

# Tools, Equipment and Metals <br> 2016-2017 

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Tools, Equipment and Metals
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302 Rue Louis XIV
Lafayette, LA 70508 USA
Phone 3372627700
Stuller.com

When Stuller was founded in 1970, Matt Stuller set out to satisfy the customer. Today, 45 years later, that same vision holds true.

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Your success is our ultimate goal.

Table of Contents

IMPORTANT SYMBOLS


Safety Glasses

Safety Mask

Respirator Recommended

Proper Ventilation


First Aid

Eye Wash Station

Flammable


Recommended RPMs


Lift Gate Required

Hazardous Shipping

Hazardous Shipping Does Not Apply


Number of Pieces Sold by Unit


Weight


Video Available Online


Stuller Exclusive Product

Tried, Tested \& Used by Stuller

4 Abrasives
36 Adhesives
40 Bags and Envelopes
44 Batteries
53 Beading and Stringing Supplies
78 Benches and Bench Tools
99 Brushes
108 Burs
134 Casting
192 Cleaning
210 Drills and Punches
220 Engraving
252 Files
266 Flex Shafts
280 Gauges and Mandrels
293 Gemological Instruments
304 Hammers
312 Lamps
318 Loupes and Magnifiers
330 Metals
374 Metal Drawing and Forming
387 Plating Supplies
403 Pliers, Cutters and Shears
430 Polishing
472 Ring Sizers and Stretchers
474 Safety Supplies
482 Saw Blades and Frames
488 Scales
496 Screwdrivers
500 Soldering Supplies and Torches
530 Testers
538 Tweezers
549 Videos and Books
554 Watch Tools and Supplies
580 Ordering Information
582 Safety Information
584 Conversion Charts
587 Product Index
590 Numerical Index

FLEX DIAMOND BANDS
Excellent for inside ring cleaning, shaping, and carving. They can be used wet or dry on both metals and stones. Cuts sanding time in half. These bands should be used on the expanding drum mandrels 43-1262 or 43-1266.

| Order\# | Grit | $\mathbf{O D} \times$ Length | Micron |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 0 - 8 0 9 0}$ | 60 | $1 / 2 " \times 1 / 2 "$ | $250 \mu$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |  |
| $\mathbf{1 0 - 8 0 9 1}$ | 120 | $1 / 2 \times 1 / 2^{\prime \prime}$ | $125 \mu$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |  |
| $\mathbf{1 0 - 8 0 9 2}$ | 200 | $1 / 2 " \times 1 / 2^{\prime \prime}$ | $74 \mu$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |  |
| $\mathbf{1 0 - 8 0 9 3}$ | 400 | $1 / 2 " \times 1 / 2^{\prime \prime}$ | $40 \mu$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |  |
| $\mathbf{1 0 - 8 0 9 4}$ | 800 | $1 / 2 " \times 1 / 2^{\prime \prime}$ | $20 \mu$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |  |

CUBITRON CERAMIC ABRASIVES
These purple bands are coated with a ceramic aluminum-oxide mineral, which is very aggressive and the toughest on the market. They provide longer life, great finish, and dust control all wrapped into one. These bands should be used on the drum mandrels 43-1262 or 43-1266.

| Order \# | Grit | OD $\times$ Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-6000 | 42-Piece Assortment with Mandrel |  | \$25.97 | \$27.50 | \$30.55 |
| 10-6100 | 60 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$13.57 | \$14.16 | \$14.75 |
| 10-6102 | 80 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$13.57 | \$14.16 | \$14.75 |
| 10-6103 | 120 | $1 / 2 \mathrm{x} \times 1 / 2^{\prime \prime}$ | \$13.57 | \$14.16 | \$14.75 |
| 10-6104 | 220 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$13.57 | \$14.16 | \$14.75 |



DIAMOND MICRO-FINISHING POLISHING BANDS
The Diamond Micro bands are designed to improve productivity and reduce the cost of finishing. Durable yet flexible due to its unique film design.

| Order \# | Grit | OD $\times$ Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-8420 | 21-Piece Assortment with Mandrel <br> (5 of each grit) |  | \$43.84 | \$45.74 | \$47.65 |
| 10-8407 | 220 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$2.84 | \$3.20 | \$3.55 |
| 10-8408 | 320 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$2.84 | \$3.20 | \$3.55 |
| 10-8409 | 400 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$2.84 | \$3.20 | \$3.55 |
| 10-8410 | 600 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$2.84 | \$3.20 | \$3.55 |



ALUMINUM-OXIDE SANDING BANDS
Aluminum-oxide sanding bands provide a fast and smooth cut rate and can be used for cleanup and pre-polish work. These sanding bands are durable and last longer than most other bands.

| Order \# | Grit | OD $\times$ Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-8100 | 80 | $1 / 2^{\prime \prime} \times 1$ " | \$8.14 | \$8.50 | \$8.85 |
| 10-8101 | 120 | $1 / 2^{\prime \prime} \times 1$ " | \$8.14 | \$8.50 | \$8.85 |
| 10-8102 | 180 | $1 / 2^{\prime \prime} \times 1$ " | \$8.14 | \$8.50 | \$8.85 |
| 10-8103 | 240 | $1 / 2^{\prime \prime} \times 1$ " | \$8.14 | \$8.50 | \$8.85 |
| 10-8104 | 320 | $1 / 2^{\prime \prime} \times 1$ " | \$8.14 | \$8.50 | \$8.85 |
| 10-8105 | 80 | $1 / 22^{1 / 1 / 2 "}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8106 | 120 | $1 / 22^{1} \times 1 / 2{ }^{1 / 2}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8107 | 180 | $1 / 2{ }^{1 / 2} \times 1 / 2^{\prime \prime}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8108 | 240 | $1 / 2^{1} \times 1 / 2^{11}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8109 | 320 | $1 / 2{ }^{1 / 2} \times 1 / 2^{\prime \prime}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8110 | 80 | $1 / 44^{\prime \prime} \times 1 / 2{ }^{1 / 2}$ | \$8.14 | \$8.50 | \$8.85 |
| 10-8111 | 120 | $1 / 4^{\prime \prime} \times 1 / 2{ }^{1 / 2}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8112 | 180 | $1 / 4^{\prime \prime} \times 1 / 2^{11}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8113 | 240 | $1 / 4 / 41 / 2{ }^{1 / 2}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8114 | 320 | $1 / 4^{1 /} \times 1 / 2{ }^{1 / 2}$ | \$8.14 | \$8.50 | \$8.85 |
| 10-8115 | 80 | $3 / 8{ }^{\prime \prime} \times 1 / 2{ }^{\prime \prime}$ | \$8.14 | \$8.50 | \$8.85 |
| 10-8116 | 120 | $3 / 88^{\prime \prime} \times 1 / 2{ }^{1 / 2}$ | \$8.23 | \$8.59 | \$8.95 |
| 10-8117 | 240 | $3 / 8{ }^{\prime \prime} \times 1 / 21$ | \$8.23 | \$8.59 | \$8.95 |



DRUM ARBORS FOR ABRASIVE BANDS
Solid, rubber drums mounted on steel arbors expand to hold abrasive bands snugly. The cushioned drum allows the abrasive band to leave an even cut and a smooth finish.

| Item | Order \# | OD $\times$ Length | Shank Size | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 43-1260 | $1 / 22^{1} \times 1 / 4^{\prime \prime}$ | $3 / 321$ | \$1.98 | \$2.06 | \$2.15 |
| B | 43-1261 | $1 / 21 \times 3 / 8{ }^{\prime \prime}$ | $3 / 321$ | \$2.07 | \$2.16 | \$2.25 |
| C | 43-1262 | $1 / 2^{17} \times 1 / 2^{\prime \prime}$ | $3 / 321$ | \$2.07 | \$2.16 | \$2.25 |
|  | 43-1264 | $1 / 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 1/8" | \$2.07 | \$2.16 | \$2.25 |
|  | 43-1265 | $1 / 24 \times 3 / 8^{\prime \prime}$ | 1/8" | \$2.07 | \$2.16 | \$2.25 |
|  | 43-1266 | $1 / 2 \mathrm{x} \times 1 / 2^{\prime \prime}$ | 1/8" | \$2.21 | \$2.30 | \$2.40 |
|  | 43-1267 | 1 " $\times 1 / 2$ " | $1 / 81$ | \$4.14 | \$4.32 | \$4.50 |



## RUBBER SANDING DRUM MANDRELS

Solid drum mandrels expand to hold abrasive bands tightly.

| Order\# |  | OD $\times$ Length | Shank Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 43-1272 | $1 / 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $3 / 321$ | \$3.83 | \$4.05 | \$4.50 |
| E | 43-1273 | $3 / 8{ }^{1 \times 1 / 21}$ | $3 / 321$ | \$3.83 | \$4.05 | \$4.50 |
| F | 43-1274 | $1 / 2^{1} \times 1 / 2^{11}$ | $3 / 32^{\prime \prime}$ | \$3.83 | \$4.05 | \$4.50 |
|  | 43-1275 | $1 / 4^{\prime \prime} \times 1 / 2^{11}$ | $1 / 81$ | \$3.83 | \$4.05 | \$4.50 |
|  | 43-1276 | $3 / 8^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 1/8" | \$3.83 | \$4.05 | \$4.50 |
|  | 43-1277 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | 1/8" | \$3.83 | \$4.05 | \$4.50 |
| Left-hand threaded for running in reverse operation. |  |  |  |  |  |  |
|  | 43-1279 | $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $3 / 321$ | \$7.22 | \$7.54 | \$7.85 |




## 3M ${ }^{\circledR}$ ALUMINUM-OXIDE CARTRIDGE ROLLS

Achieve consistent, uniform surface finishes with these aluminum-oxide abrasive paper rolls. Simply cut away the used abrasive material to expose a new sanding surface. Rolls are conveniently mounted on a $3 / 32^{\prime \prime}$ mandrel.

| Order \# | Grit | OD $\times$ Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-6090 | 240 | $1 / 2{ }^{11} \times 23 / 8^{\prime \prime}$ | \$6.04 | \$6.39 | \$7.10 |
| 10-6091 | 320 | $1 / 2^{1 \times} \times 23 / 8^{\prime \prime}$ | \$6.04 | \$6.39 | \$7.10 |
| 10-6092 | 400 | $1 / 2{ }^{1 / 2} \times 23 /{ }^{\prime \prime}$ | \$6.04 | \$6.39 | \$7.10 |
| 10-6093 | 600 | $1 / 2^{1} \times 23 / 8^{\prime \prime}$ | \$6.04 | \$6.39 | \$7.10 |
| 10-6094 | 800 | $1 / 2^{1} \times 23 / 8^{\prime \prime}$ | \$6.04 | \$6.39 | \$7.10 |
| 10-6095 | 1000 | $1 / 2 \times 23 / 8{ }^{1 /}$ | \$5.87 | \$6.21 | \$6.90 |



3M ${ }^{\circledR}$ ALUMINUM-OXIDE CARTRIDGE ROLLS
These cartridge rolls, available in regular and full tapered, provide an economical way of sanding. Layers of the cartridge roll break down, exposing a new sanding surface while sanding.

| Order \# | Grit | OD $\times$ Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-8150 | 60 | $1 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$13.66 | \$14.26 | \$14.85 |
| 10-8122 | 80 | $1 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$13.48 | \$14.06 | \$14.65 |
| 10-8123 | 120 | $1 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$13.62 | \$14.21 | \$14.80 |
| 10-8124 | 180 | $1 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$13.62 | \$14.21 | \$14.80 |
| 10-8125 | 240 | $1 / 2^{\prime \prime} \times 3 / 4{ }^{\prime \prime}$ | \$13.62 | \$14.21 | \$14.80 |
| 10-8126 | 320 | $1 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$13.62 | \$14.21 | \$14.80 |
| 10-8151 | 60 | $1 / 2{ }^{\prime \prime} \times 1$ " | \$15.59 | \$16.27 | \$16.95 |
| 10-8152 | 80 | $1 / 21 \times 1$ " | \$15.59 | \$16.27 | \$16.95 |
| 10-8153 | 120 | $1 / 2{ }^{\prime \prime} \times 1$ " | \$15.59 | \$16.27 | \$16.95 |
| 10-8155 | 180 | $1 / 2^{\prime \prime} \times 1$ " | \$15.59 | \$16.27 | \$16.95 |
| 10-8131 | 240 | $1 / 2{ }^{\prime \prime} \times 1$ " | \$15.50 | \$16.18 | \$16.85 |
| 10-8132 | 320 | $1 / 2{ }^{\prime \prime} \times 1$ " | \$15.50 | \$16.18 | \$16.85 |



## CARTRIDGE-ROLL MANDRELS

Specially made mandrel to accommodate abrasive cartridge rolls.

| Order \# | $\begin{aligned} & \text { Arbor } \\ & \text { ID } \end{aligned}$ | Roll Length | Length | Shank | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-2205 | 1/8" | 23/4" | $11 / 2$ " | 1/8" | \$3.17 | \$3.31 | \$3.45 |
| 11-2204 | $1 / 8^{\prime \prime}$ | 21/2" | $11 / 2^{11}$ | $1 / 4 /$ | \$3.17 | \$3.31 | \$3.45 |
| 11-2203 | 1/8" | 23/4" | $11 / 2^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | \$3.17 | \$3.31 | \$3.45 |



SANDING MANDRELS
Developed by Kate Wolf for sanding and finishing the inside of rings and made of stainless steel. These mandrels are machined true and come with rubber bands to hold the emery paper in place.

| Order \# | $\mathbf{0 D} \times$ Length | Shank <br> Size | Assortment <br> Ouantity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| 21-0498 |  | $5 / 8^{\prime \prime}$ | Set of3 | $\$ 8.59$ | $\$ 9.09$ | $\$ 10.10$ |
| $\mathbf{2 1 - 0 4 5 2}$ | $3 \mathrm{~mm} \times 1 / 4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | Each | $\$ 2.47$ | $\$ 2.61$ | $\$ 2.90$ |
| $\mathbf{2 1 - 0 4 5 3}$ | $3 \mathrm{~mm} \times 3 / 8^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | Each | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{2 1 - 0 0 0 3}$ | $4 \mathrm{~mm} \times 1 / 2^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | Each | $\$ 3.78$ | $\$ 4.01$ | $\$ 4.45$ |

EMERY PAPER OR CLOTH, INSIDE RING SHELLS
Drilled for a tapered spindle and used to polish and smooth ring insides. Fits over wood mandrel.

| Order \# | Grade | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- |
| $\mathbf{1 1 - 3 2 0 0}$ | $4 / 0$ | (Finest) | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |
| $\mathbf{1 1 - 3 2 0 1}$ | $3 / 0$ | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 2 0 2}$ | $2 / 0$ | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 2 0 3}$ | $1 / 0$ | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 2 0 4}$ | 1 | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 2 0 5}$ | 2 | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 2 0 6}$ | 3 (Coarsest) | Paper | $\$ 16.10$ | $\$ 16.80$ | $\$ 17.50$ |  |
| $\mathbf{1 1 - 3 1 0 0}$ | $4 / 0$ | Cloth | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |  |
| $\mathbf{1 1 - 3 1 0 1}$ | $2 / 0$ | Cloth | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |  |
| $\mathbf{1 1 - 3 1 0 2}$ | 1 | Cloth | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |  |
| $\mathbf{1 1 - 3 1 0 3}$ | 3 | Cloth | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |  |



EMERY SHELL KIT
Assorted grits with wooden cone mandrel. Grits are 4/0, 3/0, 2/0, 1/0, 1, 2 .

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 1 - 3 1 1 0}$ | Emery Shell Kit (pack of 6) | $\$ 5.50$ | $\$ 6.28$ | $\$ 7.85$ |



WOOD ARBOR
A. Can be used as a $6^{\prime \prime}$ polishing stick once coated with adhesive and rolled in abrasive. Arbor hole measures $1 / 4$ " for tapered spindle mounting. Made of birch wood.

WOOD MANDREL
B. Used with emery shells that are held by friction. Can also be used as a holder for rings, chains, and other items when polishing.

SPLIT WOOD MANDREL - SPINDLE
C. Insert into the slot of the wood mandrel to create an emery flat wheel.

Mandrel fits any tapered shaft. Made of birch wood.

| Item | Order \# Description | OD | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 2 6 6 0}$ | Wood Arbor | $1 / 4^{\prime \prime}$ | $7^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |
| B | $\mathbf{1 1 - 3 3 3 0}$ | Wood Mandrel |  | $4^{\prime \prime}$ | $\$ 1.01$ | $\$ 1.06$ | $\$ 1.10$ |
| C | $\mathbf{1 1 - 3 0 6 0}$ | Split Wood Mandrel | $1 / 8^{\prime \prime}$ | $4^{11 / 4^{\prime \prime}}$ | $\$ 1.29$ | $\$ 1.34$ | $\$ 1.40$ |


$\qquad$


Half-Round
A


Triangle
B


Round


## SHAPED SANDING STICKS

Sanding sticks can be used before you buff or polish a piece to help smooth out deep scratches and surface marring. They can be used to remove corrosion, rust, or other build-up. Many jewelers like them for use on unfired metal clay as well. They are designed so the emery paper is glued to wooden handles to make them easy to hold and easy to use. The wooden handles measure $93 / 4$ " and are approximately $7 / 16^{\prime \prime}$ diameter. These emery sanding sticks come in three different grits running from $2 / 0$ (finest) to 3 (coarsest) and three different shapes with so many uses. Sets of 3 also available. Set pricing not shown.

| Item |  | Order \# | Grit | Grade |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 3 3 9 0}$ | 180 | 3 | Coarse | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 0}$ | 280 | 0 | Medium | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 0}$ | 1000 | $2 / 0$ | Fine | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
| B | $\mathbf{1 1 - 3 3 9 1}$ | 180 | 3 | Coarse | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 1}$ | 280 | 0 | Medium | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 1}$ | 1000 | $2 / 0$ | Fine | $\$ 2.10$ | $\$ 2.40$ | $\$ 3.00$ |
| C | $\mathbf{1 1 - 3 3 9 2}$ | 1000 | $2 / 0$ | Fine | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 2}$ | 280 | 0 | Medium | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
|  | $\mathbf{1 1 - 3 3 9 2}$ | 180 | 3 | Coarse | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |

## SANDING STICKS

Handy sanding sticks with molded plastic handles. Both sizes sold with 120 (medium) grit cloth-back sandpaper strips (11" long).

| Item | Order \# | Description | Grit | Width | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 11-3502 | Sanding Stick (Set) | 120 | $1 / 2{ }^{1}$ | \$8.33 | \$8.82 | \$9.80 |
| E | 11-3503 | Sanding Stick (Set) | 120 | $1{ }^{\prime \prime}$ | \$8.33 | \$8.82 | \$9.80 |
|  | 11-3504 | Refill Pack (pack of 10) | 120 | $1 / 21$ | \$5.14 | \$5.45 | \$6.05 |
|  | 11-3505 | Refill Pack (pack of 10) | 120 | $1{ }^{1 \prime}$ | \$5.10 | \$5.40 | \$6.00 |
| F | 11-3500 | Sanding Stick: 1 of each | 120, 240 | $1{ }^{1 \prime}$ | \$13.89 | \$14.50 | \$15.10 |
|  | 11-3501 | Refill Pack: 1 of each | 80, 120, 240 | $1{ }^{\prime \prime}$ | \$7.08 | \$7.39 | \$7.70 |




ABRASIVE BOARDS
Quality abrasive sanding paper is mounted on both sides of this flexible foam board. Ideal for filing, shaping and smoothing, this file is designed to reach easily into confined areas and in or around contours. Use wet or dry on metal and metal clay. This assortment includes six boards, one each of six grits: $3000,2500,2000,1200,800$ and 400.

| Order \# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 3 4 3 0}$ | Abrasive Board Kit (Assorted Colors) | $\$ 7.32$ | $\$ 8.24$ | $\$ 9.15$ |  |
| $\mathbf{1 1 - 3 4 3 1}$ | Red Abrasive Board | 400 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 1 - 3 4 3 1}$ | Green Abrasive Board | 800 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 1 - 3 4 3 1}$ | Blue Abrasive Board | 1200 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 1 - 3 4 3 1}$ | Orange Abrasive Board | 2000 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 1 - 3 4 3 1}$ | Yellow Abrasive Board | 2500 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 1 - 3 4 3 1}$ | White Abrasive Board | 3000 | $\$ 1.60$ | $\$ 1.80$ | $\$ 2.00$ |



## SANDPAPER STICKS

Provides a fast, easy, and economical way to access detailed, hard-to-reach areas. The $61 / 4$ " long, tapered, plastic sticks hold a replaceable $1 / 4^{\prime \prime}(6.4 \mathrm{~mm})$ wide sanding belt. The aluminum-oxide belt is held in place by a patented, spring-loaded mechanism that allows the belt to be rotated $360^{\circ}$, exposing a new sanding surface.

| Order\# | Description | Grit | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 3 5 2 0}$ | Red Stick | 120 | Each | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 1 - 3 5 2 1}$ | Blue Stick | 240 | Each | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 1 - 3 5 2 2}$ | Green Stick | 320 | Each | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 1 - 3 5 2 3}$ | Yellow Stick | 400 | Each | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 1 - 3 5 2 4}$ | Black Stick | 600 | Each | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 1 - 3 5 2 5}$ | Belt for Red | 120 | Pack of 10 | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| $\mathbf{1 1 - 3 5 2 6}$ | Belt for Blue | 240 | Pack of 10 | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| $\mathbf{1 1 - 3 5 2 7}$ | Belt for Green | 320 | Pack of 10 | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| $\mathbf{1 1 - 3 5 2 8}$ | Belt for Yellow | 400 | Pack of 10 | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| $\mathbf{1 1 - 3 5 2 9}$ | Belt for Black | 600 | Pack of 10 | $\$ 7.91$ | $\$ 8.37$ | $\$ 9.30$ |



## UTILITY CLOTH ROLL

Professional shop rolls feature high-quality, aluminum-oxide mineral and bonded cloth backings for long abrasive life. A full, resin-over-resin bond construction gives an aggressive cut while providing improved mineral anchorage. 320 grit suitable for applications of ferrous metals.

| Order \# | Grit | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 4 5 5 1}$ | 120 | $1 " \times 50$ yards | $\$ 21.63$ | $\$ 22.91$ | $\$ 25.45$ |
| $\mathbf{1 0 - 4 5 5 4}$ | 320 | $1 " \times 50$ yards | $\$ 40.99$ | $\$ 42.77$ | $\$ 44.55$ |
| $\mathbf{1 0 - 4 5 5 3}$ | 240 | $1 " \times 50$ yards | $\$ 21.63$ | $\$ 22.91$ | $\$ 25.45$ |
| $\mathbf{1 0 - 4 5 5 2}$ | 180 | $1 " \times 50$ yards | $\$ 21.63$ | $\$ 22.91$ | $\$ 25.45$ |

## 3M ${ }^{\circledR}$ IMPERIAL ABRASIVE SHEETS



Abrasive sheets use a special bonding technique that allows more uniform cutting and is highly wear-resistant. These sheets feature a waterproof, resin-over-resin bond that resists heat and holds abrasive particles. All sheets are silicone carbide and can be used wet or dry. Can be used with split wood mandrel 11-3060 or split mandrels for handpieces 11-3008 and 11-3009.

| Order\# <br> $\mathbf{1 1 - 0 7 0 0}$ | $\mathbf{G r i t}$ | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 0 1}$ | 220 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 11^{\prime \prime}$ | $\$ 1.11$ | $\$ 1.17$ |
| $\mathbf{\$ 1 . 3 0}$ |  |  |  |  |  |
| $\mathbf{1 1 - 0 7 0 2}$ | 280 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.11$ | $\$ 1.17$ | $\$ 1.30$ |
| $\mathbf{1 1 - 0 7 0 3}$ | 320 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.11$ | $\$ 1.17$ | $\$ 1.30$ |
| $\mathbf{1 1 - 0 7 0 4}$ | 400 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.11$ | $\$ 1.30$ |  |
| $\mathbf{1 1 - 0 7 0 5}$ | 600 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.17$ | $\$ 1.30$ |  |
| $\mathbf{1 1 - 0 7 0 6}$ | 800 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.91$ | $\$ 1.17$ | $\$ 1.30$ |
| $\mathbf{1 1 - 0 7 0 7}$ | 1000 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.25$ |  |  |
| $\mathbf{1 1 - 0 7 0 8}$ | 1200 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{1 1 - 0 7 0 9}$ | 1500 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{1 1 - 0 7 1 0}$ | 2000 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{1 1 - 0 7 1 1}$ | 2500 | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |



## WATERPROOF EMERY PAPER

Powerful small particle adhesion provides superior surface finishing. Specially processed micro-grains provide additional cutting surface for fast material removal.

| Order \# | Grit | $\mathbf{W} \times \mathrm{L}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11-3420 | 180 | $9^{\prime \prime} \times 133 / 4^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3427 | 220 | $9 \mathrm{C} \times 133 / 4{ }^{\text {" }}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3421 | 240 | $9 \mathrm{x} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3422 | 280 | $9 \mathrm{x} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3423 | 400 | $9 \mathrm{x} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3424 | 500 | $9 \mathrm{x} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3425 | 600 | $9^{\prime \prime} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3426 | 800 | $9 \mathrm{x} \times 133 / 4{ }^{\text {" }}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3428 | 1000 | $9 \mathrm{x} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |
| 11-3429 | 1200 | $9 \mathrm{P} \times 133 / 4{ }^{\prime \prime}$ | \$0.76 | \$0.86 | \$0.95 |

## SLURRY COATED POLISHING CLOTH

Cotton and Rayon material combination, the minerals are micron particles with a unique blend of various types of minerals applied in a slurry coating process. G-Tac slurry coated polishing cloths and strips provide strength and durability provided by a unique backing material which sets them apart from traditional polishing paper, while giving a constant uniform finish. *Colors may vary.

| Order \# | Grit | Color | $\mathbf{W} \times \mathrm{L}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10-8340 | 360 | Dark Gray | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 400 | Sky blue | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 600 | Coral blue | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 800 | Egg shell | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 1000 | Vibrant Pink | $4 \mathrm{C} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 1200 | Dark Blue | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 1500 | Lavender | $4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 2000 | Blue | $41 \times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8340 | 4000 | Light Blue | 4 " $\times 71 / 2^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 10-8342 | Solid Assortment (10 sheets/box) |  |  | \$16.88 | \$17.62 | \$18.35 |

## SLURRY COATED POLISHING STRIPS

Cotton and Rayon material combination, the minerals are micron particles with a unique blend of various types of minerals applied in a slurry coating process. G-Tac slurry coated polishing cloths and strips provide strength and durability provided by a unique backing material which sets them apart from traditional polishing paper, while giving a constant uniform finish.

| Order \# | Grit | Color | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 8 3 4 4}$ | 360 | Black | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 400 | Sky blue | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 600 | Coral blue | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 800 | Egg shell | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 1000 | Vibrant Pink | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 1200 | Dark Blue | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 1500 | Lavender | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 2000 | Blue | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 4}$ | 4000 | Light Blue | $4^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |
| $\mathbf{1 0 - 8 3 4 3}$ | Strip Assortment (120 perforated/box) |  |  |  |  |  |

## MICRO-POLINET SANDPAPER

- Micro-Polinet is a very flexible sanding cloth using ultra fine screen-mesh cloth ( 100 mesh), designed to prevent clogging.
- Both sides are coated with grains.
- Waterproof and oil resistant; can be used for both wet and dry operations.
- Constant sanding ability lasts till the end of its longer life.
- You can cut into any size to meet your purpose.
- Standard size: $210 \mathrm{~mm} \times 280 \mathrm{~mm}$

| Order \# | Grit | Color | Grain Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 5 8}$ | 600 | Blue | $20 \mu$ | $\$ 3.92$ | $\$ 4.41$ | $\$ 4.90$ |
| $\mathbf{1 1 - 0 7 5 8}$ | 800 | Yellow | $14 \mu$ | $\$ 3.68$ | $\$ 4.14$ | $\$ 4.60$ |
| $\mathbf{1 1 - 0 7 5 8}$ | 1000 | Red | $11.5 \mu$ | $\$ 3.92$ | $\$ 4.41$ | $\$ 4.90$ |
| $\mathbf{1 1 - 0 7 5 8}$ | 2000 | Blue | $6.7 \mu$ | $\$ 3.68$ | $\$ 4.14$ | $\$ 4.60$ |
| $\mathbf{1 1 - 0 7 5 8}$ | 3000 | Orange | $4 \mu$ | $\$ 3.68$ | $\$ 4.14$ | $\$ 4.60$ |
| $\mathbf{1 1 - 0 7 5 8}$ | 4000 | Green | $3 \mu$ | $\$ 3.68$ | $\$ 4.14$ | $\$ 4.60$ |

## EMERY CLOTH

Traditional cloth sheets provide consistent finish and extra long life. Can be used with split wood mandrel 11-3060 or split mandrels for handpieces 11-3008 and 11-3009.

| Order \# | Grit | Grade | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 3 0}$ | 180 | Coarse | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.19$ | $\$ 1.26$ | $\$ 1.40$ |
| $\mathbf{1 1 - 0 7 3 1}$ | $220-240$ | Medium | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.19$ | $\$ 1.26$ | $\$ 1.40$ |
| $\mathbf{1 1 - 0 7 3 2}$ | 280 | Fine | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.19$ | $\$ 1.26$ | $\$ 1.40$ |

## WET OR DRY POLISHING PAPER

The non-woven backing allows easy polishing of interior shapes and contours. Precision, micron grading provides a unique, consistent finish. Can be used with split wood mandrel 11-3060 or split mandrels for handpieces $11-3008$ and 11-3009. Kit contains six sheets, one grit each.

| Order\# | Grit | Micron | Color | $\mathbf{W} \times \mathbf{L}$ |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 2 0}$ | 400 | $30 \mu$ | Green | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 1}$ | 600 | $15 \mu$ | Gray | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 2}$ | 1200 | $9 \mu$ | Blue | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 3}$ | 4000 | $3 \mu$ | Pink | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 4}$ | 6000 | $2 \mu$ | Mint Green | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 5}$ | 8000 | $1 \mu$ | Pale Green | $8^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |
| $\mathbf{1 1 - 0 7 2 6}$ | Kit (6 sheets) 1 each |  | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |  |  |  |

## PLATINUM ABRASIVE PAPER

Used exclusively for platinum, this abrasive paper is an excellent pre-polish step when working with this precious metal.

| Order \# | Grit | Micron | Color | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 4 5}$ | 360 | $35 \mu$ | Gray | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.06$ | $\$ 1.10$ | $\$ 1.15$ |
| $\mathbf{1 1 - 0 7 4 6}$ | 400 | $30 \mu$ | Gray | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.06$ | $\$ 1.10$ | $\$ 1.15$ |
| $\mathbf{1 1 - 0 7 4 7}$ | 500 | $20 \mu$ | Gray | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 1.06$ | $\$ 1.10$ | $\$ 1.15$ |



## MICRO-FINISHING FILM SHEETS

Use on large surface areas. These special film sheets are micro-graded abrasive, which provides a consistent cut rate and finish. Micro-graded film sheets reduce sanding steps and provide an easy-to-buff finish. Long lasting, these micro-grade films can replace emery papers.

| Order \# | Grit | Micron | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 3 6}$ | 220 | $60 \mu$ | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| $\mathbf{1 1 - 0 7 3 7}$ | 320 | $40 \mu$ | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| $\mathbf{1 1 - 0 7 3 9}$ | 500 | $20 \mu$ | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| $\mathbf{1 1 - 0 7 4 0}$ | 600 | $15 \mu$ | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| $\mathbf{1 1 - 0 7 4 1}$ | 1200 | $9 \mu$ | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |

## LAPPING FILM

Finishing films designed by to reduce the buffing process for platinum and gold. Available in three grits for a three-step finishing process for platinum and a one-step process for gold finishing. The 12 micron (yellow) sheet is used for pre-polish, the five micron (brown) is used to impart a bright finish on platinum, and the three micron (pink) sheet is used to produce an extra bright finish on platinum before the final buffing. Use with a 11-3060 split wood mandrel or split mandrels for handpiece 11-3008 and 11-3009.

| Order \# | Micron | Color | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 0 7 5 0}$ | $12 \mu$ | Yellow | $81 / 2^{\prime \prime} \times 11$ | $\$ 1.52$ | $\$ 1.58$ | $\$ 1.65$ |
| $\mathbf{1 1 - 0 7 5 1}$ | $5 \mu$ | Brown | $81 / 2 \times 11$ | $\$ 1.52$ | $\$ 1.58$ | $\$ 1.65$ |
| $\mathbf{1 1 - 0 7 5 2}$ | $3 \mu$ | Pink | $81 / 211 \times 11$ | $\$ 1.52$ | $\$ 1.58$ | $\$ 1.65$ |



DIAMOND LAPPING FILM 668X
Use on extremely hard materials for a repeatable, precision finish. Combines micron-graded diamond particles, resin bonding, and highly uniformed polyester film (self-adhesive) backing for a consistent, cleaner alternative to diamond compounds or slurries.

| Item | Order \# | Micron | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | :---: | :---: | ---: |
| A | $\mathbf{1 1 - 0 7 5 3}$ | $0.05 \mu$ | $6^{\prime \prime}$ | $\$ 13.62$ | $\$ 14.21$ | $\$ 14.80$ |
| B | $\mathbf{1 1 - 0 7 5 4}$ | $3 \mu$ | $6^{\prime \prime}$ | $\$ 13.89$ | $\$ 14.50$ | $\$ 15.10$ |
| C | $\mathbf{1 1 - 0 7 5 5}$ | $6 \mu$ | $6^{\prime \prime}$ | $\$ 13.89$ | $\$ 14.50$ | $\$ 15.10$ |
| D | $\mathbf{1 1 - 0 7 5 6}$ | $9 \mu$ | $6^{\prime \prime}$ | $\$ 13.89$ | $\$ 14.50$ | $\$ 15.10$ |
| E | $\mathbf{1 1 - 0 7 5 7}$ | $15 \mu$ | $6^{\prime \prime}$ | $\$ 13.89$ | $\$ 14.50$ | $\$ 15.10$ |



## MICRO-FINISHING DISC

Superior graded aluminum oxide pressure sensitive discs that ensure consistent surface finish. Must be used with a $6^{\prime \prime}$ aluminum back plate.

| Item | Order \# | Micron | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| F | $\mathbf{1 1 - 0 8 0 0}$ | $30 \mu$ | $6^{\prime \prime}$ | $\$ 1.86$ | $\$ 2.12$ | $\$ 2.65$ |
| G | $\mathbf{1 1 - 0 8 0 0}$ | $15 \mu$ | $6^{\prime \prime}$ | $\$ 1.86$ | $\$ 2.12$ | $\$ 2.65$ |
| H | $\mathbf{1 1 - 0 8 0 0}$ | $9 \mu$ | $6^{\prime \prime}$ | $\$ 1.86$ | $\$ 2.12$ | $\$ 2.65$ |
| J | $\mathbf{1 1 - 0 8 0 0}$ | $60 \mu$ | $6^{\prime \prime}$ | $\$ 1.86$ | $\$ 2.12$ | $\$ 2.65$ |



## SANDING SPONGES

These sanding sponges provide flexibility and will conform to almost any surface and contour. The sponges are coated with a unique slurry that provides a quick, smooth cut in medium and a pre-polish finish in micro-fine. These unique pads can be folded or trimmed to fit in most details and will not gouge surfaces.

| Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11-8042 | Extra Fine | $41 / 2^{11} \times 51 / 2^{11}$ | \$3.96 | \$4.13 | \$4.30 |
| 11-8041 | Ultra-Fine | $41 / 2^{11} \times 51 / 2^{11}$ | \$3.96 | \$4.13 | \$4.30 |
| 11-8043 | Fine | $41 / 2^{11} \times 51 / 2^{11}$ | \$3.96 | \$4.13 | \$4.30 |
| 11-8040 | Micro Fine | $41 / 2^{11} \times 51 / 2^{11}$ | \$3.96 | \$4.13 | \$4.30 |
| 11-8044 | Medium | $41 / 22^{\prime \prime} \times 51 / 2^{\prime \prime}$ | \$3.96 | \$4.13 | \$4.30 |
| 11-8045 | Assortment | 5 : one of each grade) | \$20.65 | \$21.55 | \$22.45 |




PRIMO ${ }^{\circledR}$ NON-WOVEN ABRASIVE PADS
Quality non-hand woven abrasive pad ideal for cleaning, deburring, and creating satin finishes

| Item | Order\# | Grit | Color | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 0 - 8 3 2 0}$ | 1000 | Gray | $6^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 1.56$ | $\$ 1.63$ | $\$ 1.70$ |
| B | $\mathbf{1 0 - 8 3 2 0}$ | 280 | Purple | $6^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 1.56$ | $\$ 1.63$ | $\$ 1.70$ |
| C | $\mathbf{1 0 - 8 3 2 0}$ | 0 | Light Purple | $6^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 1.56$ | $\$ 1.63$ | $\$ 1.70$ |
| D | $\mathbf{1 0 - 8 3 2 0}$ | 0 | Light Maroon | $6^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 1.56$ | $\$ 1.63$ | $\$ 1.70$ |
| E | $\mathbf{1 0 - 8 3 2 0}$ | 320 | Maroon | $6^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 1.56$ | $\$ 1.63$ | $\$ 1.70$ |

## MOUNTED midget buffs

Mounted on a $3 / 32$ " shank.

| Order \# | Grade | OD | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :--- | :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 2 8 1}$ | Coarse | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{1 1 - 8 2 8 0}$ | Medium | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{1 1 - 8 2 7 9}$ | Fine | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{1 1 - 8 2 7 8}$ | Luster Bright | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |

## UNITIZED WHEELS

Unitized wheels provide a faster cut rate and longer life. Made from a unique construction, they resist loading while providing a smooth-running, chatter-free feeling. Non-woven technology also allows these wheels to run cool and discourages undercutting and gouging. Unitized wheels are long wearing and have a unique, spring-like action.

| Order \# | Grade | OD | Width | Hole ID | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10-8176 | Coarse | $1{ }^{\prime \prime}$ | $1 / 4 /$ | 1/4" | \$2.25 | \$2.35 | \$2.45 |
| 10-8175 | Medium | $1{ }^{1 \prime}$ | $1 / 4 / 4$ | 1/4" | \$2.25 | \$2.35 | \$2.45 |
| 10-8174 | Fine | $1 "$ | $1 / 4 / 4$ | 1/4" | \$2.07 | \$2.16 | \$2.25 |
| 10-8173 | Extra Fine | $1{ }^{1 \prime}$ | 1/4" | 1/4" | \$2.07 | \$2.16 | \$2.25 |
| 10-8168 | Coarse | $3 "$ | $1 / 21$ | $1 / 21$ | \$12.51 | \$13.06 | \$13.60 |
| 10-8167 | Medium | $3 "$ | 1/21 | 1/21 | \$12.51 | \$13.06 | \$13.60 |
| 10-8166 | Fine | $3 "$ | 1/21 | $1 / 21$ | \$11.73 | \$12.24 | \$12.75 |
| 10-8165 | Extra Fine | $3 "$ | 1/21 | 1/21 | \$11.73 | \$12.24 | \$12.75 |
| 43-1283 | $1 / 8^{\prime \prime}$ Mandrel ( $1 / 8^{\prime \prime}$ shank with one silver cap for $1 / 8^{\prime \prime}$ and $1 / 4^{\prime \prime}$ thick wheels) |  |  |  | \$1.44 | \$1.62 | \$1.80 |



## BRISTLE DISCS

Kit contains 12 each of the following $9 / 16$ " discs: 120 , 220,400 , pumice, polish I, and polish II grits. Along

| ItemOrder\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 0 - 9 1 1 5}$ | $74-$-Piece, $916^{\prime \prime}$ | $\$ 57.64$ | $\$ 60.14$ | $\$ 62.65$ |

Contains 8 each of all sizes and grits along with 4 mandrels, 43-1281. Discs are molded abrasive-filled bristle discs used for deburring, blending, finishing, and polishing.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 0 - 9 1 1 7}$ | 116 -Piece Assorted Grits and Sizes | $\$ 78.11$ | $\$ 81.50$ | $\$ 84.90$ |

Kit contains 12 each of the following 1 " discs: $36,50,80$, and 120 grits. Along with two mandrels, 43-1281.

| Item Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{1 0 - 9 1 1 6}$ | $50-$ Piece, 1" | $\$ 40.99$ | $\$ 42.77$ | $\$ 44.55$ |

Kit contains 10 each of the following $3 / 4$ " discs: $80,220,400$, and pumice grits. Along with two mandrels, 43-1282.

| ItemOrder \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{1 0 - 9 1 0 4}$ | 42 -Piece Kit, $3 / 4^{\prime \prime}$ | $\$ 36.06$ | $\$ 37.63$ | $\$ 39.20$ |



## MICRO FIBER DISC

These new micro-fiber, reinforced separating discs are superior in their cutting ability and are more economical due to their durability. Unlike most ultra-thin separating discs, these do not break easily even when bent. The quality and performance are unmatched by most cutting products.

| Order \# | Material | OD | Thickness | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 2 0 6}$ | Silicone-Carbide | $7 / 8^{11}$ | .01 mm | Pack of 10 | $\$ 12.12$ | $\$ 13.14$ | $\$ 14.60$ |
| $\mathbf{1 1 - 8 2 0 6}$ | Silicone-Carbide | $7 / 8^{11}$ | .01 mm | Pack of 100 | $\$ 94.65$ | $\$ 100.22$ | $\$ 111.35$ |
| $\mathbf{1 1 - 8 2 0 7}$ | Aluminum-Oxide | $7 / 8^{11}$ | .01 mm | Pack of 10 | $\$ 12.12$ | $\$ 13.14$ | $\$ 14.60$ |
| $\mathbf{1 1 - 8 2 0 7}$ | Aluminum-Oxide | $7 / 8^{11}$ | .01 mm | Pack of 100 | $\$ 94.65$ | $\$ 100.22$ | $\$ 111.35$ |




1" (ally



TAPERED WHEEL ADAPTER

| Item | Order \# | Description | Color | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 0 - 9 1 6 3}$ | Left Adapter | Gray | $3 / 8^{\prime \prime}$ | $\$ 2.17$ | $\$ 2.30$ | $\$ 2.55$ |
| B | $\mathbf{1 0 - 9 1 6 2}$ | Right Adapter | Black | $3 / 8^{\prime \prime}$ | $\$ 2.17$ | $\$ 2.30$ | $\$ 2.55$ |
| C | $\mathbf{4 3 - 1 3 0 2}$ | Mandrel |  | $3 / 32^{\prime \prime}$ | $\$ 1.41$ | $\$ 1.53$ | $\$ 1.70$ |
| D | $\mathbf{4 3 - 1 2 8 2}$ | Heavy Duty Mandrel |  | $1 / 8^{\prime \prime}$ | $\$ 1.47$ | $\$ 1.68$ | $\$ 2.10$ |

HIGH-QUALITY CUT-OFF DISCS
Silicon carbide non-contaminating, extra durable. Extra thin cutting for gold. Use reinforced mandrel 43-1282.

| Order \# | OD | Thickness | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 1 9 0}$ | $7 / 8^{\prime \prime}$ | $0.009^{\prime \prime}$ | Box of 25 | $\$ 8.92$ | $\$ 9.31$ | $\$ 9.70$ |
| $\mathbf{1 1 - 8 1 9 2}$ | $7 / 8^{\prime \prime}$ | $0.009^{\prime \prime}$ | Box of 100 | $\$ 31.60$ | $\$ 32.98$ | $\$ 34.35$ |
| $\mathbf{1 1 - 8 1 9 4}$ | $7 / 8^{\prime \prime}$ | $0.006^{\prime \prime}$ | Box of 25 | $\$ 8.92$ | $\$ 9.31$ | $\$ 9.70$ |
| $\mathbf{1 1 - 8 1 9 6}$ | $7 / 8^{\prime \prime}$ | $0.006^{\prime \prime}$ | Box of 100 | $\$ 31.60$ | $\$ 32.98$ | $\$ 34.35$ |



## ALUMINUM-OXIDE CUT-OFF WHEELS

Wheels for cutting and finishing cobalt and hard metals. Fast, cool, and odor-free.


| Item | Order\# | Color | OD | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 8 2 4 0}$ | Light Brown | $114^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.71$ | $\$ 29.34$ | $\$ 32.60$ |
| B | $\mathbf{1 1 - 8 2 4 2}$ | Brown | $11 / 4^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $\$ 27.71$ | $\$ 29.34$ | $\$ 32.60$ |
| C | $\mathbf{1 1 - 8 2 4 4}$ | Red | $11 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.71$ | $\$ 29.34$ | $\$ 32.60$ |
| D | $\mathbf{1 1 - 8 2 4 6}$ | Ruby | $11 / 2^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $\$ 31.05$ | $\$ 32.40$ | $\$ 33.75$ |



## SEPARATING DISCS

High-speed, resin-bonded, aluminum-oxide and silicone-carbide separating discs. Fast-cutting, precise, and long-lasting.

| Order \# | Material | OD | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 1 9 7}$ | Aluminum-Oxide | $7 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 40.34$ | $\$ 42.10$ | $\$ 43.85$ |
| $\mathbf{1 1 - 8 1 9 8}$ | Aluminum-Oxide | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| $\mathbf{1 1 - 8 2 0 4}$ | Silicone-Carbide | $7 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 40.34$ | $\$ 42.10$ | $\$ 43.85$ |
| $\mathbf{1 1 - 8 2 0 5}$ | Silicone-Carbide | $7 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 11.36$ | $\$ 11.86$ | $\$ 12.35$ |
| $\mathbf{1 1 - 8 2 0 6}$ | Silicone-Carbide | $7 / 8^{\prime \prime}$ | .01 mm | $\$ 94.65$ | $\$ 100.22$ | $\$ 111.35$ |
| $\mathbf{1 1 - 8 2 0 6}$ | Silicone-Carbide | $7 / 8^{\prime \prime}$ | .01 mm | $\$ 12.12$ | $\$ 13.14$ | $\$ 14.60$ |



Side




ADALOX ${ }^{\circledR}$ SNAP-ON DISCS: ALUMINUM-OXIDE
Aluminum-oxide discs are a reddish-brown color. Thin, resin bonded flexible paper. Aluminum-oxide is less aggressive than emery. Use with snap-on mandrel 10-7050.

| $\mathbf{O r d e r} \#$ | Grade | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 0 0}$ | Coarse | $1 / 2^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 0 1}$ | Medium | $1 / 2^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 0 2}$ | Fine | $1 / 2^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 0 5}$ | Coarse | $3 / 4^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 0 6}$ | Medium | $3 / 4^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 0 7}$ | Fine | $3 / 4^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 1 0}$ | Coarse | $7 / 8^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 1 1}$ | Medium | $7 / 8^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 1 2}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |



## SILICONE-CARBIDE DISCS

Silicon carbide discs are a black color. Thin, resin bonded flexible paper. Silicone-carbide is less aggressive than emery. Use with snap-on mandrel 10-7050.


| Order \# | Grade | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 1 5}$ | Coarse | $1 / 2^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 1 6}$ | Medium | $1 / 2 "$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 1 7}$ | Fine | $1 / 2^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 2 0}$ | Coarse | $3 / 4^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 2 1}$ | Medium | $3 / 4^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 2 5}$ | Coarse | $7 / 8^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 2 6}$ | Medium | $7 / 8^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| $\mathbf{1 0 - 7 0 2 7}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 7 0 2 2}$ | Fine | $3 / 4^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |



## MAGNUM SANDING SNAP-ON DISCS

The aluminum-oxide discs work similarly to the Moor plastic and Adalox ${ }^{\oplus}$ discs. They are designed with a special reinforced, waterproof backing. This disc is recommended for fast cutting of acrylics and is excellent for polishing non-precious alloys. Use with snap-on mandrel 10-7050.

| Item | Order\# | Grade | Color | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| A | $\mathbf{1 0 - 7 1 2 2}$ | Coarse | Reddish Brown | $7 / 8^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |
| B | $\mathbf{1 0 - 7 1 2 1}$ | Medium | White | $7 / 8^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |
| C | $\mathbf{1 0 - 7 1 2 0}$ | Fine | Green | $7 / 8^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |



## ALUMINUM-OXIDE SANDING DISCS

Aluminum-oxide grit provides excellent results in sanding and smoothing operations. The flexible backing allows access to hard-to-reach areas. Use with snap-on mandrel 10-7050.

| Item | Order\# | Grade | Color | $\mathbf{O D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| D | $\mathbf{1 0 - 1 0 7 7}$ | Coarse | Brown | $1 / 21$ | $\$ 12.92$ | $\$ 13.68$ | $\$ 15.20$ |
| E | $\mathbf{1 0 - 1 0 7 8}$ | Medium | Brown | $1 / 2 "$ | $\$ 12.92$ | $\$ 13.68$ | $\$ 15.20$ |
| F | $\mathbf{1 0 - 1 0 7 9}$ | Fine | Brown | $1 / 2 "$ | $\$ 12.92$ | $\$ 13.68$ | $\$ 15.20$ |
|  | $\mathbf{1 0 - 7 0 5 0}$ | Snap-On Mandrel $\left(3 / 32^{\prime \prime}\right.$ shank) | $\$ 1.70$ | $\$ 1.85$ | $\$ 2.05$ |  |  |


ALUMINUM-OXIDE SANDING DISCS
Nickel-plated small wheel mandrels.

| Order \# | Grade | OD | 12+ | $6+$ | $1+$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-7100 | Coarse | 7/8" | \$5.87 | \$6.21 | \$6.90 |
| 10-7101 | Medium | 7/8" | \$5.87 | \$6.21 | \$6.90 |
| 10-7102 | Fine | 7/8" | \$5.87 | \$6.21 | \$6.90 |
| 10-7103 | Extra Fine | 7/8" | \$5.87 | \$6.21 | \$6.90 |
| 10-7104 | Coarse | $3 / 4 / 1$ | \$5.87 | \$6.21 | \$6.90 |
| 10-7105 | Medium | $3 / 4 / 1$ | \$5.87 | \$6.21 | \$6.90 |
| 10-7106 | Fine | $3 / 4 /$ | \$5.87 | \$6.21 | \$6.90 |
| 10-7107 | Extra Fine | $3 / 4{ }^{11}$ | \$5.87 | \$6.21 | \$6.90 |
| 10-7050 | Snap-On N | ( $3 / 32^{\prime \prime}$ shank) | \$1.70 | \$1.85 | \$2.05 |

## YELLOW SANDING DISCS

Yellow abrasive disc with snap-on feature used in the pre-finishing process. Exclusive aluminum-oxide grit provides excellent results in sanding and smoothing operations. Hard-to-reach places are accessible with the flexible backing.

| Order \# | Grade | OD | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-7125 | 103-Piece Sanding Disc Kit |  | \$12.45 | \$13.19 | \$14.65 |
| 10-7030 | Coarse | $3 / 4 /$ | \$8.42 | \$8.78 | \$9.15 |
| 10-7031 | Medium | $3 / 4{ }^{1 /}$ | \$8.42 | \$8.78 | \$9.15 |
| 10-7032 | Fine | $3 / 41$ | \$8.33 | \$8.69 | \$9.05 |
| 10-7033 | Coarse | 7/8" | \$8.33 | \$8.69 | \$9.05 |
| 10-7034 | Medium | 7/8" | \$8.33 | \$8.69 | \$9.05 |
| 10-7035 | Fine | 7/8" | \$8.33 | \$8.69 | \$9.05 |
| 10-7050 | Snap-On | l (3/32" shank) | \$1.70 | \$1.85 | \$2.05 |

ZIRCONIA PIN HOLE SANDING DISCS
Zirconia sanding discs are superior to other conventional abrasives. Aggressively cuts and grinds metals with uniform file-like finish. Ideal for platinum use. Prolong life by using water as a

100 lubricant. Mandrels sold separately.

| Order \# | Grade | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 3 6}$ | Coarse | $3 / 4^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{1 0 - 7 0 3 7}$ | Medium | $3 / 4^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{1 0 - 7 0 3 8}$ | Fine | $3 / 4^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{1 0 - 7 0 3 9}$ | Coarse | $7 / 8^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{1 0 - 7 0 4 0}$ | Medium | $7 / 8^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{1 0 - 7 0 4 1}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 8.18$ | $\$ 8.87$ | $\$ 9.85$ |
| $\mathbf{4 3 - 1 2 8 0}$ | Reinforced Screw Mandrel $\left(3 / 3 \mathbf{z}^{\prime \prime}\right)$ | $\$ 0.89$ | $\$ 0.95$ | $\$ 1.05$ |  |

SNAP-ON SANDING DISCS
Mandrels sold separately.


## MOORE'S MAGNUM POLISHERS

Moore's Magnum Polishers feature unique "felt-like" surfaces specially designed for working with all polishing parts.

| Order \# | Grade | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 1 0 8}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 24.70$ | $\$ 25.78$ | $\$ 26.85$ |
| $\mathbf{1 0 - 7 1 4 0}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 24.70$ | $\$ 25.78$ | $\$ 26.85$ |
| $\mathbf{1 0 - 7 1 2 0}$ | Fine | $7 / 8^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |



PINK ALUMINUM-OXIDE POINTS
Long-lasting pink aluminum-oxide points are ideal for fine finishing of non-precious and semi-precious metals. Non-contaminating.

| Item | Order\# | Shape | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 5 1 0 0}$ | Point | $\$ 21.17$ | $\$ 22.41$ | $\$ 24.90$ |
| B | $\mathbf{1 1 - 5 1 0 2}$ | Cylinder | $\$ 21.17$ | $\$ 22.41$ | $\$ 24.90$ |
| C | $\mathbf{1 1 - 5 1 0 3}$ | Cone | $\$ 21.17$ | $\$ 22.41$ | $\$ 24.90$ |
| D | $\mathbf{1 1 - 5 1 0 4}$ | Inverted Cone | $\$ 21.17$ | $\$ 22.41$ | $\$ 24.90$ |
| E | $\mathbf{1 1 - 5 1 0 5}$ | Wheel | $\$ 21.17$ | $\$ 22.41$ | $\$ 24.90$ |



KONTOUR-DIAMOND IMPREGNATED STONES
Diamond-impregnated stones give off very little heat and will cut time when working with harder metals. Medium grit stones used for shaping and contouring. Mounted on $3 / 32$ " shanks.

| Item | Order\# | Shape | $\mathbf{0 D}$ | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| F | $\mathbf{2 8 - 6 0 0 1}$ | Square | $5 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 39.84$ | $\$ 41.57$ | $\$ 43.30$ |  |
| G | $\mathbf{2 8 - 6 0 0 6}$ | Square | $7 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 39.84$ | $\$ 41.57$ | $\$ 43.30$ |  |
| H | $\mathbf{2 8 - 6 0 0 5}$ | Knife-Edge | $7 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 39.84$ | $\$ 41.57$ | $\$ 43.30$ |  |

## EVE

Contains 4 squareedge, 4 knife-edge, 1 cylinder of each grit and size with mandrels.

## UNMOUNTED

## SILICONE POLISHING WHEELS

Premium unmounted, silicone polishing wheels. Silicone rubber for flexibility and smooth finishing. Each wheel is impregnated with carefully graded silicone-carbide abrasive. These wheels provide a superior finish without messy compounds at a great price. Unmounted wheels have a $1 / 16^{\text {" }}$ arbor hole. Imported from Germany. Use mandrels: 43-1288 or 43-1289

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 1 - 6 0 5 2}$ | 117-Piece Kit Assortment | $\$ 45.05$ | $\$ 47.70$ | $\$ 53.00$ |


| STEP 1 <br> White <br> 100 Grit <br> Coarse | - | - | 5 | $\square$ | - | - |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Order\# | 11-6000 | 11-6001 | 11-6002 | 11-6003 | 11-6004 | 11-6005 | 11-6006 | 11-6007 | 11-6008 | 11-6009 |
| OD | 7/8" | 7/8" | 5/8" | $7 / 81$ | 7/8" | $5 / 8{ }^{\prime \prime}$ | 5/16" | $3 / 8{ }^{\prime \prime}$ | $1 / 2{ }^{1 /}$ | 9/16" |
| Thickness | $1 / 8{ }^{\prime \prime}$ | 1/4" | $1 / 8{ }^{\prime \prime}$ | 1/16" | 1/8" | $1 / 8{ }^{\prime \prime}$ | 13/16" | 7/8" | 7/8" | $1{ }^{\prime \prime}$ |
| Shape | Square | Square | Square | Square | Knife-Edge | Knife-Edge | Cylinder | Cylinder | Cylinder | Cylinder |
| 12+ | \$0.58 | \$0.87 | \$0.58 | \$0.58 | \$0.58 | \$0.58 | \$0.58 | \$0.71 | \$0.87 | \$1.37 |
| $6+$ | \$0.63 | \$0.95 | \$0.63 | \$0.63 | \$0.63 | \$0.63 | \$0.63 | \$0.77 | \$0.95 | \$1.49 |
| $1+$ | \$0.70 | \$1.05 | \$0.70 | \$0.70 | \$0.70 | \$0.70 | \$0.70 | \$0.85 | \$1.05 | \$1.65 |

STEP 2
Black
220 Grit
Medium

| Order\# | $\mathbf{1 1 - 6 0 1 2}$ | $\mathbf{1 1 - 6 0 1 3}$ | $\mathbf{1 1 - 6 0 1 4}$ |
| :--- | :--- | :--- | :--- |
| OD | $7 / 8^{\prime \prime}$ | $7 / 8^{\prime \prime}$ | $5 / 8^{\prime \prime}$ |
| Thickness | $1 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ |
| Shape | Square | Square | Square |
| $12+$ | $\$ 0.58$ | $\$ 0.87$ | $\$ 0.58$ |
| $6+$ | $\$ 0.63$ | $\$ 0.95$ | $\$ 0.63$ |
| $1+$ | $\$ 0.70$ | $\$ 1.05$ | $\$ 0.70$ |
|  |  |  |  |


| 11-6015 | 11-6016 | 11-6017 | 11-6018 | 11-6019 | 11-6020 | 11-6021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7/8" | 7/8" | 5/8" | 5/16" | $3 / 8{ }^{1}$ | $1 / 2{ }^{1}$ | 9/16" |
| 1/16" | 1/8" | $1 / 8{ }^{\prime \prime}$ | 13/16" | 7/8" | 7/8" | $1^{1 \prime}$ |
| Square | Knife-Edge | Knife-Edge | Cylinder | Cylinder | Cylinder | Cylinder |
| \$0.58 | \$0.58 | \$0.58 | \$0.58 | \$0.71 | \$0.87 | \$1.37 |
| \$0.63 | \$0.63 | \$0.63 | \$0.63 | \$0.77 | \$0.95 | \$1.49 |
| \$0.70 | \$0.70 | \$0.70 | \$0.70 | \$0.85 | \$1.05 | \$1.65 |

STEP 3 Blue 800 Grit Fine


| Order\# | 11-6040 | 11-6041 | 11-6042 | 11-6043 | 11-6044 | 11-6045 | 11-6046 | 11-6047 | 11-6048 | 11-6049 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | 7/8" | 7/8" | 5/8" | 7/8" | 7/8" | 5/8" | 5/16" | $3 / 8{ }^{\prime \prime}$ | $1 / 2$ " | 9/16" |
| Thickness | $1 / 8{ }^{\prime \prime}$ | $1 / 4{ }^{\prime \prime}$ | $1 / 8 "$ | $1 / 16^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | 1/8" | 13/16" | 7/8" | 7/8" | $1^{\prime \prime}$ |
| Shape | Square | Square | Square | Square | Knife-Edge | Knife-Edge | Cylinder | Cylinder | Cylinder | Cylinder |
| 12+ | \$0.58 | \$0.87 | \$0.58 | \$0.58 | \$0.58 | \$0.58 | \$0.58 | \$0.71 | \$0.87 | \$1.37 |
| $6+$ | \$0.63 | \$0.95 | \$0.63 | \$0.63 | \$0.63 | \$0.63 | \$0.63 | \$0.77 | \$0.95 | \$1.49 |
| $1+$ | \$0.70 | \$1.05 | \$0.70 | \$0.70 | \$0.70 | \$0.70 | \$0.70 | \$0.85 | \$1.05 | \$1.65 |

## MOUNTED

SILICONE POLISHING WHEELS
Premium, ready-to-use, mounted silicone polishers. Get a superior finish without the messy compounds. Excellent for karat golds, platinum, and palladium. $3 / 32^{11}$ shanks.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 11-6120 | 32-Piece Kit: 2 of each | $\$ 25.80$ | $\$ 27.32$ | $\$ 30.35$ |



STEP 1
Aggressive Pre-Finish White / 100 Grit Coarse

| Order\# | $\mathbf{1 1 - 6 1 0 0}$ | $\mathbf{1 1 - 6 1 0 1}$ | $\mathbf{1 1 - 6 1 0 2}$ | $\mathbf{1 1 - 6 1 0 3}$ |
| :--- | :--- | :--- | :--- | :--- |
| 0 O | $1 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $7 / 16^{\prime \prime}$ | $7 / 16^{\prime \prime}$ |
| Thickness | $3 / 8^{\prime \prime}$ | $11 / 6^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ |
| Shape | Point | Bullet | Square | Knife-Edge |
| $12+$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ |
| $6+$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ |
| $1+$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ |

STEP 2
Pre-Finish Black / 220 Grit Medium

| Order\# | $\mathbf{1 1 - 6 1 0 5}$ | $\mathbf{1 1 - 6 1 0 6}$ | $\mathbf{1 1 - 6 1 0 7}$ | $\mathbf{1 1 - 6 1 0 8}$ |
| :---: | :--- | :--- | :--- | :--- |
| 0 OD | $1 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\mathbf{7} / 16^{\prime \prime}$ | $7 / 16^{\prime \prime}$ |
| Thickness | $3 / 8^{\prime \prime}$ | $11 / 16^{" 1}$ | $1 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ |
| Shape | Point | Bullet | Square | Knife-Edge |
| $12+$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ |
| $6+$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ |
| $1+$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ |
|  |  |  |  |  |

STEP 3
Finish
Blue / 800 Grit
Fine



11-6112
7/16"
$1 / 8^{\prime \prime}$ Square
$\$ 0.92$ $\$ 1.03$ $\$ 1.15$


STEP 4 High Polish Pink / 1200 Grit Extra Fine

| Order\# | $\mathbf{1 1 - 6 1 1 5}$ | $\mathbf{1 1 - 6 1 1 6}$ | $\mathbf{1 1 - 6 1 1 7}$ | $\mathbf{1 1 - 6 1 1 8}$ |
| :--- | :--- | :--- | :--- | :--- |
| 0 D | $1 / 4^{" 1}$ | $1 / 4^{\prime \prime}$ | $7 / 16^{\prime \prime}$ | $7 / 16^{\prime \prime}$ |
| Thickness | $3 / 8^{\prime \prime}$ | $11 / 16^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ |
| Shape | Point | Bullet | Square | Knife-Edge |
| $12+$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ | $\$ 0.92$ |
| $6+$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ | $\$ 1.03$ |
| $1+$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ | $\$ 1.15$ |
|  |  |  |  |  |



GOLD POLISHING KIT
An introductory kit with a generous amount of our standard sized silicone pre-polished, high shine, and long life wheels along with mini-point cylinders and mandrels.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 1 - 8 1 0 0}$ | $44-$ Piece Gold Kit | $\$ 40.80$ | $\$ 42.58$ | $\$ 44.35$ |



## PLATINUM/GOLD POLISHING KIT

The most complete kit available! A wide range of silicone pre-polish and high shine wheels. Cutting discs for gold in two sizes. Mini-points, mandrels, and cylinders for inside rings. Silipum wheels that won't scratch the stones. Wheels come in square-edge, knife-edge, $7 / 8^{\prime \prime}$, and $5 / 8^{\prime \prime}$. This kit will handle all your polishing needs.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 1 1 0}$ | 70 -Piece Platinum/Gold Polishing Kit | $\$ 47.52$ | $\$ 49.58$ | $\$ 51.65$ |

## STULLER PREMIUM SILICONE POLISHERS

The ultimate silicone-carbide polishers for gold and all precious metal alloys in an easy three-step process. Made in Switzerland.


SILICONE PRE-POLISH WHEELS
A coarse wheel for fast cutting and leaving a very smooth surface.
Slightly harder and longer lasting than the flexible gray.


A dark gray coarse polisher for precious and semi-precious. Leaves a brilliant satin finish that removes scratches and prepares the material for a high-shine gloss.


| Order\# | 11-8120 | 11-8122 | 11-8124 | 11-8126 | 11-8134 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $7 / 81$ | 5/8" | 7/8" | 5/8" | $1 / 4{ }^{1 \prime}$ |
| Thickness | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | 1/8" | 1/8" | 7/8" |
| Shape | Square | Square | Knife-Edge | Knife-Edge | Cylinder |
| 12+ | \$5.47 | \$5.47 | \$5.47 | \$5.47 | \$5.47 |
| $6+$ | \$5.71 | \$5.71 | \$5.71 | \$5.71 | \$5.71 |
| $1+$ | \$5.95 | \$5.95 | \$5.95 | \$5.95 | \$5.95 |

One step harder than the dark gray, this wheel is more coarse and aggressive. Used for precious and non-precious. Excellent for deep scratches.


| Order\# | $\mathbf{1 1 - 8 1 3 6}$ | $\mathbf{1 1 - 8 1 3 8}$ | $\mathbf{1 1 - 8 1 4 0}$ | $\mathbf{1 1 - 8 1 4 2}$ |
| ---: | :--- | :--- | :--- | :--- |
| 0 D | $7 / 8^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $7 / 8^{\prime \prime}$ | $5 / 8^{\prime \prime}$ |
| Thickness | $1 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $18^{\prime \prime}$ |
| Shape | Square | Square | Knife-Edge | Knife-Edge |
| $12+$ | $\$ 5.47$ | $\$ 5.47$ | $\$ 5.47$ | $\$ 5.47$ |
| $6+$ | $\$ 5.71$ | $\$ 5.71$ | $\$ 5.71$ | $\$ 5.71$ |
| $1+$ | $\$ 5.95$ | $\$ 5.95$ | $\$ 5.95$ | $\$ 5.95$ |
|  |  |  |  |  |

A wheel made specifically for platinum and softer materials. Pre-polisher that leaves an extremely smooth finish and prepares for the final high-shine.


## UNMOUNTED

 SILICONE PRE-POLISH WHEELSA soft silicone wheel for high gloss. Very smooth, leaving a brilliant glossy coat.



Final high shine polisher. Creates an incredible high gloss after the pre-polish stage. Very soft and extremely smooth.
Unmatched performance with no need for rouge or compound.

PINK 1200 Grit

| Order\# | 11-8152 | 11-8154 | 11-8156 | 11-8158 | 11-8162 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OD | 5/8" | $5 / 81$ | 7/8" | $5 / 81$ | $1 / 81$ |
| Thickness | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | 7/8" |
| Shape | Square | Square | Knife-Edge | Knife-Edge | Cylinder |
| 12+ | \$6.21 | \$6.21 | \$6.21 | \$6.21 | \$6.21 |
| $6+$ | \$6.48 | \$6.48 | \$6.48 | \$6.48 | \$6.48 |
| 1+ | \$6.75 | \$6.75 | \$6.75 | \$6.75 | \$6.75 |

Used to remove light scratches quickly, leaving a smooth, even finish. Silicone-carbide abrasive allows medium fast cutting
while the silicone rubber bond produces a smooth finish. Soft, flexible polishers for satin finishes. Made in Germany.

| BLUE <br> Medium <br> Flexible | - | - | - | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Order\# | 11-6060 | 11-6061 | 11-6062 | 11-6063 | 11-606 |
| OD | $5 / 8{ }^{\prime \prime}$ | $7 / 8{ }^{\prime \prime}$ | $5 / 81$ | $7 / 81$ | 5/16" |
| Thickness | $1 / 8{ }^{\prime \prime}$ | 1/8" | 1/8" | $1 / 8{ }^{\prime \prime}$ | 13/16" |
| Shape | Square | Square | Knife-Edge | Knife-Edge | Cylinde |
| 12+ | \$0.60 | \$0.60 | \$0.60 | \$0.60 | \$0.60 |
| $6+$ | \$0.62 | \$0.62 | \$0.62 | \$0.62 | \$0.62 |
| $1+$ | \$0.65 | \$0.65 | \$0.65 | \$0.65 | \$0.65 |

Revolutionary green wheel for long-lasting and highly flexible polishers for precious metals. Made from the highest quality raw materials available. Soft, extremely flexible for a matte finish. Made in Germany.


MOUNTED
STULLER SELECT SYNTHETIC RUBBER POLISHERS
These flexible polishers are excellent for precious metals but also work well on brass, bronze, and other non-precious metals. Mounted acrylic, rubber polishers are slightly harder than silicone rubber and longer lasting. Safe for use with stones. These ready-to-use polishers are all mounted on $3 / 32^{\prime \prime}$ shank mandrels. Kit excludes smallest point.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 6 1 2 4}$ | $24-$ Piece Kit: 1 of each | $\$ 30.59$ | $\$ 31.92$ | $\$ 33.25$ |

EVE


| Order\# | 11-6121 | 11-6125 | 11-6126 | 11-6127 | 11-6128 | 11-6129 | 11-6130 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $1 / 81$ | $1 / 4 "$ | $1 / 41$ | $5 / 81$ | $3 / 411$ | $5 / 81$ | $5 / 81$ |
| Thickness | $3 / 8{ }^{\prime \prime}$ | $3 / 4{ }^{\prime \prime}$ | 11/16" | $1 / 8 "$ | 1/16" | 1/8" | $1 / 2{ }^{\prime \prime}$ |
| Shape | Point | Point | Bullet | Knife-Edge | Knife-Edge | Square | Cylinder |
| 12+ | \$1.20 | \$1.20 | \$1.20 | \$1.45 | \$1.45 | \$2.39 | \$2.16 |
| $6+$ | \$1.35 | \$1.35 | \$1.35 | \$1.53 | \$1.53 | \$2.50 | \$2.34 |
| $1+$ | \$1.50 | \$1.50 | \$1.50 | \$1.70 | \$1.70 | \$2.60 | \$2.60 |



| REDDISH |
| :--- |
| BROWN |
| Fine |

Order\#
OD

GREEN Extra Fine

| Order\# | 11-6151 | 11-6155 | 11-6156 | 11-6157 | 11-6158 | 11-6159 | 11-6160 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $1 / 8{ }^{\prime \prime}$ | $1 / 4{ }^{1 \prime}$ | $1 / 4{ }^{11}$ | $5 / 81$ | $3 / 4{ }^{11}$ | 5/8" | $5 / 81$ |
| Thickness | $3 / 8{ }^{\prime \prime}$ | $3 / 4{ }^{\prime \prime}$ | 11/16" | $1 / 8{ }^{\prime \prime}$ | 1/16" | $1 / 8{ }^{\prime \prime}$ | $1 / 2{ }^{\prime \prime}$ |
| Shape | Point | Point | Bullet | Knife-Edge | Knife-Edge | Square | Cylinder |
| 12+ | \$1.20 | \$1.20 | \$1.20 | \$1.19 | \$1.36 | \$2.16 | \$2.16 |
| $6+$ | \$1.35 | \$1.35 | \$1.35 | \$1.36 | \$1.53 | \$2.34 | \$2.34 |
| $1+$ | \$1.50 | \$1.50 | \$1.50 | \$1.70 | \$1.70 | \$2.60 | \$2.60 |

## UNMOUNTED

ACRYLIC POLISHERS
Unmounted acrylic polishers. Square wheels use mandrel



43-1280 or 43-1282. Cylinders use mandrel 43-1280 or 43-1286.


## EVEFLEX TECHNIK SERIES 400

Hard and long-lasting polishers for non-precious alloys and model casting material. Use for grinding and pre-polishing, removing casting skin, non-precious metals and model casting. Very hard wear-resistant polishers offering a high level of material removal. Featuring a hard, flexible synthetic rubber binder.

| BROWN <br> Medium | . | - |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Order\# | 11-6520 | 11-6521 | 11-6522 | 11-6523 | 11-6524 | 11-6525 |
| OD | $7 / 81$ | $7 / 81$ | 5/16" | $11 / 16^{\prime \prime}$ | $1 / 4{ }^{4}$ | $1 / 87$ |
| Thickness | $1 / 8{ }^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | 13/16" | $1 / 16^{\prime \prime}$ | $3 / 4{ }^{\prime \prime}$ | $3 / 8{ }^{\prime \prime}$ |
| Shape | Square | Square | Cylinder | Square | Point | Point |
| 12+ | \$0.60 | \$0.60 | \$0.60 | \$0.60 | \$1.08 | \$1.08 |
| $6+$ | \$0.68 | \$0.68 | \$0.68 | \$0.68 | \$1.22 | \$1.22 |
| $1+$ | \$0.85 | \$0.85 | \$0.85 | \$0.85 | \$1.35 | \$1.35 |

## POLISHING RODS

Long-lasting, acrylic polishing rods give you a smooth finish in all of your hard-to-reach places. Excellent for use on non-precious and precious metals. Available in 2 mm and 3 mm diameters and five abrasive grades. Kits include 10 of each rod and a mandrel.

| Order \# | Grade | Color | OD | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-6165 | Extra Coarse | Brown | 2 mm | 20 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6166 | Hard | Blue | 2 mm | 20 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6167 | Medium | Gray | 2 mm | 20 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6168 | Fine | Reddish Brown | 2 mm | 20 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6169 | Extra Fine | Green | 2 mm | 20 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6175 | Extra Coarse | Brown | 3 mm | 23 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6176 | Hard | Blue | 3 mm | 23 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6177 | Medium | Gray | 3 mm | 23 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6178 | Fine | Reddish Brown | 3 mm | 23 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6179 | Extra Fine | Green | 3 mm | 23 mm | \$0.83 | \$0.86 | \$0.90 |
| 11-6171 | 51-Piece Kit Assortment |  |  |  | \$23.60 | \$24.62 | \$25.65 |
| 11-6181 | 51-Piece Kit Assortment |  |  |  | \$23.60 | \$24.62 | \$25.65 |
| 43-1300 | 2 mm Mandrel ( $1 / 88^{\prime \prime}$ Arbor hole) |  |  |  | \$4.42 | \$4.61 | \$4.80 |
| 43-1301 | 3 mm Mandrel ( $1 / 8{ }^{\prime \prime}$ Arbor hole) |  |  |  | \$4.69 | \$5.09 | \$5.65 |




## UNMOUNTED

AIRFLEX POLISHERS
Excellent for all types of metal including titanium. Unmounted Airflex polishers provide a more flexible wheel than standard, heatless wheels. These new wheels are made with tiny air voids uniformly distributed through the wheel, providing a cool-running, flexible polishing wheel. These Airflex wheels aggressively remove material. Use mandrel 43-1280 or 43-1282.


| Order\# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 11-6172 | 31-Piece Airflex Kit | $\$ 20.52$ | $\$ 21.41$ | $\$ 22.30$ |


| SOUARE |
| :--- |
| WHEEL |
| Order\# |
| OD |

CERAMIC POLISHING WHEELS


Ceramic-infused polishing wheels for smoothing and polishing precious metals, including platinum, gold, silver, and titanium. Available in six color-coded grits, these wheels work faster and last longer than other polishers.
Use with mandrel 43-1280.

| Order \# | Grit | Color | OD $\times$ Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-6090 | 10-Piece Kit: 2 of each |  |  | \$11.27 | \$11.76 | \$12.25 |
| 11-6091 | 1500 | White | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |
| 11-6092 | 1000 | Gray | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |
| 11-6093 | 500 | Orange | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |
| 11-6094 | 320 | Violet | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |
| 11-6095 | 180 | Green | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |
| 11-6096 | 120 | Blue | $7 / 81 \times 1 / 81$ | \$11.27 | \$11.76 | \$12.25 |

## UNMOUNTED

STULLER PREMIUM SWISS STEEL POLISHERS
The most abrasive and toughest polishers for stainless steel and chrome-cobalt alloys. Available in three grits: coarse, medium, and fine.
Available in unmounted only. Made in Switzerland.

|  |  |  |  | . |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Order\# | 11-6350 | 11-6351 | 11-6353 | 11-6354 | 11-6356 | 11-6357 |
| OD | $1 / 4{ }^{1 /}$ | 7818 | $1 / 4{ }^{4}$ | $7 / 8$ | $1 / 4{ }^{4}$ | 7/8" |
| Thickness | 7/8" | 1/8" | 7/8" | $1 / 81$ | 7/8" | 1/8" |
| Grade | Coarse | Coarse | Medium | Medium | Fine | Fine |
| Shape | Cylinder | Square | Cylinder | Square | Cylinder | Square |
| 12+ | \$0.69 | \$0.69 | \$0.69 | \$0.69 | \$0.69 | \$0.69 |
| $6+$ | \$0.72 | \$0.72 | \$0.72 | \$0.72 | \$0.72 | \$0.72 |
| $1+$ | \$0.75 | \$0.75 | \$0.75 | \$0.75 | \$0.75 | \$0.75 |

STULLER PREMIUM PLATINUM AND GEMSTONE POLISHERS
Premium polishers for platinum and gemstones. Three-step process produces a high gloss luster on platinum. Made in Switzerland.


CHROME ALLOYS, STAINLESS STEEL, AND TITANIUM POLISHERS
Designed for use on high-strength alloys for preparing and high-gloss polishing. Controllable handling with a high level of material removal. Hard, flexible synthetic rubber binder.

| Order\# | 11-6530 | 11-6531 | 11-6532 | 11-6533 | 11-6534 | 11-6535 | 11-6540 | 11-6541 | 11-6542 | 11-6543 | 11-6544 | 11-6545 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | 7/8" | 7/8" | 7/8" | $1 / 4{ }^{\prime \prime}$ | $1 / 44$ | $5 / 81$ | 7/8" | $7 / 81$ | 7/8" | $1 / 4 "$ | $1 / 4{ }^{\prime \prime}$ | $5 / 81$ |
| Thickness | $1 / 8 "$ | $1 / 16$ " | $3 / 16^{\prime \prime}$ | 7/8" | 11/16" | 7/8" | $1 / 8 "$ | 1/16" | $3 / 16^{\prime \prime}$ | 7/8" | 11/16" | 7/8" |
| Shape | Square | Square | Square | Cylinder | Point | Square | Square | Square | Knife-Edge | Cylinder | Point | Square |
| 12+ | \$0.60 | \$0.60 | \$0.60 | \$0.60 | \$1.08 | \$1.12 | \$0.60 | \$0.60 | \$0.60 | \$0.60 | \$1.08 | \$1.12 |
| $6+$ | \$0.68 | \$0.68 | \$0.68 | \$0.68 | \$1.22 | \$1.26 | \$0.68 | \$0.68 | \$0.68 | \$0.68 | \$1.22 | \$1.26 |
| $1+$ | \$0.85 | \$0.85 | \$0.85 | \$0.85 | \$1.35 | \$1.40 | \$0.85 | \$0.85 | \$0.85 | \$0.85 | \$1.35 | \$1.40 |



DIAMOND COATED DRESSING STONE
This diamond-coated block allows fast dressing and shaping of silicone and rubber polishers.

## BLUE DRESSING STONE

Light blue abrasive stone used to shape and contour polishers.

## dressing stone

Hard, coarse, silicon-carbide block with various-sized, half-round grooves for cleaning and reshaping abrasive points and wheels.

| Item Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 0 - 4 0 8 0}$ | Dressing Stone | $13 / 8^{\prime \prime} \times \mathbf{3}^{1 / 2 "}$ | $9 / 6^{\prime \prime}$ | $\$ 6.26$ | $\$ 6.53$ | $\$ 6.80$ |
| B | $\mathbf{1 1 - 6 2 6 0}$ | Blue Stone | $7 / 8^{\prime \prime} \times 1^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |
| C | $\mathbf{1 1 - 6 2 6 1}$ | Diamond Coated $1 / 2^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 45.28$ | $\$ 49.10$ | $\$ 54.55$ |  |



Ceramic stones are designed for stoning tight corners, pockets, ribs, and slots. One of our most popular series of finishing stones, these are ideal for finishing EDM surfaces. Ceramic super stones will withstand considerable pressure for their relative thinness. The grit of the ceramic fiber is exposed in the cross section of the stones.

| Item Order \# | Grit | Color | $\mathbf{W} \times \mathrm{L}$ Th | ckness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FLAT |  |  |  |  |  |  |  |
| D 21-1200 | 300 | Light Brown | $2^{\prime \prime} \times 1^{\prime \prime}$ | $4 "$ | \$10.63 | \$11.09 | \$11.55 |
| E 21-1201 | 400 | Orange | $2^{\prime \prime} \times 1$ " | $4{ }^{\prime \prime}$ | \$10.63 | \$11.09 | \$11.55 |
| F 21-1202 | 600 | Brown | $2^{\prime \prime} \times 1$ " | $4{ }^{\prime \prime}$ | \$10.63 | \$11.09 | \$11.55 |
| G 21-1203 | 800 | Blue | $2^{\prime \prime} \times 1$ " | $4{ }^{\prime \prime}$ | \$10.63 | \$11.09 | \$11.55 |
| H 21-1204 | 1000 | White | $2^{\prime \prime} \times 1$ " | $4{ }^{\prime \prime}$ | \$10.63 | \$11.09 | \$11.55 |
| J 21-1205 | 1200 | Red | $2^{\prime \prime} \times 1$ " | $4{ }^{\prime \prime}$ | \$10.63 | \$11.09 | \$11.55 |
| ROUND |  |  |  |  |  |  |  |
| K 21-1206 | 300 | Light Brown | $2^{\prime \prime} \times 1$ " | $2{ }^{\prime \prime}$ | \$23.87 | \$24.91 | \$25.95 |
| L 21-1207 | 400 | Orange | 2 " $\times 31 / 5^{\prime \prime}$ |  | \$24.38 | \$25.44 | \$26.50 |
| M 21-1208 | 600 | Brown | 2 " $\times 31 / 5^{\prime \prime}$ |  | \$24.38 | \$25.44 | \$26.50 |
| N 21-1209 | 800 | Blue | 2 " $\times 31 / 5^{\prime \prime}$ |  | \$24.38 | \$25.44 | \$26.50 |
| P 21-1210 | 1000 | White | 2 " $\times 31 / 5^{\prime \prime}$ |  | \$24.38 | \$25.44 | \$26.50 |
| 0 21-1211 | 1200 | Red | 2 " $\times 31 / 5^{\prime \prime}$ |  | \$24.38 | \$25.44 | \$26.50 |



$5 \mathrm{~mm} \quad 3 \mathrm{~mm} \quad 2 \mathrm{~mm}$


## GENUINE HEATLESS® "MIZZY" WHEELS

These unique square-edge wheels are made from silicone carbide and a non-loading binder. Heatless "Mizzy" Wheels can be used for fast grinding or preparing contact finishes and texturing. Mandrels sold separately.

| Order \# | Width | OD | Thickness | Per Pack | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-4400 | 5 mm | $1{ }^{\prime \prime}$ | 3/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4390 | 3 mm | $1{ }^{1 \prime}$ | $1 / 8{ }^{1}$ | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4380 | 2 mm | $1{ }^{1 \prime}$ | 1/66" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4370 | 5 mm | 7/8" | 3/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4360 | 3 mm | 7/8" | $1 / 8{ }^{\prime \prime}$ | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4350 | 2 mm | 7/8" | 3/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4340 | 5 mm | $3 / 4{ }^{\prime \prime}$ | 3/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4330 | 3 mm | 3/4" | 1/8" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4320 | 2 mm | 3/4" | 1/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4310 | 5 mm | 3/8" | $3 / 16^{\prime \prime}$ | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4300 | 3 mm | 3/8" | 1/8 | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4290 | 2 mm | $3 / 81$ | 1/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4280 | 5 mm | $1 / 21$ | $3 / 16^{\prime \prime}$ | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4270 | 3 mm | 1/2" | 1/8" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4260 | 2 mm | 3/16" | 1/16" | Pack of 10 | \$5.01 | \$5.23 | \$5.45 |
| 11-4401 | 5 mm | $1{ }^{1 \prime}$ | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4391 | 3 mm | $1{ }^{\prime \prime}$ | 1/8" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4381 | 2 mm | $1{ }^{1 \prime}$ | 1/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4371 | 5 mm | 7/8" | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4361 | 3 mm | 7/8" | $1 / 8{ }^{\prime \prime}$ | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4351 | 2 mm | 7/8" | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4341 | 5 mm | $3 / 4{ }^{\prime \prime}$ | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4331 | 3 mm | 3/4" | $1 / 8{ }^{\prime \prime}$ | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4321 | 2 mm | $3 / 4{ }^{\prime \prime}$ | 1/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4311 | 5 mm | $3 / 8^{\prime \prime}$ | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4301 | 3 mm | $3 / 81$ | 1/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4291 | 2 mm | $3 / 81$ | 1/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4281 | 5 mm | $1 / 2{ }^{1}$ | 3/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4271 | 3 mm | 1/2" | $1 / 8{ }^{\prime \prime}$ | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 11-4261 | 2 mm | 1/2" | 1/16" | Pack of 50 | \$22.26 | \$23.23 | \$24.20 |
| 43-1280 | Reinforced Screw Mandrel (3/32" shank) |  |  |  | \$0.89 | \$0.95 | \$1.05 |
| 43-1283 | $1 / 88^{\prime \prime}$ Mandrel (1/8" shank with one silver cap for $1 / 8^{\prime \prime}$ and $1 / 4^{\prime \prime}$ thick wheels) |  |  |  | \$1.44 | \$1.62 | \$1.80 |

## CYLINDER POLISHING KIT

Specially designed cylinders for polishing inside rings. Eliminates the use of sand paper rolls. 14-piece kit includes: coarse 180 (blue), fine 220 (gray), extra-fine 800 (green), high-shine 1200 (pink), and two inside ring mandrels (1-43-1288 and 1-43-1289).


## STULLER PREMIUM RUBBER POLISHERS

Rubber polishers used for gold and other precious and semi-precious alloys. Made in Switzerland.


TITANIUM AND PLATINUM HIGH-PERFORMANCE POLISHING WHEELS
High-performance polishing wheels available in a medium grit and an extra-fine grit for high-luster polishing. Made in Germany from the highest quality raw materials available. Use mandrels 43-1280 or 43-1282.


## DIAMOND-IMPREGNATED POLISHING KIT

Platinum diamond-impregnated polishing kit contains nine polishers. Long-lasting, high performance, rubber polishers create a high luster quickly. Work especially well with platinum, tungsten and glass. These individual polishers are mounted and ready to use. One of each fineness of the point, disc, and square-edge polishers $(11 \mathrm{~mm} \times 14 \mathrm{~mm})$ are included in the kit. Shanks are $3 / 32^{\prime \prime}$.


| Item Order \# | Description | 12+ | 6+ | $\mathbf{1 +}$ |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 6 2 0 0}$ | 9-Piece Polishing Kit | $\$ 103.41$ | $\$ 107.90$ | $\$ 112.40$ |


| Item | Shape |  | Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | Square-Edge |  | $1 / 8{ }^{\prime \prime}$ | \$10.26 | \$10.70 | \$11.15 |
| C | Square-Edge | 7/16" | 3/16" | \$17.53 | \$18.29 | \$19.05 |
| D | Point | 3/16" | 9/16" | \$10.26 | \$10.70 | \$11.15 |
| E | Flex Disc | 3/4" | 1/16" | \$17.53 | \$18.29 | \$19.05 |
| F | Square-Edge | 7/16" | 1/8" | \$10.26 | \$10.70 | \$11.15 |
| G | Square-Edge | 7/16" | 3/16" | \$17.53 | \$18.29 | \$19.05 |
| H | Point | 3/16" | $9 / 16{ }^{\prime \prime}$ | \$10.26 | \$10.70 | \$11.15 |
| J | Flex Disc | $3 / 41$ | $1 / 16$ " | \$17.53 | \$18.29 | \$19.05 |
| K | Square | 11" | $2 "$ | \$10.26 | \$10.70 | \$11.15 |
| L | Square-Edge | 7/16" | 3/16" | \$17.53 | \$18.29 | \$19.05 |
| M | Point | 3/16" | 9/6" | \$10.26 | \$10.70 | \$11.15 |
| N | Flex Disc | 3/4" | 1/16" | \$17.53 | \$18.29 | \$19.05 |



## RUBY POWDER

Intended for use with hand buffs, brushes, felts and wood laps. Can be mixed with water or fine oil to form a 5000 grit polishing paste that will impart a high luster. The Ruby powder gives a high luster to platinum, gold, steel, precious stones, pearl, ivory, horn shell and porcelain.

| Order \# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| 59-1039 | High Shine Polishing Powder | 5000 | $\$ 5.65$ | $\$ 5.99$ | $\$ 6.65$ |



GEM SHINE POLISHING WHEELS
Polishing wheels designed for removing light surface scratches from soft stones such as onyx, cabochons, and opals. The Gem Shine wheels are impregnated with a polishing paste to provide scratch removal and a final polish on the stone's surface. Comes with five wheels and a reinforced mandrel.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 6 0 6 5}$ | Gem Shine Kit | $\$ 20.57$ | $\$ 21.78$ | $\$ 24.20$ |

MIRACLE GOLD SILICONE WHEEL
The industry's absolute finest rubberized abrasive for final polishing of gold and semi-precious metals. Eliminates the need for rouge. Use mandrel 43-1281.


## PUMICE POLISHERS

Excellent for use on prong and bezel finishing with set stones. Provides safe polishing around precious and synthetic stones. Contains a silicone binder, which provides more durability.


| GOLD Medium |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Order \# | 11-6244 | 11-6245 | 11-6246 | 11-6292 | 11-6290 | 11-6291 | 11-6249 |
| OD | 5/8" | 7/8" | 7/8" | $5 / 81$ | $1 / 4{ }^{10}$ | 5/8" | 5/8" |
| Thickness | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | 1/16" | 1/16" | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ |
| Shape | Square | Square | Knife-Edge | Knife-Edge | Point | Square | Knife-Edge |
| 12+ | \$0.68 | \$0.56 | \$0.68 | \$1.62 | \$1.62 | \$1.62 | \$0.68 |
| $6+$ | \$0.72 | \$0.64 | \$0.72 | \$1.71 | \$1.71 | \$1.71 | \$0.72 |
| $1+$ | \$0.80 | \$0.80 | \$0.80 | \$1.90 | \$1.90 | \$1.90 | \$0.80 |



## JEWELER'S PUMICE POLISHERS

Rubberized pumice polishers provide a very fine result for finishing and a final polish for gold and semi-precious metals. Will not scratch stones. Extra-long lasting.

| Item | Order \# | Shape | Outside Diameter | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 11-6280 | Square-Edge | 581 | $1 / 81$ | \$0.94 | \$0.99 | \$1.10 |
| D | 11-6281 | Square-Edge | 7/8" | $1 / 81$ | \$0.94 | \$0.99 | \$1.10 |
| E | 11-6282 | Knife-Edge | 5/81 | $1 / 8{ }^{1 /}$ | \$0.94 | \$0.99 | \$1.10 |
| F | 11-6283 | Knife-Edge | 7/8" | $1 / 8{ }^{1 /}$ | \$0.94 | \$0.99 | \$1.10 |



Abrasives
SILICONE PUMICE WHEELS
Unique pumice wheel mixed with silicone to last longer than standard pumice wheels. Safe for use on soft stones. Use with 10 mandrels 43-1280 or 43-1281.

| Item | Order \# | Shape | OD | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 11-8164 | Square | 7/8" | $1 / 81$ | \$3.83 | \$4.05 | \$4.50 |
| B | 11-8166 | Square | 5/8" | 1/8" | \$3.83 | \$4.05 | \$4.50 |
| C | 11-8168 | Knife-Edge | 7/8" | 1/8" | \$3.83 | \$4.05 | \$4.50 |
| D | 11-8170 | Knife-Edge | 5/8" | 1/8" | \$3.74 | \$4.05 | \$4.50 |

## ALL IN ONE POLISHERS

Introducing a new breakthrough polishing line. The "All in One" polishers allow you to polish and shine in one step. Ideal for touch-ups. Suitable for precious metals and stones. Long lasting and won't scratch stones. Unmounted. Use with mandrel 43-1281.

| Item | Order\# | Shape | $\mathbf{0 D}$ | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{1 1 - 6 6 0 0}$ | Square | $5 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 0.79$ | $\$ 0.86$ | $\$ 0.95$ |  |
| F | $11-6601$ | Square | $7 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 0.79$ | $\$ 0.86$ | $\$ 0.95$ |  |
| G | $\mathbf{1 1 - 6 6 0 2}$ | Knife-Edge | $5 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 0.79$ | $\$ 0.86$ | $\$ 0.95$ |  |
| H | $\mathbf{1 1 - 6 6 0 3}$ | Knife-Edge | $7 / 8 "$ | $1 / 8^{\prime \prime}$ | $\$ 0.79$ | $\$ 0.86$ | $\$ 0.95$ |  |

## STAINLESS STEEL MINIATURE MANDRELS

Long-lasting, acrylic polishing rods give you a smooth finish in all of your hard-to-reach places. Excellent for use on non-precious and precious metals. Available in 2 mm and 3 mm diameters and five abrasive grades. Kits include 10 of each rod and a mandrel.

| Item |  | Order \# | Description | Shank Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| J | $\mathbf{4 3 - 1 3 0 0}$ | $2 m m$ Mandrel | $3 / 32^{\prime \prime}$ | $\$ 4.42$ | $\$ 4.61$ | $\$ 4.80$ |
| K | $\mathbf{4 3 - 1 3 0 1}$ | $3 m m$ Mandrel | $3 / 32^{\prime \prime}$ | $\$ 4.69$ | $\$ 5.09$ | $\$ 5.65$ |
| L | $\mathbf{4 3 - 1 3 0 2}$ | Mandrel | $3 / 32^{\prime \prime}$ | $\$ 1.41$ | $\$ 1.53$ | $\$ 1.70$ |
| M | $\mathbf{4 3 - 1 3 0 3}$ | Reinforced | $3 / 32^{\prime \prime}$ | $\$ 1.41$ | $\$ 1.53$ | $\$ 1.70$ |
| N | $\mathbf{4 3 - 1 3 0 4}$ | $1 / 8^{\prime \prime}$ Standard | $3 / 32^{\prime \prime}$ | $\$ 1.62$ | $\$ 1.76$ | $\$ 1.95$ |
| P | $\mathbf{4 3 - 1 3 0 5}$ | $14 m m$ Wheel | $3 / 32^{\prime \prime}$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 1.80$ |
| O | $\mathbf{4 3 - 1 3 0 6}$ | $8 m m$ Wheel | $3 / 32^{\prime \prime}$ | $\$ 2.39$ | $\$ 2.50$ | $\$ 2.60$ |

## NICKEL-PLATED MINIATURE MANDRELS

Nickel-plated small wheel mandrels.

| Item | Order \# | Description Sh | k Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | 43-1280 | Reinforced Screw Mandrel | $3 / 321$ | \$0.89 | \$0.95 | \$1.05 |
| S | 43-1281 | Standard Screw Mandrel | $3 / 32^{1}$ | \$0.74 | \$0.84 | \$1.05 |
| T | 43-1282 | Heavy Duty Mandrel | $3 / 321$ | \$1.47 | \$1.68 | \$2.10 |
| U | 43-1283 | $1 / 8^{\prime \prime}$ Mandrel ( $1 / 8$ " shank with one silver cap for $1 / 8^{\prime \prime}$ and $1 / 4^{\prime \prime}$ thick wheels) |  | \$1.44 | \$1.62 | \$1.80 |
| V | 43-1286 | Stainless Steel | $3 / 321$ | \$0.74 | \$0.84 | \$1.05 |
| W | 43-1284 | $3 / 8{ }^{\text {3 }}$ Crew Stainless Steel | $3 / 321$ | \$0.64 | \$0.68 | \$0.75 |
| Y | 43-1288 | Stainless Steel | $3 / 32^{11}$ | \$2.66 | \$2.88 | \$3.20 |
| Z | 43-1289 | Stainless Steel | $1 / 8{ }^{\prime \prime}$ | \$2.66 | \$2.88 | \$3.20 |
| AA | 10-7050 | Snap-On Mandrel | $3 / 32^{\prime \prime}$ | \$1.70 | \$1.85 | \$2.05 |



## SPLIT MANDRELS FOR HANDPIECES

Emery paper is wrapped around this mandrel and used for polishing smaller pieces.

| Item | Order \# | Description | Length | Shank Size | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AB | 11-3009 | Tapered | 21/4" | $3 / 32^{\prime \prime}$ | \$1.36 | \$1.53 | \$1.70 |
| AC | 11-3010 | Slim | 21/4" | $3 / 321$ | \$1.33 | \$1.44 | \$1.60 |

## TAPERED SPINDLE ADAPTERS

MX Polishing Wheel features a consistent premium grade of siliconecarbide mineral along with brightness enhancers that result in controllable, consistent finishing and polishing of metal parts.


| Order \# | Hole ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 0 - 8 2 0 8}$ | $1^{\prime \prime}$ | $\$ 5.61$ | $\$ 5.86$ | $\$ 6.10$ |



## EXL II WHEELS

This wheel is a more aggressive wheel than the light deburring wheel. Excellent for rapid removal of sprues, parting lines, and fire scale. Wheels are $6^{\prime \prime} \times 1$ " and have a 1 " center hole. Be sure to order the correct adapter to fit your size motor shaft.

| Order \# | Grade | OD | Thickness | Hole ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 0 - 8 1 2 8}$ | Medium | $6^{\prime \prime}$ | $1^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 62.70$ | $\$ 65.42$ | $\$ 68.15$ | 6,000 |
| $\mathbf{1 0 - 8 1 2 7}$ | Fine | $1^{\prime \prime}$ | $1 / 16^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 67.34$ | $\$ 70.27$ | $\$ 73.20$ | $R P M$ |



## LIGHT DEBURRING WHEELS

These light deburring wheels have been the \#1 choice of jewelry manufacturers for years. Excellent for sprue removal. Wheels are 6 " in diameter and have a 1 " center hole. Flanges not included. 1" wheel adapter. Two pieces used for wheels with 1 " center hole. Order wheel adapter to fit your shaft diameter.

| Order \# | Grade | OD | Thickness | Hole ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | :--- | :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- |
| $\mathbf{1 0 - 8 1 8 2}$ | Medium | $6^{\prime \prime}$ | $1^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 60.49$ | $\$ 63.12$ | $\$ 65.75$ | 6,000 |
| $\mathbf{1 0 - 8 1 8 1}$ | Fine | $6^{\prime \prime}$ | $1^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 5.61$ | $\$ 58.03$ | $\$ 60.45$ |  |


fine

## STULLER ABRASIVE CLOTH FLAP WHEELS

Used for light deburring when the casting is not so advanced and scarred. Leaves a typical deep straight mark of the abrasive cloth on the surface, masked by the satin pattern of the abrasive. Use adapter 10-8208.

| Order \# | Grit | OD | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10-7060 | 120 | 3/16" | 1/16" | \$14.37 | \$15.21 | \$16.90 |
| 10-7061 | 180 | 3/16" | 1/16" | \$14.37 | \$15.21 | \$16.90 |
| 10-7062 | 240 | 3/16" | 1/16" | \$14.37 | \$15.21 | \$16.90 |
| 10-7063 | 280 | 3/16" | 1/16" | \$14.37 | \$15.21 | \$16.90 |
| 10-7064 | 320 | 3/16" | 1/16" | \$14.37 | \$15.21 | \$16.90 |
| 10-7065 | 400 | $3 / 16$ " | 1/16" | \$14.37 | \$15.21 | \$16.90 |


High-stretch, clean and finish buffs provide a fast, consistent, and beautiful satin finish. These $1 / 4^{\prime \prime}$ thick discs can be stacked to get the thickness you need.

| Order \# | Grade | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 8 1 2 0}$ | Medium | $4^{\prime \prime}$ | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |
| $\mathbf{1 0 - 8 1 2 1}$ | Fine | $4^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| $\mathbf{1 0 - 8 1 9 0}$ | Extra Fine | $4^{\prime \prime}$ | $\$ 2.12$ | $\$ 2.21$ | $\$ 2.30$ |
| $\mathbf{1 0 - 8 1 9 1}$ | Medium | $6^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 0 - 8 1 9 2}$ | Fine | $6^{\prime \prime}$ | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |
| $\mathbf{1 0 - 8 1 9 3}$ | Extra Fine | $6 "$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |



UNMOUNTED AIRFLEX POLISHING WHEELS
These new wheels are made with tiny air voids uniformly distributed throughout the wheel. This provides a cool running, flexible polishing wheel excellent for use on precious alloys, platinum, titanium, and stainless steel. Use with wheel mandrel 34-2013 and 34-2014.

| Item Order \# | Grade | $\mathbf{0 D}$ | Thickness | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | ---: | :--- | ---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 6 2 5 5}$ | Coarse | $4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.58$ | $\$ 19.39$ | $\$ 20.20$ |
| B | $\mathbf{1 1 - 6 2 5 6}$ | Medium | $4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.58$ | $\$ 19.39$ | $\$ 20.20$ |
| C | $\mathbf{1 1 - 6 2 5 7}$ | Fine | $4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.58$ | $\$ 19.39$ | $\$ 20.20$ |



## STULLER ALUMINUM-OXIDE FLAP WHEELS

The most popular item in the jewelry world. Used for every kind of satin finishing pattern, from the roughest (Grit A/Coarse) to the finest (Grit/Ultra-Fine).

| Order \# | Material | Grade | OD x Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10-7070 | Scotch Brite | Coarse | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7071 | Scotch Brite | Medium | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7072 | Scotch Brite | Fine | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7073 | Aluminum Oxide | Extra Fine | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7074 | Aluminum Oxide | Fine | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7075 | Aluminum Oxide | Super Fine | $4^{\prime \prime} \times 1^{\prime \prime}$ | \$9.61 | \$10.17 | \$11.30 |
| 10-7076 | Aluminum Oxide | Ultra-Fine | $4^{\prime \prime} \times 1$ 1 | \$9.61 | \$10.17 | \$11.30 |



## PREMIUM SILICONE POLISHING WHEELS

Requires no rouge or Tripoli. Each wheel is impregnated with carefully graded, silicone-carbide abrasive. Available in several grades. Measures 4" diameter x 15 mm thick with $1 / 2$ " center hole.
Use with 47-2560, $3 / 32$ " wheel arbor.

| Item Order \# |  | Grade | Color | OD $\times$ Thickness | Hole ID | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 11-6250 | Coarse | White | $4^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | \$20.40 |
| E | 11-6251 | Medium | Black | $4{ }^{\prime \prime} \times 3 / 8{ }^{\prime \prime}$ | 1/2" | \$20.35 |
| F | 11-6252 | Fine | Blue | $4^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $1 / 2^{11}$ | \$13.44 |
| G | 11-6253 | Extra Fine | Pink | $4^{\prime \prime} \times 3 / 8{ }^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | \$20.40 |

MINIMAT BRUSH WITH MANDREL
A. The .3 mm Minimat brush allows you to quickly put a fine textured finish on bands or other fine jewelry.
B. The .45 mm Minimat brush allows you to quickly put a medium textured finish on bands or other fine jewelry.
C. The 6 mm Minimat brush allows you to quickly put a coarse textured finish on bands or other fine jewelry.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 7 1 0 0}$ | .3 mm | $\$ 36.42$ | $\$ 38.57$ | $\$ 42.85$ |
| B | $\mathbf{1 1 - 7 1 0 0}$ | .45 mm | $\$ 36.42$ | $\$ 38.57$ | $\$ 42.85$ |
| C | $\mathbf{1 1 - 7 1 0 0}$ | .6 mm | $\$ 36.42$ | $\$ 38.57$ | $\$ 42.85$ |

A


## MINIMAT BRUSH SET WITH MANDREL

The Minimat brush set comes complete with one wheel, one mandrel, and one set of each size of pins. Use this set to create fine, medium, and coarse textures on bands or other fine jewelry.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 1 - 7 1 0 1}$ | $.3, .45$, and .6 mm | $\$ 56.36$ | $\$ 59.67$ | $\$ 66.30$ |



PRIMO® ${ }^{\circledR}$ FLAP BRUSH
Quality abrasive ideal for creating satin finishes.

|  |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| Order \# | Color | $\mathbf{O D} \times$ <br> Thickness | Inside <br> Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| $\mathbf{1 0 - 8 3 2 1}$ | Brown | $5^{\prime \prime} \times 1^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 18.54$ | $\$ 19.34$ | $\$ 20.15$ |
| $\mathbf{1 0 - 8 3 2 1}$ | Purple | $5^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.54$ | $\$ 19.34$ | $\$ 20.15$ |
| $\mathbf{1 0 - 8 3 2 1}$ | Green | $5^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.54$ | $\$ 19.34$ | $\$ 20.15$ |
| $\mathbf{1 0 - 8 3 2 1}$ | Gray | $5^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 18.54$ | $\$ 19.34$ | $\$ 20.15$ |



## PRIMO ${ }^{\circledR}$ BLENDING AND CONVOLUTED WHEELS

Quality abrasive wheel made from silicon carbide. Ideal for blending, deburring, and pre-polishing.

| Order\# | Color | $\mathbf{O D} \times$ <br> Thickness | Inside <br> Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 0 - 8 3 2 2}$ | Gray | $4^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.23$ | $\$ 28.42$ | $\$ 29.60$ |
| $\mathbf{1 0 - 8 3 2 2}$ | Purple | $4^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.23$ | $\$ 28.42$ | $\$ 29.60$ |
| $\mathbf{1 0 - 8 3 2 2}$ | Green | $4^{\prime \prime} \times 1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.23$ | $\$ 28.42$ | $\$ 29.60$ |



## SUPER NEW-GLUE ${ }^{\circledR}$

Super strength cyanoacrylate adhesive sets and cures rapidly at room temperature. New-Glue bonds rubber, metal, glass, and plastic. Dries clear and has an excellent resistance to chemicals and low temperatures. Made in the USA.

| Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | :---: | ---: |
| $\mathbf{1 2 - 2 1 2 0}$ | 3 g tube | $20-30$ seconds | $\$ 1.66$ | $\$ 1.80$ | $\$ 2.00$ |



VIGOR SUPER GLUE
Strong cyanoacrylate adhesive capable of bonding a combination of metals, plastic, rubber, ceramic, and glass. Sets and cures rapidly at room temperature. Requires no surface treatment. Bond is colorless and transparent.

| Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 1 7}$ | 2 g tube | $45-60$ minutes | $\$ 9.25$ | $\$ 9.65$ | $\$ 10.05$ |
| $\mathbf{1 2 - 2 1 1 8}$ | 32 g tube | $10-20$ minutes | $\$ 8.79$ | $\$ 9.17$ | $\$ 9.55$ |

## G-S HYPO TUBE CEMENT

This precision applicator allows you to apply cement inside beads without creating a mess. Recommended for all illusion designs that use plastic, ceramic, glass, and metal beads. Dries clear-no mess! Will not bond fingers.

| Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 0 5 0}$ | $1 / 20 z$ tube | $10-20$ seconds | $\$ 5.70$ | $\$ 5.95$ | $\$ 6.20$ |



TWO-PART JEWELRY EPOXY
Used for making and repairing jewelry. Also works on metal, wood, glass, stones, crystal, and ceramic. Clear, non-shrink formula is resistant to most chemicals. Two-part epoxy sets in just five minutes and withstands temperatures up to $175^{\circ}$ F. One fluid ounce total. Dries clear with a 2 year shelf life.

| Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 0 4 5 1}$ | $2-1 / 2$ oz tubes | 5 minutes | $\$ 3.27$ | $\$ 3.41$ | $\$ 3.55$ |

## SUPER GLUE QUICK FIX

1200 psi. Best product for general use. Works best on metal, china, glass, and plastic. Cures light yellow. One part hardener and one part resin.

| Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 3 7}$ | 1 oz tubes | 5 minutes | $\$ 2.42$ | $\$ 2.57$ | $\$ 2.85$ |

## SUPER GLUE OUICK FIX

Original formula super glue bonds instantly. Precision applicator extender tip drops super glue into tight spots. Works best on clean non-porous surfaces including metal, rubber, and plastic.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 2 - 2 1 1 4}$ | 2 g tube | $10-20$ seconds | $\$ 1.80$ | $\$ 2.03$ | $\$ 2.25$ |

## SUPER GLUE GEL

Precision applicator best for continuous stream of glue. Self-piercing tube. Works best on metal, rubber, and plastic.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 2 - 2 1 1 1}$ | 0.07 oz tube | $10-20$ seconds | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |

FUTURE GLUE GEL
Bonds instantly, faster than other super glues. Works on multiple surfaces including oily or dirty surfaces. Selfpiercing tube. Works on porous and non-porous surfaces including metal, cardboard, and corkboard.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{1 2 - 2 1 1 2}$ | 2 g tube | $10-20$ seconds | $\$ 2.07$ | $\$ 2.16$ | $\mathbf{\$ 2 . 2 5}$

## BONDINI EVERYTHING GEL

Fills gaps and cracks and penetrates through grease and oil to form a strong bond. Bonds rubber, stone, plastic, wood, metal, and tile.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| D | $\mathbf{1 2 - 2 1 1 3}$ | 4 g bottle | $10-20$ seconds | $\$ 2.42$ | $\$ 2.57$ | $\$ 2.85$ |

## QUICK SETTING EPOXY

1200 psi. Bonds vertical surfaces and fills gaps. Cures cream color or can be tinted to desired color. Works best on rubber, carpet, wood, and plastic.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 2 - 2 1 3 8}$ | 0.14 oz tubes | 5 minutes | $\$ 1.87$ | $\$ 1.98$ | $\$ 2.20$ |

## QUICK SETTING EPOXY

1200 psi. Best product for general use. Works best on metal, china, glass, and plastic. Cures light yellow.

| Item | Order \# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| F | $\mathbf{1 2 - 2 1 3 6}$ | $10 z$ tube | 5 minutes | $\$ 3.24$ | $\$ 3.65$ | $\$ 4.05$ |





## BEADALON® BEAD STRINGING GLUE

Great for use on Silk, Nymo, Nylon, Elasticity, Elonga, and other stringing materials. Beadalon Designers Bead Stringing Glue has a fine-tip applicator perfect for getting the glue exactly where you need it. No-clog cap keeps the applicator always ready.

| Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 0 5 1}$ | 10 ml tube | $\$ 3.95$ | $\$ 4.18$ | $\$ 4.65$ |

VIGOR ${ }^{\circledR}$ SUPER GLUE
Exceptionally effective for stone and pearl settings. Strong ethyl adhesive bonds any combination of metal, plastic, rubber, ceramic, or glass. Sets in $45-60$ seconds, and dries colorless and transparent.

| Order\# | Size | Drying Time | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 1 5}$ | $0.07 \mathrm{oz}(2 \mathrm{~g})$ | $45-60$ seconds | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |

## BEADFIX ${ }^{T m}$ SUPERFAST ADHESIVE

This adhesive is ideal for adhering glass, stone, metal, plastic, wood, and most other types of beads. Quick adhesion; allow 24 hours dry time for maximum strength. Precision applicators available with 3 gram BeadFix.

| Order \# | Description | Size | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 2 1}$ | Adhesive Glue | 0.10 oz $(3 \mathrm{~g})$ | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |

## BEADALON ${ }^{\circledR}$ BEAD FIX GEL



This adhesive is ideal for adhering glass, stone, metal, plastic, wood, and most other types of beads. BeadFix is unaffected by cold and heat, and is water resistant. Quick setting, even on absorbent surfaces. When attaching End Caps to Memory Wire, allow 24 hours drying time for maximum strength.

| Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 0 5 6}$ | Adhesive Gel | 0.43 oz $(3 \mathrm{~g})$ | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |



## GRIFFITH ACETONE

This quick-drying solvent dissolves most lacquers and cements.

| Order\# | Description | Size | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 8 0 0 0}$ | Acetone Solvent | 8 oz bottle | $\$ 6.72$ | $\$ 7.01$ | $\$ 7.30$ |

## TWO-PART JEWELRY EPOXY

A high-grade clear synthetic rubber adhesive with superior adhesion characteristics that sets in 10 minutes. Works on all woods, metals, fiberglass, glass, leather, and reinforced plastics. May be used on high wear surfaces.

| Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 3 5}$ | 3.7 oz tube | $\$ 5.23$ | $\$ 5.54$ | $\$ 6.15$ |



## DEVCON ${ }^{\circledR}$ EPOXY

Devcon ${ }^{\circledR}$ epoxy adhesive cures and joins materials together by a chemical reaction between the resin and hardener. This reaction results in a high strength bond that is resistant to most chemicals. Use epoxy adhesive for household, industrial, crafts, or for any job that requires a high-strength, high-quality bond. Works on metal, wood, concrete, glass, ceramics, china, and much more. Sets in five minutes and dries clear with strength up to $1,500 \mathrm{lbs}$

| Item |  |  |  | Order \# | Size | Drying Time |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |  |  |  |
| A | $\mathbf{1 2 - 2 1 3 1}$ | $2-1 / 20 z$ tubes | 5 minutes | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |
| B | $\mathbf{1 2 - 2 1 3 2}$ | $2-1 / 2$ oz tubes | $10-20$ minutes | $\$ 4.72$ | $\$ 5.00$ | $\$ 5.55$ |

## DEVCON® EPOXY 220, LIGHT AMBER

C. Drying Time: 12 hours (20 minutes with heat)

## DEVCON ${ }^{\circledR}$ EPOXY 330, WATER CLEAR

D. Excellent for attaching end caps to leather cord, the assembly of stones to metal findings and mending broken glass and china. Hardens in one hour (approximately) at room temperature and 10 minutes under heat lamp at $200^{\circ} \mathrm{F}$. Ideal where clarity is important. Refractive index is 1.3025 , tensile strength neat 9,000 pounds with viscosity at $1,200 \mathrm{CPS}$.
Drying Time: 1 hour (10 minutes with heat)

| Item Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{2 6 - 6 0 0 9}$ | Epoxy 220 | $2-1 / 202$ tubes | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |
| D | $\mathbf{2 6 - 6 0 1 0}$ | Epoxy 330 | $2-1 / 202$ tubes | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |



## ATTACK GLUE-DISSOLVING COMPOUND

Dissolves cured epoxy and polyester resins. Cleans cured resins from metal, stone, glass, wood, undrilled pearls, quartz, coral, and many other materials. Do not use with plastic, amber, or amelite.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 8 - 3 2 5 0}$ | Dissolving Compound | 8 oz can | $\$ 9.38$ | $\$ 9.79$ | $\$ 10.20$ |



## MINIGRIP RED LINE BAGS

Premium zipper easily snaps open-even with one hand-and zips securely shut. Superior clarity that you can see. Red Line bags are packaged in convenient dispenser bag packaging. Remove a bag at a time through the mid-package opening or...through the zipper at the top! Manufactured with $100 \%$ FDA-approved virgin LDPE and LLDPE resins. Reinforced zipper and side seams to keep bags from splitting when opened or filled.


| Order \# | $\mathbf{9 0 - 0 0 0 0}$ |
| :--- | :--- |
| Material | Plastic |
| Thickness | 2 mil |
|  | Sold in Bags of 100 |


|  | 2" $\times 2$ " | 2" $\times 3$ " | $3^{\prime \prime} \times 3^{\prime \prime}$ | $3^{\prime \prime} \times 4$ ' | 3" $\times 5$ " | $4 \times 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50+ | \$1.25 | \$1.25 | \$1.63 | \$1.70 | \$1.78 | \$1.95 |
| 10+ | \$1.38 | \$1.38 | \$1.79 | \$1.87 | \$1.95 | \$2.15 |
| 1+ | \$2.50 | \$2.50 | \$3.25 | \$3.40 | \$3.55 | \$3.90 |


|  | $4^{\prime \prime} \times 6^{\prime \prime}$ | 4" $\times 8$ " | $5 " \times 7$ " | 6" $\times 8$ 8' | $8^{\prime \prime} \times 10^{\prime \prime}$ | $10 \times 12$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50+ | \$2.20 | \$4.17 | \$3.10 | \$4.62 | \$5.81 | \$8.15 |
| 10+ | \$2.42 | \$4.46 | \$3.41 | \$4.95 | \$6.23 | \$8.74 |
| 1+ | \$4.40 | \$5.95 | \$6.20 | \$6.60 | \$8.30 | \$11.65 |


| Order \# | $\mathbf{9 0 - 0 2 0 0}$ |
| :--- | :--- |
| Material | Plastic |
| Thickness | 4 mil |
|  | Sold in Bags of 100 |


|  | 21/2" $\times 3$ " | $3^{\prime \prime} \times 4^{\prime \prime}$ | $3^{\prime \prime} \times 5^{\prime \prime}$ | 4" $\times 6$ " | 6" $\times 6$ ' | $6 \times 81$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50+ | \$2.91 | \$3.50 | \$4.10 | \$5.29 | \$6.62 | \$7.74 |
| 10+ | \$3.11 | \$3.75 | \$4.39 | \$5.66 | \$7.09 | \$8.29 |
| 1+ | \$4.15 | \$5.00 | \$5.85 | \$7.55 | \$9.45 | \$11.05 |


|  | $\mathbf{6 "} \times \mathbf{9 " ~}^{\prime \prime}$ |  |  | $\mathbf{8 "} \times \mathbf{1 0 "}$ |
| ---: | ---: | :---: | :---: | :---: |
| $50+$ | $\$ 9.38$ | $\$ 12.32$ | $\$ 15.47$ | $\$ 22.68$ |
| $10+$ | $\$ 10.05$ | $\$ 13.20$ | $\$ 16.58$ | $\$ 24.30$ |
| $1+$ | $\$ 13.40$ | $\$ 17.60$ | $\$ 22.10$ | $\$ 32.40$ |

## MINIGRIP RED LINE WHITE BLOCK BAGS

Premium zipper easily snaps open - even with one hand - and zips securely shut. Superior clarity that you can see. Red Line bags are packaged in convenient dispenser bag packaging. Remove a bag at a time through the mid-package opening or...through the zipper at the top! Manufactured with $100 \%$ FDA-approved virgin LDPE and LLDPE resins. Reinforced zipper and side seams to keep bags from splitting when opened or filled. Volume pricing is available by the box of 1,000 .


| Order\# | $\mathbf{9 0 - 0 1 0 0}$ |
| :--- | :--- |
| Material | Plastic |
| Thickness | 2 mil |

Sold in Bags of 100

|  | $2 \mathrm{C} \times 3^{\prime \prime}$ | $3^{\prime \prime} \times 4^{\prime \prime}$ | $3^{\prime \prime} \times 5^{\prime \prime}$ | $4^{\prime \prime} \times 6{ }^{\prime \prime}$ | $5{ }^{\prime \prime} \times 8$ " | 6" $\times 9$ " | 8" $\times 10$ | 9" $\times 12$ " |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $50+$ | \$1.65 | \$1.78 | \$1.90 | \$2.65 | \$4.87 | \$5.78 | \$10.19 | \$10.54 |
| $10+$ | \$1.82 | \$1.95 | \$2.09 | \$2.92 | \$5.21 | \$6.19 | \$10.91 | \$11.29 |
| $1+$ | \$3.30 | \$3.55 | \$3.80 | \$5.30 | \$6.95 | \$8.25 | \$14.55 | \$15.05 |


| Order \# | $\mathbf{9 0 - 0 3 0 0}$ |
| :--- | :--- |
| Material | Plastic |
| Thickness | 4 mil |
|  | Sold in Bags of 100 |


|  | $4^{\prime \prime} \times 6{ }^{\prime \prime}$ | 6" $\times 9$ " |
| :---: | :---: | :---: |
| 50+ | \$6.65 | \$10.75 |
| 10+ | \$7.13 | \$11.51 |
| $1+$ | \$9.50 | \$15.35 |

## MINIGRIP GREEN LINE BIODEGRADABLE BAGS

Ever wonder what happens to that poly bag when you throw it away? It will sit in a landfill for years before it even starts to biodegrade, if it does at all. With new Minigrip Green Line ${ }^{\text {tw }}$ bags, you no longer have to worry. Minigrip technology contains an innovative bio-resin additive found to be biodegradable (ASTM D5511), thus drastically reducing the plastic's landfill life. Every part of the bag is biodegradable. Same great performance of a Red Line ${ }^{\text {T" }}$ Bag, but biodegradable. Made of low-density polyethylene (LDPE).


Width $\times$ Length resealable bags are measured without the zipper included.


|  | 2" $\times 2$ " | $2 \mathrm{*} \times 3^{\prime \prime}$ | $3^{\prime \prime} \times 4$ | $4^{\prime \prime} \times 6{ }^{\text {" }}$ | 5" $\times 7$ " | $6 \times 9$ | 9" $\times 12$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50+ | \$1.25 | \$1.48 | \$2.00 | \$2.60 | \$3.65 | \$5.20 | \$8.50 |
| 10+ | \$1.38 | \$1.62 | \$2.20 | \$2.86 | \$4.01 | \$5.72 | \$9.35 |
| $1+$ | \$2.50 | \$2.95 | \$4.00 | \$5.20 | \$7.30 | \$10.40 | \$17.00 |



Bags are measured width by length. Width is the outside dimension, Length is measured from the bottom of the zipper to the bottom of the bag. Due to reinforced side seals, bag openings are approximately $1 / 2^{\prime \prime}$ less than their listed width.

CORROSION INTERCEPT CLEAR POLY ZIP-LOCK BAGS
Corrosion Intercept ${ }^{\oplus}$ clear poly zip-lock bags provide effective tarnish protection for metals. When the copper color turns black, it's time to change the intercept package. Protects items for up to 3 years. (sold in packs of 20)

| Order \# <br> $\mathbf{6 1 - 1 3 3 1}$ | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{6 1 - 1 \mathbf { 1 3 3 1 }}$ | $2^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |
| $\mathbf{6 1 - 1 3 3 2}$ | $4^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 126.27$ | $\$ 133.70$ | $\$ 148.55$ |
| $\mathbf{6 1 - 1 3 3 3}$ | $4^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 5.10$ | $\$ 5.40$ | $\$ 6.00$ |
| $\mathbf{6 1 - 1 3 3 4}$ | $6^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 5.31$ | $\$ 5.63$ | $\$ 6.25$ |
| $\mathbf{6 1 - 1 3 3 5}$ | $4^{\prime \prime} \times 4^{\prime \prime}$ Dual Compartment | $\$ 6.76$ | $\$ 7.16$ | $\$ 7.95$ |
| $\mathbf{6 1 - 1 3 3 6}$ | $6^{\prime \prime} \times 6^{\prime \prime}$ Dual Compartment | $\$ 7.23$ | $\$ 7.72$ | $\$ 6.35$ |



STATIC INTERCEPT NON-ABRASIVE ANTI-TARNISH STRIPS/TABS
The same technology used by NASA, the Guggenheim Museum and jewelry manufacturers worldwide.

- Provides protection from tarnish for up to 12 months
- Does not leave deposits on items it protects
- Nontoxic, non-abrasive, and will not scratch or harm metals or gemstones
- Before placing item in pouch, be sure item is clean, dry, and free of fingerprints and deposits

$\qquad$



## APPRAISAL FORMS

These repair order forms highlight specific areas to indicate issues for jewelry or watch repair.
The triple form allows for individual copies for record keeping and customers.

| Order \# | Description | $\mathbf{W} \times \mathrm{L}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 61-1630 | 3-Part Jewelry Repair Forms (Box of 500) | $41 / 2^{11} \times 61 / 2^{11}$ | \$60.03 | \$62.10 | \$69.00 |
| 61-1635 | 3-Part Watch Repair Forms (Box of 500) | $41 / 2^{11} \times 61 / 2^{11}$ | \$60.03 | \$62.10 | \$69.00 |
| 61-1660 | Zip Bag with Pouch (Box of 100) | $5^{\prime \prime} \times 61 / 2^{\prime \prime}$ | \$89.72 | \$93.79 | \$101.95 |
| 61-1655 | Appraisal Form | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | \$21.71 | \$22.46 | \$24.95 |




Jewelry Form Close-Up


Watch Form Close-Up

TRIPLE-DUTY REPAIR ENVELOPES
Each numbered envelope has two detachable stubs with corresponding numbers; one for the customer and one for filing. Printed on standard kraft paper. Measures $31 / 8^{\prime \prime} \times 53 / 4^{\prime \prime}$. Sold in packs of 1,000 .

| Order \# <br> $\mathbf{6 1 - 1 5 1 0}$ | Description | Envelope \# | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 1 - 1 5 2 0}$ | Repair Envelope | $1-1000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 3 0}$ | Repair Envelope | $1001-2000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 4 0}$ | Repair Envelope | $2001-3000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 0}$ | Repair Envelope | $2001-5000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 5}$ | Repair Envelope | $5001-6000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 6}$ | Repair Envelope | $6001-7000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 7}$ | Repair Envelope | $7001-8000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 8}$ | Repair Envelope | $8001-9000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 9}$ | Repair Envelope | $9001-9999$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |



Front


Back

## ACRYLIC ENVELOPE ORGANIZER AND DIVIDERS

Keep your repair orders neat and arranged with this handy repair envelope organizer. Made of clear, sturdy, acrylic, this organizer will fit conveniently on most work surfaces for easy storage and retrieval. Repair envelopes (61-1510 shown with A) not included.

|  | em Order \# | Description | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 61-1560 | Acrylic Envelope Organizer | $31 / 21 \times 11^{\prime \prime} \times 31 / 2^{\prime \prime}$ | \$18.35 | \$18.75 | \$19.95 |
| B | 61-1640 | Repair Form Dividers | $9^{\prime \prime} \times 4^{\prime \prime}$ | \$82.18 | \$83.89 | \$85.60 |

JEWELRY REPAIR ENVELOPES
These repair order forms highlight specific areas to indicate issues for jewelry or watch repair. The triple form allows for individual copies for record keeping and customers.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{6 1 - 1 7 0 0}$ | Repair Envelopes (Box of 500$)$ | $51 / 2 " \times 31 / 8^{\prime \prime}$ | $\$ 22.60$ | $\$ 23.38$ | $\$ 25.98$ |



## Energizer:

- Buy them in bulk or buy them as singles
- Energizer, a name you can trust for performance
- Alkaline, rechargeable, watch, hearing aid, testers, kits
- Available for next day delivery
- Huge profit potential for jewelers

Build battery sales and profits with our wide range of battery options. Visit Stuller.com to see our complete line of batteries and accessories. Order online or call 800-877-7777.


ENERGIZER WATCH BATTERY STARTER KITS
Build your watch battery replacement sales and profits with our Energizer ${ }^{\oplus}$ Watch Battery Deluxe Starter Kit. These kits contain assorted watch batteries that cover $97 \%$ of the replacement market sales, plus other useful tools to make your watch battery replacement business a profit center.

- 60 Drawer Cabinet
- Watch Battery Analyzer
- Cross Reference Guide
- Battery Size Chart
- Store Counter Sign
- Training Booklet
- Watch Tool Kit


## Deluxe Kit contains:

- Battery Types Included (200):
- 20 each: 377SP, 362SP, 379SP
- 5 each: $371,376,370,392,397,337,394,315,303,384$, $391,395,357,321,317,319,362,399,373,396,389,344$, 390, ECR1216, ECR2025, ECR2016, ECR2032, ECR1025


## Basic Kit contains:

- Battery Types Included (130):


ENERGIZER-LITHIUM BATTERIES
(INDIVIDUAL)

| Order \# |  | $\mathbf{1 0 0 +}$ | $\mathbf{2 5 +}$ |
| :--- | ---: | ---: | ---: |
| EBAT 1025 | $\mathbf{1 +}$ |  |  |
| EBAT 1225 | $\$ 0.83$ | $\$ 0.99$ | $\$ 1.18$ |
| EBAT 1220 | $\$ 0.75$ | $\$ 0.76$ | $\$ 0.91$ |
| EBAT 1216 | $\$ 0.80$ | $\$ 1.00$ | $\$ 1.33$ |
| EBAT 1620 | $\$ 0.71$ | $\$ 0.86$ | $\$ 1.02$ |
| EBAT 1632 | $\$ 0.71$ | $\$ 0.89$ | $\$ 1.18$ |
| EBAT 1616 | $\$ 0.56$ | $\$ 0.70$ | $\$ 0.93$ |
| EBAT 2025 | $\$ 0.64$ | $\$ 0.77$ | $\$ 0.92$ |
| EBAT 2016 | $\$ 0.64$ | $\$ 0.77$ | $\$ 0.92$ |
| EBAT 2032 | $\$ 0.65$ | $\$ 0.78$ | $\$ 0.93$ |
| EBAT 2012 | $\$ 0.73$ | $\$ 0.92$ | $\$ 1.22$ |
| EBAT 2450 | $\$ 0.99$ | $\$ 1.19$ | $\$ 1.42$ |
| EBAT 2430 | $\$ 0.83$ | $\$ 1.00$ | $\$ 1.19$ |

OTHER BRANDS

| Order \# | Brand | $\mathbf{1 0 0 +}$ | $\mathbf{2 5 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: |
| EBAT 2354 | Panasonic | $\$ 2.30$ | $\$ 2.76$ | $\$ 3.28$ |
| EBAT 2412 | Panasonic | $\$ 4.58$ | $\$ 5.49$ | $\$ 6.54$ |
| EBAT 1612 | Panasonic | $\$ 3.51$ | $\$ 4.22$ | $\$ 5.02$ |
| EBAT 2320 | Renata | $\$ 0.81$ | $\$ 0.97$ | $\$ 1.15$ |

## Energizer. T-ROMERORY

ENERGIZER-SILVER OXIDE BATTERIES (INDIVIDUAL)

| Order \# | $\mathbf{1 0 0 +}$ | $\mathbf{2 5 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: |
| EBAT 364-363 | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.39$ |
| EBAT 377-376 | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.44$ |
| EBAT 379 | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.52$ |
| EBAT 317 | $\$ 0.70$ | $\$ 0.88$ | $\$ 1.17$ |
| EBAT 319 | $\$ 0.52$ | $\$ 0.62$ | $\$ 0.74$ |
| EBAT 319 | $\$ 0.57$ | $\$ 0.69$ | $\$ 0.82$ |
| EBAT 379 | $\$ 0.50$ | $\$ 0.60$ | $\$ 0.72$ |
| EBAT 377-376 | $\$ 0.34$ | $\$ 0.40$ | $\$ 0.48$ |
| EBAT 321 | $\$ 0.53$ | $\$ 0.64$ | $\$ 0.76$ |
| EBAT 364-363 | $\$ 0.29$ | $\$ 0.35$ | $\$ 0.42$ |
| EBAT 362-361 | $\$ 0.47$ | $\$ 0.56$ | $\$ 0.67$ |
| EBAT 341 | $\$ 1.23$ | $\$ 1.48$ | $\$ 1.76$ |
| EBAT 397-396 | $\$ 0.77$ | $\$ 0.69$ | $\$ 0.82$ |
| EBAT 315 | $\$ 0.91$ | $\$ 1.08$ |  |
| EBAT 393-309 | $\$ 0.71$ | $\$ 0.85$ | $\$ 1.01$ |
| EBAT 373 | $\$ 0.54$ | $\$ 0.65$ | $\$ 0.77$ |
| EBAT 371-370 | $\$ 0.57$ | $\$ 0.69$ | $\$ 0.82$ |
| EBAT 395-399 | $\$ 0.78$ | $\$ 0.94$ | $\$ 1.12$ |
| EBAT 394-380 | $\$ 1.13$ | $\$ 1.36$ | $\$ 1.62$ |
| EBAT 386-301 |  |  |  |

WATCH BATTERIES
(SPACE PACKS)

| Order \# <br> EBAT 341 | $\mathbf{1 0 0 +}$ | $\mathbf{2 5 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: | ---: |
| EBAT 317 | $\$ 19.44$ | $\$ 23.33$ | $\$ 27.77$ |
| EBAT 379 | $\$ 10.78$ | $\$ 12.94$ | $\$ 15.40$ |
| EBAT 319 | $\$ 8.62$ | $\$ 10.34$ | $\$ 12.31$ |
| EBAT 377-376 | $\$ 9.25$ | $\$ 11.10$ | $\$ 13.21$ |
| EBAT 321 | $\$ 6.38$ | $\$ 7.65$ | $\$ 9.11$ |
| EBAT 364-363 | $\$ 8.51$ | $\$ 10.21$ | $\$ 12.16$ |
| EBAT 397-396 | $\$ 5.67$ | $\$ 6.80$ | $\$ 8.10$ |
| EBAT 362-361 | $\$ 9.04$ | $\$ 10.84$ | $\$ 12.91$ |
| EBAT 315 | $\$ 7.54$ | $\$ 9.05$ | $\$ 10.77$ |
| EBAT 395-399 | $\$ 12.67$ | $\$ 15.20$ | $\$ 18.10$ |
| EBAT 394-380 | $\$ 11.74$ | $\$ 14.09$ | $\$ 16.77$ |
| EBAT 373 | $\$ 11.74$ | $\$ 14.09$ | $\$ 16.77$ |
| EBAT 371-370 | $\$ 8.41$ | $\$ 10.09$ | $\$ 12.01$ |




EMERGING POWER BATTERIES

| Order \# |  | 100+ | 25+ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| EBAT | 309 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 315 | \$3.75 | \$3.75 | \$3.75 |
| EBAT | 319 | \$3.17 | \$3.17 | \$3.17 |
| EBAT | 321 | \$2.59 | \$2.59 | \$2.59 |
| EBAT | 329 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 337 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 339 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 341 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 344-350 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 346 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 357-303 | \$5.30 | \$5.30 | \$5.30 |
| EBAT | 362-361 | \$2.07 | \$2.07 | \$2.07 |
| EBAT | 364-363 | \$1.41 | \$1.41 | \$1.41 |
| EBAT | 365-366 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 371-370 | \$2.15 | \$2.15 | \$2.15 |
| EBAT | 373 | \$2.86 | \$2.86 | \$2.86 |
| EBAT | 377-376 | \$1.48 | \$1.48 | \$1.48 |
| EBAT | 379 | \$1.73 | \$1.73 | \$1.73 |
| EBAT | 386-301 | \$5.82 | \$5.82 | \$5.82 |
| EBAT | 387 | \$5.69 | \$5.69 | \$5.69 |
| EBAT | 390-389 | \$2.98 | \$2.98 | \$2.98 |
| EBAT | 391-381 | \$6.27 | \$6.27 | \$6.27 |
| EBAT | 392-384 | \$2.46 | \$2.46 | \$2.46 |
| EBAT | 394-380 | \$3.68 | \$3.68 | \$3.68 |
| EBAT | 395-399 | \$2.50 | \$2.50 | \$2.50 |
| EBAT | 397-396 | \$2.52 | \$2.52 | \$2.52 |

## گENER



EMERGING POWER-LITHIUM WATCH BATTERIES

| Order \# |  | $\mathbf{1 0 0 +}$ | $\mathbf{2 5 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: |
| EBAT | $\mathbf{1 0 2 5}$ | $\$ 1.52$ | $\$ 1.52$ | $\$ 1.52$ |
| EBAT | $\mathbf{1 2 2 5}$ | $\$ 1.64$ | $\$ 1.64$ | $\$ 1.64$ |
| EBAT | $\mathbf{1 2 2 0}$ | $\$ 1.57$ | $\$ 1.57$ | $\$ 1.57$ |
| EBAT | $\mathbf{1 2 1 6}$ | $\$ 1.43$ | $\$ 1.43$ | $\$ 1.43$ |
| EBAT | $\mathbf{1 6 2 0}$ | $\$ 1.49$ | $\$ 1.49$ | $\$ 1.49$ |
| EBAT | $\mathbf{1 6 3 2}$ | $\$ 2.51$ | $\$ 2.51$ | $\$ 2.51$ |
| EBAT | $\mathbf{1 6 1 6}$ | $\$ 1.22$ | $\$ 1.22$ | $\$ 1.22$ |
| EBAT | $\mathbf{2 0 3 2}$ | $\$ 0.87$ | $\$ 0.87$ | $\$ 0.87$ |
| EBAT $\mathbf{2 0 2 5}$ | $\$ 0.88$ | $\$ 0.88$ | $\$ 0.88$ |  |
| EBAT $\mathbf{2 0 1 6}$ | $\$ 0.87$ | $\$ 0.87$ | $\$ 0.87$ |  |
| EBAT $\mathbf{2 4 5 0}$ | $\$ 2.77$ | $\$ 2.77$ | $\$ 2.77$ |  |
| EBAT $\mathbf{2 4 3 0}$ | $\$ 2.25$ | $\$ 2.25$ | $\$ 2.25$ |  |

## RENATA DELUX WATCH BATTERY STARTER KIT

This deluxe assortment contains everything needed to get started, including the perfect mix of 225 assorted popular batteries-46 types covering $99 \%$ of sales, Renata's designer 60-drawer organizer display cabinet, two watch case openers, small Phillips and flat head screwdrivers, battery size selector, plastic tweezers, cross reference guides, inventory control form, watch battery tester, case vice table clamp, scratch brush contact case cleaner, spring bar tool and assorted spring bars, rubber gasket assortment, Renata official traffic Poster and Renata Watch Battery Basics instructional DVD.

## RENATA BATTERY SIZE CHECKER

This handy hard plastic tool is the world's easiest device for cross-referencing button and coin cell watch batteries. Start with the small holes and work your way around until you find a hole that fits. Type numbers marked next to the holes correspond to the cell size. The device indicates which option to use to power simple analogs or high drain applications incorporating back lights and alarms.


- Each single blister can be torn away from the compact strip of 10 cells.
- Renata's type number, corresponding Japanese number and best before/use by date are printed on each individual blister.
- Black arrow indicates easy-opening tab located in one corner of the blister.


## RENATA BATTERIES

RENATA's comprehensive assortment of over 40 different watch battery types, mostly of the silver oxide 1.55 V system, offers a suitable power source for any electronic device requiring an ultra-compact, long lasting, low voltage power source. Thanks to its close association with Swiss watch industry, RENATA has first-hand knowledge of what a high quality watch battery must stand for, an optimized volume/capacity ratio, dimensional precision and stability, high capacity retention on storage (low self-discharge), excellent reliability thanks to a uniformly high
 quality level, state of the art leakproofness thanks to a sophisticated sealing process, and constant availability

| Order \# | 100+ | 25+ | 1+ | Order \# | 100+ | 25+ | 1+ | Order \# | 100+ | 25+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EBAT 1025 | \$9.09 | \$10.90 | \$12.98 | EBAT 319 | \$6.31 | \$7.58 | \$9.02 | EBAT 376 | \$4.70 | \$5.64 | \$6.71 |
| EBAT 1216 | \$10.24 | \$12.29 | \$14.63 | EBAT 321 | \$5.85 | \$7.02 | \$8.36 | EBAT 377 | \$4.70 | \$5.64 | \$6.71 |
| EBAT 1220 | \$9.63 | \$11.55 | \$13.75 | EBAT 329 | \$9.16 | \$11.00 | \$13.09 | EBAT 379 | \$5.54 | \$6.65 | \$7.92 |
| EBAT 1225 | \$7.01 | \$8.41 | \$10.01 | EBAT 335 | \$11.70 | \$14.04 | \$16.72 | EBAT 380 | \$8.62 | \$10.35 | \$12.32 |
| EBAT 1616 | \$7.16 | \$8.59 | \$10.23 | EBAT 337 | \$18.40 | \$22.08 | \$26.29 | EBAT 381 | \$7.25 | \$8.69 | \$10.35 |
| EBAT 1620 | \$7.85 | \$9.42 | \$11.22 | EBAT 339 | \$11.21 | \$13.46 | \$16.02 | EBAT 384 | \$4.77 | \$5.73 | \$6.82 |
| EBAT 1632 | \$9.09 | \$10.90 | \$12.98 | EBAT 341 | \$13.55 | \$16.26 | \$19.36 | EBAT 386 | \$12.47 | \$14.97 | \$17.82 |
| EBAT 2016 | \$7.08 | \$8.50 | \$10.12 | EBAT 344 | \$15.48 | \$18.57 | \$22.11 | EBAT 387S | \$13.86 | \$16.63 | \$19.80 |
| EBAT 2025 | \$7.08 | \$8.50 | \$10.12 | EBAT 346 | \$14.01 | \$16.82 | \$20.02 | EBAT 389 | \$7.08 | \$8.50 | \$10.12 |
| EBAT 2032 | \$7.16 | \$8.59 | \$10.23 | EBAT 350 | \$15.48 | \$18.57 | \$22.11 | EBAT 390 | \$7.08 | \$8.50 | \$10.12 |
| EBAT 2320 | \$8.20 | \$9.84 | \$11.71 | EBAT 357 | \$12.47 | \$14.97 | \$17.82 | EBAT 391 | \$7.39 | \$8.86 | \$10.55 |
| EBAT 2325 | \$8.97 | \$10.76 | \$12.81 | EBAT 361 | \$5.16 | \$6.19 | \$7.37 | EBAT 392 | \$4.77 | \$5.73 | \$6.82 |
| EBAT 2430 | \$9.16 | \$11.00 | \$13.09 | EBAT 362 | \$5.16 | \$6.19 | \$7.37 | EBAT 393 | \$10.47 | \$12.57 | \$14.96 |
| EBAT 2450N | \$10.93 | \$13.12 | \$15.62 | EBAT 364 | \$3.70 | \$4.44 | \$5.28 | EBAT 394 | \$8.62 | \$10.35 | \$12.32 |
| EBAT 301 | \$12.47 | \$14.97 | \$17.82 | EBAT 365 | \$11.70 | \$14.04 | \$16.72 | EBAT 395 | \$6.31 | \$7.58 | \$9.02 |
| EBAT 303 | \$12.47 | \$14.97 | \$17.82 | EBAT 366 | \$11.70 | \$14.04 | \$16.72 | EBAT 396 | \$6.31 | \$7.58 | \$9.02 |
| EBAT 309 | \$10.47 | \$12.57 | \$14.96 | EBAT 370 | \$5.93 | \$7.11 | \$8.47 | EBAT 397 | \$6.31 | \$7.58 | \$9.02 |
| EBAT 315 | \$8.32 | \$9.98 | \$11.88 | EBAT 371 | \$5.93 | \$7.11 | \$8.47 | EBAT 399 | \$6.31 | \$7.58 | \$9.02 |
| EBAT 317 | \$9.01 | \$10.81 | \$12.87 | EBAT 373 | \$7.78 | \$9.33 | \$11.11 | EBAT 2320 | \$0.81 | \$0.97 | \$1.15 |

## Energizer.



## ENERGIZER WATCH BATTERY PAD

This durable watch battery pad is an excellent work surface for your battery changing station. It features a boldly printed battery cross reference chart that covers every conceivable contemporary battery size.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| EBATPAD | Battery Coin Cross-Reference Pad | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |

ENERGIZER MAX (BLISTER-PACKED)

- Long lasting, dependable power for your everyday devices
- Available in AA, AAA, AAAA, C, D, 9 volt
- Estimated shelf life - 7 years

| Item | Order \# | Battery Size | Per Pack | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | EBATAA | AA | Pack of 4 | \$4.60 | \$4.80 | \$5.00 |
| B | EBATAAA | AAA | Pack of 4 | \$5.15 | \$5.38 | \$5.60 |
| C | EBATAAAA | AAAA | Pack of 2 | \$3.31 | \$3.46 | \$3.60 |
| D | EBATC | C | Pack of 2 | \$4.83 | \$5.04 | \$5.25 |
| E | EBATD | D | Pack of 2 | \$4.83 | \$5.04 | \$5.25 |
| F | EBAT9V | 9 V | Pack of 1 | \$4.83 | \$5.04 | \$5.25 |

## BATTERY SIZE CHECKER

Conveniently determine battery size with this easy-to-use plastic battery size checker. Just slip the battery into the various slots to determine size.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| EBAT101 | Battery Size Checker | $\$ 1.43$ | $\$ 1.49$ | $\$ 1.55$ |

EVEREADY ALKALINE BATTERIES (BLISTER-PACKED)

- The Eveready ${ }^{\circ}$ brand name has been part of powering people's lives for over 160 years
- These batteries are long lasting in low to moderate drain devices
- Estimated shelf life - 5 years

| Item |  | Order \# | Battery Size | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| G | EBATAA | AA | Pack of 4 | $\$ 3.40$ | $\$ 3.55$ | $\$ 3.70$ |
| H | EBATAAA | AAA | Pack of 4 | $\$ 3.40$ | $\$ 3.55$ | $\$ 3.70$ |
| J | EBATC | C | Pack of 2 | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |
| K | EBATD | D | Pack of 2 | $\$ 3.59$ | $\$ 3.74$ | $\$ 3.90$ |
| L | EBAT9V | 9V | Pack of 1 | $\$ 3.31$ | $\$ 3.46$ | $\$ 3.60$ |

ENERGIZER ADVANCED LITHIUM
Lithium battery technology maximizes your gear's performance and keeps you going non-stop.

- Last up to 4X Ionger in digital cameras (versus Energizer® Max)
- Last 20 hours longer in wireless gaming accessories.
- Last up to 30\% longer in personal audio devices (versus Energizer ${ }^{\circ}$ Max)
- Weighs $1 / 3$ less than standard alkaline.
- Available in AA, AAA, 9V
- Estimated shelf life - 10 years
- Leak resistant construction

| Item | Order\# | Battery Size | Per Pack | 12+ | 6+ | 1+ |
| :---: | :--- | :---: | :--- | ---: | ---: | ---: | ---: |
| A | EBATAA | AA | Pack of 4 | $\$ 8.83$ | $\$ 9.22$ | $\$ 9.60$ |
| B | EBATAAA | AAA | Pack of 4 | $\$ 8.83$ | $\$ 9.22$ | $\$ 9.60$ |

## ENERGIZER ULTIMATE LITHIUM BATTERIES

For the countless electronic gadgets that you can't live without. Get the best lithium battery technology that's proven to be the world's longest lasting AA and AAA batteries in high-tech devices. Other things you should know: - Last up to 8 X Ionger in digital cameras (versus Energizer Max AA only, results vary by camera)

- Weigh $1 / 3$ less than standard alkaline batteries
- Performs in extreme temperatures from $-40^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}$
- Leak resistant construction
- 15 -year storage life

| Item | Order\# | Battery Size | Per Pack | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| C | EBATAA | AA | Pack of 8 | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |
| D | EBATAA | AA | Pack of 2 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |
| E | EBATAAA | AAA | Pack of 4 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |

## ENERGIZER HEARING AID BATTERIES

- World's only hearing aid battery dispenser
- Battery goes straight from dispenser to hearing aid
- Dispenser protects batteries from dust and dirt
- Available in sizes 10, 13, 312, 675,-1.4V

| Order \# | Description | Battery \# | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | 1+ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| EBATHA | EZ Turn \& Lock | $\# 10$ | Pack of 8 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |
| EBATHA | EZ Turn \& Lock | $\# 10$ | Pack of 16 | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |
| EBATHA | EZ Turn \& Lock | $\# 13$ | Pack of 16 | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |
| EBATHA | EZ Turn \& Lock | $\# 13$ | Pack of 8 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |
| EBATHA | EZ Turn \& Lock | $\# 312$ | Pack of 8 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |
| EBATHA | EZ Turn \& Lock | $\# 312$ | Pack of 16 | $\$ 14.67$ | $\$ 15.31$ | $\$ 15.95$ |
| EBATHA | EZ Turn \& Lock | $\# 675$ | Pack of 8 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |
| EBATHA | EZ Turn \& Lock | $\# 675$ | Pack of 4 | $\$ 4.55$ | $\$ 4.75$ | $\$ 4.95$ |






ENERGIZER SPECIAL APPLICATION BATTERIES

- These lithium batteries have high-energy density and a long-life power source - Used in photography devices, calculators, memory backup, pocket pages, and watches

| Order \# | Description | Volts | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| EBAT1.5V | N | 1.5 V | Pack of 2 | $\$ 2.53$ | $\$ 2.64$ | $\$ 2.75$ |
| EBAT12V | A23 | 12 V | Pack of 2 | $\$ 2.67$ | $\$ 2.78$ | $\$ 2.90$ |



## Energizer.



ENERGIZER E² RECHARGEABLE
Features and Benefits:

- Packed with four AA 2500 MAH cells
- Energizer's highest capacity cells
- Charges both AA and AAA MiMH cells in $81 / 2$ hours
- Compact charger ideal for camera and travel bags
- Package fits on standard pegs

| Item Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :--- | :--- | ---: | ---: | ---: |
| A | EBATAA | Rechargeable Batteries, AA (2-pack) | $\$ 5.84$ | $\$ 6.10$ | $\$ 6.35$ |
| B | EBATAAA | Rechargeable Batteries, AAA (2-pack) | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| C | EBATC | Rechargeable Batteries, C (2-pack) | $\$ 9.20$ | $\$ 9.60$ | $\$ 10.00$ |
| D | EBATD | Rechargeable Batteries, D (2-pack) | $\$ 9.20$ | $\$ 9.60$ | $\$ 10.00$ |
| E | EBAT9V | Rechargeable Batteries, 9V (1-pack) | $\$ 9.20$ | $\$ 9.60$ | $\$ 10.00$ |

## ENERGIZER ${ }^{\circledR}$ CHARGERS

## F. Smart Battery Charger

Countdown timer shows how long until batteries are charged. Battery fuel gauge shows charge status. Bad battery alert detects, alerts, and shuts off charging when a non-NiMH or old NiMH battery is inserted. Large visual display can be viewed from across the room. Charges two or four AA or AAA NiMH rechargeable batteries.

## G. 15-Minute Battery Charger

Charges 1-4 AA or AAA NiMH rechargeable batteries. Charge in your car with the included car adapter or at home with the wall adapter. Easy-to-read charge status indicator light. Energy Star certified.

## H. Family Charger

- Super safe-will only begin charging when closed
- Easy-to-read charge status indicator
- Charges up to eight AA, eight AAA, four C, four D, or two 9 V rechargeable batteries

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| F | EBATCHARGER | Smart Charger | $\$ 19.27$ | $\$ 20.11$ | $\$ 20.95$ |
| G | EBATCHARGER | 15-Minute Charger | $\$ 38.00$ | $\$ 39.65$ | $\$ 41.30$ |
| H | EBATCHARGER | Family Charger | $\$ 30.31$ | $\$ 31.63$ | $\$ 32.95$ |

ENERGIZER ${ }^{\circledR}$ METAL KEY CHAIN LIGHT
Bright Nichia LED delivers. Momentary push-button switch for extended 30-hour run time. Spring clip key chain. Two Energizer" CR2032 lithium coin cell batteries included. Durable cast metal body.

| Item | Order \# | Description | Lumens | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{8 0 - 0 0 0 3}$ | 1 Bub LED Light | 14 | $\$ 7.18$ | $\$ 7.61$ | $\$ 8.45$ |

## ENERGIZER ${ }^{\circledR}$ LIGHT

Bright 1 Watt LED. Knurled grip. 7-hour run time with AA lithium or $3 ½$ hours with alkaline. Durable machine with high strength aluminum case. Regulatory circuitry for stable light output. Weatherproof push-button tail switch. Packed with Energizer Ultimate Lithium AA batteries.

| Item | Order \# | Description | Lumens | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | ---: | ---: | ---: |
| B | $\mathbf{8 0 - 0 0 0 1}$ | Tactical Metal Light | 85 | $\$ 20.70$ | $\$ 21.92$ | $\$ 24.35$ |



B


ENERGIZER ${ }^{\text {® }}$ FLASHLIGHT
Non-slip rubber textured handle with built-in stand for hands-free use. Large push-button switch for use with gloves. LED technology. Packed with long-lasting AAA Energizer batteries.

| Item | Order \# | Description | Lumens | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| C | $\mathbf{8 0 - 0 0 0 2}$ | Large 2 Bulb LED Light | 11 | $\$ 9.86$ | $\$ 10.44$ |

## DELUXE BATTERY TOOL KIT (EVEREADY® TOOL KIT)

Contains the tools you need to change a battery in a convenient, faux-leather pouch. Has a zipper and elastic bands to keep tools securely in place. Shipped with a complete list of tools for easy replacement.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 2 5 0 0}$ | Battery Tool Kit | $\$ 26.48$ | $\$ 28.04$ | $\$ 31.15$ |



## WATCH TOOL KIT

This watch kit is specifically designed for watch battery replacement of all brand name watches. The tools included will allow you to open the watch back, remove the old watch battery, safely handle all components, replace your watch batteries, size or replace your watch band, replace or adjust watch band clasp, or remove watch band links.

- Yellow case opener
- 1.6 mm screwdriver
- Aluminum spring bar tool
- Case holder
- Watchmakers hammer
- 2.0 mm screwdriver
- Blue band opener
- Multi-function watch band remover
- Bracelet holding block
- Plastic tweezers
- Pocket case opener

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 2 6 0 0}$ | Watch Tool Kit | $\$ 34.68$ | $\$ 36.72$ | $\$ 40.80$ |



## Energizer. <br> 

## ENERGIZER® WATCH ELECTRIC BATTERY TESTER

Tests full range of silver, mercury, and coin lithium watch/electronic batteries. Compact, modern design is easy to use. Instructions on bottom of tester.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 1 0 0 0}$ | Tester | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |



## ENERGIZER ${ }^{\circledR}$ WATCH BATTERY ANALYZER

Electronic testing device. Determines if there is a problem with the watch or if the battery needs replacing without having to open the watch case. Easy-to-read instruction manual included. Tests all types of batteries: silver-oxide, high-drain, silver-dioxide, low drain, mercury, and lithium.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 3 0 0 0}$ | Analyzer | $\$ 45.01$ | $\$ 47.66$ | $\$ 52.95$ |

## OT 2500 BATTERY AND PULSE TESTER

Test the pulse of quartz watch movement. Can be checked with movement out of watch case or inside of watch case. Two options to check silver oxide low and high drain battery power. Additionally, this tester allows you to check the coil of the watch movement with the power conductor indicators. Very practical tool for battery and quartz movement changers.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 3 0 0 2}$ | Tester | $\$ 11.73$ | $\$ 12.42$ | $\$ 13.80$ |



## ANTI-STATIC BENCH MAT

Flexible mat used for organizing tools and projects.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 8 8}$ | Light Green | $14^{\prime \prime} \times 91 / 22^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |

## BATTERY CHANGING PARTS KIT

Kit contains spare parts for changing watch batteries. Contains battery clamp screws, electronic module screws, battery clamps, insulators, and watch gaskets.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $59-\mathbf{0 2 8 0}$ | 200 -piece Kit | $\$ 31.69$ | $\$ 33.07$ | $\$ 34.45$ |

ASSORTED BATTERY CLAMPS

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 1 0 6}$ | Assorted Clamps (Pack of 25) | $\$ 18.35$ | $\$ 19.15$ | $\$ 19.95$ |
| $\mathbf{6 4 - 5 1 0 7}$ | Assorted Clamps (Pack of 30) | $\$ 6.39$ | $\$ 6.67$ | $\$ 6.95$ |

100\% SILK CARDED BEAD CORD
The beaders prefer the tight-woven silk cord needle attached. When stringing, remove all the cord from the card and string your strand at the end without the twisted stainless steel needle. When you are finished, cut the bead strand off and use the remaining silk (with the needle still attached) for another project. Sold by the card.

POLY NYLON (POLYAMID) CARDED BEAD CORD
Poly Nylon, also referred to as "Polyamid", is a strong, fray-resistant, and very knottable stringing material. The nylon card has needle attached. This nylon creates very tight knots and has the stretch of regular nylon. Sold by the card.

| Color | White | Dark Pink | Light Pink | Red | Beige | Yellow | Dark Blue | 12+ | $6+$ | $1+$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Order \# | Order \# | Order \# | Order\# | Order \# | Order \# | Order\# |  |  |  |
| Size \#1 | 38-4001 | - | - | - | - | - | - | \$1.23 | \$1.31 | \$1.45 |
| \#2 | 38-4002 | 38-4012 | 38-4011 | 38-4022 | 38-4025 | 38-4032 | 38-4042 | \$1.23 | \$1.31 | \$1.45 |
| \#3 | 38-4003 | 38-4007 | 38-4013 | 38-4020 | 38-4027 | 38-4033 | 38-4038 | \$1.23 | \$1.31 | \$1.45 |
| \#4 | 38-4004 | 38-4014 | 38-4015 | 38-4024 | 38-4028 | 38-4034 | 38-4044 | \$1.23 | \$1.31 | \$1.45 |
| \#5 | 38-4005 | 38-4009 | 38-4017 | 38-4021 | 38-4029 | 38-4035 | 38-4039 | \$1.23 | \$1.31 | \$1.45 |
| \#6 | 38-4006 | 38-4016 | 38-4018 | 38-4026 | 38-4030 | 38-4036 | 38-4046 | \$1.23 | \$1.31 | \$1.45 |
| \#8 | 38-4008 | 38-4010 | 38-4019 | 38-4023 | 38-4031 | - | 38-4040 | \$1.27 | \$1.35 | \$1.50 |


| Color | Lilac | Amethyst | Green | Brown | Turquoise | Gray | Black | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Order \# | Order \# | Order \# | Order \# | Order\# | Order \# | Order \# |  |  |  |
| Size \#2 | 38-4041 | 38-4052 | 38-4062 | 38-4072 | 38-4060 | 38-4082 | 38-4092 | \$1.23 | \$1.31 | \$1.45 |
| \#3 | 38-4043 | 38-4050 | 38-4053 | 38-4057 | 38-4061 | 38-4070 | 38-4093 | \$1.23 | \$1.31 | \$1.45 |
| \#4 | 38-4045 | 38-4054 | 38-4064 | 38-4074 | 38-4063 | 38-4084 | 38-4094 | \$1.23 | \$1.31 | \$1.45 |
| \#5 | - | 38-4051 | 38-4055 | 38-4059 | 38-4065 | 38-4071 | 38-4073 | \$1.23 | \$1.31 | \$1.45 |
| \# | 38-4048 | 38-4056 | 38-4066 | 38-4076 | 38-4067 | 38-4086 | 38-4096 | \$1.23 | \$1.31 | \$1.45 |
| \#8 | 38-4049 | 38-4058 | 38-4068 | 38-4078 | 38-4069 | 38-4088 | 38-4098 | \$1.27 | \$1.35 | \$1.50 |

100\% PURE SILK BEAD STRINGING CORD
Silk is the finest natural fiber in the world. This smooth, twisted three-ply, 100\% pure silk thread has the most luxurious feel and softest sheen of any natural fiber. Our bead cord is extremely supple, yet resistant to stretch and wear. Durable enough to withstand the abrasion of pearls, glass beads, and gemstones.

| Order \# | Threa Size | Diameter | Length | Tested Strength | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WHITE CORD |  |  |  |  |  |  |  |
| 38-6030 | B | 0.008 " $(0.203 \mathrm{~mm})$ | 390" | 3.7 lbs | \$0.00 | \$0.00 | \$0.00 |
| 38-6031 | D | 0.012 " 0.305 mm ) | 260" | 5.9 lbs | \$9.14 | \$9.68 | \$10.75 |
| 38-6032 | E | 0.013 " (0.325mm) | 200" | 8.2 lbs | \$8.67 | \$9.18 | \$10.20 |
| 38-6033 | F | $0.014{ }^{\text {" }}$ ( 0.348 mm ) | 1401 | 10.9 lbs | \$8.67 | \$9.18 | \$10.20 |
| 38-6034 | FF | $0.017{ }^{\prime \prime}(0.381 \mathrm{~mm})$ | $115{ }^{\prime \prime}$ | 12.8 lbs | \$8.67 | \$9.18 | \$10.20 |

BLACK CORD

| $\mathbf{3 8 - 6 0 3 8}$ | B | $0.008^{\prime \prime}(0.203 \mathrm{~mm})$ | $1170^{\prime \prime}$ | 3.7 lbs | $\$ 8.93$ | $\$ 10.20$ | $\$ 12.75$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- | :--- |
| $\mathbf{3 8 - 6 0 3 8}$ | D | $0.012^{\prime \prime}(0.305 \mathrm{~mm})$ | $780^{\prime \prime}$ | 5.9 lbs | $\$ 8.93$ | $\$ 10.20$ | $\$ 12.75$ |
| $\mathbf{3 8 - 6 0 3 8}$ | E | $0.013^{\prime \prime}(0.325 \mathrm{~mm})$ | $6000^{\prime \prime}$ | 8.2 lbs | $\$ 8.93$ | $\$ 10.20$ | $\$ 12.75$ |
| $\mathbf{3 8 - 6 0 3 8}$ | F | $0.014^{\prime \prime}(0.348 \mathrm{~mm})$ | $420^{\prime \prime}$ | 10.9 lbs | $\$ 8.93$ | $\$ 10.20$ | $\$ 12.75$ |
| $\mathbf{3 8 - 6 0 3 8}$ | FF | $0.017^{\prime \prime}(0.381 \mathrm{~mm})$ | $84^{\prime \prime}$ | 12.8 lbs | $\$ 8.93$ | $\$ 10.20$ | $\$ 12.75$ |



## BEADALON ${ }^{\otimes}$ ULTRA SUPPLEMAX

Ultra abrasion-resistant supplemax is a technological advance from Beadalon. This material has 15 times the abrasion resistance of other nylon bead stringing materials. It has a soft white appearance, which makes it look thread-like while maintaining excellent drape.

| Order \# | Color | Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 7 1 2 0}$ | Clear | $0.01^{\prime \prime}(0.25 \mathrm{~mm})$ | 82 ft | $\$ 1.23$ | $\$ 1.31$ | $\$ 1.45$ |
| $\mathbf{3 8 - 7 1 8 8}$ | White | $0.01^{\prime \prime}(0.25 \mathrm{~mm})$ | 82 ft | $\$ 2.08$ | $\$ 2.21$ | $\$ 2.45$ |
| $\mathbf{3 8 - 7 1 8 9}$ | White | $0.012^{\prime \prime}(0.3 \mathrm{~mm})$ | 82 ft | $\$ 2.08$ | $\$ 2.21$ | $\$ 2.45$ |




## ELASTICITY

Make popular stretch jewelry in a snap! Just string beads or charms onto Elasticity and finish with a secure knot. Apply rubber cement to the knot to protect it and provide a professional appearance. Sold in 25 meter spools.

| Order \# | Color | Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 7 1 3 0}$ | Clear | $0.02^{\prime \prime}(0.5 \mathrm{~mm})$ | 82 ft | $\$ 7.10$ | $\$ 7.52$ | $\$ 8.35$ |
| $\mathbf{3 8 - 7 1 3 1}$ | Clear | $0.039^{\prime \prime}(1 \mathrm{~mm})$ | 82 ft | $\$ 8.12$ | $\$ 8.60$ | $\$ 9.55$ |
| $\mathbf{3 8 - 7 1 3 3}$ | Black | $0.02^{\prime \prime}(0.5 \mathrm{~mm})$ | 82 ft | $\$ 7.10$ | $\$ 7.52$ | $\$ 8.35$ |
| $\mathbf{3 8 - 7 1 3 4}$ | Black | $0.0399^{\prime \prime}(1 \mathrm{~mm})$ | 82 ft | $\$ 8.12$ | $\$ 8.60$ | $\$ 9.55$ |



## BEADALON ${ }^{\circledR}$ WILDFIRE ${ }^{\oplus}$ THREAD

Wildfire beading thread features the strength and durability of DandyLine, with a smooth, thermally-bonded coating, creating a superior stringing product that cannot be pierced with a needle. Super strong, waterproof, and near zero-stretch, this cord will not fray at the ends, making it easy to thread through a needle. This colorfast, knotable, supple cord is also available for multiple-strand seeded bead designs.

| Order \# <br> $\mathbf{3 8 - 7 1 9 1}$ | Color | Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 8 - 7 1 9 2}$ | White | $0.006^{\prime \prime}(0.15 \mathrm{~mm})$ | 50 ft | $\$ 6.62$ | $\$ 7.56$ | $\$ 9.45$ |
| $\mathbf{3 8 - 7 1 9 3}$ | Black | $0.008^{\prime \prime}(0.02 \mathrm{~mm})$ | 50 ft | $\$ 6.62$ | $\$ 7.56$ | $\$ 9.45$ |
| $\mathbf{3 8 - 7 1 9 4}$ | White | $0.008^{\prime \prime}(0.02 \mathrm{~mm})$ | 50 ft | $\$ 6.62$ | $\$ 7.56$ | $\$ 9.45$ |



## COLLAPSIBLE EYE NEEDLES

Perfect for stringing beads with very small holes. Needles have a specially designed eye that automatically collapses and instantly reshapes when it is pulled through the bead. Needles are five inches long and kink-resistant.
$\qquad$

| Order \# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 0 1 0 6}$ | Fine | $0.012^{\prime \prime}(0.30 \mathrm{~mm})$ | $\$ 2.64$ | $\$ 2.79$ | $\$ 3.10$ |
| $\mathbf{3 8 - 0 1 0 7}$ | Medium | $0.014^{\prime \prime}(0.36 \mathrm{~mm})$ | $\$ 2.64$ | $\$ 2.79$ | $\$ 3.10$ |
| $\mathbf{3 8 - 0 1 0 8}$ | Heavy | $0.020 "(0.51 \mathrm{~mm})$ | $\$ 2.64$ | $\$ 2.79$ | $\$ 3.10$ |

$\qquad$
TWISTED-BEAD NEEDLES
Twisted-bead needles, ideal for general beading. Approximately $31 / 2^{"}$ long and flexible.

| Order\# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 8 - 0 1 0 0}$ | Fine | 0.23 mm | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |
| $\mathbf{3 8 - 0 1 0 1}$ | Medium | 0.35 mm | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |
| $\mathbf{3 8 - 0 1 0 2}$ | Heavy | 0.49 mm | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |



## SBEADY ${ }^{\text {™ }}$ WIRE NEEDLES

An easy way to string beads onto Beadalon wire - use the Beadalon Sbeady Wire Needle. The Sbeady Wire Needle comes in four sizes that correspond to Beadalon wire sizes.

| Order \# | Description | Length | Unit Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 0 1 1 9}$ | Assorted | $11 / 2^{11}$ | Pack of 4 | $\$ 21.04$ | $\$ 22.28$ | $\$ 24.75$ |

## USING THE SBEADY WIRE NEEDLE

Just slip the wire into the end of the needle using the easy-slide, half-open portion to guide the wire into the hollow needle. Push the wire all the way in, and you're ready to string!


BRASS BEADING NEEDLES
Easy threading is yours with this needle; the eye runs the entire length of the needle!
$\qquad$

| Order \# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 0 9 0 7}$ | Small | 0.30 mm | $\$ 6.49$ | $\$ 6.77$ | $\$ 7.05$ |
| $\mathbf{3 8 - 0 9 0 8}$ | Medium | 0.39 mm | $\$ 6.49$ | $\$ 6.77$ | $\$ 7.05$ |
| $\mathbf{3 8 - 0 9 0 9}$ | Large | 0.48 mm | $\$ 6.35$ | $\$ 6.62$ | $\$ 6.90$ |

## KINK-FREE $\mathrm{TI}^{\text {TM }}$ - TITANIUM BEAD STRINGING WIRE

The first nylon-coated, kink-free beading wire. This technologically advanced titanium alloy wire is super-elastic and offers dramatic kink resistance. When pinched and released, the wire returns to its original straight shape without kinking. Ideal for use on jewelry designs subject to lots of twisting, looping, and extreme movement, the wire holds its shape and works well on designs made with crystal, metal, and medium to heavier weight beads. Made in the USA.

| Order \# | Diameter (Thickness) | Length | MFG <br> Model | Shank | Tested Strength | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 38-7114 | $0.015{ }^{\prime \prime}(0.38 \mathrm{~mm})$ | 10 ft | \#2 | \#1 | 33 lbs | \$30.45 | \$34.80 | \$43.50 |
| 38-7114 | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 10 ft | \#2 | \#1 | 44 lbs | \$30.45 | \$34.80 | \$43.50 |



## 49 STRAND, PLATED COLORS

Create stunning designs with the luxurious sheen of precious metal. 49 Strand Silver Plated wires combine the softness and flexibility of traditional 49 Strand with the strength of steel. Clear nylon coating over silver or 24kt gold-plated stainless steel wire. Made in the USA.

| Order \# | Surface <br> Coating | Diameter | Length | Tested <br> Strength |  |  |  |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 8 - 7 0 0 6}$ | Silver Plated | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 10 ft | 20 lbs | $\$ 15.34$ | $\$ 16.25$ | $\$ 18.05$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 7 1}$ | Gold Plated | $0.0188^{\prime \prime}(0.46 \mathrm{~mm})$ | 10 ft | 26 lbs | $\$ 14.41$ | $\$ 15.26$ | $\$ 16.95$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 7 0}$ | Gold Plated | $0.015 "^{\prime \prime}(0.38 \mathrm{~mm})$ | 10 ft | 20 lbs | $\$ 14.41$ | $\$ 15.26$ | $\$ 16.95$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 0 7}$ | Silver Plated | $0.018 "(0.46 \mathrm{~mm})$ | 10 ft | 26 lbs | $\$ 14.45$ | $\$ 15.30$ | $\$ 17.00$ |  |  |  |  |  |



## 49 STRAND, STANDARD COLORS

Combines the flexibility and softness of thread with the strength and durability of stainless steel wire. Designed for stringing all types of beads and pearls, Beadalon 49 Strand is the softest and most popular beading wire. It drapes very naturally without kinking. It is the finest choice wire for creating professional jewelry that remains securely strung. The smooth nylon coating provides abrasion resistance, prevents kinking, and prolongs strand life. Made in the USA.

|  | Surface <br> Order \# <br> Coating | Diameter | Length | Tested <br> Strength |  |  |  |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 8 - 7 0 9 0}$ | Bright | $0.013^{\prime \prime}(0.33 \mathrm{~mm})$ | 30 ft | 13 lbs | $\$ 24.40$ | $\$ 25.83$ | $\$ 28.70$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 9 1}$ | Bright | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 30 ft | 20 lbs | $\$ 11.94$ | $\$ 12.65$ | $\$ 14.05$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 9 2}$ | Bright | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 10.41$ | $\$ 11.03$ | $\$ 12.25$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 9 3}$ | Bright | $0.024^{\prime \prime}(0.61 \mathrm{~mm})$ | 30 ft | 40 lbs | $\$ 11.27$ | $\$ 11.76$ | $\$ 12.25$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 5 0}$ | Black | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 30 ft | 20 lbs | $\$ 14.75$ | $\$ 15.62$ | $\$ 17.35$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 5 2}$ | Black | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 14.75$ | $\$ 15.62$ | $\$ 17.35$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 6 0}$ | Bronze | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 30 ft | 20 lbs | $\$ 13.56$ | $\$ 14.36$ | $\$ 15.95$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 6 2}$ | Bronze | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 16.70$ | $\$ 17.68$ | $\$ 19.65$ |  |  |  |  |  |



## 49 STRAND

- Softest, Most Supple

19 STRAND

- Maximum Flexibility
- Maximum Drape
- Maximum Kink Resistance
- Maximum Abrasion Resistance
- Superior Strength
- Excellent Flexibility
- Excellent Drape
- Excellent Kink Resistance
- Excellent Abrasion Resistance
- Superior Strength


Gold-Plated

## 19-STRAND, PLATED COLORS

Supple 19-strand stainless steel wire is plated with silver or 24 kt gold, then coated with clear, soft nylon. Combine the flexibility and strength of 19-strand wire with the luster of precious metals. Choose brilliant silver plated wire to coordinate with sterling silver or silver-plated findings. Glimmering 24kt Gold Plated wire complements gold and plated metal jewelry components for finer quality jewelry designs. Made in the USA.

| Order \# | Surface Coating | Diameter | Length | Tested Strength | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 38-7104 | Silver Plated | $0.015{ }^{\text {" }}(0.38 \mathrm{~mm})$ | 15 ft | 17 lbs | \$8.79 | \$9.17 | \$9.55 |
| 38-7105 | Silver Plated | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 15 ft | 26 lbs | \$8.79 | \$9.17 | \$9.55 |
| 38-7100 | Gold Plated | 0.015 " $(0.38 \mathrm{~mm})$ | 15 ft | 17 lbs | \$15.59 | \$16.27 | \$16.95 |
| 38-7101 | Gold Plated | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 15 ft | 26 lbs | \$15.59 | \$16.27 | \$16.95 |



## 19-STRAND, STANDARD COLORS

Specifically developed for bead stringing, Beadalon 19-strand is an ideal choice for creating jewelry designs or repairs. Only slightly less flexible than 49-strand, with less cost, this wire contains 19 strands of strong stainless steel. Nylon coated for increased kink and abrasion resistance, Beadalon 19-strand is easy to work with, very strong, and perfect for jewelry that lasts. Made in the USA.

|  | Surface <br> Coating | Diameter | Length | Tested <br> Strength |  |  |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| $\mathbf{O r d e r} \#$ |  |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{3 8 - 7 0 8 5}$ | Bright | $0.01^{\prime \prime}(0.25 \mathrm{~mm})$ | 30 ft | 17 lbs | $\$ 8.67$ | $\$ 9.18$ | $\$ 10.20$ |  |  |  |  |
| $\mathbf{3 8 - 7 0 8 6}$ | Bright | $0.012^{\prime \prime}(.30 \mathrm{~mm})$ | 30 ft | 12 lbs | $\$ 9.05$ | $\$ 9.59$ | $\$ 10.65$ |  |  |  |  |
| $\mathbf{3 8 - 7 0 8 7}$ | Bright | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 30 ft | 17 lbs | $\$ 8.59$ | $\$ 9.09$ | $\$ 10.10$ |  |  |  |  |
| $\mathbf{3 8 - 7 0 8 8}$ | Bright | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |  |  |  |  |
| $\mathbf{3 8 - 7 1 1 8}$ | Bronze | $0.021^{\prime \prime}(.53 \mathrm{~mm})$ | 30 ft | 35 lbs | $\$ 10.37$ | $\$ 10.98$ | $\$ 12.20$ |  |  |  |  |
| $\mathbf{3 8 - 7 1 1 3}$ | Black | $0.018^{\prime \prime}(0.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 10.37$ | $\$ 10.98$ | $\$ 12.20$ |  |  |  |  |
| $\mathbf{3 8 - 7 1 1 6}$ | Bronze | $0.015^{\prime \prime}(.38 \mathrm{~mm})$ | 30 ft | 17 lbs | $\$ 9.52$ | $\$ 10.08$ | $\$ 11.20$ |  |  |  |  |
| $\mathbf{3 8 - 7 1 1 7}$ | Bronze | $0.018^{\prime \prime}(.46 \mathrm{~mm})$ | 30 ft | 26 lbs | $\$ 9.52$ | $\$ 10.08$ | $\$ 11.20$ |  |  |  |  |
| $\mathbf{3 8 - 7 1 1 2}$ | Black | $0.015^{\prime \prime}(0.38 \mathrm{~mm})$ | 30 ft | 35 lbs | $\$ 9.99$ | $\$ 10.58$ | $\$ 11.75$ |  |  |  |  |



## 19-STRAND, SATIN COLOR

"Satin Colors" give designs a soft, warm glow of silver, gold, and copper. The special nylon coating on Satin Colors offers a soft, silky feel and a unique, matte coloring The coating also creates a softer more supple feel and drape. Great for designs requiring exposed wire. Made in the USA.

|  | Surface <br> Coating | Diameter | Length | Tested <br> Strength |  |  |  |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 8 - 7 1 2 1}$ | Satin Gold | $0.015^{\prime \prime}(.38 \mathrm{~mm})$ | 30 ft | 12 lbs | $\$ 9.99$ | $\$ 10.58$ | $\$ 11.75$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 1 2 6}$ | Satin Silver | $0.018^{\prime \prime}(.46 \mathrm{~mm})$ | 30 ft | 17 lbs | $\$ 10.63$ | $\$ 11.25$ | $\$ 12.50$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 1 2 5}$ | Satin Silver | $0.015^{\prime \prime}(.38 \mathrm{~mm})$ | 30 ft | 12 lbs | $\$ 10.20$ | $\$ 10.80$ | $\$ 12.00$ |  |  |  |  |  |
| $\mathbf{3 8 - 7 1 2 2}$ | Satin Gold | $0.018^{\prime \prime}(.46 \mathrm{~mm})$ | 30 ft | 17 lbs | $\$ 11.94$ | $\$ 12.65$ | $\$ 14.05$ |  |  |  |  |  |

## 19-STRAND, BEADALON VARIETY PACK WIRE



Metallic colors combine the rich look and brilliant shine of gold and silver with the dramatic flexibility and softness of 19 -strand. Silver color is a value-priced silver-plated wire. It is comprised of a blend of tarnish-resistant metals with actual silver plating. Gold color and champagne are made of a mix of tarnish-resistant metals. These mixed-metal wires have slightly lower breaking strengths than other Beadalon 19-strand stainless steel wires. Use the metallic color wire with silver and gold findings to render the shimmer and shine of fine jewelry. Comes with one spool of each of the following: gold, silver, and champagne.

| Order\# | Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | :---: | ---: |
| $\mathbf{3 8 - 7 1 9 0}$ | $0.0155^{\prime \prime}(0.38 \mathrm{~mm})$ | 10 ft | $\$ 17.47$ | $\$ 19.96$ | $\$ 24.95$ |

## GERMAN-STYLE PLATED WIRE

Excellent quality shaping wire, available in several gauges and shapes. This copper and brass wire has a tarnish-resistant coating and has the perfect temper and finish for most jewelry wire wrapping uses. Fancy Round wire is constructed of two strands of round wire that have been twisted together, then run through tooling to make the outside round again (instead of the usual swirl/bumps of twisted wire) creating a very unique pattern.

| Order \# | Color | Gauge | Diameter | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ROUND |  |  |  |  |  |  |  |
| 38-7096 | Silver Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | 197/10 ft | \$2.98 | \$3.40 | \$4.25 |
| 38-7096 | Silver Plated | 24 | $0.020^{\prime \prime}(0.51 \mathrm{~mm})$ | 392/5ft | \$2.98 | \$3.40 | \$4.25 |
| 38-7097 | Brass Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | 197/10 ft | \$2.98 | \$3.40 | \$4.25 |
| 38-7097 | Brass Plated | 24 | $0.020^{\prime \prime}(0.51 \mathrm{~mm})$ | 392/5 ft | \$2.98 | \$3.40 | \$4.25 |
| SQUARE |  |  |  |  |  |  |  |
| 38-7098 | Silver Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | $61 / 2 \mathrm{ft}$ | \$5.22 | \$5.96 | \$7.45 |
| 38-7099 | Brass Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | $61 / 2 \mathrm{ft}$ | \$5.22 | \$5.96 | \$7.45 |
| HALF-ROUND |  |  |  |  |  |  |  |
| 38-7108 | Silver Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | 94/5ft | \$2.77 | \$2.77 | \$2.77 |
| 38-7109 | Brass Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | 94/5ft | \$6.33 | \$6.71 | \$7.45 |
| FANCY |  |  |  |  |  |  |  |
| 38-7110 | Silver Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | 61/2ft | \$4.09 | \$4.09 | \$4.09 |
| 38-7111 | Brass Plated | 20 | $0.032^{\prime \prime}(0.81 \mathrm{~mm})$ | $61 / 2 \mathrm{ft}$ | \$7.70 | \$8.80 | \$11.00 |



## WIRE bending pliers

The bend in these pliers reduces the time needed to create professional wire wrapping and stone setting. Each end of the T -shaped head fits a different gauge.

| Item | Order\# | Gauge (for bending) | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 4 0 4 0}$ | 22,24 gauge | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |
|  | $\mathbf{4 6 - 4 0 4 0}$ | 20,21 gauge | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |

## COILING GIZMO DELUXE WINDER

Features built-in, table-mount base, five crank-rods of different sizes, and instructions. The thinnest rod will handle fine wires, while the larger rods will help you make your own jump rings.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| B | $\mathbf{3 8 - 0 1 8 8}$ | Wire Coiling Jump Ring Maker | $\$ 10.33$ | $\$ 10.94$ | $\$ 12.15$ |

## WIRE TWISTER AND JUMP RING MAKER

Together in one convenient set, you can twist wire and make custom jump rings in the sizes and wire gauges you want. The Jump Ring Maker comes in different configurations so you can make just the size you need. Use the wire twister to make pre twisted color combinations, then make twisted jump rings for all your jewelry or craft projects. Easy to use, fast, and fun.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{3 8 - 0 1 8 9}$ | Wire Twisting/Jump Ring Making Combo Set | $\$ 52.45$ | $\$ 55.53$ | $\$ 61.70$ |



## COLOURCRAFT SPIRAL MAKER

Creates perfect spirals out of any metal wire up to 20 gauge. Use small pieces of the diameter wire you intend to make the spiral, as a washer on the three screws. Tighten nut and insert the same gauge wire into the device. Center the wire in the center hole and insert the twister handle so the wire is inside the slit on the handle. Twist the handle until the desired size of coil is reached (maximum of 16 mm ).

| Item | Order\# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{3 8 - 9 0 2 4}$ | Standard | $5 / 8^{\prime \prime}(16 \mathrm{~mm})$ | $\$ 14.54$ | $\$ 15.39$ | $\$ 17.10$ |
|  | $\mathbf{3 8 - 9 0 2 5}$ | Large | $11 / 4^{\prime \prime}(32 \mathrm{~mm})$ | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |




## ARTISTIC WIRE

These wires are made by first plating the copper wire with a precision layer of pure silver. Then we carefully apply our unique enamel color and tarnish resistant coating on top of this silver plating. The silver plating beneath the color adds an incredible high shine and brilliance to the wire.

| Item | Order \# | Surface Coating | Gauge | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{3 8 - 0 0 1 2}$ | Brass Plated | 22 | 8 yds | $\$ 2.28$ | $\$ 2.60$ | $\$ 3.25$ |
|  | $\mathbf{3 8 - 0 0 1 2}$ | Brass Plated | 20 | 6 yds | $\$ 2.28$ | $\$ 2.60$ | $\$ 3.25$ |
| B | $\mathbf{3 8 - 0 0 1 1}$ | Silver Plated | 22 | 8 yds | $\$ 4.13$ | $\$ 4.72$ | $\$ 5.90$ |
|  | $\mathbf{3 8 - 0 0 1 1}$ | Silver Plated | 20 | 6 yds | $\$ 4.13$ | $\$ 4.72$ | $\$ 5.90$ |

ARTISTIC WIRE KITS
Buy the Dozen packs feature all one gauge per package. Provide your customers with the best vari-pack on the market.

| Item Order \# | Surface Coating | Gauge | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| C | $\mathbf{3 8 - 0 0 0 0}$ | Multi | 20 | 5 yds | $\$ 9.31$ | $\$ 10.64$ | $\$ 13.30$ |
|  | $\mathbf{3 8 - 0 0 0 0}$ | Multi | 24 | 5 yds | $\$ 9.31$ | $\$ 10.64$ | $\$ 13.30$ |
|  | $\mathbf{3 8 - 0 0 0 0}$ | Multi | 22 | 5 yds | $\$ 9.31$ | $\$ 10.64$ | $\$ 13.30$ |
| D | $\mathbf{3 8 - 0 0 0 1}$ | Multi | 22 | 5 yds | $\$ 12.06$ | $\$ 12.06$ | $\$ 12.06$ |
|  | $\mathbf{3 8 - 0 0 0 1}$ | Multi | 20 | $5 y d s$ | $\$ 21.53$ | $\$ 24.60$ | $\$ 30.75$ |

## ARTISTIC WIRE - 3 PACKS

Artistic Wire 3-Packs feature all one gauge per package and three different colors. These colors are specially selected to go together in any project.

| Item | Order \# | Surface Coating | Gauge | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| E | $\mathbf{3 8 - 0 0 0 3}$ | Black, Natural, Gun | 20 | 3 yds | $\$ 3.40$ | $\$ 3.83$ | $\$ 4.25$ |
|  | $\mathbf{3 8 - 0 0 0 3}$ | Black, Natural, Gun | 22 | 5 yds | $\$ 3.40$ | $\$ 3.83$ | $\$ 4.25$ |
| F | $\mathbf{3 8 - 0 0 0 4}$ | Silver, Brass, Hematile | 20 | $3 y d s$ | $\$ 3.40$ | $\$ 3.83$ | $\$ 4.25$ |
|  | $\mathbf{3 8 - 0 0 0 4}$ | Silver, Brass, Hematile | 22 | $5 y d s$ | $\$ 3.40$ | $\$ 3.83$ | $\$ 4.25$ |

## ARTISTIC WIRE - TWISTED

Give your designs a twist with Artistic Wire Twisted! Three strands are twisted together to make a truly unique textured wire. Use this wire in your designs to add an interesting appearance and feel.

| Item | Order\# | Surface Coating | Gauge | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| G | $\mathbf{3 8 - 0 0 0 9}$ | Silver Plated | 20 | 3 yds | $\$ 5.22$ | $\$ 5.96$ | $\$ 7.45$ |

FRENCH WIRE (BULLION)
Use this coiled, fine-gauge wire on knotted strands to keep clasps from wearing on or cutting through unprotected silk or bead cord. It creates a professional appearance and is commonly used as the preferred method for stringing pearls.

| Order \# | Surface <br> Coating | Diameter | Pack <br> Quantity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| 38-6051 | Gold Plated | $0.024^{\prime \prime}(0.8 \mathrm{~mm})$ | 1 m | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| $\mathbf{3 8 - 6 0 5 2}$ | Gold Plated | $0.027^{\prime \prime}(0.9 \mathrm{~mm})$ | 1 m | $\$ 6.46$ | $\$ 6.84$ | $\$ 7.60$ |
| $\mathbf{3 8 - 6 0 5 3}$ | Gold Plated | $0.031^{\prime \prime}(1 \mathrm{~mm})$ | 1 m | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{3 8 - 6 0 6 4}$ | Silver Plated | $0.035^{\prime \prime}(1.1 \mathrm{~mm})$ | 1 m | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| $\mathbf{3 8 - 6 0 6 1}$ | Silver Plated | $0.024^{\prime \prime}(0.8 \mathrm{~mm})$ | 1 m | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| $\mathbf{3 8 - 6 0 6 2}$ | Silver Plated | $0.027^{\prime \prime}(0.9 \mathrm{~mm})$ | 1 m | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{3 8 - 6 0 6 3}$ | Silver Plated | $0.031^{\prime \prime}(1 \mathrm{~mm})$ | 1 m | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| $\mathbf{3 8 - 6 0 5 4}$ | Gold Plated | $0.035^{\prime \prime}(1.1 \mathrm{~mm})$ | 1 m | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |

ASSORTMENTS

| $\mathbf{3 8 - 6 0 5 0}$ | Gold Plated | Assortment (all) | 4 m | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 8 - 6 0 6 0}$ | Silver Plated | Assortment (all) | 4 m | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |



## 49-STRAND JEWELRY CABLE

Ideal for metal beading and for interesting jewelry designs. Try separating the strands to create interesting individual wavy cables, then add beads and finish with a crimp and clasp for stylish and unique creations!
A

| Item | Order\# | Material | Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 8 - 8 0 1 0}$ | Stainless Steel | $0.036^{\prime \prime}(0.92 \mathrm{~mm})$ | $30^{\prime}$ | $\$ 10.16$ | $\$ 10.76$ | $\$ 11.95$ |
| B | $\mathbf{3 8 - 8 0 1 2}$ | Stainless Steel | $0.045^{\prime \prime}(1.14 \mathrm{~mm})$ | $30^{\prime}$ | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |

## SHAPED MEMORY WIRE

String on beads for a flexible design that retains its round shape. Do not use cutters to cut. Bend back and forth to "break" metal, then use pliers to coil the end around or use end caps available at right. Wire diameter is .025" (.62mm).

| Item | Order \# | Description | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{C}$ | $\mathbf{3 8 - 7 1 4 0}$ | Ring | 195 coils | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |
| $\mathbf{3 8 - 7 1 4 1}$ | Small Bracelet | 75 coils | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |
| $\mathbf{3 8 - 7 1 4 2}$ | Large Bracelet | 60 coils | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |
| $\mathbf{3 8 - 7 1 4 3}$ | Small Necklace | 36 coils | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |
| $\mathbf{3 8 - 7 1 4 4}$ | Large Necklace | 32 coils | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |

## MEMORY WIRE END CAPS VARIETY PACK

Finish off Remembrance Wire designs with End Caps for a professional look. End Caps are open on one side to accommodate Remembrance and Plated Steel Memory Wire. End Caps are a fun way to dangle charms. Secure the End Cap and last few beads with BeadFix adhesive for a fast and easy finish.

| Item | Order\# | Surface Coating | Thickness | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{3 8 - 7 1 5 4}$ | Silver Plated | $3-4 \mathrm{~mm}$ | 72 | $\$ 7.11$ | $\$ 8.12$ | $\$ 10.15$ |



## EASY EAR WIRE

Easy to use, fully automatic, and hand-operated. Just put in a straight piece of wire and in seconds you will have an elegant ear wire ready for use. So easy and quick you will not need to keep an inventory of ear wires for your earrings. Simply make them as you need them.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 9 0 2 3}$ | Ear Wire Maker | $\$ 22.06$ | $\$ 23.36$ | $\$ 25.95$ |



Kit available in five different styles.


## SCRIMP ${ }^{\text {T" }}$ KIT

Scrimp Findings are an innovative screw finding that takes the place of a crimp, and are reusable. A tiny set screw inside holds Beadalon wires in place. The complete Scrimp Kit contains its own screwdriver and an ample supply of Scrimp Findings with screws. Additional screws are cleverly held within the handle of the screwdriver. A secure - and flexible - finish! See tip diagram below! Assortment Quantity:
Stainless-4 Plated-10

| Order \# | Description | Surface Coating | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 8 - 7 1 5 5}$ | $3.5 m \mathrm{~mm}$ Magnetic | Stainless Steel | $\$ 13.86$ | $\$ 15.03$ | $\$ 16.70$ |
| $\mathbf{3 8 - 7 1 6 1}$ | Bullet | Silver Plated | $\$ 7.64$ | $\$ 8.28$ | $\$ 9.20$ |
| $\mathbf{3 8 - 7 1 5 6}$ | $3.5 m \mathrm{~mm}$ Oval | Silver Plated | $\$ 8.88$ | $\$ 9.63$ | $\$ 10.70$ |
| $\mathbf{3 8 - 7 1 6 0}$ | Bullet | Gold Plated | $\$ 7.64$ | $\$ 8.28$ | $\$ 9.20$ |

## INDIVIDUAL SCRIMP ${ }^{m m}$ FINDINGS

Scrimp Findings are the unique marriage of a screw finding within a crimp - a fresh alternative. Assortment Quantity:
Stainless - 6 Plated - 10

| Item | Order \# | Description | Surface Coating | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 8 - 7 1 6 4}$ | Magnetic | Stainless Steel | $\$ 15.56$ | $\$ 16.88$ | $\$ 18.75$ |
| B | $\mathbf{3 8 - 7 1 6 3}$ | Bullet | Silver Plated | $\$ 5.35$ | $\$ 5.81$ | $\$ 6.45$ |
| C | $\mathbf{3 8 - 7 1 6 5}$ | Oval | Silver Plated | $\$ 6.35$ | $\$ 6.89$ | $\$ 7.65$ |
| D | $\mathbf{3 8 - 7 1 6 2}$ | Bullet | Gold Plated | $\$ 5.35$ | $\$ 5.81$ | $\$ 6.45$ |
| E | $\mathbf{3 8 - 7 1 6 6}$ | Oval | Gold Plated | $\$ 6.35$ | $\$ 6.89$ | $\$ 7.65$ |
| F | $\mathbf{3 8 - 7 1 6 7}$ | Oval | Copper Plated | $\$ 6.35$ | $\$ 6.89$ | $\$ 7.65$ |

## SCRIMP FINDING INSTRUCTIONS

1. Begin by loosening screw to allow wire to go through the Scrimp Finding.
2. Feed the wire through the Scrimp Finding, onto a Wire Guardian [optional], attach a clasp, and feed back through the Scrimp Finding.
3. Tighten screw for a secure and clean finish.

TIP: For an extra strong Scrimp Finding, add a small amount of BeadFix to the screw.



BEAD TIPS

| Item | Order\# | Quality | Hole ID | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{2 6 2}$ | Nickel Plated | .71 mm | $\$ 0.24$ | $\$ 0.24$ | $\$ 0.24$ |
|  | $\mathbf{2 6 2}$ | Yellow Plated | .71 mm | $\$ 0.31$ | $\$ 0.32$ | $\$ 0.32$ |
| H | $\mathbf{2 6 3}$ | Nickel Plated | .92 mm | $\$ 0.38$ | $\$ 0.39$ | $\$ 0.39$ |
|  | $\mathbf{2 6 3}$ | Yellow Plated | .92 mm | $\$ 0.34$ | $\$ 0.35$ | $\$ 0.35$ |


| Order \# | Size | OD | ID | Type | Surface Coating | Per Pack | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BEADALON |  |  |  |  |  |  |  |  |  |
| 38-7000 | \#1 | 2 mm | 1.3 mm | Bead | Silver Plated | 430 | \$4.42 | \$4.68 | \$5.20 |
| 38-7001 | \#1 | 2 mm | 1.3 mm | Bead | Gold Plated | 430 | \$4.42 | \$4.68 | \$5.20 |
| 38-7002 | \#1 | 2 mm | 1.3 mm | Bead | Black Plated | 430 | \$4.42 | \$4.68 | \$5.20 |
| 38-7003 | \#2 | 2.5 mm | 1.5 mm | Bead | Silver Plated | 400 | \$4.21 | \$4.46 | \$4.95 |
| 38-7004 | \#2 | 2.5 mm | 1.5 mm | Bead | Gold Plated | 400 | \$4.21 | \$4.46 | \$4.95 |
| 38-7005 | \#2 | 2.5 mm | 1.5 mm | Bead | Black Plated | 400 | \$4.21 | \$4.46 | \$4.95 |
| 38-7010 | \#1 | 1.3 mm | 0.8 mm | Tube | Silver Plated | 470 | \$4.76 | \$5.04 | \$5.60 |
| 38-7011 | \#1 | 1.3 mm | 0.8 mm | Tube | Gold Plated | 370 | \$4.76 | \$5.04 | \$5.60 |
| 38-7012 | \#2 | 1.8 mm | 1.3 mm | Tube | Silver Plated | 365 | \$3.83 | \$4.05 | \$4.50 |
| 38-7013 | \#2 | 1.8 mm | 1.3 mm | Tube | Gold Plated | 365 | \$3.83 | \$4.05 | \$4.50 |
| 38-7014 | \#3 | 2 mm | 1.5 mm | Tube | Silver Plated | 384 | \$4.04 | \$4.28 | \$4.75 |
| 38-7015 | \#3 | 2 mm | 1.5 mm | Tube | Gold Plated | 384 | \$4.04 | \$4.28 | \$4.75 |
| 38-7016 | \#4 | 2.5 mm | 2 mm | Tube | Silver Plated | 234 | \$4.51 | \$4.70 | \$4.90 |
| 38-7017 | \#4 | 2.5 mm | 2 mm | Tube | Gold Plated | 234 | \$4.51 | \$4.70 | \$4.90 | PRECIOUS METAL


| $\mathbf{2 4 0 5 7}$ | $\# 1$ | 2.5 mm | 1.35 mm Tube | 14 kt Gold | Each | $\$ 4.31$ | $\$ 4.38$ | $\$ 4.38$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 4 0 5 7}$ | $\# 1$ | 2.5 mm | 1.35 mm Tube | Sterling Silver | Each | $\$ 0.24$ | $\$ 0.24$ | $\$ 0.25$ |
| $\mathbf{2 4 0 5 8}$ | $\# 1$ | 2 mm | 1.37 mm Tube | 14 kt Gold | Each | $\$ 2.22$ | $\$ 2.26$ | $\$ 2.26$ |
| $\mathbf{2 4 0 5 8}$ | $\# 1$ | 2 mm | 1.37 mm Tube | Sterling Silver Each | $\$ 0.14$ | $\$ 0.14$ | $\$ 0.14$ |  |

CRIMP BEAD AND TUBE VARIETY PACK

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Order \# | Quality | Pcs <br> $\mathbf{\# 0}$ | Pcs <br> $\mathbf{\# 1}$ | Pcs <br> $\mathbf{\# 2}$ | Pcs <br> $\mathbf{\# 3}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| BEAD |  |  |  |  |  |  |  |  |  |
| $\mathbf{2 4 1 4 3}$ | Silver Plated | 250 | 150 | 125 | 75 | $\$ 19.80$ | $\$ 21.15$ | $\$ 21.83$ | $\$ 22.50$ |
| $\mathbf{2 4 1 4 3}$ | Gold Plated | 250 | 150 | 125 | 75 | $\$ 19.80$ | $\$ 21.15$ | $\$ 21.83$ | $\$ 22.50$ |

TUBE

| $\mathbf{2 4 0 3 5}$ | Yellow Plated | 250 | 150 | 125 | 75 | $\$ 19.80$ | $\$ 21.15$ | $\$ 21.83$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\$ 22.50$

WIRE GUARDIANS
Protect stringing materials from undue wear with Wire Guardians. Reduce abrasion from clasps or other sharp-edged components. Use Wire Guardians in the same way as French Wire; the only difference is the Wire Guardian is rigid. For wire diameters up to 0.53 mm ( $0.021^{\prime \prime}$ ).

| Item | Order \# | Surface Coating | ID | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 8 - 7 1 7 1}$ | Silver Plated | $0.022^{\prime \prime}$ | 20 | $\$ 2.99$ | $\$ 3.24$ | $\$ 3.60$ |
| B | $\mathbf{3 8 - 7 1 7 0}$ | Gold Plated | $0.022^{\prime \prime}$ | 20 | $\$ 2.99$ | $\$ 3.24$ | $\$ 3.60$ |
| C | $\mathbf{3 8 - 7 1 7 2}$ | Copper Plated | $0.022^{\prime \prime}$ | 20 | $\$ 2.99$ | $\$ 3.24$ | $\$ 3.60$ |
| D | $\mathbf{2 4 0 5 9}$ | 14kt Yellow | $0.021^{\prime \prime}$ | 20 | $\$ 5.06$ | $\$ 5.15$ | $\$ 5.15$ |
|  | $\mathbf{2 4 0 5 9}$ | Sterling Silver | $0.021^{\prime \prime}$ | 20 | $\$ 0.33$ | $\$ 0.34$ | $\$ 0.35$ |

## MYSTERY CLASPS

Mystery clasps are made to be glued into enlarged drill holes in the end of pearls.
The mechanism disappears when the two parts are screwed together.

| Item | Order \# | Quality | $\mathbf{W} \times \mathbf{L}$ |  | $\mathbf{6 +}$ | $\mathbf{3 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{2 0 3 1 3}$ | BRASS | $2 \mathrm{~mm} \times 6.5 \mathrm{~mm}$ | $\$ 6.35$ | $\$ 6.55$ | $\$ 6.75$ |
|  | $\mathbf{2 0 3 1 3}$ | Nickel Plated | $2 \mathrm{~mm} \times 6.5 \mathrm{~mm}$ | $\$ 6.35$ | $\$ 6.55$ | $\$ 6.75$ |
| F | $\mathbf{2 0 3 1 2}$ | BRASS | $2.5 \mathrm{~mm} \times 7 \mathrm{~mm}$ | $\$ 6.35$ | $\$ 6.55$ | $\$ 6.75$ |
|  | $\mathbf{2 0 3 1 2}$ | Nickel Plated | $2.5 \mathrm{~mm} \times 7 \mathrm{~mm}$ | $\$ 6.35$ | $\$ 6.55$ | $\$ 6.75$ |

BEAD BUMPERS
Use Bead Bumpers instead of knots to separate and add interest to designs strung on Beadalon wire. Simply string one Bead Bumper in between each bead of a design to space beads evenly. Once incorporated, the Bumpers look similar to a knot and keep the beads from rubbing against one another. Since Bead Bumpers are made of a special stretch material, they can be added to Beadalon wires up to 0.024 " in diameter. Bead Bumpers are also great for Memory Wire designs and knotted or tin-cup style looks.


| Order \# | Color | Shape | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 7 2 0 0}$ | White | Oval | 1.5 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 1}$ | Black | Oval | 1.5 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 2}$ | Clear | Oval | 1.5 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 9}$ | Silver | Oval | 1.5 mm | $\$ 6.76$ | $\$ 7.06$ | $\$ 7.35$ |
| $\mathbf{3 8 - 7 2 1 0}$ | Gold | Oval | 1.5 mm | $\$ 6.76$ | $\$ 7.06$ | $\$ 7.35$ |
| $\mathbf{3 8 - 7 2 0 3}$ | White | Oval | 2 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 4}$ | Black | Oval | 2 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 5}$ | Clear | Oval | 2 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 1 1}$ | Silver | Oval | 2 mm | $\$ 6.76$ | $\$ 7.06$ | $\$ 7.35$ |
| $\mathbf{3 8 - 7 2 1 2}$ | Gold | Oval | 2 mm | $\$ 6.76$ | $\$ 7.06$ | $\$ 7.35$ |
| $\mathbf{3 8 - 7 2 0 6}$ | White | Cube | 1.7 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 7}$ | Black | Cube | 1.7 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 0 8}$ | Clear | Cube | 1.7 mm | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| $\mathbf{3 8 - 7 2 1 3}$ | Silver | Cube | 1.7 mm | $\$ 3.15$ | $\$ 3.15$ | $\$ 3.15$ |
| $\mathbf{3 8 - 7 2 1 4}$ | Gold | Cube | 1.7 mm | $\$ 8.00$ | $\$ 8.35$ | $\$ 8.70$ |

LIGHTWEIGHT BEAD

| Item |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| Order\# | Quality | OD | Hole ID | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| A | $\mathbf{8 6 3}$ | 14kt Gold | 3 mm | 1.5 mm | $\$ 2.11$ | $\$ 2.14$ |
|  | $\mathbf{8 6 3}$ | Sterling Silver | 3 mm | 1.5 mm | $\$ 0.50$ | $\$ 0.53$ |
| B | $\mathbf{8 6 4}$ | 14kt Gold | 4 mm | 1.45 mm | $\$ 3.46$ | $\$ 3.52$ |
|  | $\mathbf{8 6 4}$ | Sterling Silver | 4 mm | 1.45 mm | $\$ 0.74$ | $\$ 0.77$ |
| C | $\mathbf{8 6 5}$ | 14kt Gold | 5 mm | 1.45 mm | $\$ 5.80$ | $\$ 5.89$ |
|  | $\mathbf{8 6 5}$ | Sterling Silver | 5 mm | 1.45 mm | $\$ 1.22$ | $\$ 1.27$ |
| D | $\mathbf{8 6 6}$ | 14kt Gold | 6 mm | 1.8 mm | $\$ 10.15$ | $\$ 10.44$ |
|  | $\mathbf{8 6 6}$ | Sterling Silver | 6 mm | 1.8 mm | $\$ 1.79$ | $\$ 1.87$ |
| E | $\mathbf{8 6 7}$ | 14kt Gold | 7 mm | 2.2 mm | $\$ 12.05$ | $\$ 12.43$ |
|  | $\mathbf{8 6 7}$ | Sterling Silver | 7 mm | 2.2 mm | $\$ 2.49$ | $\$ 2.61$ |

## CRIMP COVERS

| Item | Order \# | Quality | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| F | $\mathbf{2 4 0 5 6}$ | 14kt Gold | 3 mm | $\$ 7.02$ | $\$ 7.15$ | $\$ 7.35$ |
|  | $\mathbf{2 4 0 5 6}$ | Sterling Silver | 3 mm | $\$ 0.40$ | $\$ 0.40$ | $\$ 0.42$ |
| G | $\mathbf{2 4 0 5 5}$ | Sterling Silver | 4 mm | $\$ 0.97$ | $\$ 0.99$ | $\$ 1.03$ |

STERLING SILVER FANCY BEAD CAP

| Item |  | Order\# | OD | Hole ID | $\mathbf{6 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| H | $\mathbf{2 4 9 1 3}$ | 9 mm | 1.5 mm | $\mathbf{1 +}$ |  |
| J | $\mathbf{2 4 9 1 4}$ | 6 mm | 1.5 mm | $\$ 6.07$ | $\$ 6.69$ |
| K | $\mathbf{2 4 9 1 5}$ | 8 mm | 1.4 mm | $\$ 1.70$ | $\$ 1.88$ |

## STERLING SILVER FLUTED BEAD CAP



| Item |  | Order \# | OD | Hole ID | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: |
| L | $\mathbf{2 4 9 0 8}$ | 7 mm | 1.7 mm | $\mathbf{1 +}$ |  |
| M | $\mathbf{2 4 9 1 2}$ | 10.5 mm | 1.5 mm | $\$ 3.96$ | $\$ 4.36$ |

STERLING SILVER PETAL BEAD CAP
N


| Item |  | Order\# | OD | Hole ID | $\mathbf{6 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: |
| N | $\mathbf{2 4 9 0 4}$ | 7 mm | 1.1 mm | $\mathbf{1 +}$ |  |
| P | $\mathbf{2 4 9 0 5}$ | 6.5 mm | 1 mm | $\$ 3.29$ | $\$ 3.62$ |

SINGLE STAND PEARL CLASPS

| Item | Order \# | Quality | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{9 4}$ | Yellow Gold Filled | $5.3 \mathrm{~mm} \times 11.1 \mathrm{~mm}$ | $\$ 6.60$ | $\$ 6.77$ | $\$ 6.95$ |
|  | $\mathbf{9 4}$ | 14 kt Gold | $5.3 \mathrm{~mm} \times 11.1 \mathrm{~mm}$ | $\$ 45.31$ | $\$ 46.03$ | $\$ 46.75$ |
|  | $\mathbf{9 4}$ | Sterling Silver | $5.3 \mathrm{~mm} \times 11.1 \mathrm{~mm}$ | $\$ 5.55$ | $\$ 5.66$ | $\$ 5.82$ |
| B | $\mathbf{1 0 1}$ | Yellow Gold Filled | $8 \mathrm{~mm} \times 16 \mathrm{~mm}$ | $\$ 14.77$ | $\$ 15.18$ | $\$ 15.59$ |
|  | $\mathbf{1 0 1}$ | Sterling Silver | $8 \mathrm{~mm} \times 16 \mathrm{~mm}$ | $\$ 11.06$ | $\$ 11.28$ | $\$ 11.60$ |
| C | $\mathbf{1 0 9}$ | 14 kt Gold | $5.75 \mathrm{~mm} \times 13.5 \mathrm{~mm}$ | $\$ 70.43$ | $\$ 70.87$ | $\$ 74.37$ |
| D | $\mathbf{2 2 5 3 2}$ | Sterling Silver | $6 \mathrm{~mm} \times 12.25 \mathrm{~mm}$ | $\$ 5.40$ | $\$ 5.50$ | $\$ 5.66$ |
| E | $\mathbf{1 0 2}$ | 14 kt Gold | $5.75 \mathrm{~mm} \times 12 \mathrm{~mm}$ | $\$ 63.91$ | $\$ 64.33$ | $\$ 67.66$ |
| F | $\mathbf{2 3 3 7 3}$ | 14 kt Gold | $5.3 \mathrm{~mm} \times 11.1 \mathrm{~mm}$ | $\$ 45.55$ | $\$ 46.27$ | $\$ 47.00$ |



MAGNETIC CLASPS

| Item | Order \# | Quality | W $\times$ L or Diameter | $6+$ | $3+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | 24283 | Sterling Silver | 7 mm (diameter) | \$9.99 | \$10.19 | \$10.48 |
| H | 28506 | Sterling Silver | $5 \mathrm{~mm} \times 15.5 \mathrm{~mm}$ | \$7.20 | \$7.35 | \$7.57 |
|  | 28506 | 14kt Gold | $4.3 \mathrm{~mm} \times 15.5 \mathrm{~mm}$ | \$42.81 | \$43.13 | \$45.66 |
| J | 28294 | Sterling Silver | 6 mm (diameter) | \$23.04 | \$23.50 | \$24.18 |
|  | 28294 | Gold | 6 mm (diameter) | \$31.43 | \$32.07 | \$33.04 |
| K | 28293 | Sterling Silver | 5.5 mm (diameter) | \$22.72 | \$23.17 | \$23.86 |
|  | 28293 | Gold | 5.5 mm (diameter) | \$31.43 | \$32.07 | \$33.04 |
| L | 24314 | 14kt Gold | $8 \mathrm{~mm} \times 25 \mathrm{~mm}$ | \$26.69 | \$26.98 | \$29.33 |
|  | 24314 | Silver Plated | $8 \mathrm{~mm} \times 25 \mathrm{~mm}$ | \$26.69 | \$26.98 | \$29.33 |
| M | 24313 | Sterling Silver | $7.3 \mathrm{~mm} \times 19 \mathrm{~mm}$ | \$52.34 | \$55.91 | \$59.47 |
|  | 24313 | Sterling Silver | $7.3 \mathrm{~mm} \times 19 \mathrm{~mm}$ | \$41.70 | \$42.16 | \$45.82 |
|  | 24313 | Sterling Silver | $7.3 \mathrm{~mm} \times 19 \mathrm{~mm}$ | \$26.69 | \$26.98 | \$29.33 |
|  | 24313 | Silver Plated | $7.3 \mathrm{~mm} \times 19 \mathrm{~mm}$ | \$26.69 | \$26.98 | \$29.33 |
| N | 22485 | Sterling Silver | $5.5 \mathrm{~mm} \times 21.25 \mathrm{~mm}$ | \$25.51 | \$25.99 | \$26.71 |
|  | 22485 | Sterling Silver | $4.5 \mathrm{~mm} \times 20.25 \mathrm{~mm}$ | \$24.40 | \$24.87 | \$25.58 |



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LINK LOCK ${ }^{m m}$

| Order \# Quality |  | $\mathbf{m m}$ ID |  | mm OD | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 9 9 9}$ | 14kt Gold | $2.25 \times 4.25$ | $5 \times 8$ | 1.2 mm | $\$ 24.77$ | $\$ 25.83$ | $\$ 26.90$ |  |
| $\mathbf{2 0 9 9 9}$ | Sterling Silver | $5 \times 8$ | $5 \times 8$ | 1.2 mm | $\$ 5.86$ | $\$ 6.19$ | $\$ 6.66$ |  |



## LINK LOCK ${ }^{\text {m }}$

Securely attach charms or dangles without soldering using the rotating crimp collar on the link lock


ROUND SPLIT RING


| Item | Order \# | Description | OD | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | RD1 | 14K Yellow or White | 5 mm | 1 mm | \$11.93 | \$12.11 | \$12.29 |
|  | RD1 | Sterling Silver | 5 mm | 1 mm | \$0.47 | \$0.48 | \$0.50 |
|  | RD1 | Yellow or White Gold Filled | 5 mm | 1 mm | \$2.17 | \$2.23 | \$2.23 |
| B | RD2 | 14K Yellow or White | 6.5 mm | 1 mm | \$19.79 | \$20.05 | \$20.31 |
|  | RD2 | Sterling Silver | 5 mm | 1 mm | \$0.95 | \$0.97 | \$0.99 |
|  | RD2 | Yellow or White Gold Filled | 6.5 mm | 1 mm | \$2.69 | \$2.76 | \$2.76 |
| C | RD3 | 14K Yellow or White | 7.5 mm | 1.5 mm | \$30.28 | \$30.71 | \$31.13 |
|  | RD3 | Sterling Silver | 7.5 mm | 1.5 mm | \$1.20 | \$1.22 | \$1.26 |
|  | RD3 | Yellow or White Gold Filled | 7.5mm | 1.5 mm | \$2.80 | \$2.88 | \$2.88 |

## MICRO MINI PLIERS

These pliers are a great choice for product assembly or bead stringing. To open split rings, insert the tooth onto the side of the ring and squeeze gently.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 7 0}$ | Split Ring Pliers | $51 / 4^{\prime \prime}$ | $\$ 7.78$ | $\$ 8.24$ | $\$ 9.15$ |



## SPLIT RING TWEEZERS

An easy-to-use tweezer for opening small to medium split rings. Just put the split ring under the claw and squeeze. The tweezer is made of stainless steel.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 6 4 0}$ | Split Ring Tweezers | $41 / 2^{\prime \prime}$ | $\$ 4.21$ | $\$ 4.46$ | $\$ 4.95$ |

EZ-CRIMP ${ }^{T M}$ HOOK AND EYE

| Item |  | Order \# | Metal Type | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{2 4 0 3 8}$ | Sterling Silver | $7.8 \times 30 \mathrm{~mm}$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |  |
| E | $\mathbf{2 4 0 3 6}$ | Sterling Silver | $7 \times 33.5 \mathrm{~mm}$ | $\$ 26.27$ | $\$ 26.80$ | $\$ 28.14$ |  |
| F | $\mathbf{2 4 0 3 9}$ | Sterling Silver | $7.8 \times 30 \mathrm{~mm}$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |  |



JUMBO SPRING RINGS WITH CLOSED RING


| Item | Order \# | Metal Type | $\mathbf{W} \times \mathrm{L}$ | Ring ID | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P | 22467 | Sterling Silver | $12.75 \times 20.5 \mathrm{~mm}$ | 3.6 mm | \$18.61 | \$18.96 | \$19.50 |
| 0 | 22467 | Sterling Silver | $14.75 \times 24.25 \mathrm{~mm}$ | 3.6 mm | \$21.12 | \$21.52 | \$22.13 |
| R | 22467 | Sterling Silver | $16.5 \times 25 \mathrm{~mm}$ | 3.5 mm | \$23.67 | \$24.12 | \$24.80 |
| S | 22467 | Sterling Silver | $20 \times 31 \mathrm{~mm}$ | 4.1 mm | \$42.63 | \$43.45 | \$44.68 |

BEADING KIT
Our beading kit contains the essential tools and supplies for the beginning beader, including all the essential pliers, tools, design board, and instruction book.
Basic Beading Kit includes:

| - Bead Board | - 4122" Chain Nose Pliers |  |  |
| :---: | :---: | :---: | :---: |
| - \#5 Beading Tweezer | - 41⁄2" Round Nose Pliers |  |  |
| - Beading Awl | - 41/2" Sidecutter |  |  |
| - Basic Beading Instruction Book <br> - 80 mm Brass Gauge | - Thread Scissors |  |  |
| Item Order \# Description | 12+ | 6+ | 1+ |
| A 38-9022 Basic Beading Kit | \$32.47 | \$34.38 |  |



FLOCKED BEAD BOARDS
Help in keeping design objects in place. Recessed storage bins are perfect for organizing beads, findings, and stringing material.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :---: | :---: |
| B | $\mathbf{3 8 - 1 0 0 9}$ | Mini-Travelers Board with Cover | $73 / 4^{\prime \prime} \times 111 / 4^{\prime \prime}$ | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |
| C | $\mathbf{3 8 - 1 0 1 0}$ | U-Shaped Travelers Board with Cover | $9^{3} / 4^{\prime \prime} \times 13^{1 / 2} 4^{\prime \prime}$ | $\$ 5.82$ | $\$ 6.17$ | $\$ 6.85$ |
| D | $\mathbf{3 8 - 1 0 0 8}$ | Multi-Strand Bead Board | $10^{\prime \prime} \times 201 / 2^{\prime \prime}$ | $\$ 9.38$ | $\$ 9.79$ | $\$ 10.20$ |
| E | $\mathbf{3 8 - 1 0 1 1}$ | Bead Board with 3 Channels (6 bin) | $9^{\prime \prime} \times 19^{\prime \prime}$ | $\$ 5.91$ | $\$ 6.26$ | $\$ 6.95$ |
| F | $\mathbf{3 8 - 1 0 0 7}$ | Bead Board with 3 Channels | $8^{\prime \prime} \times 19^{\prime \prime}$ | $\$ 7.27$ | $\$ 7.70$ | $\$ 8.55$ |
| G | $\mathbf{3 8 - 1 0 1 2}$ | Bead Board | $101 / 2^{\prime \prime} \times 19^{\prime \prime}$ | $\$ 4.29$ | $\$ 4.55$ | $\$ 5.05$ |
| H | $\mathbf{3 8 - 1 0 0 5}$ | 4-Row Straight Board | $8^{\prime \prime} \times 21^{\prime \prime}$ | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |



B


G


C


D


E


F


H

## BEAD BOARD WITH CASE

The flocked gray surface reduces eyestrain and helps keep objects in place. Recessed storage bins are perfect for organizing beads, findings, and stringing materials. Graduated beading channels are essential for designing multi-strand necklaces and bracelets.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{J}$ | $\mathbf{3 8 - 1 0 1 5}$ | Bead Board with Case | $9^{\prime \prime} \times 19^{\prime \prime}$ | $\$ 10.64$ | $\$ 12.16$ | $\$ 15.20$ |
|  | $\mathbf{3 8 - 1 0 1 6}$ | Case Only | $9^{\prime \prime} \times 19^{\prime \prime}$ | $\$ 7.91$ | $\$ 9.04$ | $\$ 11.30$ |




## BEAD BOARD

Use this black wood board to align beads prior to stringing. Contains grooves, which are perfectly spaced for work organization.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 1 0 0 1}$ | Wood Stringing Board | $4^{\prime \prime} \times 14 \frac{1}{2} / 2^{\prime \prime}$ | $\$ 6.85$ | $\$ 7.43$ | $\$ 8.25$ |



## BEAD MAT

Soft comfortable bead mats keep small parts from rolling around and cushion hands while stringing beads.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 1 0 0 6}$ | 3 -Piece Set: Beige Blue Gray | $9^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 2.85$ | $\$ 2.98$ | $\$ 3.10$ |

## PERFECT END THREAD BURNER

End the fray. Why didn't someone think of this before? Perfect for stopping frayed ends of thread on embellishments, peyote stitch, or anywhere raw ends need to be eliminated. Cuts and cauterizes. Fact is that the tip heats to red hot at the touch of a button and melts synthetic threads so that they don't unravel. Powered by one AA battery (included).

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 2 6 0 3}$ | Perfect End Thread Burner | $\$ 23.38$ | $\$ 24.75$ | $\$ 27.50$ |



## BEADALON ${ }^{\circledR}$ BEADING TOOL

The Beadalon Knotter Tool allows you to create tight, consistent knotted strands. This economy tool does the work of an awl and tweezers in one easy-to-use tool. Complete with illustrated instruction book.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 8 - 0 1 9 4}$ | Beadalon Beading Tool | $5^{\prime \prime}$ | $\$ 27.58$ | $\$ 29.21$ | $\$ 32.45$ |

## BEAD STATION

Organize your beading supplies for stringing convenience. This wood carryall features a plier bar, carded silk hooks, a place for wire and cord spools, a tabletop ruler, and a top shelf for holding miscellaneous tools, supplies, and components. Choose white silk on spools for economy and value.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 9 0 2 0}$ | Station | $61 / 2^{\prime \prime} \times 22^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 38.17$ | $\$ 40.41$ | $\$ 44.90$ |



All tool items shown are sold separately.

## TRI-CORD" ${ }^{\text {™ }}$ PROFESSIONAL BEAD STRINGING

A. The professional knotting tool kit comes with everything you need to get started in the craft of classic pearl knotting, beading, and bead stringing, as well as the profitable jewelry repair industry. Just a few short hours of self-learning with the instructional DVD help provided, and your investment will quickly pay for itself.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 8 - 0 1 9 0}$ | Tri-Cord"' Beading Kit | $\$ 90.11$ | $\$ 94.03$ | $\$ 97.95$ |
|  | $\mathbf{6 2 - 4 4 0 3}$ | Bead Stringing Instruction Booklet | $\$ 22.68$ | $\$ 23.66$ | $\$ 24.65$ |

 $3 / 8$ of an inch or more between each station. They can be any combination of components separated by the silk cord or even links of chain, creating unique artistic designs in pearl, metal, stone, and crystal beads.

## TRI-CORD"' PROFESSIONAL KNOTTING TOOL®

C. Knot faster and with more consistency. The revolutionary Tri-Cord" ${ }^{\text {mi }}$ Knotter does the work of an awl and tweezers in one easy-to-use tool. Once your strand is started, you can string on all beads and knot quickly and continually, creating knots that are tight, consistent, and have the professional appearance your customers expect.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| B | $\mathbf{3 8 - 0 1 9 3}$ | Tin-Cup Knotter | $\$ 43.82$ | $\$ 46.40$ | $\$ 51.55$ |
| C | $\mathbf{3 8 - 0 1 9 2}$ | Knotting Tool | $\$ 38.25$ | $\$ 40.50$ | $\$ 45.00$ |



## STRINGING WITH THE TRI-CORD"' KNOTTER

It's fast and easy to create professional quality knots with this convenient tool. Simply make a loop, pick it up with the knotters awl, move the knot down to the bead, and release (instructions included). You get tight, consistent knots in a fraction of the time it would take with the conventional awl-and-tweezers stringing method!


## STORAGE ORGANIZER

Handy trays for beads, clasps, and findings. Makes carrying small parts safe and easy. Clear box with hinged lid.

| Item | Order\# | \# of Compartments | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 5 - 2 0 6 4}$ | 6 Compartments | $7^{\prime \prime} \times 4^{\prime \prime} \times 1^{11 / 21}$ | $\$ 1.78$ | $\$ 1.94$ | $\$ 2.15$ |
| B | $\mathbf{1 5 - 2 0 5 8}$ | 52 Compartments | $10 " \times 7^{\prime \prime} \times 1^{3 / 4}$ | $\$ 18.19$ | $\$ 19.26$ | $\$ 21.40$ |

## B



ORGANIZATION TRAYS AND VIALS
Durable, clear plastic storage boxes with fixed compartments.

| Order \# | \# of Compartments | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $6+$ | $3+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15-2066 | 18 Compartments | $81 / 4^{\prime \prime} \times 11 / 4^{\prime \prime} \times 41 / 4^{\prime \prime}$ | \$5.81 | \$6.19 | \$6.45 |
| 15-2067 | 12 Compartments | $81 / 44^{\prime \prime} \times 11 / 4^{\prime \prime} \times 41 / 4^{\prime \prime}$ | \$5.81 | \$6.19 | \$6.45 |
| 15-2068 | 18 Compartments | $11^{\prime \prime} \times 13 / 4^{\prime \prime} \times 61 / 2^{\prime \prime}$ | \$8.28 | \$8.37 | \$8.45 |
| 15-2069 | 36 Compartments | $10^{\prime \prime} \times 11 / 2$ " $\times 7$ " | \$9.26 | \$9.36 | \$9.45 |



## STACK DRAWERS

Fill these handy drawers with all different types of findings, stringing materials, solder chips, and anything else needed for different jobs. Then when it's time to do the job, simply get the drawers of product you need, attach them together, and all the supplies stay neatly organized. Kit includes 10 drawer units that connect in two different directions, side to side or top to bottom.

| Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 5 - 2 0 5 9}$ | $1^{\prime \prime} \times 13 / \mathbf{l}^{\prime \prime}$ | $\$ 4.29$ | $\$ 4.55$ | $\$ 5.05$ |



## ORGANIZATION TRAYS AND VIALS

High-impact, plastic utility boxes are convenient for storing small items.
Adjustable partitions are removable and allow for a variety of compartment sizes. Contents are easily identified with see through lid, which securely snaps closed.

| Order \# | \# of Compartments | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 6+ | 3+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15-2060 | 6 Compartments | $41 / 21 \times 1 \frac{1}{8 \prime \prime} \times{ }^{\prime \prime}$ | \$2.21 | \$2.35 | \$2.45 |
| 15-2061 | 3-15 Compartments | $83 / 81 \times 13 / 8{ }^{\prime \prime} \times 5^{\prime \prime}$ | \$5.67 | \$6.05 | \$6.30 |
| 15-2062 | 5-15 Compartments | $11^{\prime \prime} \times 21 / 8^{\prime \prime} \times 7^{\prime \prime}$ | \$8.06 | \$8.59 | \$8.95 |



ORGANIZATION TRAYS AND VIALS
Paper-covered trays with magnetic closure and clear view lid. Vials have swing-top lids. Small Bottle: 6mm hole Large Bottle: 10 mm hole

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 2 1 0 5}$ | Black Tray (36 black vials) | $6^{\prime \prime} \times 9^{1 / 22^{\prime \prime}} \times 1^{\prime \prime}$ | $\$ 17.91$ | $\$ 19.10$ | $\$ 19.90$ |
| B | $\mathbf{5 9 - 2 1 1 5}$ | Black Tray (24 lime green vials) | $53 / 4^{\prime \prime} \times 101 / 4^{\prime \prime} \times 11 / 4^{\prime \prime}$ | $\$ 22.98$ | $\$ 23.47$ | $\$ 24.45$ |
| C | $\mathbf{5 9 - 2 1 0 0}$ | Small Plastic Vial with Black Lid | $1 / 2^{\prime \prime} \times 1^{11 / 21}$ | $\$ 0.54$ | $\$ 0.58$ | $\$ 0.60$ |
| D | $\mathbf{5 9 - 2 1 1 0}$ | Large Plastic Vial with Lime Green Lid | $7 / 16^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 0.86$ | $\$ 0.91$ | $\$ 0.95$ |



STACKABLE ROUND TRAYS
These convenient and space-saving trays have threaded bottoms that securely screw to the tray below, allowing access to any tray at any level. Translucent plastic.

| Item Order\# |  | Diameter | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{3 8 - 9 0 0 6}$ | $2^{\prime \prime}$ | 6 | $\$ 3.27$ | $\$ 3.47$ | $\$ 3.85$ |
| F | $\mathbf{3 8 - 9 0 0 8}$ | $11 / 4$ | 6 | $\$ 2.47$ | $\$ 2.61$ | $\$ 2.90$ |



ORGANIZATION TRAYS AND VIALS
Light blue plastic tray with slide lid that allows for smooth opening and closing operations and keeps parts in place. A wide variety of parts and small objects can be stored. The front edge of each compartment is rounded, making the contents easily retrievable.

| Item | Order \# | \# of Compartments | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{1 5 - 2 0 7 0}$ | 18 Compartments | $101 / 2^{\prime \prime} \times 6^{3 / 4^{\prime \prime}} \times 11 / 2^{\prime \prime}$ | $\$ 9.00$ | $\$ 9.60$ | $\$ 10.00$ |
| $H$ | $\mathbf{1 5 - 2 0 7 1}$ | 24 Compartments | $73 / 4^{\prime \prime} \times 5^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 9.00$ | $\$ 9.60$ | $\$ 10.00$ |



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We've designed Bench Jeweler Workshop to be educational, entertaining, and value-packed with discounted products. Students, first-time attendees, and industry veterans alike can learn more about the craft of jewelry-making and repair. Bench Jeweler Workshop is the industry's best opportunity for bench jewelers and store owners to learn from fellow craftsmen and tools experts.

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_ W O R K S HO P

## PRO ELECTRIC BEAD REAMER

Compact, lightweight design makes it perfect for smoothing rough edges of beads and enlarging bead holes. Includes 3 diamond-coated tips: small reamer, large reamer and $45^{\circ}$ edge reamer. Variable speed control: 1,000-20,000 rpm. 24V DC.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{3 8 - 9 0 1 9}$ | Motorized Bead Reamer | $\$ 19.98$ | $\$ 21.15$ | $\$ 23.50$ |
| B | $\mathbf{5 3 - 0 2 0 1}$ | Short Tip | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| C | $\mathbf{5 3 - 0 2 0 2}$ | Long Tip | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| D | $\mathbf{5 3 - 0 2 0 3}$ | $45^{\circ}$ Diamond Tip | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |



## BATTERY-OPERATED BEAD REAMER

This bead reamer is designed to enlarge holes in pearls, gemstones, and other beads. Simply submerge the bead and reamer tip into a small amount of water and apply to the bead hole. Sold with two tips; batteries not included.

| Item Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: |
| E | $\mathbf{3 8 - 3 1 0 1}$ | Battery-Operated Bead Reamer | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |
| F | $\mathbf{3 8 - 3 1 0 2}$ | Replacement Tips (pack of 2) | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |



## DELUXE BEAD REAMER

Diamond Bead Reamer Set. Includes three points (small and large reaming points, plus $45^{\circ}$ edge reamer). Handle is hollow so you won't lose the diamond points, just store them in the handle. Easy-release chuck fits into the aluminum housing so it releases instantly when the collect is unscrewed. Handle is anodized aluminum with a cushion PVC grip for comfort. Chuck is brass so rust is never a problem.

| Item | Order \# | Description | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G | 53-0200 | Bead Reamer Set with Comfort Grip | \$15.85 | \$16.79 | \$18.65 |
| H | 53-0201 | Short Tip | \$1.83 | \$1.94 | \$2.15 |
| $J$ | 53-0202 | Long Tip | \$1.83 | \$1.94 | \$2.15 |
| K | 53-0203 | $45^{\circ}$ Diamond Tip | \$1.83 | \$1.94 | \$2.15 |



## BEADING AWL DESIGNER WITH PVC GRIP

Deluxe rubberized handle helps control tip placement. Great for hand knotting and opening small beads for covering crimps.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 3 1 0 0}$ | $53 / 4^{\prime \prime}$ | $\$ 5.78$ | $\$ 6.12$ | $\$ 6.80$ |

## STRINGING AWL

Designed to slide a knot down into the bead tip or between two beads.
Can also be used for cleaning holes.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 3 3 0 0}$ | Stringing Awl (Brass) | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |

## WOOD BEAD HOLDER

A handy tool for bead stringing. This wooden vise securely holds delicate beads while cleaning or reaming holes.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 0 2 1 5}$ | $63 / 4^{\prime \prime}$ | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |

## PATTERN \#7 TWEEZERS

Pattern \#7- Excellent for handling all miniature and micro-miniature parts and components. Curved shanks have beveled edges and points are very sharp with a plain finish.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 0 4 2 0}$ | Dumont II Stainless Steel | $41 / 2^{\prime \prime}$ | $\$ 34.00$ | $\$ 36.00$ | $\$ 40.00$ |

## PATTERN \#5 BEAD TWEEZERS



Pattern \#5 - Used for handling microscopic parts and delicate knotting work. Has very narrow, needle-like points honed to extreme sharpness. Shanks are indented with beveled edges. Non-magnetic.

| Order \# | Description | Length | 12+ | $6+$ | + |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 57-5030 | Dumont II Stainless Steel | $41 / 4$ " | \$28.05 | \$29.70 | 3.00 |

PEARL-HOLDING TWEEZERS
Used to hold pearls. Tips are epoxy coated and will not damage pearls.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 1 3}$ | Holding Tweezers | $53 / 4^{\prime \prime}$ | $\$ 10.16$ | $\$ 10.76$ | $\$ 11.95$ |

DIAMOND TWEEZER WITH SCOOP
Fine serrated points, ribbed shanks.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| 57-7660 | Tweezers with Scoop | $7^{\prime \prime}$ | $\$ 3.36$ | $\$ 3.56$ | $\$ 3.95$ |



ECONOMY TOOL KIT
This economy tool kit with zip pouch comes complete with all the tools you need to begin beading. It features chain nose pliers, round nose pliers, wire cutters, tweezers, a bead scoop, snips, and six modular and stackable drawers, all zipped into a handy storage pouch. The complete kit is ready to travel and keeps tools neatly organized.
Store various findings and beads in the drawers.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 1 6}$ | 7-Piece Repair Kit | $\$ 13.09$ | $\$ 13.86$ | $\$ 15.40$ |



## MINI TOOL KIT

The perfect set of mini tools for quick repairs and for travel.
Contains all the tools necessary for wire wrapping and other stringing functions. These mini tools are $3^{\prime \prime}$ long. Set is complete with chain nose pliers, round nose pliers, flat nose pliers, fiber tipped pliers, and a cutter, all zipped up into the blue pouch.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 1 5}$ | 5-Piece Repair Kit | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |

## EURO CRIMPER

Incorporates two medium crimping cavities to fit all of the crimp tubes and beads within the medium range. Each cavity is slightly larger (or smaller) than the other to give the user the ability to tighten the crimp properly. Great on Beadalon \#1 and \#2 Crimp Beads or \#2 Crimp Tubes, as well as other non-standard crimp bead and tube sizes.

| Order\# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 9 9 5}$ | Crimping Plier | $5^{\prime \prime}$ | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |



THE \#1 CONNER BEAD SETTING PLIERS
The right tool for securing Beadalon \#1 Crimp Tubes and sizes \#0 and \#1 Crimp Beads. Use one firm squeeze to crimp with the inner-position grooves, then use the outer-position grooves to round off the crimp. The jaw grooves are comparably smaller to make a dependable closure on smaller crimp findings.

| Order\# | Description | Length | 12+ | 6+ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 7}$ | Crimping Plier | $5 "$ | $\$ 11.90$ | $\$ 12.60$ | $\$ 14.00$ |



## MICRO CRIMPER

Close and secure Beadalon Crimp Beads and Crimp Tubes with this easy-touse hand tool. Inner-position grooves crimp beads and tubes tightly closed with one firm grip; outer-position grooves round off edges on Crimp Beads for a smooth, professional result. Use with Beadalon \#1 and \#2 Crimp Beads or \#2 Crimp Tubes.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 5}$ | Crimping Plier | $5^{\prime \prime}$ | $\$ 11.18$ | $\$ 11.84$ | $\$ 13.15$ |



## MICRO FLUSH CUTTER DELUXE

Secure larger Beadalon \#3 Crimp Beads or \#3 or \#4 Crimp Tubes with this specially sized crimper tool. Larger surface area provides a full crimp on bigger components without compromising the professional, finished look.

| Order\# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| $\mathbf{4 6 - 4 0 0 8}$ | Crimping Plier | $5 "$ | $\$ 10.63$ | $\$ 11.25$ | $\$ 12.50$ |



## POWER MAX CUTTERS

Designed to fit exclusive Beadalon EZ-Crimp ${ }^{\text {tw }}$ Ends. Simply navigate the EZ-Crimp End into the jaws with the smooth part of the end in the curved tip of the jaw. Next, squeeze completely and repeat if necessary on the full length of the EZCrimp End. The connection with the wire is now complete.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | :---: | ---: |
| $\mathbf{4 6 - 4 0 1 8}$ | Crimping Plier | $5^{\prime \prime}$ | $\$ 13.13$ | $\$ 13.91$ | $\$ 15.45$ |




## FOUR-IN-ONE PLIERS

This plier is our Four-In-One "Beader's Delight." A must for wire wrappers. This plier has a finely tapered long nose for coiling; a flat jaw for flattening, straightening, or bending; a groove for closing coils and jump rings; and a sidecutter. Great for travel with PVC grips and double-leaf springs.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | :---: | ---: |
| $\mathbf{4 6 - 4 0 1 7}$ | Beading Plier | $5 "$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |

## MICRO-MINI BEAD KNOT PLIERS

This pair of pliers is used when knotting bead cord, as knotted cord slides off of this finely tapered nose. These pliers are easier to use than tweezers, especially when using heavier bead cord.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 6}$ | Beading Plier | $5^{\prime \prime}$ | $\$ 8.80$ | $\$ 9.32$ | $\$ 10.35$ |



MICRO MINI/FLAT NOSE PLIERS
Use these reasonably priced stainless steel pliers for delicate tasks.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 9 0 0 3}$ | Flat Nose Plier | $5^{\prime \prime}$ | $\$ 6.12$ | $\$ 6.48$ | $\$ 7.20$ |

## XURON ${ }^{\circledR}$ HIGH PRECISION SCISSORS

Ultra-precise, the Xuron ${ }^{\text {T" }}$ scissor cuts fine or delicate items with a clean, square edge cut. Cushion grips and return spring provide increased comfort and precision. Rated for cutting soft metals up to 0.005 ". Including materials such as silk, embroidery, floss, or thin mylars.

| Order \# | Description | Length | Jaw Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 8}$ | Scissor | $5 "$ | $0.47^{\prime \prime}$ | $\$ 14.96$ | $\$ 15.84$ | $\$ 17.60$ |

## XURON ${ }^{\circledR}$ HIGH DURABILITY SCISSORS

Features precision ground high carbon steel cutting edges. Excellent for cutting solder and sheets of light gauge metal up to 0.030 " $(0.8 \mathrm{~mm})$. For line and all bead cords, these pliers have serrations on one edge to keep material secure while cutting.

| Order\# | Description | Length | Jaw Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :---: | :---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 1 3}$ | Scissor | $6^{\prime \prime}$ | $0.85 "$ | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |



PRECISION SCISSORS
Used for beading and other delicate work. Handles are large and made of black ABS. Small, pointed blades are made of high quality stainless steel. Blades are held together with a stainless steel high-impact rivet and nylon washer, which provide smooth cutting and extended life.

| Order\# | Description | Length | 12+ | 6+ | 1+ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 6 2 0 0}$ | Beading Scissor | $4^{\prime \prime}$ | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |

MICRO-SNIP BEADING SHEAR
Ideal for bead string and thread snipping.

| $\mathbf{O r d e r} \#$ | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 2 8 0 0}$ | Shear | $31 / 2^{11}$ | $\$ 3.74$ | $\$ 3.96$ | $\$ 4.40$ |



## BEADALON® SNIPPER TOOL

These compact snips have precision tips to make close cuts easy. Built for efficiency, these new snips look good and can cut silk cord, nylon, nymo, and most other non-metal stringing materials with ease. Always-ready blades are extremely sharp and hold their edge. The secure blade cover prevents accidental holes.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 2 8 0 1}$ | Snipper | $41 / 2^{\prime \prime}$ | $\$ 3.40$ | $\$ 3.60$ | $\$ 4.00$ |



## FULL FLUSH CUTTER

These cutters are specifically designed for multi-strand beading wire and full-flush with jaws induction hardened to 60-62 Rockwell. Used properly, this degree of hardness assures a clean cut, time after time. Cutting edges are precisely aligned and the black oxide non-glare head has a "relieved" design for reaching into tight areas. This quality German cutter also features double-leaf spring and yellow PVC handles. Use on flexible beading wire and soft wire only.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 1 3}$ | Cutter | $41 /{ }^{2}$ | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |
| $\mathbf{4 6 - 4 0 1 4}$ | Pointed Jaw Cutter | $41 / 2^{\prime \prime}$ | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |



## JUMP RING MAKER WITH MANDRELS

Pepetools Jump Ring Maker employs the use of a keyless chuck for securing the inner Jump Ring core rod. The Jump Ring Maker is supplied with 20 inner core rods which range in size from 2.5 mm to 12.5 mm in $1 / 2 \mathrm{~mm}$ increments. Wire is coiled on the core rods and placed in the coil holder and cut with a Foredom flexshaft tool with a No. 30 hand piece.

| Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 8 - 2 0 4 0}$ | Jump Ring Maker |  | $\$ 157.25$ | $\$ 166.50$ | $\$ 185.00$ |
| $\mathbf{2 8 - 2 0 4 3}$ | Replacement Blade | $11 / 4$ | $\$ 11.26$ | $\$ 11.93$ | $\$ 13.25$ |
| $\mathbf{2 8 - 2 0 4 3}$ | Replacement Blade | $11 / 22^{\prime \prime}$ | $\$ 14.07$ | $\$ 14.90$ | $\$ 16.55$ |



## WATCHMAKER'S BENCH

Our Stuller custom Watchmaker's bench is made in the USA with a solid Gibraltar top that is routed along the edge to prevent parts from rolling away. This red oak fully skirted bench features a 15 " steel lined catch drawer with a removable leather insert. Eight graduated drawers include one lockable and dividable small parts drawer, with six bank drawers, one $6^{\prime} D \times 278^{\prime \prime} \mathrm{H}$ tool holder, and also includes one center roll out work surface.


Large satin nickel pulls give it a modern look while improving function. This bench comes equipped with a quality version of the classic watchmakers vise suitable for precision work. Only the base secures into the bench surface. This vise can be quickly removed from its mounting base by sliding a lever back that reattaches quickly by sliding the lever forward. The European arm rests are
tilted, adjustable, upholstered, and padded in brown imitation leather to keep you really comfortable. Special ergonomic shape prevents fatigue at the bench and makes it really easy to work. Inlaid bushing for Dazor lamps on either side of the bench. Ships completely assembled by truck freight. content on Stuller.com.

| Item | $\mathbf{O r d e r} \#$ | Description | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{1 3 - 0 4 4 1}$ | Watchmaker's Bench | $60^{\prime \prime} \times 44^{\prime \prime} \times 24^{\prime \prime}$ | $\$ 3,800.00$ |
| ACCESSORIES |  |  |  |  |
| B | $\mathbf{5 8 - 2 4 3 6}$ | Bergeon Vise with Detachable Vise |  |  |
| C | $\mathbf{1 3 - 1 8 2 3}$ | Bushing | $\$ 385.90$ |  |
| D | $\mathbf{1 3 - 0 5 3 0}$ | Adjustable Armrests | $\$ 26.25$ |  |

IDEAL BENCH
Designed to be the only bench you'll need. This fully assembled, 10 drawer, solid wood jeweler's bench features easy-to-slide drawers complete with a convenient contoured, steel lined filing drawer, a removable small parts/watchmaker's mat, storage cabinets with plier holder, an oversized Gibraltar top with a GRS ${ }^{\circ}$ mounting adaptor plate inlaid, and predrilled mandrel holes. Purchase the best value in the industry today. Special order a customized bench. The width of this bench can be suited to the individual's needs. Choose a width from $46^{\prime \prime}$ up to 60". The depth and height should not be altered. However, drawer sizes will change. Made of solid wood in the USA. Benches ship fully assembled by motor freight only.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 2}$ | $52^{\prime \prime} \times 48^{\prime \prime} \times 231 / 2^{\prime \prime}$ | $\$ 2,160.00$ |




Find added video content on Stuller.com.


## JEWELER'S WORKBENCH

Well-constructed, all wood with hardwood top, jeweler's workbench. Consists of three drawers on the right-hand side, a pullout utility tray with two shelves, full skirted legs and back, two arm rests, steel-lined drawer pan, and pre-drilled mandrel holes. No assembly required. Made of solid wood in the USA.


HARDWOOD WORK TABLE WITH LOWER SHELF
Made from hardwood, this work table is ideal for use as a metal forming table or as a polishing table. Assembly required.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 6}$ | $681 / 4^{\prime \prime} \times 373 / 4^{\prime \prime} \times 21 \frac{1}{1 / 2}$ | $\$ 495.00$ |



HARDWOOD WORK TABLE WITH 1 DRAWER
Made from hardwood, this work table is ideal for use as a metal forming table or as a polishing table. Assembly required.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 7}$ | $60 " \times 32 \frac{1}{4} \times 251 / 4^{\prime \prime}$ | $\$ 395.00$ |



SMALL HARDWOOD WORK TABLE
Made from hardwood, this small work table is ideal for use next to your bench. Assembly required.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 8}$ | $321 / 22^{\prime \prime} \times 25 \frac{1}{2} \times 153 / 4^{\prime \prime}$ | $\$ 166.50$ |

HARDWOOD WORK TABLE WITH OVERHEAD TOOL ORGANIZER
Made from hardwood, this work table is ideal for metal forming or any other type of fabricating. No assembly required.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 5}$ | $44 \frac{1}{2 \prime} \times 471 / 4^{\prime \prime} \times 271 / 2^{\prime \prime}$ | $\$ 468.00$ |



## JEWELER'S WORK BENCH

Don't settle for imitations...Buy a genuine, solid wood, heavy-duty bench! Solid all-wood bench; no pressboard and no particle board. Solid wood top with all wood legs and full skirt. Three utility drawers assembled. Pull-out tray with two shelves. Two-arm rests and a lined catch drawer.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 4 9}$ | $39 " \times 39^{\prime \prime} \times 191 / 22^{\prime \prime}$ | $\$ 299.00$ |

## SPECIAL FEATURES



Lined Catch Drawer



## JEWELER'S BENCH WITH SURRELL SURFACE

All-wood constructed workbench with a solid Surrell, heat-resistant, easy to maintain work surface. Light sanding will remove burns, stains, or minor scratches. Fully-skirted, quality hardwood construction will withstand the rigors of daily use. Other features include two side drawers and two arm rests. No assembly required. Made of solid wood in the USA.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 3 6}$ | $37 " \times 391 / 2^{\prime \prime} \times 191 / 2^{\prime \prime}$ | $\$ 695.00$ |




## CUSTOM DELUXE JEWELER'S WORKBENCH

This deluxe bench is made of top-quality, wood materials and constructed to handle the demands of daily use. The solid $3 / 4$ " hardwood work surface is complemented by 16 drawers, two armrests, and a pullout tray. Solid side and back panels provide long-lasting support. No assembly required.


## PREMIER WORKBENCH

Well-crafted, all-wood bench that is built to last. Has a solid hardwood work surface with reinforced side railings and full skirted sides and rear. Features seven side drawers, two top drawers with security locks, one formica-lined drawer, three steel-lined drawers, "catch" drawers, right and left arm rests, slot for bench pin, and layout shelf. No assembly required. Made of solid wood in the USA.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 0 4 3 8}$ | $481 / 2^{\prime \prime} \times 40^{\prime \prime} \times 21^{\prime \prime}$ | $\$ 999.00$ |



SHELFMATE TOOL HOLDER
Keep your tools handy and organized while increasing your workspace. Store pliers, shears, and other tools within reach. Easy to assemble instructions included.

| Item | Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: |
| A | $\mathbf{1 3 - 0 4 6 0}$ | $35^{\prime \prime} \times 17^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 59.95$ |

## MAGNETIC TOOL HOLDER

Pliers, screwdrivers, and other miscellaneous metal tools are held securly in place with permanent magnets. Mounts with screws.

| Item | Order \# | Length | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| B | $\mathbf{1 3 - 3 8 0 0}$ | $12^{\prime \prime}$ | $\$ 21.40$ |



WOODEN PLIERS CABINET
Ideal for hobbyists, jewelers, or watch makers to place on work bench. Holds seven pliers, a shelf for tools, and a storage drawer.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 3 7 6 0}$ | $6^{1} / 2^{\prime \prime} \times 5^{\prime \prime} \times 71 / 2^{\prime \prime}$ | $\$ 15.75$ |



## BENCH TOP ORGANIZER

Fits perfectly on the back of a bench or a work table. Contains space for findings, tools, and accessories and organizes it all. Four drawers are included for stowaway items. A great compliment to any work area.

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 3 7 6 5}$ | $5^{\prime \prime} \times 18^{\prime \prime} \times 3^{1 / 2 "}$ | $\$ 51.75$ |



MANDREL AND HAMMER ORGANIZER
Can be attached to a work bench.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 3 7 6 6}$ | $18^{\prime \prime} \times 61 / 2^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 66.35$ |



## WOODEN PLIERS RACK

Has slots for seven pliers, a shelf for small tools, and a handy storage drawer in a natural, varnished finish.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| $\mathbf{1 3 - 3 7 7 1}$ | $7^{\prime \prime} \times 33 / 4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | $\$ 21.80$ |



JEWELER'S BENCH CHAIR
Ergonomic bench chair designed for jewelers and watchmakers. Specially constructed to provide years of comfort while greatly improving productivity and reducing fatigue. Single touch adjustments provide independent control of the seat, backrest, and lumbar height. Soft durahyde vinyl keeps you cool and comfortable.

| Item | Order \# | Description | Height | $\mathbf{1 +}$ |
| :---: | :--- | :---: | ---: | ---: |
| A | $\mathbf{1 3 - 0 5 1 0}$ | Jeweler's Chair | $16-211 / 4^{\prime \prime}$ | $\$ 439.90$ |



AUTOFIT JEWELER'S CHAIR
Sitmatic's AutoFit, the first auto-tensioning chair with a reclining seat. Before AutoFit, chairs that auto tensioned had to have seats that pitched forward to counterbalance the user. AutoFit's unique design promotes a healthy lumbar by keeping the user in constant contact with the backrest throughout their range of motion. Not only a dedicated task chair, AutoFit has natural applications in conference and 24 -hour settings where chairs are rarely adjusted.

| Item | Order \# | Description | Height | 1+ |
| :---: | :---: | :--- | :---: | ---: |
| B | $\mathbf{1 3 - 0 5 1 1}$ | Autofit Jeweler's Chair | 21" | $\$ 489.00$ |
| C | $\mathbf{1 3 - 0 5 1 2}$ | Autofit Jeweler's Chair without Arms | $21{ }^{\prime \prime}$ | $\$ 459.95$ |




Find added video
content on Stuller.com.

## SADDLE SEAT

This deceptively comfortable setter's seat is a thoroughly ergonomic design. It adjusts the hips and knees to a $135^{\circ}$ angle rather than the $90^{\circ}$ angle of a traditional chair. It is fully adjustable to suit the user's height and tilt preferences, and will create healthier feeling back, neck, and legs.

| Item | Order \# | Description | Height |
| :---: | ---: | :---: | ---: |
| D | $\mathbf{1 3 - 0 5 1 7}$ | Saddle Seat | $35 "$ |



SETTER'S CHAIR
Ergonomic jewelers' chair designed to provide comfort and reduce fatigue. Single touch adjustments provide independent control of the seat, backrest, and lumbar height. The seat is adjustable from $16^{\prime \prime}$ to $21^{\prime \prime}$ by a convenient foot control.

| Item | Order \# | Description | Height | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | ---: |
| E | $\mathbf{1 3 - 0 5 1 6}$ | Setter's Chair | $377^{\prime \prime}$ | $\$ 295.00$ |

## EARRING SETTING TOOL

This unique earring setting tool allows you to keep a good grip on a basket earring during the setting process. This tool is made of light weight aluminum and brass and has a $.43 \mathrm{~mm} \times 1 / 2^{\prime \prime}$ deep hole for the earring post to sit in. The Earring Setting Tool is easy to use. First, place the earring into the hole in the fixture, then tighten the brass knob which will close the brass jaws and secure the earring. Now you are ready to set your earring.


## SPECIAL FEATURES



Knob to Tighten the Claws


Mounting Height Adjustment Knob


## RING SETTING TOOL

The Stuller exclusive Ring Setting Tool was created by a master jeweler. The kit comes complete with two fixtures, two sets of nine interchangeable dies, knobs, and allen wrenches for tightening the collets. Using this tool is very easy. First choose the correct collet size to fit inside the ring. Next, place the ring over the collet and then snug the ring up by using the provided allen wrench or knob. Once the ring is secure, place the fixture into your mini or standard engraving ball and you are ready to channel set, bead set, or engrave. The angled fixture allows you to change the angle of your working surface for easier setting or engraving. The straight edged fixture allows you to mount your rings with the lap area of the ring exposed to aid in the process of engraving and setting stones on side of the shank.

| Order \# | Description | 1+ |
| :--- | :--- | ---: | ---: | ---: |
| 53-0603 | Ring Setting Tool | $\$ 96.90$ |



GRS ${ }^{\circledR}$ BENCHMATE ${ }^{\text {m }}$ ACCESSORIES
BenchMate ${ }^{\text {t" }}$ is a versatile work-holding system for a full range of jewelry work. BenchMate ${ }^{\text {T" }}$ multiplies the force of your hands using the principles of leverage. You will work with reduced muscular strain and force. BenchMate ${ }^{\text {Tw }}$ tilts and rotates freely to any position. You can also lock the BenchMate ${ }^{\text {Tw }}$ in virtually any position. This feature helps eliminate the possibility of damaging your work or injuring yourself in case of an accidental slip.

## BASIC PACKAGE

A. Includes: BenchMate ${ }^{\text {™ }}$, shellac pad, fixed mounting plate, and hardware.
deluxe package
B. Includes: BenchMate ${ }^{\text {rw" }}$, shellac pad, narrow solder clamp, wide solder clamp, third hand attachment, bench pin kit, fixed mounting plate, and hardware.

## PLUS PACKAGE

C. Includes: BenchMate ${ }^{\text {T"W }}$, shellac pad, narrow solder clamp, wide solder clamp, two third-hand attachments, bench pin kit, four-inch solder station, fixed mounting plate, and hardware. Right-handed use only. Left-hand saw plate may be special ordered for left-handed users.

SETTER'S PACKAGE
D. Includes basic BenchMate ${ }^{\text {T"W }}$ holder, shellac pad, bench pin kit, inside ring holder, fixed mounting plate, and hardware.

| Item | Order \# | Description | Assortment Oty | Each | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| A | $\mathbf{2 6 - 4 1 0 0}$ | Basic Package | Each | $\$ 237.15$ |  |
| B | $\mathbf{2 6 - 4 1 0 1}$ | Deluxe Package | Each | $\$ 321.40$ |  |
| C | $\mathbf{2 6 - 4 1 0 2}$ | Plus Package | Each | $\$ 3831.80$ |  |
| D | $\mathbf{2 6 - 4 0 9 9}$ | Setter's Package | Each |  |  |
| ACCESSORIES |  | Each | $\$ 3.10$ |  |  |
| E | $\mathbf{2 6 - 4 1 0 3}$ | Knob Assembly | 5 Pairs | $\$ 19.80$ |  |
| F | $\mathbf{2 6 - 4 1 0 7}$ | Fixed Mounting Plate | Each | $\$ 7.70$ |  |
| G | $\mathbf{2 6 - 4 1 2 0}$ | Jaw Inserts | Each | $\$ 31.90$ |  |
| H | $\mathbf{2 6 - 4 1 5 8}$ | Sawing Plate Right-Handed | $\$ 35.20$ |  |  |
| J | $\mathbf{2 6 - 4 1 5 9}$ | Sawing Plate Left-Handed | Set | $\$ 87.10$ |  |
| K | $\mathbf{2 6 - 4 1 2 5}$ | Inside Ring Holder with 7 Collets | Set | $\$ 44.05$ |  |
| L | $\mathbf{2 6 - 4 1 4 8}$ | Replacement 7 Collet Set |  | $\$ 1.05$ |  |



GRS ${ }^{\circledR}$ ID RING HOLDER
Takes ring fixtures to a new level. The expansion cones assure equal pressure on both sides of the mandrel as it grips the inside diameter of the ring. When using the standard cone, the ring drag can be set to allow smooth rotation of the work-piece while setting stones or engraving the ring surface. Includes a set of 10 mandrels and all tooling.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 8 2}$ | Ring Holder | $\$ 56.14$ | $\$ 59.45$ | $\$ 66.05$ |

Find added video content on Stuller.com.

## RING SETTERS INSIDE CLAMP

This unique tool allows you to access the entire circumference of your ring. Includes nine plastic sleeve inserts marked clearly in U.S. sizes from 2-13 and in millimeter sizes 13-22. Firmly grips ring from the inside without marking, which allows you to work on the outside of the ring. Smooth hardwood handle for comfortable hand-held operations. Packaged in a hardwood box.


GRS ${ }^{\circledR}$ BENCH PIN KIT
Wooden bench pin with holder. (Does not include mounting plate.)

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 1 1 4}$ | Bench Pin Kit | $\$ 27.12$ | $\$ 28.71$ | $\$ 31.90$ |
| $\mathbf{1 3 - 3 0 0 0}$ | Replacement Pin | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |  |
| $\mathbf{2 6 - 4 1 0 7}$ | Fixed Mounting Plate | $\$ 16.83$ | $\$ 17.82$ | $\$ 19.80$ |  |



BENCH PIN IN METAL HOLDER
Easily screws to the edge of the workbench. Thumbscrew locks bench pin securely in place. Measures 4".

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 3 - 3 2 0 0}$ | Bench Vise | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |

## BENCH SUCTION PIN

This unique bench pin allows you to cut, grind, and polish without debris flying through the air. Attach your 2" hose from your quatro basic or Quatro gold vault to the flange located on the bottom of the bench pin and watch the debris go down the hose and into your dust collector.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 7 - 4 1 2 2}$ | Suction Pin | $\$ 33.15$ | $\$ 35.10$ | $\$ 39.00$ |



## WOOD BENCH PINS

Fits into slot in workbench. Used as support when filing, sawing, and setting.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B | 13-3000 | $21 / 4^{\prime \prime} \times 5^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$2.55 | \$2.70 | \$3.00 |
| C | 13-3001 | $21 / 2^{1 \prime} \times 61 / 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$2.76 | \$2.93 | \$3.25 |
| D | 13-3002 | $21 / 2^{\prime \prime} \times 7^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$3.53 | \$3.74 | \$4.15 |



## COMBINATION BENCH PIN AND ANVIL

Used to support pieces being flattened and for layout work. Combination polished steel anvil and wood bench pin measures $13 / 4$ " and 4 ". Flat anvil is smoothly finished. Adjustable clamp allows use on benches up to 2" thick.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 3 - 3 2 0 5}$ | Combo Bench Pin and Anvil | $1^{13 / 4^{\prime \prime}} \times 4^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |
| F | $\mathbf{1 3 - 3 2 0 7}$ | Extra Bench Pins | $13 / 4^{\prime \prime} \times 4^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 2.34$ | $\$ 2.48$ | $\$ 2.75$ |



THE PEG ASSIST
The PEG ASSIST"' by Jay Whaley is a Premium Ring Clamp with improved features such as:

- Non-slip, extra-long round peg.
- Quality leather-lined jaws.
- Ideal shape for secure hold.
- Clamp length: 6"; Peg length: 43/4".
- Patent pending.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 8 - 4 0 0 0}$ | Peg Assist Ring Clamp | $\$ 11.01$ | $\$ 11.66$ | $\$ 12.95$ |

## BENCH PIN FOR RINGS

Specially shaped to hold rings. Also has a slot and a channel for saw blade. Easily attaches to top of bench.

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 3 - 3 0 3 0}$ | $1 / 2^{\prime \prime} \times 51 / 2^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |


BENCH CLAMPS
Ring clamps are standard fare for the bench jeweler. Stuller is proud to offer a great selection of quality ring clamps to meet the needs of our valued customers.

| Item | Order\# | Description |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | :---: | :---: |
| A | $\mathbf{4 8 - 1 0 0 0}$ | Hardwood Ring Clamp Double Leather Lined | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |  |
| B | $\mathbf{4 8 - 1 0 2 0}$ | Mahogany Ring Clamp Double Leather Lined | $\$ 5.91$ | $\$ 6.26$ | $\$ 6.95$ |  |
| C | $\mathbf{4 8 - 1 0 1 0}$ | Plastic Ring Clamp (Nylon) Double Leather Lined | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |
| D | $\mathbf{4 8 - 1 0 6 7}$ | Wood Ring Holding Clamp Grooved Slot Holder <br> 8" Length | $\$ 5.19$ | $\$ 5.49$ | $\$ 6.10$ |  |
| E | $\mathbf{4 8 - 1 0 3 4}$ | Wood Ring Clamp | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |  |
| F | $\mathbf{4 8 - 1 0 3 5}$ | Wood Inside Ring Vise | $\$ 5.91$ | $\$ 6.26$ | $\$ 6.95$ |  |
| G | $\mathbf{4 8 - 1 0 3 2}$ | Euro-Style Ring Clamp | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |  |




BENCH RING CLAMPS

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| H | $\mathbf{4 8 - 1 0 6 5}$ | Ring Clamp Cast Anodized Aluminum | $\$ 25.29$ | $\$ 26.78$ | $\$ 29.75$ |
| J | $\mathbf{4 8 - 1 0 4 1}$ | Large Head Ring Clamp 61/4" Round Head | $\$ 7.27$ | $\$ 7.70$ | $\$ 8.55$ |

DELUXE PRONG LIFTER
Precision tool made of steel. Rockwell hardness of 57-59. Extra-sharp, long-lasting edges.

| Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6}+$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 3 - 1 4 4 2}$ | $1 / 4^{\prime \prime} \times 33 / 4^{\prime \prime}$ | $\$ 12.58$ | $\$ 13.32$ | $\$ 14.80$ |

## KIRKLAND RING CLAMP HOLDER

Used for polishing the inside and outside of rings. One end clamps from the outside for polishing and stone setting. The other end holds the ring from the inside for total circumference polishing and buffing. Heat is conducted away from the ring due to the metal construction. Accommodates ring sizes 1-13.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 8 - 1 0 5 0}$ | $51 / 2^{11}$ | $\$ 15.26$ | $\$ 16.16$ | $\$ 17.95$ |

## KIRKLAND EXTERNAL RING CLAMP

Made of cast aluminum. Holds a ring externally, which allows the inside to be filed, ground, or polished. Jaws are slightly concave and lined with thick leather so they will not scratch gold, silver, or other precious metals.

| Order\# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 8 - 1 0 6 0}$ | $6^{\prime \prime}$ | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |



PRONG PUSHER
Used for pushing prongs or crown points around stones. Made of steel and mounted in wood handle.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 4 0 6}$ | $31 / 2^{\prime \prime}$ | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |



## BEZEL PUSHER

Used for pushing and rolling bezels around stones. Grooved steel mounted in wood handle.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 4 0 0}$ | $33 / 4^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |



## BEZEL ROLLER

Used for rolling bezels around stones in rings, pendants, and brooches. Half-round, highly polished steel head with wood handle.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 3 - 1 4 0 2}$ | $4^{\prime \prime}$ | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |



BENCH KNIFE
Heavy-duty, bench knife. Thick steel blade. Heavy hardwood handle.

| Order \# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 9 - 0 6 2 6}$ | $51 / 2^{\prime \prime}$ | $15 / 8^{\prime \prime}$ | $\$ 3.74$ | $\$ 3.96$ | $\$ 4.40$ |

## MEDIUM-DUTY BENCH KNIFE

Used for opening watchcases, scraping, and cutting. Blade is mounted in hardwood handle.

| Order \# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 9 - 1 8 0 0}$ | $5^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |



C STEEL BURNISHERS
Highly polished blades mounted in wooden handles. Used for smoothing bezels around stones as well as other parts of soft metals.

| Item | Order \# | Description | Length | Tip Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| C | $\mathbf{1 8 - 0 5 0 0}$ | Curved Blade | $53 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 10.84$ | $\$ 11.48$ | $\$ 12.75$ |
| D | $\mathbf{1 8 - 0 5 0 2}$ | Straight Blade | $51 / 2^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |
| E | $\mathbf{1 8 - 0 5 1 0}$ | Curved Blade | $6^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |

TUNGSTEN-CARBIDE SCRAPERS
Flat-sided, tungsten-carbide scrapers are ideal for flash and bur removal on precious metals. Recommended for platinum.

| Item | Order \# | Length | Tip Length | Tip Diameter | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 18-0520 | $61 / 4{ }^{\prime \prime}$ | 11/4" | 3 mm | \$17.21 | \$18.23 | \$20.25 |
| B | 18-0521 | $61 / 4 "$ | $11 / 4$ " | 4 mm | \$17.21 | \$18.23 | \$20.25 |

## TUNGSTEN-CARBIDE BURNISHERS

Highly polished and very hard burnishers made of tungsten carbide. Used for closing bezels, smoothing away scratches, and burnishing metals to a brilliant shine. Recommended for platinum work.

| Item | Order \# | Length | Tip Length | Tip Diameter |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| F | $\mathbf{1 8 - 0 5 1 6}$ | $63 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | 2 mm | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |
| G | $\mathbf{1 8 - 0 5 1 7}$ | $63 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | 3 mm | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |
| H | $\mathbf{1 8 - 0 5 1 8}$ | $63 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | 4 mm | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |
| J | $\mathbf{1 8 - 0 5 1 9}$ | $63 / 4^{\prime \prime}$ | $1^{\prime \prime}$ | 5 mm | $\$ 14.24$ | $\$ 15.08$ | $\$ 16.75$ |

## SLIM BURNISHERS

Slim steel burnishers with hardwood handles are perfect for smaller jobs. Highly polished steel assures the user a smooth finish every time. Hardwood handle is the right grip for this well made burnisher. Some prefer straight, others bent-the choice is yours!


TUNGSTEN-CARBIDE ROLLER BURNISHERS
High-quality, tungsten-carbide roller burnishers are ideal for removing small or coarse pinholes and scratches on platinum or gold.

| Item | Order \# | OD | Length | Edges | Grade | Application | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 8 - 0 5 3 5}$ | 5 mm | 13 mm | 12 | Coarse | Gold | $\$ 30.41$ | $\$ 31.73$ | $\$ 33.05$ |
| B | $\mathbf{1 8}-\mathbf{- 0 5 3 6}$ | 5 mm | 13 mm | 18 | Medium | Gold/Platinum | $\$ 30.41$ | $\$ 31.73$ | $\$ 33.05$ |
| C | $\mathbf{1 8 - 0 5 3 7}$ | 5 mm | 13 mm | 36 | Fine | Platinum | $\$ 30.82$ | $\$ 32.16$ | $\$ 33.50$ |
| D | $\mathbf{1 8}-\mathbf{- 0 5 3 8}$ | 10 mm | 7 mm | 18 | Medium | Gold/Platinum | $\$ 30.82$ | $\$ 32.16$ | $\$ 33.50$ |
| E | $\mathbf{1 8 - 0 5 3 9}$ | 10 mm | 7 mm | 36 | Fine | Gold/Platinum | $\$ 30.82$ | $\$ 32.16$ | $\$ 33.50$ |



## MARGIN ROLLER BURNISHERS

Individually sized burnishing tools that effectively remove porosity, pits, or scratches on the inside of rings and bracelets.

| Item |  | Order \# | Diameter | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :---: | :---: | ---: | ---: | ---: |
| F | $\mathbf{1 8 - 0 5 3 0}$ | 5 mm | $3 / 32^{\prime \prime}$ | $\mathbf{1 +}$ |  |  |
| G | $\mathbf{1 8 - 0 5 3 1}$ | 8 mm | $3 / 32^{\prime \prime}$ | $\$ 32.20$ | $\$ 33.60$ | $\$ 35.00$ |
| H | $\mathbf{1 8 - 0 5 3 2}$ | 10 mm | $3 / 32^{\prime \prime}$ | $\$ 34.34$ | $\$ 36.36$ | $\$ 40.40$ |
| J | $\mathbf{1 8 - 0 5 3 3}$ | 12 mm | $3 / 32$ | $\$ 43.93$ | $\$ 45.84$ | $\$ 47.75$ |



## POROSITY KILLER

Fills minor porosity holes in gold, silver, platinum, and other metals. Eliminates the need for extra filing and filling holes with solder.

| Order\# | Wheel Size | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 8 - 0 5 4 5}$ | $1 / 2 "$ square | $3 / 32^{\prime \prime}$ | $\$ 12.11$ | $\$ 12.83$ | $\$ 14.25$ |



## BUSCH ${ }^{\circledR}$ TUNGSTEN-CARBIDE POLISHERS

Produce a brilliant polish on platinum and gold with the Busch ${ }^{*}$ tungsten-carbide polishers. These polishers are made of the finest tungsten-carbide material, which makes them ideal for platinum polishing. The four different shapes highlight surfaces, edges, elevated areas, and recessed or relatively inaccessible spots.

| Item | Order \# | Description | Shank | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 18-0540 | Round End Pointer | $3 / 321$ | \$43.19 | \$45.07 | \$46.95 |
| L | 18-0541 | Barrel Polisher | $3 / 321$ | \$43.19 | \$45.07 | \$46.95 |
| M | 18-0542 | Cone Polisher | $3 / 32^{\prime \prime}$ | \$43.19 | \$45.07 | \$46.95 |
| N | 18-0543 | Point Polisher | $3 / 321$ | \$43.19 | \$45.07 | \$46.95 |




## MASTER BEADING TOOL SET

Deluxe Swiss-made beading tool set consists of:

- 100 beading tools
- Five each no. 5-6-7-8
- 15 each no. 9-10-11-12
- Five each no. 13-14-15-16
- Beading plate, beading tool handle, and 40-hole deluxe wood holder

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 3 - 1 7 2 5}$ | Swiss Beading Kit | $\$ 136.00$ | $\$ 144.00$ | $\$ 160.00$ |

## BEADING TOOL SETS

Genuine Swiss beading tool sets and individual sizes. $3 / 32$ " shank. Used mostly in beading or bright-cut settings. Can also be used to make beaded edge designs. Smallest (.25mm) to largest ( 1.35 mm )


## Order \# 77-29000

Shank Size 3/32"
Sold Each

|  | Kit Order \# | 77-29000 |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { B. Set of } 12 \\ (1 \text { each) } \\ .25 \mathrm{~mm}-1.35 \mathrm{~mm} \end{gathered}$ | $\begin{gathered} \text { C. Set of } 23 \\ (1 \text { each) } \\ .25 \mathrm{~mm}-1.35 \mathrm{~mm} \end{gathered}$ |
| 12+ | \$17.43 | \$18.90 |
| $6+$ | \$21.00 | \$22.44 |
| $1+$ | \$23.76 | \$26.40 |



|  | . 25 mm | . 30 mm | . 35 mm | . 40 mm | . 45 mm | . 50 mm | . 55 mm | . 60 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tool \# | \#0 | \#1 | \#2 | \#3 | \#4 | \#5 | \#6 | \#7 |
| 12+ | \$1.16 | \$1.16 | \$1.16 | \$1.16 | \$1.16 | \$1.16 | \$1.16 | \$1.16 |
| $6+$ | \$1.32 | \$1.32 | \$1.32 | \$1.32 | \$1.32 | \$1.32 | \$1.32 | \$1.32 |
|  | \$1.65 | \$1.65 | \$1.65 | \$1.65 | \$1.65 | \$1.65 | \$1.65 | \$1.65 |


|  | $\mathbf{6 5 m m}$ |  |  |  | . $\mathbf{7 0 m m}$ | . $\mathbf{7 5 m}$ | $\mathbf{8 0 m m}$ | $\mathbf{8 5 m m}$ | $\mathbf{. 9 0 m m}$ |  | $\mathbf{. 9 5 m m}$ |  | $\mathbf{1 . 0 0 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tool \# | $\# 8$ | $\# 9$ | $\# 10$ | $\# 11$ | $\# 12$ | $\# 13$ | $\# 14$ | $\# 15$ |  |  |  |  |  |
| $12+$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ |  |  |  |  |  |
| $6+$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ |  |  |  |  |  |
| $1+$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ |  |  |  |  |  |


|  | $\mathbf{1 . 0 5 m m}$ |  |  |  |  |  |  |  | $\mathbf{1 . 1 0 m m}$ | $\mathbf{1 . 1 5 m m}$ | $\mathbf{1 . 2 0 m m}$ | $\mathbf{1 . 2 5 m m}$ | $\mathbf{1 . 3 0 m m}$ | $\mathbf{1 . 3 5 m m}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tool \# | $\# 16$ | $\# 17$ | $\# 18$ | $\# 19$ | $\# 20$ | $\# 21$ | $\# 22$ |  |  |  |  |  |  |  |
| $12+$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ | $\$ 1.16$ |  |  |  |  |  |  |  |
| $6+$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ | $\$ 1.32$ |  |  |  |  |  |  |  |
| $1+$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ | $\$ 1.65$ |  |  |  |  |  |  |  |


| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{7 7 - 2 9 4 0}$ | Bending Tool Handle | $\$ 2.56$ | $\$ 2.88$ | $\$ 3.20$ |



## BRACELET HOLDER

Used to hold bracelets in place when setting stones in prong, pavé, or channel settings. Saves time and eliminates the need for shellac. Holds bracelets up to 7 mm wide and will not mar or distort. Space for clasp on outer side of holder. Made of aluminum. $31 / 2^{\prime \prime}$ diameter. Includes hex wrench.

| Item | Order \# | Diameter | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{4 3 - 0 6 0 0}$ | $31 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 27.88$ | $\$ 29.52$ |

## BEAD BLOCK

In order to sharpen and reshape the tips of your beading tools, apply slight pressure to the beading tool and rotate the tip within the round shape hole. Re-insert the tip and repeat the process until shape is uniform.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{5 3 - 1 7 2 6}$ | Sharpening Block | $\$ 25.50$ | $\$ 27.00$ | $\$ 30.00$ |

MILLRITE MILGRAIN MACHINE
The Milgrain is an innovative machine that allows you to create professional decorative designs on rings without the need of a lathe. The designs are cold formed in the surface of the ring without the loss of any precious metal. A variety of tools are available to provide clean, well-defined designs according to the chosen styles. The machine comes complete with 10 collets for ring sizes from \#2-13, one milgrain tool, and an allen key.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{2 6 - 6 0 0 0}$ | Milgrain Machine | - | - | $\$ 550.00$ |
| B | $\mathbf{2 6 - 6 0 0 1}$ | Set of 10 Collets | $\$ 12.79$ | $\$ 13.55$ | $\$ 15.05$ |

STANDARD EMBOSSING WHEELS (6mm diameter, 1⁄" shank)

| $\mathbf{2 6 - 6 0 0 2}$ | M4 Indented Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 6 - 6 0 0 2}$ | F4 Raised Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | M6 Indented Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | F6 Raised Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | M8 Indented Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | F8 Raised Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | M9 Indented Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | F9 Raised Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | M10 Indented Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| $\mathbf{2 6 - 6 0 0 2}$ | F10 Raised Bead Pattern | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |

## MILLRITE PLUS MILLGRAIN MACHINE

The Millrite Plus Millgrain Machine allows you to create designs on your rings, even on angled or perpendicular surfaces. This machine accepts both lathe millgrain tools and french millgrain tools. It also includes collets for ring sizes 2-14. The machine is quality crafted of aluminium alloy with spring action tool holders that ensure clean, crisp, even empressions.



STANDARD 1/8" SHANK

## 




## JETT SETT ${ }^{T M}$ KITS

Unique thermoplastic, ceramic compound used to hold delicate parts for engraving, stone setting, chasing and repairs. Jett Sett ${ }^{\text {tw }}$ is non toxic, biodegradable and is an excellent substitute for orange flake shellac. It is a clay-like compound that easily dissolves in hot water and hardens to a desired shape. Reusable. Kit A includes: - Hot Pot - Strainer - Thermometer - 1 lb Thermoplastic Kit B includes: - Hot Pot - Strainer - Thermometer - 1 lb Plastiform

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 2 - 2 2 8 1}$ | Thermoplastic Kit | $\$ 80.36$ | $\$ 83.86$ | $\$ 87.35$ |
| B | $\mathbf{1 2 - 2 2 9 2}$ | Plastiform Kit | $\$ 56.30$ | $\$ 58.75$ | $\$ 61.20$ |

## JETT SETT ${ }^{\text {TM }}$ THERMOPLASTIC COMPOUND

Jett Sett" is a thermoplastic compound used for stone setting, riveting, engraving, and holding parts. Use it to make rigid molds, drying forms, texture plates, and custom clay stamping tools. Make custom handles and grips for your favorite tools. Jett Sett"' has ceramic component that makes it so strong it can be used to make dies for hydraulic presses. Jett Sett"' is made workable by soaking pellets in hot water, then gathering it into a ball of pliable material. Jett Sett ${ }^{\text {t" }}$ becomes rock hard when it cools and cannot be chipped, cracked, or broken even when applying force with hammers or hydraulics.

| Order \# | Description | Container Volume |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 2 8 0}$ | Thermoplastic Compound | 1 lb | $\$ 36.62$ | $\$ 38.21$ | $\$ 39.80$ |  |

## JETT SETT ${ }^{T M}$ PLASTIFORM



Plastiform is a low temperature, hand-formable, non-toxic thermoplastic with many uses for the jewelry industry. It is a unique material that is resilient plastic at room temperature but melts into a clear gel at only $140^{\circ}$. This process can be repeated indefinitely, making Plastiform very economical to use. Plastiform was originally developed for the jewelry industry as a shellac substitute.

| Order \# | Description | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 2 8 8}$ | Plastiform Compound | 1 lb | $\$ 22.04$ | $\$ 24.80$ | $\$ 27.55$ |



PITCH BOWL KIT
Suitable for holding or supporting jewelry for engraving. The bowl is made of cast iron and rests on a rubber pad. The bowl can be tipped to a comfortable working angle. Includes: pitch, bowl, and rubber pad.

| Order \# | Description | Outside Diameter | 1+ |
| :--- | :--- | :---: | ---: |
| $\mathbf{2 6 - 4 2 0 5}$ | Pitch Bowl Set | $61 / 4^{\prime \prime}$ | $\$ 39.75$ |



## THERMO-LOC ${ }^{\circledR}$ STARTER

Kit includes $6^{\prime \prime}$ square PTFE (Teflon pad) and 1 lb . Thermo-Loc ${ }^{\oplus}$ sticks. Thermo-Loc ${ }^{\oplus}$ is a special reusable polymer material that is rigid at room temperature yet becomes softly pliable when heated/ warmed. Always place on Thermo-Loc® ${ }^{\circledR}$ (Teflon) pad when warming in microwave oven. Ring not included.

| Item |  | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{2 6 - 4 1 6 8}$ | Starter Kit | $\$ 36.34$ | $\$ 37.92$ | $\$ 39.50$ |
| D | $\mathbf{2 6 - 4 1 6 9}$ | 1 lb of Sticks | $\$ 29.44$ | $\$ 30.72$ | $\$ 32.00$ |

ORANGE FLAKE SHELLAC
When heated, it is used to hold objects for chasing, engraving, or setting.

| Order \# | Description | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 2 7 0}$ | Flake Shellac | $60 z$ | $\$ 12.33$ | $\$ 12.86$ | $\$ 13.40$ |



CLAW SETTING JIG KIT
Tool for making claw settings in sizes 0.15 to 2 carats with four, six, and eight prongs for small or large rings. The set comes with five wire holders, four retaining tubes, one main base, and instructions.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 4 2 5}$ | Jig Kit | $\$ 28.09$ | $\$ 29.75$ | $\$ 33.05$ |

## olal 14,66

## SETTERS TUBE HOLDER KIT

Holds tubes for stone setting firmly without damage. Set of seven springtempered three-jaw collets. Screw chuck has hardwood handle. Collets fit tube sizes $1 / 32^{\prime \prime}$ to $1 / 22^{\prime \prime}$. Shipping weight. 20 lb .

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 6 - 6 0 0 6}$ | Pin Vise Kit | $6^{\prime \prime}$ | $\$ 18.61$ | $\$ 19.71$ | $\$ 21.90$ |

FINAL TOUCH KIT
Used for quick and secure tightening of both snap-in and hand-set round prong settings. With one light tap all four or six prongs are tightened. Urethane base and five tools are included: $2 \mathrm{~mm}, 3 \mathrm{~mm}-4 \mathrm{~mm}$, and $5 \mathrm{~mm}-6 \mathrm{~mm}$.
Base holds 12 studs.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 9 0 1}$ | Secure Kit | $\$ 60.95$ | $\$ 64.53$ | $\$ 71.70$ |



## BEZEL PUNCH

Stone setting system with hardwood handles is ideal for burnishing stones. Simply insert the stone and press the punch directly over the prongs to set. The concave shapes push prongs in gently and evenly. This system is especially good for more fragile stones.

| Order \# | Size Range | Assortment Oty | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 4 1 2}$ | $2 \mathrm{~mm}-9 \mathrm{~mm}$ | 24 | $\$ 130.90$ | $\$ 138.60$ | $\$ 154.00$ |



## ROUND BEZEL SETTING PUNCHES SET

Bezel punches with concave ends for shaping bezel over round stones. Set comes with hardwood handle and wooden box.

| Order \# | Description | Size Range | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 1 4 0 9}$ | Set of 18 Punches | $2 m \mathrm{~mm}-9 \mathrm{~mm}$ | $\$ 133.96$ | $\$ 141.84$ | $\$ 157.60$ |




HORN ANVIL
Used for flattening and shaping. Flat and round horns are polished, and there is a hole in the top for riveting. Made of drop-forged steel, then case hardened. Used for flattening and shaping.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 2 - 3 0 5 0}$ | Horn Anvil | $13 / 16^{\prime \prime} \times 4^{1 / 21} \times 15 / 8^{\prime \prime}$ | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |
| B | $\mathbf{1 2 - 3 0 1 0}$ | Double Horn Anvil | $1^{\prime \prime} \times 4^{1 / 4} 4^{\prime \prime} \times 7 / 8^{\prime \prime}$ | $\$ 15.90$ | $\$ 16.83$ | $\$ 18.70$ |



## LARGE HORN ANVIL

A larger version of the standard bench anvil. The larger size allows for a greater variety of tasks. Highly polished horn and top surface. It has a $51 / 8^{\text {" }}$ diameter base for stability.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 3 0 1 5}$ | Large Horn Anvil | $73 / 4^{\prime \prime} \times 51 / 4^{\prime \prime}$ | $51 / 8^{\prime \prime}$ | $\$ 38.25$ | $\$ 40.50$ | $\$ 45.00$ |

HEXAGON ANVIL
Used as a base for staking, riveting, and drilling small parts. Case-hardened and ground flat and smooth. Has 15 holes, graduated from $3 / 64^{\prime \prime}$ to $1 / 4^{\prime \prime}$, and five milled slots.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 - 3 1 1 7}$ | Hexagon Anvil | $15 / 8^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 15.90$ | $\$ 16.83$ | $\$ 18.70$ |

## SLOT ANVIL

Used as a base for staking, riveting, and drilling small parts. V-Slot is handy for removing pinions and similar items. Case hardened and ground flat and smooth. Has nine graduated holes, with one size for stumps, and five milled slots.

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 3 1 1 5}$ | Slot Anvil | $15 / 8^{\prime \prime} \times 13 / 4^{11} \times 3 / 4^{\prime \prime}$ | $\$ 12.75$ | $\$ 13.50$ | $\$ 15.00$ |



FOREDOM ${ }^{\circledR}$ DRILL VISE
Plastic mini vise is great for holding gemstones and other materials that require water during the drilling process.

| Order \# | Description | Jaw: $\mathrm{L} \times \mathbf{H} \times$ Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 3 4}$ | Drill Vise | $15 / 8^{\prime \prime} \times 13 / 16^{\prime \prime} \times 11 / 2^{\prime \prime}$ | $\$ 16.83$ | $\$ 17.82$ | $\$ 19.80$ |



## FOREDOM ${ }^{\circledR}$ MINI VISE

Zinc, die-cast, mini vise firmly grasps small work pieces for precision drilling. Has horizontal and vertical "V" grooves for holding small round pieces. Use with DP30, item 34-6302.

| Order \# | Description | Jaw: $\mathbf{L} \times \mathbf{H} \times$ Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 4 - 6 3 0 1}$ | Metal Vise | $11 / 4^{\prime \prime} \times 11 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |

## STEEL BENCH BLOCK

Used to support work when flattening or laying out designs. Case-hardened. Ground flat and smooth.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 2 - 3 1 0 7}$ | $2^{1 / 2} \times 2^{1 / 2} \times 2^{3 / 4 "}$ | $\$ 15.30$ | $\$ 16.20$ | $\$ 18.00$ |
| B | $\mathbf{1 2 - 3 1 0 9}$ | $4^{\prime \prime} \times 4^{\prime \prime} \times 3^{\prime \prime} 4^{\prime \prime}$ | $\$ 17.85$ | $\$ 18.90$ | $\$ 21.00$ |



## BENCH BLOCK HELPER

This three-piece well-made set allows one to hammer without excess noise and vibrations at the bench. Includes rubber ball with steel and nylon block.

| Order \# | Diameter | Thickness | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 5 7 2}$ | $3^{\prime \prime}$ | $15 / 16^{\prime \prime}$ | Box of 25 | $\$ 27.16$ | $\$ 28.76$ | $\$ 31.95$ |



## DURSTON BENCH BLOCKS

Durston's new high quality steel bench blocks for flattening, laying out, or chasing. Each piece is constructed out of tool steel, ground flat, polished, and case hardened.

| Item | $\mathbf{O r d e r} \#$ | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{1 2 - 3 1 1 0}$ | $65 \mathrm{~mm} \times 65 \mathrm{~mm} \times 20 \mathrm{~mm}$ | $\$ 20.61$ | $\$ 21.83$ | $\$ 24.25$ |
| D | $\mathbf{1 2 - 3 1 1 0}$ | $100 \mathrm{~mm} \times 100 \mathrm{~mm} \times 20 \mathrm{~mm}$ | $\$ 27.20$ | $\$ 28.80$ | $\$ 32.00$ |
| E | $\mathbf{1 2 - 3 1 1 0}$ | $130 \mathrm{~mm} \times 130 \mathrm{~mm} \times 20 \mathrm{~mm}$ | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |



## PRECISION BENCH VISE

Screw the attaching plate to the workbench to have a vise that can be set up or removed in a few seconds. Utilizes a reliable clamping device with its operating lever on the side by the vise. Absolutely smooth, parallel 45 mm jaws. Fits optional mounting plate installed on bench top.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 8 - 2 4 3 6}$ | Bergeon Vise with Detachable Vise | $\$ 385.90$ |



## BENCH VISE

Sturdy construction with twin guide rods to assure parallel closing and rigidity. Smooth jaws prevent marring of soft metals. Rust-proof finish. Clamps to any bench. Jaws are $2 \frac{1}{2 \prime \prime}$ wide and open to $2 \frac{1}{2} 2^{\prime \prime}$. Will mount on surfaces up to 2" thick.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 3 2}$ | Bench Vise | $\$ 44.92$ | $\$ 47.57$ | $\$ 52.85$ |



## BENCH VISE

Bench vise with twin guides to assure parallel closing and rigidity. Smooth jaws prevent marring of soft metals. Jaws are $13 / 4$ " wide and open to $13 / 4^{\prime \prime}$. Will mount on surfaces up to $2^{\prime \prime}$ thick.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 3 0}$ | Bench Vise | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |


$\qquad$


## UNIVERSAL BALL JOINT SWIVEL

 VISE WITH VACU-BASEPortable universal ball joint rotates vise to any desired working angle. Attaches instantly to any smooth surface. Large v-grooved iron jaws open to 3" with precision, screw action. Unit also comes with a set of rubber jaws.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 1 0 3 0}$ | Swivel Vise | $\$ 48.62$ | $\$ 51.48$ | $\$ 57.20$ |



## BENCH VISE PADS

Magnetic strips hold Soft Jaws ${ }^{\text {m" }}$ to your bench vise. The cushioned pads grip odd or round shapes and threaded parts preventing marring of finished surfaces. They fit 3 " to 4" wide bench vises, but can be mounted on larger vises. Do not use to hold glass bottles or beakers.

| Order\# | Description | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 3 8}$ | Vise Pads | $31 / 2^{\prime \prime}$ | $\$ 7.48$ | $\$ 7.92$ | $\$ 8.80$ |



## MULTI-PURPOSE VISE

Precision steel vise for the BenchMate ${ }^{\text {t" }}$ system uses the versatile lift-on, lift-off mounting system. This vise tilts and rotates on two axes to virtually any position. Your work moves to accommodate you rather than you adjusting to your work. Jaws are $2 \frac{1}{3} 3^{\prime \prime}$ wide, $12 / 3^{\prime \prime}$ tall, and open to $14 / 5^{\prime \prime}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 4 4}$ | Multi-Purpose Vise | $\$ 138.72$ | $\$ 146.88$ | $\$ 163.20$ |
| $\mathbf{2 6 - 4 1 5 5}$ | Attachment Set | $\$ 96.35$ | $\$ 102.02$ | $\$ 113.35$ |

double row MOUNTED
MINIATURE BRISTLE BRUSHES
Great for cleaning and polishing hard to reach areas. For use with flexshaft machines.

| Item | Order\# | Grade | Rows | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 6 - 6 0 7 0}$ | Soft | 2 | $3 / 4^{\prime \prime}$ | $3 / 3 \mathbf{n}^{\prime \prime}$ | $\$ 22.00$ | $\$ 24.75$ | $\$ 27.50$ |
| B | $\mathbf{1 6 - 6 0 7 2}$ | Hard | 2 | $3 / 4^{\prime \prime}$ | $3 / 32^{11}$ | $\$ 22.00$ | $\$ 24.75$ | $\$ 27.50$ |



UNMOUNTED
BRISTLE BRUSHES

| Item | Order \# | Grade | OD | Shank | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 16-6019 | Stiff | $1{ }^{\prime \prime}$ | 1/8" | \$6.35 | \$6.62 | \$6.90 |
|  | 16-6018 | Medium | $1{ }^{1 \prime}$ | 1/8" | \$6.35 | \$6.62 | \$6.90 |
|  | 16-6017 | Soft | 1" | $1 / 8{ }^{\prime \prime}$ | \$6.35 | \$6.62 | \$6.90 |
|  | 16-6016 | Extra Soft | $1{ }^{1 \prime}$ | $1 / 8{ }^{\prime \prime}$ | \$6.35 | \$6.62 | \$6.90 |
| D | 16-6014 | Stiff | 3/4" | $1 / 8{ }^{\prime \prime}$ | \$4.46 | \$4.66 | \$4.85 |
|  | 16-6013 | Medium | $3 / 4{ }^{\text {" }}$ | $1 / 8{ }^{\prime \prime}$ | \$4.46 | \$4.66 | \$4.85 |
|  | 16-6012 | Soft | $3 / 4{ }^{11}$ | 1/8" | \$4.65 | \$4.85 | \$5.05 |
|  | 16-6011 | Extra Soft | 3/4" | 1/8" | \$4.65 | \$4.85 | \$5.05 |
| E | 16-6029 | Stiff | $1{ }^{\prime \prime}$ | $3 / 321$ | \$5.61 | \$5.86 | \$6.10 |
|  | 16-6028 | Medium | $1{ }^{1 \prime}$ | $3 / 32^{11}$ | \$5.70 | \$5.95 | \$6.20 |
|  | 16-6027 | Soft | $1{ }^{1 \prime}$ | $3 / 32^{\prime \prime}$ | \$6.35 | \$6.62 | \$6.90 |
|  | 16-6026 | Extra Soft | $1{ }^{1 \prime}$ | $3 / 32^{\prime \prime}$ | \$6.35 | \$6.62 | \$6.90 |
| F | 16-6024 | Stiff | 3/4" | $3 / 32^{\prime \prime}$ | \$4.46 | \$4.66 | \$4.85 |
|  | 16-6023 | Medium | 3/4" | $3 / 32$ " | \$4.46 | \$4.66 | \$4.85 |
|  | 16-6022 | Soft | $3 / 4^{11}$ | $3 / 321$ | \$4.65 | \$4.85 | \$5.05 |
|  | 16-6021 | Extra Soft | $3 / 4{ }^{\text {" }}$ | $3 / 32$ " | \$4.65 | \$4.85 | \$5.05 |

SUGGESTED MANDRELS
Nickel-plated small wheel mandrels.

| G | $\mathbf{4 3 - 1 2 8 0}$ | Reinforced Screw Mandrel | $3 / 22^{\prime \prime}$ | $\$ 0.89$ | $\$ 0.95$ | $\$ 1.05$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| H | $\mathbf{4 3 - 1 2 8 2}$ | Heavy Duty Mandrel | $3 / 32^{\prime \prime}$ | $\$ 1.47$ | $\$ 1.68$ | $\$ 2.10$ |



## MOUNTED

BRISTLE BRUSHES

| Item | Order \# | Grade | OD | Shank | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | 16-6059 | Stiff | $1{ }^{1 \prime}$ | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6058 | Medium | $1{ }^{1 \prime}$ | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6057 | Soft | $1{ }^{1 \prime}$ | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6056 | Extra Soft | $1{ }^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
| K | 16-6055 | Stiff | $3 / 4{ }^{11}$ | $3 / 321$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6054 | Medium | $3 / 4{ }^{11}$ | $3 / 32^{11}$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6053 | Soft | 3/4" | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
|  | 16-6052 | Extra Soft | $3 / 4{ }^{11}$ | $3 / 32^{\prime \prime}$ | \$3.91 | \$4.08 | \$4.25 |
| L | 16-6071 | Soft | $3 / 4{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | \$13.94 | \$14.54 | \$15.15 |



${ }^{1 "}$

MOUNTED
BRISTLE BRUSHES

| Item |  | Order \# | Brush Type | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | :---: | :---: |
| F | $\mathbf{1 6 - 6 0 0 9}$ | Stiff | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 6 - 6 0 0 7}$ | Soft | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 6 - 6 0 0 6}$ | Extra Soft | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| G | $\mathbf{1 6 - 6 0 0 4}$ | Stiff | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 6 - 6 0 0 3}$ | Medium | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 6 - 6 0 0 2}$ | Soft | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 6 - 6 0 1 0}$ | Medium | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.64$ | $\$ 8.60$ | $\$ 9.55$ |
|  |  |  |  |  |  |  |  |



STULLER SELECT BRISTLE BRUSHES

|  | Order \# | Grade | Length | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| END | $\mathbf{1 6 - 7 0 0 8}$ | Stiff | $3 / 16^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 6.60$ | $\$ 7.16$ | $\$ 7.95$ |
|  | $\mathbf{1 6 - 7 0 0 7}$ | Soft | $3 / 16^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 6.60$ | $\$ 7.16$ | $\$ 7.95$ |
| $\mathbf{1 6 - 7 0 0 1}$ | Stiff | $3 / 16^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 6.60$ | $\$ 7.16$ | $\$ 7.95$ |  |
|  | $\mathbf{1 6 - 7 0 0 0}$ | Soft, | $3 / 16^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 6.60$ | $\$ 7.16$ | $\$ 7.95$ |
| CUP | $\mathbf{1 6 - 7 5 3 5}$ | Stiff | $1 / 2^{\prime \prime}$ | $9 / 16^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 3.68$ | $\$ 3.84$ | $\$ 4.00$ |
|  | $\mathbf{1 6 - 7 5 3 0}$ | Soft | $1 / 2^{\prime \prime}$ | $9 / 16^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 3.68$ | $\$ 3.84$ | $\$ 4.00$ |
| $\mathbf{1 6 - 7 5 4 0}$ | Stiff | $1 / 2^{\prime \prime}$ | $9 / 16^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 3.68$ | $\$ 3.84$ | $\$ 4.00$ |  |

## STULLER VALUE BRISTLE BRUSHES

|  | Order \# | Grade | Length | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| END | $\mathbf{1 6 - 7 0 0 3}$ | Stiff | $3 / 16^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{1 6 - 7 0 0 2}$ | Soft | $3 / 16^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |  |
| $\mathbf{1 6 - 7 0 0 9}$ | Soft | $3 / 8^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |  |
| $\mathbf{1 6 - 7 0 1 0}$ | Stiff | $3 / 88^{\prime \prime}$ | $3 / 16^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |  |

UNMOUNTED
STULLER BRASS/STEEL WIRE BRUSHES

|  | Order \# | Wire Type | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| BRASS | $\mathbf{1 6 - 5 9 7 7}$ | Crimped | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.19$ | $\$ 8.54$ | $\$ 8.90$ |
| $\mathbf{1 6 - 5 9 7 8}$ | Straight | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.19$ | $\$ 8.54$ | $\$ 8.90$ |  |
| $\mathbf{1 6 - 5 9 8 1}$ | Crimped | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.13$ | $\$ 7.44$ | $\$ 7.75$ |  |
| $\mathbf{1 6 - 5 9 8 2}$ | Straight | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.13$ | $\$ 7.44$ | $\$ 7.75$ |  |
| STEEL | $\mathbf{1 6 - 5 9 7 9}$ | Crimped | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.19$ | $\$ 8.54$ | $\$ 8.90$ |
| $\mathbf{1 6 - 5 9 8 0}$ | Straight | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.19$ | $\$ 8.54$ | $\$ 8.90$ |  |
| $\mathbf{1 6 - 5 9 8 3}$ | Crimped | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.13$ | $\$ 7.44$ | $\$ 7.75$ |  |
| $\mathbf{1 6 - 5 9 8 4}$ | Straight | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.13$ | $\$ 7.44$ | $\$ 7.75$ |  |

MOUNTED
BRASS/STEEL WIRE BRUSHES

|  | Order \# | Wire Type | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| BRASS | $\mathbf{1 6 - 5 9 6 9}$ | Crimped | 1" $^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |
| $\mathbf{1 6 - 5 9 7 0}$ | Straight | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |  |
| $\mathbf{1 6 - 5 9 7 3}$ | Crimped | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |  |
|  | $\mathbf{1 6 - 5 9 7 4}$ | Straight | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |
| STEEL | $\mathbf{1 6 - 5 9 7 1}$ | Crimped | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |
| $\mathbf{1 6 - 5 9 7 2}$ | Straight | $1^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |  |
| $\mathbf{1 6 - 5 9 7 5}$ | Crimped | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |  |
| $\mathbf{1 6 - 5 9 7 6}$ | Straight | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |  |



Mounted Brush/Mandrel


BRASS/STEEL WIRE BRUSHES
Clean and surface-finish brass and other metals. Straight wire produces a coarser finish.

|  | Order \# | Wire Type | Rows | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| BRASS | $\mathbf{1 6 - 4 4 6 4}$ | Crimped | 4 | $4^{\prime \prime}$ | $\$ 11.27$ | $\$ 11.76$ | $\$ 12.25$ |
|  | $\mathbf{1 6 - 4 4 0 2}$ | Crimped | 2 | $3^{\prime \prime}$ | $\$ 6.85$ | $\$ 7.15$ | $\$ 7.45$ |
| STEEL | $\mathbf{1 6 - 4 6 2 4}$ | Lightly Crimped | 4 | $4^{\prime \prime}$ | $\$ 13.48$ | $\$ 14.06$ | $\$ 14.65$ |
|  | $\mathbf{1 6 - 4 5 6 2}$ | Lightly Crimped | 2 | $3^{\prime \prime}$ | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |

$\qquad$


MOUNTED miniature brush

| Order\# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 16-7050 | Soft | $5 / 88^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 10.58$ | $\$ 11.04$ | $\$ 11.50$ |
| $\mathbf{1 6 - 7 0 5 0}$ | Soft | $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 10.58$ | $\$ 11.04$ | $\$ 11.50$ |



## MOUNTED miniature brush

Geza brush mounted with this toothed shaped brush is made of high quality chung king and goat hair bristles make this the perfect brush for deep, interproximal and occlusal polishing.

| Order\# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| 16-7051 | Soft | $7 / 81$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 11.68$ | $\$ 12.19$ | $\$ 12.70$ |
| $\mathbf{1 6 - 7 0 5 1}$ | Medium | $7 / 8 "$ | $3 / 32^{\prime \prime}$ | Grey Goat Hair | $\$ 11.68$ | $\$ 12.19$ | $\$ 12.70$ |




## MOUNTED miniature brush

These bristle brushes hold compound longer and keep their shape longer. They are made in Germany and layered with a chamois insert.

| Order\# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 6 - 7 0 5 2}$ | Soft | $7 / 8^{\prime \prime}$ | $3 / 311$ | White Goat Hair | $\$ 18.26$ | $\$ 19.06$ | $\$ 19.85$ |
| $\mathbf{1 6 - 7 0 5 2}$ | Medium | $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | Grey Goat Hair | $\$ 18.26$ | $\$ 19.06$ | $\$ 19.85$ |



## MOUNTED miniature brush

This mounted miniature brush is made with white goats hair with zeta cloth insert is a fine cotton tread. They hold polish very well and brushes tend to keep their shape longer.

| Order \# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 6 - 7 0 5 3}$ | Soft | $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 17.80$ | $\$ 18.58$ | $\$ 19.35$ |
| $\mathbf{1 6 - 7 0 5 3}$ | Medium | $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | Grey Goat Hair | $\$ 17.80$ | $\$ 18.58$ | $\$ 19.35$ |

## MOUNTED miniature brush

Astro brushes are special miniature brushes in a star design their shape is to optimally polish narrow and fine surfaces effectively, such as filigree. Made in Germany with white goat hair. Astro brushes are for fine luster.

| Order\# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| 16-7054 | Soft | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 11.22$ | $\$ 11.71$ | $\$ 12.20$ |
| $\mathbf{1 6 - 7 0 5 4}$ | Soft | $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | White Goat Hair | $\$ 11.22$ | $\$ 11.71$ | $\$ 12.20$ |
| 16-7054 | Medium | $3 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | Grey Goat Hair | $\$ 11.22$ | $\$ 11.71$ | $\$ 12.20$ |
| 16-7054 | Medium $7 / 8^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | Grey Goat Hair | $\$ 11.22$ | $\$ 11.71$ | $\$ 12.20$ |  |



## MOUNTED miniature brush

These mounted miniature brushes are extra soft when used with low speeds around 5000 RPM and light pressure to prep delicate surfaces.

| Order\# | Grade | OD | Shank | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 6 - 7 0 5 5}$ | Extra Soft | 1" | $3 / 3 \mathbf{n}^{\prime \prime}$ | Scotch Brite | $\$ 12.74$ | $\$ 13.30$ | $\$ 13.85$ |
| $\mathbf{1 6 - 7 0 5 5}$ | Extra Soft | $1^{\prime \prime}$ | $3 / 3 \mathbf{z}^{\prime \prime}$ | Resin Bonded | $\$ 13.75$ | $\$ 14.35$ | $\$ 14.95$ |



## MOUNTED end brush

Made of white goat hair are excellent for finishing delicate or patterned metal.

| Order \# | Grade | $\begin{gathered} \text { OD } \\ (\mathrm{mm}) \end{gathered}$ | Shank | Material | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16-7056 | Soft | 4 | $3 / 321$ | White Goat Hair | \$7.96 | \$8.30 | \$8.65 |
| 16-7056 | Extra Soft | $61 / 2$ | $3 / 321$ | White Goat Hair | \$11.59 | \$12.10 | \$12.60 |
| 16-7056 | Stiff | 4 | $3 / 321$ | Nylon Filament | \$6.53 | \$6.82 | \$7.10 |




WOOD HUB BRUSHES
Premium-quality ChungKing ${ }^{\text {tw }}$ bristles. Hubs are made of seasoned
hardwood and are precision bored for a perfect, tapered-spindle fit.

| Order \# | Hub <br> Brush Style | $\begin{aligned} & \text { Hub } \\ & \text { OD } \end{aligned}$ | Brush Rows | Bristle Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16-3980 | 1A | $17 / 8^{\prime \prime}$ | 1 | 5/8" | \$0.98 | \$1.03 | \$1.15 |
| 16-3981 | 1B | 17/8" | 1 | $1 / 2^{\prime \prime}$ | \$0.98 | \$1.03 | \$1.15 |
| 16-3982 | 1 C | 17/8" | 1 | $3 / 8{ }^{\prime \prime}$ | \$0.98 | \$1.03 | \$1.15 |
| 16-3983 | 2A | $17 / 8^{\prime \prime}$ | 2 | 5/8" | \$1.19 | \$1.26 | \$1.40 |
| 16-3984 | 2 B | 17/8" | 2 | $1 / 21$ | \$1.19 | \$1.26 | \$1.40 |
| 16-3985 | 2 C | 17/8" | 2 | $3 / 8{ }^{1 /}$ | \$1.19 | \$1.26 | \$1.40 |
| 16-3986 | 6 A | $11 / 4^{\prime \prime}$ | 2 | 5/8" | \$1.27 | \$1.35 | \$1.50 |
| 16-3987 | 6B | $11 / 4^{\prime \prime}$ | 2 | $1 / 2{ }^{1}$ | \$1.27 | \$1.35 | \$1.50 |
| 16-3988 | 6 C | $11 / 4^{\prime \prime}$ | 2 | $3 / 81$ | \$1.27 | \$1.35 | \$1.50 |
| 16-3989 | 7 A | $11 / 4 "$ | 3 | 5/8" | \$2.93 | \$3.11 | \$3.45 |
| 16-3990 | 7 C | $11 / 4^{\prime \prime}$ | 3 | $3 / 8$ | \$2.08 | \$2.25 | \$2.50 |
| 16-3991 | 8 A | $11 / 4^{\prime \prime}$ | 4 | 5/8" | \$2.78 | \$3.02 | \$3.35 |
| 16-3992 | 8C | $11 / 4^{\prime \prime}$ | 4 | $3 / 8{ }^{1 /}$ | \$2.85 | \$3.02 | \$3.35 |



METAL HUB BRUSHES
Metal hub brushes with nylon or lead centers.

| Order\# | Grade | Center | OD | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 6 - 4 0 0 5}$ | Stiff | Nylon | $2^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 2.25$ | $\$ 2.38$ | $\$ 2.65$ |
| $\mathbf{1 6 - 4 0 0 6}$ | Stiff | Lead | $2^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 2.98$ | $\$ 3.15$ | $\$ 3.50$ |
| $\mathbf{1 6 - 4 0 0 1}$ | Medium | Lead | $2^{1 / 21}$ | $1 / 4^{\prime \prime}$ | $\$ 15.13$ | $\$ 15.79$ | $\$ 16.45$ |
| $\mathbf{1 6 - 4 0 0 7}$ | Soft | Nylon | $2^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 2.34$ | $\$ 2.48$ | $\$ 2.75$ |
| $\mathbf{1 6 - 4 0 0 8}$ | Soft | Lead | $2^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |

Shown attached. (Motors not included).

TAPERED CHUCK FOR BRUSHES
For use with tapered spindle on polishing motors. Fits brushes with $1 / 8^{\prime \prime}$ holes. Can be threaded onto the hardened, steel taper, which in turn can be threaded onto a standard tapered spindle.

| Item | Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: |
| A | $\mathbf{4 7 - 2 5 8 0}$ | Right-Handed | $1 / 8^{\prime \prime}$ | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |
| B | $\mathbf{4 7 - 2 5 9 0}$ | Left-Handed | $1 / 8^{\prime \prime}$ | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |

WOODEN HUB MANDREL
$1 / 6$ " diameter screw mounted on wooden handle. Heavy duty for right side.
For use with tapered spindle.

| Item | Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{4 7 - 2 6 0 0}$ | Wood Hub Mandrel | $1 / 6^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |



## PLASTIC HUB MANDREL

Plastic hub mandrels designed to fit brushes with $1 / 8^{\prime \prime}$ arbor hole.

| Item | Order\# | Description | 0D | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| D | $\mathbf{4 7 - 2 6 0 8}$ | Right-Handed | $1 / 8^{\prime \prime}$ | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |
| E | $\mathbf{4 7 - 2 6 1 0}$ | Left-Handed | $1 / 8^{\prime \prime}$ | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |

WHEEL MANDRELS
Hold rubber bonded abrasive wheels, grinding stones, sanding drums, brushes, and other accessories with $1 / 4$ " center mounting. Holds up to $3 / 4$ " thick.

| Item | Order \# | Description | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{3 4 - 2 0 1 3}$ | Left Wheel Mandrel | $5 / 16^{\prime \prime}$ | $\$ 15.26$ | $\$ 16.16$ | $\$ 17.95$ |
| B | $\mathbf{3 4 - 2 0 1 4}$ | Right Wheel Mandrel | $5 / 16^{\prime \prime}$ | $\$ 15.26$ | $\$ 16.16$ | $\$ 17.95$ |




Mandrel shown attached. (Motor not included).

## WHEEL MANDREL

For right-hand side of motor. Designed to hold wheels with $1 / 2$ " arbor hole. This arbor is excellent for use with clean and finish buffs. Wheel arbor fits shaft $1 / 2^{\prime \prime}$ diameter straight motor shaft.
C. Used with unitized wheels, this plastic mandrel self-tops into the wheel.
D. Designed to hold grinding wheel on the right side of the motor with $1 / 2^{\prime \prime}$ straight shaft. For wheels with $1 / 2$ " hole.

| Item Order \# | Description OD | ID | Length | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |  |
| ---: | ---: | :--- | :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| C | $\mathbf{1 0 - 8 1 8 8}$ | Plastic | $3 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 6.16$ | $\$ 6.53$ | $\$ 7.25$ |
| D | $\mathbf{4 7 - 2 5 6 0}$ | Right Arbor | $13 / 4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $31 / 2^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |



Mandrels shown attached. (Motors not included).


WOODEN FLUX BRUSH

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| 16-2597 | \#4 Flux Brush | 4 " | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |

$\square$

EXTRA STIFF FLUX BRUSHES
Excellent for use with flux and acid applications.

| Item | Order\# | Grade | OD | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{1 6 - 2 2 5 6}$ | Extra Stiff | $1 / 4^{\prime \prime}$ | $314^{\prime \prime}$ | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |
| F | $\mathbf{1 6 - 2 2 5 5}$ | Stiff | $3 / 8^{\prime \prime}$ | $534^{\prime \prime}$ | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |
| G | $\mathbf{1 6 - 2 2 5 7}$ | Extra Stiff | $1 / 2^{\prime \prime}$ | $5 / 4^{\prime \prime}$ | $\$ 2.99$ | $\$ 3.12$ | $\$ 3.25$ |

## FLUX BRUSH WITH TIN FERRULE

Ideal for applying fluxes and other liquids. Inexpensive and disposable.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 6 - 2 2 5 0}$ | Flux Brush | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |



## RED SABLE BRUSHES

Select, pure-red sable tips, hand cupped with needle-sharp points. Bristles are mounted in aluminum, seamless ferrules, which are mounted on wooden handles.


## Order \# 16-2701

Brush Length 71/4"
\#2/0 (smallest), \#7 (largest)
Sold Each

| Brush Size | \#2/0 | \#1 | \#2 | \#3 | \#4 | \#5 | \#6 | \#7 |
| ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 0.78$ | $\$ 0.97$ | $\$ 0.97$ | $\$ 1.15$ | $\$ 1.47$ | $\$ 1.75$ | $\$ 2.02$ | $\$ 2.35$ |
| $6+$ | $\$ 0.82$ | $\$ 1.01$ | $\$ 1.01$ | $\$ 1.20$ | $\$ 1.54$ | $\$ 1.82$ | $\$ 2.11$ | $\$ 2.45$ |
| $1+$ | $\$ 0.85$ | $\$ 1.05$ | $\$ 1.05$ | $\$ 1.25$ | $\$ 1.60$ | $\$ 1.90$ | $\$ 2.20$ | $\$ 2.55$ |



SCRATCH BRUSHES
Scratch brushes have pen-shaped handles and come in four different styles. Used for removing rust or corrosion in hard-to-reach places. Clogged burs are best cleaned using the brass model. Fine, fiberglass bristles are mounted in a plastic, transparent case. Bristle length can be adjusted as they wear down by twisting the cap. Includes one brush.

| Item | Order \# | Description | Brush Length | Bristle Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 16-0560 | Steel Scratch Brush | $41 / 2^{11}$ | $11 / 2$ " | \$8.33 | \$8.69 | \$9.05 |
| B | 16-0570 | Nylon Scratch Brush | $41 / 2^{11}$ | $11 / 2$ " | \$8.33 | \$8.69 | \$9.05 |
| C | 16-0580 | Fiberglass Scratch Brush | $41 / 2^{\prime \prime}$ | $11 / 2$ " | \$6.44 | \$6.72 | \$7.00 |
| D | 16-0590 | Brass Scratch Brush | 41/2" | $11 / 2^{1}$ | \$8.00 | \$8.35 | \$8.70 |
| E | 16-0565 | Steel Refill (Pack of 6) |  | $11 / 2{ }^{\text {" }}$ | \$6.30 | \$6.58 | \$6.85 |
| F | 16-0575 | Nylon Refill (Pack of 6) |  | 11/2" | \$5.29 | \$5.52 | \$5.75 |
| G | 16-0585 | Fiberglass Refill (Pack of 6 |  | $11 / 2{ }^{\text {" }}$ | \$4.65 | \$4.85 | \$5.05 |
| H | 16-0595 | Brass Refill (Pack of 6) |  | $11 / 2{ }^{\text {" }}$ | \$5.84 | \$6.10 | \$6.35 |



## CLEANING UTILITY BRUSH

Ideal for cleaning small parts while at the bench.

| Item Order \# | Description | Length | Bristle <br> Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :---: | :--- | ---: | ---: | ---: |
| J | $\mathbf{1 6 - 0 5 5 1}$ | Nylon | $7^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |
| $\mathbf{1 6 - 0 5 5 1}$ | Brass | $7^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |  |
|  | $\mathbf{1 6 - 0 5 5 1}$ | Steel | $7^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |
| K | $\mathbf{1 6 - 0 5 5 2}$ | Nylon Double Ended | $7^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |

BRASS BRUSH
Bristles are finer than most and the handle is curved for better access.

| Item | Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{1 6 - 3 1 1 1}$ | Fine Bristles | $3 / 8^{\prime \prime} \times 73 / 4^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | $\$ 8.24$ | $\$ 8.73$ | $\$ 9.70$ |

## STAINLESS STEEL BRUSH

Bristles are finer than most and the handle is curved for better access.

| Item | Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| B | $\mathbf{1 6 - 3 1 1 2}$ | Fine Bristles | $3 / 8^{\prime \prime} \times 73 / 4^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | $\$ 8.24$ | $\$ 8.73$ | $\$ 9.70$ |

BRASS SCRATCH BRUSH WITH WOODEN HANDLE
Bristles firmly anchored in handles. Suitable for cleaning in and with solutions. Contains four rows of .003 " wire.

| Item | Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{1 6 - 3 1 0 0}$ | Medium Bristles | $3 / 4^{\prime \prime} \times 81 / 4^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 10.30$ | $\$ 10.75$ | $\$ 11.20$ |

## GLASGOW WASHOUT BRUSHES

Contains four rows of white bristles that are locked in a wooden handle. Used for cleaning PC boards and other washing applications. Made in Germany.

| Item | Order\# | Grade | Tool Length | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| D | $\mathbf{1 6 - 0 5 9 8}$ | Hard Bristles | $103 / /^{\prime \prime}$ | $53 / 4^{\prime \prime}$ | $\$ 6.35$ | $\$ 6.62$ | $\$ 6.90$ |
| E | $\mathbf{1 6 - 0 5 9 9}$ | Medium Bristles | $103 / 4^{\prime \prime}$ | $53 / 4^{\prime \prime}$ | $\$ 6.35$ | $\$ 6.62$ | $\$ 6.90$ |

## WOOD HANDLE WASHOUT BRUSH

Excellent for cleaning operations. Brushes are impervious to most cleaning fluids and hot water. Contains four rows of stiff natural bristles.

| Item | Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| F | $\mathbf{1 6 - 0 5 3 0}$ | Stiff Bristles | $3 / 4^{\prime \prime} \times 81 / 4^{\prime \prime}$ | $31 / 2^{\prime \prime}$ | $\$ 4.37$ | $\$ 4.56$ | $\$ 4.75$ |

## PLASTIC HANDLE WASHOUT BRUSH

Contains four rows of stiff, nylon bristles.

| Item | Order \# | Grade | $\mathbf{W} \times \mathbf{L}$ | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| G | $\mathbf{1 6 - 0 5 4 0}$ | Stiff Bristles | $1 / 2^{\prime \prime} \times 71 / 2^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 7.31$ | $\$ 7.63$ | $\$ 7.95$ |

## BENCH DUSTER

Makes cleaning your bench area quick and easy. This brush contains four rows of soft, black bristles mounted in a wooden handle. Ideal for sweeping filings and general purpose cleanup.

| Item | Order \# | Grade | $\mathbf{W} \times \mathrm{L}$ | Brush | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 16-0510 | Soft Bristles | $21 / 8^{\prime \prime} \times 9^{1 / 21}$ | $4 "$ | \$7.04 | \$7.34 | \$7.65 |

## MULTI-PURPOSE CLEANING BRUSH

Contains four rows of nylon bristles mounted in an angled, Lucite ${ }^{\text {Tuw }}$ handle.

| Item | Order \# | Grade | Tool Length | Brush | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| J | $\mathbf{1 6 - 0 5 5 0}$ | Medium Bristles | $63 / 4^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 2.67$ | $\$ 2.78$ | $\$ 2.90$ |

HAND AND FINGERNAIL SCRUB BRUSH
Designed to help clean hands and fingernails easily after working with jewelry and rouges. Bristles are nylon.

| Item | Order\# | Grade | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| K | $\mathbf{1 6 - 0 5 2 0}$ | Extra Soft | $11 / 2^{\prime \prime} \times 31 / 2^{11}$ | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |




## PANTHER SETTING BUR KIT

This 20 piece ball bur kit consist of a nice wooden box with 20 burs made of the finest quality tool steel. These are very durable burs with an exceptional history of durability and performance.
1 each: . $90 \mathrm{~mm}-5.00 \mathrm{~mm}$ plus wooden box.

| Order \# | Set of | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 19-3152 | 20 | 1 each: $.90 \mathrm{~mm}-5.00 \mathrm{~mm}$ | $\$ 74.82$ | $\$ 81.14$ | $\$ 90.15$ |

## PANTHER BALL BUR KIT

This 18 piece kit consist of 18 setting burs neatly displayed in a wooden box. Made of the finest quality tool steel, these burs display exceptional durability and performance.
1 each: . 90 mm to 4.50 mm with wooden box.

| Order \# | Set of | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 9 - 3 1 6 0}$ | 18 | 1 each: $.90 \mathrm{~mm}-4.50 \mathrm{~mm}$ | $\$ 43.99$ | $\$ 47.70$ | $\$ 53.00$ |



STULLER SELECT LUBE
Petroleum-based lubricant that extends the useful life of burs, saw blades, and cutting tools.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 0 7 4 0}$ | Push-up Lubricant | $\$ 4.59$ | $\$ 4.86$ | $\$ 5.40$ |
| B | $\mathbf{2 6 - 1 0 0 0}$ | Beeswax | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |

## The Mark of Excellence

Made in Germany．Panther has earned a reputation for the highest standards in precision tool production in the world．Our burs and tools are manufactured on the most technically advanced computer assisted machinery in existence．Only the finest quality hardened tool steel is used．Each tool is individually hand inspected before leaving the factory．Our highly trained technicians take pride in producing the most exceptional，durable precision burs available anywhere．Once you experience the performance of a Panther bur，you will never accept a substitute．

## Order \＃77－10000

Material Tungsten Vanadium Steel
Head Shape Bud
Shank Size 3／32＂
Sold in packs of 6

| Kit Order \＃77－1560 |  |  |
| ---: | ---: | ---: |
| Set of 12 Burs（1 each） $\mathbf{. 9 0 m m - 3 . 1 m m ~}$ |  |  |
| $12+$ | $6+$ | $1+$ |
| $\$ 10.54$ | $\$ 11.16$ | $\$ 12.40$ |


|  | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ |
| $6+$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ |
| $1+$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ |


|  | 2.1 mm | 2.3 mm | 2.5 mm | 2.7 mm | 2.9 mm | 3.1 mm | 3．3mm | 3.5 mm | 3.7 mm | 4．0mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | \＄4．32 | \＄4．32 | \＄9．30 | \＄9．30 | \＄9．30 | \＄9．30 | \＄9．30 | \＄9．30 | \＄9．30 | \＄17．13 |
| $6+$ | \＄4．68 | \＄4．68 | \＄10．08 | \＄10．08 | \＄10．08 | \＄10．08 | \＄10．08 | \＄10．08 | \＄10．08 | \＄18．14 |
| $1+$ | \＄5．20 | \＄5．20 | \＄11．20 | \＄11．20 | \＄11．20 | \＄11．20 | \＄11．20 | \＄11．20 | \＄11．20 | \＄20．15 |



BUD BURS，FIG．\＃6


| Order\＃ | 77－10001 |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cone |
| Shank Size | $3 / 3$ 土 $^{\prime \prime}$ |
|  | Sold in packs of 6 |
|  |  |


| Kit Order \＃77－1640 |  |  |
| :---: | :---: | :---: |
| Set of 12 Burs（ 1 each）． $90 \mathrm{~mm}-3.1 \mathrm{~mm}$ |  |  |
| 12＋ | $6+$ | $1+$ |
| \＄11．52 | \＄12．20 | \＄13．55 |


|  | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{2 . 0 m m}$ | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 2 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ | $\$ 4.32$ |
| $6+$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ | $\$ 4.68$ |
| $1+$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ | $\$ 5.20$ |


|  | 2.3 mm | 2.5 mm | 2.7 mm | 2.9 mm | 3.0 mm | 3.1 mm | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12＋ | \＄4．32 | \＄8．13 | \＄8．13 | \＄8．13 | \＄8．13 | \＄8．13 |  |
| $6+$ | \＄4．68 | \＄8．82 | \＄8．82 | \＄8．82 | \＄8．82 | \＄8．82 |  |
| 1＋ | \＄5．20 | \＄9．80 | \＄9．80 | \＄9．80 | \＄9．80 | \＄9．80 | 6 |



CONE BURS，FIG．\＃5

раMither


ROUND BURS, FIG. \#1

|  | 0.3 mm | 0.4 mm | 0.5 mm | 0.6 mm | 0.7 mm | 0.8 mm | 0.9 mm | 1.0 mm | 1.1mm | 1.2mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$3.27 | \$3.27 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 |
| $6+$ | \$3.41 | \$3.41 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 |
| $1+$ | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 |
|  | 1.3 mm | 1.4 mm | 1.5mm | 1.6 mm | 1.7 mm | 1.8 mm | 1.9 mm | 2.0 mm | 2.1 mm | 2.2 mm |
| $12+$ | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$2.95 |
| $6+$ | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 |
| $1+$ | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 |


|  | $\mathbf{2 . 3 m m}$ |  | $\mathbf{2 . 4 m m}$ | $\mathbf{2 . 5 m m}$ | $\mathbf{2 . 6 m m}$ | $\mathbf{2 . 7 m m}$ | $\mathbf{2 . 8 m m}$ | $\mathbf{2 . 9 m m}$ | $\mathbf{3 . 0 m m}$ |  | $\mathbf{3 . 1} \mathbf{m m}$ |  | $\mathbf{3 . 3 m m}$ |
| ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 2.95$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.04$ | $\$ 6.97$ |  |  |  |
| $6+$ | $\$ 3.20$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 6.39$ | $\$ 7.38$ |  |  |  |
| $1+$ | $\$ 3.55$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 7.10$ | $\$ 8.20$ |  |  |  |


|  | $\mathbf{3 . 5 m m}$ |  |  |  | $\mathbf{3 . 7 m m}$ | $\mathbf{4 . 0 m m}$ | $\mathbf{4 . 2 m m}$ | $\mathbf{4 . 5 m m}$ | $\mathbf{4 . 7 m m}$ | $\mathbf{5 . 0 m m}$ | $\mathbf{5 . 5 m m}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 6.97$ | $\$ 6.97$ | $\$ 6.97$ | $\$ 6.97$ | $\$ 20.67$ | $\$ 20.67$ | $\$ 20.67$ | $\$ 27.03$ | $\$ 27.03$ | $\$ 27.03$ |  |
| $6+$ | $\$ 7.38$ | $\$ 7.38$ | $\$ 7.38$ | $\$ 7.38$ | $\$ 22.41$ | $\$ 22.41$ | $\$ 22.41$ | $\$ 28.62$ | $\$ 28.62$ | $\$ 28.62$ |  |
| $1+$ | $\$ 8.20$ | $\$ 8.20$ | $\$ 8.20$ | $\$ 8.20$ | $\$ 24.90$ | $\$ 24.90$ | $\$ 24.90$ | $\$ 31.80$ | $\$ 31.80$ | $\$ 31.80$ |  |


|  | $\mathbf{7 . 0 m m}$ |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{7 . 5 m m}$ | $\mathbf{8 . 0 m m}$ | $\mathbf{8 . 5 m m}$ | $\mathbf{9 . 0 m m}$ | $\mathbf{9 . 5 m m}$ | $\mathbf{1 0 . 0 m m}$ |  |  |  |
| $12+$ | $\$ 27.03$ | $\$ 27.03$ | $\$ 46.94$ | $\$ 46.94$ | $\$ 46.94$ | $\$ 46.94$ | $\$ 46.94$ |  |  |
| $6+$ | $\$ 28.62$ | $\$ 28.62$ | $\$ 50.90$ | $\$ 50.90$ | $\$ 50.90$ | $\$ 50.90$ | $\$ 50.90$ |  |  |
| $1+$ | $\$ 31.80$ | $\$ 31.80$ | $\$ 56.55$ | $\$ 56.55$ | $\$ 56.55$ | $\$ 56.55$ | $\$ 56.55$ | 6 |  |


| Order \# | $\mathbf{7 7 - 1 0 0 0 2}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Krause |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 6 |


|  | 1.0mm |  |
| ---: | ---: | ---: |
|  | $\mathbf{1 . 2 m m}$ |  |
| $12+$ | $\$ 11.21$ | $\$ 11.21$ |
| $6+$ | $\$ 12.15$ | $\$ 12.15$ |
| $1+$ | $\$ 13.50$ | $\$ 13.50$ |

KRAUSE BURS, FIG. \#256

| Order \# | $\mathbf{7 7 - 1 0 0 0 4}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | $90^{\circ}$ Bur |
| Shank Size | $3 / 3 z^{\prime \prime}$ |
|  | Sold in packs of 6 |


|  | 77-1197 | Kit Order \# 77-1198 | 77-1199 |
| :---: | :---: | :---: | :---: |
|  | Set of 12 <br> (1 each) <br> $.50 \mathrm{~mm}-2.5 \mathrm{~mm}$ | Set of 12 <br> (1 each) <br> $3.1 \mathrm{~mm}-8.0 \mathrm{~mm}$ | Set of 24 <br> (1 each) <br> $.40 \mathrm{~mm}-3.1 \mathrm{~mm}$ |
| 12+ | \$20.02 | \$21.20 | \$23.55 |
| $6+$ | \$33.07 | \$35.01 | \$38.90 |
| $1+$ | \$46.07 | \$48.78 | \$54.20 |


|  | $\mathbf{0 . 5 m m}$ | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 1 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{1 . 4 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ |
| $6+$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ |
| $1+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ |


|  | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 7 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{1 . 9 m m}$ | $\mathbf{2 . 0 m m}$ | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 2 m m}$ | $\mathbf{2 . 3 m m}$ | $\mathbf{2 . 4 m m}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 11.82$ |
| $6+$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 12.51$ |
| $1+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 13.90$ |


$90^{\circ}$ HART BURS, FIG. \#156C

|  | $\mathbf{2 . 5 m m}$ | $\mathbf{2 . 7 m m}$ | $\mathbf{2 . 9 m m}$ | $\mathbf{3 . 0 m m}$ | $\mathbf{3 . 1 m m}$ | $\mathbf{3 . 3 m m}$ | $\mathbf{3 . 5 m m}$ | $\mathbf{3 . 7 m m}$ | $\mathbf{4 . 0 m m}$ | $\mathbf{4 . 2 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 11.82$ | $\$ 17.09$ | $\$ 17.09$ | $\$ 17.09$ |
| $6+$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 12.51$ | $\$ 18.09$ | $\$ 18.09$ | $\$ 18.09$ |
| $1+$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 13.90$ | $\$ 20.10$ | $\$ 20.10$ | $\$ 20.10$ |


|  | $\mathbf{4 . 5 m m}$ | $\mathbf{4 . 7 m m}$ | $\mathbf{5 . 0 m m}$ |  |
| ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| $12+$ | $\$ 17.09$ | $\$ 17.09$ | $\$ 17.09$ |  |
| $6+$ | $\$ 18.09$ | $\$ 18.09$ | $\$ 18.09$ |  |
| $1+$ | $\$ 20.10$ | $\$ 20.10$ | $\$ 20.10$ |  |


| Order \# | 77-10005 |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | $70^{\circ}$ Bur |
| Shank Size | $3 / 3$ ² $^{\prime \prime}$ |
|  | Sold in packs of 6 |


| Kit Order \# 77-1299 |  |  |
| ---: | ---: | ---: |
| Set of 12 Burs (1 each) $\mathbf{1 . 0 m m} \mathbf{- 2 . 9 m m}$ |  |  |
| $12+$ | $6+$ | $1+$ |
| $\$ 20.02$ | $\$ 21.20$ | $\$ 23.55$ |


|  | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 1 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 7 m m}$ | $\mathbf{1 . 8 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ |
| $6+$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ |
| $1+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ |


|  | $\mathbf{1 . 9 m m}$ | $\mathbf{2 . 0 m m}$ | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 2 m m}$ | $\mathbf{2 . 3 m m}$ | $\mathbf{2 . 5 m m}$ | $\mathbf{2 . 7 m m}$ | $\mathbf{2 . 9 m m}$ | $\mathbf{3 . 1 m m}$ | $\mathbf{3 . 3 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 7.69$ | $\$ 13.18$ | $\$ 13.18$ | $\$ 13.18$ | $\$ 16.68$ | $\$ 16.68$ |
| $6+$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 8.15$ | $\$ 13.95$ | $\$ 13.95$ | $\$ 13.95$ | $\$ 18.09$ | $\$ 18.09$ |
| $1+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 20.10$ | $\$ 20.10$ |


$70^{\circ}$ HART THIN BURS, FIG. \#446




STONE SETTING BURS, FIG. \#413


|  | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 7 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{1 . 9 m m}$ | $\mathbf{2 0 m m}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $12+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ |
| $6+$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ |
| $1+$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ |


|  | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 2 m m}$ | $\mathbf{2 . 3 m m}$ | $\mathbf{2 . 4 m m}$ | $\mathbf{2 . 5 m m}$ | $\mathbf{2 . 7 m m}$ | $\mathbf{2 . 9 m m}$ | $\mathbf{3 . 0 m m}$ | $\mathbf{3 . 1 m m}$ | $\mathbf{3 . 3 m m}$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $12+$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 9.05$ | $\$ 13.70$ | $\$ 13.70$ | $\$ 13.70$ | $\$ 13.70$ | $\$ 13.70$ | $\$ 13.70$ | $\$ 11.82$ |
| $6+$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 9.59$ | $\$ 14.85$ | $\$ 14.85$ | $\$ 14.85$ | $\$ 14.85$ | $\$ 14.85$ | $\$ 14.85$ | $\$ 12.51$ |
| $1+$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 10.65$ | $\$ 16.50$ | $\$ 16.50$ | $\$ 16.50$ | $\$ 16.50$ | $\$ 16.50$ | $\$ 16.50$ | $\$ 13.90$ |


|  | $\mathbf{3 . 7 m m}$ | $\mathbf{4 . 0 m m}$ | $\mathbf{4 . 2 m m}$ | $\mathbf{4 . 5 m m}$ | $\mathbf{4 . 7 m m}$ | $\mathbf{5 . 0 m m}$ | $\mathbf{6 . 0 m m}$ | $\mathbf{7 . 0 m m}$ | $\mathbf{8 . 0 m m}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 19.04$ | $\$ 19.04$ | $\$ 19.04$ | $\$ 19.04$ | $\$ 19.04$ | $\$ 19.04$ | $\$ 23.99$ | $\$ 23.99$ | $\$ 23.99$ |  |
| $6+$ | $\$ 20.16$ | $\$ 20.16$ | $\$ 20.16$ | $\$ 20.16$ | $\$ 20.16$ | $\$ 20.16$ | $\$ 26.01$ | $\$ 26.01$ | $\$ 26.01$ |  |
| $1+$ | $\$ 22.40$ | $\$ 22.40$ | $\$ 22.40$ | $\$ 22.40$ | $\$ 22.40$ | $\$ 22.40$ | $\$ 28.90$ | $\$ 28.90$ | $\$ 28.90$ | $\mathbf{6}$ |


| $\square$ |  |  |  | Order \# | 77-10008 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.5 mm | 2.0 mm | Material Head Shape Shank Size | Tungsten Vanadium Steel Wheel $3 / 32^{\prime \prime}$ <br> Sold in packs of 6 |
|  | 12+ | \$9.31 | \$9.31 |  |  |
| 6 | $6+$ | \$9.86 | \$9.86 |  |  |
|  | $1+$ | \$10.95 | \$10.95 |  |  |



WHEEL BURS, FIG. \#431

| $\square$ |  | 2.3 mm | 2.9 mm | 3.5 mm | 4.0 mm | Order \# | 77-10010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12+ | \$8.09 | \$11.54 | \$11.54 | \$15.94 | Material Head Shape Shank Size | Tungsten Vanadium Steel <br> Wheel <br> $3 / 32^{\prime \prime}$ <br> Sold in packs of 6 |
| $\square$ | $6+$ | \$8.78 | \$12.51 | \$12.51 | \$17.28 |  |  |
| 6 | $1+$ | \$9.75 | \$13.90 | \$13.90 | \$19.20 |  |  |



CIRCULAR EDGE BURS, FIG. \#231S

|  | Order \# 7 |  | 77-10009 |  | Kit Order \# 77-1740 <br> Set of 12 Burs ( 1 each) . $\mathbf{6 0 m m} \mathbf{- 2 . 5 m m}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Material <br> Head Shape <br> Shank Size |  | Tungsten Vanadium Stee Wheel $3 / 32^{1 "}$ <br> Sold in packs of 6 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 12+ | 6+ | 1+ |  |  |  |  |  |  |
|  |  |  |  | \$7.57 | \$8.01 | \$8.90 |  | WHEEL BURS, FIG. \#2 |  |  |  |  |
|  | 0.6 mm | 0.7 mm |  |  | 0.8 mm | 0.9 mm | 1.0 mm | 1.2 mm | 1.4 mm |  | 1.6 mm | 1.8 mm | 2.1 mm | 2.3 mm | 2.5 mm | 2.8 mm |
| 12+ | \$2.95 | \$2.95 |  |  | \$2.95 | \$2.95 | \$2.95 | \$2.95 | \$3.53 | 12+ | \$3.20 | \$3.20 | \$3.20 | \$3.53 | \$6.29 | \$6.29 |
| $6+$ | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.83 | $6+$ | \$3.47 | \$3.47 | \$3.47 | \$3.83 | \$6.66 | \$6.66 |
| 1+ | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$3.55 | \$4.25 | 1+ | \$3.85 | \$3.85 | \$3.85 | \$4.25 | \$7.40 | \$7.40 |


|  | Order \# | 77-10011 |
| :--- | :--- | :--- |
|  | Material | Tungsten Vanadium Steel |
| Head Shape |  |  |
| Shank Size |  |  | | Inverted Cone |
| :--- |
| $3 / 32 "$ |
| Sold in packs of 6 |


| Kit Order \# 77-1840 |  |  |
| ---: | ---: | ---: |
| Set of $\mathbf{1 2}$ Burs (1 each) . $\mathbf{6 0 m m} \mathbf{- 2 . 5 m m}$ |  |  |
| $12+$ | $6+$ | $1+$ |
| $\$ 7.01$ | $\$ 7.43$ | $\$ 8.25$ |



INVERTED CONE BURS, FIG. \#3

|  | 0.6 mm | 0.7 mm | 0.8 mm | 0.9 mm | 1.0 mm | 1.2 mm | 1.4 mm |  | 1.6 mm | 1.8 mm | 2.1 mm | 2.3mm | 2.5 mm | 2.7 mm | 2.9mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | 12+ | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$8.46 | \$7.82 | \$7.82 |
| 6+ | \$3.47 | \$3.47 | \$3.47 | \$3.47 | \$3.47 | \$3.47 | \$3.47 | $6+$ | \$3.47 | \$3.47 | \$3.47 | \$3.47 | \$8.83 | \$8.28 | \$8.28 |
| 1+ | \$3.85 | \$3.85 | \$3.85 | \$3.85 | \$3.85 | \$3.85 | \$3.85 | $1+$ | \$3.85 | \$3.85 | \$3.85 | \$3.85 | \$9.20 | \$9.20 | \$9.20 |



BUD CONICAL BURS, FIG. \#79

Made in Germany. Panther ${ }^{\oplus}$ has earned a reputation for the highest standards in precision tool production in the world. Our burs and tools are manufactured on the most technically advanced computer assisted machinery in existence. Only the finest quality hardened tool steel is used. Each tool is individually hand inspected before leaving the factory. Our highly trained technicians take pride in producing the most exceptional, durable precision burs available anywhere. Once you experience the performance of a Panther ${ }^{\circledR}$ bur, you will never accept a substitute.

| Order \# | 77-10012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Material | Tungsten Vanadium Steel |  | 4.0 mm | 5.0 mm |
| Head Shape | Bud | 12+ | \$15.85 | \$17.00 |
| Shank Size | $3 / 32^{\prime \prime}$ | $6+$ | \$16.79 | \$18.00 |
|  | Sold in packs of 6 | $1+$ | \$18.65 | \$20.00 |



Order \# 77-10013
Material Tungsten Vanadium Steel Head Shape Cylinder
Shank Size $3 / 32^{\prime \prime}$
Sold in packs of 6

|  | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{2 . 1} \mathbf{m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ |
| $6+$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ |
| $1+$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ |




| Order \# | 77-10015 |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cone |
| Shank Size | $3 / 3$ l $^{\prime \prime}$ <br>  <br>  <br>  <br>  <br> Sold in packs of 6 |


| Kit Order \# 77-2240 |  |  |
| ---: | ---: | ---: |
| Set of 12 Burs (1 each). $\mathbf{6 0 m m} \mathbf{2 . 5 m m}$ |  |  |
| $12+$ | $6+$ | $1+$ |
| $\$ 8.59$ | $\$ 9.09$ | $\$ 10.10$ |


|  | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 1 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ | $\$ 3.53$ |
| $6+$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ | $\$ 3.74$ |
| $1+$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ | $\$ 4.15$ |





ROUND BURS, FIG. \#H71


| Order \# | $\mathbf{7 7 - 1 0 0 1 8}$ |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Cylinder |
| Shank Size | $32^{\prime \prime}$ <br>  <br>  <br> Sold in packs of 6 |
|  |  |



TAPERED ROUND END BURS, FIG. H23RS


| Order \# | $\mathbf{7 7 - 1 0 0 1 9}$ |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Cone |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 6 |



CONE ROUND BURS, FIG. \#H23R

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ |
| $12+$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ |
| $6+$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ |
| $1+$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ |


| Order \# | 77-10020 |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Cylinder |
| Shank Size | $3 / 32$ " |
|  | Sold Each |



CONE ROUND CROSS-CUT EXTRA FINE BURS, FIG. H33 FRS

Made in Germany. Panther ${ }^{\circledR}$ has earned a reputation for the highest standards in precision tool production in the world. Our burs and tools are manufactured on the most technically advanced computer assisted machinery in existence. Only the finest quality hardened tool steel is used. Each tool is individually hand inspected before leaving the factory. Our highly trained technicians take pride in producing the most exceptional, durable precision burs available anywhere. Once you experience the performance of a Panther ${ }^{\circledR}$ bur, you will never accept a substitute.

| Order \# | 77-10023 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Material | Tungsten Carbide Steel |  | 0.9 mm | 1.0mm |
| Head Shape | Round | 12+ | \$33.16 | \$33.16 |
| Shank Size | $3 / 32$ " | $6+$ | \$35.96 | \$35.96 |
|  | Sold in packs of 6 | $1+$ | \$39.95 | \$39.95 |



CONE SQUARE BURS, FIG. \#H23

| Order \# | 77-10024 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Material | Tungsten Carbide Steel | $\mathbf{0 . 9 m m}$ |  |  |
| Head Shape | Cone | $12+$ | $\$ 19.51$ | $\$ 19.51$ |
| 3hank Size | $3 / 32$ " | $6+$ | $\$ 21.15$ | $\$ 21.15$ |
|  | Sold in packs of 6 | $1+$ | $\$ 23.50$ | $\$ 23.50$ |


| Order \# | 77-10025 |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Cone |
| Shank Size | $3 / 3$ "1 |
|  | Sold in packs of 6 |


|  | $\mathbf{0 . 9 m m}$ |  |  |  | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $12+$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ | $\$ 18.51$ |
| $6+$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ | $\$ 20.07$ |
| $1+$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ | $\$ 22.30$ |

CONE SQUARE CROSS-CUT BURS, FIG. \#H33

| Order \# | 77-10027 |  |  |
| :---: | :---: | :---: | :---: |
| Material <br> Head Shape <br> Shank Size | Tungsten Carbide Steel Cone $3 / 32^{\prime \prime}$ <br> Sold in packs of 6 |  |  |
|  |  | 0.9 mm | 1.0 mm |
|  | 12+ | \$28.30 | \$28.30 |
|  | $6+$ | \$30.69 | \$30.69 |
|  | $1+$ | \$34.10 | \$34.10 |

 FIG. \#H23RSE


CONE SQUARE CROSS-CUT LONG BURS, FIG. \#H33L
$\qquad$

| Order \# | 77-10028 |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Inverted Cone |
| Shank Size | $3 / 3$ In $^{\prime \prime}$ |
|  | Sold in packs of 6 |


| - |  | 0.6 mm | 0.8mm | 0.9 mm | 1.0 mm | 1.2mm | 1.4mm | 1.6mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12+ | \$21.46 | \$21.46 | \$21.46 | \$21.46 | \$21.46 | \$21.46 | \$21.46 |
| 6 | $6+$ | \$23.27 | \$23.27 | \$23.27 | \$23.27 | \$23.27 | \$23.27 | \$23.27 |
|  | $1+$ | \$25.85 | \$25.85 | \$25.85 | \$25.85 | \$25.85 | \$25.85 | \$25.85 |



INVERTED CONE BURS, FIG. \#H3O



CYLINDER PLAIN BURS, FIG. \#H21



CYLINDER CROSS-CUT BURS, FIG. \#31
$\qquad$

## Kit Order \#

|  | Kit Order \# |  |
| :---: | :---: | :---: |
|  | 77-2898 <br> Set of 12 <br> (1 each) <br> $1.0 \mathrm{~mm}-2.9 m m$ | 77-2899 <br> Set of 18 <br> (1 each) <br> .80m-2.9mm |
| $12+$ | $\$ 21.51$ | $\$ 22.77$ |
| $6+$ | $\$ 25.30$ | $\$ 31.03$ |
| $1+$ | $\$ 32.85$ | $\$ 36.50$ |


|  | 0.8 mm | 0.9 mm | 1.0mm | 1.1 mm | 1.2mm | 1.3mm | 1.4 mm | 1.5mm | 1.6mm | 1.7mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 |
| $6+$ | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 |
| 1+ | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 |
|  | 1.8 mm | 1.9 mm | 2.0 mm | 2.1 mm | 2.3 mm | 2.5 mm | 2.7 mm | 2.9 mm | 3.0 mm | 3.5 mm |
| 12+ | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$7.69 | \$13.70 | \$13.70 | \$13.70 | \$16.02 | \$16.02 |
| $6+$ | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$8.15 | \$14.85 | \$14.85 | \$14.85 | \$16.97 | \$16.97 |
| 1+ | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$16.50 | \$16.50 | \$16.50 | \$18.85 | \$18.85 |


|  | 4.0mm |  | $\mathbf{4 . 5 m m}$ | $\mathbf{5 . 0 m m}$ |
| ---: | ---: | ---: | ---: | :---: |
|  |  |  |  |  |
| $12+$ | $\$ 24.01$ | $\$ 24.01$ | $\$ 24.01$ |  |
| $6+$ | $\$ 25.43$ | $\$ 25.43$ | $\$ 25.43$ |  |
| $1+$ | $\$ 28.25$ | $\$ 28.25$ | $\$ 28.25$ |  |



PANTHER SPECIAL CUP BURS,
FIG. \#256A

|  | $\mathbf{1 . 8 m m}$ |  |  | $\mathbf{2 . 1 m m}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 . 3 m m}$ |  |  |  |
|  | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ |  |
| $6+$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ |  |
| $1+$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ |  |


| Order \# | $\mathbf{7 7 - 1 0 0 3 2}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cup |
| Shank Size | $3 / 3$ 2 $^{\prime \prime}$ |
|  | Sold in packs of 6 |



PANTHER SPECIAL CONICAL CUP BURS, FIG. \#256S

## Order \# 77-10033

Material Tungsten Vanadium Steel Head Shape Cup
Shank Size 3/32"
Sold in packs of 6

|  | $\mathbf{0 . 8 m m}$ |  |  |  |  |  |  |  |  |  | $\mathbf{0 . 9 m m}$ |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 1 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 7 m m}$ |  |  |  |
| $12+$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ | $\$ 11.26$ |  |
| $6+$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ | $\$ 11.93$ |  |
| $1+$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ | $\$ 13.25$ |  |

Made in Germany. Panther ${ }^{\circledast}$ has earned a reputation for the highest standards in precision tool production in the world. Our burs and tools are manufactured on the most technically advanced computer assisted machinery in existence. Only the finest quality hardened tool steel is used. Each tool is individually hand inspected before leaving the factory. Our highly trained technicians take pride in producing the most exceptional, durable precision burs available anywhere. Once you experience the performance of a Panther® bur, you will never accept a substitute.




$\qquad$


BUSCH ${ }^{\circledR}$ MASTER KIT 84 PIECE KIT
Busch ${ }^{\oplus}$ Master Kit contains and assortment of Round, $70^{\circ}$ hart, $90^{\circ}$ hart, bud, inverted cone, cylinder square, and setting burs, displayed in a wooden storage box. These German burs are made of exceptional quality and known for their precision which allows for accurate and smooth cutting.

| Order \# | Set of | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 9 - 3 2 2 0}$ | 97 | Master Bur Kit | $\$ 255.31$ | $\$ 276.84$ | $\$ 307.60$ |



$70^{\circ}$ BEARING, FIG. \#446

| Order \# | $\mathbf{1 8 - 1 0 0 0 1}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | $70^{\circ}$ Bur |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 6 |


|  | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 3 m m}$ | $\mathbf{2 . 5 m m}$ | $\mathbf{2 . 7 m m}$ | $\mathbf{2 . 9 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 14.17$ | $\$ 21.99$ | $\$ 21.99$ | $\$ 21.99$ |
| $6+$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 14.78$ | $\$ 22.94$ | $\$ 22.94$ | $\$ 22.94$ |
| $1+$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 15.40$ | $\$ 23.90$ | $\$ 23.90$ | $\$ 23.90$ |


|  | $\mathbf{3 . 1 m m}$ | $\mathbf{3 . 3 m m}$ | $\mathbf{3 . 5 m m}$ | $\mathbf{3 . 7 m m}$ | $\mathbf{4 . 0 m m}$ | $\mathbf{4 . 2 m m}$ | $\mathbf{4 . 5 m m}$ | $\mathbf{4 . 7 m m}$ | $\mathbf{5 . 0 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 26.31$ | $\$ 26.31$ | $\$ 26.31$ | $\$ 26.31$ | $\$ 32.71$ | $\$ 32.71$ | $\$ 32.71$ | $\$ 32.71$ | $\$ 35.10$ |
| $6+$ | $\$ 27.46$ | $\$ 27.46$ | $\$ 27.46$ | $\$ 27.46$ | $\$ 34.13$ | $\$ 34.13$ | $\$ 34.13$ | $\$ 34.13$ | $\$ 36.62$ |
| $1+$ | $\$ 28.60$ | $\$ 28.60$ | $\$ 28.60$ | $\$ 28.60$ | $\$ 35.55$ | $\$ 35.55$ | $\$ 35.55$ | $\$ 35.55$ | $\$ 38.15$ |

BUSCH ${ }^{\circledR}$ TWINCUT CONICAL CUP BUR KIT
Concave cutter with outstanding Twincut blade geometry. Designed for quick and precise working of rounding- off, smoothing, and shortening of prong settings in one single operation.

| Order\# | Set of | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 8 - 5 0 0 5}$ | 12 | 1 each: $1.0-3.1$ | $\$ 45.05$ | $\$ 47.70$ | $\$ 53.00$ |



|  | Order \# |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Material Head Shape <br> Shank Size | Tungsten Vanadium Steel Cup $3 / 32^{\prime \prime}$ <br> Sold in packs of 6 |  |  |  |  |  |  |  |  |  |
|  | 0.8mm | 0.9mm | 1mm | 1.1mm | 1.2 mm | 1.3mm | 1.4mm | 1.5 mm | 1.6mm | 1.7mm |  |
| $12+$ | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 |  |
| $6+$ | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 |  |
| $1+$ | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | BUSCH TWINCUT CUP BUR |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.8 mm | 1.9mm | 2mm | 2.1mm | 2.2mm | 2.3mm |  |  |  |  |  |
| $12+$ | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | \$17.64 | $\square$ |  |  |  |  |
| $6+$ | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 | \$18.68 |  |  |  |  |  |
| $1+$ | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | \$20.75 | 6 |  |  |  |  |


| Order \# | $\mathbf{1 8 - 1 0 0 1 5}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cup |
| Shank Size | $3 / 3$ 2 $^{11}$ <br>  <br>  <br>  <br>  <br> Sold in packs of 6 |




BUSCH TWINCUT CONICAL CUP BUR
$\qquad$



| Order \# | $\mathbf{1 8 - 1 0 0 0 2}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cylinder |
| Shank Size | $3 / 3$ " <br>  <br>  <br>  <br> Sold in packs of 6 |


|  | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 . 0 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{2 . 1 m m}$ | $\mathbf{2 . 3 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 8.69$ | $\$ 15.85$ |
| $6+$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 9.07$ | $\$ 16.79$ |
| $1+$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 9.45$ | $\$ 18.65$ |

CONE, SQUARE CROSS-CUT,
FIG. \#23

|  | 2.5mm | 2.7 mm | 2.9 mm | 3.1 mm | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$15.81 | \$15.85 | \$15.81 | \$19.46 |  |
| $6+$ | \$16.74 | \$16.79 | \$16.74 | \$20.30 | $\square$ |
| 1+ | \$18.60 | \$18.65 | \$18.60 | \$21.15 | 0 |




INVERTED CONE, FIG. \#3


|  | 0.9 mm | 1.0 mm | 1.2 mm | 1.4mm | 1.5 mm | 1.6 mm | 1.7mm | 1.8 mm | 1.9 mm | 2.0 mm | 2.1 mm | 2.2 mm | 2.3 mm | 2.4 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$14.11 | \$21.21 |
| $6+$ | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$14.94 | \$22.46 |
| 1+ | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$16.60 | \$24.95 |
|  | 2.5 mm | 2.6 mm | $\mathbf{2 . 7 m m}$ | 2.8 mm | 2.9mm | 3.1 mm | 3.3 mm | 3.5 mm | 3.7 mm | 4.0 mm | 4.2 mm | 4.5 mm | 4.7 mm | 5.0 mm |
| 12+ | \$21.21 | \$21.21 | \$21.21 | \$21.21 | \$21.21 | \$27.83 | \$27.83 | \$27.83 | \$27.83 | \$33.81 | \$33.81 | \$33.81 | \$33.81 | \$33.81 |
| $6+$ | \$22.46 | \$22.46 | \$22.46 | \$22.46 | \$22.46 | \$29.04 | \$29.04 | \$29.04 | \$29.04 | \$35.28 | \$35.28 | \$35.28 | \$35.28 | \$35.28 |
| 1+ | \$24.95 | \$24.95 | \$24.95 | \$24.95 | \$24.95 | \$30.25 | \$30.25 | \$30.25 | \$30.25 | \$36.75 | \$36.75 | \$36.75 | \$36.75 | \$36.75 |


|  |  | 1.0 mm | 1.2mm | Order \# | 18-10006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $12+$ | \$17.72 | \$17.72 | Material <br> Head Shape <br> Shank Size | Tungsten Vanadium Steel <br> Krause 3/32" <br> Sold in packs of 6 |
| $\square$ | $6+$ | \$18.77 | \$18.77 |  |  |
| 6 | $1+$ | \$20.85 | \$20.85 |  |  |



KRAUSE BURS, FIG. \#256



CYLINDER, SPECIAL SINGLE-CUT, FIG. \#15

| Order \# | 18-10004 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Material Head Sha Shank Size | Tungsten Vanadium Steel Cylinder $3 / 32^{\prime \prime}$ <br> Sold in packs of 6 |  |  |  |  |  |  |  |  |  |
| 0.7mm | 0.8mm | 0.9mm | 1.0mm | 1.2mm | 1.4mm | 1.6 mm | 1.8mm | 2.1mm | 2.3 mm | 3.1mm |
| \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$8.33 | \$17.98 |
| \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$8.69 | \$19.04 |
| \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$9.05 | \$21.15 |



| Order \# | $\mathbf{1 8 - 1 0 0 1 0}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Wheel |
| Shank Size | $3 / 33^{\prime \prime}$ |
|  | Sold Each |


|  | $\mathbf{6 . 0 m m}$ | $\mathbf{7 . 0 m m}$ | $\mathbf{8 . 0 m m}$ | $\mathbf{1 0 . 0 m m}$ | $\mathbf{1 2 . 0 m m}$ | $\mathbf{1 4 . 0 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 13.94$ | $\$ 13.94$ | $\$ 15.81$ | $\$ 20.32$ | $\$ 24.93$ | $\$ 24.93$ |
| $6+$ | $\$ 14.76$ | $\$ 14.76$ | $\$ 16.74$ | $\$ 21.51$ | $\$ 26.02$ | $\$ 26.02$ |
| $1+$ | $\$ 16.40$ | $\$ 16.40$ | $\$ 18.60$ | $\$ 23.90$ | $\$ 27.10$ | $\$ 27.10$ |

BUSCH ${ }^{\circledR}$ KNIFE EDGE WHEEL BUR


BUSCH ${ }^{\oplus}$ WHEEL BUR WITH SAW EDGE, FIG. \#231S

| Order \# | $\mathbf{1 8 - 1 0 0 1 1}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Wheel |
| Shank Size | $3 / 3$ 3" |
|  | Sold Each |


|  | $\mathbf{2 . 3 m m}$ | $\mathbf{4 . 0 m m}$ | $\mathbf{5 . 0 m m}$ | $\mathbf{6 . 0 m m}$ | $\mathbf{8 . 0 m m}$ | $\mathbf{1 0 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 2.25$ | $\$ 5.91$ | $\$ 5.91$ | $\$ 9.52$ | $\$ 11.31$ | $\$ 12.20$ |
| $6+$ | $\$ 2.38$ | $\$ 6.26$ | $\$ 6.26$ | $\$ 10.08$ | $\$ 11.97$ | $\$ 12.92$ |
| $1+$ | $\$ 2.65$ | $\$ 6.95$ | $\$ 6.95$ | $\$ 11.20$ | $\$ 13.30$ | $\$ 14.35$ |


|  | Order \# | 18-10013 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Material Head Sha Shank Size | ```Tungsten Vanadium Steel Cup \(3 / 32^{\prime \prime}\) Sold Each``` |  |  |  |  |
|  | 1.0mm | 1.5mm | 1.6mm | 1.8mm | 2.1mm | 2.3 mm |
| 12+ | \$2.90 | \$2.90 | \$2.90 | \$2.90 | \$2.90 | \$2.90 |
| $6+$ | \$3.02 | \$3.02 | \$3.02 | \$3.02 | \$3.02 | \$3.02 |
| $1+$ | \$3.15 | \$3.15 | \$3.15 | \$3.15 | \$3.15 | \$3.15 |



BUSCH ${ }^{\circledR}$ FAST-CUT CUP BURS,
FIG. \#411C

| Order \# | $\mathbf{1 8 - 1 0 0 1 6}$ |
| :--- | :--- |
| Material | Tungsten Vanadium Steel |
| Head Shape | Cup |
| Shank Size | $3 / 3{ }^{3}$ |
|  | Sold Each |


| Kit Order \# 18-1530 <br> Set of 13 Burs <br> (1 each) $0.9 \mathrm{~mm}-3.1 \mathrm{~mm}$ |  |  |
| :---: | ---: | ---: |
| $12+$ | $6+$ | $1+$ |
| $\$ 45.82$ | $\$ 47.81$ | $\$ 49.80$ |


|  | 0.9 mm | 1.0mm | 1.2 mm | 1.4mm | 1.5 mm | 1.6 mm | 1.8 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$2.72 | \$2.72 | \$2.72 | \$2.72 | \$2.72 | \$2.72 | \$2.72 |
| $6+$ | \$2.88 | \$2.88 | \$2.88 | \$2.88 | \$2.88 | \$2.88 | \$2.88 |
| $1+$ | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 | \$3.20 |
|  |  | 2.1mm | 2.3 mm | 2.5 mm | 2.7 mm | 2.9 mm | 3.1 mm |
|  | 12+ | \$2.72 | \$2.72 | \$4.76 | \$4.76 | \$4.76 | \$5.65 |
|  | $6+$ | \$2.88 | \$2.88 | \$5.04 | \$5.04 | \$5.04 | \$5.99 |
|  | $1+$ | \$3.20 | \$3.20 | \$5.60 | \$5.60 | \$5.60 | \$6.65 |



BUSCH ${ }^{\circledR}$ CUP BURS, FIG. \#77B

| Order \# | 18-10012 |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Head Shape | Ball |
| Shank Size | $3 / 3$ z' $^{\prime \prime}$ |
|  | Sold Each |




STULLER SELECT ROUND CARBIDE BURS

$\qquad$
PANTHER WAX AND PLASTIC CARVING BURS
Coarse burs that will not clog with wax.

| Item | Order\# | Grade | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{7 7 - 4 1 2 3}$ | Very Coarse | 2.3 mm | $\$ 22.49$ | $\$ 24.39$ | $\$ 27.10$ |
| B | $\mathbf{7 7 - 4 1 3 1}$ | Very Coarse | 3.1 mm | $\$ 30.01$ | $\$ 31.77$ | $\$ 35.30$ |
| C | $\mathbf{7 7 - 4 1 5 1}$ | Very Coarse | 5 mm | $\$ 37.02$ | $\$ 39.20$ | $\$ 43.55$ |

WOLF WAX CYLINDER BUR
D. Made of high-speed steel. Coarse-cut for rapid removal of wax. Teeth on the end for milling. Longer cutting surface. Shorter shank length ( 25 mm ) reduces centrifugal wobble.

## WOLF WAX ROUND BUR

E. Made of high-speed steel. Coarse cut for rapid removal of wax. Ideal cut for controlled rapid removal of material.



## GROBET USA ROTARY FILES

High-speed steel. Cylinder shape fits easily into insides of rings.
Not recommended for use exceeding 5,000 RPM.

| Order \# | Grade | Length | OD | Shank | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33-6029 | Standard | $11 / 2 \mathrm{~L}$ | $1 / 2^{11}$ | $3 / 321$ | \$26.78 | \$28.35 | \$31.50 |
| 33-6032 | Fine | $11 / 2^{\prime \prime}$ | 1/21 | $3 / 32^{11}$ | \$38.23 | \$39.89 | \$41.55 |
| 33-6350 | Standard | $1{ }^{11}$ | $1 / 2^{11}$ | 1/8" | \$26.36 | \$27.50 | \$28.65 |
| 33-6355 | Fine | $11 / 2$ " | 1/2" | 1/8" | \$38.23 | \$39.89 | \$41.55 |

INSIDE RING BURS
Made of carbide steel for extra-long life. These cylinder burs are designed for fast deburring, smoothing, and finishing of inside-ring surfaces. Made in the USA.

| Item Order \# | Grade | Length | OD | Shank | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SINGLE-CUT |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| A | $\mathbf{2 0 - 2 9 2 4}$ | Medium | $5 / 8^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 22.65$ | $\$ 23.99$ | $\$ 26.65$ |

DOUBLE-CUT

| B | $\mathbf{2 0 - 2 9 2 0}$ | Fine | $3 / 4^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 18.19$ | $\$ 19.26$ | $\$ 21.40$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C | $\mathbf{2 0 - 2 9 2 2}$ | Fine | $5 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 16.58$ | $\$ 17.55$ | $\$ 19.50$ |
| D | $\mathbf{2 0 - 2 9 3 0}$ | Fine | $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 11.99$ | $\$ 12.69$ | $\$ 14.10$ |
| E | $\mathbf{2 0 - 2 9 3 2}$ | Extra Fine | $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 11.99$ | $\$ 12.69$ | $\$ 14.10$ |
| F | $\mathbf{2 0 - 2 9 3 4}$ | Extra Coarse | $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $3 / 32^{\prime \prime}$ | $\$ 11.99$ | $\$ 12.69$ | $\$ 14.10$ |

$\qquad$

$\int_{0}^{U L L_{0}}$


CARBIDE CYLINDER BURS
Cylinder Length: ½"
Cylinder Diameter: $1 / 4^{1 "}$

| Item | Order \# | Grade | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| G | $\mathbf{2 0 - 2 8 2 0}$ | Coarse | $\$ 9.48$ | $\$ 10.67$ | $\$ 11.85$ |
| H | $\mathbf{2 0 - 2 8 2 1}$ | Medium | $\$ 9.48$ | $\$ 10.67$ | $\$ 11.85$ |
| J | $\mathbf{2 0 - 2 8 2 2}$ | Fine | $\$ 9.48$ | $\$ 10.67$ | $\$ 11.85$ |
| K | $\mathbf{2 0 - 2 8 2 3}$ | Extra Coarse | $\$ 9.48$ | $\$ 10.67$ | $\$ 11.85$ |

## CUTTERS

Stuller is proud to offer the highest quality milling cutters on the market These high precision cutters are available in the definitive shapes and sizes used by CAD/CAM operators around the world.

| Item | Order \# | Description | Color | Length | OD | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | 39-1830 | Pyramid | Light Blue | $11 / 2^{\prime \prime}$ | .004" | \$106.10 |
| M | 39-1831 | Helical Pyramid | Dark Blue | $11 / 2^{\prime \prime}$ | .004" | \$116.70 |
| N | 39-1832 | Double Flute | Black | $11 / 2^{\prime \prime}$ | 00.4" | \$87.05 |
| P | 39-1833 | Single Flute | Yellow | $11 / 2^{\prime \prime}$ | 0.47" | \$79.60 |




DIAMOND BURS
These long-wearing, high-quality diamond burs give you the hardness of diamond plate over steel to provide you with the uniform cutting edge you need to shape, grind, and finish with precision on a variety of materials. Round diamond point. Excellent for stone carving, clean-up work, glass, ceramics, and metals.

| Item | Order \# | Description | Grade | Length (mm) | $\underset{(\mathrm{mm})}{\mathrm{OD}}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 19-5000 | Set of 12 |  |  |  | \$45.05 | \$47.70 | \$53.00 |
| B | 19-5002 | Inverted Cone | Medium Fine | 1.5 | 2.7 | \$3.91 | \$4.08 | \$4.25 |
| C | 19-5006 | Tapered Cylinder | Medium Fine | 8.0 | 2.0 | \$3.91 | \$4.08 | \$4.25 |
| D | 19-5008 | Round Cone | Medium Fine | 12.0 | 7.0 | \$12.33 | \$13.05 | \$14.50 |
| E | 19-5009 | Cylinder | Medium Fine | 4.0 | 3.0 | \$3.91 | \$4.08 | \$4.25 |
| F | 19-5010 | Tapered Point | Medium Fine | 10.0 | 1.5 | \$3.91 | \$4.08 | \$4.25 |
| G | 19-5014 | Point | Medium Fine | 10.0 | 1.5 | \$3.91 | \$4.08 | \$4.25 |
| H | 19-5015 | Cone | Medium Fine | 6.0 | 3.5 | \$4.19 | \$4.37 | \$4.55 |
| J | 19-5017 | Cylinder | Medium Fine | 10.0 | 6.0 | \$8.46 | \$8.96 | \$9.95 |
| K | 19-5023 | Rounded Cylinder | Medium Fine | 12.0 | 3.0 | \$3.91 | \$4.08 | \$4.25 |
| L | 19-5027 | Round | Coarse |  | 1.0 | \$3.91 | \$4.08 | \$4.25 |
| M | 19-5028 | Round | Coarse |  | 2.0 | \$3.91 | \$4.08 | \$4.25 |
| N | 19-5029 | Round | Coarse |  | 3.0 | \$4.65 | \$4.85 | \$5.05 |
| P | 19-5030 | Round | Coarse |  | 4.0 | \$4.65 | \$4.85 | \$5.05 |
| 0 | 19-5020 | Round | Medium Fine |  | 1.0 | \$3.91 | \$4.08 | \$4.25 |
| R | 19-5021 | Round | Medium Fine |  | 2.0 | \$3.91 | \$4.08 | \$4.25 |
| S | 19-5026 | Round | Medium Fine |  | 4.0 | \$3.91 | \$4.08 | \$4.25 |
| T | 19-5031 | Tapered Cylinder | Medium Fine | 4.0 | 1.5 | \$3.91 | \$4.08 | \$4.25 |

## STULLER SELECT FINE DIAMOND POINTS

Fine grit $1 / 16$ " shank.

| Item Order\# | Description | Length | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| U | $\mathbf{1 9 - 6 0 0 0}$ | Set of 6 |  |  | $\$ 39.56$ | $\$ 41.28$ | $\$ 43.00$ |
| V | $\mathbf{1 9 - 6 0 0 1}$ | Needle | 8.0 mm | 1.4 mm | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| W | $\mathbf{1 9 - 6 0 0 2}$ | Flame | 8.0 mm | 1.4 mm | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| Y | $\mathbf{1 9 - 6 0 0 3}$ | Flame | 3.5 mm | 1.6 mm | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| Z | $\mathbf{1 9 - 6 0 0 4}$ | Football | 3.0 mm | 1.6 mm | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |
| AA | $\mathbf{1 9 - 6 0 0 5}$ | Football | 5.0 mm | 2.3 mm | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |



DIAMOND COATED BUR KIT

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 9 - 5 0 0 1}$ | 20-Piece Assorted | $\$ 6.52$ | $\$ 7.07$ | $\$ 7.85$ |
| $\mathbf{1 9 - 5 0 0 1}$ | 30-Piece Assorted (shown) | $\$ 6.64$ | $\$ 7.20$ | $\$ 8.00$ |

DIAMOND DISC CUTTER
Five diamond discs all medium grit and diamond electroplated onto both sides and used for cutting or sanding. Kit includes an $1 / 8^{\prime \prime}$ mandrel and discs that will also fit perfectly on a $3 / 32^{\prime \prime}$ shank.

| Order \# | OD | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{1 1 - 8 2 3 5}$ | $13 / 16^{\prime \prime}$ | 0.84 mm | $\$ 12.60$ | $\$ 14.18$ | $\$ 15.75$ |



STULLER SELECT DIAMOND KNIFE BURS
Medium grit $3 / 32^{\prime \prime}$ shank.

| Item | Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 9 - 6 0 1 0}$ | Assortment |  | $\$ 34.87$ | $\$ 36.38$ | $\$ 37.90$ |
| B | $\mathbf{1 9 - 6 0 1 1}$ | Knife-Edge | 2.3 mm | $\$ 8.79$ | $\$ 9.17$ | $\$ 9.55$ |
| C | $\mathbf{1 9 - 6 0 1 2}$ | Knife-Edge | 5.0 mm | $\$ 13.62$ | $\$ 14.21$ | $\$ 14.80$ |
| D | $\mathbf{1 9 - 6 0 1 3}$ | Knife-Edge | 6.0 mm | $\$ 13.62$ | $\$ 14.21$ | $\$ 14.80$ |



## SPECIALTY DIAMOND DISC AND CUT-OFF WHEELS

These specialty discs are designed to cut metals, shanks, prongs, fins, and stones. The discs are impregnated with diamonds - not just plated - so they will last longer. The wheels are set on $3 / 32$ " shanks. Made in Germany.

| Item | Order\# | Description | OD | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 1 - 8 2 0 0}$ | Serrated Disc/Saw | 30 mm | 0.3 mm | $\$ 43.48$ | $\$ 46.04$ | $\$ 51.15$ |
| F | $\mathbf{1 1 - 8 2 1 0}$ | Sintered Full Wheel | 8 mm | 0.9 mm | $\$ 41.35$ | $\$ 43.15$ | $\$ 44.95$ |
| G | $\mathbf{1 1 - 8 2 1 1}$ | Sintered Full Wheel | 22 mm | 0.4 mm | $\$ 59.85$ | $\$ 62.45$ | $\$ 65.05$ |
| H | $\mathbf{1 1 - 8 2 1 2}$ | Sintered Disc | 20 mm | 0.17 mm | $\$ 55.84$ | $\$ 58.27$ | $\$ 60.70$ |
| J | $\mathbf{1 1 - 8 2 2 0}$ | Mini-Flex | 8 mm | 0.15 mm | $\$ 22.26$ | $\$ 23.23$ | $\$ 24.20$ |
| K | $\mathbf{1 1 - 8 2 3 0}$ | Separating Wheel | 22 mm | 0.15 mm | $\$ 23.63$ | $\$ 25.02$ | $\$ 27.80$ |



MEDIUM WAX BURS
Swiss-made, tungsten-vanadium steel burs fluted to eliminate wax build-up. Can also be used for wood carving or plastic. Sizes and shapes may vary

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 8 - 5 0 8 9}$ | Set of 12, Medium | $\$ 26.10$ | $\$ 28.31$ | $\$ 31.45$ |




## CARBIDE PRACTICE FLY WHEELS

B. Carbide practice flywheels are strongly recommended before using a diamond flywheel.

## DIAMOND FLY WHEELS

A. Precision manufactured for bright-cutting gold and other precious metals. Constructed with a high-grade, industrial diamond chip. Note: A diamond flywheel is a delicate, precision instrument. As it is an industry standard, we do not offer a warranty-no refunds or exchanges. Caution: Wear proper eye and face protection.

| Item Order\# | Degree | $\mathbf{0 D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 1 - 0 9 0 0}$ | $90^{\circ}$ | 4.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 1}$ | $120^{\circ}$ | 4.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 2}$ | $130^{\circ}$ | 4.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 3}$ | $150^{\circ}$ | 4.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 4}$ | $180^{\circ}$ | 4.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 6}$ | $90^{\circ}$ | 3.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 7}$ | $120^{\circ}$ | 3.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 8}$ | $130^{\circ}$ | 3.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 0 9}$ | $150^{\circ}$ | 3.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
|  | $\mathbf{1 1 - 0 9 1 0}$ | $180^{\circ}$ | 3.0 mm | $\$ 52.72$ | $\$ 55.01$ | $\$ 57.30$ |
| B | $\mathbf{1 1 - 0 9 1 5}$ | $90^{\circ}$ | 3.0 mm | $\$ 34.26$ | $\$ 36.27$ | $\$ 40.30$ |
|  | $\mathbf{1 1 - 0 9 1 6}$ | $90^{\circ}$ | 4.0 mm | $\$ 34.26$ | $\$ 36.27$ | $\$ 40.30$ |



## DIAMOND FLY WHEELS

The diamond flywheel requires little or no maintenance when used properly. There are a few considerations that should be identified to maximize the serviceability of the tool's life. First, the diamond flywheel is intended to run at high speeds in excess of 30,000 RPM. The 30,000 RPM is considered the minimum speed at which one of these wheels should be operated.

The most common arrangement for a flex shaft and handpiece combination is the " $R$ " series motor and \#35 handpiece with the planetary drive system. Lubricating the diamond flywheel prior to and during cutting is not recommended. When using the diamond flywheel, it is necessary to allow it to come up to full speed before engaging with the surface to be cut. When cutting, very light pressure is all that is required. The wheel only needs to contact the surface to cut. If excessive force is applied while cutting, there is risk of knocking the diamond loose from the flywheel. If this happens, the flywheel is ruined and no attempt should be made to glue the diamond back into the flywheel. Excessive pressure will also reduce the speed of the flywheel during operation, thereby reducing its efficiency as well as making it more susceptible to damage.


FOREDOM ${ }^{\circledR}$ H. 35
Precision, high-speed handpiece with unique, planetary drive that produces $21 / 2$ times the speed of the motor. This feature makes it the perfect tool for bright cutting with diamond flywheels and for other high-speed work with carbide and diamond points. Seven collets are available ranging from $1 / 16^{\prime \prime}$ to $3 / 16^{6}$ including metric sizes. Pre-lubricated, double shielded, ball bearings rated for speeds to 35,000 RPM and comes with $1 / 8^{\prime \prime}$ collet (unless other size is specified). Recommended motor speed is 14,000 RPM.

| Item |  | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{3 4 - 2 2 1 6}$ | H.35 Handpiece | $\$ 125.38$ | $\$ 132.75$ | $\$ 147.50$ |  |
| D | $\mathbf{3 4 - 2 1 3 5}$ | $3 / 3^{\prime \prime}$ Collet | $\$ 17.21$ | $\$ 18.23$ | $\$ 20.25$ |  |
| E | $\mathbf{3 4 - 2 1 3 8}$ | $1 / 16^{16}$ " Collet | $\$ 17.21$ | $\$ 18.23$ | $\$ 20.25$ |  |
| F | $\mathbf{3 4 - 2 1 3 9}$ | $3 / 8^{\prime \prime}$ Collet | $\$ 17.21$ | $\$ 18.23$ | $\$ 20.25$ |  |

## ROTATING BUR HOLDER

Conveniently stores and organizes all sizes of burs. Holds 69, $3 / 32^{\prime \prime}$ or $1 / 8$ " shank, burs and $45,1 / 16^{\prime \prime}$ shank, burs. Made in the USA.

| Item | Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 9 - 9 2 7 2}$ | $7^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |

## BUR ORGANIZER

Lazy Susan type of bur organizer. Holds up to $150,3 / 32^{\prime \prime}$ shank, burs.

| Item | Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 9 - 9 2 7 0}$ | $7 " \times 4^{\prime \prime}$ | $\$ 12.33$ | $\$ 13.37$ | $\$ 14.85$ |

ROTATING TOOL HOLDER
Rotating bur holder organizes $114,3 / 32$ " shank, burs. It also features a handy $23 / 4$ " width $\times 3$ " depth cup at the top for storing bench tools.

| Item | Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| C | $\mathbf{1 9 - 9 2 7 3}$ | $7^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |



PLASTIC BUR HOLDER
Square plastic stand with clear cover for storing $34,3 / 32$ " and $18,1 / 8^{\prime \prime}$ shank accessories.

| Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 9 - 9 2 5 2}$ | $21 / 2^{\prime \prime} \times 2^{1} / 2^{\prime \prime}$ | $\$ 3.91$ | $\$ 4.08$ | $\$ 4.25$ |



PLASTIC BUR STAND
Holds $3 / 32^{\prime \prime}$ shank burs securely in place.

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 9 - 9 2 5 0}$ | $5^{\prime \prime} \times 1^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |



## MATT GOLD COLLECTOR

Traps gold and other precious metals for easy retrieval. Provides convenient precious metal collection while enabling you to keep arms and hands in a natural working position. Protects your eyes and skin from dust and flying particles. Optically clear Plexiglass ${ }^{\oplus}$ shield allows for glare-free viewing. Completely portable, lightweight, and strong. Plexiglass shield easily removes for cleaning and scrap collection.

| Order\# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 9 6 0}$ | $7^{\prime \prime} \times \mathbf{7}^{\prime \prime} \times \mathbf{9}^{\prime \prime}$ | $\$ 85.51$ | $\$ 90.54$ | $\$ 100.60$ |




## WOODEN BUR HOLDER

Clean up your bench with this spinning tool holder that makes hand tools easy-to-reach. This lazy Susan - style rack suits your small tool storage needs for gravers, files, burs, punches, and abrasive wheels.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 9 - 9 2 7 5}$ | $8^{\prime \prime} \times 10^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 34.40$ | $\$ 37.31$ | $\$ 41.45$ |

WOOD BUR BOX
Sturdy wooden bur boxes for $3 / 32^{\prime \prime}$ shank burs or other mounted tools. Burs sold separately.

| Item | Order\# | No. of Compartments | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| B | $\mathbf{1 8 - 0 5 0 4}$ | 24 | $\$ 6.25$ | $\$ 6.62$ | $\$ 7.35$ |

WOOD BUR BOX
Sturdy wooden bur boxes for $3 / 32$ " shank burs or other mounted tools.
Burs sold separately.

| Item | Order \# | No. of Compartments | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: | ---: |
| C | $\mathbf{1 8 - 0 5 0 5}$ | 36 | $\$ 6.84$ | $\$ 7.25$ | $\$ 8.05$ |

## WOOD BUR BOX

Sturdy wooden bur boxes for $3 / 32^{\prime \prime}$ shank burs or other mounted tools. Burs sold separately.

| Item | Order \# | No. of Compartments | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| D | $\mathbf{1 8 - 0 5 0 6}$ | 72 | $\$ 9.86$ | $\$ 10.44$ | $\$ 11.60$ |

## WOOD BUR BOX

Sturdy wooden bur boxes for $3 / 32^{\prime \prime}$ shank burs or other mounted tools.
Burs sold separately.

| Item | Order \# | No. of Compartments | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{1 8 - 0 5 0 7}$ | 100 | $\$ 10.46$ | $\$ 11.07$ | $\$ 12.30$ |

## BUR CADDY

The hexagon rotating caddy is 8 " high with a removable top. This is a great tool to organize your burs and small tools for easy access. There are 288 holes for burs and tools along with two 3" magnetic strips to keep your files and other hand tools close. The top offers 11 mm in diameter holes for extra tool storage. With the rotating caddy every tool it holds is visible and easy to access.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 9 - 9 2 7 6}$ | $6^{\prime \prime} \times 6^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 33.82$ | $\$ 36.67$ | $\$ 40.75$ |



## HANDY BUR BOX

Handy box for storing burs at the bench. Makes finding the right size bur easy and convenient. The handy bur box slips into your center bench drawer. Leave the burs in their original plastic packaging for quick retrieval. Made of hardwood with removable dividers.

| Item | Order \# | $\mathbf{W} \times \mathrm{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 8 - 0 5 0 9}$ | $8^{\prime \prime} \times 57 / 8^{\prime \prime} \times 11 / 2^{\prime \prime}$ | $\$ 7.82$ | $\$ 8.16$ | $\$ 8.50$ |

## HANDY BUR BLOCK

Cured, hardwood block with 88 holes that are $1 / 88^{\prime \prime}$ in diameter to accommodate either $1 / 8$ " or $3 / 32^{\prime \prime}$ shanks. Block is slanted and also features stay-put rubber pads on the bottom to prevent sliding. Will hold burs, needle files, beaders, and mini brushes.

| Item | Order \# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{1 9 - 9 2 6 0}$ | $41 / 2^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 11.68$ | $\$ 12.19$ | $\$ 12.70$ |

## BUR STAND PLUS

This bur stand is solid smooth wood painted black for an easy to see tool holder. This stand has a magnetic side for easy grab and go. There are 88 holes ( 8 holes of 11 drilled 4 mm holes). There is also a long groove for holding your unmounted wheels and other tools. This stand also has felt cushions on the bottom of the stand to prevent scratching on your bench.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{1 9 - 9 2 7 7}$ | $51 / 4^{\prime \prime} \times 6^{1 / 2} \times 2^{\prime \prime}$ | $\$ 18.59$ | $\$ 20.16$ | $\$ 22.40$ |

## BUR STAND

This bur stand fits on any microscope or any rod that has a diameter of $1 \frac{1}{2}$ ". This stand can stay on your bench or be mounted on a shaft or rod. This stand has a detachable base that holds nine $3 / 32^{\prime \prime}$ burs. The cylinder is split and connected by a single hex screw (hex key supplied) that can be tightened to fit on the shaft of a microscope stand. The cylinder has 48 holes.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 9 - 9 2 8 0}$ | $334^{\prime \prime} \times 3^{11 / 2 "} \times 31 / 4^{\prime \prime}$ | $\$ 32.05$ | $\$ 33.93$ | $\$ 37.70$ |



## Perfactory ${ }^{\circledR}$ Micro 3D Printer with Curing Chamber

The Perfactory 3D printer from EnvisionTEC is the smallest professional-grade desktop 3D printer in size with the highest resolution. It is a low cost, easy maintenance, and user friendly desktop manufacturing system designed for producing high quality models for direct casting or molding. Using the state-of-the-art digital light projection (DLP) technology from Texas Instruments ${ }^{\oplus}$ coupled with LED performance, the Perfactory Micro System allows access to a top quality professional grade prototyping system. Utilizing a built- in USB connection, the Perfactory Micro can connect directly to your personal PC workstation and works just like a personal desktop printer.

- Electrical Requirements:

100-120V, 3 Amps / 220-240V, 2 Amps

- Dimensions: 8" W $\times$ 9" L $\times 24$ " H


| Order \# | Description | 1+ |
| :---: | :--- | ---: |
| $\mathbf{2 4 - 1 0 0 6}$ | Perfactory Micro Hi-Res | $\$ 21,995.00$ |

- Easy handling through pre-adjusted material modules
- Very few moving parts and minimal consumable components guarantee a strong and reliable system
- Any STL data format can be easily imported using the Perfactory ${ }^{\otimes}$ Micro Software Suite
- Fully automated self-calibrating system

| MACHINE PROPERTIES* | PERFACTORY ${ }^{\ominus}$ MICRO HIRES |
| :--- | :--- |
| Build Envelope | $1.58^{\prime \prime} \times 1.18^{\prime \prime} \times 3.94^{\prime \prime}(40 \times 30 \times 100 \mathrm{~mm})$ |
| Resolution in X and Y | $0.0012^{\prime \prime}(31 \mu \mathrm{~m})$ |
| Dynamic Voxel Resolution <br> in Z (material dependent)** | $0.0010^{\prime \prime}$ to $0.0014^{\prime \prime}(25 \mu \mathrm{~m}$ to $35 \mu \mathrm{~m})$ |
| Light Source | LED |
| Data Handling | STL |

${ }^{*}$ Specifications are subject to change without notice. ${ }^{* *}$ A voxel is a volumetric pixel.

| MATERIALS AVAILABLE | IDEAL USAGE |
| :--- | :--- |
| PIC $\mathbf{1 0 0} \mathbf{~ M}$ | Direct Casting |
| EC500 M | Direct Casting |
| HTM140 M | HTV Molding with minimal post finishing |
| ABS Tough M | High impact general purpose material |
| EPIC M | Direct Casting |

## Perfactory ${ }^{\circledR}$ Micro Advantage 3D Printer

The Perfactory Micro Advantage is a low cost, easy maintenance and user friendly professional desktop 3D printer for the jewelry market. The Micro Advantage provides an attractive entry-level solution for jewelry designers and retailers. It boasts a build envelope that is double that of competitive entries in the market, while maintaining an enhanced XY resolution of 50 microns and a $Z$ resolution that is adjustable from 25 to 100 microns depending on the material used. This size makes the Micro Advantage the perfect companion to the original Micro for jewelry, allowing for larger pieces such as bangles and belt buckles to widen design capabilities. Impressive build speeds of up to 10 mm per hour for the full envelope are also possible depending on the material used.

- Office friendly desktop 3D printer
- Plug and play 3D printer with easy to use software interface
- Very few moving parts guarantees a strong and reliable production system
- Fully automated self-calibrating system
- Starter kit includes software CD and $1 / 2$ KG of material
- Electrical Requirements: 100-120V, 3 Amps/220-240V, 2 Amps
- Dimensions: $10^{\prime \prime} \mathrm{W} \times 11^{\prime \prime} \mathrm{L} \times 24^{\prime \prime} \mathrm{H}$


| MACHINE PROPERTIES* | PERFACTORY ${ }^{\text {® }}$ MICRO ADVANTAGE |
| :--- | :--- |
| Build Envelope | $2.36^{\prime \prime} \times 1.77^{\prime \prime} \times 3.94^{\prime \prime}(60 \times 45 \times 100 \mathrm{~mm})$ |
| Enhanced XY Resolution | $0.002^{\prime \prime}(50 \mu \mathrm{~m})$ |
| Dynamic Z Resolution** | $0.001^{\prime \prime}$ to $0.004^{\prime \prime}(25 \mu \mathrm{~m}$ to $100 \mu \mathrm{~m})$ |
| Build Speed | Up to $0.394^{\prime \prime}(10 \mathrm{~mm}) /$ hour for full envelope** |
| Light Source | LED |
| Data Handling | STL |

* Specifications are subject to change without notice. ** Material dependent.

| MATERIALS AVAILABLE | IDEAL USAGE |
| :--- | :--- |
| PIC $\mathbf{1 0 0} \mathbf{~ M}$ | Casting |
| EC500 M | Casting |
| HTM140 M | High temperature molding |
| EPIC M | Casting |

## EasyCast 12

The EasyCast 12 is an induction casting machine designed to increase your productivity with a high degree of control. It casts all metals, precious and non-precious, with an automatic frequency setting so you can enjoy a fast melting process. The heating generator utilizes the latest high efficient technology. This reliable modular system has low maintenance requirements and low energy consumption.

## FEATURES:

- Advanced digital control panel with status and diagnostics messages
- Centrifugal injection casting with pneumatic movement for fast coil decent
- Integral water cooling system with pressure and water temperature control
- Centrifugal arm balancing with adjustable counterweight
- Infrared temperature reader with automatic or manual working cycle

- Auto locking of the chamber lid during centrifugal phase for maximum safety
- Melting power regulation
- DC motor with reduction gear: adjustable acceleration from 0.1 to 1 second
- Max rotating speed-500 turns/minute rotation timeout pre-set at 40 seconds
- Normal atmospheric operation
- Internal vacuum pump (EC-12)
- Insert (Argon) gas circuit included (EC-12)
- Set up with 44 mm diameter crucibles for jewelry casting (EC-12)


## BENEFITS:

- Improved energy efficiency
- Higher degree of control
- Increased repeatability
- Low maintenance requirements
- Increased productivity


| Absorbed Power kW (max) | 3.0 |
| :---: | :---: |
| AC Line Volts ( $50 / 60 \mathrm{~Hz}$ ) | 230 $\pm 10 \%$ |
| Line Phases | , |
| Crucible Capacity | $150 \mathrm{~g} \mathrm{Pt}, 150 \mathrm{~g} \mathrm{Au}$, 80 g Ag |
| Flask Size (max) | $3 " \times 3$ " |
| Max Melting ( ${ }^{\circ}$ ) | $2000 \mathrm{C}^{\circ}$ |
| IR Temperature Reader | Included |
| Cooling System | Water-Internal |
| Vacuum Pump | Included |
| Weight | 265 lbs ( 120 kg ) |
| Dimensions W $\times \mathrm{L} \times \mathrm{H}$ | $\begin{aligned} & 19.2^{\prime \prime} \times 26^{\prime \prime} \times 41^{\prime \prime} \\ & (49 \times 66 \times 105 \mathrm{~cm}) \end{aligned}$ |

## CS1 Digital Control Casting Machine

The CS1 Digital Control Casting Machine is the next step for casting made easy. This casting machine has a overhaul of new features to give you the ultimate casting experience.

## FEATURES:

- New melting circuit
- New control board
- New temperature reader
- New Hi-Tech Thermo-Regulator
- Metal emissivity regulation
- Auto-diagnosis
- 10 memories
- Vacuum-Argon washing cycle
- Automatic vacuum release


## BENEFITS:

- Better power regulation
- Totally microprocessor controlled
- More accurate temperature reading
- Better heating cycle control
- Easier to find the metal melting point
- 10 error messages
- 9 parameter per program
- For casting with stone
- No more valve on the top of the lid

This system was designed primarily for the casting of platinum, but can also be used for casting all precious metal alloys and industrial alloys. The CS1 is available with a 7.5 kW melting circuit and can be fitted with temperature controls, vacuum systems, and inert gas inlets. The crucible can handle about 350 grams of platinum, 800 grams of pure gold or 250 grams of stainless steel.


## SuperCast 12

SuperCast 12 is a casting system in a class by itself, with development of the patented RCS (Rotating Coil System), the user no longer has to raise or lower the induction coil. With the RCS, the induction coil is integrated into the centrifugal arm, thus allowing the material being cast to continue stay under heat as it is being shot into the flask. Being able to keep the metal under heat during the centrifuge process leads to denser castings with less porosity. The Supercast is totally microprocessor controlled. With decreased coil maintenance you can spend more time focusing on the actual casting of items.

## FEATURES:

- Patented RCS system (Rotating Coil System)
- Totally microprocessor controlled
- 10 memories (complete working programs with up to 9 paramemters/program)
- 4kW induction melting circuit

- Fiber optic temperature control with ETC calibration
- 220V, single-phase power requirement
- Excellent for gold alloy
- Ideal for chrome-cobalt and nickel-chrome
- Exceptional for platinum and titanium
- Vacuum pump system
- Inert gas dispensing system
- Internal water circulator


## BENEFITS:

- Decreased coil maintenance
- Eliminates induction coil movement
- Metal is still heated during rotation
- Extremely compact metal casting


| Power | 4 kW |
| :--- | :--- |
| Frequency | $65 / 90 \mathrm{kHz}$ |
| Consumption | AC 220 V, Single phase, <br> $50 / 60 \mathrm{~Hz}$ |
| Crucible Capacity | 200 g Pt |
| Flask Size (max) | $3^{\prime \prime} \times 3^{\prime \prime}$ |
| Max Melting (T) | $2000 \mathrm{C}^{\circ}$ |
| Temperature Reader | Optional |
| Cooling System | Built-in or external closed <br> circuit system |
| Vacuum Pump | Included |
| Rotation Time | Preset at 45 seconds, <br> automatic rotation stop |
| Casting Time | Adjustable |
| Weight | $256 \mathrm{lbs}(130 \mathrm{~kg})$ |
| Dimensions $\mathbf{W} \times \mathrm{L} \times \mathbf{H}$ | 27 " $\times 22^{\prime \prime} \times 40$ " <br> $(67 \times 22 \times 100 \mathrm{~cm})$ |
|  |  |

## EasyMelt and EasyMelt HT

The EasyMelt is a robust industrial design for low or high volume melting and is micro-processor controlled. This is a compact bench-top system for your everyday use. For your convenience it has fast melting times with a powerful 2.5 kW melting circuit.

## FEATURES:

- Robust industrial design for low or high volume melting
- Powerful 2.5 kW melting circuit for fast melt times
- Micro-processor controlled
- Operates on 220V, 1-phase; $50 / 60 \mathrm{~Hz}$

LED display for power regulation, exact timing,

- Thermocouple temperature control
- 10-15 minute melt times for up to 2 kg of gold (EasyMelt)
- Under 5 minute melt time for up to 250 grams of platimum (EasyMelt HT)
- Optional water cooling system


## BENEFITS:

- Compact bench-top system
- Extremely fast and efficient melting of small metal quantities
- Economical and practical for jewelry applications
- Greater degree of control over melting processes


| Order \# | Description | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| $\mathbf{2 2 - 2 1 8 0}$ | EasyMelt | $\$ 5,450.00$ |
| $\mathbf{2 2 - 2 1 7 0}$ | EasyMelt HT | $\$ 5,950.00$ |

EastMelt HT Specifications:

| Power Supply | $220 \mathrm{~V}, 1$-Phase; $50 / 60 \mathrm{~Hz}$ |
| :--- | :--- |
| Output Power | 2.5 kW |
| Crucible Capacity | 250 grams platinum |
|  | 150 grams gold |
| Water Cooling | System requires water cooling |
| Weight | $20 \mathrm{lbs}(9 \mathrm{~kg})$ |
| Dimensions $\mathbf{W} \times \mathrm{L} \times \mathbf{H}$ | $14^{\prime \prime} \times 18^{\prime \prime} \times 7^{\prime \prime}$ |
|  | $(355 \times 457 \times 178 \mathrm{~mm})$ |



Centrifugal Casting Machine $20^{\prime \prime} \mathrm{W} \times 20^{\prime \prime} \mathrm{L} \times 12^{\prime \prime} \mathrm{H}$


## CENTRIFUGAL FLOOR MODEL CASTING MACHINE

The unit that pioneered the centrifugal casting technology in the jewelry industry. "Broken" arm designs allows maximum metal flow into flask.

- Automatic digital count down timer
- Adjustable speed
$-1 / 3 \mathrm{Hp}$ motor
- Dimensions: 30" W x 30" D x 39" H
- 110V - "Broken" arm designs allows maximum metal flow into flask

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: |
| F | $\mathbf{2 2 - 1 3 0 4}$ | Centrifugal Machine | $\$ 6,343.15$ |

## VACUUM INVESTMENT MACHINE

This $20^{\prime \prime} \times 20$ " spring-mounted investment table is simple to set up and operate. Its heavy-duty 12 -gauge cabinet features a durable powder-coated finish and hinged front panel with latched access to vacuum pump.

- Bell jar dimensions: $143 / 4$ inner diameter $131 / 4$ inner height
- 15CFM/ 1hp Oil-Filled vacuum pump
- Ball vise controlled vacuum flow rate
- Extra thick internal rubber hosing
- Made in the USA

| Item Order\# | Description | $\mathbf{1 +}$ |  |
| :---: | :--- | ---: | ---: |
| A | $\mathbf{2 2 - 1 3 0 1}$ | Investment Machine | $\$ 7,692.35$ |

## COMBINATION CASTING AND VACUUM INVESTING MACHINE

Space saving design incorporates both casting and investing in one unit!

- Heavy duty design and fabrication with the strongest vacuum pump in the market
- Vacuum storage tank enables instantaneous pull around casting flask
- Foot pedal operated for hands free use
- Large flask capacity: up to: 6" diameter and 9" height
- $20^{\prime \prime} \times 20^{\prime \prime}$ Investment table
- Counter balanced lift allows easy storage of bell jar
- Dimensions: 42" W x 22" D x 44" H

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: |
| B | 22-1302 | Combination Machine | $\$ 16,153.85$ |

## SUPER VAC VACUUM CASTING MACHINE

Proven technology with proven results makes the
Arbe Super Vac the choice for the professional caster.

- Heavy duty design and fabrication with the strongest vacuum pump in the market
- Vacuum storage tank enables instantaneous pull around casting flask
- Foot pedal operated for hands free use
- Large flask capacity: up to 8" diameter and 12" height
- Dimensions: 25" W x 25" D x 40" H

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| C | $\mathbf{2 2 - 1 3 0 0}$ | Casting Machine | $\$ 10,769.25$ |




## VAC-U-CAST JUNIOR

Compact, quality-built table-top unit allows for vacuum investing and casting to be accomplished on the same table simply by changing rubber pads and operating two valves. Complete with 9" diameter x 8 " high bell jar, crucible with handle, silicon casting pad, and 32 oz. vacuum pump oil. One-year limited manufacturer's warranty. Made in the USA. Replacement parts below.

| Order \# | Description | $\mathbf{1 +}$ |
| ---: | ---: | ---: |
| $\mathbf{2 2 - 1 1 8 0}$ | Vac-U-Cast Junior | $\$ 830.00$ |

## STULLER VAC-U-CAST MASTER-CAST



The Vac-U-Cast Master-Cast is an exceptional unit combining all the features with the added dimension of casting in a recessed vacuum chamber. Vacuum investing is accomplished under a bell jar 9 " diameter x $8^{\prime \prime}$ high. The recessed vacuum chamber will accommodate perforated flasks as large as 5 " diameter $x 7$ " high or as small as $33 / 8$ "diameter $\times 4$ " high. A direct drive, two-stage pump and motor create a free air displacement of 85 liters per minute ( 3 cfm ) producing a vacuum of 25 microns or better, exceeding the required 29.9 inches of mercury, in less than 1 minute. Motor $1 / 3$ hp 120V. (7amp). One-year limited manufacturer's warranty. Made in the USA. Replacement parts below.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 2 - 1 1 5 0}$ | Vac-U-Cast Master-Cast | $\$ 1,435.00$ |

REPLACEMENT PARTS


| Item | Ord er \# | Description | Size | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| A | 22-1185 | Bell Jar (2.8 lb) | $9^{\prime \prime} \times 8^{\prime \prime}$ | \$115.55 |
| B | 21-7005 | Perforated Flask (1.39 lb) | $33 / 8^{\prime \prime} \times 4^{\prime \prime}$ | \$29.25 |
| C | 22-4727 | Sprue Base (4.35 lb) | $33 / 8{ }^{\prime \prime}$ | \$4.55 |
| D | 21-4999 | Adapt Plate Vacuum Hole (1 lb) |  | \$69.00 |
| E | 21-5001 | Casting Silicone Seal | 7" | \$15.95 |
| F | 21-5002 | Investing Rubber Pad (Black) (1.5 lb) |  | \$16.15 |
|  | 21-5006 | Flask Seal (4.8 oz) | 21/2" | \$15.95 |
| G | 21-5003 | Flask Seal (4.8 0z) | $33 / 8^{\prime \prime}$ | \$13.25 |
| H | 21-5004 | Flask Seal (4.8 0z) | $41 / 2^{\prime \prime}$ | \$12.20 |
| $J$ | 21-5005 | Flask Seal (4.8 0z) | $5{ }^{\prime \prime}$ | \$12.10 |
| K | 22-1152 | Plate Adaptor ( 1.51 lb ) | $33 / 8^{\prime \prime}$ | \$69.00 |
| L | 22-1153 | Plate Adaptor (1.04 lb) | $4 "$ | \$73.70 |
| M | 21-5000 | Silicone Rubber Pad | $51 / 2^{\prime \prime}$ | \$12.05 |
| N | 22-7911 | Crucible |  | \$14.25 |
| P | 22-7912 | Handle |  | \$7.05 |
| 0 | 22-7910 | Crucible with Handle |  | \$22.45 |



ALUMINIUM CASTING BLOCK

| Item | Order \# | Description | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | ID | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| R | 21-4995 | Casting Block | $6^{\prime \prime} \times 6^{\prime \prime} \times 6^{\prime \prime}$ | 21/2" | \$169.00 |
| REPLACEMENT PARTS |  |  |  |  |  |
| S | 21-4996 | Aluminum Plate |  | $31 / 21$ | \$65.00 |
|  | 21-4996 | Aluminum Plate |  | $4{ }^{\prime \prime}$ | \$65.00 |
|  | 21-4996 | Aluminum Plate |  | $3^{\prime \prime}$ | \$65.00 |
| T | 21-5007 | Silicone Gasket |  |  | \$16.95 |

## OIL-LESS VACUUM PUMP AND MOTOR

Direct-drive, two-stage, high vacuum pump features a free air displacement of 85 liters per minute ( 3 cfm ) to produce a vacuum of 25 microns or better.

- Powerful $1 / 3 \mathrm{hp}-1725 \mathrm{RPM}-120 \mathrm{~V}(60 \mathrm{~Hz})$ motor
- Intake nipple OD ¼"
- A replacement for most vacuum casting or investing machines using $9^{\prime \prime} \times 8$ " bell jars requiring a high vacuum of 29.9" of mercury
- One-year warranty
- Made in the USA


| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 22-1170 | Oil-Less Vacuum Pump and Motor | $\$ 514.95$ |



## VACUUM PUMP

Two stage deep draw vacuum pump, $1 / 2 \mathrm{hp} / 110 \mathrm{v}$, 3CFM


| Order \# | Description | 1+ |
| ---: | ---: | ---: |
| $\mathbf{2 2 - 1 2 0 0}$ | 3CFM Vacuum Pump | $\$ 476.95$ |



VACUUM PUMP
Two stage deep draw vacuum pump, $3 / 4 \mathrm{hp} / 110 \mathrm{v}$, 8CFM


| Order \# | Description | 1+ |
| ---: | :--- | ---: |
| 22-1201 | 8 CFM Vacuum Pump | $\$ 630.80$ |




## JUMBO FIREBRICK FURNACE

Extra-large capacity firebrick furnace with a chamber measuring ID 22" x 22" x 13".
Heavy-gauge steel shell, deeply recessed heating elements, and a swing door allows easy access to the rear of the chamber. Back of the furnace is predrilled to accommodate optional pyrometer or controller thermocouple. Comes with wax elimination tray. Made in the USA. - Maximum temperature: $2,000^{\circ} \mathrm{F} / 1,093^{\circ} \mathrm{C}$

- Electrical requirements: 240V-24 amps - $50 / 60 \mathrm{hz}-5,760$ watts
- Options: Furnace controller 22-1112 or Pyrometer 22-1600


| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: |
| A | $\mathbf{2 2 - 1 0 7 0}$ | Jumbo Furnace 240V | $301 / \mathbf{N}^{\prime \prime} \times 27^{\prime \prime} \times 23^{\prime \prime}$ | $\$ 1,599.95$ |
| REPLACEMENT PARTS |  |  |  |  |


| B | $\mathbf{2 2 - 1 0 7 1}$ | Heating Element (Pack of 2) | $\$ 84.75$ |  |
| :--- | :--- | :--- | :--- | :--- |
| C | $\mathbf{2 2 - 1 0 7 2}$ | Wax Elimination Tray (included) | $20^{\prime \prime} \times 20^{\prime \prime}$ | $\$ 62.50$ |



## LARGE FIREBRICK FURNACE

Large capacity firebrick furnace, chamber dimensions ID $13^{\prime \prime} \times 13^{1 / 2 "} \times 83 / 4^{\prime \prime}$. Heavy-gauge steel shell, deeply recessed heating elements, counter-weighted door, 10 -setting switch, and a top vent. Back of the furnace is predrilled to accommodate optional pyrometer or controller thermocouple. Comes with wax elimination tray. Made in the USA.

- Maximum temperature: $2,000^{\circ} \mathrm{F} / 1,093^{\circ} \mathrm{C}$
- Electrical requirements: 240V-13amps - 50/60hz
- Options: Furnace controller 22-1112 or Pyrometer 22-1600


| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: |
| D | 22-1060 | Large Furnace 240V | $211 / \mathbf{N}^{\prime \prime} \times 19^{\prime \prime} \times 18^{\prime \prime}$ | $\$ 946.95$ |

REPLACEMENT PARTS

| E | $\mathbf{2 2 - 1 0 6 1}$ | Heating Element (Set of 2) |  | $\$ 105.80$ |
| :---: | ---: | :--- | :--- | ---: |
| F | $\mathbf{2 2 - 1 0 6 2}$ | Wax Elimination Tray (included) | $111 / 2^{\prime \prime} \times 111 / 2^{\prime \prime}$ | $\$ 20.70$ |



## MEDIUM FIREBRICK FURNACE

Medium-size, firebrick furnace with a chamber measuring ID $81 / 2^{\prime \prime} \times 9^{\prime \prime} \times 83 / 4^{\prime \prime}$. Heavygauge steel shell, deeply recessed heating elements, counter-weighted door, 10 -setting switch, and a top vent. Back of furnace is predrilled to accommodate optional pyrometer or controller thermocouple. Comes with wax elimination tray. Made in the USA.

- Maximum temperature: $2,000^{\circ} \mathrm{F} / 1,093^{\circ} \mathrm{C}$
- Electrical requirements: 120V-50/60hz - 14.1amps
- Options: Furnace Controller 22-1100, Pyrometer 22-1600

| Item |  | Description | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| G |  | Medium Furnace 120V | $171 / 2^{\prime \prime} \times 15^{\prime \prime} \times 18^{\prime \prime}$ | \$844.15 |
| REPLACEMENT PARTS |  |  |  |  |
| H | 22-1056 | Heating Element (Set of 2) |  | \$84.75 |
| J | 22-1057 | Wax Elimination Tray (included) | $7{ }^{\prime \prime} \times 7^{\prime \prime}$ | \$39.00 |

SMALL FIREBRICK FURNACE, 120V


Small capacity firebrick furnace with a heavy-gauge steel shell, deeply recessed heating elements, and a swing door with inspection port. Comes with a wax elimination tray.

- Maximum temperature: $2,000^{\circ} \mathrm{F} / 1,093^{\circ} \mathrm{C}$
- Electrical Requirements: 120V-14 amps -50/60 hz
- Chamber Measures: 6"W x 6"H x 6"D
- Optional: Furnace Controller 22-1100 or 22-1600 Pyrometer

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | 1+ |
| :---: | :---: | :--- | :--- | ---: |
| K | $\mathbf{2 2 - 1 0 5 1}$ | Small Furnace 120V | $6^{\prime \prime} \times 6^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 589.95$ |
| REPLACEMENT PARTS |  |  |  |  |
| L | $\mathbf{2 2 - 1 0 5 2}$ | Heating Element Set of 2 |  |  |
| M | $\mathbf{2 2 - 1 0 5 3}$ | Wax Elimination Tray (included) | $5^{\prime \prime} \times 5^{\prime \prime}$ | $\$ 74.15$ |

## FIBER FURNACE WITH CONTROLLER

This small capacity (ID $73 / 4$ " $\mathrm{W} \times 73 / 4$ " $\mathrm{H} \times 8$ " D ) chamber is an easy-to-use muffle kiln with a top vent for burnout. Fully programmable it features the "Sentry Xpress 3 Button Digital Controller" with custom burnout program capability as well as built-in 5,8 , and 12 hour preset programs.

- Maximum temperature: $2,000^{\circ} \mathrm{F} / 1,093^{\circ} \mathrm{C}$
- Electrical Requirements: 120V/15A


FIBER FURNACE WITH CONTROLLER
This larger capacity (ID $101 / 2^{\prime \prime} \mathrm{W} \times 7$ " $\mathrm{H} \times 101 / 2^{\prime \prime} \mathrm{D}$ ) chamber is a user-friendly muffle kiln with a top vent for burnout. Fully programmable it features the "Sentry 2.0, 12 Button Controller" with three standard built-in programs, custom program capability, delay start, alarm, skip segment, and more.


## NEYCRAFT ${ }^{\circledR}$ FIBER FURNACE

Compact, electric furnace features alumina-silica fiber insulation with embedded heating elements. Lighter, faster heating than a firebrick furnace. Made of 20 gauge steel. Cabinet remains cool. Unit comes with pyrometer.

- Maximum temperature: $2,000^{\circ} \mathrm{F}$
- Chamber measures: 9" W x 9" H x 6½" D
- Ceramic wax elimination tray: 8" $\times 8$ "
- Electrical requirements: $120 \mathrm{~V}, 12 \mathrm{amps}, 50 / 00 \mathrm{hz}, 1400$ watts

| Item Order \# |  | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| C | $\mathbf{2 2 - 1 0 0 0}$ | Fiber Furnace | $\$ 1,038.50$ |
| D | $\mathbf{2 2 - 1 1 2 3}$ | Fiber Hardening Agent | $\$ 9.35$ |
| E | $\mathbf{2 2 - 1 1 2 4}$ | Replacement Muffle 120V | $\$ 341.30$ |
| F | $\mathbf{2 2 - 1 1 0 1}$ | Infinity Controller | $\$ 72.45$ |
| G | $\mathbf{2 2 - 1 1 0 2}$ | Knob Infinite Control | $\$ 14.45$ |

## VULCAN BENCHTOP FURNACES

The Vulcan, programmable air exchange furnaces offers faster, cleaner burnout than traditional furnaces. Pre-heated air is drawn through the chamber and removed with an internal Venturi Exhaust System. The removal of all ash and other contaminates make this furnace ideal for platinum burnout. Programmable temperature ranging from $122-2012^{\circ} \mathrm{F}$ assures precision firing. Nine three-stage programs, icon graphics for easy data entry, and advanced hybrid muffle design make this furnace a requirement for any product casting operation. Two-year manufacturer's warranty.

- Max Temperature: $2,012^{\circ} \mathrm{F}\left(1,100^{\circ} \mathrm{C}\right)$
- Exterior Dimensions: 15.8" W x 16" H x 17" D
- Interior Dimensions: 9" W x 7" H x 9" D
- Flask Capacity: Solid, $15-2^{\prime \prime} \times 3^{\prime \prime}, 4-4$ " $\times 6^{\prime \prime}$;

Perforated, 2-4" x 6" - Power: 240V/7.2 amps/2200 watts


| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: |
| H | $\mathbf{2 2 - 1 0 4 5}$ | Vulcan 3550A Furnace with Air Exchange, 230V | $\$ 2,595.00$ |
| $J$ | $\mathbf{2 2 - 1 0 4 7}$ | Replacement Muffle 240V | $\$ 635.90$ |




Outside Dimensions: $15^{\prime \prime} \mathrm{W} \times 16^{\prime \prime} \mathrm{H} \times 17^{\prime \prime} \mathrm{D}$



## STULLER FURNACE CONTROLLER

Programmable controller for burnout furnaces with three pre-programmed cycles and six easily custom programmed to the individual casters needs. Easy "start up", choice of a 5 -hour, 8 -hour or 12 -hour cycle by touch entry key. Step-by-step instructions for creating a custom burnout cycle are easy to follow. Added features: power failure protection, delay start time from 1 minute to 99 hours (great for overnight burnouts), a reminder signal to remove wax trays, and digital temperature readout. Self-standing or can be easily mounted to a wall. Comes with thermocouple.
Dimensions: 16 " x 4" x 7 ".

| Item | Order \# | Description | Volts | Amps | Hertz | 1+ |
| :---: | :---: | :--- | :--- | :--- | :--- | ---: |
| A | $\mathbf{2 2 - 1 1 0 0}$ | Controller | 120 | 15 | 60 | $\$ 695.95$ |
| B | $\mathbf{2 2 - 1 1 1 0}$ | Controller | 120 | 20 | 60 | $\$ 695.95$ |
|  | $\mathbf{2 2 - 1 1 1 2}$ | Controller | 240 | 30 | $50 / 60$ | $\$ 729.00$ |
| C | $\mathbf{2 2 - 1 1 1 3}$ | Replacement Thermocouple |  | $\$ 61.40$ |  |  |




## PYROMETER

Used to measure temperature in burnout ovens. Measures within 98\% accuracy, from $0^{\circ}$ to $2,500^{\circ}$ F on meter. Has $5^{\prime \prime}$ lead and sheathed $1 / 8^{\prime \prime}$ thermocouple.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{2 2 - 1 6 0 0}$ | Analog (Needle) Pyrometer | $\$ 164.20$ |

STRESS-RELIEVED, QUARTZ STIRRING ROD
Used to stir molten metal. Made of superior quality clear quartz, annealed and fire polished. Melting point $3,183^{\circ} \mathrm{F}\left(1,750.6^{\circ} \mathrm{C}\right)$.

| Item | Order\# | Outside Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| A | $\mathbf{2 1 - 9 0 5 0}$ | $3 / 8^{\prime \prime}$ | $12 "$ | $\$ 18.31$ | $\$ 19.10$ | $\$ 19.90$ |

A


B
 content on Stuller.com.


GROBET USA ${ }^{\circledR}$ DIGITAL METAL MELT
Specially designed and constructed for melting metals for casting and alloying. Features $2,050^{\circ} \mathrm{F} / 1,120^{\circ} \mathrm{C}$ operating range. Has heavy-duty graphite crucible, precise temperature control, LED on/off indicator light, $1 \mathrm{~kg}(32$ oz) capacity, easy-to-read digital display, and $110 \mathrm{~V}-50 / 60$ cycle power.


| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | :---: |
| H | 22-2110 | Digital Metal Melt | \$861.00 |
| REPLACEMENT PARTS |  |  |  |
| J | 22-2111 | Crucible (11.37 0z) | \$28.60 |
| K | 22-2112 | Heating Element (5 lb) | \$360.00 |



FILE-A-WAX ORANGE MILLING WAX
This revolutionary wax (burnt orange) was developed for wax milling. The milling wax is available in round, flat tablets, solid bars, and multiple ring tube sizes. The wax is harder than the green standard wax. Great for all CAD milling machines or hand wax carving. Melt point $232^{\circ} \mathrm{F}$.

FLIP FIXTURE DISCS

| Item | Order \# | OD | Height | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 9 1 0 1}$ | $2^{\prime \prime}$ | $0.42^{\prime \prime}$ | 27 discs | $\$ 28.89$ | $\$ 30.14$ | $\$ 31.40$ |
| B | $\mathbf{2 1 - 9 1 0 2}$ | $2^{\prime \prime}$ | $0.63^{\prime \prime}$ | 18 discs | $\$ 28.89$ | $\$ 30.14$ | $\$ 31.40$ |
| C | $\mathbf{2 1 - 9 1 0 3}$ | $2^{\prime \prime}$ | $0.83^{\prime \prime}$ | 15 discs | $\$ 28.89$ | $\$ 30.14$ | $\$ 31.40$ |
| D | $\mathbf{2 1 - 9 1 0 4}$ | $2^{\prime \prime}$ | $1^{\prime \prime}$ | 12 discs | $\$ 28.89$ | $\$ 30.14$ | $\$ 31.40$ |

## REVO WAX SLICES

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{P e r}$ Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{2 1 - 9 1 2 0}$ | $23 / 8^{\prime \prime} \times 23 / 8^{\prime \prime} \times 0.32^{\prime \prime}$ | 8 slices | $\$ 12.24$ | $\$ 12.96$ | $\$ 14.40$ |
| F | $\mathbf{2 1 - 9 1 2 1}$ | $23 / 8^{\prime \prime} \times 23 / 8^{\prime \prime} \times 0.47^{\prime \prime}$ | 6 slices | $\$ 12.24$ | $\$ 12.96$ | $\$ 14.40$ |
| G | $\mathbf{2 1 - 9 1 2 2}$ | $23 / 8^{\prime \prime} \times 23 / 8^{\prime \prime} \times 0.7^{\prime \prime}$ | 4 slices | $\$ 12.24$ | $\$ 12.96$ | $\$ 14.40$ |


$1 / 2 \mathrm{lb}$ Kit Contains:
$2-4^{\prime \prime} \times 2^{\prime \prime} \times$. $23^{\prime \prime}$ slices
$2-4$ " x 2" x .42" slices
$1-4$ " $\times 2^{\prime \prime} \times .72$ " slice
1 lb Kit Contains
$2-4^{\prime \prime} \times 2$ " $\times .23^{\prime \prime}$ tablets
$2-4^{\prime \prime} \times 2^{\prime \prime} \times .32^{\prime \prime}$ tablets $2-4^{\prime \prime} \times 2^{\prime \prime} \times .42^{\prime \prime}$ tablets
2-4" x 2" x .49" tablets $1-4^{\prime \prime} \times 2$ " $\times .72^{\prime \prime}$ tablet

## MILLING WAX SLICES

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 9 0 9 9}$ | $2^{\prime \prime} \times 2^{\prime \prime} \times 0.2^{\prime \prime}$ | 16 slices | $\$ 12.24$ | $\$ 12.96$ | $\$ 14.40$ |

## HALF LB TABLETS

| $\mathbf{O r d e r} \#$ | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{P e r} \mathbf{P a c k}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 9 1 1 4}$ | $2^{\prime \prime} \times 4^{\prime \prime} \times .42^{\prime \prime}$ | 4 slices | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{2 1 - 9 1 1 5}$ | $2^{\prime \prime} \times 4^{\prime \prime} \times .49^{\prime \prime}$ | 3 slices | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{2 1 - 9 1 1 6}$ | $2^{\prime \prime} \times 4^{\prime \prime} \times 0.72^{\prime \prime}$ | 2 slices | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{2 1 - 9 1 1 7}$ | $1 / 2 \mathrm{lb}$ kit | 5 slices | $\$ 12.24$ | $\$ 12.96$ | $\$ 14.40$ |
| $\mathbf{2 1 - 9 1 1 8}$ | 1 lb kit | 9 slices | $\$ 21.60$ | $\$ 24.30$ | $\$ 27.00$ |

WHICH FILE-A-WAX FORMULA IS RIGHT FOR YOUR NEXT PATTERN?

|  | Blue | Purple | Green | Gold | Orange |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Flexibility | Excellent | Good | Fair | Good | Poor |
| Hand Carvability | Good | Excellent | Fair | Good | Fair |
| Hardness (Shore D) | 52 (Softest) | 55 | 55 | 58 | 63 (Hardest) |
| High-Speed CNC | Poor | Fair | Good | Excellent | Excellent |
| Viscosity @ 300 (cPs) | 3650 | 3350 | 1560 (Thinnest) | 2030 | 3550 |

## FILE-A-WAX RING TUBES

Stuller's wax ring tubes offer a comprehensive blend of carving versatility and flexibility. Convenient and easy-to-use, these wax tubes are perfect for designing a wide selection of rings, jewelry, and small art pieces. Ring tubes have a $5 / 8$ " off-center hole.

| Item | Order \# | Shape | Color | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 21-1341 | T1062E Flat-Sided | Green | $15 / 16^{\prime \prime} \times 6^{\prime \prime} \times 13 / 16^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1342 | Flat-Sided | Purple | $15 / 16^{\prime \prime} \times 6^{\prime \prime} \times 13 / 16^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1340 | Flat-Sided | Blue | $15 / 16^{\prime \prime} \times 6^{\prime \prime} \times 13 / 16^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| B | 21-1346 | Flat-Sided | Green | $11 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{118}{}{ }^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1347 | Flat-Sided | Purple | $11 / 8^{\prime \prime} \times 6{ }^{\prime \prime} \times 1 \frac{118}{}{ }^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1345 | Flat-Sided | Blue | $15 / 16^{\prime \prime} \times 6^{\prime \prime} \times 1 / 3 / 16^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| C | 21-1359 | Flat-Sided | Green | $11 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1$ " | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1360 | Flat-Sided | Purple | $11^{1 / 8} \times 6^{\prime \prime} \times 1 "$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1358 | Flat-Sided | Blue | $11^{1 / 8} \times 66^{\prime \prime} \times 1$ " | \$8.07 | \$8.55 | \$9.50 |
| D | 21-1362 | Flat-Sided | Green | $1^{\prime \prime} \times 6^{\prime \prime} \times 1^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1363 | Flat-Sided | Purple | $1^{1 \prime} \times 6^{\prime \prime} \times 1^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1361 | Flat-Sided | Blue | $1^{\prime \prime} \times 6^{\prime \prime} \times 1^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| E | 21-1351 | Round Tube | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1352 | Round Tube | Purple | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1350 | Round Tube | Blue | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| F | 21-1356 | Round Tube | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1357 | Round Tube | Purple | $11 / 166^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1355 | Round Tube | Blue | $11166^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| G | 21-1365 | Round Tube | Green | $7 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1366 | Round Tube | Purple | $7 / 81 \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1364 | Round Tube | Blue | $7 / 81 \times 6{ }^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| H | 21-1368 | Solid Bar | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1369 | Solid Bar | Purple | $11 / 166^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1367 | Solid Bar | Blue | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
| J | 21-1371 | Solid Bar | Green | $7 / 81 \times 6$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1372 | Solid Bar | Purple | $7 / 81 \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |
|  | 21-1370 | Solid Bar | Blue | $7 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$ | \$8.07 | \$8.55 | \$9.50 |



## WAX BLOCK KIT

Wax Block Kit: Includes one block each of green, purple, and blue wax.
Student Kit: Features an assortment of 11 pieces of various shapes and sizes. Includes combination of all three hardness grades, blue (regular), green (hard), and purple (medium).
Professional Kit: This kit contains a 14-piece assortment of designers' favorite shapes and sizes. Available in three hardness grades: blue (regular), green (hard), and purple (medium).


FILE-A-WAX BLOCKS
Ideal for freeform design work, modeling, and rapid prototyping. Available in three hardness grades: blue (regular), green (hard), and purple (medium).

| Item | Order\# | Color | Weight | $\mathbf{W} \times \mathbf{L} \times \mathrm{H}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 21-0321 | Green | $1 / 2 \mathrm{lb}$ | $31 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 11 / 8^{\prime \prime}$ | \$8.93 | \$9.45 | \$10.50 |
|  | 21-0308 | Purple | $1 / 2 \mathrm{lb}$ | $31 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 11 / 8^{\prime \prime}$ | \$8.93 | \$9.45 | \$10.50 |
|  | 21-0320 | Blue | $1 / 2 \mathrm{lb}$ | $31 / 21 \times 31 / 2^{\prime \prime} \times 11 / 8^{\prime \prime}$ | \$8.93 | \$9.45 | \$10.50 |
| P | 21-0323 | Green | $1 / 2 \mathrm{lb}$ | $35 / 8^{\prime \prime} \times 6{ }^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0309 | Purple | $1 / 2 \mathrm{lb}$ | $35 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{1}{2 \prime \prime}$ | \$14.88 | \$15.75 | \$17.50 |
|  | 21-0322 | Blue | 1/2lb | $35 / 8 \times 6{ }^{\prime \prime} \times 11 / 2{ }^{\prime \prime}$ | \$14.88 | \$15.75 | \$17.50 |



## COMPONENTRY WAX

Developed to help the professional wax carver with time they spend on creating channels, clasps, hinges, and other complex precision-formed wax designs. Shapes are sold in blue (medium) and available in $4^{\prime \prime}-5^{\prime \prime}$ lengths. This full selection of shapes can be used individually or in a combination. Perfect for producing unique jewelry items as well as links, prongs, bezels, and sprues. Although extremely flexible, wire wax is strong enough to be twisted or bent to conform to any configuration or angle without cracking or breaking.

$20 z$






$\qquad$




Order \# 21-10010
Shape Rectangle

| $\mathbf{2 . 5 m m}$ |  |  |  |  |  |  | $\mathbf{3 m m}$ | $\mathbf{4 m m}$ | $\mathbf{5 m m}$ | $\mathbf{6 m m}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $1+$ | $\$ 9.75$ | $\$ 9.75$ | $\$ 9.75$ | $\$ 9.75$ | $\$ 9.75$ |  |  |  |  |  |



## STULLER SELECT CASTING WAX SHEETS

High-grade, translucent, flexible casting wax sheets are used by jewelry designers for a wide variety of applications and are always pliable at room temperature. Each sheet measures 4 " square. 1 Box $=32$ sheets.
Assortment Size: 4-14 gauge, 4-18 gauge, 6-20 gauge, 6-22 gauge, and 6-24 gauge, 6-26 gauge

| Order \# | Wax Gauge | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 4 0}$ | 14 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 1}$ | 16 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 2}$ | 18 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 3}$ | 20 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 4}$ | 24 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 5}$ | 26 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 6}$ | 28 Gauge | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |
| $\mathbf{2 1 - 0 4 4 9}$ | Casting Wax Assortment | $\$ 16.93$ | $\$ 17.66$ | $\$ 18.40$ |

## STULLER SELECT STICKY WAX

A quick-setting adhesive that creates a rigid bond between two wax surfaces. This wax is a must when creating complex assemblies or attaching patterns to your sprue rod. Sticky wax will not hinder melt-out, leaves no residue, and is ideal for both large and small parts. Melting temperature $161^{\circ} \mathrm{F}$.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 3 8 2}$ | Stick | $1^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 9.94$ | $\$ 10.37$ | $\$ 10.80$ |
| $\mathbf{2 1 - 0 3 8 3}$ | Chunks $(1 \mathrm{lb})$ | $1^{\prime \prime} \times 5^{\prime \prime}$ | $\$ 12.56$ | $\$ 13.10$ | $\$ 13.65$ |



## WAX WIRE ASSORTMENTS

The assortment packs ensure you have a convenient selection of wire waxes when you need them. Each box contains 8 different gauges of Stuller Select wire waxes cut in 4" lengths.
No. 1 Assortment: 10, 14, 18 gauge; Half-round: 6, 8, 12, and 14 gauge; Half-pear: 6 gauge
No. 2 Assortment: 6, 8, 10, 12, 14, 16, 18, and 20 gauge
No. 3 Assortment: 2, 4, 6, 8, 10, and 12 gauge; Square: 12 and 14 gauge
No. 4 Assortment: 2, 4, 6, 8, and 10 gauge; Bezel: 6, 8, and 10 gauge
No. 5 Assortment: 8, 12, 14, and 18 gauge;
Half-round: $6,8,12$, and 14 gauge
No. 6 Assortment: 8, 10, and 12 gauge; 3-Prong:
14 and 16 gauge; 4-Prong: 16 and 18 gauge; 6 -Prong: 16 gauge

| WAX CONVERSION CHART |  | GAUGE/ |
| :---: | :---: | :---: |
| 1 dwt | Multiply by | MILLIMETER SIZE |
| Sterling Silver | 10.36 | 1 Gauge / 7.34 mm |
| 10kt yellow | 11.60 | 2 Gauge / 6.35 mm |
| 14kt white | 12.65 | 3 Gauge / 5.83 mm |
| 14kt yellow | 13.08 | 4 Gauge / 5.18 mm |
| 18kt white | 14.65 | 6 Gauge / 4.12 mm |
| 18kt yellow | 15.60 | 8 Gauge / 3.25 mm |
| Palladium | 12.20 | 10 Gauge / 2.6 mm |
| Platinum ( $10 \% \mathrm{Ir}$ ) | 21.50 | 12 Gauge / 2.06 mm |
| Platinum (5\% Ir) | 21.50 | 14 Gauge / 1.6 mm |
|  |  | 16 Gauge / 1.3 mm |
|  |  | 18 Gauge / 1.0 mm |
|  |  | 20 Gauge / 0.8 mm |
|  |  | 24 Gauge / 0.5 mm |

STULLER FILE-A-WAX DESIGNER SHAPES BY FERRIS
Stuller Select designer shapes provide a selection of basic shapes that are perfect for large, custom design work. These shapes afford the ability to respond quickly to design assignments or to creative inspirations. Available in blue (regular), green (hard), and purple (medium).
Specify color when ordering.

| Item Order \# |  | Color | Shape | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 21-0710 | Blue | Slices | 53/16" Assorted | \$13.35 | \$14.13 | \$15.70 |
|  | 21-0711 | Green | Slices | 53/16" Assorted | \$13.35 | \$14.13 | \$15.70 |
|  | 21-0712 | Purple | Slices | 53/16" Assorted | \$13.35 | \$14.13 | \$15.70 |
| B | 21-0714 | Green | Bar | $21 / 4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0715 | Purple | Bar | $21 / 4 " \times 71 / 2^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0713 | Blue | Bar | $21 / 4^{\prime \prime} \times 71 / 2^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0717 | Green | Bar | $15 / 16^{\prime \prime} \times 111 / 4^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0718 | Purple | Bar | $15 / 16^{\prime \prime} \times 111 / 4^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0716 | Blue | Bar | $15 / 66^{\prime \prime} \times 111 / 4^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
| C | 21-0720 | Green | Half-Round | $45 / 8{ }^{\prime \prime} \times 31 / 88^{\prime \prime} \times 25 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0721 | Purple | Half-Round | $45 / 8^{\prime \prime} \times 31 / 8^{\prime \prime} \times 25 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0719 | Blue | Halt-Round | $45 / 8^{\prime \prime} \times 31 / 8^{\prime \prime} \times 25 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0723 | Green | Half-Round | $35 / 8^{\prime \prime} \times 23 / 4^{\prime \prime} \times 35 / 8^{\prime \prime}$ | \$15.51 | \$16.43 | \$18.25 |
|  | 21-0724 | Purple | Half-Round | $35 / 8^{\prime \prime} \times 23 / 4^{\prime \prime} \times 35 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0722 | Blue | Half-Round | $35 / 8^{\prime \prime} \times 23 / 4^{\prime \prime} \times 3 / 88^{\prime \prime}$ | \$15.51 | \$16.43 | \$18.25 |
| D | 21-0726 | Green | Block | $39 / 16^{\prime \prime} \times 39 / 16^{\prime \prime} \times 23 / 8{ }^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0727 | Purple | Block | $39 / 16^{\prime \prime} \times 39 / 16^{\prime \prime} \times 23 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |
|  | 21-0725 | Blue | Half-Round | $39 / 16^{\prime \prime} \times 39 / 16^{\prime \prime} \times 23 / 8^{\prime \prime}$ | \$13.26 | \$14.04 | \$15.60 |




STULLER FILE-A-WAX UTILITY WAX BY FERRIS
Easily shaped waxes that are specially suited for fill-ins and wax repair. Utility waxes can be used to easily correct mistakes or apply sprues to sprue bases. Pliable at room temperature.

| Item | Order \# | Description | W $\times \mathrm{L} \times$ Thickness | Weight | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 21-0392 | Thin | $3^{\prime \prime} \times 6^{\prime \prime} \times 1 / 8^{\prime \prime}$ | $1 / 2 \mathrm{lb}$ | \$8.00 | \$8.35 | \$8.70 |
| F | 21-0393 | Regular | $3^{\prime \prime} \times 6^{\prime \prime} \times 3 / 16^{\prime \prime}$ | $1 / 2 \mathrm{lb}$ | \$8.10 | \$8.45 | \$8.80 |
| G | 21-0394 | Sticks | $3^{\prime \prime} \times 6^{\prime \prime} \times 3 / 16^{\prime \prime}$ | 802 | \$11.64 | \$12.14 | \$12.65 |



## STULLER FILE-A-WAX SLICE ASSORTMENT

Half-Pound Kit Assortment: $13 / 16^{\prime \prime} \mathrm{H} \times 39 / 16^{\text {" }} \mathrm{W}$ wax sliced in thicknesses from $1 / 8^{\prime \prime}$ to $1 / 4^{\prime \prime}$. Kit consists of: 6 pieces -0.280 " ( 7.1 mm ), 6 pieces -0.200 " ( 5.1 mm ), and 6 pieces $-0.135^{\prime \prime}(3.4 \mathrm{~mm})$.
One-Pound Kit Assortment: $13 / 16^{\prime \prime} \mathrm{W} \times 358^{\text {" }} \mathrm{L}$ in thicknesses from $3 / 16^{\prime \prime}$ to $1^{1 "}$. Each kit contains: 1 piece - 1 " ( 25.4 mm ) thick; 3 pieces $-0.700^{"}$ $(17.8 \mathrm{~mm})$ thick; 4 pieces $-0.280^{\prime \prime}(7.1 \mathrm{~mm})$, 4 pieces $-0.190^{\prime \prime}(4.8 \mathrm{~mm})$, 4 pieces - 0.140 " $(3.6 \mathrm{~mm})$.

| Order \# <br> 21-0325 | Color | Net Weight | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 1 - 0 3 2 6}$ | Purple | $1 / 2 \mathrm{lb}$ | 18 slices | 18 slices | $\$ 14.35$ | $\$ 14.98$ | $\$ 15.60$ |
| $\mathbf{2 1 - 0 3 2 4}$ | Blue | $1 / 2 \mathrm{lb}$ | 18 slices | $\$ 14.35$ | $\$ 14.98$ | $\$ 15.60$ |  |
| $\mathbf{2 1 - 0 3 2 8}$ | Green | 1 lb | 16 slices | $\$ 14.81$ | $\$ 15.46$ | $\$ 16.10$ |  |
| $\mathbf{2 1 - 0 3 2 9}$ | Purple | $\mathbf{1} \mathrm{lb}$ | 16 slices | $\$ 14.81$ | $\$ 15.46$ | $\$ 16.10$ |  |
| $\mathbf{2 1 - 0 3 2 7}$ | Blue | 1 lb | 16 slices | $\$ 14.81$ | $\$ 15.46$ | $\$ 16.10$ |  |



## WOLF ${ }^{\text {m }}$ WAX RING TUBES AND SOLID BAR

This carving wax melts at approximately $240^{\circ} \mathrm{F}$ and is available in many sizes. It has medium hardness and flexibility, and is ideal for extremely fine detail, piercing, and carvability.

| Item Order \# | Description | Color | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 0 4 8 0}$ | Ring Tube w/ Off-Center Hole | Gold | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 9.44$ | $\$ 9.99$ | $\$ 11.10$ |
| B | $\mathbf{2 1 - 0 4 8 2}$ | Flat Top Ring Tube | Gold | $1^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 9.44$ | $\$ 9.99$ | $\$ 11.10$ |
| C | $\mathbf{2 1 - 0 4 8 4}$ | Flat Top Ring Tube (EH) | Gold | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 10.21$ | $\$ 10.66$ | $\$ 11.10$ |
| D | $\mathbf{2 1 - 0 4 7 6}$ | Solid Ring Tube | Gold | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 9.44$ | $\$ 9.99$ | $\$ 11.10$ |
| E | $\mathbf{2 1 - 0 4 7 8}$ | Ring Tube w/ Center Hole | Gold | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 9.44$ | $\$ 9.99$ | $\$ 11.10$ |



WOLF ${ }^{T m}$ WAX SPACE BLOCKS



## WOLF ${ }^{\text {m" }}$ WICKED STICKY POSITIONING WAX

Ideal for securing stones for accurate tracing. Smear wax on stone,

| Order \# | Depth | Shape | Length | Flow | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 8 8}$ | $3^{3 / 6 "}$ | Square | $5^{\prime \prime}$ | $173^{\circ} \mathrm{F}\left(78^{\circ} \mathrm{C}\right)$ | $\$ 16.58$ | $\$ 17.55$ | $\$ 19.50$ |



## WOLF ${ }^{\text {m }}$ WAX

Ideal for creating raised detail on carving waxes or the final touch-up of wax imperfections such as pits and cracks or to flow inside bezel walls for a tighter fit. Apply molten relief wax onto surface of the wax model. Can be easily carved. Touch-Up Wax can be easily scraped off for a smooth finish.

| Item Order \# | Description | Flow | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| F | 21-0489 | Touch-Up Wax | $163^{\circ} \mathrm{F}\left(73^{\circ} \mathrm{C}\right)$ | 1.7 oz | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |
| G | $\mathbf{2 1 - 0 4 9 0}$ | Relief Wax | $163^{\circ} \mathrm{F}\left(73^{\circ} \mathrm{C}\right)$ | 1.702 | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |

## WOLF"' PRECISION CARVERS

Designed by Kate Wolf, master model maker and educator. These tools have the profiles and edges that wax carvers have been waiting for. Wolf's Precision Carvers are made of chromium and manganese, and the wood handles are color coded and numbered for quick identification. Set A includes: container and 22-page, 7" x 7", full-color instructional booklet.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :---: | :---: |
| A | 21-0495 | 18-piece Carvers Set | $\$ 131.75$ | $\$ 139.50$ | $\$ 155.00$ |
| B | 21-0508 | 8-piece Micro Carvers set | $\$ 67.96$ | $\$ 71.96$ | $\$ 79.95$ |
| C | 21-0496 | 22-Page Instruction Booklet (only) | $\$ 11.31$ | $\$ 11.97$ | $\$ 13.30$ |
| D | 21-1411 | \#1 Scribe/Detailing | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| E | 21-1412 | \#2 Small 90 | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| F | 21-1413 | \#3 Carving Knife | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| G | 21-1414 | \#4 Diamond Point | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| H | 21-1415 | \#5 Medium Hollower | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| J | 21-1416 | \#6 Medium Rake Hollower | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| K | 21-1417 | \#7 Detailing Knife | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| L | 21-1418 | \#8 Small Hollower | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| M | 21-1419 | \#9 Small Rake Hollower | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| N | 21-1420 | \#10 Medium 90 $/$ Safety Edge | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| P | 21-1421 | \#11 Pavilion/Safety Edge | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| Q | 21-1422 | \#12 Tapered Triangle | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| R | 21-1423 | \#13 Small Rounding | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| S | 21-1424 | \#14 Medium Rounding | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| T | 21-1425 | \#15 Undercutting | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| U | 21-1426 | \#16 Concave/Convex | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |
| V | 21-1427 | \#17 Large Hollower | $\$ 10.29$ | $\$ 10.89$ | $\$ 12.10$ |




## WOLF ${ }^{\text {m }}$ TRIMMER

Multipurpose tool for quickly and accurately trimming carving waxes and other applications now made easier by its ability to securely position rotary tools. The Wolf Trimmer is a simple tool designed extraordinarily well for holding a \#30 handpiece in use. Made primarily for trimming waxes while using a 11 mm diameter cylinder bur (not supplied), the Wolf Trimmer will also work with a variety of rotary tools, allowing you to use both hands and precisely locate items next to a stationary tool.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 5 5}$ | Trimmer | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |



## WOLF ${ }^{\text {m }}$ ADJUSTABLE TRIMMER

Made of aluminum, steel, and plastic. It has a removable rip fence for controlled cutting. The pivoting, sliding table adjusts from $90^{\circ}-45^{\circ}$ for complex cuts. The Wolf Adjustable Trimmer and the Wolf Trimmer slide over a \#30 flex shaft handpiece. Either can be handheld against a bench pin or tabletop, or held in a GRS ${ }^{\ominus}$ BenchMate ${ }^{\text {™ }}$. Use with cylinder bur to quickly and accurately trim carving wax. Use with separating disks on metal to cut grooves for inlay and channels. Use with abrasives for finish work on metal.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 5 6}$ | Adjustable Trimmer | $\$ 97.75$ | $\$ 103.50$ | $\$ 115.00$ |




MATT $^{\text {Tw }}$ WAX RING TUBES
Available in three degrees of flexibility: green (hard); purple (medium); and blue (soft).
Specify color when ordering.

| Item | Order \# | Shape | Color | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 21-0215 | Flat-Sided Tube | Green | $1^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{1}{8 \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0216 | Flat-Sided Tube | Purple | $1 " \times 6{ }^{\prime \prime} \times 1 \frac{1}{8 \prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0217 | Flat-Sided Tube | Blue | $1 " \times 6{ }^{\prime \prime} \times 1 \frac{1}{8 \prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| B | 21-0218 | Flat-Sided Tube | Green | $11 / 8{ }^{\prime \prime} \times 6^{\prime \prime} \times 11 / 8^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0219 | Flat-Sided Tube | Purple | $11 / 8^{\prime \prime} \times 6^{\prime \prime} \times 11 / 8^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0220 | Flat-Sided Tube | Blue | $11 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{1188^{\prime \prime}}{}$ | \$6.46 | \$6.84 | \$7.60 |
| C | 21-0221 | Flat-Sided Tube | Green | $11 / 8^{\prime \prime} \times 6^{\prime \prime} \times 11^{1 / 4}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0222 | Flat-Sided Tube | Purple | $11 / 4^{\prime \prime} \times 6^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0223 | Flat-Sided Tube | Blue | $11 / 4^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{11 / 4}{}{ }^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| D | 21-0224 | Solid Round Tube | Green | $7 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0225 | Solid Round Tube | Purple | $7 / 81 \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0226 | Solid Round Tube | Blue | $7 / 81 \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| E | 21-0227 | Solid Round Tube | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0228 | Solid Round Tube | Purple | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0229 | Solid Round Tube | Blue | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| F | 21-0230 | Solid Round Tube | Green | $115 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0231 | Solid Round Tube | Purple | $115 / 6^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0232 | Solid Round Tube | Blue | $115 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| G | 21-0233 | Round Tube-Center Hole | Green | $7 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0234 | Round Tube-Center Hole | Purple | $7 / 81 \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0235 | Round Tube-Center Hole | Blue | $7 / 8{ }^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| H | 21-0238 | Round Tube-Center Hole | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0239 | Round Tube-Center Hole | Purple | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0245 | Round Tube-Center Hole | Blue | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| J | 21-0246 | Round Tube-Center Hole | Green | $115 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0247 | Round Tube-Center Hole | Purple | $115 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0248 | Round Tube-Center Hole | Blue | $115 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
| K | 21-0249 | Round Tube-Off Center Hole | Green | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0257 | Round Tube-Off Center Hole | Purple | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |
|  | 21-0258 | Round Tube-Off Center Hole | Blue | $11 / 16^{\prime \prime} \times 6^{\prime \prime}$ | \$6.46 | \$6.84 | \$7.60 |

Available in three degrees of flexibility. Specify color when ordering
Green (hard), 7-10\% shrink $\quad$ Purple (medium), 1\% shrink $\quad$ Blue (soft), 7-10\% shrink

MATT ${ }^{\text {TM }}$ WAX RODS
Designed for use with the Matt" mini-lathe (page 138, 21-2800). Each box contains four $1 \frac{1}{2} 2^{\prime \prime}$ long rods. Specify color (green, purple, or blue) when ordering.

| Item Order \# |  | Width | Color | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | 21-0531 | 15/16" | Green (hard) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0532 | 15/16" | Purple (medium) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0533 | 15/16" | Blue (soft) | \$8.30 | \$9.00 | \$10.00 |
| M | 21-0534 | $13 / 32^{\prime \prime}$ | Green (hard) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0535 | $13 / 32^{\prime \prime}$ | Purple (medium) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0536 | $13 / 32^{\prime \prime}$ | Blue (soft) | \$8.30 | \$9.00 | \$10.00 |
| N | 21-0537 | 7/81 | Green (hard) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0538 | 7/81 | Purple (medium) | \$8.30 | \$9.00 | \$10.00 |
|  | 21-0539 | 7/81 | Blue (soft) | \$8.30 | \$9.00 | \$10.00 |

## MATT ${ }^{\text {m }}$ BRACELET WAX BARS

Designed for use with the Matt" ${ }^{\text {t" }}$ shape, these six-inch long, arch-shaped bars simplify the construction of bracelets. Create round, oval, and square designs in a variety of sizes.

| Order\# | Color | Length | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | :---: | ---: | ---: |
| 21-0519 | Green (hard) | $6^{\prime \prime}$ | 1 lb | $\$ 14.86$ | $\$ 16.11$ | $\$ 17.90$ |
| $\mathbf{2 1 - 0 5 2 0}$ | Purple (medium) | $6^{\prime \prime}$ | 1 lb | $\$ 14.86$ | $\$ 16.11$ | $\$ 17.90$ |
| $\mathbf{2 1 - 0 5 2 1}$ | Blue (soft) | $6^{\prime \prime}$ | 1 lb | $\$ 14.86$ | $\$ 16.11$ | $\$ 17.90$ |



## MATT ${ }^{\text {m }}$ WAX SLICES

Slices assorted from $1 / 88^{\prime \prime}$ to $1 / 2$ " in thickness.


## MATT ${ }^{\text {m }}$ WAX BARS

A special wax used for making models. Can be carved, sawed, filed, machined, or turned on a lathe. Available in three grades of flexibility: green, purple, and blue. Specify color when ordering.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 0 4 3 3}$ | $1 / 2 \mathrm{lb}$ Bar | $33 / 8^{\prime \prime} \times 33 / 8^{\prime \prime} \times 17 / 16^{\prime \prime}$ | $\$ 8.69$ | $\$ 9.07$ | $\$ 9.45$ |
|  | $\mathbf{2 1 - 0 4 3 4}$ | $1 / 2 \mathrm{lb}$ Bar | $33 / 8^{\prime \prime} \times 33 / 8^{\prime \prime} \times 17 / 16^{\prime \prime}$ | $\$ 8.69$ | $\$ 9.07$ | $\$ 9.45$ |
|  | $\mathbf{2 1 - 0 4 3 5}$ | $1 / 2 \mathrm{lb}$ Bar | $33 / 8^{\prime \prime} \times 33 / 8^{\prime \prime} \times 17 / 16^{\prime \prime}$ | $\$ 8.69$ | $\$ 9.07$ | $\$ 9.45$ |
| B | $\mathbf{2 1 - 0 4 3 0}$ | 1 lb Bar | $33 / 8^{\prime \prime} \times 61 / 2^{\prime \prime} \times 17 / 6^{\prime \prime}$ | $\$ 12.14$ | $\$ 12.67$ | $\$ 13.20$ |
|  | $\mathbf{2 1 - 0 4 3 1}$ | 1 lb Bar | $33 / 8^{\prime \prime} \times 61 / 2^{\prime \prime} \times 17 / 6^{\prime \prime}$ | $\$ 12.14$ | $\$ 12.67$ | $\$ 13.20$ |
|  | $\mathbf{2 1 - 0 4 3 2}$ | 1 lb Bar | $33 / 8^{\prime \prime} \times 61 / 2^{\prime \prime} \times 17 / 16^{\prime \prime}$ | $\$ 12.14$ | $\$ 12.67$ | $\$ 13.20$ |



## MATT ${ }^{\text {m }}$ WAX CARVING TABLETS

These smooth, precision wax tablets provide jewelry designers and model makers with large, flat, incredibly smooth surfaces for designing jewelry directly onto carving wax. The tablets save time and money by eliminating the filing and surface preparation that is required with standard wax slices. The tablet size is produced in four thicknesses: $4.5 \mathrm{~mm}, 6 \mathrm{~mm}, 8 \mathrm{~mm}$, and 10.5 mm . Available in three assorted sets.
Specify color (green, purple, or blue) when ordering.
Set $\mathbf{C}$ contains thickness of $3-4.5 \mathrm{~mm}, 1-8 \mathrm{~mm}, 1-10.5 \mathrm{~mm}$
Set $\mathbf{D}$ contains thickness of $4-4.5 \mathrm{~mm}, 3-6 \mathrm{~mm}$
Set E contains thickness of 2-8mm, 2-10.5mm

| Item | Order \# | $\mathbf{W} \times \mathrm{L}$ | Color | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 21-0522 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Green (hard) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0523 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Purple (medium) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0524 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Blue (soft) | \$24.52 | \$25.58 | \$26.65 |
| D | 21-0525 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Green (hard) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0526 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Purple (medium) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0527 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Blue (soft) | \$24.52 | \$25.58 | \$26.65 |
| E | 21-0528 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Green (hard) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0529 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Purple (medium) | \$24.52 | \$25.58 | \$26.65 |
|  | 21-0530 | $25 / 8^{\prime \prime} \times 6^{\prime \prime}$ | Blue (soft) | \$24.52 | \$25.58 | \$26.65 |



Available in three degrees of flexibility. Specify color when ordering.
Green (hard), 7-10\% shrink Purple (medium), $1 \%$ shrink Blue (soft), 7-10\% shrink


## MATT ${ }^{\text {TM }}$ RING TEMPLATE

Features 18 different profiles for both men's and ladies' rings, from the most popular to universal designs.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{2 1 - 0 2 7 9}$ | Ring Template | $5 " \times 81 / 4^{\prime \prime}$ | $\$ 13.10$ |

## MATT ${ }^{\text {mw }}$ BRACELET TEMPLATE

This bracelet template helps you establish the perfect profile for creating square, round, and oval bracelets. Conveniently sized for most bracelet projects.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{2 1 - 0 2 6 9}$ | Bracelet Template | $5 " \times 81 / 4^{\prime \prime}$ | $\$ 13.50$ |



## MATT ${ }^{\text {m }}$ TECHNIQUES OF JEWELRY ILLUSTRATION AND COLOR RENDERING KIT

Features full instruction on jewelry illustration, with step-by-step guidelines and clear illustrations. 152 pages with hardcover presenting full instructions on jewelry rendering and design ideas. Includes five design templates.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 1 - 0 5 4 0}$ | Rendering Kit | $\$ 99.00$ |
| $\mathbf{2 1 - 0 5 4 1}$ | Book Only | $\$ 44.90$ |
| $\mathbf{2 1 - 0 5 4 2}$ | Set of 5 Templates | $\$ 66.00$ |

## JEWELRY DESIGN TEMPLATE KIT

Allows accurate drawings of jewelry designs. Kit of seven, heavygauge plastic templates. Includes shapes as follows: round, oval, baguette, emerald, marquise, and pear. Templates for ring and setting designs are also included along with metric and carat equivalents for accuracy and convenience.

| Order \# | Description | 1+ |
| :--- | :--- | ---: | ---: |
| $\mathbf{3 5 - 5 7 0 0}$ | Design Templates | $\$ 60.20$ |

## MATT ${ }^{\text {TM }}$ WAX ROD CENTERING TOOL

Allows exact alignment of the mini-lathe's wax-holding collet in the wax rod. Accommodates and precisely centers all three rod diameters.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 1 - 0 5 4 8}$ | Centering Tool | $\$ 37.75$ |



## MATT ${ }^{\text {TM }}$ WAX REAMER

With the Matt Reamer you can quickly create perfect wax blanks with smooth parallel walls, and bore finger sizes (to the exact dimensions) straight through the blanks. You can also create bezels for round stones or coin holders. The reamer consists of a precision ground steel rod with a holding knob. Two specially designed carbide blades ensure the tool's precision and long life.

| Order \# | Description |
| :---: | :---: |
| 21-2835 | Reamer |



## MATT ${ }^{T m}$ RING TUBE SIZER

Enlarge the finger size of your wax models quickly and accurately. Hardwood mandrel is specially machined to incorporate a cutting steel blade that extends from the handle to the tip on the tapered section. Slide this tool through the hole of wax ring or ring tube and gently rotate clockwise. As the blade turns it scribes inner wall, enlarging the ring to the size that is marked along the mandrel, leaving a smooth and even finish on the ring.


| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 21-2895 | Matt Ring Tube Sizer | $\$ 33.50$ |

## MATT ${ }^{\text {m }}$ MITER BOX

Slices bars, rods, and wax ring tubes into perfectly straight tablets and parallel walls or tapered sides. The Miter Box holds ring tube firmly in position inside the box, so there is no strain on your hands. The miter box has a stop/lock feature for cutting several tablets of the same thickness. The fine steel saw blades allow you to cut through the tube with no effort, leaving a smooth finish without filing.

| Order \# | Description | W x L | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 1 - 0 3 9 0}$ | Box and Saw | $6^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 69.00$ |



## MATT $^{\text {m }}$ GUN KIT

Versatile, extrusion technique for creating models is provided to you through the use of the Matt Gun. Allows you to individually control the temperature and pressure of the extrusion process. Three different methods of design can be achieved: on objects, freeform, and on water. Kit contains Matt Gun, two brass tips, three styles of wax, and a 113-page instruction book. 110V.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| 21-0955 | Matt Gun Kit | $\$ 165.00$ |
| REPLACEMENTS |  |  |
| 21-0956 | Blue Pellets for Mandrel Design (pack of 20) | $\$ 9.80$ |
| 21-0957 | Green Pellets for Water Design (pack of 20) | $\$ 9.80$ |
| 21-0958 | Red Pellets for Weaving (pack of 20) | $\$ 9.80$ |




MATT ${ }^{m}$ MINI LATHE WITH GAUGE KIT
The handheld lathe works with a flex shaft and a \#30 handpiece and is used for the design of wedding bands, bezels, coin holders, and pieces as large as a chess piece. Comes with a three-piece cutting tool and a 32-page instruction book. Handpiece is not included. 115 V .

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| A | $\mathbf{2 1 - 2 8 0 0}$ | Mini Lathe with Gauge Kit (shown) | $\$ 165.00$ |
| REPLACEMENT PARTS <br> B <br> $\mathbf{2 1 - 0 5 4 4}$ | Blade Set (3-Pieces) | $\$ 18.70$ |  |
| C | $\mathbf{2 1 - 0 5 4 5}$ | Wax Holding Collet | $\$ 6.50$ |
| D | $\mathbf{2 1 - 0 5 4 6}$ | Cutting Tool Square End | $\$ 6.60$ |
| E | $\mathbf{2 1 - 0 5 4 7}$ | Cutting Tool Blank End | $\$ 4.75$ |
|  | $\mathbf{2 1 - 2 8 1 7}$ | Green Replacement Wax Rods (4-Pieces) | $\$ 11.80$ |
|  | $\mathbf{2 1 - 2 8 1 2}$ | Purple Replacement Wax Rods (4-Pieces) | $\$ 11.80$ |
|  | $\mathbf{2 1 - 2 8 2 2}$ | Blue Replacement Wax Rods (4-Pieces) | $\$ 11.80$ |

## MATT ${ }^{\text {m }}$ TRIMMER SET

Files flat and curved surfaces at different angles. This unit comes with a rotary file, three different waxes, instructions, and is powered by a flex shaft and No. 30 handpiece. Handpiece and cable not supplied with unit. 115V.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | :---: |
| $\mathbf{2 1 - 2 8 8 0}$ | Matt Trimmer Set | $\$ 160.00$ |



## KERR ${ }^{\oplus}$ INLAY WAX

Superior build-up wax. Excellent for repairing. Inlay wax has excellent carvability without chipping or flaking. Solidifies at $144^{\circ} \mathrm{F}\left(62.2^{\circ} \mathrm{C}\right)$. Melting point $163^{\circ} \mathrm{F}\left(72.8^{\circ} \mathrm{C}\right)$.

| Order \# | $\mathbf{O D} \times$ Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 2 5 0}$ | $1_{4} \times 4^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 14.49$ | $\$ 15.12$ | $\$ 15.75$ |



## KERR ${ }^{\circledR}$ PERFECT PURPLE

Excellent build-up wax that carves easily. Used especially when multiple layers of build-up is required. Produces smooth surfaces. Melting point $156^{\circ} \mathrm{F}\left(68.9^{\circ} \mathrm{C}\right)$.

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 2 5 5}$ | Build-Up Wax | $1^{\prime \prime} \times 3^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 28.15$ | $\$ 29.38$ | $\$ 30.60$ |

## SCULPTURE WAX STRIPS

Soft, pliable wax that is easily formed and shaped by hand without the use of heat. Perfect for forming large models.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 6 5 5 0}$ | Sculpture Wax | $1 / 4 " \times 24^{\prime \prime} \times 1 / 4^{\prime \prime}$ | $\$ 17.62$ | $\$ 18.38$ | $\$ 19.15$ |

## COMPASS CUTTER

Capable of cutting circles from 1 cm up to 6 inches in diameter from paper, film, wax sheets, and other thin materials. Comes complete with five spare blades.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $39-1820$ | Compass Cutter | $\$ 12.00$ |



DOUBLE-END WAX CARVER SET
Seven excellent professional tools that offer design versatility and a hardwood stand that includes a sharpening stone.

| Order \# | Description | Length | 1+ |
| :--- | :--- | :--- | :--- |
| $\mathbf{2 1 - 1 1 2 7}$ | Carvers Set with Stand | $6^{\prime \prime}$ | $\$ 29.00$ |
| $\mathbf{5 2 - 1 0 1 2}$ | Hardwood Stand | $6^{\prime \prime}$ | $\$ 10.65$ |



## WAX CARVER SET

Made of high-grade, non-corrosive stainless steel, this wax carver set features all new shapes that cut or scrape waxes. Various tip designs give you the ability to work in tight places. Ergonomic handles provide a firm but pleasant grip. All tips feature sharp edges to cut properly.

| Order \# | Description | Length | 1+ |
| :--- | :--- | ---: | ---: |
| $\mathbf{2 1 - 1 1 2 5}$ | Wax Carvers (6-Pieces) | $6 "$ | $\$ 23.25$ |



## WAX CARVING TOOLS

Set contains four shapes, two sizes of each. Allows the user to actually carve the wax rather than scrape it away since the loops are sharp on one edge. Used to make and smooth designs, or use with wax lathes for making rings. Made of surgical-grade stainless steel with a sure-grip handle.


## WAX DETAILER SET

Excellent tool for filing waxes. Points are stainless steel and spiral with filelike edges. They are small enough to file in tiny corners, crevices and holes where other tools and files cannot reach. Set includes a fine detailer and an extra fine detailer. The fine detailer has a 1.2 mm shaft, and the extra fine has a 0.8 mm shaft. Comfortable wood handle measures 4". Made in the USA.


| Order \# | Description | Length | 1+ |
| :--- | :--- | :---: | ---: |
| $\mathbf{2 1 - 1 0 0 0}$ | Wax Detailers (2-Pieces) | $5^{\prime \prime}$ | $\$ 12.00$ |

## WAX CARVERS AND PROBES

Set of six popular carvers and probes for wax work. Ideal for design and touch-up. Made of stainless steel.

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :--- | ---: | :--- | :--- | :--- | ---: |
|  | $\mathbf{2 1 - 1 1 2 0}$ | Wax Carvers and Probes (6-Pieces) |  | $\$ 29.75$ |
| A | $\mathbf{2 1 - 1 1 4 0}$ | \#3 Carver | $61 / 2^{\prime \prime}$ | $\$ 6.35$ |
| B | $\mathbf{2 1 - 2 5 2 0}$ | \#17 Probe | $53 / 8^{\prime \prime}$ | $\$ 3.05$ |
| C | $\mathbf{2 1 - 2 5 1 0}$ | \#6 Probe | $51 / 2^{\prime \prime}$ | $\$ 3.05$ |
| D | $\mathbf{2 1 - 1 1 5 0}$ | \#5 Carver | $61 / 2^{\prime \prime}$ | $\$ 6.35$ |



## WALLER SCRIBER



Used to scribe hard metal, glass, and stone. Reversible ends for protection while carrying.

| Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: |
| $\mathbf{5 2 - 9 5 0 0}$ | Scriber | $6^{\prime \prime}$ | $\$ 6.60$ |

## DOUBLE-ENDED STEEL TRACER

Twisted center allows firm grip. Ends are finely honed. Overall length is $61 / 2$ ".

| Order \# | Description | Length | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{5 2 - 9 6 6 0}$ | Tracer | $61 / 21$ | $\$ 9.50$ |



## STARRET DIVIDER

Highly-polished dividers made of spring steel with hardened, tempered, and well-balanced round legs. Floating washer and thumb screw permit fast and positive adjustment.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 21-1128 | Divider with 3 inch legs | $\$ 75.00$ |



## SPRING DIVIDER

Features heavy-duty, spring action with a special, quick-adjustment nut. The perfect tool for measuring distances between points and scribing circles and arcs. Made in Germany.

| Order \# | Max Opening | Leg Length | 1+ |
| :---: | :---: | :---: | ---: |
| $\mathbf{3 5 - 0 8 0 0}$ | $2^{11 / 4}$ | $3^{\prime \prime}$ | $\$ 14.35$ |
| $\mathbf{3 5 - 0 8 0 2}$ | $61 / 2^{\prime \prime}$ | $6^{\prime \prime}$ | $\$ 15.50$ |



## SPRING DIVIDER WITH ADJUSTABLE POINTS

Sharp, pointed tips are adjustable and can be replaced. Maximum opening $23 / 4$ " with tips retracted or $31 / 4^{\prime \prime}$ with tips extended. Special quick-adjustment nut and heavy-duty spring. Made in Germany.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| A | $\mathbf{3 5 - 0 8 0 5}$ | Spring Divider | $\$ 14.35$ |
| B | $\mathbf{3 5 - 0 8 0 6}$ | Replacement Tips (sold per pair) | $\$ 2.65$ |



## KERR ${ }^{\circledR}$ CALIPER

Stainless steel and calibrated in 0.1 mm . Excellent for measuring wall thicknesses. Rounded tip caliper is perfect for wax carving. The pointed tip is perfect for metal work.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| 21-0025 | Round Tip Caliper | $\$ 37.50$ |

## STEPPED WAX RING MANDREL

Round stepped sizes 4-13. Rotates $360^{\circ}$ vertically. Aluminum mandrel is highly polished for easy wax removal. Sturdy steel base.

| Order\# | Description | Length |
| :--- | :--- | ---: |
| $\mathbf{2 1 - 0 8 9 6}$ | Stepped Wax Ring Mandrel | $13 "$ |



## MAX WAX PENS

Cordless wax tools used to form beads and details, whisk away flares, and spray and repair floaters and accidents. Designed to transfer wax to models. Heats up instantly to $850^{\circ}$ with finger pressure control. Batteries included.

| Item |  | Order \# | Description | Length | Batteries |  |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: |
| A | $\mathbf{2 1 - 2 6 0 0}$ | Max Wax Pen | $63 / 4^{\prime \prime}$ | $1-A A$ | 1+ |  |
| B | $\mathbf{2 1 - 2 6 0 2}$ | Super Max Wax Pen | $81 / 2^{\prime \prime}$ | $2-$ AA | $\$ 25.00$ |  |
| C | $\mathbf{2 1 - 2 6 0 1}$ | Replacement Tips |  |  | $\$ 27.50$ |  |



## WAX PEN

This digital touch-sensitive unit is used for wax working and spruing. Innovative touch power allows precise control of temperature when you touch the contact point on the pen. It has an immediate heating response. Low enough temperatures for precision wax working, yet high enough to burn silicon mold. Very small footprint takes up less space on the bench. Includes 4 Nichrome tips.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 1 - 2 0 0 3}$ | Touch-A-Matic Wax Pen | $\$ 270.00$ |
| $\mathbf{2 1 - 2 0 0 2}$ | Set of 9 Tips | $\$ 85.00$ |

## ECONO WAXER WITH PEN

This compact and economical 2 amp waxer quickly heats up to $350^{\circ} \mathrm{F}$. This unit has an easy to read dial and a small handle designed to stay cool with a soft rubber finger rest. Each kit comes with 6 tips which can all be customized with a file or pair of pliers. This pen can even be mounted on a wall to save space (Velcro ${ }^{\oplus}$ not included).

| ItemOrder \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :---: | ---: | :---: | ---: |
| D | $\mathbf{2 1 - 2 6 0 4}$ | Econo Waxer with Pen | $\$ 118.15$ | $\$ 125.10$ | $\$ 139.00$ |



KERR ${ }^{\text {® }}$ ULTRA-WAXER 2
An electronic waxing unit designed to increase efficiency and quality of waxing applications. - Includes dual spatulas to optimize productivity and an all-aluminum, lightweight design, which helps increase user comfort. - Foam grips on the spatula allow technicians to change the tips while they are still hot. - A convenient tip holder that keeps eight interchangeable heating tips organized and easily accessible.

- Easy-to-use operations such as programmable presets and a quick heat function to increase unit effectiveness.
- Tips from your Ultra-Waxer will fit the Ultra-Waxer 2. - $100^{\circ} \mathrm{F}-500^{\circ} \mathrm{F}$

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| A | 22-0085 | Kerr® Ultra-Waxer 2 | $\$ 375.00$ |
| B | 22-0088 | Spatula Small Blue Tip | $\$ 79.00$ |
| C | $\mathbf{2 2 - 0 0 8 9}$ | Spatula Large Teal Tip | $\$ 79.00$ |
| D | $\mathbf{2 2 - 0 0 9 0}$ | Spatula Beavertail Purple Tip | $\$ 79.00$ |
| E | $\mathbf{2 2 - 0 0 9 1}$ | Spatula Small \# 7 Gray Tip | $\$ 79.00$ |
| F | $\mathbf{2 2 - 0 0 9 2}$ | Spatula Large \# 7 Green Tip | $\$ 79.00$ |
| G | $\mathbf{2 2 - 0 0 9 3}$ | Spatula Needle Red Tip | $\$ 79.00$ |
| H | $\mathbf{2 2 - 0 0 9 4}$ | Spatula 1/2 Hollenback Black Tip | $\$ 79.00$ |
| J | $\mathbf{2 2 - 0 0 9 5}$ | Spatula Small Denture Pink Tip | $\$ 79.00$ |
| K | $\mathbf{2 2 - 0 0 9 6}$ | Spatula Large Denture Orange Tip | $\$ 79.00$ |
| L | $\mathbf{2 2 - 0 0 9 7}$ | Spatula Denture Spoon Yellow Tip | $\$ 79.00$ |
| M | $\mathbf{2 2 - 0 1 3 3}$ | Spatula Cord/Handle | $\$ 79.00$ |

## FOREDOM ${ }^{\circledR}$ WAX CARVER

The Handpiece - Lightweight and comfortable to hold with cork insulation to keep fingertips cool while working.
Compact Control - Precision heat control dial for setting and maintaining temperatures from $95^{\circ} \mathrm{F}\left(35^{\circ} \mathrm{C}\right)$ up to $560^{\circ} \mathrm{F}\left(294^{\circ} \mathrm{C}\right)$. Only $21^{\prime \prime} 2^{\prime \prime} \times 2^{\prime \prime}$
$(64 \times 51 \mathrm{~mm})$. It hardly takes up any workbench space. 115 V .
Brass Tips - Easy to clean and change, they're a great improvement over the tips used on other models. You can alter the tips with a file or pliers and create your own custom shapes. The wax carver comes with three tips: knife, small spoon, and straight taper. Four optional tips are sold separately. (*One-year limited manufacturer's warranty on all components except tips.)

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| N | $\mathbf{2 1 - 0 1 8 0}$ | Wax Carver | $\$ 195.00$ |
| P | $\mathbf{2 1 - 0 1 8 3}$ | Knife Tip | $\$ 12.45$ |
| O | $\mathbf{2 1 - 0 1 8 4}$ | Small Spoon Tip | $\$ 12.45$ |
| R | $\mathbf{2 1 - 0 1 8 6}$ | Straight Taper Tip | $\$ 12.45$ |
| S | $\mathbf{2 1 - 0 1 8 7}$ | Curved Taper Tip | $\$ 12.45$ |
| T | $\mathbf{2 1 - 0 1 8 8}$ | Small Flat Tip | $\$ 12.45$ |
| U | $\mathbf{2 1 - 0 1 8 9}$ | Large Flat Tip | $\$ 12.45$ |

PRECISION WAX HEATING UNIT
Heavy duty variable power rheostat enables precise and consistent temperature control. Sturdy handle with ultra flexible cord provides comfortable use. Built-in holder provides a safe place to store handpiece when not in use.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: |
| V | $\mathbf{4 7 - 4 1 6 0}$ | Heating Unit with Tip | $4^{\prime \prime} \times 6^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 145.00$ |
| W | $\mathbf{4 7 - 4 1 6 1}$ | Handpiece | $\$ 45.00$ |  |
| Y | $\mathbf{4 7 - 4 1 6 2}$ | Tip (Blue) |  | $\$ 12.00$ |
| Z | $\mathbf{4 7 - 4 1 6 3}$ | Tip (Red) | $\$ 12.00$ |  |
| AA | $\mathbf{4 7 - 4 1 6 4}$ | Tip (Yellow) | $\$ 11.40$ |  |
| AB | $\mathbf{4 7 - 4 1 6 5}$ | Tip (Orange) | $\$ 11.40$ |  |
| AC | $\mathbf{4 7 - 4 1 6 6}$ | Tip (Green) | $\$ 12.00$ |  |



## GRIFFITH WAXOLVENT

A quality solvent and polish for wax and plastic models. Hazardous material, ships UPS Ground only.


| Item | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 9 0 1 0}$ | Bottle | $40 z$ | $\$ 6.12$ | $\$ 6.38$ | $\$ 6.65$ |
| B | $\mathbf{5 4 - 9 0 1 2}$ | Bottle | $80 z$ | $\$ 10.12$ | $\$ 10.56$ | $\$ 11.00$ |



WAX KLEEN
A non-petroleum, pleasant, citrus-scented solution for removing light scratches, parting lines, and polishing wax patterns. Also excellent for removing "stuck on" price or stock number labels without marring product surface. Ships UPS Ground only.

| Item | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{2 1 - 0 1 6 0}$ | Wax Gloss | $40 z$ | $\$ 8.60$ | $\$ 8.98$ | $\$ 9.35$ |
| D | $\mathbf{2 1 - 0 1 6 2}$ | Wax Gloss | $80 z$ | $\$ 15.00$ | $\$ 15.65$ | $\$ 16.30$ |

## MICRO WAX FILM DEBUBBLER

Applied to wax patterns before vacuum investing to prevent wax bubbles. Non-flammable and biodegradable.

| Order\# | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 4 5}$ | 1 gallon | $\$ 18.61$ | $\$ 19.71$ | $\$ 21.90$ |



PRO-CRAFT ${ }^{\oplus}$ VAC-U-COAT/DEBUBBLER
Reduces surface tension on model so that investment will adhere. Eliminates bubbles.

| Order \# | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 2 7}$ | $71 / 202$ | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |



## GLASS ALCOHOL LAMPS

E-F. Nickel-plated brass burner with screw adjustment for wick. Includes 3 " wick, $3 / 16^{1 "}$ diameter.
G. Polished chrome-plated base with screw adjustment for wick. Includes 3" wick, 3/16" diameter.

| Item | Order \# | $\mathbf{W} \times \mathbf{H}$ | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 8 0 2 5}$ | $2^{112^{\prime \prime}} \times 1^{\prime \prime}$ | $11 / 20 z$ | $\$ 8.09$ | $\$ 8.78$ | $\$ 9.75$ |
| $F$ | $\mathbf{5 4 - 8 0 2 6}$ | $2^{112^{\prime \prime}} \times 1^{3 / 4^{\prime \prime}}$ | $30 z$ | $\$ 8.29$ | $\$ 8.78$ | $\$ 9.75$ |
| G | $\mathbf{1 4 - 2 8 6 5}$ | $3^{\prime \prime} \times 3^{\prime \prime}$ | $30 z$ | $\$ 17.25$ | $\$ 18.00$ | $\$ 18.75$ |
|  | $\mathbf{5 4 - 8 0 2 7}$ | Replacement Wicks $3 / 16^{\prime \prime}$ (pack of 12) | $\$ 3.65$ | $\$ 3.96$ | $\$ 4.40$ |  |

## DENATURED ALCOHOL

For use in alcohol lamps, making anti-oxidizers, and as a quick-drying dip to prevent spotting of plated pieces. Flammable, ships UPS Ground only.

| Order \# | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 8 0 4 1}$ | $160 z$ Bottle | $\$ 6.53$ | $\$ 6.82$ | $\$ 7.10$ |
| $\mathbf{5 4 - 8 0 4 2}$ | $320 z$ Bottle | $\$ 8.46$ | $\$ 8.83$ | $\$ 9.20$ |



## SOLVENT DISPENSER

These dispensers have no stopper or cap to remove. Just touch the dispensing dish with a brush, cloth, or other applicator and the solvent is brought to the surface the instant it is needed. Stainless steel valves seal contents in the bottle until used, preventing spills, dripping, and escaping fumes. Fluid pumped into the dish does not drip back into the bottle, keeping stored liquids uncontaminated. Made of static dissipative plastic with Teflon tube.

| Item | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| J | $\mathbf{5 4 - 4 0 3 6}$ | Small | $40 z(120 \mathrm{ml})$ | $\$ 16.01$ | $\$ 16.70$ | $\$ 17.40$ |
| K | $\mathbf{5 4 - 4 0 3 7}$ | Small Anti-Splash | $40 z(120 \mathrm{ml})$ | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |
| L | $\mathbf{5 4 - 4 0 3 8}$ | Large | $60 z(180 \mathrm{ml})$ | $\$ 16.01$ | $\$ 16.70$ | $\$ 17.40$ |

## CASTALDO ${ }^{\circledR}$ MOLD RUBBER

## Castaldo ${ }^{\circledR}$ Gold Label ${ }^{\circledR}$ :

- Premium soft
- Very pliable
- Great for molds containing undercuts


## Castaldo ${ }^{\circledR}$ White Label ${ }^{\circledR}$ :

- Regular Firm
- Resilient
- Pliable
- Great for pieces that do not require undercuts like flat items


## Castaldo ${ }^{\oplus}$ No Shrink Pink ${ }^{\oplus}$ :

- Provides zero shrinkage
- Excellent detail
- Vulcanized at $310^{\circ} \mathrm{F}$ for $71 / 2$ minutes per layer.


| Item Order \# |  | Description | W $\times \mathrm{L} \times$ Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 22-5865 | Gold Label Strips | $27 / 8{ }^{\prime \prime} \times 18^{\prime \prime} \times 1 /{ }^{\prime \prime}$ | \$44.90 | \$46.85 | \$48.80 |
| B | 22-5855 | White Label Strips | $18 \mathrm{C} \times 1 / 8^{\prime \prime}$ | \$42.96 | \$44.83 | \$46.70 |
| C | 22-5885 | No-Shrink Pink Strips | $27 / 81 \times 18{ }^{\prime \prime} \times 1 / 8^{\prime \prime}$ | \$49.27 | \$51.41 | \$53.55 |
| D | 22-5860 | Gold Label Ready-Cut | $27 / 8^{\prime \prime} \times 17 / 8^{\prime \prime} \times 1 / 8^{\prime \prime}$ | \$47.38 | \$49.44 | \$51.50 |
| E | 22-5850 | White Label Ready-Cut | $27 / 8^{\prime \prime} \times 17 / 8^{\prime \prime} \times 1 / 8^{\prime \prime}$ | \$43.98 | \$45.89 | \$47.80 |
|  | 22-5880 | No-Shrink Pink Ready-C | $27 / 8^{\prime \prime} \times 1 / 8^{\prime \prime} \times 1 / 8^{\prime \prime}$ | \$52.72 | \$55.01 | \$57.3 |



CASTALDO ${ }^{\circledR}$ TITANIUM LABEL ${ }^{\text {m }}$ MOLD RUBBER
Castaldo ${ }^{\oplus}$ Titanium Features:

- Less pattern distortion
- Higher injection pressures
- Reduced rubber shrinkage
- Lower injection temperatures
- Higher clamping pressure
- Better detail
- Vulcanized at $307^{\circ}$

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| 22-5916 | Titanium Label | $2 / 8^{\prime \prime} \times 18^{\prime \prime} \times 1 / 8^{\prime \prime}$ | $\$ 48.81$ | $\$ 50.93$ | $\$ 53.05$ |

CASTALDO ${ }^{\circledR}$ SUPER STRETCH SILICONE MOLDING RUBBER
New SuperStretch offers fantastic tear strength that allows mold makers to make standard two- part molds of designs that formerly required complicated multipiece molds with difficult cores and inserts. The rubber stretches $900 \%$ before breaking. SuperStretch is easy to pack, easy to cut, and requires no silicone mold release spray. The shine is fantastic with waxes coming out with a glossy high shine finish meaning castings will require less finishing. Rubber shrinkage is very low at only $1.3 \%$.


| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 22-5856 | Super Stretch | $27 / 8^{\prime \prime} \times 18^{\prime \prime} \times 1 / 8^{\prime \prime}$ | $\$ 44.90$ | $\$ 46.85$ | $\$ 48.80$ |



## ECONOSIL ORANGE SILICONE RUBBER

Silicone molding rubbers are synthetic rubber compounds. They have the consistency of molding clay, which reduces packing time to a few minutes. No spray needed. The rubber is orange in color. Vulcanize at $330^{\circ} \mathrm{F}$ for 15 minutes per layer.


| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| 22-5900 | Silicone Mold Rubber | $2 / 8^{\prime \prime} \times 18^{\prime \prime} \times 1 / 8^{\prime \prime}$ | $\$ 44.90$ | $\$ 46.85$ | $\$ 48.80$ |

## CASTALDO ${ }^{\text {© }}$ GELATO ${ }^{\text {m }}$

Castaldo ${ }^{\oplus}$ super high strength silicone molding rubber cuts like butter. It resists tearing and is strong enough to make complex molds that are stronger than any other silicone molding rubber on the market. The different colors do not have different properties. Rather, they allow the jeweler to color code his/her molds for categorizing.

- Easy to cut - No mold release spray
- High shine finish - Cheaper and easier than RTVs
- Vulcanize at $330^{\circ} \mathrm{F}$ for 15 minutes per layer
- Width x Length x Thickness: $27 / 8^{\prime \prime} \times 18^{\prime \prime} \times 1 / 8^{\prime \prime}$



## VLT SILICONE RUBBER

Castaldo ${ }^{\oplus}$ VLT (very low temperature) make high volume molds directly from CAD/CAM and rapid prototyping models fast without risk of damage from heat or pressure. Get your models into production in as little as 30 minutes. Castaldo ${ }^{\oplus}$ VLT vulcanizes at temps as low as $150^{\circ}$. Makes great molds from traditional wax carvings. Also, spray wax or plastic model with release spray to ensure easy release of the model after vulcanization. Shrinkage is only 1.4\%. Castaldo ${ }^{\circledR}$ Silicone Modeling Rubber can be vulcanized in a wide range of time and temperature combinations depending on the characteristics of your model material.


| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 9 1 5}$ | Silicone Rubber | $27 / 8^{\prime \prime} \times 18^{\prime \prime} \times 1 / 8^{\prime \prime}$ | $\$ 41.48$ | $\$ 43.92$ | $\$ 48.80$ |

## CASTALDO® LIOUAGLASS KIT

Castaldo ${ }^{\circledR}$ LiquaGlass ${ }^{\text {t" }} 0 \%$ shrinkage clear liquid RTV jewelry molding rubber makes strong, tough, flexible production molds at only a fraction of the price of clear silicone rubbers. Easy to measure, easy to mix, easy to pour, and easy to vacuum or de-bubble, LiquaGlass cures at room temperature in 24 hours with $0 \%$ shrinkage. Castaldo ${ }^{\oplus}$ LiquaGlass ${ }^{\text {T" }}$ is packaged in a $1 \mathrm{~kg} / 2.21 \mathrm{~b}$. kit containing equal parts A and B. 1:1 Mix Ratio. Cure time: 16 hours.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 8 6 9}$ | 2-Part RVT Rubber Kit | $\$ 58.99$ | $\$ 62.46$ | $\$ 69.40$ |



## CASTALDO ${ }^{\circledR}$ LIQUACAST LONG LIFE <br> RTV LIQUID MOLDING RUBBER

New $0 \%$ shrinkage liquid RTV rubber with all the advantages of regular Castaldo ${ }^{\oplus}$ LiquaCast ${ }^{\text {"' }}$ plus added strength, tear resistance, and firmness. Its extreme durability means that difficult molds last and are less likely to break or tear in use. Bright orange in color and is packaged in plastic containers in two-part kits weighing $1 \mathrm{~kg}, 8 \mathrm{~kg}$, and 20kg. Cure time: 24 hours.

| Order \# | Description | Size | 1+ |
| :--- | :--- | :--- | ---: |
| 22-5896 | LiquaCast Molding Rubber | 2.2 lb | $\$ 180.30$ |
| $\mathbf{2 2 - 5 8 9 6}$ | LiquaCast Molding Rubber | $\mathbf{1 7 . 6} \mathrm{lb}$ | $\$ 68.90$ |




CASTALDO ${ }^{\circledR}$ LIOUACAST ${ }^{\text {™ }}$ AND CASTALDO ${ }^{\circledR}$ OUICK-SIL ${ }^{\text {™ }}$ KITS
A. Castaldo ${ }^{\oplus}$ LiquaCast" ${ }^{\text {t" }}$ makes stronger, tougher, and longer-lasting production molds than other RTVs. LiquaCast is easier to mix, easier to vacuum or debubble, and easier to pour. It's safe, easy to use, and produces the finest details. Instructions included. 10:1 mix ratio. Cure time: 18 hours.
B. Castaldo ${ }^{\circledR}$ Quick-Sil ${ }^{\text {m }}$ is a revolutionary $0 \%$ shrinkage jewelry molding rubber material that makes tough, long-lasting production molds with a high shine. Instructions included. Cure time: 15 minutes.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 2 - 5 8 7 0}$ | 2-Part LiquaCast Kit | 1 lb | $\$ 36.62$ | $\$ 38.21$ | $\$ 39.80$ |
|  | $\mathbf{2 2 - 5 8 7 0}$ | 2-Part LiquaCast Kit | 10 lb | - | - | $\$ 99.80$ |
| B | $\mathbf{2 2 - 5 8 7 1}$ | 2-Part Quick-Sil Kit | 2.216 lb | $\$ 57.60$ | $\$ 62.46$ | $\$ 69.40$ |
|  | $\mathbf{2 2 - 5 8 7 1}$ | 2-Part Quick-Sil Kit | 11 lb | - | - | $\$ 275.75$ |

## CASTALDO ${ }^{\circledR}$ MOLD-LOCK FORMERS

Castaldo ${ }^{\circledR}$ mold-lock formers are a convenient, easy way to make mold locks without cutting. These stamped brass cones will form locks to prevent molds from shifting during injection. Sold by the bag. Each bag contains approximately 150 pieces weighing approximately $30 z$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 8 8 9}$ | Mold Lock Formers | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |



CASTALDO ${ }^{\circledR}$ MOLD RELEASE CREAM ${ }^{\text {m" }}$
Makes mold separation easier. Mold cream is a lotion and is more effective at separating a mold in half than using knives or powder. Vulcanized molds can be pulled open by hand. Mold cream is safe and non-toxic in plastic containers.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 8 4 4}$ | Mold Release Cream | 102 | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |



## CASTALDO® ${ }^{\circledR}$ RESIN RELEASE SPRAY

This resin release spray is a non-silicone, non- PTFE coating designed to release plastic resin and wax models from jewelry molds. The resin spray is non-flammable, non-explosive, natural, biodegradeable, and is worker safe. Each can contains 340 grams.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{2 2 - 5 8 4 9}$ | Resin Release Spray | $\$ 12.49$ | $\$ 13.55$ | $\$ 15.05$ |

## SPIRITS MOLD RELEASE

Allows a clean, smooth release of wax from the rubber mold. Do not use with Ditto products. Hazardous material, ships UPS Ground only.

| Item Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| D | $\mathbf{2 2 - 5 8 4 0}$ | Resin Release Spray | $\$ 16.10$ | $\$ 16.80$ |



## CASTALDO® JEWELRY-MOLD RELEASE SPRAY

Safe, non-toxic, long-lasting silicone spray used to prevent wax from sticking to molds, which helps eliminate broken patterns. Works well on rubber molds and metal molds. Spray a small amount onto the mold before injecting wax. Virtually odorless. Material is non-explosive and nonflammable. Contains no CFCs or VOCs. Hazardous material, ships UPS Ground only.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| E | $\mathbf{2 2 - 5 8 4 5}$ | Mold Spray Release | $\$ 11.73$ | $\$ 12.42$ | $\$ 13.80$ |

FREEMAN JEWEL-SIL KITS
A two-part component, room-temperature vulcanizing silicone rubber compound. Designed especially for mold making, it is an ideal rubber for reproducing intricate detail and maintaining close tolerances. It features low viscosity for easy pouring and excellent clarity and cutting ability. It features high tear strength and the ability to endure temperatures up to $350^{\circ} \mathrm{F}$. $1 \%$ or less shrinkage rate.

| Item | Order\# | Description | Size | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 5 6 0 2}$ | 2-Part Silicone Rubber | 2.2 lb | Clear | $\$ 50.46$ | $\$ 52.66$ | $\$ 54.85$ |
| B | $\mathbf{5 4 - 5 6 0 5}$ | 2-Part Silicone Rubber | 1 Gallon | Clear | - | - | $\$ 274.80$ |



REPLISIL CLEAR MOLD SILICONE RUBBER KIT
Two $A$ and $B$ component silicone that pours and cures at an ambient temperature without any shrinkage. Available in clear 1.1 kg . 9:1 ratio of A to B . Made in Germany.


## HEAVY DUTY VULCANIZERS

- Heavy duty aluminum cast construction
- Steel frame ceramic-mica heating element
- Ultra sensitive bulb and capillary
- Sensitive thermostat, ensures consistent accurate temperature
- $5 / 8$ " thick aluminum heating plates "won't warp"
- Maximum temperature $550^{\circ} \mathrm{F}$

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | ID | Jaw Size | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: |
| C | $\mathbf{2 2 - 7 4 3 6}$ | Deluxe | $15^{\prime \prime} \times 8^{\prime \prime} \times 18^{\prime \prime}$ | $4^{\prime \prime}$ | $6^{\prime \prime} \times 8^{1 / 4}$ | $\$ 925.00$ |
| D | $\mathbf{2 2 - 7 4 3 5}$ | Standard | $14^{\prime \prime} \times 9^{\prime \prime} \times 20^{\prime \prime}$ | $23 / 4^{\prime \prime}$ | $5^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 669.95$ |




LIQUID MOLD FRAMES
Clear plastic plates release easily from rubber, and won't shatter or cut hands like glass plates. Plastic mold frames can be used with LiquaCast RTV liquid rubber compounds and all other liquid rubber compounds. Heavy duty bands included.

| Order \# | $\mathbf{W} \times \mathrm{L} \times$ Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| 22-6006 | $17 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{11 / 4}{}$ | \$15.00 | \$15.89 | \$17.65 |
| 22-6007 | $17 / 8{ }^{\prime \prime} \times 6^{\prime \prime} \times 1$ 1 | \$15.00 | \$15.89 | \$17.65 |
| 22-6008 | $17 / 8^{\prime \prime} \times 6^{\prime \prime} \times 1 \frac{114}{}{ }^{\prime \prime}$ | \$15.00 | \$15.89 | \$17.65 |
| 22-6009 | $17 / 8^{\prime \prime} \times 6^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$15.00 | \$15.89 | \$17.65 |



## SEE-THRU ${ }^{\circledR}$ MOLD FRAMES BY FERRIS ${ }^{\circledR}$

Features a built-in sprue former, glass cover plates, and corrosion resistant clamps. The perfect frame for pourable mold compounds.

| Order \# | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 9 2 2}$ | $2^{\prime \prime} \times 3^{\prime \prime} \times 7 / 8^{\prime \prime}$ | $\$ 17.38$ | $\$ 18.41$ | $\$ 20.45$ |
| $\mathbf{2 2 - 5 9 2 3}$ | $2^{\prime \prime} \times 3^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 17.77$ | $\$ 18.81$ | $\$ 20.90$ |
| $\mathbf{2 2 - 5 9 2 4}$ | $2^{\prime \prime} \times 3^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 22.36$ | $\$ 23.67$ | $\$ 26.30$ |
| $\mathbf{2 2 - 5 9 2 5}$ | $2^{\prime \prime} \times 3^{\prime \prime} \times 1^{1 / 4^{\prime \prime}}$ | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |



ALUMINUM MOLD FRAMES
Used to hold uncured rubber and model when vulcanizing. Sides of frame contain pre-drilled holes to allow excess rubber to escape, preventing model deformation.

| Order \# | Description | W $\times \mathrm{L} \times$ Thickness | 12+ | 6+ | + |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22-5506 | Single | $27 / 8^{\prime \prime} \times 178^{\prime \prime} \times 3 / 4^{\prime \prime}$ | \$9.35 | \$9.90 | \$11.00 |
| 22-5507 | Single | $27 / 8^{\prime \prime} \times 17 / 8^{\prime \prime} \times 1^{\prime \prime}$ | \$10.58 | \$11.21 | \$12.45 |
| 22-5509 | Single | $33 / 4^{\prime \prime} \times 21 / 2^{\prime \prime} \times 1^{\prime \prime}$ | \$13.56 | \$14.36 | \$15.95 |
| 22-5600 | Single | $43 / 4^{\prime \prime} \times 31 / 2^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$29.58 | \$31.32 | \$34.80 |
| 22-5620 | Double | $27 / 8^{\prime \prime} \times 17 / 8^{\prime \prime} \times 1 / 2^{\prime \prime}$ | \$11.41 | \$11.41 | \$11.41 |
| 22-5621 | Double | $27 / 81 \times 17 / 8^{\prime \prime} \times 5 / 81$ | \$12.65 | \$12.65 | \$12.65 |
| 22-5622 | Double | $27 / 8^{\prime \prime} \times 17 / 8^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$23.59 | \$23.59 | \$23.59 |



## MOLD FRAME PLATES

Metal plates used when vulcanizing that prevent mold rubber from adhering to the vulcanizer.

| Order \# | $\mathbf{W} \times \mathrm{L} \times$ Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| 22-5700 | $5^{\prime \prime} \times 7^{\prime \prime} \times 1 / 8^{\prime \prime}($ set of 2$)$ | \$9.52 | \$10.08 | \$11.20 |
| 22-5701 | $4^{\prime \prime} \times 6^{\prime \prime} \times 1 / 8^{\prime \prime}($ set of 2) | \$7.52 | \$7.97 | \$8.85 |
| 22-5702 | $31 / 2^{\prime \prime} \times 5^{\prime \prime} \times 1 / 8^{\prime \prime}$ (set of 2) | \$5.87 | \$6.21 | \$6.90 |
| 22-5703 | $21 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 1 / 8^{\prime \prime}($ set of 2$)$ | \$5.40 | \$5.72 | \$6.35 |



## SPRUE FORMERS

Used to form an opening in the mold through which wax is injected. Attaches to the model in the mold frame. Also assures proper fit on the nozzle of the wax injector.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 5 8 0 0}$ | Sprue Formers | $\$ 1.06$ | $\$ 1.10$ | $\$ 1.15$ |

## MOLD-MATE ${ }^{\text {m }}$

Cut molds safely and easily. The new Mold-Mate ${ }^{\text {tw }}$ has one vise-like clamp and a plastic cutting surface to help hold the mold. Mold-Mate ${ }^{\text {T" }}$ gives cutter free movement of the mold for easier cutting and inspection.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 9 - 2 5 6 5}$ | Mold-Mate | $\$ 76.50$ | $\$ 81.00$ | $\$ 90.00$ |



## SWANN-MORTON ${ }^{\circledR}$ KNIFE BLADES

Swann-Morton ${ }^{\circledR}$ high-carbon knife blades are high-quality, precise (non-sterilized) blades for mold cutting. High carbon is sharper and lasts longer than stainless.

| Item | Order \# | Description | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{3 9 - 2 5 8 5}$ | \#11 Straight | Pack of 5 | $\$ 1.62$ | $\$ 1.71$ | $\$ 1.90$ |
|  | $\mathbf{3 9 - 2 5 8 0}$ | \#11 Straight | Pack of 100 | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |
| B | $\mathbf{3 9 - 2 5 9 5}$ | \#12 Curved | Pack of 5 | $\$ 1.57$ | $\$ 1.67$ | $\$ 1.85$ |
|  | $\mathbf{3 9 - 2 5 9 0}$ | \#12 Curved | Pack of 100 | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |



## MOLD-CUTTING KNIFE HANDLES

Used for \#11 and \#12 blades. Excellent for cutting rubber molds or wax carvings. Contoured and very comfortable.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | :---: |
| C | $\mathbf{3 9 - 2 5 6 0}$ | Steel | $\$ 3.19$ | $\$ 3.38$ | $\$ 3.75$ |
| D | $\mathbf{3 9 - 2 5 6 1}$ | Blue Rubber PVC Grip | $\$ 7.10$ | $\$ 7.52$ | $\$ 8.35$ |
| E | $\mathbf{3 9 - 2 5 7 0}$ | Contoured Plastic | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |
| F | $\mathbf{3 9 - 2 5 7 5}$ | Hollow Stainless Steel | $\$ 6.12$ | $\$ 6.48$ | $\$ 7.20$ |



## RETRACTAWAY SCALPEL

The Retractaway has a sleek, graphite-finished metal handle, offering the added safety of a hand-retractable blade mechanism. It is a highly versatile cutting tool, produced with designers, graphic artists, and model makers in mind.

| Order \# | Description | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 9 - 2 5 0 0}$ | Scalpel with 2 Blades |  | $\$ 12.16$ | $\$ 12.87$ | $\$ 14.30$ |
| $\mathbf{3 9 - 2 5 8 5}$ | \#11 Straight | Pack of 5 | $\$ 1.62$ | $\$ 1.71$ | $\$ 1.90$ |



## HD EQUIPMENT

A. The HD Silver Bullet is a hyperbaric curing chamber for HD Photopolymer Pattern production as well as RTV silicone mold making. This automatic hyperbaric chamber uses alternating air pressure and light energy to produce bubble-free HD precision casting patterns and bubblefree RTV silicone molds.
B. The HD "Firefly" Kit produces both silicone RTV molds and HD casting patterns. The Firefly hyperbaric light chamber utilizes air pressure instead of vacuum to eliminate air bubbles often associated with both mold and casting pattern production. Up to six RTV molds can be made in the chamber per cycle, curing in as little as two hours. When making HD casting patterns, up to four molds can be placed in the chamber per cycle with an average curing time of six minutes. Kit includes the hyperbaric light chamber, stainless steel stand, three stainless steel mold frames, timer, power supply, spin bag, and air coupling.
C. The HD "Novac" hyperbaric curing chamber utilizes air pressure to remove bubbles in the production of silicone RTV molds. By replacing the vacuum equipment and vacuum steps in mold production, the Novac chamber eliminates the time, waste, and mess normally associated with silicone RTV mold production.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{5 4 - 5 8 0 2}$ | HD Silver Bullet | $\$ 9,888.00$ |
| B | $\mathbf{5 4 - 5 8 0 3}$ | HD Firefly Kit | $\$ 645.00$ |
| C | $\mathbf{5 4 - 5 8 0 1}$ | HD Novac | $\$ 185.00$ |



## HD SPITFIRE INJECTION MACHINE

The HD Spitfire is a low-pressure injector for mold filling of HD liquid polymer formulations. It injects into clear silicone molds in the HD Pattern light curing chambers. The Silver Bullet or Firefly curing chambers complete the production of high detailed and durable polymer patterns for casting. Requiring no electricity, the Spitfire is an air logic system that requires only a source of compressed air for operation. The HD polymer bottles fit easily in the Spitfire's internal dispensing tank. Three manual control valves operate the tank pressure, dispensing nozzle, and auxiliary air port. A foot pedal operates the dispensing nozzle for controlled mold filling of the liquid polymer into the silicone molds. Designed for extremely long life, the sturdy Spitfire has been designed with a very narrow footprint to conserve counter space.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{2 2 - 5 9 5 0}$ | Spittire Injection Machine | $\$ 3,250.00$ |

## HD MOLD FRAME

HD Micro-Frame kits offer an economical alternative to traditional RTV mold frames. The compact frame sizes save approximately half the RTV required for industry standard frames. The precision stainless steel Micro- Frames quickly pay for themselves in RTV savings and are compatible with all RTV compounds. The innovative hinge-forming rod included in each kit allows the finished micro-molds to open and close like a book with perfect registration, eliminating the need for cutting intricate corner keys. A removable stainless steel sprue former and matching thumbscrew allows the master to be mounted in the sprue-former outside the mold frame without frame restriction or wobble. HD stainless steel Micro-Frame kits include two glass plates, rubber bands, sprue former, thumb screw, nylon hinge-forming rod, and nylon sprue-forming rod. The polypropylene jar that houses the kit doubles as a convenient RTV mixing cup.

| Order \# | Description | Height | 1+ |
| :---: | :---: | :---: | :---: |
| 22-5926 | HD Micro Mold Frame Kit | $1 / 2 / 12 \mathrm{~mm}$ | \$19.65 |
| 22-5927 | HD Micro Mold Frame Kit | 5/8/16mm | \$20.70 |
| 22-5928 | HD Micro Mold Frame Kit | $3 / 4 / 20 \mathrm{~mm}$ | \$21.75 |
| 22-5929 | HD Micro Mold Frame Kit | 1"/25mm | \$22.80 |
| 22-5930 | HD Micro Mold Frame Kit | $11 / 4 / 31 \mathrm{~mm}$ | \$23.80 |



## HD AVATAR

Avatar is the newest addition to the HD Pattern System product line. Designed to produce heavier patterns in the class ring range for casting, this new photopolymer can also produce ultra light patterns as well. This virtual non-shrink polymer allows precise duplication from masters molded in clear RTV silicone. All HD patterns offer reliable detail and exact weights for casting. Patterns have perfect memory and infinite shelf life. A needed partner to CAD generated designs, HD patterns succeed where wax injection fails. One small bottle produces patterns that will yield up to 1,500 grams of 14 Karat gold castings.

| Order\# | Description | Size | 1+ |
| :--- | :--- | :--- | ---: |
| 22-5940 | Avatar | 118 ml | $\$ 159.15$ |



Designed to produce heavier patterns in the class ring range for casting, this new photopolymer can also produce ultra light patterns as well.


## HD MASTER COPY

HD Master Copy is photopolymer that cures to a very tough and hard plastic that can be detailed and/or duplicated to produce a moldable master pattern. It's heat resistance allows it to be used as an alternate to the traditional silver masters for press molding with many vulcanized rubber molding materials, or as a master that can be used with silicone RTV molding compounds. -Detailing: Milled, injected, or hand carved waxes, as well as RP patterns, or metal masters, can be molded first in clear silicone RTV and a duplicate pattern can then be made with Master Copy. Once the Master Copy pattern is removed from the mold it can be post cured to achieve maximum hardness with the curing lights of the Silver Bullet or Firefly units or in strong sunlight. This first generation Master Copy can be detailed as if it were a metal casting with rotary tools, files, fine abrasives, engravers, and polished to produce a perfect finished master to be molded again. Minimal shrinkage will be present in the duplicate master and it can be saved and reused like a Silver Master to produce additional production molds.

| Order\# | Description | Size | 1+ |
| :--- | :--- | :--- | ---: |
| $22-5941$ | HD Master Copy | 118 ml | $\$ 159.15$ |



Note: Before molding a Master Copy model, clean the model in soapy water. Post curing or mold release maybe required before the model is used with some molding compounds.


## STULLER MINI WAX INJECTOR

Easy-to-use, economical, hand-operated pump injects wax into mold. Thermostatically controlled settings keep wax at desired temperatures.
Low temperature $=125^{\circ} \mathrm{F}$, Medium temperature $=150^{\circ} \mathrm{F}$, and High temperature $=175^{\circ} \mathrm{F}$. Available in 120 V .
One-year limited manufacturer's warranty. Made in the USA.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | Wax Capacity | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | ---: |
| $\mathbf{2 2 - 7 4 2 5}$ | 1 Pint | $8^{\prime \prime} \times 10^{\prime \prime}$ | 1 lb | $\$ 228.75$ |



## STULLER COMPACT AIR PRESSURE WAX INJECTOR

The Stuller compact, air pressure wax injector is constructed to provide years of service-free performance. One-quart, heavy-duty aluminum pot; three wing nuts for easy cover removal and wax loading; 0-20 PSI air pressure regulator and gauge; leak-resistant nozzle (will not clog at injection temperature; accurate thermostat; on/off; safety valve (set at 20 PSI ). Requires 6 to 8 PSI (air supply not included). One-year limited manufacturer's warranty. Made in the USA.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | Wax Capacity | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | :---: |
| A | $\mathbf{2 2 - 7 4 2 4}$ | 1 Quart Compact Wax Injector | $6^{\prime \prime} \times 12^{\prime \prime}$ | $21 / 2 \mathrm{lb}$ | $\$ 365.00$ |
| REPLACEMENT PARTS |  |  |  |  |  |
| B | $\mathbf{2 2 - 7 4 4 0}$ | Complete Regulator Assembly |  | $\$ 84.65$ |  |
| C | $\mathbf{2 2 - 7 4 2 8}$ | Lid Seal (61/4" diameter) | $\$ 11.40$ |  |  |
| D | $\mathbf{2 2 - 7 4 2 6}$ | Heating Element, 120V | $\$ 58.25$ |  |  |
| E | $\mathbf{2 2 - 7 4 0 3}$ | Nozzle Assembly | $\$ 87.95$ |  |  |
|  | $\mathbf{2 2 - 7 4 2 7}$ | Thermostat | $\$ 41.30$ |  |  |



## STULLER COMPACT AIR PRESSURE WAX INJECTOR

The Stuller compact, air pressure wax injector is constructed to provide years of service-free performance. One-quart, heavy-duty aluminum pot; three wing nuts for easy cover removal and wax loading; 0-20 PSI air pressure regulator and gauge; leak-resistant nozzle (will not clog at injection temperature; accurate thermostat; on/off; safety valve (set at 20 PSI). Requires 6 to 8 PSI (air supply not included). One-year limited manufacturer's warranty. Made in the USA.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | Wax Capacity |
| :---: | :--- | :--- | :---: | ---: |
| F | $\mathbf{2 2 - 7 4 3 2}$ | $23 / 4$ Quart Wax Injector | $9^{\prime \prime} \times 16^{\prime \prime}$ | $51 / 2 \mathrm{lb}$ |

REPLACEMENT PARTS

| H | 22-7440 | Complete Regulator Assembly | \$84.65 |
| :---: | :---: | :---: | :---: |
| J | 22-7437 | Lid Seal ( $61144^{\prime \prime}$ diameter) | \$11.20 |
| K | 22-7439 | Heating Element, 120V | \$90.60 |
| L | 22-7403 | Nozzle Assembly | \$87.95 |
| M | 22-7431 | Thermometer | \$27.80 |
| N | 22-7438 | Thermostat | \$91.35 |





## INJECTION WAX FLAKES

Freeman injection wax has been the industry standard for quality and consistency. Our formulations are renowned for their high pattern detail, rapid wax solidification, minimal shrinkage, excellent flow, and low ash content ( $0.003 \%$ ), enabling the cleanest burnouts and most accurate reproductions possible. All are designed for platinum, gold and silver, as well as industrial and dental alloys.

## AQUA FLAKES

This all-purpose injection wax is our most popular formulation as it provides the ideal balance of characteristics demanded by most designers and casters. Also recommended for stone in place casting.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 0 0}$ | $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ | $\$ 6.81$ | $\$ 7.38$ | $\$ 8.20$ |

## RUBY RED FLAKES

Similar to our Aqua Flakes, except for the deep red color. Many designers and casters prefer the darker color for easier visual verification of fine detail.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 0 1}$ | $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ | $\$ 6.81$ | $\$ 7.38$ | $\$ 8.20$ |

## TUROUOISE FLAKES

Similar to our Aqua Flakes, except for the turquoise color. Many designers and casters prefer the darker color for easier visual verification of fine detail.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 0 2}$ | $150^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)$ | $\$ 6.81$ | $\$ 7.38$ | $\$ 8.20$ |

## FILIGREE PINK FLAKES

This wax combines the flexibility of Tuffy Green with the excellent flow characteristics of Aqua Flakes, producing very high detail while enabling easy pattern removal without breakage. Recommended for stone in place casting.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 0 3}$ | $155^{\circ} \mathrm{F}\left(68^{\circ} \mathrm{C}\right)$ | $\$ 6.81$ | $\$ 7.38$ | $\$ 8.20$ |

## flexible blue flakes

Featuring the longest shelf-life and highest flexibility of the Freeman Flakes line, this unique mixture of wax and plastic is especially well-suited for metal molds and stone in place casting.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 4 1 0}$ | $155^{\circ} \mathrm{F}\left(68^{\circ} \mathrm{C}\right)$ | $\$ 6.97$ | $\$ 7.38$ | $\$ 8.20$ |



## CARVEABLE PURPLE FLAKES

This new wax features low shrinkage, excellent flow, and low ash content, yet offers minimal gumming of wax files and rotary tools like that of traditional injection waxes. It is a durable wax that will not break under stress, and does not react to body heat from fingers while handling. Ideal for designers or any casters who find themselves often reworking wax patterns.

| Order \# | Injection Temperature | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 0 1 6}$ | $170^{\circ} \mathrm{F}\left(77^{\circ} \mathrm{C}\right)$ | $\$ 6.97$ | $\$ 7.38$ | $\$ 8.20$ |



|  | Flow | Flexibility | Carvability | Shrinkage | Memory | Pattern Shelf Life | Readability | Solidification Time |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aqua | High | Medium | Low | Low | Medium | High | High | Medium |
| Ruby Red | High | Medium | Low | Low | Medium | High | High | Medium |
| Turquoise | High | Medium | Low | Low | Medium | High | High | Medium |
| Filigree Pink | Medium | Medium | Low | Low | Medium | High | Medium | Medium |
| Filigree Blue | Medium | Highest | Medium | Medium | High | Highest | Medium | Medium |
| Carveable Purple | High | High | High | Low | Medium | High | High | Fast |



BEAD INJECTION WAXES BY FERRIS ${ }^{\oplus}$
Excellent flow and high flexibility. This tough wax yields bright surfaces and will not become brittle in storage. Contains a built-in release agent. Turquoise beads with the same durability as aqua, but the darker color increases pattern readability. Injection temperature: $160^{\circ}-165^{\circ} \mathrm{F}\left(71^{\circ}-74^{\circ} \mathrm{C}\right)$.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | 21-0422 | Turquoise-Ject Wax Beads | $\$ 6.02$ | $\$ 6.53$ | $\$ 7.25$ |
| B | $\mathbf{2 1 - 0 4 2 1}$ | Aqua-Ject Wax Beads | $\$ 7.47$ | $\$ 8.10$ | $\$ 9.00$ |
| C | $\mathbf{2 1 - 0 4 2 0}$ | Pink Magna-Ject Wax Beads | $\$ 7.47$ | $\$ 8.10$ | $\$ 9.00$ |



CASTALDO ${ }^{\circledR}$ PLAST-O-WAX JEWELRY INJECTION WAX

- Produces patterns that are very flexible, resilient, and durable with great memory
- Patterns will not break despite rough handling
- Patterns bend, flex, and twist under pressure but return
to their original shape
- Excellent flow and fill characteristics of wax and the stability of plastic
- Wax does not become brittle over time, inject them now - use them months later
- Wax releases easily from any type of mold to produce patterns with smooth glossy surfaces, crisp detail, and minimal shrinkage - Unlike plastic-only pattern materials, it can easily be steam de-waxed
- Injection temperature $155^{\circ}-160^{\circ} \mathrm{F}\left(68^{\circ}-71^{\circ} \mathrm{C}\right)$

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 21-0429 | Injection Wax | $\$ 23.42$ | $\$ 24.80$ | $\$ 27.55$ |



## CASTALDO ${ }^{\circledR}$ SUPERCERA ${ }^{\circledR}$ GOLD

Superior quality wax for a full range of applications in a unique, new form that provides extra convenience with easy identification. The Supercera® ${ }^{\circledR}$ old is a hard wax with very little flexibility. Flows easily and will hold sharp detail. Almost no shrinkage or shrink. Can be carved. Recommended for large patterns with fine detail. Good for metal molds. Inject at $70^{\circ} \mathrm{F}\left(76^{\circ} \mathrm{C}\right)$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 1 - 0 4 6 0}$ | Supercera $^{\text {® }}$ Gold | $\$ 45.86$ | $\$ 47.86$ | $\$ 49.85$ |

## STULLER SELECT WATER SOLUBLE WAX

Water soluble wax offers jewelry designers an effective, cost-efficient means for creating soluble cores in wax patterns. When injected or poured into the core mold, this wax will conform precisely to the core shape. This hard wax is excellent for precision molds and larger parts. Can be injected or hand cast at $150^{\circ} \mathrm{F}\left(66^{\circ}-77^{\circ} \mathrm{C}\right)$.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 1 - 0 2 4 0}$ | Wax Cake | 1 lb box | $\$ 12.07$ | $\$ 12.78$ | $\$ 14.20$ |

STULLER SELECT WAX SPRUE RODS
The ideal wax for sprue rods. Fully refined to eliminate impurities, the rods burn out quickly without expansion or residue. Perfect for building even the most demanding sprue systems. The sprue rod of choice for Stuller's own manufacturing. Light Green: A medium hard spruce rod which is tough and rigid. Perfect for general purpose casting. - Melt $158^{\circ}-168^{\circ} \mathrm{F}$

| Order \# | Diameter | Length | Per Unit | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21-1330 | $1 / 4{ }^{1 /}$ | $10^{\prime \prime}$ | 1 lb pack | \$11.68 | \$12.19 | \$12.70 |
| 21-1331 | 3/8" | $10^{\prime \prime}$ | 1 lb pack | \$11.68 | \$12.19 | \$12.70 |
| 21-1332 | $1 / 2{ }^{1}$ | $10^{\prime \prime}$ | 1 lb pack | \$12.65 | \$13.20 | \$13.75 |
| 21-1338 | $38^{\prime \prime}$ | 101 | 25 lb box | \$425.96 | \$444.48 | \$463.00 |
| 21-1339 | $3 / 8{ }^{\prime \prime}$ | $6 "$ | 25 lb box |  |  | \$436.80 |



## SPRUE WAX

Combines flexibility and sufficient rigidity for sprues and mounting wax patterns. Melts at lower temperature $\left(125^{\circ} \mathrm{F}\right)$ and burns out clean. Great for general sprues and creating runners.

| Order \# | Gauge | Length | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 1 3 0 5}$ | 6 Gauge | $4^{\prime \prime}$ | 2 oz box | $\$ 9.09$ | $\$ 9.86$ | $\$ 10.95$ |
| $\mathbf{2 1 - 1 3 0 6}$ | 8 Gauge | $4^{\prime \prime}$ | 2 oz box | $\$ 9.09$ | $\$ 9.86$ | $\$ 10.95$ |
| $\mathbf{2 1 - 1 3 0 7}$ | 10 Gauge | $4^{\prime \prime}$ | 2 oz box | $\$ 9.09$ | $\$ 9.86$ | $\$ 10.95$ |
| $\mathbf{2 1 - 1 3 0 8}$ | 12 Gauge | $4^{\prime \prime}$ | 2 oz box | $\$ 9.09$ | $\$ 9.86$ | $\$ 10.95$ |


hexagon sprue wax
Six-sided wax rods make treeing for production casting faster and easier than traditional round sprue rods. Melting temperature $125^{\circ}$. Burns out fast and clean.

| Order\# | Diameter | Length | Per Unit |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 1 3 8 3}$ | $3 / 8^{\prime \prime}$ | $24 "$ | 1 lb pack | $\$ 5.31$ | $\$ 5.63$ | $\$ 6.25$ |  |



## EXTRUDED SPRUE WAX

Round, petroleum-based "red wax" rods (24" lengths) for sprues. Melting temperature $125^{\circ}$. Burns out quickly and cleanly.

| Order\# | Diameter | Length | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 3 9 5}$ | $1 / 4^{\prime \prime}$ | $24^{\prime \prime}$ | 1 lb pack | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |
| $\mathbf{2 1 - 0 3 9 6}$ | $3 / 8^{\prime \prime}$ | $24 "$ | 1 lb pack | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |




KERR FLASKS
Heavy duty, 304 stainless steel flasks with 18 gauge wall thickness.

| Item | Order \# | Description | OD | Height | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 2 - 4 7 2 0}$ | 2 C | $13 / 4^{11}$ | $11 / 2^{11}$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |
| B | $\mathbf{2 2 - 4 7 1 9}$ | J 3 | $31 / 2^{11}$ | $258^{11}$ | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |



C


D


E

SPRUE BASE
Will accept $3 / 8^{\prime \prime}$ or $1 / 4^{\prime \prime}$ sprue rods.

| Item | Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{2 2 - 4 7 2 5}$ | T2 | $13 / 4^{\prime \prime}$ | $\$ 9.29$ | $\$ 9.70$ | $\$ 10.10$ |
| D | $\mathbf{2 2 - 4 7 2 9}$ | T3 | $21 / 2^{\prime \prime}$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| E | $\mathbf{2 2 - 4 7 2 7}$ | Sprue Base $(4.35 \mathrm{lb})$ | $33 / 8^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |

CASTING FLASKS
Made of durable stainless steel. Withstands extreme temperatures, quenching, and burnouts. 18 gauge.

| Item | Order \# | OD | Height | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 21-6925 | 2" | $21 / 2^{\prime \prime}$ | \$4.14 | \$4.32 | \$4.50 |
| G | 21-6930 | 21/2" | $3{ }^{\prime \prime}$ | \$5.20 | \$5.42 | \$5.65 |
| H | 21-6935 | 21/2" | $4{ }^{\text {" }}$ | \$5.89 | \$6.14 | \$6.40 |
| J | 21-6940 | $3{ }^{\prime \prime}$ | 3" | \$6.12 | \$6.38 | \$6.65 |
| K | 21-6945 | $3{ }^{\prime \prime}$ | $4{ }^{\text {" }}$ | \$6.53 | \$6.82 | \$7.10 |
| L | 21-6950 | $31 / 21$ | 3" | \$7.77 | \$8.11 | \$8.45 |
| M | 21-6955 | $31 / 21$ | 4 " | \$4.85 | \$4.85 | \$4.85 |
| N | 21-6960 | $31 / 21$ | $5{ }^{\prime \prime}$ | \$10.35 | \$10.80 | \$11.25 |
| P | 21-6965 | $4{ }^{\prime \prime}$ | 4" | \$10.35 | \$10.80 | \$11.25 |
| 0 | 21-6966 | $4{ }^{\prime \prime}$ | $5{ }^{\prime \prime}$ | \$9.82 | \$10.40 | \$11.55 |
| R | 21-6970 | $4{ }^{\prime \prime}$ | $6 "$ | \$11.73 | \$12.24 | \$12.75 |



PERFORATED FLASKS
Stainless steel flasks used in vacuum casting. A vacuum pulls through the end and side, which allows complete fills. Masking tape is used to cover the holes when investing.

| Item | Order \# | OD | Height | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | 21-7000 | 21/2" | $31 / 2{ }^{11}$ | \$17.13 | \$18.14 | \$20.15 |
| T | 21-7001 | 21/2" | $4{ }^{\prime \prime}$ | \$21.68 | \$22.95 | \$25.50 |
| U | 21-7002 | 3" | $4{ }^{\prime \prime}$ | \$25.37 | \$26.87 | \$29.85 |
| V | 21-7011 | $31 / 21$ | 4 " | \$25.16 | \$26.64 | \$29.60 |
| W | 21-7012 | $31 / 21$ | $5{ }^{\prime \prime}$ | \$29.50 | \$31.23 | \$34.70 |
| Y | 21-7013 | $31 / 21$ | $6 "$ | \$31.58 | \$33.44 | \$37.15 |
| Z | 21-7003 | $4{ }^{\prime \prime}$ | $4{ }^{\prime \prime}$ | \$33.90 | \$35.38 | \$36.85 |
| AA | 21-7014 | $4{ }^{\prime \prime}$ | $6 "$ | \$33.62 | \$35.60 | \$39.55 |
| AB | 21-7007 | $4{ }^{\prime \prime}$ | $7{ }^{\prime \prime}$ | \$39.65 | \$41.38 | \$43.10 |
| AC | 21-7015 | $4{ }^{\prime \prime}$ | 8" | \$41.86 | \$44.33 | \$49.25 |

SPRUE BASE
Allows the tree rod to be placed directly in the base and held securely. Will accept $3 / 8$ " or $1 / 4$ " sprue rods.

| Item | Order\# | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 7 8 3 4}$ | $2^{\prime \prime}$ | $\$ 2.67$ | $\$ 2.78$ | $\$ 2.90$ |
| B | $\mathbf{2 1 - 7 8 3 5}$ | $2^{1 / 21}$ | $\$ 2.85$ | $\$ 2.98$ | $\$ 3.10$ |
| C | $\mathbf{2 1 - 7 8 3 6}$ | $3^{\prime \prime}$ | $\$ 3.08$ | $\$ 3.22$ | $\$ 3.35$ |
| D | $\mathbf{2 1 - 7 8 3 2}$ | $3^{1 / 2} 2^{\prime \prime}$ | $\$ 3.54$ | $\$ 3.70$ | $\$ 3.85$ |
| E | $\mathbf{2 1 - 7 8 3 3}$ | $4^{\prime \prime}$ | $\$ 3.82$ | $\$ 3.98$ | $\$ 4.15$ |



## BUTTON SPRUE BASE

Used to form the base for the sprue. Fill the cup in the center with wax or clay and attach wax with sticky wax.

| Item | Order \# | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{2 1 - 7 8 2 7}$ | 2" $^{\prime \prime}$ | $\$ 2.90$ | $\$ 3.02$ | $\$ 3.15$ |
| G | $\mathbf{2 1 - 7 8 2 8}$ | $\mathbf{2 1}^{11 \prime}$ | $\$ 2.94$ | $\$ 3.07$ | $\$ 3.20$ |
| H | $\mathbf{2 1 - 7 8 2 9}$ | $3^{\prime \prime}$ | $\$ 3.17$ | $\$ 3.31$ | $\$ 3.45$ |
| J | $\mathbf{2 1 - 7 8 3 0}$ | $31 / 2^{\prime \prime}$ | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |
| K | $\mathbf{2 1 - 7 8 3 1}$ | $4 "$ | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |



## FLASK EXTENDERS

Used to prevent overflow of investment during vacuuming. Made of rubber. Easily slips on and off flasks.

| Item | Order \# | OD | Height | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| L | $\mathbf{2 1 - 7 9 7 0}$ | $\mathbf{2 1}^{\prime \prime} 2^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| M | $\mathbf{2 1 - 7 9 7 5}$ | $3^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |
| N | $\mathbf{2 1 - 7 9 8 0}$ | $31 / 2^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |



## RUBBER SLEEVES

Used in place of masking tape to cover holes on the perforated flasks. Sleeves easily fit over flasks to contain investment while pouring. Remove sleeve prior to burnout.

| Item | Order\# | OD | Height | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{P}$ | $\mathbf{2 1 - 7 0 0 8}$ | $338^{\prime \prime}$ | $4^{\prime \prime}$ | $\$ 8.10$ | $\$ 8.45$ | $\$ 8.80$ |
| 0 | $\mathbf{2 1 - 7 0 0 9}$ | $4^{\prime \prime}$ | $534^{\prime \prime}$ | $\$ 11.36$ | $\$ 11.86$ | $\$ 12.35$ |
| $R$ | $\mathbf{2 1 - 7 0 1 0}$ | $4^{\prime \prime}$ | $7^{\prime \prime}$ | $\$ 15.23$ | $\$ 15.89$ | $\$ 16.55$ |



## FLASK TONGS

Steel tongs used for lifting small and large perforated flasks to and from oven.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 0 6 8 0}$ | $15^{\prime \prime}$ | $\$ 5.70$ | $\$ 6.03$ | $\$ 6.70$ |



## PLATINUM FLASK LINER SHEET

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 7 9 7 6}$ | Flask Liner | $8^{\prime \prime} \times 31^{\prime \prime} \times 1 / 16^{\prime \prime}$ | $\$ 12.11$ | $\$ 12.83$ | $\$ 14.25$ |




## KERR ${ }^{\circledR}$ SATIN CAST DIAMANTE ${ }^{\circledR}$

With more than 20 years of experience as a "Stone in Place" investment, Satin Cast 20 is known as the most popular investment for this process. An investment formulated specifically for "Stone in Place" casting for higher temperature burnout.

| Order \# | Description | Weight | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 4 7 5 0}$ | Satin Cast | $99 \operatorname{lbs}(45 \mathrm{~kg})$ | $\$ 69.55$ | $\$ 75.42$ | $\$ 83.80$ |

## KERR ${ }^{\oplus}$ PLATINITE ${ }^{\oplus}$

Platinite is a high strength and high temperature investment for casting platinum, stainless steel, and alloys that melt above $2000^{\circ}$. Platinite forms a strong mold with good dimensional accuracy and caters to the exacting needs for excellence. An exceptionally smooth surface is achieved without cracks and fissures, which drastically reduces finishing time.

| Order \# | Description | Weight | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 4 7 3 9}$ | Platinite | 99 lbs $(45 \mathrm{~kg})$ | $\$ 89.34$ | $\$ 94.59$ | $\$ 105.10$ |


| Stuller offers a wide range of investments to fit your casting needs | Gold | Silver | Platinum | Palladium | Stainless Steel | Titanium | Stone in Place |  | Mix with Binder | Ok for CAD/ CAM Resins | Di-Vester Needed | UOM | Order \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kerr Satin Cast 20 | - | - |  |  |  |  |  | - |  | - |  | 33 lbs | 22-4738 |
| Kerr Satin Cast Diamate | - | - |  |  |  |  | - | - |  |  |  | 99 lbs | 22-4750 |
| Kerr Opticast |  |  | $\bullet$ | $\bullet$ | - |  |  |  | - | - | - | 77 lbs | 22-4755 |
| R\&R Ultra-Vest | - | - |  |  |  |  |  | $\bullet$ |  | - |  | 50 lbs | 22-4771 |
| R\&R Solitaire | - | - |  |  |  |  | - | - |  | - |  | 50 lbs | 22-4772 |
| R\&R Ultra-Vest MAXX | - |  |  | - |  |  |  | - |  | - |  | 50 lbs | 22-4776 |
| Grobet Investment | - | - |  |  |  |  |  | - |  |  |  | 25 lbs | 22-4761 |
| Invest C/P |  |  | - | - | - | - |  |  | - | - | - | 11 lbs | 22-7047 |
| Platinite |  |  | - |  | $\bullet$ |  |  | $\bullet$ |  |  |  | 11 lbs | 22-4739 |

## R\&R ${ }^{\circledR}$ ULTRA-VEST ${ }^{\circledR}$ INVESTMENT

Ultra-Vest ${ }^{\circledR}$ Investment offers casters smooth mixing, controlled setting, clean breakout, and excellent surface finish. Ultra-Vest ${ }^{\oplus}$ eliminates the watermarking defects seen with many other investments. Ultra-Vest ${ }^{\oplus}$ offers superior performance and unmatched consistency. For low temperature mold materials. Rapid prototype cooling.

| Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 2 - 4 7 7 1}$ | Ultra-Vest | $50 \mathrm{lbs}(23 \mathrm{~kg})$ | $\$ 44.21$ | $\$ 46.13$ | $\$ 48.05$ |

## R\&R ${ }^{\circledR}$ ADVANTAGE AND PLASTICAST

A. R\&R Advantage investment provides silver, brass, and bronze jewelry casters with an economical investment that reduces excess metal and watermarking defects for dependable casting results and maximum profits. For low temperature mold materials.
B. R\&R Plasticast investment provides casters using plastic and wax/ plastic pattern materials with a mold material that meets the high expansion demands of the pattern material while maintaining mold surface and dimensional integrity.

| Item |  | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| A | 22-4773 | Advantage | $50 \mathrm{lbs}(23 \mathrm{~kg})$ | $\$ 36.94$ | $\$ 38.54$ | $\$ 40.15$ |  |
| B | $\mathbf{2 2 - 4 7 7 8}$ | Plasticast | $50 \mathrm{lbs}(23 \mathrm{~kg})$ | $\$ 47.84$ | $\$ 49.92$ | $\$ 52.00$ |  |

## R\&R ${ }^{\circledR}$ ULTRA-VEST® ${ }^{\circledR}$ MAXX

An investment that can be used for yellow gold, white gold, and palladium, MAXX is very stable for high-melt temperatures, flask temperatures, burnout temperatures, and casting temperatures. MAXX eliminates orange peel defects associated with metal and other mold reactions, or any other challenges in the burnout process associated with plastic and resin pattern materials. For low temperature mold materials. Rapid prototype cooling.

| Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 22-4776 | Ultra-Vest ${ }^{\oplus}$ MAXX | $50 \mathrm{lbs}(23 \mathrm{~kg})$ | $\$ 50.23$ | $\$ 52.42$ | $\$ 54.60$ |

## R\&R${ }^{\circledR}$ SOLITAIRE INVESTMENT

Solitaire Investment is designed to provide critical protection to stone-in-place castings. Solitaire Investment protects castable stones during the wax-burnout phase of flask preparation.

| Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 2 - 4 7 7 2}$ | Solitaire Investment | $50 \mathrm{lbs}(23 \mathrm{~kg})$ | $\$ 48.81$ | $\$ 50.93$ | $\$ 53.05$ |



Less than 80\% Silica


## Less than 50\% Silica


 160 g bags or in 5 kg bulk package.

## INVESTMENT C/P AND LIQUID C/P (BINDER)

A-D. Allows for same-day platinum casting. Sets up in minutes, burns out clean, and allows for 2 hour burnout.
E-G. Phosphate bonded speed burnout investment for all common metals for jewelry casting except titanium. Developed for precious metals with high melting points. Better surface quality by reduced particle size. Improved composition for the highly demanding requirements of rapid prototype materials.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 7 0 4 7}$ | 5kg Invest C/P Speed Investment | $\$ 53.59$ | $\$ 55.92$ | $\$ 58.25$ |  |
| B | $\mathbf{2 1 - 7 0 4 8}$ | 20kg Invest C/P Speed Investment | $\$ 185.01$ | $\$ 193.06$ | $\$ 201.10$ |  |
| C | $\mathbf{2 1 - 7 0 4 9}$ | Investment Liquid for C/P 1000 ml | $\$ 14.03$ | $\$ 14.64$ | $\$ 15.25$ |  |
| D | $\mathbf{2 1 - 7 0 5 7}$ | Investment Liquid for C/P 5000 ml | $\$ 68.82$ | $\$ 71.81$ | $\$ 74.80$ |  |
| E | $\mathbf{2 1 - 7 0 5 8}$ | Invest C/P Speed Investment <br> with 1L Invest Liquid |  | $\$ 60.90$ | $\$ 63.55$ | $\$ 66.20$ |
| F | $\mathbf{2 1 - 7 0 5 9}$ | Invest RP Investment for <br> Rapid Prototype Materials | $\$ 51.52$ | $\$ 53.76$ | $\$ 56.00$ |  |
| G | $\mathbf{2 1 - 7 0 6 0}$ | Invest RP Investment with <br> 1L Invest Liquid | $\$ 60.90$ | $\$ 63.55$ | $\$ 66.20$ |  |

INVESTMENT WARNING! This material contains crystalline silica and shows evidence of causing cancer in humans. (ARC Group 1) Prolonged exposure may cause lung injury (silicosis). Users must comply with all applicable health and safety regulations relating to the safe handling of crystalline silica. See MSDS for information. California Prop 65 Warning: This product contains crystalline silica, a chemical know in the state of California to cause cancer.


## GROBET USA ${ }^{\bullet}$ INVESTMENT

Formulation contains a defoamer blended right into the material. Gives a low rise when vacuuming, a wider water usage for greater yield flexibility, and easier removal of air bubbles on wax pattern's face.

| Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 2 - 4 7 6 1}$ | Investment | 50 lbs | $\$ 75.07$ | $\$ 78.34$ | $\$ 81.60$ |



PLASTIC MEASURING CYLINDERS AND SYRINGE

| Item | Order \# | Height | Capacity | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 21-7400 | 16 " | 250ml | \$10.63 | \$11.09 | \$11.55 |
| J | 21-7401 | $6^{\prime \prime}$ | 1000 ml | \$11.18 | \$11.66 | \$12.15 |
| K | 58-2559 |  | 35 ml | \$2.38 | \$2.72 | \$3.40 |

INVESTMENT SCALES

| Item | Order\# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 1 - 7 7 0 0}$ | Investment Scale | 10 lb | $\$ 19.76$ | $\$ 20.93$ | $\$ 23.25$ |
| B | $\mathbf{2 1 - 7 7 0 1}$ | Investment Scoop |  | $\$ 2.30$ | $\$ 2.40$ | $\$ 2.50$ |
| C | $\mathbf{2 1 - 7 7 0 5}$ | Investment Scale | 20 lb | $\$ 68.47$ | $\$ 72.50$ | $\$ 80.55$ |
| D | $\mathbf{2 1 - 7 7 2 0}$ | Investment Scale | 6.5 Ib | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |

TASO MIXING BOWL SCALE
Measure, mix and pour all-in-one bowl with the Taso mixing bowl scale.

- Weight Capacity: $11 \mathrm{lb} / 5000 \mathrm{~g}$
- Scale Mode, units: Pounds, Ounces, Grams
- Volume Mode, units: Cups, Fluid Ounces \& Milliliters
- Increments: 0.1 oz, $1 \mathrm{~g}, 1 / 8$ cup, $1 / 8 \mathrm{fl}$. oz, 1 ml

| Order \# |  | Description | 12+ | $\mathbf{6 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{2 1 - 7 7 2 1}$ | Taso Mixing Bowl Scale | $\$ 49.45$ | $\$ 52.36$ |

## RUBBER MIXING BOWLS

Flexible for easy pouring.

| Item Order \# | Diameter | Height | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :---: | :---: | :--- | ---: | ---: | ---: | ---: |
| F | $\mathbf{2 1 - 7 6 0 2}$ | $5^{\prime \prime}$ | $5^{\prime \prime}$ | 1 pint | $\$ 4.60$ | $\$ 4.80$ | $\$ 5.00$ |
| G | $\mathbf{2 1 - 7 6 0 3}$ | $6^{\prime \prime}$ | $6^{\prime \prime}$ | $11 / 2$ quart | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |
| H | $\mathbf{2 1 - 7 6 0 4}$ | $8^{1 / 2} 2^{\prime \prime}$ | $6^{1 / 2}$ | 1 gallon | $\$ 17.20$ | $\$ 17.95$ | $\$ 18.70$ |



## PRO-CRAFT® INVESTMENT VIBRATOR

Three-speed, variable vibrator with great weight and a low center of gravity. Quiet operation with great surface area on platform. Comes with an extra-long cord and three-prong grounded plug. $120 \mathrm{~V}, 40 \mathrm{~W}, 60 \mathrm{~Hz}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 7 7 1 0}$ | Investment Vibrator | $\$ 70.17$ | $\$ 74.30$ | $\$ 82.55$ |



INTERVAL TIMER
Interval timer for investment mixing. One to 60 minute timer. Weight $3 / 4 \mathrm{lbs}$.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Depth | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 9 0 1 0}$ | Interval Timer | $21 / 4^{\prime \prime} \times 45 / 8^{\prime \prime} \times \frac{1}{2 \prime \prime}$ | $\$ 17.60$ | $\$ 18.63$ | $\$ 20.70$ |



## HI-HEAT TORCH

The mixing chamber of the Model D blowpipe is designed for use with natural, artificial, or bottled gas, but not for acetylene. Produces intense, perfectly formed flame. Use standard $1 / 2^{\prime \prime}$ hose with C-clamps.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 5 3 5}$ | Hi-HeatTorch | $\$ 59.46$ | $\$ 62.96$ | $\$ 69.95$ |
| B | $\mathbf{5 4 - 4 5 3 6}$ | Large Gas/Air Torch (Extra Tip) | $\$ 11.86$ | $\$ 12.56$ | $\$ 13.95$ |
| C | $\mathbf{5 4 - 4 5 3 7}$ | Small Gas/Air Torch (Extra Tip) | $\$ 6.72$ | $\$ 7.11$ | $\$ 7.90$ |
| D | $\mathbf{5 4 - 4 5 3 8}$ | Oxygen/Gas Torch (Extra Tip) | $\$ 6.72$ | $\$ 7.11$ | $\$ 7.90$ |



THE SWISS TORCH
The most versatile, handy, lightweight, and reliable torch on the market. Use with propane and natural gas/oxygen. Not for use with acetylene. The selection of heads permit pinpoint to large flames for melting. $100 \%$ made in Switzerland.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 4 - 1 6 6 0}$ | Swiss Torch Body | $\$ 101.15$ | $\$ 107.10$ | $\$ 119.00$ |
| F | $\mathbf{1 4 - 1 6 6 1}$ | Micro Head w/3 Needle Nozzles | $\$ 131.75$ | $\$ 139.50$ | $\$ 155.00$ |
| G | $\mathbf{1 4 - 1 6 6 2}$ | Hoke ${ }^{\text {® }}$ Standard Head | $\$ 131.75$ | $\$ 139.50$ | $\$ 155.00$ |
| H | $\mathbf{1 4 - 1 6 6 3}$ | Short Melting Head | $\$ 97.75$ | $\$ 103.50$ | $\$ 115.00$ |
| J | $\mathbf{1 4 - 1 6 6 4}$ | Long Melting Head | $\$ 97.75$ | $\$ 103.50$ | $\$ 115.00$ |
| K | $\mathbf{1 4 - 1 6 6 5}$ | Platinum Head | $\$ 89.68$ | $\$ 94.95$ | $\$ 105.50$ |

## CHECK VALVE

L

Used to help prevent dangerous reverse gas flow.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| L | $\mathbf{1 4 - 1 7 9 0 0}$ | For Fuel Gas Regulator | $\$ 12.45$ | $\$ 13.19$ | $\$ 14.65$ |
|  | $\mathbf{1 4 - 1 7 9 5}$ | For Oxygen Regulator | $\$ 12.45$ | $\$ 13.19$ | $\$ 14.65$ |

## CHECK VALVES/FLASHBACK ARRESTORS

Stops flashback fires by preventing reverse gas flow with automatic reset between flashes. Solid brass case is durable and easy to install. Fits standard $9 / 66^{" ~ " B " ~ c o n n e c t i o n s . ~(U s e ~ w i t h ~ h o s e ~ 14-0780) . ~}$

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| M | $\mathbf{1 4 - 0 7 6 9}$ | For Fuel Gas Lines | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |
| N | $\mathbf{1 4 - 0 7 7 0}$ | Oxygen Flashback Arrestor | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |



SMITH CASTING TORCHES
Smith torch handle is nickel plated. For casting platinum, gold, or silver. Note: Flashback arrestors recommended for use with all casting torches. UL listed with a lifetime warranty.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| P | $\mathbf{1 4 - 5 0 6 0}$ | Smith Torch Handle | $\$ 140.25$ | $\$ 148.50$ | $\$ 165.00$ |
| Q | $\mathbf{1 4 - 5 0 6 2}$ | Oxygen/Acetylene Tip | $\$ 103.95$ | $\$ 103.95$ | $\$ 103.95$ |
| R | $\mathbf{1 4 - 5 0 6 3}$ | Oxygen/Acetylene Heating Tip | $\$ 84.41$ | $\$ 89.37$ | $\$ 99.30$ |
| S | $\mathbf{1 4 - 5 0 6 6}$ | Oxygen/Propane Tip | $\$ 53.98$ | $\$ 57.15$ | $\$ 63.50$ |
| T | $\mathbf{1 4 - 5 0 6 5}$ | Oxygen/Hydrogen Tip | $\$ 50.96$ | $\$ 53.96$ | $\$ 59.95$ |

MELTING DISH WITH HANDLE
Ideal for torch melts. Removable wooden handle resists heat, which makes it easy to melt and pour metals.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| U | $\mathbf{2 2 - 7 9 1 1}$ | Crucible | $\$ 13.11$ | $\$ 13.68$ | $\$ 14.25$ |
| V | $\mathbf{2 2 - 7 9 1 0}$ | Crucible with Handle | $\$ 20.65$ | $\$ 21.55$ | $\$ 22.45$ |
| W | $\mathbf{2 2 - 7 9 1 2}$ | Handle | $\$ 6.49$ | $\$ 6.77$ | $\$ 7.05$ |

MELTING DISHES KITS
These kits come with two melting dishes that are made of fused silica for melting precious metals, and one handle ideal for torch melts with removable, wooden handle that resists heat. For temperatures up to $2,800^{\circ} \mathrm{F}\left(1,538^{\circ} \mathrm{C}\right)$. Small Kit contains: 20 DWT crucible, 40 DWT crucible, and holder. Large Kit contains: 100 DWT crucible, 175 DWT crucible, and holder

| Item | Order\# | Description | Diameter $\mathbf{~} \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | 22-7913 | Small Holder | $\$ 9.29$ | $\$ 9.70$ | $\$ 10.10$ |  |
|  | 22-7913KIT | Small Kit | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |  |
| B | 22-7914 | Large Holder | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |  |
|  | $\mathbf{2 2 - 7 9 1 4 K I T}$ | Large Kit | $\$ 20.65$ | $\$ 21.55$ | $\$ 22.45$ |  |

CRUCIBLE DISHES

| C | $\mathbf{2 2 - 7 9 3 0}$ | 16 DWT $(148 \mathrm{~g})$ | $13 / 4^{\prime} \times 5 / 8^{\prime \prime}$ | $\$ 4.00$ | $\$ 4.18$ | $\$ 4.35$ |
| :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| D | $\mathbf{2 2 - 7 9 3 1}$ | 19 DWT $(196 \mathrm{~g})$ | $21 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| E | $\mathbf{2 2 - 7 9 3 2}$ | 25 DWT $(155 \mathrm{~g})$ | $3^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 6.12$ | $\$ 6.38$ | $\$ 6.65$ |
| F | $\mathbf{2 2 - 7 9 3 3}$ | 35 DWT (420g) | $4^{\prime \prime} \times 13 / 8^{\prime \prime}$ | $\$ 5.34$ | $\$ 5.57$ | $\$ 5.80$ |



## GRAPHITE CRUCIBLES

These heat resistant crucibles, often called black lead, withstand temperatures up to $3,000^{\circ} \mathrm{F}\left(1,649^{\circ} \mathrm{C}\right)$ and will tolerate thermal shock.

| Item | Order \# | Diameter $\times \mathbf{H}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G | 22-8000 | $49 / 16^{\prime \prime} \times 378{ }^{\prime \prime}$ | \$34.13 | \$35.62 | \$37.10 |
| H | 22-8000 | $51 / 4^{\prime \prime} \times 41 / 4^{\prime \prime}$ | \$38.27 | \$39.94 | \$41.60 |
| J | 22-8000 | $65 / 8^{\prime \prime} \times 5 \% / 8^{\prime \prime}$ | \$50.69 | \$52.90 | \$55.10 |



## STRAIGHT SIDES MELTING DISHES

Used for high-temperature $\left(2,500^{\circ} \mathrm{F}\right)$ melting of platinum, chromium, gold, alloys, and other metals.

| Item | Order \# | Diameter $\times \mathbf{H}$ | Capacity | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 22-7937 | $33 / 8{ }^{\prime \prime} \times 2^{\prime \prime}$ | 18 oz (510g) | \$11.27 | \$11.76 | \$12.25 |
| L | 22-7938 | $33 / 4^{\prime \prime} \times 31 / 2^{\prime \prime}$ | 40 oz (1134g) | \$13.39 | \$13.97 | \$14.55 |



## MELTING CRUCIBLES

These melting crucibles have thick walls that will withstand temperatures up to $2,500^{\circ}$ F. Made of clay bonded fused silica, these heavy-duty crucibles have spouts (lips) for easy pouring. Use for torch welding only.

| Item | Order \# | Diameter $\times \mathbf{H}$ | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{M}$ | $\mathbf{2 2 - 7 9 4 2}$ | $2^{3} 8^{\prime \prime} \times 27 / 8^{\prime \prime}$ | $180 z$ | $\$ 9.29$ | $\$ 9.70$ | $\$ 10.10$ |
| $N$ | $\mathbf{2 2 - 7 9 4 3}$ | $31 / 2^{\prime \prime} \times 31 / 2^{\prime \prime}$ | $450 z$ | $\$ 12.33$ | $\$ 12.86$ | $\$ 13.40$ |
| P | $\mathbf{2 2 - 7 9 4 4}$ | $4^{\prime \prime} \times 41 / 2^{\prime \prime}$ | $800 z$ | $\$ 16.47$ | $\$ 17.18$ | $\$ 17.90$ |
| 0 | $\mathbf{2 2 - 7 9 4 6}$ | $5^{\prime \prime} \times 51 / 4^{\prime \prime}$ | $1500 z$ | $\$ 22.45$ | $\$ 23.42$ | $\$ 24.40$ |



## MORGAN MELTING DISH (WESGO)

Used for high-temperature melting of platinum, chromium, gold, alloys, and other metals.

| Item |  | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | $\mathbf{1 +}$ |  |  |  |  |  |
| 22-8150 | Straight Side | $80 z(227 \mathrm{~g})$ | $\$ 22.13$ | $\$ 23.09$ | $\$ 24.05$ |  |
| S | $\mathbf{2 2 - 8 1 5 2}$ | High Back | 10 oz $(282 \mathrm{~g})$ | $\$ 25.35$ | $\$ 26.45$ | $\$ 27.55$ |



R

s


HOODED CRUCIBLE WITH SPOUT
Hooded, high-temperature ceramic crucibles for steel.

| Item | Order\# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 2 - 3 7 0 2}$ | 500 DWT | 110 ml | $\$ 9.38$ | $\$ 9.79$ | $\$ 10.20$ |
| B | $\mathbf{2 2 - 3 7 0 3}$ | 380 DWT | 80 ml | $\$ 8.56$ | $\$ 8.93$ | $\$ 9.30$ |

## KERR ${ }^{\circledR}$ CLAY CRUCIBLES

These high quality, clay/ceramic replacement crucibles are for melting gold, silver, and other non-ferrous metals. Use with centrifugal casting machines.

| Item | Order\# | Description | $\mathbf{W} \times \mathrm{L}$ | Capacity | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 22-4700 | Standard | $13 / 8{ }^{\prime \prime} \times 17 / 8^{\prime \prime}$ | 102 | \$32.61 | \$34.03 | \$35.45 |
| D | 22-4701 | Standard | $11 / 8^{\prime \prime} \times 25 / 8^{\prime \prime}$ | $21 / 202$ | \$26.91 | \$28.08 | \$29.25 |
| E | 22-4702 | 4 " $\times 6$ " | $17 / 8{ }^{\prime \prime} \times 33 / 81$ | 702 | \$33.72 | \$35.18 | \$36.65 |
| F | 22-4703 | $4^{\prime \prime} \times 6^{\prime \prime}$ | $17 / 8^{\prime \prime} \times 33 / 8^{\prime \prime}$ | 1202 | \$36.16 | \$37.73 | \$39.30 |
| G | 22-4704 | $4^{\prime \prime} \times 6^{\prime \prime}$ | $17 / 8{ }^{\prime \prime} \times 33 / 8{ }^{\prime \prime}$ | 120 oz | \$38.27 | \$39.94 | \$41.60 |



## PLATINUM CRUCIBLE

Use only with the large Yasui platinum casting machine.

| Item | Order \# | Description | Capacity | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| H | $\mathbf{2 2 - 3 7 0 0}$ | Large Crucible | 400 g | $\$ 78.75$ | $\$ 82.18$ | $\$ 85.60$ |



MORGAN CRUCIBLES (WESGO)
Used for high-temperature melting of platinum, chromium, gold, alloys, and other metals.

| Item | Order\# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: |
| J | $\mathbf{2 2 - 4 6 1 0}$ | Slotted A | $130 z(185 \mathrm{~g})$ | $\$ 30.50$ | $\$ 31.82$ | $\$ 33.15$ |
| K | $\mathbf{2 2 - 4 6 1 2}$ | Large D | $110 z(315 \mathrm{~g})$ | $\$ 47.29$ | $\$ 49.34$ | $\$ 51.40$ |



CRUCIBLES
These crucibles are designed for use with the tabletop casting machine from Ti-Research.

| Item | Order \# | Description | Max Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| L | $\mathbf{2 1 - 7 0 5 0}$ | Medium | up to 150 g | $\$ 21.57$ | $\$ 22.51$ | $\$ 23.45$ |
| M | $\mathbf{2 1 - 7 0 5 1}$ | Large | up to 250 g | $\$ 24.29$ | $\$ 25.34$ | $\$ 26.40$ |
| N | $\mathbf{2 1 - 7 0 5 2}$ | Extra Large | up to 450 g | $\$ 28.29$ | $\$ 29.52$ | $\$ 30.75$ |



## CASTING CRUCIBLES

These crucibles for centrifugal casting machines are suitable for melting metals in temperatures up to $2,000^{\circ}$. Square casting crucibles retain heat and are excellent for use with centrifugal casting machines.

| Item | Order\# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| P | $\mathbf{2 2 - 4 6 2 0}$ | Replacement Crucible | $90 z$ | $\$ 20.65$ | $\$ 21.55$ | $\$ 22.45$ |
| 0 | $\mathbf{2 2 - 4 6 2 4}$ | Round | $90 z$ | $\$ 24.06$ | $\$ 25.10$ | $\$ 26.15$ |
| R | $\mathbf{2 2 - 4 6 3 1}$ | Square | $120 z$ | $\$ 18.35$ | $\$ 19.15$ | $\$ 19.95$ |
| S | $\mathbf{2 2 - 4 6 3 4}$ | Square | 18 oz | $\$ 19.85$ | $\$ 21.00$ | $\$ 23.35$ |

## REVERSIBLE INGOT MOLD

Used to recycle scrap metal. One side makes sheet and the other side makes wire in $3,4,5$, and 6 mm sizes. C-clamp secures and releases the plates.

| Item | Order\# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | ---: | ---: |
| A | $\mathbf{2 2 - 8 7 7 0}$ | Wire and Sheet | 130 DWT $(221 \mathrm{~g})$ | $\$ 42.20$ | $\$ 44.69$ | $\$ 49.65$ |

## COMBINATION INGOT MOLD

Offers versatility and ease of use. Used to recycle scrap metal into sheet and wire. Machined from high quality tool steel. Adjustable double-sided frame with C-clamp handle.

- Flat Faces for flat or square ingots.

Width adjustable from 0 to 46 mm . Height 76 mm , thickness 3 mm .

- Bored Faces to form round wire.

Wire diameters: $3,4,5$, and 6 mm . Wire length up to 76 mm .

| Item | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| B | $\mathbf{2 2 - 8 7 7 1}$ | Wire and Sheet | 175 DWT | $\$ 31.88$ | $\$ 33.75$ | $\$ 37.50$ |

## ADJUSTABLE INGOT MOLD

Used for recycling clean scrap into sizes useful for rolling sheet. Adjustable width and height. Machined from high quality tool steel.
Width adjustable from 0 to 46 mm .
Height 76 mm , thickness 3 mm . Weight 2.75 lbs .

| Item | Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| C | $\mathbf{2 2 - 8 7 7 2}$ | Sheet Mold | 140 DWT | $\$ 25.93$ | $\$ 27.45$ | $\$ 30.50$ |

DURSTON OPEN INGOT MOLD
Used to form ingots or bullion.

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | Capacity |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| D | $\mathbf{2 2 - 8 7 0 0}$ | $35 \mathrm{~mm} \times 90 \mathrm{~mm} \times 35 \mathrm{~mm}$ | 50 DWT $(78 \mathrm{~g})$ | $\$ 20.06$ | $\$ 21.24$ | $\$ 23.60$ |  |
| E | $\mathbf{2 2 - 8 7 0 1}$ | $35 \mathrm{~mm} \times 90 \mathrm{~mm} \times 35 \mathrm{~mm}$ | 80 DWT $(124 \mathrm{~g})$ | $\$ 20.57$ | $\$ 21.78$ | $\$ 24.20$ |  |
| F | $\mathbf{2 2 - 8 7 0 2}$ | $65 \mathrm{~mm} \times 155 \mathrm{~mm} \times 40 \mathrm{~mm}$ | 200 DWT $(310 \mathrm{~g})$ | $\$ 22.44$ | $\$ 23.76$ | $\$ 26.40$ |  |

## DURSTON INGOT MOLD FOR WIRE

Used to pre-form metal into wire strips before rolling or drawing.
Can make three sizes:
$3 / 4^{\prime \prime} \times 5 / 16^{\prime \prime} \times 611 / 16^{\prime \prime}(19 \mathrm{~mm} \times 8 \mathrm{~mm} \times 170 \mathrm{~mm})$
$3 / 8^{\prime \prime} \times 3 / 8^{\prime \prime} \times 61 \frac{1}{16 "}(9 \mathrm{~mm} \times 9 \mathrm{~mm} \times 170 \mathrm{~mm})$
$9 / 32^{1 "} \times 5 / 16^{\prime \prime} \times 611 / 16^{\prime \prime}(7 \mathrm{~mm} \times 8 \mathrm{~mm} \times 170 \mathrm{~mm})$

| Item | Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| G | $\mathbf{2 2 - 0 5 1 0}$ | $11 / 4^{\prime \prime} \times 101 / 2^{\prime \prime} \times 11 / 4^{\prime \prime}$ | $\$ 8.93$ | $\$ 9.45$ | $\$ 10.50$ |

## DURSTON REVERSIBLE INGOT MOLDS

Precision ground. Six sizes of wire. Adjustable flat up to 70 mm .

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
|  | $\mathbf{2 2 - 8 7 1 0}$ | 4 Hole | $60 \mathrm{~mm} \times 110 \mathrm{~mm}$ | $\$ 180.46$ | $\$ 191.07$ | $\$ 212.30$ |
| H | $\mathbf{2 2 - 8 7 1 1}$ | 6 Hole | $60 \mathrm{~mm} \times 110 \mathrm{~mm}$ | $\$ 115.60$ | $\$ 122.40$ | $\$ 136.00$ |
| J | $\mathbf{2 2 - 8 7 1 2}$ | Flat | $50 \mathrm{~mm} \times 130 \mathrm{~mm}$ | $\$ 106.25$ | $\$ 112.50$ | $\$ 125.00$ |



BORAX
Specially prepared for making flux for jewelry soldering. Dissolves easily to make a paste. Inhibits the formation of oxides on metal surfaces and allows solder to flow more easily.

| Item | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 2 5 2 0}$ | Cone | $40 z$ | $\$ 6.07$ | $\$ 6.34$ | $\$ 6.60$ |

## MAGIC BORAX ${ }^{\text {™ }}$

Borax Granular powder is an excellent, general purpose flux. Excellent also for glazing clay crucibles to extend crucible life.

| Item | Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{5 4 - 4 4 3 2}$ | Boric Acid Granular | $160 z$ | $\$ 7.31$ | $\$ 7.63$ | $\$ 7.95$ |

## MAGIC BORIC ACID POWDER ${ }^{\circledR}$

C High-grade, superfine boric acid powder. Use as high-grade flux and deoxidizing agent. Can also be mixed with denatured alcohol to make soldering flux.

| Item | Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 4 4 3 3}$ | Boric Acid Powder | $160 z$ | $\$ 7.86$ | $\$ 8.32$ | $\$ 9.25$ |

## SUPER FLUX

Special formulation of flux for jewelers. Will minimize oxidation on molten metal. Use on precious metals for torch melting or furnace melting.

| Item | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 4 4 1 1}$ | Super Flux | $80 z$ | $\$ 12.42$ | $\$ 12.96$ | $\$ 13.50$ |



## FIRESCOFF®

Revolutionary heat-activated ceramic spray coating. Firescoff"' combines a scale preventer, a high performance non-fluorinated flux (for both hard and soft solder), and the convenience of easy removal in warm water, all-in-one.
Other benefits include:

- Integrated non-fluorinated flux for consistent soft and hard solder welding.
- Perform multiple soldering operations without waiting
- Enjoy strong, non-brittle, void-free welds
- Greater control when reticulating with silver or gold
- Superior performance over boric acid and Batterns ${ }^{\ominus}$ flux or paste flux
- Provides stray heat protection for gemstones
- Prevents scaling of metal alloys including gold, stainless steel, copper, and silver
- Warm water cleanup - less than two minutes in an ultrasonic cleaner
- Remove dangerous pickling acids from the workbench
- Alcohol-free - no dangerous flash, no frustrating burn residue
- No smell, no outgassing
- Significant improvement in safety over traditional methods

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 4 4 1 3}$ | Small Bottle | $10 z$ | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |
| F | $\mathbf{5 4 - 4 4 1 4}$ | Bulk Dispenser | 3000 ml | $\$ 191.41$ | $\$ 199.73$ | $\$ 208.05$ |
| G | $\mathbf{5 4 - 4 4 1 4}$ | Large Bottle | $41 / 20 z$ | $\$ 23.89$ | $\$ 25.29$ | $\$ 28.10$ |

## CENTRIFUGAL TABLETOP CASTING MACHINE

The new CAST/T is a compact centrifugal casting machine for the production of precision castings. The casting machine includes a 30 mm and 60 mm casting flask, the necessary handling tools, wax disks, and investments. The casting machine also includes one 150 gram and one 250 gram crucible for a flame melt. The manufacturer highly recommends a propane/oxygen flame. The CAST/T can cast up to 450 grams of gold, platinum, silver, or other alloys in one mold. The CAST/T is designed to handle your small casting requirements (up to 25 rings) and includes a step-by-step operating manual and video CD. Made in Germany. Two-year limited manufacturer's warranty.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{2 1 - 7 0 4 0}$ | Tabletop Machine Kit | $\$ 3.445 .00$ |
| B | $\mathbf{2 1 - 7 0 4 3}$ | Metal Ring Sectioned (30mm) | $\$ 85.25$ |
| C | $\mathbf{2 1 - 7 0 4 4}$ | Metal Ring (30mm) | $\$ 71.00$ |
| D | $\mathbf{2 1 - 7 0 4 5}$ | Metal Ring (60mm) | $\$ 72.00$ |
| E | $\mathbf{2 1 - 7 0 5 4}$ | Mold Base | $\$ 45.40$ |
| F | $\mathbf{2 1 - 7 0 4 6}$ | Wax Discs for standard (pack of 25) | $\$ 26.80$ |
| G | $\mathbf{2 1 - 7 0 4 9}$ | Liquid | $\$ 15.25$ |
| H | $\mathbf{2 1 - 7 0 5 3}$ | Stainless Steel Cleaning Solution 100ml | $\$ 9.05$ |
| J | $\mathbf{2 2 - 5 8 1 1}$ | 2-Part - Silicone Mold Rubber | $\$ 74.15$ |
| K | $\mathbf{2 1 - 7 6 0 5}$ | Mix Kit | $\$ 790.10$ |
| L | $\mathbf{2 1 - 7 0 5 5}$ | Ceramic Liner (55mm W x 40mm L) | $\$ 52.55$ |
| M | $\mathbf{2 1 - 7 0 5 6}$ | Ceramic Liner (25mm W x 40mm L) | $\$ 44.45$ |
| N | $\mathbf{2 1 - 7 0 5 9}$ | Invest RP Investment for Rapid Prototype Materials | $\$ 56.00$ |
| P | $\mathbf{2 1 - 7 0 6 0}$ | Invest RP Investment with 1L Invest Liquid | $\$ 66.20$ |
|  |  |  |  |



## BEAD BLASTING

Bead blasting cabinets help to remove hardened investment, oxidation, and heat scale from metals, and they also produce a satin finish on jewelry. This is accomplished by using dry abrasives such as glass beads or granule abrasives. It is recommended that some sort of dust collection is used with beading cabinets. 0. Includes handpiece with $0.060^{\prime \prime} \mathrm{ID}$ ceramic nozzle, foot operated, $1 / 8^{\prime \prime}$ male fitting for all sources, 80-90 psi compressed air required. 1.5 CFM. Use glass beads media 150 mesh or finer. R. A heavy duty cabinet with handheld pencil style etcher, recirculates glass beads, Plexiglas ${ }^{\circledR}$ top opening window, requires $90-100$ psi compressed air. 1.5CFM. Includes incandescent light receptacle, rubber gloves, and rear vent for vacuum system.
S. High pressure trigger operated gun, Plexiglas top slant window. Includes


## Casting



## E-Z VIEW SAND BLASTER

The E-Z Blaster unit is designed to remove hardened investment from castings and to also produce a rich satin finish on jewelry. The cabinet is made of a one-piece polymer body, which will never rust or leak. The unit automatically recirculates the media and features an adjustable pressure regulator and a self-cleaning ceramic nozzle. It also includes a bright light for easy viewing and a double filter bag to ensure a clean interior. Made in the USA. - Requires 80-90 PSI.

- Comes with 5 lbs of quartz abrasive that provides a strong, satin finish.


| Item | Order \# | Description | Volts | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ |
| :---: | :---: | :---: | :---: | ---: |
| A | $\mathbf{2 3 - 0 0 8 0}$ | E-Z Sand Blaster | 110 | $10^{\prime \prime} \times 11^{\prime \prime} \times 15^{\prime \prime}$ |



## GLASS BEAD BLASTER

Produces a stream of micro-sized glass beads for removing stubborn investment particles, oxidation, and heat scale from metal. Leaves articles with smooth finish. Made in the USA.

- Large viewing window with hinged door for easy clean-out
- Illuminated interior (40-watt bulb maximum)
- Neoprene glove sealed to opening for holding article
- Easily controlled instant action gun
- Gun is attached to $31 / 2^{\prime \prime}$ air line hose with fittings
- Connects to compressor (sold separately), capable of producing $30-60$ psi pressure with at least a 5 gallon tank
- Portable - Weighs only 10 lbs when filled with 5 lbs of glass beads
- Includes 5 lbs waterproof micro-sized glass beads

| Item | Order \# | Description | Size | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| B | $\mathbf{2 3 - 0 0 5 0}$ | Bead Blaster | $9^{\prime \prime} \times 9^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 425.00$ |
| C | $\mathbf{2 3 - 0 0 5 1}$ | Filter |  | $\$ 38.95$ |
| D | $\mathbf{2 3 - 0 0 5 2}$ | Neoprene Gloves |  | $\$ 15.75$ |
| E | $\mathbf{2 3 - 0 0 5 3}$ | Air Gun | 6.1902 | $\$ 74.15$ |
| F | $\mathbf{2 3 - 0 0 5 4}$ | On Face Tube | 6.1702 | $\$ 27.40$ |
| G | $\mathbf{2 3 - 0 0 4 9}$ | Replacement Media | 5 lbs | $\$ 18.95$ |
|  |  |  |  |  |



## GLASS BEADS

Ceroglass crushed glass is made of clean and carefully screened soda lime glass. Low cost angular media with a high cutting speed. Primarily used in open blast cleaning and difficult cleaning applications.

| Item | Order \# | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| H | $\mathbf{2 3 - 0 0 7 3}$ | $20-40$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| J | $\mathbf{2 3 - 0 0 7 4}$ | $50-80$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| K | $\mathbf{2 3 - 0 0 7 5}$ | $70-120$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| L | $\mathbf{2 3 - 0 0 7 6}$ | $120-230$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| M | $\mathbf{2 3 - 0 0 7 7}$ | $140-325$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| N | $\mathbf{2 3 - 0 0 7 8}$ | $170-400$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |

## GLASS BEAD ADVANTAGES

- Fast cutting action
- Safe substitute for sand (does not cause silicosis)

Improves performance of other media by blending - Improved water jet cutting and cleaning performance - Cleans thoroughly and very efficiently

- Lower disposal and maintenance costs - Available in a full range of sizes


## INVESTMENT MIXING INSTRUCTIONS RECOMMENDED WATER/POWDER RATIOS

## REGULAR Castings

Ladies' Rings, pendants, filigree $\&$ intricate-wax patterns.
$\mathbf{4 0} \mathbf{~ m l}$ water to $\mathbf{1 0 0}$ grams powder

| Water |  | Yields Approximate |  |
| :---: | :---: | :---: | :---: |
| avg 0z | ml | cubic inch | CC |
| 6.1 | 172 | 21 | 349 |

## HEAVY Castings

Heavy Ladies' Rings, Mens' Rings \& School Rings
$\mathbf{3 6} \mathbf{~ m l}$ water to $\mathbf{1 0 0}$ grams powder

| Water |  | Yields Approximate |  |
| :---: | :---: | :---: | :---: |
| avg. $0 z$ | ml | cubic inch | CC |
| 6.4 | 182 | 22 | 359 |

To get the number of pounds of investment needed to fill any particular flask, divide the cubic inch content of the flask by 20. To get flask content in cubic inches. Round Flask $=0.7854 \times$ dia. $2 \times$ height. Square Flask $=$ width $\times$ length $\times$ height.


Weigh investment.


Vacuum 20 seconds after bell.


Measure water.


Pour into flask.


Always add investment to water.


Vacuum up to 90 seconds.


Mix for 3 to 312 minutes.


Leave still for 2 hours.
temperature conversion table
Conversion Formulas ${ }^{\circ} \mathrm{F}=\left(9 / 5 \times{ }^{\circ} \mathrm{C}\right)+32^{\circ}{ }^{\circ} \mathrm{C}=5 / 9\left({ }^{\circ} \mathrm{F}-32^{\circ}\right)$

| ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | ${ }^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600 | 316 | 830 | 443 | 1120 | 604 | 1410 | 766 | 1640 | 893 | 1930 | 1054 |
| 610 | 321 | 840 | 449 | 1130 | 610 | 1420 | 771 | 1650 | 899 | 1940 | 1060 |
| 620 | 327 | 850 | 454 | 1140 | 616 | 1430 | 777 | 1660 | 904 | 1950 | 1066 |
| 630 | 332 | 860 | 460 | 1150 | 621 | 1440 | 782 | 1670 | 910 | 1960 | 1071 |
| 640 | 338 | 870 | 466 | 1160 | 627 | 1450 | 788 | 1680 | 916 | 1970 | 1077 |
| 650 | 343 | 880 | 471 | 1170 | 632 | 1460 | 793 | 1690 | 921 | 1980 | 1082 |
| 660 | 349 | 890 | 477 | 1180 | 638 | 1470 | 799 | 1700 | 927 | 1990 | 1088 |
| 670 | 354 | 900 | 482 | 1190 | 643 | 1480 | 804 | 1710 | 932 | 2000 | 1093 |
| 680 | 360 | 910 | 488 | 1200 | 649 | 1490 | 810 | 1720 | 938 | 2010 | 1099 |
| 690 | 366 | 920 | 493 | 1210 | 654 | 1500 | 816 | 1730 | 943 | 2020 | 1104 |
| 700 | 371 | 930 | 499 | 1220 | 660 | 1510 | 821 | 1800 | 982 | 2030 | 1110 |
| 710 | 377 | 1000 | 538 | 1230 | 666 | 1520 | 827 | 1810 | 988 | 2040 | 1116 |
| 720 | 382 | 1010 | 543 | 1240 | 671 | 1530 | 832 | 1820 | 993 | 2050 | 1121 |
| 730 | 388 | 1020 | 549 | 1250 | 677 | 1540 | 838 | 1830 | 999 | 2060 | 1127 |
| 740 | 393 | 1030 | 554 | 1260 | 682 | 1550 | 843 | 1840 | 1004 | 2070 | 1132 |
| 750 | 399 | 1040 | 560 | 1270 | 688 | 1560 | 849 | 1850 | 1010 | 2080 | 1138 |
| 760 | 404 | 1050 | 566 | 1280 | 693 | 1570 | 854 | 1860 | 1016 | 2090 | 1143 |
| 770 | 410 | 1060 | 571 | 1290 | 699 | 1580 | 860 | 1870 | 1021 | 2100 | 1149 |
| 780 | 416 | 1070 | 577 | 1300 | 704 | 1590 | 866 | 1880 | 1027 | 2110 | 1154 |
| 790 | 421 | 1080 | 582 | 1310 | 710 | 1600 | 871 | 1890 | 1032 | 2120 | 1160 |
| 800 | 427 | 1090 | 588 | 1320 | 716 | 1610 | 877 | 1900 | 1038 | 2130 | 1166 |
| 810 | 432 | 1100 | 593 | 1330 | 721 | 1620 | 882 | 1910 | 1043 |  |  |
| 820 | 438 | 1110 | 599 | 1400 | 760 | 1630 | 888 | 1920 | 10 |  |  |


A new generation of steam cleaning performance, quality and durability.

```
- External sight glass with cover
- Low water cut-off
- Water intake valve with back up flow prevention
- Adjustable thermostat
- Insulated nozzle assembly
```



| Item Order \# |  | Description |  | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| A | 15-0510 | Steamer with Solenoid | $141 / 2^{\prime \prime} \times 101 / 2^{\prime \prime} \times 14^{\prime \prime}$ | \$1,395.00 |
| REPLACEMENT PARTS |  |  |  |  |
| B | 15-0512 | Safety Valve |  | \$255.45 |
| C | 15-0514 | Nozzle |  | \$16.65 |
| D | 15-0509 | Check Valve |  | \$29.95 |
| E | 15-0515 | Ball Valve | $1 / 2{ }^{1 /}$ | \$27.55 |
| F | 15-0513 | Plastic Housing for Glass |  | \$36.00 |
| G | 15-0520 | Sight Glass | $6{ }^{\prime \prime}$ | \$12.30 |
| H | 15-0516 | Foot Switch and Cord |  | \$79.00 |
| J | 15-0511 | Solenoid Valve |  | \$106.00 |
| K | 15-0519 | Thermostat |  | \$35.00 |
| L | 15-0517 | Ball Valve | $1 / 4{ }^{\prime \prime}$ | \$33.45 |
| M | 15-0530 | Heating Element |  | \$76.75 |
| N | 15-0525 | Low Water Cut-Off |  | \$51.50 |
| P | 15-0518 | Pressure Gauge |  | \$38.00 |
| 0 | 15-0531 | Rubber Gasket |  | \$4.15 |
| R | 15-0524 | On/Off Switch |  | \$6.35 |
| S | 15-0012 | Ferrule Fitting |  | \$3.00 |

Hoffman offers technologically-superior micronic cleaning. Grease, grime, and micro-deposits disappear in seconds - no messy rag, lint, or baths. Oxidation and deposits are removed from the tiniest crevices for a bright, sparkling finish—faster, easier. Inexpensive to operate, Hoffman Steemkleen machines offer outstanding value. Choose from the 2 or 6 gallon capacities that start up faster, recover temperature and pressure faster, and finish your job faster with less labor. Automatic safety valves make our micronis cleaners safer.


## RELIABLE

## RELIABLE STEAMERS

- Provides hours of continuous steam
- Low water light indicator
- Uses regular tap water
- Stainless steel tank
- Water level stick
- Incology heating elements
- 120 Volts
- Made in Italy
- Limited 1 year warranty, 3 year warranty on tank

These steamers are ideally suited for use in jewelry stores and workrooms for cleaning away leftover wax, plaster waste, and other debris, and for polishing the final product. Steam deodorizes and sanitizes with heat and moisture, and since the only ingredient required for these is regular tap water, cleaning has never been safer, healthier, or more environmentally friendly. They provide up to 6 hours of steam from a stainless steel tank.

## A. Model i500A

- Four hours of continuous steam
- Water Capacity: . 66 gallons (2.5 liters)
- Up to 50 PSI, 3.4 bar operating pressure
- 1,000 watt copper heating element
- 10 amps power consumption
- 1,800 watt electrical (iron and boiler)
- Rated for up to 8 hours of use per day
- Unit weight: 13 lbs .
- Shipping weight: 16 lbs .

A. Model i500A


## B. Model i600A

- Six hours of continuous steam
- Water Capacity: $1 \frac{1}{4}$ gallons (4.5 liters)
- Up to 65 PSI, 4.5 bar operating pressure
- 1200 watt heating element
- 10 amps power consumption
- Unit weight: 16.7 lbs .
- Shipping weight: 23 lbs .

Find added video content on Stuller.com.

B. Model i600A

## D. Model i800A

- Unlimited continuous steam when connected to a water supply
- Water Capacity: 1.3 gallons (5 liters)
- Up to 80 PSI, 5.5 bar operating pressure
- Two 1200 watt heating elements (1 spare)
- 10 amps power consumption
- 20 amp plug required
- Automatic shut-off of pump
- Boiler thermostat reset switch
- Direct connection to water line
- Optional portable water supply
- Unit weight: 36 lbs .
- Shipping weight: 46 lbs .


## C. Model i700A

- Six hours of continuous steam
- Water Capacity: 2.37 gallons (9 liters)
- Up to $70 \mathrm{PSI}, 4.8$ bar operating pressure
- 10 amps power consumption
- Two 1200 watt heating elements (1 spare)
- Unit weight: 30.35 lbs .
- Shipping weight: 33.9 lbs .

Find added video content on Stuller.com.


| Item | Order \# | Description | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{1 5 - 1 1 1 0}$ | Reliable Model i500A | $14^{\prime \prime} \times 83 / 4^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 599.00$ |
| B | $\mathbf{1 5 - 1 1 0 5}$ | Reliable Model i600A | $13^{\prime \prime} \times 83 / 4^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 899.00$ |
| C | $\mathbf{1 5 - 1 1 0 6}$ | Reliable Model i700A | $12^{1} 1 / 2^{\prime \prime} \times 14^{\prime \prime} 4^{\prime \prime} \times 201 / 5^{\prime \prime}$ | $\$ 1,199.00$ |
| D | $\mathbf{1 5 - 1 1 1 2}$ | Reliable Model i800A | $111 / 2^{\prime \prime} \times 11^{\prime \prime} \times 39^{\prime \prime}$ | $\$ 2,299.00$ |
| E | $\mathbf{1 5 - 1 1 1 6}$ | Foot Switch |  | $\$ 120.00$ |
| F | $\mathbf{1 5 - 1 1 0 9}$ | Solenoid Valve |  | $\$ 125.00$ |


C. Model i700A

## SHARPERTEK STEAMER

Sleek table-top unit makes a great impression and delivers reliable, superior performance with its compact, durable, state-of-the-art design. Atmospheric technology directly converts distilled water into high-powered, super-heated, dry steam cleaning energy on demand at 70-90psi. Effectively cleans dirt, residue, and build-up with excellent penetration and exceptional control for even the most delicate of jewelry. Safe, efficient, green, requires no boiler tank, harsh chemicals or detergents, and the tank stays cool to the touch. Proudly designed, engineered, and manufactured in the U.S.A. to meet the highest standards anywhere in the world.

| Order \# | Description | Model | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: |
| $\mathbf{1 5 - 1 0 0 0}$ | Steam Cleaner | S1500-R | $9^{\prime \prime} \times 14^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 395.00$ |



## SILVER DRAGON STEAMER

The Silver Dragon is a boilerless steam cleaner that will deliver 90-125 PSI of constant steam in up to two minutes. This tabletop steamer is foot-pedal controlled, made of 20 gauge stainless steel, and uses 1,200 watts, 110 volts. UL approved. Use only distilled water.

| Order \# | Description | W $\times \mathbf{L} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{1 5 - 1 0 0 5}$ | Steam Cleaner | $9^{\prime \prime} \times 10^{\prime \prime} \times 13^{\prime \prime}$ | $\$ 725.00$ |



MAGIC CLEAN STEAM
Special, high concentrate prevents scale, rust buildup, and mineral deposits inside steamer. Use this super-concentrated additive to help prolong the life of your steamer. Note: Use one cap full each time steamer is filled.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 3 0}$ | $160 z$ Bottle | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |



## JEWEL JET STEAM

The worlds \#1 home jewelry cleaner is back and better than ever. The Jewel Jet Jewelry Steam Cleaner uses the amazing power of steam to clean your jewelry. Professional jewelers have been using steam to produce those brand new jewelry looks for years and now you can too. With 8 oz of tap water (no chemicals), you can produce amazing results in your own home! - Two-year warranty

- Modern styling retains design cues that are distinctly Jewel Jet
- Stainless steel boiler has 10 times the burst capacity as aluminum
- Pressurized safety cap locks under pressure and releases steam to prevent build-up
- Auto shut-off after 10 minutes of non-use
- Increased burst steam releases 50\% more steam than before
- Pressure and heat sensors shut the unit down if too much pressure or heat is detected

| Order \# | Description | Height | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{1 5 - 2 0 0 8}$ | Pro Personal Steamer | $10 "$ | $\$ 89.95$ |



## E/mai

## ELMA ${ }^{\oplus}$ S-SERIES ULTRASONICS

Powerful professional ultrasonic cleaning for all applications. The series increases the ultrasonic effect farther to obtain even better results. Made in Germany.


## ELMA ${ }^{\oplus}$ P-SERIES ULTRASONIC

The ideal cleaner for all applications. The units are easy to operate with clearly arranged displays showing frequency and settings vs. actual settings of selected temperature. Several special features make these units perfect for intensive cleaning applications.


- Pulse Operating mode to intensify the cleaning effect.
- High frequency for dissolving dirt or rouge in hard to reach areas.
- Low frequency - Noise reduction, ideal for prolonged cleaning times.
- Power reduction by increments of $10 \%$ to aid in sensitive surfaces.
- Degas Mode - Freshly mixed cleaning liquids are saturated with air, which reduces the cleaning effect. Degas mode removes such oxygen.
- Made in Germany.
- Ultrasonic frequency of $37 / 80 \mathrm{kHz}$
- $3 / 8$ " Drain duct diameter
- Sweep function


## Model P3OH

- Tank Capacity: $21 / 2$ quarts ( 2.75 liters)
- Heating Power: 250 watts
- Tank Dimensions: $91 / 22^{\prime \prime} \times 52 / 5^{\prime \prime} \times 39 / 10^{\prime \prime}$
- Unit Weight: 3.3 lbs
- Total Power Consumption: 320/300 watts

Model P60H

- Tank Capacity: $33 / 4$ quarts ( 5.75 liters)
- Heating Power: 500 watts
- Tank Dimensions: $114 / 5^{\prime \prime} \times 5 \% 10 " \times 5 \% 0^{\prime \prime}$
- Unit Weight: 5.75 lbs
- Total Power Consumption: 580/550 watts


## Model P70H

- Tank Capacity: $8 \frac{1}{2}$ quarts (5.6 liters)
- Heating Power: 750 watts
- Tank Dimensions: $1945^{\prime \prime} \times 52 / 5^{\prime \prime} \times 39 / 10^{\prime \prime}$
- Unit Weight: 5.6 lbs
- Total Power Consumption: 820 watts

| Order \# | MFG Model \# | $\mathbf{W} \times \mathrm{D} \times \mathrm{H}$ | 1+ |
| :---: | :---: | :---: | :---: |
| 23-5950 | Elma Model P30H | $114 / 5^{\prime \prime} \times 71 / 10 \mathrm{C} \times 87 / 10^{\prime \prime}$ | \$859.00 |
| 23-5950 | Elma Model P60H | $14^{2} / 5^{\prime \prime} \times 73 / 10^{10} \times 103 / 5^{\prime \prime}$ | \$1,189.00 |
| 23-5950 | Elma Model P70H | $221 / 3^{\prime \prime} \times 7$ " $\times 87 / 10^{\prime \prime}$ | \$1,289.00 |

## ELMA ${ }^{\circledR}$ X-TRA ULTRASONICS - HEAVY DUTY

Elma's latest generation of ultrasonic cleaners meet high requirements of life span and durability.
The ElmaSonic X-Tra series stands out, due to the longer lasting cavitation-resistant, stainless steel used in all tanks. Powerful, short heat-up time and optimized sound field distribution with sweep function. Complete with two cleaning modes and temp control range of $70^{\circ}-175^{\circ} \mathrm{F}$. Elma offers a three-year warranty against leakage under normal usage. Made in Germany.

- Ultrasonic frequency of 35 kHz
- 115 Volts
- Sweep function


## Model 30H

- Tank Capacity: 2 quarts (2.75 liters)
- Tank Dimensions: $9^{1 ⁄ 21} \times 51 / 4^{\prime \prime} \times 4^{\prime \prime}$
- Total Power Consumption: 120 watts

Model 50H

- Tank Capacity: $31 / 2$ quarts (4.5 liters)
- Tank Dimensions: $91 / 2^{\prime \prime} \times 514^{\prime \prime} \times 4^{\prime \prime}$
- Total Power Consumption: 160 watts


## Model 70H

- Tank Capacity: 5 quarts (6.5 liters)
- Tank Dimensions: $9 \frac{1}{2} 2^{\prime \prime} \times 5^{1 / 4} \times 4^{\prime \prime}$
- Total Power Consumption: 180 watts

Model 150H

- Tank Capacity:13 quarts (14 liters)
- Tank Dimensions: 12 " $\times$ 8" $^{\prime \prime}$
- Total Power Consumption: 300 watts
- Heating Power: 400 watts
- Drain Duct Diameter: 3/8"
- Weight: 16 lbs
- Heating Power: 400 watts
- Drain Duct Diameter: $3 / 8^{\prime \prime}$
- Weight: 22 lbs
- Heating Power: 400 watts
- Drain Duct Diameter: 3/8"
- Unit Weight: 33 lbs
- Heating Power: 800 watts
- Drain Duct Diameter: $1 / 2^{11}$
- Weight: 35 lbs

| Order \# | MFG Model \# | $\mathbf{W} \times \mathrm{D} \times \mathrm{H}$ | 1+ |
| :---: | :---: | :---: | :---: |
| 23-5936 | Elma Model 30H | $141 / 5^{\prime \prime} \times 81 / 10^{\prime \prime} \times 94 / 5^{\prime \prime}$ | \$1,236.00 |
| 23-5938 | Elma Model 50H | $141 / 5^{\prime \prime} \times 81 / 10^{\prime \prime} \times 114 / 5^{\prime \prime}$ | \$1,299.00 |
| 23-5940 | Elma Model 70H | $141 / 5^{\prime \prime} \times 84 / 5^{\prime \prime} \times 114 / 5{ }^{\prime \prime}$ | \$1,537.00 |
| 23-5942 | Elma Model 150H | $167 / 10^{\prime \prime} \times 122 / 5^{\prime \prime} \times 1345^{\prime \prime}$ | \$2,127.00 |



23-5936 Model 3OH

## PARTS HOLDING BASKET

Baskets used for keeping small parts together in ultrasonics or steam cleaners. Springs apart for quick unloading.

| Item Order \# |  | Description | Basket | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 3 - 1 0 0 0}$ | Small Basket | $11 / 2^{\prime \prime}$ | $61 / 2^{\prime \prime}$ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |
| B | $\mathbf{2 3 - 1 0 1 0}$ | Large Basket | $2^{\prime \prime}$ | $6^{\prime \prime}$ | $\$ 3.87$ | $\$ 4.10$ | $\$ 4.55$ |
| C | $\mathbf{2 3 - 1 0 1 2}$ | Large Brass Basket | $1^{\prime \prime}$ | $\$ 5.40$ | $\$ 5.72$ | $\$ 6.35$ |  |
| D | $\mathbf{2 3 - 1 0 1 5}$ | Small Basket with Handle | $53 / 4^{\prime \prime}$ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |  |
|  | $\mathbf{2 3 - 1 0 2 0}$ | Large Basket with Handle | $53 / 4^{\prime \prime}$ | $\$ 4.25$ | $\$ 4.50$ | $\$ 5.00$ |  |



## CLEANING BASKET

Stainless steel cleaning baskets are universal. With practical side clips, they can be used with smaller and larger units.

| Item | Order \# | $\mathbf{L} \times \mathbf{W} \times \mathbf{D}$ | Mesh | Fits Tank | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 23-5915 | $5^{\prime \prime} \times 4^{\prime \prime} \times 13 / 4{ }^{\prime \prime}$ | Fine | 2 qt | \$10.84 | \$11.48 | \$12.75 |
| F | 23-5920 | $51 / 22^{\prime \prime} \times 41 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ | Extra-Fi | 2 qt | \$14.07 | \$14.90 | \$16.55 |
| G | 23-6200 | $51 / 2^{\prime \prime} \times 21 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ | Fine | 1 pt | \$24.31 | \$25.74 | \$28.60 |
| H | 23-6209 | $51 / 4^{\prime \prime} \times 5^{\prime \prime} \times 31 / 8^{\prime \prime}$ | Extra-Fine | 2 qt | \$14.41 | \$15.26 | \$16.95 |
| J | 23-6210 | $9^{\prime \prime} \times 5^{\prime \prime} \times \times 31 / 8^{\prime \prime}$ | Extra-Fine |  | \$15.30 | \$16.20 | \$18.00 |


$\qquad$


These high quality ultrasonics are available in two-quart, three-quart, or six-quart sizes. Includes a basket and small mesh cylinder basket for cleaning small parts.


| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{2 3 - 5 7 1 2}$ | 2 Quart | $\$ 265.00$ |
| B | $\mathbf{2 3 - 5 7 1 2}$ | 3 Quart | $\$ 345.00$ |
| C | $\mathbf{2 3 - 5 7 1 2}$ | 6 Quart | $\$ 595.00$ |

$L \& R^{\circledR}$ Quantrex ${ }^{\circledR}$ systems are manufactured with vinyl-clad steel housings, stainless steel tanks, and premium system components. Their contemporary design and quiet operation are a complement to the importance of beauty and elegance within the jewelry industry. The Quantrex ${ }^{\circledR}$ line is backed by the most comprehensive warranty on the industry - all defects in materials or workmanship are covered for $21 / 2$ years.

## PERSONAL-SIZED ULTRASONIC CLEANER

- Tank dimensions: $43 / 4^{\prime \prime} \times 33 / 8^{\prime \prime} \times 25 / 8^{\prime \prime}$
- Tank capacity: $180 z$
- Overall dimensions: $53 / 8^{\prime \prime} \times 41 / 8^{\prime \prime} \times 43 / 4^{\prime \prime}$ - 117V AC
- Peak output: 70 watts
- Heater, timer, and basket not included

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 23-5850 | PC3 | $\$ 170.00$ |
| 23-5851 | Stainless Steel Basket | $\$ 42.00$ |



## QUANTREX ${ }^{\circledR} 0140$

- Tank dimensions: $93 / 8^{\prime \prime} \times 53 / 8^{\prime \prime} \times 4^{\prime \prime} \quad$ - Overall dimensions: $103 / 8^{\prime \prime} \times 63 / 8^{\prime \prime} \times 8^{\prime \prime}$
- Peak output: 270W
- 117V AC
- Fits 2-quart and 3-quart baskets
- Capacity: 33/8 quarts
- Timer and heater

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 3 - 5 8 5 8}$ | Quantrex $^{\circledR} 0140$ | $\$ 455.00$ |



## QUANTREX ${ }^{\circledR} 0210$

- Tank dimensions: $93 / 8^{\prime \prime} \times 53 / 8^{\prime \prime} \times 4$ "
- Peak output: 400W, 43 kHz
- Timer and heater included
- Capacity: 6 quarts

| Order \# | Description | 1+ |
| :--- | :--- | :---: |
| 23-5859 | Quantrex $^{\circledR} 0210$ | $\$ 897.00$ |




Model 100SB

- $4^{\prime \prime}$ W $\times 5^{\prime \prime} \mathrm{H}$
- Stainless steel basket
- 6 oz. tank capacity
- 4 oz. Gem Sparkle concentrate
- Battery operated
- Ring hanger



Model 200 TURBO

- 53/4" W x 53/4" H
- Stainless steel basket
- 12 oz. tank capacity
- 32 oz. Gem Sparkle concentrate
- Available in 110 V or 220 V
- Ring hanger


## Model 309 TURBO

- $103 / 4^{\prime \prime} \mathrm{W} \times 63 / 4^{1 "} \mathrm{H}$
- Stainless steel basket
- 12 oz. tank capacity
- 32 oz. Gem Sparkle concentrate
- Available in 110 V or 220 V
- Ring hanger

SPEED BRITE IONIC CLEANING SYSTEMS
The Speed Brite Ionic Cleaning System is an odorless, silent process that instantly removes tarnish from gold and silver and will not damage soft stones such as emeralds, opals, turquoise, and pearls. Operation is quick and easy. Ions are attached to the contaminants rather than the metal and stones. The surface tension is reduced, which permits the contaminants to be lifted away by soft bubbles. Made in the USA.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{2 3 - 6 5 0 0}$ | Model 100SB | $\$ 63.55$ |
| B | $\mathbf{2 3 - 6 5 0 1}$ | Model 200 Turbo | $\$ 125.00$ |
| C | $\mathbf{2 3 - 6 5 0 2}$ | Model 309 Turbo | $\$ 185.00$ |

GEM SPARKLE CLEANING SOLUTIONS

| D | $\mathbf{2 3 - 6 6 1 0}$ | 32 oz (liquid) | $\$ 16.85$ |
| :---: | :---: | :--- | :--- |
| E | $\mathbf{2 3 - 6 6 1 1}$ | 1 gallon (liquid) | $\$ 31.50$ |
| F | $\mathbf{2 3 - 6 6 1 2}$ | $320 z$ (powder) | $\$ 17.95$ |
| G | $\mathbf{2 3 - 6 6 1 2}$ | $80 z$ (powder) | $\$ 13.50$ |



G


STULLERSONIC CLEANER
Ideal machine for the small trade shop or for the retail counter. Handy and robust, the sandwich transducer system ensures high reliability. Complete stainless steel construction prevents rusting or oxidation. Compact in size and price but not in quality. Comes with 15 -minute timer switch. Made in Germany.

- Maximum temperature: $140^{\circ} \mathrm{F}$ - Power consumption: 30 watts,
- Weight: 6 lbs. heater 100 watts
- Capacity: 0.85 quarts ( 0.8 liters) - Tank dimensions: $71 / 21 \times 31 / 21 \times 21 / 41$
- Frequency: 35 kHz
- Unit dimensions: $81 / 16^{\prime \prime} \times 37 / 8^{\prime \prime} \times 6^{3 / 4 "}$

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| H | $\mathbf{2 3 - 5 8 7 4}$ | Stullersonic with Heater | $\$ 349.90$ |
| J | $\mathbf{2 3 - 6 2 0 8}$ | Stainless Steel Basket | $\$ 40.25$ |



## ELMASONIC ULTRASONIC CLEANER

An industrial-strength ultrasonic designed for the retail counter. Features a stainless steel tank encased in an attractive plastic housing and hinged cover. Made in Germany.

- Plastic basket included
- Frequency: 35 kHz
- Capacity: 9 quarts (9 liters)
- 0-120 minute timer
- Tank dimensions: $75 / 8^{\prime \prime} \times 35 / 16^{\prime \prime} \times 23 / 8^{\prime \prime}$
- Power consumption: 40 watts

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{2 3 - 5 8 7 2}$ | Ultrasonic Cleaner | $\$ 249.95$ |

## MEDELCO ${ }^{\circledR}$ SONIC CLEANER

Sonic cleaning has many of the advantages of an ultrasonic without the high cost. Excellent promotional item, comes in an attractive resale box. Housing and tank are sturdy plastic. Supplied with instructions, 8 ounces concentrated cleaning solution, lid, and perforated dip tray. Made in the USA.

- Tank dimensions: 3" x 2" high
- Capacity: 8 ounces



## PERSONAL ULTRASONIC CLEANER

- Use only plain tap water to clean
- Remove dirt effectively; results can be seen with bare eyes
- Clean articles to shine just like new
- Three-minute automatic shutoff
- Significant product structure advancement
- Tightened lid design for effective noise reduction
- Improved products durability and safety by water
resistance capability enhancement
- Stainless steel tank

| Order \# | Description | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 3 - 5 9 0 1}$ | Ultrasonic Cleaner | 1 pint | $\$ 35.62$ | $\$ 37.71$ | $\$ 41.90$ |



## DIGITAL ULTRASONIC

Professional cleaning power is available in this simple, small, and well priced unit. This ultrasonic is designed for home and professional use, with enough power and durability to be used in a jewelry store. Simply add clean, distilled water, jewelry cleaner concentrate (sold separately), and your jewelry in the tank. Start the cleaning cycle and watch as your jewelry is cleaned the professional way. You'll be pleased as dirt, body oil, soap scum, dead skin, and other filmy substances are loosened and removed in a matter of minutes. Tank dimensions: $63 / 4^{\prime \prime} \times 5 \frac{1}{3} 3^{\prime \prime} \times 23 / 4^{\prime \prime}$

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 3 - 5 9 0 4}$ | Ultrasonic with Basket | $7^{\prime \prime} \times 9^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 58.52$ | $\$ 61.97$ | $\$ 68.85$ |



## ULTRA-CR BY POLYCHEM

Ultra-CR is a mildly alkaline, concentrated cleaning solution specially formulated for the jewelry industry. Ultra-CR easily removes all buffing and polishing compounds from gold, silver, platinum, brass, copper, and rhodium without the use of ammonia or other harsh chemicals. Patented surfactants provide superior rinsability, which eliminates streaking and dulling. Ultra-CR has gone through comprehensive development and testing at Stuller's manufacturing facility. It's proven to be longer lasting and superior to other cleaners on the market. Ships UPS Ground only. (Dilute 10 to 1.)

| Item | Order \# | Description | Container <br> Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 5 0}$ | Container | 1 gallon | $\$ 20.72$ | $\$ 23.31$ | $\$ 25.90$ |
| B | $\mathbf{5 4 - 4 4 5 2}$ | Container | $21 / 2$ gallon | $\$ 49.47$ | $\$ 53.64$ | $\$ 59.60$ |
| C | $\mathbf{5 4 - 4 4 5 1}$ | Drum | 15 gallon | $\$ 258.57$ | $\$ 269.81$ | $\$ 281.05$ |
| D | $\mathbf{5 4 - 4 4 5 5}$ | Drum | 55 gallon | - | - | $\$ 724.20$ |





C


E


D


F

## L\&R® ULTRASONIC SOLUTIONS

A. Waterless solution is designed to prevent varnish formation and leaves an excellent polish on all watch parts.
B. Waterless cleaning solution especially formulated for use with all L\&R rinses and cleaning machines. Rinse with No. 54-4395. Will not spot or streak. Contains ammonia.


| Item | Order \# | Description | Container Volume | 1+ |
| :---: | :---: | :--- | :---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 3 9 1}$ | Extra-Fine Watch Cleaner | 1 gallon | $\$ 47.70$ |
| B | $\mathbf{5 4 - 4 3 9 2}$ | \#111 Ammoniated Watch Cleaner | 1 gallon | $\$ 46.70$ |

C. Waterless, non-ammoniated solution, formulated for use on ultrasonic cleaning units. Won't spot or streak. Greater solvency on greases, gummed oils, and containments. Rinse with No. 54-4395.
D. Ready-to-use, waterless, and non-ammoniated clock cleaning solution.


| Item | Order\# | Description | Container Volume |  | 1+ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| C | $\mathbf{5 4 - 4 3 9 3}$ | \#566 Non-Ammoniated Watch Cleaner | 1 gallon | $\$ 47.70$ |  |
| D | $\mathbf{5 4 - 4 3 9 7}$ | \#677 Clock Cleaner | 1 gallon | $\$ 47.70$ |  |

E. Biodegradable super concentrate used at a 3 to $20 \%$ concentration with water. Removes most buffing compounds without discoloration of metal. Can be heated in an ultrasonic machine up to $180^{\circ} \mathrm{F}$ to enhance cleaning. Contains no film-forming corrosion inhibitors so parts can be plated without any additional cleaning. Do not use on aluminum.
F. Ellanar cleaner is an effective solution without the added ammonia. Safe to use on gold, diamonds, and gems.


| Item | Order\# | Description | Container Volume | 1+ |
| :---: | :---: | :--- | :--- | ---: | ---: |
| E | $\mathbf{5 4 - 4 4 0 2}$ | Buffing Compound Cleaner | 1 gallon | $\$ 37.95$ |
| F | $\mathbf{5 4 - 4 4 0 3}$ | Ellanar Jewelry Cleaner | 1 gallon | $\$ 35.00$ |



## ULTRASONIC/ STANDARD WATCH RINSE

G. Fast drying, long lasting, and won't break down. Specially formulated for use with Watch Cleaner \#111. Can be used with any watch cleaning solution. Compatible with all cleaners.
H. Clear petroleum distillate, specially blended by L\&R. Contains no benzoil or chlorinated solvents. Leaves no oily film. Dries fast. Use in ultrasonic with Cleaner \#111; in standard machines, with No-Foam Watch Cleaner. Compatible with all cleaners.


| Item | Order \# | Description | Container Volume | 1+ |
| :---: | ---: | :--- | ---: | ---: |
| G | $\mathbf{5 4 - 4 3 9 5}$ | Standard Rinse | 1 gallon | $\$ 46.70$ |
| H | $\mathbf{5 4 - 4 3 9 4}$ | \#3 Rinse | 1 gallon | $\$ 47.70$ |

## MYXIS SHINE BRITE ULTRASONIC CONCENTRATE

- Shine Brite works well on jewelry such as mesh and rope chains, diamond bracelets, cluster rings, precious metals, and watch bands.
- Non-toxic, non-acidic, and designed to dissolve the dirt and grime away faster than any other cleaner on the market.
- Rinses away with warm water and light steam.
- Now available in 15 no-mess, pre-measured packages that make 1 gallon (each) of Shine Brite cleaning solution, reducing your shipping costs.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 7 6}$ | Ultrasonic Concentrate | $\$ 33.44$ | $\$ 34.90$ | $\$ 36.35$ |

## CLEANING CONCENTRATE

Tivaclean is an electrocleaning concentrate for both metals and plastics. It is an orange powder that, when mixed with water, changes to a fluorescent green to ensure full rinsing. Tivaclean also contains anti-foaming agents for low sudsing and a deodorant to suppress odor. A biocatalyst is also present for biodegradability and eliminates the need to use toxic chlorinated solvents. In solution, Tivaclean has a non-caustic Ph of 9-10. Tivaclean is also a great ultrasonic cleaner. It can be used at room temperature; however, heating the solution to a temperature between $160^{\circ} \mathrm{F}$ and $180^{\circ} \mathrm{F}$ enhances its performance.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: | ---: |
| B | $\mathbf{5 4 - 4 4 0 1}$ | 1 lb | $\$ 6.21$ | $\$ 6.48$ | $\$ 6.75$ |

## STULLER SUPER SONIC SOAP

A special blend of cleaning agents, including ammonia, that produces the ultimate in ultrasonic cleaning. Very effective in removing tripoli, bobbing, and polishing compounds.
Highly concentrated, dilute with up to 10 parts water.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 4 4 4 7}$ | 1 gallon | $\$ 12.71$ | $\$ 13.46$ | $\$ 14.95$ |



B

## PUMP ADAPTER

D. Pump adapter for 5 gallon drum. Allows for the easy directional dispensing of liquids into receiving container.
E. Pump adapter for 5 gallon drum. Heavy duty pump with angled spout to prevent dripping. Fits $3 / 4$ "and 2 " openings.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 4 4 5 8}$ | 18 " Barrel - 8 oz per stroke | $\$ 27.46$ | $\$ 29.07$ | $\$ 32.30$ |
| E | $\mathbf{5 4 - 4 4 3 9}$ | 12 " Barrel - 5 oz per stroke | $\$ 32.26$ | $\$ 34.16$ | $\$ 37.95$ |

MAGIC GREEN ULTRASONIC CLEANING POWDER
Non-ammoniate, concentrated. Mix one ounce per gallon of water.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| F | $\mathbf{5 4 - 4 4 0 0}$ | 32 oz | $\$ 17.68$ | $\$ 19.17$ | $\$ 21.30$ |
| $\mathbf{5 4 - 4 4 0 4}$ | 10 lb (not shown) | $\$ 56.17$ | $\$ 58.61$ | $\$ 61.05$ |  |
| $\mathbf{5 4 - 4 4 0 5}$ | 50 lb (not shown) | $\$ 316.65$ | $\$ 343.35$ | $\$ 381.50$ |  |

MAGIC LUSTER CLEANING SOLUTION
Super concentrated ultrasonic cleaner for gold and silver dilutes with up to 40 parts water. Works fast at room temperature, extra fast in heated water. Non-ammoniated, biodegradable.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{5 4 - 4 4 0 7}$ | 1 gallon | $\$ 16.77$ | $\$ 18.18$ | $\$ 20.20$ |
|  | $\mathbf{5 4 - 4 4 0 8}$ | 5 gallons (not shown) | $\$ 74.89$ | $\$ 79.29$ | $\$ 88.10$ |




ULTRASONIC PARTS BASKET
Fine, plastic mesh mounted on plastic legs to keep basket away from bottom of ultrasonic and will prevent even your smallest stone from being lost. Has up to 16 hanging hooks. Great for use with chains also. Basket has convenient handle for easy removal.

| Order \# | Description | Height | Depth | 12+ | 6+ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 3 - 2 0 0 0}$ | Parts Basket | $37 / 8^{\prime \prime}$ | $47 / 8^{\prime \prime}$ | $\$ 15.73$ | $\$ 16.65$ | $\$ 18.50$ |



## PLASTIC STRAINERS

Plastic strainers with nylon mesh are great for many uses. Nylon will not scratch jewelry and is perfect for dipping jewelry.

| Item | Order \# | Description | Width | Depth | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{2 3 - 5 9 0 0}$ | Small Basket | $5^{\prime \prime}$ | $27 / 8^{\prime \prime}$ | $\$ 1.62$ | $\$ 1.71$ | $\$ 1.90$ |
| B | $\mathbf{2 3 - 5 9 0 5}$ | Large Basket | $9^{\prime \prime}$ | $21 / 2^{\prime \prime}$ | $\$ 2.59$ | $\$ 2.75$ | $\$ 3.05$ |



## ULTRASONIC RING RACKS

Fits one- and two-quart ultrasonics lengthwise and three-, six-, and ten-quart tanks crosswise. Plastic coated, rust-resistant hook and bar racks increase ultrasonic cleaning efficiency and will not mar objects.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{2 3 - 6 2 0 5}$ | Coated Rack - No Legs | $\$ 3.61$ | $\$ 3.83$ | $\$ 4.25$ |  |
| D | $\mathbf{2 3 - 6 2 0 6}$ | Coated Double Rack with Legs | $\$ 6.29$ | $\$ 6.66$ | $\$ 7.40$ |  |
| E | $\mathbf{2 3 - 6 2 0 4}$ | Stainless Steel Rack - No Legs | $\$ 8.80$ | $\$ 9.32$ | $\$ 10.35$ |  |
| F | $\mathbf{2 3 - 1 0 3 0}$ | 8 Hooks (16 Rings) | 12 " | $\$ 7.40$ | $\$ 7.83$ | $\$ 8.70$ |
| G | $\mathbf{2 3 - 1 0 3 2}$ | 12 Hooks (24 Rings) | $141 / 2^{\prime \prime}$ | $\$ 8.07$ | $\$ 8.55$ | $\$ 9.50$ |
|  | $\mathbf{2 3 - 1 0 3 4}$ | Replacement Hooks - pack of 5 | $\$ 3.87$ | $\$ 4.10$ | $\$ 4.55$ |  |



Rings not included


STONE WASHER
Clean loose stones with a glass container for washing.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 4 0 1 0}$ | Stone Washer | $\$ 7.11$ | $\$ 8.12$ | $\$ 10.15$ |

## BAMB00 TWEEZERS

Tweezers made from bamboo have a gentle grip and will not damage small delicate objects. Bamboo tweezers are highly recommended for use in optical inspection and production environments. They have excellent insulation and are chemical-resistant.

| Item |  | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 7 - 7 5 1 7}$ | Small Pointed | 6 1+ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |
| B | $\mathbf{5 7 - 7 5 1 8}$ | Large Pointed | $97 / 8^{\prime \prime}$ | $\$ 4.21$ | $\$ 4.46$ | $\$ 4.95$ |
| C | $\mathbf{5 7 - 7 5 1 9}$ | Large Flat Blunt | $7^{\prime \prime}$ | $\$ 4.89$ | $\$ 5.18$ | $\$ 5.75$ |

## COATED FORCEPS/STEAM TWEEZERS

Used for handling items being steamed and/or cleaned in ultrasonics. Plastic coating on tips provide chemical resistance along with a firm grip for retrieving items without scratching. Made of nickel-plated steel Plastic coating may vary in color.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| D | $\mathbf{5 7 - 7 5 1 0}$ | Cross-Locking | $61 / 2^{\prime \prime}$ | $\$ 9.99$ | $\$ 10.58$ | $\$ 11.75$ |
| E | $\mathbf{5 7 - 7 5 1 5}$ | Straight | $8^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| F | $\mathbf{5 7 - 7 5 1 6}$ | Straight | $10 "$ | $\$ 10.20$ | $\$ 10.80$ | $\$ 12.00$ |

ECONOMICAL STEAM TWEEZERS
Chrome-plated. Chemical resistance is provided by the plastic coating on tips. Plastic coating may vary in color.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 9 2 0 0}$ | Steam Tweezers | $10 "$ | $\$ 6.16$ | $\$ 6.53$ | $\$ 7.25$ |



## STEAMOSTAT

Made of stainless steel, the Steamostat features PVC-covered tips for holding jewelry while steam cleaning.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 5 5 5}$ | Steamostat | $8^{\prime \prime}$ | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |



HEMOSTAT FORCEPS
Used as clamps when working with small articles. Made of stainless steel. Box-joint construction and serrated jaws allow firm holding. Contains three-position locking device.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| G | $\mathbf{4 6 - 4 5 4 5}$ | Straight Forceps | 5 " | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |
| H | $\mathbf{4 6 - 4 5 5 0}$ | Curved Forceps | $5^{\prime \prime}$ | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |




## SPARKLE SPARKLE EVERYDAY CLEANER

This jewelry cleaner is perfect for all of your jewelry - even your delicate opals and pearls. Its refreshing botanical formula boasts scents of citrus, mint, and aloe extracts for powerful, yet gentle cleaning power. Made in USA.
Kit Includes:
(1) Bottle of 60 ml powerful jewelry cleaner spray
(1) Bottle of 120 ml refill
(2) Jewelry cleaning micro brushes
(1) $6^{\prime \prime} \times 4^{\prime \prime}$ polishing cloth

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $54-9029$ | Jewelry Cleaning Kit | $\$ 12.95$ |

- Spray and rinse convenience
- Cleans in less than 30 seconds
- Leakproof bottle
- No residue after cleaning
- Safe/non-toxic
- Non-abrasive
- Sold in 1 oz. bottles


A


B



D

Kit (54-9034) includes all of the following:

- Sparkle Sparkle Gold Jewelry Cleaner
- Two GemBrushes
- SparkleSparkle ${ }^{\text {m" }}$ Lint-Free GemCloth
- Luxurious velvet GemPouch



## QUICK-CLEAN CLEANER

The quickest, easiest, and most effective way to clean your jewelry at home. Our Quick-Clean system is a fully contained foam with an agitating chamber that protects jewelry, while efficiently removing soil. The fill line of the liquid cleaner is below the bottom of the agitating chamber. A riser/drainer feature supports the agitating chamber and allows the cleaning solution to flow into the agitating chamber during cleaning.
OUICK-CLEAN CLEANER


## SPARKLE SPARKLE

Now you can polish and care for your jewelry with premium jewelry care products. Unique, leak-proof spray bottle design means less mess than a traditional dip silver cleaner, and it's safe to take along when traveling.

Sold individually or as a set. Set includes: one cleaner; one lint-free cloth; two brushes and one velvet pouch. Rekindles the brilliance of white and yellow gold jewelry. Helps extend the life of rhodium coatings.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 9 0 3 0}$ | Gold Cleaner | $10 z$ | $\$ 3.44$ | $\$ 3.56$ | $\$ 3.95$ |
| B | $\mathbf{5 4 - 9 0 3 1}$ | Platinum Cleaner | $10 z$ | $\$ 3.44$ | $\$ 3.56$ | $\$ 3.95$ |
| C | $\mathbf{5 4 - 9 0 3 2}$ | Silver Cleaner | $10 z$ | $\$ 3.44$ | $\$ 3.56$ | $\$ 3.95$ |
| D | $\mathbf{5 4 - 9 0 3 3}$ | Delicate Cleaner | $10 z$ | $\$ 3.44$ | $\$ 3.56$ | $\$ 3.95$ |
| E | $\mathbf{5 4 - 9 0 3 4}$ | Gold Kit |  | $\$ 6.05$ | $\$ 6.26$ | $\$ 6.95$ |
|  | $\mathbf{5 4 - 9 0 3 5}$ | Platinum Kit |  | $\$ 6.05$ | $\$ 6.26$ | $\$ 6.95$ |
|  | $\mathbf{5 4 - 9 0 3 6}$ | Silver Kit |  | $\$ 6.05$ | $\$ 6.26$ | $\$ 6.95$ |
|  | $\mathbf{5 4 - 9 0 3 7}$ | Delicate Kit |  | $\$ 6.05$ | $\$ 6.26$ | $\$ 6.95$ |

## MYXIS SHINE BRITE

Formulated for repair facilities, yet safe enough for the retail market. Nonharmful, non-acidic, Shine Brite works remarkably well on the most difficult of jewelry such as mesh and rope chains, diamond bracelets and cluster rings, precious metals, and watch bands. Shine Brite dissolves dirt and grime away completely in warm water or light steam.

| Order \# | Description | Container Volume |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 7 8}$ | Jewelry Cleaner | $40 z$ | $\$ 3.53$ | $\$ 3.83$ | $\$ 4.25$ |  |
| $\mathbf{5 4 - 4 4 7 9}$ | Jewelry Cleaner | $80 z$ | $\$ 4.90$ | $\$ 5.31$ | $\$ 5.90$ |  |

INSTA-CLEAN
A non-toxic dip or wipe-on tarnish remover and cleaner for gold, silver, copper, and brass.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 9 0}$ | $80 z$ | $\$ 4.72$ | $\$ 5.00$ | $\$ 5.55$ |
| B | $\mathbf{5 4 - 4 4 9 1}$ | $160 z$ | $\$ 6.89$ | $\$ 7.47$ | $\$ 8.30$ |
| C | $\mathbf{5 4 - 4 4 9 2}$ | $320 z$ | $\$ 11.04$ | $\$ 11.97$ | $\$ 13.30$ |
| D | $\mathbf{5 4 - 4 4 9 3}$ | 1 gallon | $\$ 32.08$ | $\$ 34.78$ | $\$ 38.65$ |



PR88 HAND PROTECTION
Excellent hand protection that will keep grease and grime from penetrating the skin. Just apply before beginning work. Washes off with soap and water.

| Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 6 2}$ | 311202 | $\$ 9.06$ | $\$ 9.46$ | $\$ 9.85$ |
| $\mathbf{5 4 - 4 4 6 2}$ | 1 liter | $\$ 27.92$ | $\$ 29.14$ | $\$ 30.35$ |

BLUE MAGIC INVISIBLE GLOVE
Protective hand coating. Protects hands from rouge, grease, oil, and even paint. Easy clean-up with soap and water. Not greasy-actually improves grip on tools.

| Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 6 8}$ | $21 / 20 z$ | $\$ 6.21$ | $\$ 6.48$ | $\$ 6.75$ |



## HAND CLEANER

A concentrated hand cleaner specifically designed for the jewelry industry. Contains very little grit with a citrus orange scent. This hand cleaner will remove all polish quickly and easily.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{2 3 - 0 0 6 5}$ | 1 gallon | $\$ 20.65$ | $\$ 21.55$ | $\$ 22.45$ |

## PURE MAGIC

Cleans jewelry in 3 to 5 minutes regardless of how dirty. Just add water to the concentrated dry chemical mixture to obtain $320 z$ of full-strength cleaning solution.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| F | $\mathbf{5 4 - 4 4 7 0}$ | $320 z$ | $\$ 13.48$ | $\$ 14.06$ | $\$ 14.65$ |

## STULLER TARNISH REMOVER

Dip and rinse to instantly remove tarnish from silver. Note: Ingredients deteriorate with use and can cause tarnish. Fresh solution corrects the problem.

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| G | $\mathbf{5 4 - 4 4 4 4}$ | 1 gallon | $\$ 25.80$ | $\$ 27.32$ | $\$ 30.35$ |




381/4" W $\times 181 / 4^{\prime \prime} L \times 491 / 4^{\prime \prime} H$ Double Faucet

3
FILTRATION STEPS
1 - CARPET FILTER
2 - DECANTING
3 - WATER TRANSFER

Recover metal with this easy-to-install triple water filtration system.
$213 / 4^{\prime \prime} W \times 181 / 4^{\prime \prime} L \times 491 / 4^{\prime \prime} H$ Single Faucet


## FILTRATION SINK

Stuller's exclusive filtration sinks are a must have for your shop. Our single and double filtration sinks are made of stainless steel and each have a removable basin, which is light but durable. These sinks feature quality construction and up to 10 micron filtration at an affordable price.

One of the best ways to recover all the metal being washed away is with these 3 step filtration process. This is an easy to install filtration system taking less than 10 minutes for set up. Now you can stop washing away profits and save yourself the headache plumbing problems. The first step of the filtration process is a carpet filter, next the water will go through the decanting process, and last the water transfer. You can't go wrong with these easy installable filtration sinks.


View from above down into the basin, showing the filter.


Each sink has a removable basin which is light but durable.


| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 3 - 6 0 1 1}$ | Double Faucet | $\$ 2,600.00$ |
| $\mathbf{2 3 - 6 0 1 1}$ | Single Faucet | $\$ 1,900.00$ |

REPLACEMENT PARTS

| $\mathbf{2 3 - 6 0 1 2}$ | Bag Filter | $\$ 31.95$ |
| :--- | :--- | :--- |
| $\mathbf{2 3 - 6 0 1 2}$ | Carpet Filter | $\$ 10.25$ |

## MAGIC DRAIN TRAP

See-thru trap can save all kinds of valuables. Easy, snap-off filter is easily removed to recover lost items. Magic drain is all plastic and resists corrosion. Easy to install. Hardware included.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 3 - 6 0 1 5}$ | Magic Drain Trap | $\$ 14.41$ | $\$ 15.26$ | $\$ 16.95$ |



STONE SAVER
New style drain trap for jewelry trade shops. Made with fine mesh that prevents anything larger than 0.5 millimeters across from falling into the drain. Magnetic ring provides a secure seal to metal drains. Works with any standard $41 / 2^{\prime \prime}$ metal sink drain. No installation required.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 1 0 0 0}$ | Stone Saver $^{\text {™ }}$ | $\$ 11.36$ | $\$ 11.86$ | $\$ 12.35$ |

## ROUND SINK TRAP

This under counter sink trap is made from high density polyethylene with $3 / 8$ " uniform wall thickness and a removable polyethylene bucket and filter. It is designed for gravity drainage and is $100 \%$ corrision proof seamless polyethylene construction. Made in the U.S.A.

| Item | Order \# | Description | Capacity | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{2 3 - 6 0 2 2}$ | Top Access 1½ Pipe | 1.2 gallon | $\$ 356.00$ |
|  | $\mathbf{2 3 - 6 0 2 2}$ | Top Access with 2" Pipe | 1.2 gallon | $\$ 356.00$ |
| B | $\mathbf{2 3 - 6 0 2 3}$ | Bottom Access 1½ Pipe | 1.2 gallon | $\$ 356.00$ |
|  | $\mathbf{2 3 - 6 0 2 3}$ | Bottom Access 2" Pipe | 1.2 gallon | $\$ 356.00$ |



GOLD RECOVERY SYSTEM
Don't let money get washed down the drain. Install a drain sweeper kit under your sink and capture all your precious metal sweeps. The kit is easily installed with the included fittings and instructions - no need for a plumber in most cases. Catch particles as small as five microns. Filter cartridges are easily changed out in a matter of a couple minutes with no mess. This is a must-have for any repair room or manufacturing facility. Uses 1 " inside diameter PVC pipe.

| Item |  | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: |
| C | $\mathbf{2 3 - 6 0 2 0}$ | Drain Sweeper Kit | $41 / 22^{\prime \prime} \times 133 / 4^{\prime \prime}$ | - | - | $\$ 189.75$ |
| D | $\mathbf{2 3 - 6 0 2 1}$ | Replacement Filter |  | $\$ 5.91$ | $\$ 6.26$ | $\$ 6.95$ |



HIGH-SPEED TWIST DRILLS
These high-speed drills are top-quality, precision-ground tempered steel. The drills are able to drill into metal as well as stone. A uniform, medium shank size speeds up tool changes.


|  | Kit Order \# <br> A. Set of 200 <br> (10 each) <br> \#61-80 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| B. Set of 100 <br> (10 each) <br> \#71-80 | 28-10000 <br> C. Set of 100 <br> (10 each) <br> $\# 61-70$ | D. Set of 36 <br> (1 each) <br> $\# 33-80$ |  |  |
| $12+$ | $\$ 82.75$ | $\$ 42.29$ | $\$ 42.29$ | $\$ 45.26$ |
| $6+$ | $\$ 86.35$ | $\$ 45.86$ | $\$ 45.86$ | $\$ 47.23$ |
| $1+$ | $\$ 89.95$ | $\$ 50.95$ | $\$ 50.95$ | $\$ 49.20$ |


| Order \# | 28-10000 |
| :---: | :---: |
| Material | High Speed Steel |
| Shank Size | 3/32" |
|  | Sold in packs of 10 |

1.778 mm 1.702 mm 1.613 mm 1.512 mm 1.397 mm 1.321 mm 1.181 mm 1.092 mm

| Drill\# | $\# 50$ | $\# 51$ | $\# 52$ | $\# 53$ | $\# 54$ | $\# 55$ | $\# 56$ | $\# 57$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ |
| $6+$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ |
| $1+$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ |

$1.067 \mathrm{~mm} 1.041 \mathrm{~mm} 1.016 \mathrm{~mm} 0.99 \mathrm{~mm} \quad 0.965 \mathrm{~mm} \quad 0.94 \mathrm{~mm} \quad 0.914 \mathrm{~mm} 0.889 \mathrm{~mm}$

| Drill\# | $\# 58$ | $\# 59$ | $\# 60$ | $\# 61$ | $\# 62$ | $\# 63$ | $\# 64$ | $\# 65$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ |
| $6+$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ |
| $1+$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ |

0.838 mm 0.813 mm 0.787 mm 0.734 mm 0.712 mm 0.66 mm 0.635 mm 0.61 mm

| Drill\# | $\# 66$ | $\# 67$ | $\# 68$ | $\# 69$ | $\# 70$ | $\# 71$ | $\# 72$ | $\# 73$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ |
| $6+$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ |
| $1+$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ |


| $\mathbf{0 . 5 7 2 m m}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0 . 5 3 3 m m}$ |  |  |  |  |  |  |  |  |
| Drill \# | $\# 74$ | $\# 75$ | $\# 76$ | $\# 77$ | $\# 78$ | $\# 79$ | $\# 80$ |  |
| $12+$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ | $\$ 4.48$ |  |
| $6+$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ | $\$ 5.04$ |  |
| $1+$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\$ 5.60$ | $\mathbf{1 0}$ |



## Order \# 28-0681

Material Cobalt Steel
Shank Size $3 / 32^{\prime \prime}$
Sold Each

|  | 0.5 mm | 0.6 mm | 0.7 mm | 0.8 mm | 0.9 mm | 1 mm | 1.1 mm | 1.2 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12+ | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 |
| $6+$ | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 |
| 1+ | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 |
|  | 1.3mm | 1.4 mm | 1.5mm | 1.6 mm | 1.7 mm | 1.8 mm | 1.9 mm | 2 mm |
| 12+ | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 | \$4.29 |
| $6+$ | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 | \$4.55 |
| $1+$ | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 | \$5.05 |


|  | $\mathbf{2 . 1 \mathbf { m m }}$ |  | $\mathbf{2 . 2 m m}$ |
| ---: | ---: | ---: | ---: |
| $12+$ | $\$ 4.29$ | $\$ 4.29$ | $\$ 4.29$ |
| $6+$ | $\$ 4.55$ | $\$ 4.55$ | $\$ 4.55$ |
| $1+$ | $\$ 5.05$ | $\$ 5.05$ | $\$ 5.05$ |


| Order \# | 28-10001 |
| :---: | :---: |
| Material | High Speed Steel |
| Shank Size | 3/32" |

Kit Order \# 28-10001
A. Set of 20 (1 each) \#60-80

| $12+$ | $6+$ | $1+$ |
| ---: | ---: | ---: |
| $\$ 44.39$ | $\$ 46.32$ | $\$ 48.25$ |

DORMER, HIGH-SPEED, TWIST DRILLS
Straight-shank, high-speed, steel twist drills. Made of high-quality steel. Last two digits equal drill number.


| $\mathbf{0 . 7 8 7 \mathbf { m m }} \mathbf{0 . 7 3 4 m m} \mathbf{0 . 7 1 3 m m}$ |  |  |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill\# | $\# 68$ | $\# 69$ | $\# 70$ | $\# 71$ | $\# 72$ | $\# 73$ | $\# 74$ | $\# 75$ |
| $12+$ | $\$ 17.53$ | $\$ 19.60$ | $\$ 19.60$ | $\$ 22.68$ | $\$ 22.68$ | $\$ 22.68$ | $\$ 22.68$ | $\$ 22.68$ |
| $6+$ | $\$ 18.29$ | $\$ 20.45$ | $\$ 20.45$ | $\$ 23.66$ | $\$ 23.66$ | $\$ 23.66$ | $\$ 23.66$ | $\$ 23.66$ |
| $1+$ | $\$ 19.05$ | $\$ 21.30$ | $\$ 21.30$ | $\$ 24.65$ | $\$ 24.65$ | $\$ 24.65$ | $\$ 24.65$ | $\$ 24.65$ |


| $\mathbf{0 . 5 0 8 m m}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill \# | $\# 76$ | $\# 77$ | $\# 78$ | $\# 79$ | $\# 80$ |  |
| $12+$ | $\$ 22.68$ | $\$ 22.68$ | $\$ 27.83$ | $\$ 27.83$ | $\$ 27.83$ |  |
| $6+$ | $\$ 23.66$ | $\$ 23.66$ | $\$ 29.04$ | $\$ 29.04$ | $\$ 29.04$ |  |
| $1+$ | $\$ 24.65$ | $\$ 24.65$ | $\$ 30.25$ | $\$ 30.25$ | $\$ 30.25$ |  |

PRIMO ${ }^{\circledR}$ HIGH SPEED

## TWIST DRILLS

HSS is the number one used drill in jewelry manufacturing. They are now available in standard $3 / 32^{\prime \prime}$ shank sizes.


| Order \# | $\mathbf{1 0 - 8 3 2 4}$ |
| :--- | :--- |
| Material | Steel |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 3 |


| Kit Order \# $\quad \mathbf{1 0 - 8 3 2 4}$ |  |
| :--- | :---: |
| 10-Piece Assortment (1 each) $.5 \mathrm{~mm}-\mathbf{2 . 2 m m}$  <br> $12+$ $6+$ $1+$ <br> $\$ 23.41$ $\$ 24.43$ $\$ 25.45$ |  |


|  | 0.5 mm | 0.7 mm | 0.9 mm | 1.1 mm | 1.2 mm | 1.4 mm | 1.6 mm | 1.8 mm | 2mm | 2.2 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill \# | \#76 | \#70 | \#65 | \#57 | \#56 | \#54 | \#52 | \#50 | \#46 | \#43 |
| 12+ | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 | \$7.31 |
| $6+$ | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 | \$7.63 |
| $1+$ | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 | \$7.95 |

PRIMO ${ }^{\circledR}$ HIGH SPEED TITANIUM COATED TWIST DRILLS
Titanium coated drills last 4-5 times longer than non-coated drills. Coated drills provide smoother drilling and run cooler due to less friction.

PRIMO ${ }^{\circledR}$ HIGH SPEED STEEL JOBBER TITANIUM COATED TWIST DRILLS


| Order \# | $\mathbf{1 0 - 8 3 3 0}$ |
| :--- | :--- |
| Material | Steel |
| Shank Size | $3 / 321$ |
|  | Sold Each |


|  | 0.99 mm | 0.97mm | 0.94mm | 0.91mm | 0.89mm | 0.84 mm | 0.81 mm | 0.79mm | 0.73mm | 0.71 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill \# | \#61 | \#64 | \#63 | \#64 | \#65 | \#66 | \#67 | \#68 | \#69 | \#70 |
| 12+ | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 | \$6.35 |
| $6+$ | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 | \$6.62 |
| $1+$ | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 | \$6.90 |


|  | $\mathbf{0 . 6 6 m m}$ | $\mathbf{0 . 6 4 m m}$ | $\mathbf{0 . 6 1 m m}$ | $\mathbf{0 . 5 7 m m}$ | $\mathbf{0 . 5 3 m m}$ | $\mathbf{0 . 5 1 m m}$ | $\mathbf{0 . 4 6 m m}$ | $\mathbf{0} \mathbf{0 . 4 1 m m}$ | $\mathbf{0 . 3 7 m m}$ | $\mathbf{0 . 3 4 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill\# | $\# 71$ | $\# 72$ | $\# 73$ | $\# 74$ | $\# 74$ | $\# 76$ | $\# 77$ | $\# 78$ | $\# 79$ | $\# 80$ |
| $12+$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ | $\$ 6.35$ |
| $6+$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ | $\$ 6.62$ |
| $1+$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ | $\$ 6.90$ |


|  | Order \# | 28-0683 |  |  |  |  | Kit Order \# 28-0683 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 50-Piece Assortment: \#50, \#53, \#56, \#57, \#60 \#64, \#67, \#70, \#72, \#76 |  |  | 50-Piece Assortment:\#71-\#80 |  |
|  |  | Cobalt <br> $3 / 32^{\prime \prime}$ <br> Sold in packs of 10 |  |  |  | $12+$ |  | \$65.16 |  | \$65.16 |  |
|  | Material Shank Size |  |  |  |  | 6+ |  | \$70.65 |  | \$70.65 |  |
|  |  |  |  |  |  | $1+$ |  | \$78.50 |  | \$78.50 |  |
|  | 1.78 mm | 1.7 mm | 1.61 mm | 1.51 mm | 1.4mm | 1.32mm | 1.18 mm | 1.09 mm | 1.07mm | 1.04mm | 1.02mm |
| Drill \# | \#50 | \#51 | \#52 | \#53 | \#54 | \#55 | \#56 | \#57 | \#58 | \#59 | \#60 |
| 12+ | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 |
| $6+$ | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 |
| $1+$ | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 |
|  | 0.99 mm | 0.97 mm | 0.94mm | 0.91 mm | 0.89 mm | 0.84 mm | 0.81 mm | 0.79 mm | 0.73 mm | 0.71 mm |  |
| Drill \# | \#61 | \#62 | \#63 | \#64 | \#65 | \#66 | \#67 | \#68 | \#69 | \#70 |  |
| 12+ | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 |  |
| $6+$ | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 |  |
| $1+$ | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 |  |
|  | 0.66 mm | 0.61 mm | 0.64mm | 0.57 mm | 0.53 mm | 0.52 mm | 0.46 mm | 0.41 mm | 0.37 mm | 0.34 mm |  |
| Drill \# | \#71 | \#73 | \#74 | \#74 | \#75 | \#76 | \#77 | \#78 | \#79 | \#80 |  |
| 12+ | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 | \$7.32 |  |
| $6+$ | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 | \$8.24 |  |
| $1+$ | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 | \$9.15 |  |

## PRIMO ${ }^{\circledR}$ COBALT MINI TWIST DRILLS

- Accurately ground for precise drilling
- 10 most popular drill sizes offered
- Extended life compared to Vanidium drills


10

|  | Order \# | 77-2507 |  |  | Kit Order \# 77-2507 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 30-Piece Assortment (3 each) |  |  |  |
|  | Material <br> Shank Size | $\begin{aligned} & \text { Steel } \\ \text { e } & 3 / 32 " \end{aligned}$ |  |  |  | 2+ | 6+ | 1+ |
|  | Sold in packs of 5 |  |  |  |  | . 27 | \$7.70 | \$8.55 |
|  | 2.71 mm | 2.49 mm | 2.08 mm | 1.99 mm | 1.78 mm | 1.7 mm | 1.61 mm | 1.51 mm |
| Drill \# | \#36 | \#40 | \#45 | \#47 | \#50 | \#51 | \#52 | \#53 |
| 12+ | \$7.27 | \$7.27 | \$7.27 | \$7.27 | \$7.27 | \$7.27 | \$7.27 | \$7.27 |
| $6+$ | \$7.70 | \$7.70 | \$7.70 | \$7.70 | \$7.70 | \$7.70 | \$7.70 | \$7.70 |
| $1+$ | \$8.55 | \$8.55 | \$8.55 | \$8.55 | \$8.55 | \$8.55 | \$8.55 | \$8.55 |
|  | 1.4 mm | 1.18 mm | 0.99 mm | 0.89 mm |  |  |  |  |
| Drill \# | \#54 | \#56 | \#61 | \#65 |  |  |  |  |
| 12+ | \$7.27 | \$7.27 | \$7.27 | \$7.27 |  |  |  |  |
| $6+$ | \$7.70 | \$7.70 | \$7.70 | \$7.70 |  |  |  |  |
| 1+ | \$8.55 | \$8.55 | \$8.55 | \$8.55 | 5 |  |  |  |

PRIMO ${ }^{\circledR}$ DIAMOND COATED MINI TWIST DRILLS

PRIMO ${ }^{\circledR}$ COBALT PILOT TWIST DRILL ASSORTMENT
Solid cobalt, double ended pilot drills provide an optimal pinpoint location to mark the area to be drilled.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 8 3 2 6}$ | Pilot Twist Drill Assortment $(0.5 \mathrm{~mm}, 1.0 \mathrm{~mm}, 1.5 \mathrm{~mm})$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |



Swiss-made medium-fine grit twist drills are the ultimate for drilling stones, pearls, glass, or ceramics. Use with standard handpieces and a small amount of water as lubricant.

PANTHER DIAMOND TWIST DRILL, FIG. \#77D


| Order \# | $\mathbf{2 8 - 1 0 0 0 2}$ |
| :--- | :--- |
| Material | Tungsten Carbide Steel |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 6 |


|  | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 m m}$ | $\mathbf{c} \mathbf{1 . 2 m m}$ | $\mathbf{1 . 4 m m}$ |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Drill\# | \#008 | $\# 009$ | $\# 010$ | $\# 012$ | $\# 014$ |
| $12+$ | $\$ 58.65$ | $\$ 58.65$ | $\$ 58.65$ | $\$ 58.65$ | $\$ 58.65$ |
| $6+$ | $\$ 61.20$ | $\$ 61.20$ | $\$ 61.20$ | $\$ 61.20$ | $\$ 61.20$ |
| $1+$ | $\$ 63.75$ | $\$ 63.75$ | $\$ 63.75$ | $\$ 63.75$ | $\$ 63.75$ |

6

PANTHER STAINLESS STEEL
TWIST DRILL, FIG. \#77


| Order \# | $\mathbf{2 8 - 1 0 0 0 3}$ |
| :--- | :--- |
| Material | Stainless Steel |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold in packs of 6 |


|  | $\mathbf{0 . 5 m m}$ | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ | $\mathbf{0 . 9 m m}$ | $\mathbf{1 m m}$ | $\mathbf{1 . 1 m m}$ | $\mathbf{1 . 2 m m}$ | $\mathbf{1 . 3 m m}$ | $\mathbf{. 5 0 - 1 . 6 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill\# | $\# 005$ | $\# 006$ | $\# 007$ | $\# 008$ | $\# 009$ | $\# 010$ | $\# 011$ | $\# 012$ | $\# 013$ | $\# 005-016$ |
| $12+$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 7.47$ | $\$ 16.41$ |
| $6+$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 8.10$ | $\$ 17.37$ |
| $1+$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 9.00$ | $\$ 19.30$ |


|  | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 7 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{1 . 9 m m}$ | $\mathbf{2 m m}$ | $\mathbf{2} .1 \mathbf{m m}$ | $\mathbf{2} .2 \mathbf{m m}$ | $\mathbf{2 . 3 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill\# | $\# 015$ | $\# 016$ | $\# 017$ | $\# 018$ | $\# 019$ | $\# 020$ | $\# 021$ | $\# 022$ | $\# 023$ |
| $12+$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ | $\$ 37.90$ |
| $6+$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ | $\$ 39.55$ |
| $1+$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ | $\$ 41.20$ |

## PANTHER TUNGSTEN CARBIDE

 TWIST DRILL, FIG. \#H203

## Order \# 28-10004

Material Tungsten Carbide Steel
Shank Size 3/32"
Sold in packs of 6

|  | 0.5 mm | 0.6 mm | 0.7 mm | 0.8 mm | 0.9 mm | 1 mm | 1.1 mm | 1.2mm | 1.3mm | 1.4mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drill \# | \#005 | \#006 | \#007 | \#008 | \#009 | \#010 | \#011 | \#012 | \#013 | \#014 |
| 12+ | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 |
| $6+$ | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 |
| 1+ | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 |
|  | 1.5mm | 1.6mm | 1.7 mm | 1.8 mm | 1.9mm | 2mm | 2.1 mm | 2.2mm | 2.3mm |  |
| Drill \# | \#015 | \#016 | \#017 | \#018 | \#019 | \#020 | \#021 | \#022 | \#023 |  |
| 12+ | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 | \$37.90 |  |
| $6+$ | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 | \$39.55 |  |
| $1+$ | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | \$41.20 | 6 |

Order \# 28-10005

Material Tungsten Vanadium Steel
Shank Size 3/32"
Sold in packs of 6

|  | $\mathbf{0 . 5 m m}$ |  |  |  | $\mathbf{0 . 6 m m}$ | $\mathbf{0 . 7 m m}$ | $\mathbf{0 . 8 m m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ |
| $6+$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ |
| $1+$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ |


|  | $\mathbf{1 . 2 m m}$ |  |  |  |  |  |  |  |  | $\mathbf{1 . 4 m m}$ | $\mathbf{1 . 5 m m}$ | $\mathbf{1 . 6 m m}$ | $\mathbf{1 . 8 m m}$ | $\mathbf{1 . 9 m m}$ |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ | $\$ 14.86$ |  |  |  |  |  |  |  |  |  |
| $6+$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ | $\$ 15.50$ |  |  |  |  |  |  |  |  |  |
| $1+$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | $\$ 16.15$ | 6 |  |  |  |  |  |  |  |  |

## BUSCH ${ }^{\circledR}$ TUNGSTEN VANADIUM STEEL DRILLS

Tungsten vanadium steel makes drills both tougher and harder. Only a small amount of vanadium is needed to increase the hardness, strength, and high temperature stability of steel.


| Order \# | $\mathbf{2 8 - 1 0 0 0 6}$ |
| :--- | :--- |
| Material | Stainless Steel |
| Shank Size | $3 / 32^{\prime \prime}$ |
|  | Sold Each |


|  | $\mathbf{1 . 5 m m}$ |  |  |  | $\mathbf{2 . 5 m m}$ | $\mathbf{3 m m}$ |
| ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| $12+$ | $\$ 5.66$ | $\$ 5.10$ | $\$ 5.10$ | $\$ 5.66$ | $\$ 5.66$ | $\$ 5.66$ |
| $6+$ | $\$ 5.90$ | $\$ 5.54$ | $\$ 5.54$ | $\$ 5.90$ | $\$ 5.90$ | $\$ 5.90$ |
| $1+$ | $\$ 6.15$ | $\$ 6.15$ | $\$ 6.15$ | $\$ 6.15$ | $\$ 6.15$ | $\$ 6.15$ |

Technical Note: Always use a lubricant or water when working with diamond coated instruments

## DIAMOND-COATED CORE DRILLS

Used to cut holes in ceramics, tile, and glass without chipping or cracking. Shanks are 3 mm , medium-fine grit and are made of stainless steel with electroplated diamond particles.



## BENCH TOP DRILL PRESS

A. This new, easy-to-use bench top drill press is tiny, but powerful enough to use for all of your drilling projects. With a platform measuring only $63 / 4^{\prime \prime} \times 63 / 4^{\prime \prime}$, it is space saving as well as economical.

- 110-120V - Accepts $1 / 8$ " to $1 / 4$ " drills - 100 Watts
B. Superlube is a multi-purpose synthetic non-toxic, non-polluting, and non-corrosive lubricant with Teflon particles. It does not harm plastic.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{2 8 - 0 6 8 6}$ | Bench Top Drill Press |  | $\$ 63.75$ | $\$ 67.50$ | $\$ 75.00$ |
| B | $\mathbf{2 6 - 3 8 7 9}$ | Synthetic Lubricant | $1 / 402$ | - | - | $\$ 9.05$ |

## FOREDOM'



## FOREDOM ${ }^{\circledR}$ DRILL PRESS

A rugged and precise stand that converts your flexible shaft unit into a precision drill press and milling tool. The sturdy, all-metal stand is fully adjustable, has a 2 " throat capacity, and a stroke length of up to $1 \frac{1}{4}$ ". The work holding table moves up and down or can be swung away for drilling large pieces. Designed for use with No. 30, No. 30H, No. 44, No. 44T, and No. 44HT handpieces. The DP39 comes with a dial indicator measuring in millimeters for setting, drilling, or cutting depth. Graduated by $1 / 100 \mathrm{~mm}$.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{3 4 - 6 3 0 2}$ | DP30 Drill Press | $\$ 149.43$ | $\$ 158.22$ | $\$ 175.80$ |

FOREDOM ${ }^{\circledR}$ MINI VISE
Zinc, die-cast, mini vise firmly grasps small work pieces for precision drilling. Has horizontal and vertical "V" grooves for holding small round pieces. Use with DP30, item 34-6302.

| Item | Order \# | Description | Width | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| D | $\mathbf{3 4 - 6 3 0 1}$ | Metal Vise | $13 / 8^{\prime \prime}$ | $11 / 4^{\prime \prime}$ | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |

## FOREDOM ${ }^{\circledR}$ DRILL VISE

Plastic mini vise is great for holding gemstones and other materials that require water during the drilling process.

| Item | Order \# | Description | Width | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{5 8 - 2 4 3 4}$ | Drill Vise | $3 / 4^{\prime \prime}$ | $15 / 8^{\prime \prime}$ | $\$ 16.83$ | $\$ 17.82$ | $\$ 19.80$ |

## 412 SLICK LUBE

The most advanced coolant in the market today. The $100 \%$ synthetic polymer coolant is a unique blend of wetting agents, lubricants, and rust inhibitors. Excellent for drilling and cutting. Contains no nitrosamines, phenols, nitrates, sulphur, chlorine, phosphates, or oil. It controls dermatitis with the addition of skin conditioners. Keeps machinery and work cleaner and has excellent rust prevention properties. Concentrate mixes 10:1.

| Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 6 - 1 0 0 3}$ | 16 oz bottle | $\$ 10.50$ | $\$ 11.12$ | $\$ 12.35$ |

COMBINATION CENTERING AND RIVETING PUNCH
Allows automatic stroke. Adjustable for light, medium, or heavy impressions. Fitted with centering point. Also shipped with cup and flat points for riveting and burnishing.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 8 0 0 2}$ | Centering and Riveting Punch | $\$ 21.89$ | $\$ 23.18$ | $\$ 25.75$ |



DOUBLE-ENDED, PIN VISE
Each end contains reversible, steel collets. Rolling prevented by hexagonal head. Hollow handle and heads are made of brass.

| Item | Order \# | Capacity | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: | ---: | ---: |
| B | $\mathbf{5 8 - 2 4 0 0}$ | $0-3.2 \mathrm{~mm}$ | $4^{\prime \prime}$ | $\$ 4.89$ | $\$ 5.18$ | $\$ 5.75$ |

B


## AUTOMATIC CENTER PUNCH

Punches, marks, and scribes. Lightweight aluminum body with replaceable steel point for long wear. Adjusts for light or heavy markings. Pencil-slim design with pocket clip.

| Item Order\# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| C | $\mathbf{4 7 - 8 0 1 4}$ | Center Punch | 7 " | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |



PIN SLIDE
Easy to operate with one hand due to knurled ring which slides forward to close steel jaws. Hollow handle.

| Item | Order \# | Capacity | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| D | $\mathbf{5 8 - 2 4 1 0}$ | $0-1.3 \mathrm{~mm}$ | $41 / 8^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |



PIN VISE WITH SQUARE CHUCK
Used to hold small drills, wire, taps, screwdriver blades, and more.

| Item | Order\# | Capacity | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{5 8 - 2 4 5 0}$ | $0-2 \mathrm{~mm}$ | $3^{\prime \prime}$ | $\$ 6.46$ | $\$ 6.84$ | $\$ 7.60$ |
| F | $\mathbf{5 8 - 2 4 5 2}$ | $0-2 \mathrm{~mm}$ | $4^{11 / 4}$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |
| G | $\mathbf{5 8 - 2 4 5 4}$ | $0-2 \mathrm{~mm}$ | $4^{4} \mathbf{4}^{\prime \prime}$ | $\$ 7.86$ | $\$ 8.32$ | $\$ 9.25$ |
| H | $\mathbf{5 8 - 2 4 5 6}$ | $0-2 \mathrm{~mm}$ | $5^{\prime \prime}$ | $\$ 8.37$ | $\$ 8.87$ | $\$ 9.85$ |



WING-NUT, HAND VISE
Used in holding small drills, wire, taps, screwdriver blades, and more. Hollow handles allow long wire to pass through. Jaws have spring action, and are serrated and grooved. Open and close with large wing nut.

| Item | Order \# | Length | Width | Jaw Opening | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $J$ | $\mathbf{5 8 - 1 4 0 0}$ | $41 / 2^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 24.82$ | $\$ 26.28$ | $\$ 29.20$ |



## SWIVEL PIN VISE

Used for drilling or tapping. Contains two, double-ended chucks.

| Item | Order\# | Capacity | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| K | $\mathbf{5 8 - 2 2 0 0}$ | $0-3.3 \mathrm{~mm}$ | $4 "$ | $\$ 4.38$ | $\$ 4.64$ | $\$ 5.15$ |

K



## PREFORM DRILL PRESS

The drill press is used to center and guide the drill bit when preparing the mounting to accept the Preform Stock. Designed to work with all five sizes of mill bits. Handpiece sold separately.

| Item | Order\# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | :---: | :---: |
| E | $\mathbf{4 8 - 1 0 3 6}$ | Preform Drill Press |  | - | - | $\$ 155.00$ |
| F | $\mathbf{4 8 - 1 0 4 6}$ | Drill Kit |  | $\$ 57.33$ | $\$ 60.71$ | $\$ 67.45$ |
| INDIVIDUAL DRILLS |  |  |  |  |  |  |
| G | 48-1048 | Carbide End Mill Drill | 1 mm | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |
| H | $\mathbf{4 8 - 1 0 4 7}$ | Carbide End Mill Drill | 1.2 mm | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |
| J | $\mathbf{4 8 - 1 0 4 3}$ | Carbide End Mill Drill | 1.5 mm | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |
| K | $\mathbf{4 8 - 1 0 4 4}$ | Carbide End Mill Drill | 1.75 mm | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |
| L | $\mathbf{4 8 - 1 0 4 5}$ | Carbide End Mill Drill | 2 mm | $\$ 17.57$ | $\$ 18.34$ | $\$ 19.10$ |

## GRS ${ }^{\oplus}$ HAND CHUCK

This precision hand chuck holds a variety of tools including many gravers. Its two-jaw chuck is made of hardened and ground steel with a v-notch in each jaw for superior grip. Extremely versatile, comfortable shape and size.

| Item | Order \# | Opening | Length | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 0 3 9}$ | 1.5 mm | $2{ }^{\prime \prime}$ | $\$ 33.80$ |

## SWIVEL TOOL HANDLE

Used for drilling, reaming, and other applications. The barrel turns by twisting the knurled collar. Holds earring while setting.

| Item | Order \# | Opening | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :---: | :---: | :---: | :---: | ---: |
| B | $\mathbf{3 7 - 9 0 0 0}$ | 1.5 mm | $4^{\prime \prime}$ | $\$ 13.18$ | $\$ 13.95$ | $\$ 15.50$ |

## ADAPTER CHUCKS

Allows small drills to be adapted to larger chucks or flex shaft handpieces.

| Item | Order \# | Description | Capacity | Collet Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 28-2115 | 1 collet | 1.15 mm | $3 / 32^{11}$ | \$6.33 | \$6.71 | \$7.45 |
|  | 28-2116 | 2 collets | 2.5 mm | $3 / 32^{\prime \prime}$ | \$10.03 | \$10.62 | \$11.80 |

## MICRO CHUCK

For use with \#70 and \#80 drills.

| Item | Order \# | Opening | Shank Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| D | $\mathbf{2 8 - 2 1 1 8}$ | 1.5 mm | $3 / 32^{\prime \prime}$ | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |

## PEARL HOLDING VISE

Holds pearls securely for drilling. 13 holes ( $2-10 \mathrm{~mm}$ ).

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| M | $\mathbf{5 3 - 1 2 0 3}$ | Pearl Holding Vise | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |

## PEARL DRILL VISE

Holds pearls in place while drilling. Allows you to half-drill pearls and beads or open obstructed or imperfect holes. Features a 1 mm , drill guide (\#60 drill).

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| N | $\mathbf{5 3 - 1 2 0 1}$ | Pearl Drill Vise | $\$ 16.15$ | $\$ 17.10$ | $\$ 19.00$ |



SET OF PEARL DRILLS
Used to drill holes in seed pearls and round and half-round stones to aid in the setting process.

| Item Order \# | Outside Diameter | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| A 53-1200 | 1.0mm-3.0mm Pearl Drill Set | \$75.07 | \$78.34 | \$81.60 |
| INDIVIDUAL DRILLS |  |  |  |  |
| 53-1206 | 1.05 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1207 | 1.2 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1208 | 1.45 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1209 | 1.65 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1210 | 1.85 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1211 | 2.05 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1212 | 2.26 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1213 | 2.4 mm | \$6.12 | \$6.38 | \$6.65 |
| 53-1216 | 3 mm | \$6.12 | \$6.38 | \$6.65 |

HIGH-SPEED PEARL DRILLS
High speed pearl drills are double ended. They are specially shaped to drill an accurate hole without chipping.

| Order \# | Outside Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 8 - 0 7 3 0}$ | 0.6 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 1}$ | 0.7 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 2}$ | 0.8 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 3}$ | 0.9 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 4}$ | 1 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 6}$ | 1.2 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 7}$ | 1.3 mm | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{2 8 - 0 7 3 8}$ | 1.4 mm | $\$ 14.49$ | $\$ 15.12$ | $\$ 15.75$ |
| $\mathbf{2 8 - 0 7 3 9}$ | 1.5 mm | $\$ 14.49$ | $\$ 15.12$ | $\$ 15.75$ |
| $\mathbf{2 8 - 0 7 4 0}$ | 1.6 mm | $\$ 14.49$ | $\$ 15.12$ | $\$ 15.75$ |
| $\mathbf{2 8 - 0 7 4 1}$ | 1.7 mm | $\$ 20.65$ | $\$ 21.55$ | $\$ 22.45$ |

## | $111\|4\|$

BUSCH ${ }^{\circledR}$ PEARL DRILLS
For drilling holes in pearls and other round to half-round stones for stone setting. $3 / 32^{\prime \prime}$ shank.

| Order \# | OD | 12 | 6+ | 1+ | Order \# | OD | 12+ | 6+ | + |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28-0751 | 0.9 mm | \$4.42 | \$4.68 | \$5.20 | 28-0755 | 1.6 mm | \$4.42 | \$4.68 | \$5.20 |
| 28-0752 | 1 mm | \$4.42 | \$4.68 | \$5.20 | 28-0757 | 2.1 mm | \$4.42 | \$4.68 | \$5.20 |
| 28-0753 | 1.2 mm | \$4.42 | \$4.68 | \$5.20 | 28-0758 | 2.3 mm | \$4.42 | \$4.68 | \$5.20 |
| 28-0754 | 1.4 mm | \$4.42 | \$4.68 | \$5.20 | 28-0759 | 2.5 mm | \$4.78 | \$4.99 | \$5.20 |



PEARL DRILL MACHINE
High-precision drill, specifically designed to drill pearls from 3 mm to 20 mm without any chipping or cracking of the pearls. The compact unit includes a drill chuck, a self-centering vise to hold the pearls securely while drilling, and a 6,000 RPM motor. Comes with brass pearl holders from 3 mm to 7 mm .

| Item | Order \# | Description | Outside Diameter | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| B | 28-0700 | Pearl Drilling Machine |  | \$842.70 |
| REPLACEMENT PARTS |  |  |  |  |
| C | 28-0705 | Carbon Brush/Caps |  | \$13.05 |
| D | 28-0711 | Brass Holder (pair) | 6 mm | \$37.05 |
|  | 28-0712 | Brass Holder (pair) | 7 mm | \$37.05 |
|  | 28-0713 | Brass Holder (pair) | 8 mm | \$37.05 |
|  | 28-0714 | Brass Holder (pair) | 9mm | \$37.05 |
|  | 28-0715 | Brass Holder (pair) | 10 mm | \$45.85 |
|  | 28-0716 | Brass Holder (pair) | 11 mm | \$45.85 |
|  | 28-0717 | Brass Holder (pair) | 12 mm | \$45.85 |
|  | 28-0718 | Brass Holder (pair) | 13 mm | \$45.85 |
|  | 28-0719 | Brass Holder (pair) | 14 mm | \$45.85 |
|  | 28-0720 | Brass Holder (pair) | 15 mm | \$45.85 |
|  | 28-0721 | Brass Holder (pair) | 16 mm | \$45.85 |
|  | 28-0722 | Brass Holder (pair) | 17 mm | \$51.95 |
|  | 28-0723 | Brass Holder (pair) | 18 mm | \$51.95 |
|  | 28-0724 | Brass Holder (pair) | 19 mm | \$51.95 |
|  | 28-0725 | Brass Holder (pair) | 20 mm | \$51.95 |

## EASY JEWEL IV

Advanced laser technology and marking software enable new applications and bring laser marketing and engraving to the highest standards. The new EasyJewel with 'Enhanced Mode' has been especially designed for circumferential seamless design and large components requiring uniform surfaces.

## JEWELRY MARKING MADE EASY

Typical jewelry marking tasks are handled effortlessly with perfect results. Thanks to numerous innovations, even inside marking of wide or special shape rings is now easily achieved. The sophisticated marking software automatically makes geometrical corrections due to the nonperpendicular approach to the marking area. Large markings can be executed with the help of an auto-tiling function. Within minutes the system is retooled for marking flat parts.

Based on advanced completely air cooling technology. As an all-in-one laser marking solution with compact design, the system is portable. The $100 \mathrm{~V}-240 \mathrm{~V}$ connection ensures quick and easy initial operation without requiring any additional device like for example an external cooling. A special safety feature is the enclosed marking area (laser class 1). Wearing laser safety goggles is thus not necessary, a fact which enhances operator convenience.


| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 4 - 0 1 4 6}$ | Easy Jewel IV 50F Fiber Laser Engraver | $\$ 96,700.00$ |
| $\mathbf{1 4 - 0 1 4 6}$ | Easy Jewel IV 30F Fiber Laser Engraver | $\$ 79,900.00$ |
| $\mathbf{1 4 - 0 1 4 6}$ | Easy Jewel IV 20F Fiber Laser Engraver | $\$ 69,900.00$ |
| $\mathbf{1 4 - 0 1 4 6}$ | Easy Jewel IV 10E Laser Engraver | $\$ 59,900.00$ |



- Quick and exact loading of regular and special shapes. One fixture for inside, and outside marking
- Precise jogging function to reach optimum marking position.

Software auto-correction, auto-tiling

- Live preview with real time color camera
- Task-oriented, efficient job definition by entering part and material parameters
- Ships direct from factory


## EASY JEWEL IV ACCESSORIES

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: |
| A | $\mathbf{1 4 - 0 1 4 8}$ | Chuck, Symmetric Ring (standard) | $\$ 2,156.00$ |
| B | $\mathbf{1 4 - 0 1 4 8}$ | Chuck, Symmetric Ring (custom) | $\$ 1,114.00$ |
| C | $\mathbf{1 4 - 0 1 4 9}$ | Centering Fixture | $\$ 2,023.00$ |
| D | $\mathbf{1 4 - 0 1 4 7}$ | Support Flange M/MTR | $\$ 446.00$ |
| E | $\mathbf{1 4 - 0 1 5 3}$ | Rotary Cam Centering Plate | $\$ 376.00$ |
| F | $\mathbf{1 4 - 0 1 5 0}$ | Flapper for Centering Tool | $\$ 83.00$ |
| G | $\mathbf{1 4 - 0 1 5 5}$ | Replacement Flat Marking Angle Plate (2 required) | $\$ 114.00$ |
| H | $\mathbf{1 4 - 0 1 5 4}$ | Replacement Spring for Chuck, Symmetric | $\$ 9.00$ |
| J | $\mathbf{1 4 - 0 1 5 1}$ | Pin, 13.9mm Conical (3 each required) | $\$ 67.00$ |
|  | $\mathbf{1 4 - 0 1 5 1}$ | Pin, 8.9mm Conical (3 each required) | $\$ 25.00$ |
|  | $\mathbf{1 4 - 0 1 5 1}$ | Pin, 15.0mm Cylindrical (3 each required) | $\$ 29.00$ |
|  | $\mathbf{1 4 - 0 1 5 1}$ | Pin, 8.0mm Cylindrical (3 each required) | $\$ 29.00$ |
|  | $\mathbf{1 4 - 0 1 5 1}$ | Pin, 11.4mm Conical (3 each required) | $\$ 67.00$ |




The Best Built Inside Ring Engraver can perform tasks that were previously impossible on a traditional engraver such as: Engrave on the outside of rings, easily engrave perfectly spaced multiple lines on either the inside or outside of rings, and automatically engrave any logos or artwork your customers request!

## BEST BUILT INSIDE RING ENGRAVER

A compact and quiet computerized system for engraving the inside and outside of flat of slightly domed rings, perfect for use in small stores and shops: Features intuitive software that lets you use your own PC fonts or designs for engraving, all necessary work piece fixtures, focused LED (like a laser) for precise work piece alignment, variable depth adjustment and automatic surface slope checker for uneven surfaces, and an easily replaceable diamond tip.

- Includes USB cable
- Speed up or slow down the process at the press of a button
- Do single-line, double-line and hatching-style engraving (a unique shading effect made by drawing parallel lines closely together)
- Individually assign different tool paths (e.g., double-line letter followed by hatching-style letter)
- Easily convert and engrave JPEG and BMP images


## Specifications:

-Engraves rings only

- Dual voltage $110 / 220 \mathrm{~V}$
- 101/8" W x 111/4" Lx 91/4" H
- 42 lbs .

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: |
| A | $\mathbf{2 6 - 3 9 2 2}$ | Inside Ring Engraver | $1014^{\prime \prime} \times 111^{\prime \prime} \times 91 / 4^{\prime \prime}$ | $\$ 2,395.00$ |

See next page for Replacement Diamond Tips (26-3923).

## BEST BUILT FLAT ENGRAVER

Best Built computerized flat engraver is quiet used directly for engraving on flat surfaces. This engraver is used for award plaques and plates, memorial plates, etc. It is perfect for use in small stores and shops. This computerized engraver features intuitive software that lets you use your own PC fonts or designs for engraving, all necessary work piece fixtures, focused LED (like a laser) for precise work piece alignment, variable depth adjustment and automatic surface slope checker for uneven surfaces, and an easily replaceable diamond tip.

- Includes USB cable
- Speed up or slow down the process at the press of a button
- Do single-line, double-line and hatching-style engraving (a unique shading effect made by drawing - parallel lines closely together)
- Individually assign different tool paths (e.g., double-line letter followed by hatching-style letter)
- Easily convert and engrave JPEG and BMP images

Specifications:

- Engraves flat surfaces
- 110 V
- Maximum engraving area $4^{\prime \prime} \times 41 / 2^{\prime \prime}$
- $12^{3} / 4^{\prime \prime}$ W x 101/4" L x 91/4" H
- 52 lbs .

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: |
| B | $\mathbf{2 6 - 3 9 2 1}$ | Flat Engraver | $12^{3 / 4} \times 101^{1 / 4} \times 9^{1 / 4} \mathbf{4}^{\prime \prime}$ | $\$ 3,495.00$ |
| $\mathbf{2 6 - 3 9 2 1}$ | $120^{\circ}$ Diamond Tip For UT- 120 | $\$ 35.00$ |  |  |
| $\mathbf{2 6 - 3 9 2 1}$ | $90^{\circ}$ Diamond Tip For UT- 20 | $\$ 35.00$ |  |  |

## BEST BUILT DUAL COMPUTERIZED ENGRAVERS

These engravers combine the style and accuracy of traditional diamond engraving with the endless possibilities of a Windows-based software system. This multi-functioning engraver fits the need of all types of jewelers and hobbyists. With the press of a button, engrave or mill on top of the ring using the built-in rotary vise. Engrave inside the ring with the included ring engraving tip attachment. Features:

- Variable depth adjustment and automatic surface slope checker for uneven surfaces such as bracelets
- Cut name plate jewelry
- Engraves deep enough for enamel inlay
- Engrave bangle bracelets
- Precious metal cutting bits
- Five automatic sensors
- Laser pointer
- Engrave or cut precious metal or acrylic
- Flat surface engraving area is 4" x $41 / 2^{\prime \prime}$
- $151 / 4^{\prime \prime}$ W X $131 / 4^{\prime \prime}$ L x $121^{1 / 4 " ~ H}$
- 100-240 Volts, $50 / 60 \mathrm{~Hz}$
- 80 lbs .


| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{2 6 - 3 9 2 4}$ | Dual Computerized Engraver | $15 \frac{1}{4} \times 13^{\prime \prime} 1 / 4^{\prime \prime} \times 12 \frac{1}{4} 4^{\prime \prime}$ | $\$ 7,995.00$ |

## BEST BUILT DUAL FUNCTION ENGRAVER PRO

The Best Built engraver features an intuitive Windows based software system that provides the user with options not possible on a manual engraver. This combination unit will engrave on flat and round surfaces as well as inside and outside of rings. Never before has so much engraving potential been put into one machine for such a low price. All you need to start engraving is a Windows based PC with a USB connection. The system includes software that is easy to install and operate. You are ready to start engraving in no time at all. Features:

- Flat, curved, inside ring and outside ring engraving
- Easily replaceable diamond tip
- Includes all necessary vises, clamps and jigs for holding work
- Flat engraving area is 4 " $\times 41 / 2^{\prime \prime}$
- Use any Fonts available from your personal computer
- Additional Fonts available through web downloads for free
- Import JPEG and BMP images from any online source
- Laser centering for perfect engraving
- Variable depth feature allows for engraving on uneven surfaces
like ID bracelets
- 15" W x 113/4" L x $10^{\prime \prime}$ H
- Runs smooth and quiet

- 65 lbs .

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: |
| B | $\mathbf{2 6 - 3 9 1 9}$ | Dual Engraver Pro | $15^{\prime \prime} \times 113^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 5,495.00$ |

## REPLACEMENT TIPS FOR BEST BUILT ENGRAVERS

| Order \# | Description | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| $\mathbf{2 6 - 3 9 2 3}$ | $90^{\circ}$ Diamond Tip | $\$ 35.00$ |
| $\mathbf{2 6 - 3 9 2 3}$ | $150^{\circ}$ Diamond Tip | $\$ 35.00$ |
| $\mathbf{2 6 - 3 9 2 3}$ | $120^{\circ}$ Diamond Tip | $\$ 35.00$ |


$120^{\circ}$ Diamond Tip


PRESIDIUM ${ }^{\oplus}$ INSIDE-RING ENGRAVER
The Presidium ${ }^{\oplus}$ Inside-Ring Engraver is manufactured to the highest standards. The machine is compact, user friendly and comes with a diamond engraving tip, a circular dial template, complete set of instructions, dust cover and five brass sample rings. Features include easy template installation, wide ring holding capacity, adjustable letter spacing, and the template produces letters with heights of 9 mm and 4 mm .

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: |
| A | $\mathbf{2 6 - 3 8 5 0}$ | Inside-Ring Engraver | $\$ 525.00$ |

## INSIDE RING ENGRAVER

This engraving machine is manufactured to the highest standard. It is compact and user-friendly. Features easy type installation, one single dial produces letters with heights of 1 mm and 2 mm , wide ring-holding capacity of ring sizes from 19 mm to 30 mm , adjustable letter spacing. Includes a type dial, diamond tip, and five brass sample rings. Block font dial.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: |
| B | $\mathbf{2 6 - 3 7 8 0}$ | Grobet Ring Engraver | $9^{\prime \prime} \times 7^{\prime \prime} \times 191 / 2^{\prime \prime}$ | $\$ 525.00$ |
|  | $\mathbf{2 6 - 3 7 8 1}$ | Diamond Stylus Tip |  | $\$ 46.00$ |

## PEPE INSIDE RING ENGRAVER

Used for engraving on the inside of rings, this engraver will accommodate a large variety of widths and shapes including stone set rings.

- Automatic letter centering
- Uniformed character spacing
- Jaws rotate a full $360^{\circ}$
- Includes double sided font disc and diamond stylus and three practice rings
- Block Font Dial

| Item | Order \# | Description | 1+ |
| :---: | ---: | :--- | ---: |
| C | $\mathbf{2 6 - 3 7 5 0}$ | Pepe Ring Engraver | $\$ 579.00$ |

ENGRAVING DIALS
All engraving dials measure 5 " diameter with $1 / 2^{\prime \prime}$ center hole.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{2 6 - 3 8 5 4}$ | Continuous Modern Script Upper/Lower Case | $\$ 98.00$ |
| B | $\mathbf{2 6 - 3 8 5 5}$ | Modern Block Font Upper/Lower Case | $\$ 100.00$ |
| C | $\mathbf{2 6 - 3 8 5 6}$ | Modern Block Font Large/Small Upper Case | $\$ 100.00$ |
| D | $\mathbf{2 6 - 3 8 5 7}$ | Single Line Block Font | $\$ 100.00$ |
| E | $\mathbf{2 6 - 3 8 5 8}$ | Fancy Contentious Script Font Upper/Lower Case | $\$ 100.00$ |
| F | $\mathbf{2 6 - 3 8 5 9}$ | Danish Font Large/Small Upper Case | $\$ 100.00$ |



## FLAT ENGRAVING MACHINE

- Includes type
- Adjustable type slide accommodates both small ( $\left(1 / 4^{\prime \prime}\right)$ and large (23/4") type
- 15 different pantograph ratios from $2 \frac{1}{2}: 1$ to 6:1
- Height adjustment for objects up to $21 / 2^{\prime \prime}$
- "Quick Slide" female vise accommodates jewelry, discs up to 4 " diameter, or $31 / 2^{\prime \prime}$ wide rectangular objects
- Diamond stylus vise rotates $360^{\circ}$

| Item | Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1}$ |
| ---: | :--- | :--- | ---: |
| G | $\mathbf{2 6 - 3 7 7 0}$ | $14^{\prime \prime} \times 11^{\prime \prime} \times 14^{1} / 2^{\prime \prime}$ | $\$ 600.00$ |

## PEPE FLAT ENGRAVING MACHINE

Double tray font holding table helps save time by setting up two lines of text to be engraved. Features:

- Premium diamond stylus
- Quick slide female vise will hold plates up to 4" circular or rectangular
- 15 different pantograph ratios from 21/2:1 to 6:1
- Vise rotates a full $360^{\circ}$ with stops at every $45^{\circ}$ increment
- Set of 4 brass male pins to fit into female vise assembly
- Adjustable combination type slide accommodates both large $23 / 4$ " and small $1 \frac{1}{4}$ " font blanks
- Height adjustment up to $41 / 2^{\prime \prime}$
- Single line block font included

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: |
| H | $\mathbf{2 6 - 3 7 6 0}$ | Pepe Flat Engraving | $14^{\prime \prime} \times 14^{1} / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 722.00$ |

## FONT SETS

This font set for double font table engraving machine includes 140 pieces (box included).

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| J | $\mathbf{2 6 - 3 7 6 2}$ | Single Line Block Font Set | $\$ 215.00$ |




Standard systems require oil-free compressed air to operate a standard handpiece. Get the GraverMach AT for integrated Airtact control featuring both and and foot operation.


Airtact handpieces require a GraverMach AT System or a combination of any other GRS engraving system with an Airtact control system.

## ENGRAVING SYSTEMS

A. GraverMach AT - GraverMach AT is wonderfully familiar to anyone who uses its predecessors, including the GraverMate, GraverMax"' SC, or GraverMach. But the expanded capability of precise, selectable hand control puts this power tool in a class by itself. The hand control technology is based on the GRS ${ }^{\ominus}$ Airtact. This advanced, patent-pending air logic system provides hand control power without adding moving parts to the handpiece itself. The result is a rugged and intuitive way to control handpiece power by hand. When foot control is preferred, it is only two seconds away. This one simple selector knob instantly gives you greater control, choice, and refinement in your work. The ability to instantly change from hand to foot control whenever you want means new creative freedom and reduced stress.
B. GraverMax ${ }^{\text {TM }} \mathbf{G 8}$ - GraverMax ${ }^{\text {Tw }}$ G8 is based on the original GraverMach. This engraving system gives each handpiece excellent range of power with perfect control throughout an expanded range of impact speeds. The GraverMax ${ }^{\text {™ }}$ G8 features 400 to 8,000 strokes per minute, a throttle bias adjustment valve for tailoring throttle response to your work, and a dual-stage precision air regulator. Advanced ergonomics include front air pressure adjustment, Quick Change air couplings, rear mount throttle connection, and an advanced valve pulse unit that operates with virtually no noise or vibration. The GraverMax ${ }^{\text {Tw }}$ G8 has connections for two impact handpieces plus an auxiliary air connection for the air tools, including the GRS ${ }^{\circ}$ Ultra 850 rotary handpiece. Handpieces sold separately.

| Item Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |  |
| ---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{2 6 - 4 0 0 9}$ | GraverMach AT | $6^{\prime \prime} \times 13^{\prime \prime} \times 81 / 4^{\prime \prime}$ | $\$ 1,839.00$ |
| B | $\mathbf{2 6 - 4 0 1 1}$ | GraverMax $^{\text {TM }} \mathrm{G} 8$ | $5^{1 / 4^{\prime \prime}} \times 12^{\prime \prime} \times 81 / 4^{\prime \prime}$ | $\$ 1,295.00$ |

## GRS ${ }^{\circledR}$ AIRTACT HANDPIECE

C. \#901 - The comfortable compact shape has an adjustable side hose connection. 901 fits most engraving and stone setting needs including microscopic engraving, deep relief work, and bead raising/hammer setting. Made from fully heat-treated stainless steel, the set includes six OC holders. 2.6" ( 66 mm ) long, weighs 2.4 oz . (68g). Package includes: \#901 OC handpiece, OC hand handle, 9 OC tool holders, six steel points, one GlenSteel graver, and QC holders.
D. Monarch - "Monarch" is the finest impact handpiece for confident execution of ultra-fine engraving including bulino and banknote styles. Monarch features heat-treated stainless steel construction, an elegant graverstyle handle, and adjustable side hose connection. Includes six QC holders. $2.4^{\prime \prime}(61 \mathrm{~mm})$ long, and weighs 7.4 oz .
E. Magnum - No other impact handpiece can equal the Magnum's range of power, from amazingly heavy to very fine. Its compact size is misleading as the Magnum exceeds the power of previous models that are twice the length. It also has fine control with shading capability significantly better than any handpiece with this much top end power.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| C | $\mathbf{2 6 - 4 0 3 6}$ | \#901 Airtact Stainless Steel | $\$ 379.00$ |
| D | $\mathbf{2 6 - 4 0 3 8}$ | Monarch Airtact Stainless Steel | $\$ 359.00$ |
| E | $\mathbf{3 4 - 2 2 2 4}$ | Magnum Airtact Stainless Steel | $\$ 399.00$ |

## GRS® MAGNUM HANDPIECE

No other impact handpiece can equal the Magnum's range of power, from amazingly heavy to very fine. Its compact size is misleading as the Magnum exceeds the power of previous models that are twice the length. It also has fine control with shading capability significantly better than any handpiece with this much top end power.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: |
| F | $\mathbf{3 4 - 2 2 2 4}$ | GRS $^{\circ}$ Magnum Handpiece | $\$ 339.00$ |

QUICK-CHANGE 901 HANDPIECE SET
The comfortable compact shape has an adjustable side hose connection. 901 fits most engraving and stone setting needs including microscopic engraving, deep relief work, and bead raising/hammer setting. Made from fully heat-treated stainless steel, the set includes six QC holders. 2.6" (66mm) long, weighs 2.4 oz. (68g). Package includes: \#901 OC handpiece, OC hand handle, 9 OC tool holders, six steel points, one GlenSteel graver, and $Q C$ holders.


## QUICK-CHANGE MONARCH

"Monarch" is the finest impact handpiece for confident execution of ultra-fine engraving including bulino and banknote styles. Monarch features heat-treated stainless steel construction, an elegant graverstyle handle, and adjustable side hose connection. Includes six QC holders. 2.4" ( 61 mm ) long, and weighs 7.4 oz .

| Item | Order \# | Description | 1+ |
| :---: | :--- | :--- | ---: |
| C | $\mathbf{2 6 - 4 0 3 8}$ | \#921 Quick-Change Monarch | $\$ 299.00$ |



## QC 915 GRAVERMEISTER HANDPIECE

The 915 fits most engraving and stone setting needs including microscopic engraving, deep relief work and bead raising/hammer setting. Made from fully heat-treated stainless steel, the set includes six QC holders. 2.6" (66mm) long. Weighs 8 oz.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| D | $\mathbf{2 6 - 4 0 2 6}$ | \#915 Quick-Change Handpiece | $\$ 299.00$ |



## GRS® ${ }^{\circledR}$ OUICK-CHANGE GRAVER ACCESSORIES

Handle with Holders: Gravers and/or tools mount into these interchangeable " $O C$ " holders, which in turn fit all $G R S^{\circ}$ " $\triangle C^{\prime \prime}$ handpieces and GRS " OC " sharpening fixture. This allows tools to be changed in three seconds without a wrench. Holders accept square tools up to 2.5 mm , round tools to 3.3 mm . Comes with three QC tool holders.

| Item | Order \# | Description | Per Unit | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
|  | $\mathbf{3 4 - 2 2 3 3}$ | Extra-Long | Pack of 3 | $\$ 25.25$ |
| E | $\mathbf{3 4 - 2 2 3 4}$ | Extra-Long | Pack of 10 | $\$ 82.60$ |




## GRAVERSMITH PNEUMATIC POWER TOOL FOR STONE SETTING AND ENGRAVING

This new power tool offers basic work capability and pneumatic impact power for stone setting and engraving at less cost than the fully-featured machines. Like all GRS ${ }^{\circ}$ power tools, the GraverSmith reduces worker fatigue, increases production, and improves quality. A choice of handpieces allow the GraverSmith to fit a wide range of applications and user preferences. Includes: - Variable impact rate-400 to 8,000 per minute - Heavy duty foot control - Built-in air regulator with integral pressure gauge - One handpiece outlet (handpiece sold separately) - Remote filter - Carry handle and built-in tool storage

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{2 6 - 4 0 1 3}$ | Graversmith | $53 / 4^{\prime \prime} \times 10^{\prime \prime} \times 53 / 4^{\prime \prime}$ | $\$ 869.00$ |

## GRS ${ }^{\circledR}$ SYSTEM 3 AIR HANDPIECE

The GRS ${ }^{\oplus}$ System 3 is an affordable air impact tool that can engrave metal, set stones, hammer, texture, and carve wood and other materials. The System 3 handpiece is a piston and port design, which selfoscillates using normal compressed air. It is comfortable, lightweight, and delivers good impact power. It requires compressed air 1.2 cfm at 50PSI minimum ( 35 liters per minute at 3.3 bar requiring).
Includes: handpiece, foot control, air filter-regulator, three quick-change tool holders, six steel points, and instructions.



## SILENTAIRE AIR COMPRESSOR

The Silentaire air compressor is virtually noiseless and is totally automatic. Unit includes a tank, line pressure gauge, line pressure regulator, moisture trap/filter/gauge, safety valve, air intake filter, and a carrying handle. The SIL-AIR models feature a heavy duty $1 / 2 h p$ pump for reliability and durability.

| Item | Order \# | Description | 1+ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{1 4 - 5 0 0 0}$ | 4 gallon Compressor $(1 / 2$ hp) ( 40 decibel) | $\$ 1,065.90$ |
|  | $\mathbf{1 4 - 4 9 9 9}$ | 6 gallon Compressor ( $1 / 2$ hp) (40 decibel) | $\$ 1,149.90$ |

MAINTENANCE PARTS

| B | $\mathbf{1 4 - 4 4 9 2}$ | Air Intake Filter | $\$ 19.50$ |
| :---: | :---: | :--- | ---: |
| C | $\mathbf{1 4 - 4 4 9 3}$ | Filter Element (Pack of 4) | $\$ 13.60$ |
| D | $\mathbf{1 4 - 4 4 9 4}$ | Filter Regulator WI | $\$ 83.75$ |
| E | $\mathbf{1 4 - 4 4 9 5}$ | Pressure Gauge $1 / 8^{\prime \prime}$ - Rear | $\$ 26.00$ |
| F | $\mathbf{1 4 - 4 4 9 6}$ | Filter Element WI | $\$ 26.00$ |
| G | $\mathbf{1 4 - 4 4 9 7}$ | Filter Kit N Coalescent | $\$ 47.20$ |
| H | $\mathbf{1 4 - 5 0 0 2}$ | 24 oz Compressor Oil | $\$ 22.80$ |
| J | $\mathbf{1 4 - 4 4 9 8}$ | Blowgun with Coil Hose | $\$ 41.90$ |
| K | $\mathbf{1 4 - 5 0 0 4}$ | Air Filter / Oil Removal Kit | $\$ 105.95$ |
| L | $\mathbf{1 4 - 5 0 0 1}$ | Hook-Up Hose (50' $\left.\times 1 / \mathbf{l}^{\prime \prime}\right)$ | $\$ 42.35$ |
| M | $\mathbf{1 4 - 5 0 0 5}$ | Quick Disconnect Kit | $\$ 31.75$ |



MEIJI MICROSCOPE BENCH SYSTEMS The Meiji ${ }^{\circ}$ Microscope is designed for working while viewing. Magnified up to 22.5X. You see clearly the finest details for both stone setting and engraving. Work hour after hour without eye strain. Finish your jobs with precision every time. No pattern or object is too small. Precision optics with a magnification range from 3.5 to 22.5 , working distance of 6 inches.
A. Trinocular System 1 (8TR)

- The Meiji 8TR Scope
- Acrobat ${ }^{\text {t" }}$ stand with head rest
- Mt. kit 10X eye piece
- Ring light
- 0.5 auxiliary lens (increases working distance from 104 mm (4") to 174 mm (6.85")


## B. Binocular System 2 (EMZ-5)

- The Meiji EMZ-5 Scope
- Acrobat ${ }^{\text {tu }}$ stand with head rest
- 10X eye piece
- Ring light
- 0.5 auxiliary lens (increases working distance from $93 \mathrm{~mm}\left(3.66^{\prime \prime}\right)$ to 150 mm ( $5.90^{\prime \prime}$ ) Includes mount adaptor.


|  |  |  |  |
| :---: | :--- | :--- | ---: |
| Item Order \# | Description | 1+ |  |
| A | $\mathbf{2 6 - 4 0 8 0}$ | Trinocular System 1 (8TR) | $\$ 2,495.95$ |
| B | $\mathbf{2 6 - 4 0 7 3}$ | Binocular System 2 (EMZ-5) | $\$ 2,095.95$ |
| C | $\mathbf{2 6 - 4 0 8 9}$ | Mount Adaptor (included with \#26-4080) | $\$ 75.00$ |



LED MICROSCOPE RING LIGHT
Natural spectrum light. Intensity can be adjusted. Super wide field eye pieces.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 6 - 4 1 9 6}$ | Ring Light | $\$ 159.95$ |




## MEJI MICROSCOPE BODIES

Body Binocular/Trinocular Specifications:

- Zoom Ratio: 6.5:1
- Zoom Range 0.7X - 4.5X
- Zoom Control: Graduated knurled ring (EMT-2)
- Dual, Graduated, bilateral mount (EMZ-5, EMZ-8)
- Magnification: 7X - 45X (with 10X eyepieces)
- Field of View: $32 \mathrm{~mm}-5.1 \mathrm{~mm}$
- Working distance: 93mm (EMT-2, EMZ-5); 104mm (EMZ-8)
- Eye tube Inclination: $45^{\circ}$
- Interpupilary Distance Adjustment: 54mm - 75mm
- Dioptric Adjustment: Dual (+/-5)
- Extended Magnification Range: 2.1X -270X
- Extended Working Distances: 34mm - 251mm (EMT-2, EMZ-5);
$38 \mathrm{~mm}-307 \mathrm{~mm}$ (EMZ-8) with supplement tall objectives and eyepieces

| Item | Order \# | Description | Focal Working Distance <br> (with lens) | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{2 6 - 4 0 7 9}$ | EMZ-5 (body only) | 93 mm | $\$ 1,260.00$ |
| B | $\mathbf{2 6 - 4 0 9 8}$ | *EMZ-8TR Auxiliary Lens 0.5 mm | 174 mm | $\$ 140.00$ |
| B | $\mathbf{2 6 - 4 0 9 8}$ | *EMZ-5 Auxiliary Lens | 150 mm | $\$ 140.00$ |
| C | $\mathbf{2 6 - 4 0 8 1}$ | EMZ-8TR (body only) | 104 mm | $\$ 1,630.00$ |
| D | $\mathbf{2 6 - 4 0 8 6}$ | EMT-2 Adapter (required for lens) | $\$ 35.00$ |  |
| *Choose the correct lens for each scope. |  |  |  |  |

## COLOR TV CAMERA (FOR EMZ-8TR)

Meiji̊ Techno Analog CCD Color Cameras provides a resolution of 768/494, a single analog video camera that offers a durable, compact light-weight microscope video and performs perfectly with trinocular microscope models and can be controlled with software via a computer(s) RS232 port. All camera setting can be saved to disc and recalled allowing repeatability of camera setup.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| E | $\mathbf{2 6 - 4 0 8 5}$ | Camera (for 8TR) | $\$ 1,210.00$ |
| F | $\mathbf{2 6 - 4 0 8 4}$ | Camera Mount Adapter for 8TR (required) | $\$ 210.00$ |



- HDMI C-mount camera

- 1920x1080 60 fps via HDMI
- 1920x1080 30fps via USB2.0
- Still resolution $3264 \times 1836$
- Video record: 1080p 30fps on SD card or PC
- Output: HDMI, USB 2.0, SD Card
$-1 / 3^{\prime \prime}$ CMOS chip (use .3x C-mount adapter)
- Button (1) controls:

Exposure, White balance, Gamma, Gain,
Sharpness, Saturation, Contrast

- Button (2) controls:

Cross line, Image Compare, Image Freeze

- OS support: Windows XP and later
- Software: ISCapture full parameter control


## 2 MP HD CAMERA

This HD color microscopy camera offers full 1080p video through HDMI with perfect color reproduction and extrememly fast frame rate streaming direct to a monitor. You can operate the camera by directly connecting to a monitor without a PC and save images into an onboard microSD card, or use it as a standard USB 2.0 camera. The camera quickly reacts to lighting changes in any life science, clinical, or material applications. With video output via HDMI connector, the on-camera buttons allow easy access to feature settings. With 60fps at 1080 p, this camera presents a perfect combination of outstanding resolution and frame rate. This allows the user to fluently manipulate the live images without any lags. With multiple output options available for this powerful camera HDMI 1080p, USB 2.0, or SD memory card can be used individually or all three simultaneously.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{2 6 - 4 0 5 9}$ | $60 f p s / H D M I, 30 f p s / U S B$ | $\$ 1,500.00$ |
| $\mathbf{2 6 - 4 0 5 9}$ | $0.5 X$ "C" Mount Adapter | $\$ 265.00$ |

GRS ${ }^{\oplus}$ ACROBAT ${ }^{\text {mw }}$ STAND
The Acrobat"' stand has outstanding flexibility, working with you and not against you. Easy position and swinging away when desired. Arm moves with adjustable friction or lock if desired. Built-in head rest.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: |
| A | $\mathbf{2 6 - 4 0 9 4}$ | Acrobat' Stand (Only) | $\$ 528.00$ |

## CAMERA MOUNT FOR GRS ${ }^{\circledR}$ ACROBAT STAND

This new and improved mounting system allows you to video what you see through the microscope without making any adjustments. It keeps your workplace centered at all times.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| B | $\mathbf{2 6 - 4 1 9 4}$ | Camera Mount System | $\$ 350.00$ |



## ADJUSTABLE SWING ARM

With a 6 " reach in any direction, this exclusive design, developed here at Stuller, gives you an extra hand when setting or engraving. You can set stones under your bench microscope (26-4073), or make your GRS* Microblock" or mounting bracket (26-4107) even easier to use. Cam locks are built in to hold in any position.

| Order\# | Description | 1+ |
| :--- | :--- | ---: | ---: |
| $\mathbf{2 6 - 4 1 8 5}$ | Adjustable Swing Arm (6" reach $)$ | $\$ 149.00$ |



## RINGENIE THE COMPLETE KIT

The RinGenie was created for designers and stone setters. The RinGenie enhances the precision of setting and engraving rings. With the RinGenie you can work with wax molds, blanks, or any style of ring. You can work at ease knowing that the RinGenie is securely holding your ring while your working. With the different angle options you get a complete veiw and range working with the ring. The Kit Includes:

- (1) Body
- (1) Drill/Mill/Layout Assembly
- (1) Scriber Assembly
- (1) ${ }^{3 / 32}$ Diameter Hardened Drill bushing
- (1) Alignment Plate
- (2) Tightening Rods
- (1) Side Pointer
- (1) Drag Adjustment Screw
- (8) Plastic Collets (sizes are: $5,6,7,8,9,10,11,12)$
- (16) Aluminum Collets (sizes are: 5, 5.5, 6, 6.5, 7, 7.5,
$8,8.5,9,9.5,10,10.5,11,11.5,12,12.5)$
- (1) Custom Fitted Wood Case

| Order \# | Description | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| $\mathbf{2 6 - 1 7 0 0}$ | RinGenie Kit | $\$ 695.00$ |
| $\mathbf{2 6 - 1 7 0 0}$ | RinGenie Adapter | $\$ 74.95$ |




GROBET USA ${ }^{\circledR}$ SWISS HIGH-SPEED STEEL GRAVERS
Genuine, high quality, Swiss-made gravers produced from special high-speed steel for long-lasting performance. Accept no substitutes.

| Item | Order \# | Description | Style | Width | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 36-2560 | Flat | \#36 | 0.2 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2561 | Flat | \#37 | 0.4 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2562 | Flat | \#38 | 0.6 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2563 | Flat | \#39 | 1.0 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2564 | Flat | \#40 | 1.2 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2565 | Flat | \#41 | 1.4 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2566 | Flat | \#42 | 1.8 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2567 | Flat | \#43 | 2.0 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2585 | Flat | \#45 | 2.4 mm | \$9.31 | \$9.86 | \$10.95 |
| B | 36-2600 | Knife | \#1 | 1.8 mm | \$11.82 | \$12.51 | \$13.90 |
|  | 36-2601 | Knife | \#2 | 2.0 mm | \$11.82 | \$12.51 | \$13.90 |
|  | 36-2602 | Knife | \#3 | 2.2 mm | \$11.82 | \$12.51 | \$13.90 |
|  | 36-2603 | Knife | \#4 | 2.4 mm | \$11.82 | \$12.51 | \$13.90 |
|  | 36-2604 | Knife | \#5 | 2.6 mm | \$11.82 | \$12.51 | \$13.90 |
|  | 36-2605 | Knife | \#6 | 2.8 mm | \$11.82 | \$12.51 | \$13.90 |
| C | 36-2570 | Round | \#50 | 0.2 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2571 | Round | \#51 | 0.4 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2572 | Round | \#52 | 0.6 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2573 | Round | \#53 | 1.0 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2574 | Round | \#54 | 1.20 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2590 | Round | \#55 | 1.80 mm | \$9.31 | \$9.86 | \$10.95 |
| D | 36-2580 | Point (Onglette) | \#5/0 | 1.16 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2581 | Point (Onglette) | \#4/0 | 1.24 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2582 | Point (Onglette) | \#3/0 | 1.35 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2550 | Point (Onglette) | \#2/0 | 1.45 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2551 | Point (Onglette) | \# | 1.58 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2552 | Point (Onglette) | \#1 | 1.78 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2553 | Point (Onglette) | \#2 | 1.94 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2554 | Point (Onglette) | \#3 | 2.16 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2555 | Point (Onglette) | \#4 | 2.54 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2556 | Point (Onglette) | \#5 | 2.74 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2557 | Point (Onglette) | \#6 | 2.94 mm | \$9.31 | \$9.86 | \$10.95 |
|  | 36-2559 | Point (Onglette) | \#8 | 3.36 mm | \$9.31 | \$9.86 | \$10.95 |

GRAVERS SHAPES WITH CUTTING ANGLES AND FACES
Flat has a rectangular cross section with a flat cutting edge used to make flat bottom cuts.
Square has an equilateral square set on its corner so the lower corner cuts the metal.
Lozenge has a rhombus shape with two acute and two obtuse angles for making "V" cuts with an acute angle.
Onglette is triangular in shape with slightly rounded sides that form a point along the bottom.
Knife has an acute triangular shape used to make deep, narrow $V$-shaped cuts.
Round has flat sides and a rounded bottom used to cut rounded grooves and raise beads.
Oval has an oval shape and is used to produce U-shaped cuts.
Liner has a similar shape to the flat but with shallow parallel grooves running along its bottom edge.
Dotter has a rectangular shaft with a flat top and rounded bottom used to make dots or round bottomed cuts.
Always wear eye protection when shaping and sharpening.

GROBET USA ${ }^{\circledR}$ SWISS

## QUICK CHANGE GRAVERS

Pre-shaped, quick-change gravers are designed to fit the GRS ${ }^{\circ}$ Quick Change Tool Holder for use with the GRS® Quick Change Handpieces. They also work with the Foredom ${ }^{\circ}$ PowerGraver ${ }^{\text {r"m }}$ and the MagnaGravers ${ }^{\text {™ }}$. Made from special, high-speed steel for long lasting performance. Genuine, Swiss-made with the yellow tang.
Accept no substitutes.

## Stone Setting Kit

Includes 11 Gravers:
36-2722, 36-2723, 36-2724, 36-2701, 36-2705,
36-2708, 36-2711, 36-2712, 36-2713, 36-2734, and 36-2736.

Engraving Kit
Includes 11 Gravers:
36-2722, 36-2724, 36-2726, 36-2701, 36-2702,
36-2705, 36-2708, 36-2712, 36-2713, 36-2734, and 36-2736.

| Item | Order \# | Description | Style | Width | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 36-2741 | Stone Setting |  |  | \$93.50 | \$99.00 | \$110.00 |
|  | 36-2740 | Engraving Kit |  |  | \$93.50 | \$99.00 | \$110.00 |
| A | 36-2700 | Flat Edge | \#36 | 0.2 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2701 | Flat Edge | \#37 | 0.4 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2702 | Flat Edge | \#38 | 0.6 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2703 | Flat Edge |  | 0.8 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2704 | Flat Edge | \#39 | 1.0 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2705 | Flat Edge | \#40 | 1.2 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2706 | Flat Edge | \#41 | 1.4 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2707 | Flat Edge |  | 1.6 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2708 | Flat Edge | \#42 | 1.8 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2709 | Flat Edge | \#43 | 2.0 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2710 | Flat Edge | \#45 | 2.4 mm | \$9.27 | \$9.81 | \$10.90 |
| B | 36-2732 | Knife |  | 1.8 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2733 | Knife |  | 2.0 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2734 | Knife | \#1 | 2.2 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2736 | Knife | \#2 | 2.6 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2737 | Knife | \#3 | 2.8 mm | \$9.27 | \$9.81 | \$10.90 |
| C | 36-2711 | Round | \#50 | 0.2 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2712 | Round | \#51 | 0.4 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2713 | Round | \#52 | 0.6 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2714 | Round |  | 0.8 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2715 | Round | \#53 | 1.0 mm | \$9.27 | \$9.81 | \$10.90 |
| D | 36-2719 | Point | \#5/0 | 1.16 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2720 | Point | \#4/0 | 0.20 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2721 | Point | \#3/0 | 1.35 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2722 | Point | \#2/0 | 1.45 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2723 | Point | \# | 1.58 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2724 | Point | \#1 | 1.78 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2725 | Point | \#2 | 1.94 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2726 | Point | \#3 | 2.16 mm | \$9.27 | \$9.81 | \$10.90 |
|  | 36-2727 | Point | \#4 | 2.54 mm | \$9.27 | \$9.81 | \$10.90 |



## MULLER ${ }^{\circledR}$ HIGH-SPEED GRAVERS

Quality E.C. Muller gravers hold an edge up to five times longer than carbon-steel gravers. Generally preferred for use on gold, platinum, silver, and steel. These gravers can be modified to be used with all power-assisted engraving systems and handpieces, including GRS ${ }^{\circ}$ and Foredom ${ }^{\circ}$ systems.


| FLAT | Item | Order \# | Description | Style | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | 36-3523 | Flat | \#36 | \$6.16 | \$6.53 | \$7.25 |
| 36 |  | 36-3524 | Flat | \#37 | \$6.16 | \$6.53 | \$7.25 |
| $37=$ |  | 36-3525 | Flat | \#38 | \$6.16 | \$6.53 | \$7.25 |
| $39 \square$ |  | 36-3526 | Flat | \#39 | \$6.16 | \$6.53 | \$7.25 |
| $40 \rightleftharpoons$ |  | 36-3527 | Flat | \#40 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3528 | Flat | \#41 | \$6.16 | \$6.53 | \$7.25 |
| $43 \square$ |  | 36-3529 | Flat | \#42 | \$6.16 | \$6.53 | \$7.25 |
| $\begin{aligned} & 44 \cong \\ & 45 \leftrightarrows \\ & \hline \end{aligned}$ |  | 36-3530 | Flat | \#43 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3531 | Flat | \#44 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3532 | Flat | \#45 | \$6.16 | \$6.53 | \$7.25 |
| $\begin{aligned} & \text { KNIFE } \\ & 1 / 0 \\ & 1= \\ & 2= \\ & 3 \end{aligned}$ | B | 36-3535 | Knife | \#0 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3536 | Knife | \#1 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3537 | Knife | \#2 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3538 | Knife | \#3 | \$6.16 | \$6.53 | \$7.25 |
| $\begin{aligned} & \text { ROUND } \\ & 50= \\ & 51= \\ & 52= \\ & 53 \\ & 54= \\ & 55 \\ & 56 \\ & 57 \\ & 58 \\ & 5 \\ & \hline \end{aligned}$ | C | 36-3511 | Round | \#50 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3512 | Round | \#51 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3513 | Round | \#52 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3514 | Round | \#53 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3515 | Round | \#54 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3516 | Round | \#55 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3517 | Round | \#56 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3518 | Round | \#57 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3519 | Round | \#58 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3542 | Bevel | \#1 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3543 | Bevel | \#2 | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3544 | Bevel | \#3 | \$6.16 | \$6.53 | \$7.25 |
|  | D | 36-3500 | Point (Onglette) | \#2/0 | \$6.16 | \$6.53 | \$7.25 |
| POINT $\qquad$ <br> $10 \Longrightarrow$ |  | 36-3501 | Point (Onglette) | \# | \$6.16 | \$6.53 | \$7.25 |
|  |  | 36-3502 | Point (Onglette) | \#1 | \$6.16 | \$6.53 | \$7.25 |
| $\begin{aligned} & 1 / 0 \Longrightarrow \\ & 1 \Longrightarrow \end{aligned}$ |  | 36-3503 | Point (Onglette) | \#2 | \$6.16 | \$6.53 | \$7.25 |
| 2 |  | 36-3504 | Point (Onglette) | \#3 | \$6.16 | \$6.53 | \$7.25 |
| $4 \Longrightarrow$ |  | 36-3505 | Point (Onglette) | \#4 | \$6.16 | \$6.53 | \$7.25 |
| $5 \Longrightarrow$ |  | 36-3506 | Point (Onglette) | \#5 | \$6.16 | \$6.53 | \$7.25 |



TEMPERING TEMPERATURES

| Color on Polished Steel | ${ }^{\circ}$ F | ${ }^{\circ} \mathbf{C}$ | Temperature | Tool Type |
| ---: | :---: | :---: | :--- | :--- |
| Light Straw | $400^{\circ}$ | $204^{\circ}$ | Very High | Gravers, Files |
| Straw Yellow | $428^{\circ}$ | $220^{\circ}$ | High | Scrapers, Twist Drills, Razors |
| Golden Yellow | $469^{\circ}$ | $242^{\circ}$ |  | Cold Chisels, Hammer Faces |
| Dark Brown-Bronze | $500^{\circ}$ | $260^{\circ}$ | Medium | Drills |
| Purple or Peacock | $531^{\circ}$ | $277^{\circ}$ |  | Chasing Punches, Springs, Dies |
| Full Dark Blue | $550^{\circ}$ | $287^{\circ}$ | Low | Hot Chisels, Knives |
| Pale Blue | $610^{\circ}$ | $321^{\circ}$ |  | Saw Blades, Screwdrivers |
| Gray-Black | $630^{\circ}$ | $332^{\circ}$ | Soft to Dead Soft | Too Soft for Steel Tools |
|  |  |  |  |  |


| Graver <br> Type | Normal <br> Cutting <br> Angle | Number <br> of Set-Off <br> Faces | Angle of <br> Set-Off <br> Faces |
| :--- | :--- | :---: | :---: |
| Flat | $30^{\circ}-45^{\circ}$ | 0 | 0 |
| Square | $30^{\circ}-45^{\circ}$ | 2 | $5^{\circ}-10^{\circ}$ |
| Lozenge | $30^{\circ}-45^{\circ}$ | 2 | $5^{\circ}-10^{\circ}$ |
| Onglette | $30^{\circ}-45^{\circ}$ | 0 | 0 |
| Knife | $30^{\circ}-45^{\circ}$ | 2 | $5^{\circ}-10^{\circ}$ |
| Round | $60^{\circ}-65^{\circ}$ | 0 | 0 |
| Oval | $60^{\circ}-65^{\circ}$ | 0 | 0 |
| Liner | $30^{\circ}-45^{\circ}$ | 0 | 0 |
| Dotter | $30^{\circ}-45^{\circ}$ | 0 | 0 |



## MULLER® ${ }^{\circledR}$ STRAIGHT LINE GRAVERS

Genuine E.C. Muller quality grade line gravers are made of High Carbon Tool Steel and are essential for performing various engraving techniques, some of which include florentine, shading, stippling, and background work. Suitable for work on flat or convex surfaces, these gravers can be used on most metals, wood, bone, ivory, and onyx. Made in the USA.

Gravers are ordered by indicating the grade first, which is the distance between the lines. The second number indicates the number of lines required on the liner. Grade 8 is the finest line (smallest distance between the lines) and 26 is the thickest line (farthest distance between the lines).

| Order\# | Style | Lines | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 6 - 6 5 0 0}$ | $\# 8$ | 6 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 0 1}$ | $\# 8$ | 8 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 0 2}$ | $\# 8$ | 10 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 1 0}$ | $\# 12$ | 4 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 1 1}$ | $\# 12$ | 6 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 1 2}$ | $\# 12$ | 8 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 1 3}$ | $\# 12$ | 12 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 1 4}$ | $\# 12$ | 14 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 2 0}$ | $\# 14$ | 4 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 2 1}$ | $\# 14$ | 8 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 2 2}$ | $\# 14$ | 12 | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| $\mathbf{3 6 - 6 5 3 0}$ | $\# 16$ | 4 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 3 1}$ | $\# 16$ | 6 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 3 2}$ | $\# 16$ | 8 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 3 3}$ | $\# 16$ | 10 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 3 4}$ | $\# 16$ | 16 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 4 0}$ | $\# 18$ | 6 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 4 1}$ | $\# 18$ | 8 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 4 2}$ | $\# 18$ | 10 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 5 0}$ | $\# 20$ | 6 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 5 1}$ | $\# 20$ | 10 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |
| $\mathbf{3 6 - 6 5 6 0}$ | $\# 24$ | 8 | $\$ 19.85$ | $\$ 21.02$ | $\$ 23.35$ |
| $\mathbf{3 6 - 6 5 7 0}$ | $\# 26$ | 10 | $\$ 17.72$ | $\$ 18.77$ | $\$ 20.85$ |



GROBET USA ${ }^{\circledR}$ SWISS CARBON LINE ENGRAVERS
All $4 ½$ " gravers. Made in Switzerland.

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| Order \# |  |  |  |  |  |  |  |  |
| $\mathbf{3 6 - 2 6 1 0}$ | Style | \#12 | 80 | 6 | 0.149 | $\$ 28.26$ | $\$ 29.93$ | $\$ 33.25$ |
| $\mathbf{P 6 - 2 6 1 1}$ | $\# 14$ | 57 | 6 | 0.175 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 1 2}$ | $\# 16$ | 50 | 6 | 0.200 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 1 3}$ | $\# 18$ | 44 | 6 | 0.227 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 1 4}$ | $\# 20$ | 40 | 6 | 0.250 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 2 0}$ | $\# 12$ | 67 | 8 | 0.150 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 2 1}$ | $\# 14$ | 57 | 8 | 0.175 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 2 2}$ | $\# 16$ | 50 | 8 | 0.200 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 2 3}$ | $\# 18$ | 44 | 8 | 0.227 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 2 4}$ | $\# 20$ | 40 | 8 | 0.250 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 3 0}$ | $\# 14$ | 57 | 10 | 0.175 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |
| $\mathbf{3 6 - 2 6 3 1}$ | $\# 16$ | 50 | 10 | 0.200 | $\$ 28.26$ | $\$ 29.93$ | $\$ 33.25$ |  |
| $\mathbf{3 6 - 2 6 3 5}$ | $\# 14$ | 67 | 14 | 0.149 | $\$ 28.26$ | $\$ 29.93$ | $\$ 33.25$ |  |
| $\mathbf{3 6 - 2 6 3 6}$ | $\# 16$ | 57 | 14 | 0.175 | $\$ 25.37$ | $\$ 26.87$ | $\$ 29.85$ |  |



## E.C. MULLER ${ }^{\circledR}$ BENT LINE GRAVERS

These High Carbon Tool Steel gravers are designed for concave surfaces with 6 as the finest and 16 being the thickest grade.

| Order \# | Style | Lines | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 6 - 1 2 0 0}$ | $\# 6$ | 4 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 1}$ | $\# 6$ | 6 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 2}$ | $\# 8$ | 4 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 3}$ | $\# 8$ | 6 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 4}$ | $\# 12$ | 6 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 5}$ | $\# 12$ | 8 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 6}$ | $\# 16$ | 8 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{3 6 - 1 2 0 7}$ | $\# 16$ | 10 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |



C Flat Parellel


D Onglette

## C-MAX GRAVERS

A-C. Strong demand has led to the development of additional C-Max gravers. With these three new styles, users have even more options. These gravers feature a $1 / 8^{\prime \prime}$ round shank and are made with the same GRS ${ }^{\circ}$ C-Max carbide as the new C-Max Onglettes.
D. Introducing the new C-Max Onglette for jewelry work, stone setting, and general engraving. The carbide material for C-Max gravers provides a superior edge to traditional tool metals. Try one today and see the difference for yourself.

| Item | Order \# | Description | W (mm) $\times \mathrm{L}$ (in.) | Style | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 36-2645 | Tapered Flat | $0.2 \mathrm{~mm} \times 14 /{ }^{\text {" }}$ | \#36 | \$16.96 | \$17.95 | \$19.95 |
|  | 36-2645 | Tapered Flat | $0.4 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#37 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2645 | Tapered Flat | $0.6 \mathrm{~mm} \times 145^{\prime \prime}$ | \#38 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2645 | Tapered Flat | $0.8 \mathrm{~mm} \times 14 / 5^{\prime \prime}$ | \#39 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2645 | Tapered Flat | $1.0 \mathrm{~mm} \times 14 / \mathrm{s}^{\prime \prime}$ | \#40 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2645 | Tapered Flat | $1.2 \mathrm{~mm} \times 14 / \mathrm{s}^{\prime \prime}$ | \#41 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2645 | Tapered Flat | $1.4 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#42 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2645 | Tapered Flat | $1.8 \mathrm{~mm} \times 14 / 5^{\prime \prime}$ | \#44 | \$13.56 | \$14.36 | \$15.95 |
| B | 36-2646 | Tapered Round | $0.4 \mathrm{~mm} \times 14 / 5^{\prime \prime}$ | \#51 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2646 | Tapered Round | $0.6 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#52 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2646 | Tapered Round | $0.8 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#53 | \$15.26 | \$16.16 | \$17.95 |
| C | 36-2647 | Flat Parellel | $0.6 \mathrm{~mm} \times 145^{\prime \prime}$ | \#38 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2647 | Flat Parellel | $0.8 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#39 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2647 | Flat Parellel | $1.0 \mathrm{~mm} \times 145^{\prime \prime}$ | \#40 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2647 | Flat Parellel | $1.2 \mathrm{~mm} \times 14 / \mathrm{s}^{\prime \prime}$ | \#41 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2647 | Flat Parellel | $1.4 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#42 | \$13.56 | \$14.36 | \$15.95 |
|  | 36-2647 | Flat Parellel | $1.8 \mathrm{~mm} \times 14 /{ }^{\prime \prime}$ | \#44 | \$13.56 | \$14.36 | \$15.95 |
| D | 36-2650 | Onglette | $14 / 5$ " length | \#0 | \$15.26 | \$16.16 | \$17.95 |
|  | 36-2650 | Onglette | $14 / 5$ " length | \#2 | \$13.56 | \$14.36 | \$15.95 |

## EASYGRAVER V-POINT SHARPENING FIXTURE

Many new engravers are challenged with understanding and consistently producing accurate sharpening results. Professionals want to save time during the sharpening process to increase profitable moments spent at the bench. The design of the EasyGraver Sharpening Fixture is based on the standard geometries that we observed in use by hundreds of engraving artists and jewelers throughout the world over many years. Two separate models are available: $120^{\circ}$ or $105^{\circ}$, both for creating V-point gravers. For hand engravers and jewelers who currently use other geometries, the time it takes to adjust to these presets is outweighed by the benefits of accuracy and efficiency.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| E | $\mathbf{2 6 - 3 9 8 5}$ | EasyGraver V-Point $105^{\circ}$ | $\$ 100.30$ | $\$ 106.20$ | $\$ 118.00$ |
| F | $\mathbf{2 6 - 3 9 8 5}$ | EasyGraver V-Point $120^{\circ}$ | $\$ 117.30$ | $\$ 124.20$ | $\$ 138.00$ |

## GLENSTEEL GRAVERS

GRS ${ }^{\circ}$ now offers $V$-shaped gravers made from GlenSteel high-speed steel for engravers, stone setters, and jewelers. These new tools have a precision ground V -point geometry on one end with a convenient $3 / 32$ " square shank on the other. GlenSteel features outstanding toughness to resist breaking and chipping, even in slender, fine shapes. An excellent all-around choice for professionals and hobbyists when a tough graver is needed. It is also cobalt-free so you are not exposed to cobalt dust when sharpening. Also for use with Lindsay templates.



G

## C-MAX CARBIDE GRAVERS



GRS ${ }^{\circledR}$ TUNGSTEN-CARBIDE GRAVERS
These are much harder than any tool steel, but more brittle. They last up to 10 times longer between sharpenings when properly used. Sharpen with a diamond wheel.

| Item | Order \# | Description | $\mathbf{W}(\mathbf{m m}) \times \mathbf{L}$ (in.) | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| 0 | $\mathbf{3 6 - 2 5 4 8}$ | Square Carbide | $2.2 \mathrm{~mm} \times 2^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| R | $\mathbf{3 6 - 2 5 4 9}$ | Blank Carbide | $2.2 \mathrm{~mm} \times 2^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |


$R \quad \square$

GRS ${ }^{\circledR}$ CARBIDE BLANK AND BURNISHER TOOLS
Precision tungsten-carbide tools for texturing and burnishing.
Burnish Tool - Special tool that is used for burnishing or gypsy stone setting.

| Order\# | Description | $\mathbf{W}(\mathbf{m m}) \times \mathbf{L}$ (in.) | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 6 - 2 6 0 9}$ | Carbide Burnish Tool | $1.98 \mathrm{~mm} \times \mathbf{2 "}^{\text {" }}$ | $\$ 20.40$ | $\$ 21.60$ | $\$ 24.00$ |



GRS ${ }^{\circledR}$ HEAT-TREATED HARDENED STEEL POINTS
Easily made into special punches, hammer tools, bead raisers, prong pushers, stipple points, and more. All points are properly hardened.

| Item | Order \# | $\mathbf{W}(\mathbf{m m}) \times \mathbf{L}$ (in.) | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 6 - 2 5 9 5}$ | $1.8 \mathrm{~mm} \times 1^{1 / 22^{\prime \prime}}$ | Sold in packs of 6 | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |
| B | $\mathbf{3 6 - 2 5 9 6}$ | $3.1 \mathrm{~mm} \times 1^{1 / 21}$ | Sold in packs of 6 | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |
| C | $\mathbf{3 6 - 2 5 9 7}$ | $3.3 \mathrm{~mm} \times 3^{\prime \prime}$ | Sold in packs of 6 | $\$ 8.93$ | $\$ 9.45$ | $\$ 10.50$ |



## MAGNA-GRAVER

This impact handpiece is recommended for use with the Foredom ${ }^{\circ}$ L Motor, but can also be used with other flexible shafts. It features a one piece, $1 / 8^{\prime \prime}$ output shaft that holds shank tools with a set screw. Designed for use with Magna-Graver ${ }^{\circ}$ gravers or custom tools fashioned from $1 / 8^{\prime \prime}$ tool steel rod. Gravers sold separately. Made in the USA.

| Order \# | Description | Length | 1+ |
| :---: | :---: | ---: | ---: |
| $\mathbf{3 6 - 8 8 0 1}$ | Magna-Graver | $53 / 4^{\prime \prime}$ | $\$ 249.60$ |

FACETED GEM-SETTING GRAVER SET
Used for setting diamonds and other stones. Set consists of six carbon steel gravers, six wooden handles, and a step-by-step model plate. Contains gravers point (onglette) \#0 and \#1; flat \#38 and \#40; and round \#50 and \#52.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 3 - 0 7 0 0}$ | Gem-Setting Outfit Set | $\$ 56.95$ | $\$ 60.30$ | $\$ 67.00$ |

## THERMO-LOC HANDLES

These handles let you install gravers and similar hand tools without the frustration of drilling. Inside each handle is a core made of Thermo-Loc, a
 special heat-softenable material. Simply warm the handle or heat the tool tang and insert the tool. At normal temperatures, Thermo-Loc' ${ }^{\text {tw }}$ becomes solid to hold the tool securely with a perfect fit. Includes four handles, extra Thermo-Loc, and instructions. The Thermo-Loc ${ }^{\text {T"I }}$ core softens between $160^{\circ}-180^{\circ} \mathrm{F}\left(70^{\circ}-80^{\circ} \mathrm{C}\right)$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 4 0}$ | Thermo-Loc"' Handle Set | $\$ 12.19$ | $\$ 12.72$ | $\$ 13.25$ |



GRS ${ }^{\circledR}$ QUICK-CHANGE GRAVER ACCESSORIES
Handle with Holders: Gravers and/or tools mount into these interchangeable " OC " holders, which in turn fit all GRS ${ }^{\circ}$ " OC " handpieces and $\mathrm{GRS}^{\circ}$ " OC " sharpening fixture. This allows tools to be changed in three seconds without a wrench. Holders accept square tools up to 2.5 mm , round tools to 3.3 mm . Comes with three QC tool holders.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| D | $\mathbf{2 6 - 4 1 3 5}$ | Handle with 3 Tool Holders Set | $\$ 30.50$ | $\$ 31.82$ | $\$ 33.15$ |
| E | $\mathbf{2 6 - 4 1 3 7}$ | Replacement Holder | $\$ 16.11$ | $\$ 17.06$ | $\$ 18.95$ |

ROSEWOOD GRAVER HANDLES
Used to hold gravers securely with reinforcing metal collets.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 7 - 8 6 0 0}$ | Half-Head | $11 / 4^{\prime \prime} \times 1^{1 / 2 "}$ | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |
| B | $\mathbf{3 7 - 8 6 0 1}$ | Long Half-Head | $11 / 4^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |
| C | $\mathbf{3 7 - 8 6 0 2}$ | Round | $138^{\prime \prime} \times 1^{3 / 4^{\prime \prime}}$ | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |
| D | $\mathbf{3 7 - 8 6 0 3}$ | Long Mushroom | $1 / 14^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |



GRAVER HANDLES
Wide variety of finely finished, hardwood handles. Metal sleeve securely holds graver.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 37-8500 | Gourd | $21 / 2^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| F | 37-8501 | Half-Head | $2^{\prime \prime} \times 1 \frac{1}{3 \prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| G | 37-8502 | Half-Head | $13 / 4^{\prime \prime} \times 1 \frac{1}{3 \prime}{ }^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| H | 37-8503 | Half-Head | $21 / 4^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| $J$ | 37-8504 | Mushroom | $2^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| K | 37-8505 | Mushroom | $13 / 4{ }^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| L | 37-8506 | Mushroom | $21 / 4^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| M | 37-8507 | Oval | $1^{\prime \prime} \times 11 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| N | 37-8508 | Pear | $17 / 8{ }^{\prime \prime} \times 13 / 4{ }^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| P | 37-8509 | Round | $15 / 8^{\prime \prime} \times 1 \frac{1}{3 \prime}{ }^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| 0 | 37-8510 | Vase | $3^{\prime \prime} \times 1 \frac{1}{3 \prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |



## ADJUSTABLE GRAVER HANDLE SET

Adjust your graver length to exactly what you want by sliding it in and out of the handle, then locking it in place. Lightweight aluminum. Set of three different color handles.

| Order \# | Description | Length | 1+ |
| ---: | :--- | :---: | ---: |
| $\mathbf{2 6 - 4 1 3 6}$ | Graver Handle Set (set of 3) | $23 / 4{ }^{\prime \prime}$ | $\$ 42.50$ |



CROCKER-PATTERN GRAVER SHARPENER
Used to hold graver in a fixed position while sharpening on a bench stone. Graver can be set to any angle by setting index. Can also be locked in for repeated accuracy. Sharpening stone sold separately.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| $R$ | $\mathbf{3 6 - 8 8 0 0}$ | Graver Sharpener | $\$ 40.80$ | $\$ 43.20$ | $\$ 48.00$ |

## GRAVER SHARPENER

Used to sharpen gravers. Place graver in either of two angled openings and then roll over a flat oilstone to sharpen. Sharpening stone not included.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| S | $\mathbf{3 6 - 8 8 4 0}$ | Sharpener | $11 / 3^{\prime \prime} \times 2 \frac{1}{\mathbf{n}^{\prime \prime}}$ | $\$ 7.48$ | $\$ 7.92$ | $\$ 8.80$ |




## BURGESS ${ }^{\text {TM }}$ VIBRO-GRAVER

Rugged, industrial-quality engraving tool makes permanent markings on almost any hard surface. Can also be used to make background effects. Features durable, tungsten-carbide engraving tip, an on/off switch, and a spark-free motor that vibrates at 7,200 strokes per minute. Adjustment dial changes length of stroke and depth of mark. Includes carbide bit. Diamond bit not included.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | :---: |
| $\mathbf{3 6 - 8 0 0 0}$ | Vibro-Graver 110V | $\$ 47.60$ | $\$ 50.40$ | $\$ 56.00$ |

POST ASSEMBLY FOR GRS® ${ }^{\circledR}$ SHARPENING FIXTURES
For use with GRS ${ }^{\circ}$ Sharpening Fixtures.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 6 - 3 9 8 6}$ | Post Assembly | $\$ 25.46$ | $\$ 26.96$ | $\$ 29.95$ |



GRAVER LUBE KIT
Extends graver life and brightens cuts. Sharpen your graver less and your work will look better. Includes lube container with lid and sponge.

| Order \# | Description | Size | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{1 0 - 4 5 5 5}$ | Graver Lube Oil Kit | $40 z$ | $\$ 9.55$ |



NORTON SHARPENING STONE OIL
Primarily used as sharpening oil, but can be used for general purposes.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 0 - 6 0 1 5}$ | Norton ${ }^{\text {wiw }}$ Sharpening 0il | $41 / 202$ | $\$ 8.42$ | $\$ 8.78$ | $\$ 9.15$ |

MOUNTED ARKANSAS BENCH STONE
Excellent for sharpening tools such as gravers and knives due to the close-density oilstone qualities. Mounted in cedar box.

| Order \# | Grit | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{1 0 - 5 5 1 0}$ | Fine | $2^{\prime \prime} \times 4^{\prime \prime} \times 1 / \mathbf{1}^{\prime \prime}$ | $\$ 19.35$ |
| $\mathbf{1 0 - 5 5 2 0}$ | Extra-Fine | $2^{\prime \prime} \times 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 45.90$ |



RUBY BENCH STONES
Excellent for sharpening and flattening hard metals as well as glass, quartz, and porcelain.

| Item | Order \# | Description | Grit | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :--- | :--- | ---: |
| A | $\mathbf{1 0 - 4 2 0 3}$ | 1-Sided Boxed | Medium | $1^{\prime \prime} \times 4^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 105.10$ |
| B | $\mathbf{1 0 - 4 2 0 4}$ | 1-Sided Boxed | Fine | $1^{\prime \prime} \times 4^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 134.65$ |
| C | $\mathbf{1 0 - 4 2 1 0}$ | 2-Sided Loose | Medium | $1^{\prime \prime} \times 4^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 136.70$ |



## ARKERAM BENCH STONES

Made from Arkansas stone powder, solidified by fire. Slightly more abrasive than regular Arkansas stones. Shipped in a hardwood box and can be used on both sides with oil.

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 0 - 6 0 0 8}$ | $1^{\prime \prime} \times 4^{\prime \prime} \times 1_{2 \prime \prime}^{\prime \prime}$ | $\$ 37.25$ |
| $\mathbf{1 0 - 6 0 1 0}$ | $2^{\prime \prime} \times 6^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 50.95$ |



## COMBINATION INDIA BENCH STONE

One side has fine grit, and the other side is coarse. Fast-cutting, man-made stone of a tough, aluminum-oxide abrasive.

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 0 - 4 5 0 0}$ | $13 / 4^{\prime \prime} \times 4^{\prime \prime} \times 5 / 8^{\prime \prime}$ | $\$ 17.30$ |
| $\mathbf{1 0 - 4 5 1 0}$ | $2^{\prime \prime} \times 6^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 26.50$ |



GRS ${ }^{\circledR}$ STANDARD BLOCK
Double ball-bearing system for smooth rotation without looseness or wear. The unique GRS ${ }^{\bullet}$ rotational break system lets you control the rotational resistance similar to the magna block. Block is made of solid steel. Black jaws and satin chrome finish reduce glare and eye strain. GRS standard block includes upper jaw plates, four pins, and wrench.

- Stainless steel body - Block weight 19 lbs - Jaw height $11 / 2^{\prime \prime}$
- Ball diameter $5^{\prime \prime}$ - Max opening $3^{\prime \prime}$ - Jaw width $212^{\prime \prime}$

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{2 6 - 4 1 3 1}$ | Standard Block with Attachment Kit | $\$ 507.55$ |
|  | $\mathbf{2 6 - 4 1 2 9}$ | Standard Block (only) | $\$ 445.15$ |



## GRS ${ }^{\oplus}$ MAGNA BLOCK

B. Heavy-duty block for exceptional support and strength. Two ball bearings and a thrust bearing large-roller, eliminates wear and looseness for the life of the block. Jaws are hardened steel. Rotational resistance is infinitely adjustable for fine tuning the block to your work. Non-glare finish. Block includes upper jaw plates, five pins, and wrench.

- Stainless steel body - Block weight 30 Ibs - Jaw height 13/4"
- Ball diameter 53/4" - Max opening 3½" - Jaw width 3"
C. GRS ${ }^{\circ} 30$ Piece Attachment Set includes: leather-faced ring clamps plus a variety of pins and clamps to fit upper jaws of engraving blocks

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| B | $\mathbf{2 6 - 4 1 2 8}$ | Magna Block with Attachment Set | $\$ 700.00$ |
| C | $\mathbf{2 6 - 4 1 3 0}$ | 30 Piece Attachment Kit (only) | $\$ 93.50$ |



## GRS® ${ }^{\text {POSITIONING VISE }}$

D. Especially made for microscope work. This unique vise has many magna block similarities and one huge difference: You can reposition its center of rotation by simply pulling a lever. By pulling the release lever, you can slide the upper half into various positions. Under a microscope, your work must stay in the field of view as you rotate the vice. The positioning vise allows you to keep your work within the microscope's field of view. Includes upper jaw plates, five pins, and wrench. Specifications: - Block weight 42 Ibs - Jaw height 1.8"

- Ball diameter 7.1" - Max jaw opening $3 ½$ - Jaw width 3"
E. Engraving Block Shelf: Attaches easily to GRS ${ }^{\star}$ fixed mounting plate to hold your engraving block off the front of your bench. This puts your engraving block at the same working height as your bench pin.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{2 6 - 4 1 5 7}$ | Positioning Ball Vise | $\$ 829.95$ |
| E | $\mathbf{2 6 - 4 1 5 6}$ | Large Block Shelf | $\$ 82.00$ |



## GRS® ${ }^{\circledR}$ LOW PROFILE VISE

The stainless steel low profile model offers GRS ${ }^{\circ}$ strength and quality in a shorter model. A popular use is under a microscope where 6 " $(150 \mathrm{~mm})$ of space is needed between the microscope and the work. Using other blocks, the eye level of the user can be too high. The low profile vise has the same jaw size and capacity as the Magna Block, yet is $11 / 2^{\prime \prime}$ shorter. An option for this vise is a heavy-duty turn table base. Includes upper jaw plates, five pins, and wrench.

- Block weight $201 / 4 \mathrm{lbs}(9.19 \mathrm{~kg})$ - Jaw height $14 / 5^{\prime \prime}(46 \mathrm{~mm})$
- Ball diameter $61 / 8^{\prime \prime}(147 \mathrm{~mm})$ - Max opening $3 ½^{\prime \prime}(89 \mathrm{~mm})$ - Jaw width 3 " $(76 \mathrm{~mm})$

| Item | Order\# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| F | $\mathbf{2 6 - 4 1 3 9}$ | GRS® Low Profile Vise | $\$ 630.00$ |
| G | $\mathbf{2 6 - 4 1 6 2}$ | Turntable Base with Break \& Teflon Pad | $\$ 280.00$ |

SUPER PINS
Heavy-duty plastic and steel pins fit jaw holes in GRS ${ }^{\circ}$ Magna Block and GRS ${ }^{\circ}$ Standard Block.

| Item | Order \# | Description | Diameter | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | ---: |
| A | $\mathbf{2 6 - 4 1 3 3}$ | 2 Pins | $3 / 8^{\prime \prime}$ | $\$ 5.90$ |
| B | $\mathbf{2 6 - 4 1 3 4}$ | 4 Pins | $1 / 4^{\prime \prime}$ | $\$ 8.90$ |



## GRS ${ }^{\circledR}$ MIRCOBLOCK BALL VISE

C. For engraving stone setting and other precision work. The Microblock's stainless steel low profile body, stainless steel jaws, and compact design is especially suited for microscope work or other situations where the size of a larger vise is an obstacle.
D. GRS* 30 Piece Attachment Set includes: leather-faced ring clamps plus a variety of pins and clamps to fit upper jaws of engraving blocks

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: |
| C | $\mathbf{2 6 - 4 1 6 7}$ | Microball | $\$ 260.00$ |
| D | $\mathbf{2 6 - 4 1 3 0}$ | 30 Piece Attachment Kit (only) | $\$ 93.50$ |



## ENGRAVING BLOCK

Recognized worldwide as the finest block. Side slack is eliminated as the turntable revolves on Victor ${ }^{\circ}$ bearings; however, it is responsive to the slightest touch. Center screw allows the opening and closing of the deep jaws. Used to firmly hold objects for engraving, stone setting, and general work. 5" diameter block.

| Item | Order\# | Description | Diameter | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: |
| E | $\mathbf{2 6 - 2 0 0 4}$ | Block | $5^{\prime \prime}$ | $\$ 467.25$ |
| F | $\mathbf{2 6 - 2 0 1 0}$ | Set of Attachments (only) |  | $\$ 124.75$ |



## GRS ${ }^{\circledR}$ TURNTABLE BASE

Used with the low profile vise, this heavy turntable base lets you reposition the work's center of rotation for working under a microscope. A removable centering post lets you position the turntable in the precise center of your microscope's field of view.

| Item | Order \# | Description | Diameter | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: |
| G | $\mathbf{2 6 - 4 1 6 2}$ | Turntable Base with Break \& Teflon Pad | $10 "$ | $\$ 280.00$ |
| H | $\mathbf{2 6 - 4 1 6 3}$ | Mount Kit |  | $\$ 20.15$ |



Teflon Pad

## GRS® MOUNTING PLATES

J. Optional Mounting Adapter: Used to attach the fixed mounting plate to bench tops.
K. Fixed Mounting Plate: Used for mounting BenchMate and other GRS ${ }^{\circ}$ products to your bench.
L. Adjustable Height Bracket: Includes an additional fixed mounting plate that can be lowered up to $4^{\prime \prime}$ in $1 / 2^{\prime \prime}$ increments.

M-N. Engraving Block Shelf: Attaches easily to GRS® fixed mounting plate to hold your engraving block off the front of your bench. This puts your engraving block at the same working height as your bench pin.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| J | $\mathbf{2 6 - 4 1 0 6}$ | Mounting Adapter | $\$ 27.55$ |
| K | $\mathbf{2 6 - 4 1 0 7}$ | Ceramic Lap | $\$ 199.00$ |
| L | $\mathbf{2 6 - 4 1 0 8}$ | Height Bracket | $\$ 52.90$ |
| M | $\mathbf{2 6 - 4 1 0 5}$ | Small Block Shelf | $\$ 42.35$ |
| N | $\mathbf{2 6 - 4 1 5 6}$ | Large Block Shelf | $\$ 82.00$ |




HEXAGON KEY FOR BALL VISE
Hexagon key ball vise with knurled aluminum low profile handle design so it can be left inserted in block chuck while working. Fits all GRS ${ }^{@}$ vises except the Microblock. (Block not included)

| Order \# | Description | Outside Diameter |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 3 9}$ | Hexagon Key | $1 / 4 "$ | $\$ 14.41$ | $\$ 15.26$ | $\$ 16.95$ |  |



RING PAD
When used with engraving blocks, it insulates the workbench surface from heat. Also serves as a rest for the engraving block.

| Order\# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | :---: | :---: |
| $\mathbf{2 6 - 3 6 6 0}$ | Leather | $5^{\prime \prime}$ | $\$ 56.19$ | $\$ 59.49$ | $\$ 66.10$ |

PIN PLATE

A. Single Pin: For multi-purpose and standard vise. Plate will pivot to hold unusual shapes.
B. Double Pin: For multi-purpose vise. This is a stationary plate with two mounting pins to prevent pivoting.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 1 5 1}$ | Single Pin Plate | $\$ 23.80$ | $\$ 25.20$ | $\$ 28.00$ |
| B | $\mathbf{2 6 - 4 1 5 2}$ | Double Pin Plate | $\$ 23.80$ | $\$ 25.20$ | $\$ 28.00$ |



PEG CLAMP
Hand-held tool that holds small, odd-shaped articles for engraving. Jaws are 2" round, and open and close on twin guides, which are controlled by the threaded thumbscrew. Detachable wooden handle allows head to be mounted in vise. Includes four pegs. Overall length 53/4".

| Item | Order\# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| C | $\mathbf{2 6 - 5 0 0 0}$ | Peg Clamp | $55 / 16^{\prime \prime}$ | $\$ 17.26$ | $\$ 18.27$ | $\$ 20.30$ |
| D | $\mathbf{2 6 - 5 0 0 1}$ | Set of 4 Pins |  | $\$ 2.68$ | $\$ 2.84$ | $\$ 3.15$ |



GRS ${ }^{\circledR}$ RING-CLAMP SET
Leather-faced attachment for GRS® blocks, holds rings solid to set stones, bright cut, engrave, and finish.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 4 7}$ | Ring Clamp Set | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |



GRS ${ }^{\circledR}$ INSIDE RING ENGRAVING HOLDER
This handy ring holder securely holds a ring and allows easy access to the inside of the ring for engraving. Designed to be held in the hand or in a bench or ball vise. Made of hardened steel.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 5 4}$ | Ring Holder | $\$ 55.25$ | $\$ 58.50$ | $\$ 65.00$ |



ENGRAVING PRACTICE SHEETS
Use to practice engraving and stone setting. Flat plates come in half-hard brass and copper. Sold in packs of 3 .

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{2 6 - 4 1 6 5}$ | Square Brass | $2^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |
| F | $\mathbf{2 6 - 4 1 6 6}$ | Square Copper | $2^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |

GRS ${ }^{\circledR}$ PITCH BOWL AND PITCH CUP
Both are filled with a special, meltable material that softens when heated. They allow you to hold small, fragile, irregular, or thin pieces for engraving, setting, and finishing. Both will fit any vise or engraving block.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 1 1 3}$ | Pitch Bowl | $31 / 4^{\prime \prime} \times 4^{3} 4^{\prime \prime} \times 1^{1 / 2}$ | $\$ 62.05$ | $\$ 64.75$ | $\$ 67.45$ |
| B | $\mathbf{2 6 - 4 1 4 9}$ | Pitch Cup | $2^{\prime \prime}$ Diameter | $\$ 23.78$ | $\$ 24.82$ | $\$ 25.85$ |



PITCH BOWL KIT
Suitable for holding or supporting jewelry for engraving. The bowl is made of cast iron and rests on a rubber pad. The bowl can be tipped to a comfortable working angle. Includes: pitch, bowl, and rubber pad.

| Item | Order \# | Description | Size | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 26-4205 | Pitch Bowl Set | 61/4" Diameter |  |  | \$39.75 |
|  | 26-4215 | Pitch | 802 | \$33.30 | \$34.75 | \$36.20 |
|  | 26-4216 | Pitch | 3202 | \$48.76 | \$50.88 | \$53.00 |



BRASS SHEETS


Used to practice engraving. Sold in 12 sheet packs.

| $\mathbf{O r d e r} \#$ | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 6 - 1 5 5 6}$ | Brass Sheets | $9 / 66^{\prime \prime} \times 27 / 8^{17}$ | $\$ 24.38$ | $\$ 25.44$ | $\$ 26.50$ |

## COPPER RINGS

Use to practice engraving

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 6 - 5 4 0 0}$ | Copper Rings | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |



## SYNTHETIC BEESWAX

When rubbed on a surface, it leaves a film on which a design can be marked.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{2 6 - 1 0 0 0}$ | Beeswax | 1 oz tube | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |
| E | $\mathbf{2 6 - 1 0 0 2}$ | Cake | 1 lb cake | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



## CHINESE WHITE

Apply onto a surface when melted, allows an impression to be left by a pencil mark.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| F | $\mathbf{2 6 - 1 6 0 0}$ | Small Cake | $0.190 z$ | $\$ 12.88$ | $\$ 13.44$ | $\$ 14.00$ |

ORANGE FLAKE SHELLAC
When heated, it is used to hold objects for chasing, engraving, or setting.

| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{1 2 - 2 2 7 0}$ | Flake Shellac | $160 z$ | $\$ 12.33$ | $\$ 12.86$ | $\$ 13.40$ |



THERMO-LOC ${ }^{\circledR}$ STARTER
Kit includes 6 " square PTFE (Teflon pad) and 1 lb . Thermo-Loc sticks. Thermo-Loc is a special reusable polymer material that is rigid at room temperature yet becomes softly pliable when heated/ warmed. Always place on Thermo-Loc ${ }^{\circ}$ (Teflon) pad when warming in microwave oven. Ring not included.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 1 6 8}$ | Starter Kit | $\$ 36.34$ | $\$ 37.92$ | $\$ 39.50$ |
| B | $\mathbf{2 6 - 4 1 6 9}$ | 1 lb of Sticks | $\$ 29.44$ | $\$ 30.72$ | $\$ 32.00$ |



DIAMOND SETTERS CEMENT
Securely holds diamonds or other precious stones for polishing operations when melted and applied to a wooden dowel.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{D e p t h}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: | ---: |
| G | $\mathbf{1 2 - 2 0 8 0}$ | Setters Cement | $3^{\prime \prime} \times 3^{\prime \prime} \times 1 / 3^{\prime \prime}$ | $\$ 24.89$ | $\$ 25.97$ | $\$ 27.05$ |



GRS ${ }^{\circledR}$ SHELLAC PAD
Inserts into the jaws of BenchMate ${ }^{\text {tm }}$ for setting and engraving.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| H | $\mathbf{2 6 - 4 1 1 2}$ | Shellac Pad | $\$ 4.74$ | $\$ 4.94$ | $\$ 5.15$ |

DOUBLE-ENDED STEEL TRACER
Twisted center allows firm grip. Ends are finely honed. Overall length is $61 / 2^{\prime \prime}$.

| Item | Order\# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 2 - 9 6 6 0}$ | Tracer | $61 / 2 "$ | $\$ 8.07$ | $\$ 8.55$ | $\$ 9.50$ |  |



DIAMOND-TIPPED SCRIBER
Used to scribe hardest metals, glass, and stones. Hexagonal, aluminum handle prevents rolling.


TUNGSTEN-CARBIDE TIP SCRIBER
Tungsten-carbide tip scriber marks stainless steel, copper, ceramics, and platinum. Screw chuck for reversing tungsten-carbide point when not in use. Tip is replaceable. Measures 6 " overall.


| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 2 - 9 5 0 5}$ | Tungsten-Carbide Tip Scriber | $\$ 5.87$ | $\$ 6.21$ | $\$ 6.90$ |
|  | $\mathbf{5 2 - 9 5 0 6}$ | Replacement Tips | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |



CARBIDE TIPPED SCRIBER
Used to scribe hardest metals, glass, and stones. Hexagonal, aluminum handle prevents rolling. Slim-line design, comfortable to use.


| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | 1+ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{5 2 - 9 5 0 2}$ | Scriber | $51 / 4^{\prime \prime}$ | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |



TUNGSTEN-CARBIDE SCRAPERS
Flat-sided, tungsten-carbide scrapers are ideal for flash and bur removal on precious metals. Recommended for platinum.


| Item | Order \# | Tip Diameter | $\underset{\text { Tength }}{\text { Tip }}$ | Overall Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 18-0520 | 3 mm | $11 / 4{ }^{\prime \prime}$ | $61 / 4{ }^{\prime \prime}$ | \$17.21 | \$18.23 | \$20.25 |
| F | 18-0521 | 4 mm | $11 / 4{ }^{\prime \prime}$ | 61/4" | \$17.21 | \$18.23 | \$20.25 |
| G | 18-0522 | 5 mm | $11 / 4 "$ | 61/4" | \$17.21 | \$18.23 | 20.2 |



## WALLER SCRIBER

Used to scribe hard metal, glass, and stone. Reversible ends for protection while carrying.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| H | $\mathbf{5 2 - 9 5 0 0}$ | Scriber | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |
|  | $\mathbf{5 2 - 9 5 0 1}$ | Replacement Tip | $\$ 4.42$ | $\$ 4.68$ | $\$ 5.20$ |



## GRS® ${ }^{\circledR}$ SHARPENING SYSTEMS

Sharpen gravers and tools in seconds without heat using the GRS ${ }^{\circ}$ Power Hone. It provides a sharper, stronger tool edge for brighter cuts, cleaner lines and scrolls, more precise beads, and finer shading. Beginners learn proper sharpening in minutes with easy-to-use sharpening fixtures made for the GRS ${ }^{\bullet}$ Power Hone. Diamond wheels and a low speed allow hardened steel, high-speed steel, and carbide tools to be sharpened. With its heavy steel housing, continuous-duty motor, and double-bearing spindle, the GRS* Power Hone is a sharpener users can depend on for years.


## GRS ${ }^{\circledR}$ POWER HONE ${ }^{\text {m" }}$ SYSTEMS

Dual Angle System Includes: a dual-angle sharpening fixture, power hone, quick wheel change adapter, 260 grit and 600 grit diamond wheels, ceramic lap, $1 / 2$ micron diamond spray, and wheel storage rack.
Quick-Change System Includes: quick change sharpening fixture, power hone, quick wheel change adapter, 260 grit and 600 grit diamond wheels, ceramic lap, $1 / 2$ micron diamond spray, and wheel storage rack.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{2 6 - 4 1 6 1}$ | Dual Angle Fixture System | $\$ 1,089.00$ |
| B | $\mathbf{2 6 - 3 9 9 9}$ | Quick-Change Fixture System | $\$ 1,054.00$ |

GRS ${ }^{\oplus}$ BASIC POWER HONE ${ }^{\text {m }}$
C. GRS ${ }^{\circ}$ Power Hone ${ }^{\text {t"I }}$ uses diamond wheels to sharpen hardened steels, high speed steels, and carbides. The wheels last for years and stay flat for accuracy. Different grits are available from coarse to mirror polishing. With its heavy steel housing, continuous-duty motor, and double-bearing spindle, the GRS ${ }^{\circ}$ Diamond Power Hone ${ }^{\text {tiw }}$ is a sharpener you can depend on for years. Includes 600 grit diamond wheel, quick wheel adaptor. 115 V and 220 V models available.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: |
| C | $\mathbf{2 6 - 4 1 6 0}$ | Diamond Power Hone (without fixture) | $\$ 498.00$ |

GRS ${ }^{\circledR}$ OUICK WHEEL CHANGE ADAPTER (FOR ORIGINAL)
D. Change Power Hone ${ }^{\text {t" }}$ wheels in two seconds. This drive plate assembly replaces the standard wheel knob. To change wheels, you just lift them on and off. Quick wheel change adapter shown with Power Hone system. Sharpening wheel and Power Hone not included.

| Item | Order\# | Description | 1+ |
| :---: | :--- | :--- | ---: |
| D | $\mathbf{2 6 - 4 0 1 9}$ | Wheel Change Adapter | $\$ 69.00$ |

## GRS® ${ }^{\circledR}$ DUAL-ANGLE SHARPENING FIXTURE

E. The dual-angle sharpening fixture holds a wider variety of tools and adjusts to more angles than the standard fixture. With two degree dials, you can set the elevation angle and the rotation angle of each tool. This fixture is accurate and beautifully made. Its degree dials are large and easy to read. All tool gripping surfaces are hardened steel for long life.

## GRS® ${ }^{\circledR}$ QUICK-CHANGE SHARPENING FIXTURE

F. Just insert your tool into the front of the unit and sharpen. The unit has two-degree dials, plus a unique detente system that makes sharpening fast, easy and accurate. Comes with stand.

## GRS ${ }^{\circledR}$ STANDARD SHARPENING FIXTURE

G. You'll sharpen accurate tools because the degree dial lets you set the precise angle. Saves time and gives you a better edge for making the cleanest, smoothest cuts ever. Holds tools with or without handles.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: |
| E | $\mathbf{2 6 - 4 0 0 1}$ | Dual Angle Sharpening Fixture | $\$ 249.00$ |
| F | $\mathbf{2 6 - 4 0 0 0}$ | Quick-Change Sharpening Fixture | $\$ 214.00$ |
| G | $\mathbf{2 6 - 4 0 0 2}$ | Standard Sharpening Fixture | $\$ 138.00$ |

GRS ${ }^{\circledR}$ POWER HONE ACCESSORIES

| Item | Order \# | Description | OD | Grit | Micron | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 6 - 4 0 1 4}$ | Diamond Wheel | $5^{\prime \prime}$ | 260 |  | $\$ 84.15$ | $\$ 89.10$ | $\$ 99.00$ |
| B | $\mathbf{2 6 - 4 0 1 5}$ | Diamond Wheel | $5^{\prime \prime}$ | 600 |  | $\$ 76.50$ | $\$ 81.00$ | $\$ 90.00$ |
| C | $\mathbf{2 6 - 4 0 1 6}$ | Diamond Wheel | $5^{\prime \prime}$ | 1200 |  | $\$ 76.50$ | $\$ 81.00$ | $\$ 90.00$ |
| D | $\mathbf{2 6 - 4 0 1 7}$ | Ceramic Lap | $6^{\prime \prime}$ |  |  | $\$ 183.08$ | $\$ 191.04$ | $\$ 199.00$ |
| E | $\mathbf{2 6 - 4 0 1 8}$ | Wheel Storage Rack |  |  | $\$ 17.98$ | $\$ 19.04$ | $\$ 21.15$ |  |
| F | $\mathbf{2 6 - 4 0 4 3}$ | Diamond Spray Grade - Coarse | $3 \mu$ | $\$ 27.83$ | $\$ 29.04$ | $\$ 30.25$ |  |  |
| G | $\mathbf{2 6 - 4 0 4 2}$ | Diamond Spray Grade - Medium | $1 \mu$ | $\$ 27.83$ | $\$ 29.04$ | $\$ 30.25$ |  |  |
| H | $\mathbf{2 6 - 4 0 4 1}$ | Diamond Spray Grade - Fine | $1 / 2 \mu$ | $\$ 27.83$ | $\$ 29.04$ | $\$ 30.25$ |  |  |
| J | $\mathbf{2 6 - 4 0 4 0}$ | Diamond Spray Grade - Extra Fine | $1 / 4 \mu$ | $\$ 27.83$ | $\$ 29.04$ | $\$ 30.25$ |  |  |



## STEVE LINDSAY TEMPLATE KITS

The Lindsay graver sharpening fixture is a quick way to consistently sharpen $\mathrm{a}^{3} / 32^{\prime \prime}$ square graver point accurately. Using the universal template, the sharpener will grind the patented Uniform-Parallel Point ${ }^{\text {m" }}$ in a variety of configurations, as well as produce other points. A huge benefit of this sharpener is that it is repeatable as far as making a particular point that is normally fussy to produce with adjustable angle type sharpeners. Kit contains a Lindsay sharpening fixture and Uniform-Parallel Point template (Image K).

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| K | $\mathbf{2 6 - 3 9 9 0}$ | Sharpening Fixture without Stones | $\$ 92.55$ |
| L | $\mathbf{2 6 - 3 9 9 1}$ | Universal Template and 4 Diamond Bench Stones | $\$ 234.00$ |
|  | $\mathbf{2 6 - 3 9 9 2}$ | 4 Templates and 4 Diamond Bench Stones | $\$ 305.80$ |



## STEVE LINDSAY TEMPLATES

These templates work with the Lindsay sharpening fixture. They allow you to create the designed point every time flawlessly. Use only with $3 / 32^{\prime \prime}$ square graver.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| M | $\mathbf{2 6 - 3 9 9 7}$ | Universal Uniform-Parallel Point | $\$ 23.95$ |
| N | $\mathbf{2 6 - 3 9 9 7}$ | Roland Baptist Gold Inlay | $\$ 23.95$ |
| P | $\mathbf{2 6 - 3 9 9 7}$ | Dario Cortini Bulino | $\$ 23.95$ |
| Q | $\mathbf{2 6 - 3 9 9 7}$ | Calligraphy Uniform-Parallel Point | $\$ 23.95$ |
| R | $\mathbf{2 6 - 3 9 9 7}$ | $70^{\circ}$ Bulino | $\$ 23.95$ |
| S | $\mathbf{2 6 - 3 9 9 7}$ | Round Bottom | $\$ 23.95$ |
| T | $\mathbf{2 6 - 3 9 9 7}$ | Phil Coggan Bulino | $\$ 23.95$ |
| U | $\mathbf{2 6 - 3 9 9 7}$ | Detailing | $\$ 23.95$ |
| V | $\mathbf{2 6 - 3 9 9 7}$ | Flat and Knife Combo | $\$ 23.95$ |
| W | $\mathbf{2 6 - 3 9 8 9}$ | Sharpening Fixture | $\$ 68.65$ |



DIAMOND BENCH STONES

| Item | Order\# | Grit | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: |
| Y | $\mathbf{2 6 - 3 9 9 3}$ | 260 | $\$ 41.45$ |
| Z | $\mathbf{2 6 - 3 9 9 4}$ | 600 | $\$ 41.45$ |
| AA | $\mathbf{2 6 - 3 9 9 5}$ | 1200 | $\$ 41.45$ |
| AB | $\mathbf{2 6 - 3 9 9 6}$ | 2000 | $\$ 41.45$ |



## GRS® OUICK-CHANGE GRAVER HOLDER

A. Organize your work area and protect your tools by utilizing this great storage system. It comes with 12 different color-coordinating trays and collars so that you can better organize your tools. Collars slide over the tools next to the QC Tool Holder. The color coding system saves time and keeps you organized. The trays are set at an angle for easy removal, and it is easier to see the graver points. The system holds 120 OC tools in a nice compact organized fashion. Includes small plastic magnifier.

Get 12 different colored trays and color-coordinated collars to mark your tools. Each tray holds 10 tools and comes with 10 collars of each color. Includes small plastic magnifier.

| Item | Order \# | Description | Quantity |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{2 6 - 4 1 8 0}$ | OC Storage System |  |  |  | $\$ 53.00$ |  |
|  | $\mathbf{2 6 - 4 1 8 1}$ | OC Storage Trays Set | 12 Piece | $\$ 33.99$ | $\$ 35.47$ | $\$ 36.95$ |  | Q (12 piece assortment)



## GRS® OUICK-CHANGE GRAVER ACCESSORIES

Handle with Holders: Gravers and/or tools mount into these interchangeable " $O C$ " holders, which in turn fit all GRS ${ }^{\oplus}$ " $O C$ " handpieces and GRS ${ }^{\ominus}$ " $0 C$ " sharpening fixture. This allows tools to be changed in three seconds without a wrench. Holders accept square tools up to 2.5 mm , round tools to 3.3 mm . Comes with three QC tool holders.

| Item | Order \# | Description | Per Unit | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | 26-4135 | Handle with 3 Tool Holders Set |  | \$30.50 | \$31.82 | \$33.15 |
| C | 26-4137 | Replacement Holder | 3 Pack | \$16.11 | \$17.06 | \$18.95 |
|  | 26-4138 | Traditional Holder | 10 Pack | \$46.79 | \$49.55 | \$55.05 |
| D | 34-2233 | Extra-Long | 3 Pack | \$21.46 | \$22.73 | \$25.25 |
|  | 34-2234 | Extra-Long | 10 Pack | \$70.21 | \$74.34 | \$82.60 |
| E | 34-2231 | $3 / 32^{\prime \prime}$ Round Holder | 3 Pack | \$17.43 | \$18.45 | \$20.50 |
|  | 34-2229 | $3 / 32^{\prime \prime}$ Round Holder | 10 Pack | \$59.88 | \$63.41 | \$70.45 |
| F | 34-2232 | Soft-Hit OC Holder | 10 Pack | \$27.16 | \$28.76 | \$31.95 |

Gravers handles found on page 238-239


## SET-OFF AND RELIEF ANGLES



## SELECTING THE RIGHT FILE FOR THE JOB

In choosing the correct file for any application, three factors need to be considered: shape, size and cut. Shape and size are more a choice of application, but generally the shape of the file should match the contour of the object being filed. In selecting the cut, it is important to know that files are made in a range of tooth characteristic cuts.

## The two cuts most common to the jeweler are:

Chisel-Cut - Chisel-cut files are the best choice for fast removal as the cut or number of teeth per inch will be higher, however they tend to leave a rough surface. The angle of the chisel-cut is 52-72 degrees.
Edge-Cut - Edge-cut files are generally used for finishing or fine finishing according to the chosen cut or number of teeth per inch. They can run from about 22 teeth per inch in coarse-cut files. Numbers ranging from 00 to 4 grade files are used most by jewelers, 8 is the finest cut and will be requested by the watchmakers. The angle of the edge cut is $50-55$ degrees.

## Other cuts available to the jeweler are:

Single-Cut - Used on very thin sections of the work piece with lighter pressure. Available in needle file shapes in cut 2 , equivalent to 96 teeth per inch, the most common cut for such applications.
Double-Cut - has two series of teeth, one series cuts in much the same manner as a single-cut file, and the second crosses over the first one with a $45-50$ degree angle to shape the chip breaker and the teeth. The chip breaker will avoid having to long chip which may scratch the work piece.
Rasp-Cut - Usually confined to wax work.

## FILE SHAPES

## Barrette



## Square

## Crossing

Three-square

## Equalling



Regular pillar

## Narrow pillar

## Half-round ring

## Warding



Knife

## Flat

## Scale of Cuts



1


2


3


6
8

| TEETH PER CM | $\mathbf{1 2}$ | $\mathbf{1 6}$ | $\mathbf{2 0}$ | $\mathbf{2 5}$ | $\mathbf{3 1}$ | $\mathbf{3 8}$ | $\mathbf{4 6}$ | $\mathbf{5 6}$ | $\mathbf{6 8}$ | $\mathbf{8 4}$ | $\mathbf{1 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TEETH PER INCH | $\mathbf{3 0}$ | $\mathbf{4 1}$ | $\mathbf{5 1}$ | $\mathbf{6 4}$ | $\mathbf{7 9}$ | $\mathbf{9 7}$ | $\mathbf{1 1 7}$ | $\mathbf{1 4 2}$ | $\mathbf{1 7 3}$ | $\mathbf{2 1 3}$ | $\mathbf{2 9 5}$ |
| Escapement Files |  |  |  | 0 |  | 2 |  | 4 | 6 |  |  |
| Handle Files |  | 00 |  | 1 |  |  |  |  |  |  |  |
| Needle Files |  |  | 00 | 0 | 1 | 2 | 3 | 4 | 6 |  |  |
| Precision Files (w/tang) <br> $10 " / 250 \mathrm{~mm}$ | 00 | 0 | 1 | 2 | 3 | 4 |  | 6 |  |  |  |
| Precision Files (w/tang) <br> $4 "-8 " / 100-200 \mathrm{~mm}$ |  | 00 | 0 | 1 | $\mathbf{2}$ | $\mathbf{3}$ | 4 |  | 6 |  |  |
| Precision Files <br> $3^{\prime \prime} / 76 \mathrm{~mm}$ |  |  | 00 | 0 | 1 | 2 | 3 | 4 |  | 3 | 8 |
| Rifflers, Die Sinkers |  |  |  | 0 |  | 2 |  | 4 |  |  |  |

## FILE FACTS

- The most common sizes used by jewelers are from 6 to 8 inches for the tang files and $51 / 2$ to $61 / 4$ inches for the needle files. The escapement files are available only in $51 / 4$ inches.
- On difficult material, such as platinum, it is recommended that a coated file be used such as a Grobet USA Premium file. The coating will provide non-clogging on sticky materials.
- Files kept in drawers, where they can bang into or slide over one another, will result in dulling and chipping of the teeth. Files should always be kept in the original packaging.
- Never hold files by their teeth. Perspiration can cause the file to rust, and the oil from your skin can cause the file to skip.
- Files are designed to cut on the push stroke, or, better yet, the file should be lifted from the surface entirely to allow filings to fall from the teeth as well as to minimize dulling.
- Grease or oils can be removed through the application of chalk, which absorbs them.
- Files should never be oiled for use.



## GROBET USA® WAX FILES

Used for shaping waxes. Coarse, wide-tooth style does not clog as easily as conventional files. Set of six includes one of each shape sold in plastic pouch.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 3 - 9 2 2 0}$ | 6-Piece Wax File Set | $51 / 2^{\prime \prime}$ | $\$ 46.81$ | $\$ 49.56$ | $\$ 55.07$ |



DOUBLE-ENDED WAX FILE
Double-end, double-cut file that has open, coarse teeth used for filing plastics, waxes, and soft materials. One end is coarser than the other.

| Item | Order\# | Length | Width |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{1 +}$ |  |  |  |  |  |
| B | $\mathbf{3 1 - 3 8 4 0}$ | $8^{\prime \prime}$ | 14 mm | $\$ 35.66$ | $\$ 37.76$ | $\$ 41.95$ |
| B1-3850 | $7{ }^{\prime \prime}$ | 12.7 mm | $\$ 25.71$ | $\$ 27.23$ | $\$ 30.25$ |  |

## WAX CARVING FILE SET

Precision wax carving files with pointed tips for fine work. Each file features single cuts, which will not clog, but will leave a smooth surface. Made of stainless steel with Sure-Grip ${ }^{\otimes}$ Handles.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 3 - 9 2 4 0}$ | 3-Piece Wax Carving Kit | $51 / 2 "$ | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |

## SELECTING THE RIGHT FILE FOR THE JOB

In choosing the correct file for any application, three factors need to be considered: shape, size and cut. Shape and size are more a choice of application, but generally the shape of the file should match the contour of the object being filed. In selecting the cut, it is important to know that files are made in a range of tooth characteristic cuts.

## The two cuts most common to the jeweler are:

Chisel-Cut - Chisel-cut files are the best choice for fast removal as the cut or number of teeth per inch will be higher, however they tend to leave a rough surface. The angle of the chisel-cut is 52-72 degrees.
Edge-Cut - Edge-cut files are generally used for finishing or fine finishing according to the chosen cut or number of teeth per inch. They can run from about 22 teeth per inch in coarse-cut files. Numbers ranging from 00 to 4 grade files are used most by jewelers, 8 is the finest cut and will be requested by the watchmakers. The angle of the edge cut is $50-55$ degrees.

## Other cuts available to the jeweler are:

Single-Cut - Used on very thin sections of the work piece with lighter pressure. Available in needle file shapes in cut 2, equivalent to 96 teeth per inch, the most common cut for such applications.
Double-Cut - has two series of teeth, one series cuts in much the same manner as a single-cut file, and the second crosses over the first one with a 45-50 degree angle to shape the chip breaker and the teeth. The chip breaker will avoid having to long chip which may scratch the work piece.
Rasp-Cut — Usually confined to wax work.

GROBET USA ${ }^{\circledR}$ GENUINE SWISS-PATTERN HAND FILES
Known and recognized worldwide as unsurpassed for exceptional durability. Extreme hardness due to chrome-alloy steel and unique manufacturing process.


HALF-ROUND Tapered in width and thickness, coming to a point.
Cut on both sides.

| Order \# | Cut | Width | Length | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1110 | 00 | 5/8" | $6{ }^{\prime \prime}$ | $11 / 64 \mathrm{~mm}$ | \$25.46 | \$26.96 | \$29.95 |
| 31-1120 | 0 | 5/8" | $6 "$ | $11 / 64 \mathrm{~mm}$ | \$25.46 | \$26.96 | \$29.95 |
| 31-1131 | 1 | 5/8" | $6 "$ | $11 / 64 \mathrm{~mm}$ | \$27.16 | \$28.76 | \$31.95 |
| 31-1142 | 2 | 5/8" | $6 "$ | $11 / 64 \mathrm{~mm}$ | \$27.84 | \$29.48 | \$32.75 |


| Order \# | Cut | Width | Length | Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1153 | 3 | 5/8 | $6^{\prime \prime}$ | $11 / 64 \mathrm{~mm}$ | \$29.71 | \$31.46 | \$34.95 |
| 31-1164 | 4 | 5/81 | $6 "$ | $11 / 64 \mathrm{~mm}$ | \$31.45 | \$33.30 | \$37.00 |
| 31-1176 | 6 | 5/8" | $6 "$ | 11/64mm | \$47.60 | \$50.40 | \$56.00 |

HALF-ROUND RING Tapered in width and thickness, coming to a point.
Useful in filing the inside of rings. Cut on both sides.

| Order \# | Cut | Width | Length | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1271 | 00 | $3 / 4{ }^{11}$ | $6 "$ | \% 6 mmm | \$27.63 | \$29.25 | \$32.50 |
| 31-1280 | 0 | $3 / 4{ }^{11}$ | 6 " | 9/64mm | \$27.63 | \$29.25 | \$32.50 |
| 31-1291 | 1 | $3 / 4{ }^{1}$ | $6 "$ | 9/64mm | \$28.48 | \$30.15 | \$33.50 |


| Order \# | Cut | Width | Length | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1302 | 2 | $3 / 4 / 4$ | $6 "$ | 964mm | \$28.48 | \$30.15 | \$33.50 |
| 31-1313 | 3 | $3 / 4{ }^{1 /}$ | $6 "$ | 9/64mm | \$29.33 | \$31.05 | \$34.50 |
| 31-1324 | 4 | $3 / 4{ }^{1}$ | $6 "$ | 9/64mm | \$39.53 | \$41.85 | \$46.50 |

RETTE Tapered in width and thickness, coming to a point. Only flat side is cut, providing safe edge and top.

| Order \# | Cut | Width | Length | Thickness | 12+ | 6+ | 1+ | Order \# | Cut | Width | Length | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-0271 | 00 | 5/8" | $6{ }^{\prime \prime}$ | 4 mm | \$19.34 | \$20.48 | \$22.75 | 31-0302 | 2 | $5 / 81$ | $6{ }^{\prime \prime}$ | 4 mm | \$23.38 | \$24.75 | \$27.50 |
| 31-0280 | 0 | 5/8" | $6 "$ | 4 mm | \$20.19 | \$21.38 | \$23.75 | 31-0314 | 4 | 5/8" | $6{ }^{\prime \prime}$ | 4 mm | \$26.14 | \$27.68 | \$30.75 |
| 31-0291 | 1 | 5/8" | $6 "$ | 4 mm | \$22.74 | \$24.08 | \$26.75 |  |  |  |  |  |  |  |  |



REGULAR PILLAR Parallel in width and tapered in thickness. Perfect for inside square cuts and filing slots.

| Order \# | Cut | Width | Length | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| 31-2430 | 00 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 \mathrm{~mm}$ | $\$ 15.34$ | $\$ 16.25$ | $\$ 18.05$ |
| $\mathbf{3 1 - 2 4 4 0}$ | 0 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 \mathrm{~mm}$ | $\$ 15.47$ | $\$ 16.38$ | $\$ 18.20$ |
| $\mathbf{3 1 - 2 4 5 1}$ | 1 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 \mathrm{~mm}$ | $\$ 16.24$ | $\$ 17.19$ | $\$ 19.10$ |
| $\mathbf{3 1 - 2 4 6 2}$ | 2 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 \mathrm{~mm}$ | $\$ 14.37$ | $\$ 15.21$ | $\$ 16.90$ |


| Order\# | Cut | Width | Length | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| 31-2473 | 3 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 3 \mathrm{~mm}$ | $\$ 17.43$ | $\$ 18.46$ | $\$ 20.51$ |
| $\mathbf{3 1 - 2 4 8 4}$ | 4 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 m \mathrm{~mm}$ | $\$ 19.51$ | $\$ 20.66$ | $\$ 22.95$ |
| $\mathbf{3 1 - 2 4 9 6}$ | 6 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | $5 / 32 \mathrm{~mm}$ | $\$ 29.45$ | $\$ 31.19$ | $\$ 34.65$ |

NARROW PILLAR These files are parallel in width and tapered in thickness to create perfectly flat filing. Double-cut top and bottom, both edges are safe.

| Order \# | Cut | Width | Length | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 1 - 2 1 3 2}$ | 2 | $3 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | 4 mm | $\$ 23.63$ | $\$ 25.02$ | $\$ 27.80$ |

CROSSING Half-round on two sides, with one side having a larger radius than the other. Tapered in width and thickness. Cut and usable to the point. Used primarily for filing interior curved surfaces.

| Order\# | Cut | Width | Length | Thickness |  | 12+ | 6+ | 1+ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 0 5 9 0}$ | 0 | $5 / 8^{\prime \prime}$ | $6^{\prime \prime}$ | $11 / 64 \mathrm{~mm}$ | $\$ 38.04$ | $\$ 40.28$ | $\$ 44.75$ |  |
| $\mathbf{3 1 - 0 6 0 2}$ | 2 | $5 / 8^{\prime \prime}$ | $6^{\prime \prime}$ | $11 / 64 \mathrm{~mm}$ | $\$ 40.80$ | $\$ 43.20$ | $\$ 48.00$ |  |
| $\mathbf{3 1 - 0 6 1 4}$ | 4 | $5 / 8^{\prime \prime}$ | $6^{\prime \prime}$ | $11 / 64 \mathrm{~mm}$ | $\$ 45.05$ | $\$ 47.70$ | $\$ 53.00$ |  |



PILLAR CHECKERING

| Order \# | Cut | Width | Length | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 2 1 1 8}$ | 0 | $3 / 44^{\prime \prime}$ | $6 "$ | $4 m m$ | $\$ 32.94$ | $\$ 34.88$ | $\$ 38.75$ |

## FLAT

Parallel in width and thickness. One edge is safe.

| Order \# | Cut | Width | Length | Thickness | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1431 | 00 | $4564{ }^{\text {" }}$ | $6 "$ | 4 mm | \$15.30 | \$16.20 | \$18.00 |
| 31-1440 | 0 | ${ }^{45} / 64{ }^{4}$ | $6 "$ | 4 mm | \$16.24 | \$17.19 | \$19.10 |
| 31-1451 | 1 | $4564{ }^{17}$ | $6 "$ | 4 mm | \$16.41 | \$17.37 | \$19.30 |
| 31-1462 | 2 | $45644^{17}$ | $6 "$ | 4 mm | \$16.49 | \$17.46 | \$19.40 |


| Order \# | Cut | Width | Length | Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-1473 | 3 | $45 / 64$ " | $6 "$ | 4 mm | \$18.66 | \$19.76 | \$21.95 |
| 31-1484 | 4 | ${ }^{45} / 64^{\prime \prime}$ | $6 "$ | 4 mm | \$20.53 | \$21.74 | \$24.15 |
| 31-1496 | 6 | $4564{ }^{\prime \prime}$ | $6{ }^{\prime \prime}$ | 4 mm | \$30.39 | \$32.17 | \$35.75 |

## THREE-SQUARE

Gradually tapered, cut, and workable to the point.

| Order \# | Cut | Width | Length | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 3 7 2 0}$ | 0 | $23 / 64^{\prime \prime}$ | $6^{\prime \prime}$ | 4 mm | $\$ 18.27$ | $\$ 19.35$ | $\$ 21.50$ |  |
| $\mathbf{3 1 - 3 7 3 1}$ | 1 | $23 / 64^{\prime \prime}$ | $6^{\prime \prime}$ | 4 mm | $\$ 18.27$ | $\$ 19.35$ | $\$ 21.50$ |  |


| Order \# | Cut | Width | Length | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 3 7 4 2}$ | 2 | $23 / 64^{\prime \prime}$ | $6^{\prime \prime}$ | 4 mm | $\$ 19.34$ | $\$ 20.48$ | $\$ 22.75$ |
| $\mathbf{3 1 - 3 7 5 4}$ | 4 | $23 / 4^{\prime \prime}$ | $6^{\prime \prime}$ | 4 mm | $\$ 21.68$ | $\$ 22.95$ | $\$ 25.50$ |

## FILE CLEANER



Steel, wire bristles mounted on wooden handle. Works great in removing small particles that clog teeth and reduce a files ability to cut.

| Order\# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 3 - 9 8 1 0}$ | $10 "$ | $\$ 8.33$ | $\$ 8.82$ | $\$ 9.80$ |

## GROBET USA ${ }^{\oplus}$ PREMIUM HAND FILES

The highest execution standard on files. The surface has a Rockwell hardness of 72HRC, the hardest steel known. Will give a better performance on hard-to-file surfaces. Resistant to corrosion, no need to grease these files. Has a longer life than the standard file. An excellent file to use on platinum. Use 37-8794 file handle.


PILLAR


HALF-ROUND

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | + $1+$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8060 | 0 | $6{ }^{\prime \prime}$ | 53/4" | \$34.85 | \$36.90 | \$41.00 | 31-8062 | 2 | $6 "$ | 53/4" | \$34.85 | \$36.90 | \$41.00 |



HALF-ROUND SLIM

| Order \# | Cut | Length | Cutting Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8064 | 0 | $6 "$ | $53 / 41$ | \$36.00 | \$38.12 | \$42.35 | 31-8066 | 2 | $6{ }^{\prime \prime}$ | $53 / 4$ " | \$36.89 | \$39.06 | . 40 |



ROUND


## THREE-SQUARE



## SOUARE

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | + 1+ | Order \# | Cut | Length | Cutting Length | 12+ | 6+ | + 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8076 | 0 | 8" | 53/4" | \$19.55 | \$20.70 | \$23.00 | 31-8078 | 2 | $8{ }^{\prime \prime}$ | 53/4" | \$22.64 | \$23.97 | 7 \$26.63 |

BARRETTE

| Order \# | Cut | Length | Cutting Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ |  | + ${ }^{1+}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8048 | 0 | $6{ }^{\prime \prime}$ | 53/4" | \$29.54 | \$31.28 | \$34.75 | 31-8050 | 2 | $6{ }^{\prime \prime}$ | 53/4" | \$29.54 | \$31.28 | 28 \$34.75 |

HAND

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | + 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8052 | 0 | $6{ }^{\prime \prime}$ | $53 / 41$ | \$20.15 | \$21.33 | \$23.70 | 31-8054 | 2 | $6{ }^{\prime \prime}$ | $53 / 41$ | \$20.15 | \$21.33 | \$23.70 |

## GROBET USA ${ }^{\oplus}$ PREMIUM NEEDLE FILES

The highest execution standard on files. The surface has a Rockwell hardness of 72HRC, the hardest steel known. Will give a better performance on hard-to-file surfaces. Resistant to corrosion, no need to grease these files. Has a longer life
 than the standard file. An excellent file to use on platinum. Use 37-8794 file handle.

## BARRETTE

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8000 | 00 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{\prime \prime}$ | \$14.20 | \$15.04 | \$16.71 | 31-8004 | 6 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{\prime \prime}$ | \$14.24 | \$15.08 | \$16.75 |
| 31-8002 | 0 | $7{ }^{\prime \prime}$ | $31 / 4$ " | \$14.24 | \$15.08 | \$16.75 |  |  |  |  |  |  |  |

HALF-ROUND

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8012 | 00 | $7{ }^{\prime \prime}$ | $31 / 4$ " | \$16.10 \$ | \$17.05 \$ | \$18.94 | 31-8016 | 2 | $7{ }^{\prime \prime}$ | $31 / 4 "$ | \$16.11 | \$17.06 | \$18.95 |
| 31-8014 | 0 | $7{ }^{\prime \prime}$ | $31 / 4 "$ | \$16.11 \$ | \$17.06 \$ | \$18.95 |  |  |  |  |  |  |  |

## EQUALLING

| Order \# | Cut | Length | Cutting Length | 12+ |  | 6+ 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8006 | 00 | $7{ }^{\prime \prime}$ | $31 / 4 "$ | \$14.20 | \$15.04 | \$16.71 | 31-8010 | 2 | $7{ }^{7}$ | $31 / 4$ " | \$14.24 | \$15.08 | \$16.75 |

GROBET USA ${ }^{\oplus}$ PREMIUM NEEDLE FILES
Made in Switzerland.


SOUARE

| Order\# | Cut | Length | Cutting Length | 12+ | $6+$ | + 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | + 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8030 | 00 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{\prime \prime}$ | \$13.39 | \$14.18 | \$15.75 | 31-8034 | 2 | $7{ }^{7}$ | $31 / 4{ }^{\prime \prime}$ | \$13.39 | \$14.18 | \$ \$15.75 |
| 31-8032 | 0 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{\prime \prime}$ | \$13.39 | \$14.18 | \$15.75 |  |  |  |  |  |  |  |

$\qquad$
THREE-SOUARE

$\qquad$

WARDING

| Order\# | Cut | Length | Cutting Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{3 1 - 8 0 1 8}$ | 00 | $7^{\prime \prime}$ | $314^{\prime \prime}$ | $\$ 13.39$ | $\$ 14.18$ | $\$ 15.75$ |  |
| $\mathbf{3 1 - 8 0 2 0}$ | 0 | $7^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 13.39$ | $\$ 14.18$ | $\$ 15.75$ |  |


| Order\# | Cut | Length | Cutting Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{3 1 - 8 0 2 2}$ | 2 | $7^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 13.39$ | $\$ 14.18$ | $\$ 15.75$ |

$\qquad$


ROUND

| Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | Cutting Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-8036 | 00 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{11}$ | \$13.36 | \$14.15 | \$15.72 | 31-8040 | 2 | $7{ }^{\prime \prime}$ | $31 / 4{ }^{\prime \prime}$ | \$13.39 | \$14.18 | \$15.75 |
| 31-8038 | 0 | $7{ }^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | \$13.39 | \$14.18 | \$15.75 |  |  |  |  |  |  |  |

## SIX "YELLOW TANG" FILES SET

For platinum, stainless steel, and other hard to file materials. Little to no clogging. Highly resistant to corrosion. Set includes one of each: barrette, equalling, half-round, three-squared,
square, and round.

| Order \# | Cut | Length | Cutting Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | :--- | :--- |
| $\mathbf{3 1 - 8 0 4 2}$ | 00 | $7^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 66.02$ | $\$ 69.90$ | $\$ 77.67$ |  |
| $\mathbf{3 1 - 8 0 4 4}$ | 0 | $7^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 66.00$ | $\$ 69.89$ | $\$ 77.65$ |  |
| $\mathbf{3 1 - 8 0 4 6}$ | 2 | $7^{\prime \prime}$ | $31 / 4^{\prime \prime}$ | $\$ 66.00$ | $\$ 69.89$ | $\$ 77.65$ |  |



Files



ASSORTED NEEDLE FILES
Sets consist of one each: barrette, crossing, equalling, half-round, joint round edge, knife, marking, round, splitting, square, 3 -square, and warding files. Knurled handles.

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 2 1 4 1}$ | 0 | $51 / 2 "$ | $\$ 89.34$ | $\$ 94.59$ | $\$ 105.10$ |
| $\mathbf{3 1 - 2 1 4 2}$ | 2 | $51 / 2 "$ | $\$ 89.34$ | $\$ 94.59$ | $\$ 105.10$ |
| $\mathbf{3 1 - 2 1 4 3}$ | 4 | $51 / 2 "$ | $\$ 95.58$ | $\$ 101.21$ | $\$ 112.45$ |

GROBET USA ${ }^{\oplus}$ NEEDLE FILES
Precision files for exacting work. Made of the highest quality steel, they are machined and finished for precision shape and balance.


## EQUALLING

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5120 | 0 | $73 / 4{ }^{11}$ | \$8.88 | \$9.40 | \$10.45 | 31-5144 | 4 | $73 / 41$ | \$8.88 | \$9.40 | \$10.45 |
| 31-5132 | 2 | 73/4" | \$8.88 | \$9.40 | \$10.45 |  |  |  |  |  |  |



## HALF-ROUND

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5310 | 0 | 73/4" | \$11.01 | \$11.66 | \$12.95 | 31-5354 | 4 | $73 / 4{ }^{\prime \prime}$ | \$11.86 | \$12.56 | \$13.95 |
| 31-5332 | 2 | $73 / 41$ | \$11.01 | \$11.66 | \$12.95 |  |  |  |  |  |  |



THREE-SOUARE

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-6450 | 0 | $73 / 41$ | \$9.18 | \$9.72 | \$10.80 | 31-6494 | 4 | $73 / 4{ }^{11}$ | \$9.82 | \$10.40 | \$11.55 |
| 31-6472 | 2 | $73 / 41$ | \$9.18 | \$9.72 | \$10.80 | 31-6506 | 6 | $73 / 4{ }^{11}$ | \$28.01 | \$29.66 | \$32.95 |

KNIFE

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5630 | 0 | $73 / 4{ }^{\prime \prime}$ | \$11.01 | \$11.66 | \$12.95 | 31-5654 | 4 | $73 / 4{ }^{\prime \prime}$ | \$11.01 | \$11.66 | \$12.95 |
| 31-5642 | 2 | 73/4" | \$11.01 | \$11.66 | \$12.95 |  |  |  |  |  |  |

ROUND

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5970 | 0 | 73/4" | \$8.46 | \$8.96 | \$9.95 | 31-5994 | 4 | 73/4" | \$9.31 | \$9.86 | \$10.95 |

## 4 nidic

BARRETTE

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-4660 | 0 | $73 / 4{ }^{11}$ | \$9.78 | \$10.35 | \$11.50 | 31-4704 | 4 | $73 / 41$ | \$10.16 | \$10.76 | \$11.95 |
| 31-4682 | 2 | $73 / 4{ }^{\text {" }}$ | \$9.78 | \$10.35 | \$11.50 |  |  |  |  |  |  |

CROSSING

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-4940 | 0 | $73 / 4{ }^{\text {" }}$ | \$10.16 | \$10.76 | \$11.95 | 31-4964 | 4 | 73/4" | \$11.86 | \$12.56 | \$13.95 |
| 31-4952 | 2 | $73 / 4{ }^{11}$ | \$10.16 | \$10.76 | \$11.95 |  |  |  |  |  |  |

## EQUALLING

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5051 | 00 | 61/4" | \$7.61 | \$8.06 | \$8.95 | 31-5104 | 4 | 61/4" | \$7.61 | \$8.06 | \$8.95 |
| 31-5060 | 0 | 61/4" | \$7.61 | \$8.06 | \$8.95 | 31-5116 | 6 | 61/4" | \$8.46 | \$8.96 | \$9.95 |
| 31-5082 | 2 | 61/4" | \$7.61 | \$8.06 | \$8.95 |  |  |  |  |  |  |



HALF-ROUND

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5241 | 00 | 61/4" | \$8.88 | \$9.40 | \$10.45 | 31-5294 | 4 | 61/4" | \$8.93 | \$9.45 | \$10.50 |
| 31-5250 | 0 | $61 / 41$ | \$8.88 | \$9.40 | \$10.45 | 31-5306 | 6 | $61 / 4{ }^{11}$ | \$12.03 | \$12.74 | \$14.15 |

## Files



## GROBET USA ${ }^{\oplus}$ NEEDLE FILES

Grobet, genuine precision files.


SQUARE

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-6191 | 00 | $61 / 4$ " | \$9.78 | \$10.35 | \$11.50 | 31-6244 | 4 | $61 / 41$ | \$10.16 | \$10.76 | \$11.95 |
| 31-6200 | 0 | 61/4" | \$9.78 | \$10.35 | \$11.50 | 31-6256 | 6 | $61 / 4 "$ | \$11.01 | \$11.66 | \$12.95 |
| 31-6222 | 2 | $61 / 4 "$ | \$9.78 | \$10.35 | \$11.50 |  |  |  |  |  |  |

THREE-SOUARE

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 6 3 7 1}$ | 00 | $61 / 4^{\prime \prime}$ | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |
| $\mathbf{3 1 - 6 3 8 0}$ | 0 | $61 / 4^{\prime \prime}$ | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |
| $\mathbf{3 1 - 6 4 0 2}$ | 2 | $61 / 4^{\prime \prime}$ | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |


| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 6 4 2 4}$ | 4 | $61 / 4^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |
| $\mathbf{3 1 - 6 4 3 6}$ | 6 | $61 / 4^{\prime \prime}$ | $\$ 10.16$ | $\$ 10.76$ | $\$ 11.95$ |

KNIFE

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-5580 | 0 | 61/4" | \$8.12 | \$8.60 | \$9.55 | 31-5614 | 4 | 61/4" | \$9.01 | \$9.54 | \$10.60 |
| 31-5592 | 2 | 61/4" | \$8.12 | \$8.60 | \$9.55 | 31-5626 | 6 | 61/4" | \$10.50 | \$11.12 | \$12.35 |

ROUND

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 5 9 0 1}$ | 00 | $61 / 4^{\prime \prime}$ | $\$ 7.14$ | $\$ 7.56$ | $\$ 8.40$ |
| $\mathbf{3 1 - 5 9 1 0}$ | 0 | $61 / 4^{\prime \prime}$ | $\$ 7.14$ | $\$ 7.56$ | $\$ 8.40$ |
| $\mathbf{3 1 - 5 9 3 2}$ | 2 | $61 / 4^{\prime \prime}$ | $\$ 7.14$ | $\$ 7.56$ | $\$ 8.40$ |


| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 5 9 5 4}$ | 4 | $61 / 4^{\prime \prime}$ | $\$ 7.74$ | $\$ 8.19$ | $\$ 9.10$ |
| $\mathbf{3 1 - 5 9 6 6}$ | 6 | $61 / 4^{\prime \prime}$ | $\$ 8.16$ | $\$ 8.64$ | $\$ 9.60$ |

## BARRETTE

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-4581 | 00 | 61/4" | \$7.14 | \$7.56 | \$8.40 | 31-4634 | 4 | $61 / 4{ }^{\prime \prime}$ | \$7.10 | \$7.52 | \$8.35 |
| 31-4590 | 0 | 61/4" | \$7.14 | \$7.56 | \$8.40 | 31-4646 | 6 | $6114{ }^{\prime \prime}$ | \$10.97 | \$11.61 | \$12.90 |
| 31-4612 | 2 | $61 / 41$ | \$7.14 | \$7.56 | \$8.40 |  |  |  |  |  |  |

## CROSSING

| Order \# | Cut | Length | 12+ | 6+ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-4900 | 0 | 61/4" | \$8.88 | \$9.40 | \$10.45 | 31-4924 | 4 | $61 / 4^{\prime \prime}$ | \$8.88 | \$9.40 | \$10.45 |
| 31-4912 | 2 | 61/4" | \$8.88 | \$9.40 | \$10.45 | 31-4936 | 6 | 61/4" | \$10.50 | \$11.12 | \$12.35 |

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GROBET USA ${ }^{\oplus}$ ESCAPEMENT FILES
Grobet, genuine precision files. Known as the square handle needle file.


BARRETTE

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 1 - 7 0 0 0}$ | 0 | $51 / 2^{11}$ | $\$ 13.35$ | $\$ 14.13$ | $\$ 15.70$ |
| $\mathbf{3 1 - 7 0 1 2}$ | 2 | $51 / 2^{\prime \prime}$ | $\$ 13.35$ | $\$ 14.13$ | $\$ 15.70$ |
| $\mathbf{3 1 - 7 0 3 4}$ | 4 | $51 / 2^{\prime \prime}$ | $\$ 14.37$ | $\$ 15.21$ | $\$ 16.90$ |


| Order\# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | ---: |
| $\mathbf{3 1 - 7 0 4 6}$ | 6 | $51 / 22^{\prime \prime}$ | $\$ 15.13$ | $\$ 16.02$ | $\$ 17.80$ |
| $\mathbf{3 1 - 7 0 5 0}$ | 8 | $51 / 2^{\prime \prime}$ | $\$ 15.43$ | $\$ 16.34$ | $\$ 18.15$ |

CROSSING

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-7142 | 2 | $51 / 2$ " | \$14.37 | \$15.21 | \$16.90 | 31-7166 | 6 | $51 / 2{ }^{\prime \prime}$ | \$16.28 | \$17.24 | \$19.15 |
| 31-7154 | 4 | $51 / 2^{\prime \prime}$ | \$16.45 | \$17.42 | \$19.35 |  |  |  |  |  |  |



EQUALLING


HALF-ROUND

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-7240 | 0 | $51 / 21$ | \$14.37 | \$15.22 | \$16.91 | 31-7286 | 6 | $51 / 21$ | \$15.43 | \$16.34 | \$18.15 |
| 31-7252 | 2 | $51 / 2^{11}$ | \$14.41 | \$15.26 | \$16.95 | 31-7290 | 8 | $51 / 2^{\prime \prime}$ | \$17.81 | \$18.86 | \$20.95 |



ROUND

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-7420 | 00 | $51 / 21$ | \$12.07 | \$12.78 | \$14.20 | 31-7466 | 6 | $51 / 2^{\prime \prime}$ | \$12.33 | \$13.05 | \$14.50 |
| 31-7432 | 2 | 51/2" | \$12.07 | \$12.78 | \$14.20 | 31-7470 | 8 | 51/2" | \$14.15 | \$14.99 | \$16.65 |
| 31-7454 | 4 | $51 / 21$ | \$12.33 | \$13.05 | \$14.50 | 31-7526 | 6 | $51 / 2^{\prime \prime}$ | \$9.89 | \$9.89 | \$9.89 |

Files

three-square

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-7600 | 0 | 51/2" | \$13.31 | \$14.09 | \$15.66 | 31-7636 | 6 | $51 / 21$ | \$15.34 | \$16.25 | \$18.05 |
| 31-7612 | 2 | $51 / 2^{11}$ | \$13.35 | \$14.13 | \$15.70 | 31-7637 | 8 | $51 / 2^{11}$ | \$15.43 | \$16.34 | \$18.15 |
| 31-7624 | 4 | $51 / 21$ | \$14.15 | \$14.99 | \$16.65 |  |  |  |  |  |  |



KNIFE

| Order\# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $31-7336$ | 6 | $51 / 2^{\prime \prime}$ | $\$ 18.53$ | $\$ 19.62$ | $\$ 21.80$ |



THREE-SQUARE

| Order \# | Cut | Length | 12+ | $6+$ | 1+ | Order \# | Cut | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-7576 | 6 | $51 / 2$ " | \$18.53 | \$19.62 | \$21.80 | 31-7627 | 4 | $51 / 2$ " | \$14.03 | \$14.85 | \$16.50 |
| 31-7625 | 0 | $51 / 2$ " | \$13.09 | \$13.86 | \$15.40 | 31-7629 | 8 | $51 / 2$ " | \$16.28 | \$17.24 | \$19.15 |
| 31-7626 | 2 | $51 / 2$ " | \$13.09 | \$13.86 | \$15.40 |  |  |  |  |  |  |



## FILE SET

Habilis ${ }^{\circ}$ files are the in-between files. Perfect for those jobs too large for the needle but too small for the regular file. Comes with built-in handle and are excellent for shaping. Sold in sets of 5 .

| Order\# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 3 - 8 3 0 1}$ | 00 | $81 / 21$ | $\$ 65.36$ | $\$ 69.21$ | $\$ 76.90$ |
| $\mathbf{3 3 - 8 3 0 2}$ | 1 | $81 / 2^{\prime \prime}$ | $\$ 59.63$ | $\$ 63.14$ | $\$ 70.15$ |
| $\mathbf{3 3 - 8 3 0 5}$ | 126 | Grit Diamond |  |  | $\$ 237.10$ |



## Shop Set Up SERVICE

Is your shop ready for a major renovation? Or, do a few pieces of equipment need updating?
Turn to Stuller's Tools Tech team to get the job done right.
We'll work with you to achieve the right balance of equipment, space, and budget to take your shop to the next level. Upgrade your technology and get more done in less time with improved safety measures.


## POLISHING

Work with our team to setup the best polishing shop for your business. We will work with you to select the right equipment for the basic jobs while also keeping up with the latest technology.


## CASTING

Control the entire jewelry making process by casting in your shop. Work with us to improve your casting processes by stocking up on the latest equipment for today's resins and waxes.


## DIGITAL MANUFACTURING

Forge into the future of custom jewelry and create your customers' dream piece with the latest digital manufacturing technology. Increase your manufacturing and design capabilities by designing digitally.

## What do our customers say?

Working with the Stuller team was a dream come true. We only had two and a half months before our target date for being open. The team provided everything we needed to equip our entire shop. All new state of the art equipment and tools!

I can say that the whole experience was typical Stuller.
Everything was done on time and to absolute near perfection.

Files


ECONOMY NEEDLE FILE SET
May vary on individual file shapes and sizes.

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 6 8 4 0}$ | 2 | $51 / 2^{\prime \prime}$ | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |

## MASCOT® UTILITY FILE SET

Set consists of one of each of six American pattern file shapes: square, half-round, triangular, round, flat, and warding. Wooden file handle is treated with a smooth lacquer finish, which feels good in your hand. Performs wonderfully and even looks great on your workbench.


| Order\# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 3 - 9 2 3 5}$ | $7^{\prime \prime}$ | $4^{\prime \prime}$ | $\$ 9.99$ | $\$ 10.58$ | $\$ 11.75$ |



## 4" MINI-NEEDLE FILE SET

Mini economy needle files to get into tight spots and tiny settings. Set may vary on individual shapes and sizes. Use with 37-8790 handle.

| Order \# | Cut | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 1 - 6 8 5 2}$ | 2 | $4^{\prime \prime}$ | $\$ 8.80$ | $\$ 9.32$ | $\$ 10.35$ |



## BROACHES SET

Set of six broaches with plastic handles. Sizes included are Numbers 46 through 72 according to English Stubs Gauge. Five-sided. Has a regular taper and perfect finish. Used for general purpose work such as cutting, cleaning, and finishing. Made in Germany.


| Order \# | Stub Range | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | :---: |
| $\mathbf{1 5 - 5 0 6 0}$ | $43-72$ | $\$ 13.09$ | $\$ 13.86$ | $\$ 15.40$ |



ASSORTMENT BROACH CUTTING SETS
Pen-sized aluminum holder/handle with $3 / 8^{\text {" }}$ diameter anodized barrel and pocket clip. Holds $51 / 2$ " diamond needle files with shortened shanks that are stored in the barrel. Handle has non-slip finger grip surface for positive control. An easy, convenient way to keep files at your
fingertips. Round broach set for general purpose work.

| Item | Order\# | Style | Stub Range | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{1 5 - 5 0 5 0}$ | Cutting | $15-70$ | $\$ 35.10$ | $\$ 37.17$ | $\$ 41.30$ |
| B | $\mathbf{1 5 - 5 0 5 5}$ | Round | $55-80$ | $\$ 29.58$ | $\$ 31.32$ | $\$ 34.80$ |



## DOUBLE-ENDED RIFFLER FILE SET

Six-inch long, double-ended, riffler files. Shipped in a vinyl
pouch for convenience. Note: Use proper eye protection.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 1 - 9 9 1 0}$ | $6 "$ | $\$ 13.22$ | $\$ 14.00$ | $\$ 15.55$ |

DIAMOND NEEDLE FILE SET
Made of fine steel with a diamond coating used for precision filing jobs. The diamond particles are electroplated onto the surface of the metal.

| Order \# | Description | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 33-9500 | Medium Grit Needle File Set | $51 / 21$ | \$36.55 | \$38.70 | \$43.00 |
| INDIVIDUAL FILES |  |  |  |  |  |
| 33-9501 | Equalling | 51/2" | \$9.27 | \$9.82 | \$10.91 |
| 33-9502 | Three-Square | 51/2" | \$9.27 | \$9.81 | \$10.90 |
| 33-9503 | Half-Round | 51/2" | \$9.27 | \$9.81 | \$10.90 |
| 33-9504 | Square | 51/2" | \$9.27 | \$9.81 | \$10.90 |
| 33-9505 | Round | $51 / 2^{\prime \prime}$ | \$9.27 | \$9.81 | \$10.90 |

## 3M ${ }^{\circledR}$ DIAMOND FILE SET

Diamond files can cut your finishing time in half. These flex diamond files are made of a rigid plastic with flex diamond laminate on the surface.
These files are ideal for handwork on small and difficult to reach areas.
There is no better sanding tool on the market for the price.
Shapes in set:

- Flat $\left(3 / 4^{11} \times 1 / 2^{11}\right)$

- Flat (1/2" x $13 / 4^{\prime \prime}$ )
- Half Round ( $\left.3 / 8^{\prime \prime} \times 13^{\prime \prime} 4^{\prime \prime}\right)$


| Order\# | Color | Grit | Micron | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | ---: |
| $\mathbf{1 0 - 8 0 7 1}$ | Red | 200 | $74 \mu$ | $\$ 29.11$ | $\$ 30.83$ | $\$ 34.25$ |

## FILE HANDLES

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{3 7 - 7 8 5 6}$ | Skroo-Zon Wooden Handle <br> $(6 "$ F Files Only) | $\$ 2.64$ | $\$ 2.79$ | $\$ 3.10$ |
| B | $\mathbf{3 7 - 7 8 4 6}$ | Threaded Plastic File Handle | $\$ 3.27$ | $\$ 3.47$ | $\$ 3.85$ |

NEEDLE FILE HANDLES

| C | $37-8336$ | Hardwood for Metal Ferrule 4" $\mathrm{x}^{5 / 8 "}$ | $\$ 0.94$ | $\$ 0.99$ | $\$ 1.10$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | $37-8330$ | Hardwood for Metal Ferrule 4" $\mathrm{x}^{3 / 8} 8^{\prime \prime}$ | $\$ 0.94$ | $\$ 0.99$ | $\$ 1.10$ |

## ALUMINUM FILE HANDLES

These needle-file handles are an entirely different approach to file handles. Handles are made of high-grade, anodized aluminum with steel chucks and are knurled for ease of handling. The steel chucks are fixed into the shaft so when the knurled sleeve is unscrewed, the chuck will quickly release the file. This handle could possibly be the needle-file handle to last a lifetime. These handles have been tested and found superior to all other handles.

| Item | Order \# | Needle File | Length | Diameter | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 37-8790 | $4{ }^{\prime \prime}$ | 41/2" | $3 / 8{ }^{\prime \prime}$ | \$7.27 | \$7.70 | \$8.55 |
| F | 37-8792 | $51 / 2 \mathrm{l}-61 / 4{ }^{11}$ | $41 / 2^{11}$ | $1 / 2{ }^{1 /}$ | \$7.99 | \$8.46 | \$9.40 |
| G | 37-8794 | $61 / 4 "-73 / 4 "$ | 41/2" | 1/2" | \$8.12 | \$8.60 | \$9.55 |




## FOREDOM® 2220 JEWELER'S KIT

The $1 / 6 \mathrm{HP}$ reversible SR Motor with FCT foot-operated speed control, H. 20 Handpiece with chuck key, and 43-piece accessory kit offers superior performance and combines all of the features expected. H. 20 Handpiece comes with a 1.5 mm allen wrench to adjust collet tension. SR Motor operates in both forward and reverse rotation and comes with a standard 39 " inner and outer sheath and shaft.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: |
| A | $\mathbf{3 4 - 2 2 4 2}$ | SR Motor with H.20 Handpiece | $\$ 245.00$ |
| B | $\mathbf{3 4 - 2 3 7 5}$ | H.20 Handpiece | $\$ 82.50$ |
| C | $\mathbf{3 4 - 2 1 5 7}$ | Motor Maintenance Kit 10 | $\$ 16.95$ |




FOREDOM ${ }^{\circledR} 2220$ JEWELER'S KIT
The $1 / 6 \mathrm{HP}$ reversible SR Motor with FCT foot-operated speed control, H. 30 Handpiece with chuck key, and accessory kit offers superior performance and combines all of the features expected. Operates in both forward and reverse rotation.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| D | $\mathbf{3 4 - 2 2 4 3}$ | SR Motor with H. 30 Handpiece | $\$ 229.00$ |

ACCESSORIES

| E | $\mathbf{3 4 - 2 2 1 5}$ | H.30 Handpiece | $\$ 47.00$ |
| :---: | :---: | :--- | :--- |
| F | $\mathbf{3 4 - 2 1 5 8}$ | Motor Maintenance Kit 8 | $\$ 16.95$ |



## FOREDOM ${ }^{\oplus}$ TX300 JEWELER'S KIT

The TX permanent-magnet DC $1 / 3 \mathrm{HP}$ motor delivers more torque and complete control than any other flexible shaft power tool. The TX has more torque in the low, medium, and full-speed ranges than standard motors. It offers smooth and controlled acceleration. Ideal for stone setting, wax carving, and high-speed polishing. Kit Includes:

- TX Permanent-Magnet Motor, $1 / 3 \mathrm{HP}$
- H. 30 Handpiece with chuck key
- TXR Foot-Operated Speed Control
- 43-piece accessory kit

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | :---: |
| G | $\mathbf{3 4 - 2 2 5 5}$ | TX300 Motor with H.30 Handpiece | $\$ 279.00$ |
| H | $\mathbf{3 4 - 2 2 1 5}$ | H.30 Handpiece | $\$ 47.00$ |
| ACCESSORIES |  |  |  |
| J | 34-2286 | TXR Foot Control | $\$ 47.65$ |
| K | $\mathbf{3 4 - 2 1 5 6}$ | Maintenance Kit 16 | $\$ 21.15$ |



## FOREDOM ${ }^{\circledR}$ STONE SETTING KIT

This high-torque/low-speed motor and Quick Change handpiece combination make this an ideal kit for stone setting, drilling, and other low-speed applications. Kit includes:

- LX Permanent-Magnet Motor high-torque/low-speed, 5,000 RPM
- H. 18 Quick Change Handpiece
- TXR Foot-Operated Speed Control
- Accessory kit tray

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{3 4 - 2 2 4 0}$ | Stone Setting Kit | $\$ 329.95$ |
| ACCESSORIES |  |  |  |
| B | $\mathbf{3 4 - 2 2 1 3}$ | H.18 Handpiece | $\$ 120.00$ |
| C | $\mathbf{3 4 - 2 1 5 6}$ | Maintenance Kit 16 | $\$ 21.15$ |

## FOREDOM® POWERGRAVER KIT WITH SETTING ACCESSORIES

Ideal for bead, prong, channel, hammer, and bezel setting as well as engraving and other decorative work. The PowerGraver provides a power assist to stone setting and engraving operations. The 2293 PowerGraver kit is a dedicated system with specialized components. Its new permanent magnet Series PGX (formerly PG ) motor is designed for high torque-low speed applications with permanently lubricated ball bearings for quiet, trouble-free performance. The 9D handpiece works and feels like a hand engraving tool with the advantages of greater control and the ability to adjust the impact force. The unit comes equipped with a special, extra flexible neoprene sheath and a $6^{\prime}$ long power cord. A DVD with 32 minutes of instruction for using the PowerGraver is included, along with a set of accessories and maintenance items. Two-year warranty of PowerGraver Motor. Accessories included in kit: carbide stylus, anvil point, and a set of four gravers (\#52 round, \#3 onglette, \#2 bevel, and \#40 flat).

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | :---: |
| D | $\mathbf{3 4 - 2 2 9 3}$ | PowerGraver Kit | $\$ 395.00$ |
| ACCESSORIES |  |  |  |
| E | $\mathbf{3 4 - 2 1 3 1}$ | Carbide Stylus | $\$ 32.80$ |
| F | $\mathbf{3 4 - 2 1 3 0}$ | Anvil Point | $\$ 6.90$ |



## FOREDOM ${ }^{\circledR}$ H 9D HANDPIECE

This special, chuck-type handpiece fits only the PowerGraver. Adjusting ring changes impact force, and included palm rest provides comfort and "feel" of hand engraving tool. Comes with three interchangeable collets ( $\left.1 / 16^{\prime \prime}, 3 / 32^{\prime \prime}, 1 / 88^{\prime \prime}\right)$.


| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | :---: |
| G | $\mathbf{3 4 - 2 2 9 4}$ | H 9D Handpiece | $\$ 182.00$ |

## FOREDOM ${ }^{\circledR}$ MOTORS

All motors come with a $39^{\prime \prime}$ long shaft in a protective sheath with a steel liner and silencer. The TX motor requires a special, speed control that cannot be used on other models. Comes with sheath. One-year warranty. Ball Bearing motor. Runs up to 18,000 RPM. Operates in forward and reverse.

| Item | Order \# | Description | HP | RPM | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| H | $\mathbf{3 4 - 2 2 5 7}$ | TX Motor | $1 / 3$ | 15,000 | $\$ 215.00$ |
| J | $\mathbf{3 4 - 2 2 4 1}$ | SR Motor | $1 / 6$ | 18,000 | $\$ 169.95$ |



All prices are subject to change. For current pricing and/or additional price breaks not shown, call 800-877-7777, or visit us at stuller.com. |
$\qquad$

## FOREDOM'

## FOREDOM ${ }^{\circledR}$ MAINTENANCE KITS AND SUPPLIES

A. Motor Maintenance Kits. Your flex shaft will likely require replacement shafts and sheaths during its lifetime. Motor specific kits come packed with a shaft, motor brushes, and grease.
B. Motor Brushes. Motor brushes come in pairs and should be replaced for optimal machine performance when worn to $1 / 4$ inch in length. Be sure to watch our video for help with replacing motor brushes.
C. Shafts and Sheaths. You can expect to replace inner shafts and outer sheaths over the course of your machine's life. There are various types for different machines.
D. Speed Controls. Speed controls are required to operate a Foredom flexible shaft machine and allow the user to vary speed from low to full. Motors connect to speed controls and not directly into an electrical outlet. The 6 ' long speed control power cord plugs into an outlet.

## LUBRICANTS

| Item | Order \# | Description | Size | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: |
| E | $\mathbf{3 4 - 2 2 5 9}$ | Motor/Handpiece Oil | $20 z$ | $\$ 4.00$ |
| F | $\mathbf{3 4 - 2 2 6 0}$ | Flexible Shaft Grease | $10 z$ | $\$ 4.00$ |
| G | $\mathbf{3 4 - 2 2 7 9}$ | Hypodermic Oiler |  | $\$ 4.40$ |

## DUPLEX SPRING

| Item | Order \# | Description | 1+ |
| :---: | ---: | :--- | ---: | ---: |
| H | $\mathbf{3 4 - 2 3 0 7}$ | Spring for Duplex | $\$ 10.00$ |


| Order \# | Description | 1+ | cc | cc | Do | EE | ${ }^{\text {GG }}$ | н | HB | k | 1 | LB |  | MMG | PG | R | RB | s | SB | sm | SR | SRB S |  | TX | TXB ${ }^{\text {T }}$ | TXGH ${ }^{\text {T }}$ | TXH ${ }^{\text {T }}$ | TXM ${ }_{\text {TXMH }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34-2158 | A. Motor Maintenance Kit 8 | \$16.95 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - | - | - | - | - |  |  |  |  |  |  |
| 34-2159 | Maintenance Kit 9 | \$16.95 | - |  | - |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34-2157 | Motor Maintenance Kit 10 | \$16.95 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |
| 34-2156 | Maintenance Kit 16 | \$21.15 |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |
| 34-2261 | B. Motor brushes | \$8.50 | - |  | - | - |  |  |  |  |  |  | - |  |  |  |  | - |  |  | - |  |  |  |  |  |  |  |
| 34-2262 | Motor brushes | \$8.50 |  | - |  | - | - |  |  |  |  |  |  | - |  | - | - |  |  |  |  |  |  |  |  |  |  |  |
| 34-2263 | Motor brushes | \$12.15 |  |  |  |  |  |  |  |  | - |  |  |  | - |  |  |  |  |  |  |  |  | - | - | - | - | - • |
| 34-2254 | Motor brushes | \$8.50 |  |  |  |  |  | - | - | - |  |  |  |  |  |  |  | - | - | - | - | - | - |  |  |  |  |  |
| 34-2270 | C. Inner shaft | \$10.60 | - |  |  | - | - | - |  |  | - | - |  |  |  | - | - | - |  |  | - |  |  | - |  |  |  |  |
| 34-2274 | Inner shaft | \$10.60 |  |  | - | - |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34-2277 | Standard sheath | \$15.25 |  |  | - | - |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34-2271 | Standard sheath | \$14.50 | - |  |  | - | - | - |  |  | - | - |  |  |  | - | - | - |  |  | - |  |  | - |  |  |  |  |
| 34-2273 | Neoprene sheath | \$18.40 | - |  |  | - | - | - |  |  | - | - |  |  |  | - | - | - |  |  | - |  |  | - |  |  |  |  |
| 34-2297 | 60 in. HD sheath | \$64.95 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  | - |  |  |  |  |  |
| 34-2308 | Connector CC-DD | \$3.40 | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34-2309 | Connector EE-GG | \$3.50 |  |  | - | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34-2280 | D. FCT Foot control | \$34.90 | - |  |  |  |  |  |  |  | - |  |  | - |  |  |  | - |  |  | - |  |  |  |  |  |  |  |
| 34-2286 | TXR Foot Control | \$47.65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |
| 34-2281 | SCT Foot control | \$66.75 | - |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - |  |  | - |  |  |  |  |  |  |  |
| 34-2289 | SXR Foot control | \$66.75 | - |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |
| 34-2283 | EM Manual control | \$66.75 | - |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - |  |  | - |  |  |  |  |  |  |  |
| 34-2295 | EMX Manual control | \$79.45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |

GROBET USA ${ }^{\oplus}$ S-300 MOTOR
A. Versatile flex shaft machine with ball bearing motor runs smooth and requires no lubrication. One-year replacement warranty. Includes S-300 motor, foot pedal, and No. 30 handpiece.
B. Includes S-300 motor with quick change handpiece kit.
C. Includes C-300 motor with quick change handpiece kit.

FLEX SHAFT MAINTENANCE KIT
Includes tube of flexible shaft lubricant (grease) and a set of replacement motor brushes.

| Item | Order \# | Description | HP | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: |
| A | $\mathbf{3 4 - 2 3 2 5}$ | S-300 Motor with \#30 Handpiece | $1 / 8$ | $\$ 119.00$ |
| B | $\mathbf{3 4 - 2 3 1 9}$ | S-300 | $1 / 8$ | $\$ 109.95$ |
| C | $\mathbf{3 4 - 2 3 2 7}$ | C-300 | $1 / 10$ | $\$ 89.00$ |
| D | $\mathbf{3 4 - 2 2 5 1}$ | Maintenance Kit |  | $\$ 16.95$ |
| ACCESSORIES |  |  |  |  |
| E | $\mathbf{3 4 - 2 3 4 6}$ | Inner Shaft |  | $\$ 8.15$ |
| F | $\mathbf{3 4 - 2 3 4 7}$ | Outer Shaft | $\$ 9.20$ |  |



## MOTOR HANGERS

Convenient stand used to hold or hang up machines. Attaches to workbench, allowing more working space. Both models include a handpiece rest and t-rod, which can accommodate two motors. Full swivel with locking screw.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| K | $\mathbf{3 4 - 6 1 1 0}$ | Adjustable Flex Shaft Holder | $\$ 28.15$ |
| L | $\mathbf{3 4 - 6 1 1 2}$ | Double Flex Shaft Holder | $\$ 32.00$ |



## HANDPIECE HOLDER

Convert your flex shaft machine into a polishing lathe. A convenient way to hold your handpiece while polishing, grinding, sanding, and carving. The handpiece holder comes complete with a handpiece clamp, rod, and bench clamp. Adjustable height up to $10^{\prime \prime}$. The bench clamp adjusts to bench top thicknesses up to $2 \frac{1}{4} 4^{\prime \prime}$. Fits handpieces No. 30, No. 304, No. 44, No. 44T, and No. 44HT.

| Item | Order \# | Description | 1+ |
| :---: | :---: | ---: | ---: |
| A | $\mathbf{3 4 - 2 2 6 8}$ | Handpiece Holder | $\$ 41.00$ |

QUICK CHANGE HANDPIECE
Ergonomic design provides improved control and extra comfort. Release lever for use with $3 / 32^{\prime \prime}(2.4 \mathrm{~mm})$ shanks.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: |
| B | $\mathbf{3 4 - 2 4 0 2}$ | Quick Change Handpiece | $\$ 65.60$ |

PLASTIC CHUCK KEY HANDLE
For No. 30, No. 30SJ, No. 25C, and No. 30H handpiece users.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| C | $\mathbf{2 8 - 2 1 1 4}$ | Plastic Chuck Key with Handle | $\$ 6.00$ |

## FOREDOM ${ }^{\circledR}$ CUSHION HANDLE

This foam, hand-fitted cushion fits nicely on the No. 30 and No. 44 Foredom handpieces. Makes those long hours of drilling go by quickly.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{3 4 - 2 2 6 6}$ | Cushion Handle | $\$ 2.65$ |

## GROBET USA ${ }^{\circledR}$ QUICK CHANGE HANDPIECE

Special design provides better control and extra comfort.
Quick Change lever for use with $3 / 32$ " shank.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{3 4 - 2 3 5 4}$ | Handpiece | $\$ 144.60$ |
| E | $\mathbf{3 4 - 2 3 5 5}$ | Handpiece with Duplex Spring | $\$ 224.55$ |

## GROBET USA ${ }^{\circledR}$ GENERAL PURPOSE HANDPIECE

The most popular handpiece for all-around use. Chuck takes accessory shanks for 0 to $5 / 32^{\prime \prime}(0$ to 4 mm ). Includes chuck key.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| F | $\mathbf{3 4 - 2 3 5 6}$ | General Purpose Handpiece | $\$ 34.75$ |
| G | $\mathbf{2 8 - 2 1 1 4}$ | Plastic Chuck Key with Handle | $\$ 6.00$ |

## SWISS TECHNIQUE HANDPIECE

Ideal for fast precision work that requires quick tool changes. The quick release collet can be opened even while the tool is spinning. Comes with a $3 / 32^{\prime \prime}$ collet. Shaped for the hand, vibration free, and has an all-metal dustproof casing. Made in Switzerland.

| Item | Order\# | Description | Size | 1+ |
| :---: | :---: | :--- | :--- | ---: |
| H | $\mathbf{3 4 - 2 2 9 9}$ | Rotary Handpiece |  | $\$ 190.00$ |
| J | $\mathbf{3 4 - 2 3 0 3}$ | Collet (replacement part) | $3 / 32^{\prime \prime}$ | $\$ 35.00$ |
| K | $\mathbf{3 4 - 2 3 0 4}$ | Collet (replacement part) | $1 / 8^{\prime \prime}$ | $\$ 35.00$ |

FOREDOM ${ }^{\oplus}$ H. 52 AND H.52D OUICK CHANGE HANDPIECES
Quick release, push-pull action handpieces allow users to simply push to open chuck, insert tool, and then pull to close and lock. Made of a durable plastic barrel and grip with pre-lubed ball bearings. H. 52 and H.52D handpieces to accept $3 / 32^{\prime \prime}(2.35 \mathrm{~mm})$ shank.

| Item | Order \# | Description | 1+ |
| :---: | :--- | :--- | ---: |
| A | $\mathbf{3 4 - 2 3 6 0}$ | H.52 Handpiece | $\$ 122.00$ |
| B | $\mathbf{3 4 - 2 3 6 1}$ | H.52D Handpiece with Duplex Spring | $\$ 135.00$ |



FOREDOM ${ }^{\circledR}$ H. 8 AND H.8D HANDPIECES
Handpiece is anodized aluminum with tapered grip only $1 / 2^{\prime \prime}$ thick for comfortable fingertip control. Included are both $3 / 32^{\prime \prime}$ and $1 / 8^{\prime \prime}$ collets. Pin wrench also included. Permanently sealed, maintenance-free ball bearings make this an excellent alternative for continuous use.

| Item | Order \# | Descr | Size | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| C | 34-2207 | H. 8 Ha |  | \$61.40 |
| D | 34-2208 | H.8D H |  | \$82.20 |
| REPLACEMENT PARTS |  |  |  |  |
| E | 34-2100 | Collet Set of 4 (34-2101 to 34-2104) |  | \$27.60 |
|  | 34-2103 | Collet | $3 / 32^{11}$ | \$7.75 |



E


FOREDOM ${ }^{\circledR}$ H. 10 AND H.10D HANDPIECES
Quick release lever action for rapid accessory changes. Pre-lubricated ball bearings require no maintenance. Accepts $3 / 32^{1 "}(2.35 \mathrm{~mm})$ shank.

| Item | Order\# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| F | $\mathbf{3 4 - 2 2 0 9}$ | H.10 Handpiece | $\$ 245.00$ |
| G | $\mathbf{3 4 - 2 2 1 0}$ | H.10D Handpiece | $\$ 265.00$ |
| H | $\mathbf{3 4 - 2 2 1 9}$ | Collet | $\$ 46.50$ |

FOREDOM ${ }^{\circledR}$ H. 20 AND H.20D HANDPIECES
The H. 20 handpiece has a plastic molded front grip with tapered sides for easy handling. It has pre-lubricated ball bearings that do not require maintenance. A lever action handle is all that is required to change accessories.
For use with $3 / 32^{\prime \prime}(2.35 \mathrm{~mm})$ shank burs.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| $J$ | $\mathbf{3 4 - 2 3 7 5}$ | H.20 Handpiece | $\$ 82.50$ |
| K | $\mathbf{3 4 - 2 3 7 6}$ | H.20D Handpiece | $\$ 85.00$ |
| L | $\mathbf{3 4 - 2 3 7 7}$ | Collet | $\$ 11.60$ |



## FOREDOM ${ }^{\circledR}$ STONE SETTING KIT

Handpiece with exclusive Quick Change press-to-release collet. Ideal for stone setting and other applications requiring frequent bur changes. Slimmer grip for fingertip control. Accepts $3 / 32^{\prime \prime}(2.35 \mathrm{~mm})$ shank accessories. Pre-lubricated ball bearings require no maintenance.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| M | $\mathbf{3 4 - 2 2 1 3}$ | H.18 Handpiece | $\$ 120.00$ |
| N | $\mathbf{3 4 - 2 2 1 4}$ | H.18D Handpiece | $\$ 129.00$ |
| P | $\mathbf{3 4 - 2 3 1 0}$ | Collet | $\$ 29.25$ |



FOREDOM


FOREDOM ${ }^{\oplus}$ H.44T AND H.44HT HANDPIECES
Tapered-grip handpieces with a collet-type chuck that adapts to accessories up to $1 / 4^{\prime \prime}$. Pre-lubricated ball bearings require no maintenance. H. 44 T includes a pin, wrench, and three collets ( $3 / 32^{\prime \prime}, 1 / 8^{\prime \prime}$, and $1 / 4^{\prime \prime}$ ). H . 44 HT includes a pin, wrench, and two collets ( $1 / 8^{\prime \prime}$ and $1 / 4^{\prime \prime}$ ). Designed for use with the Foredom ${ }^{\circ} \mathrm{H}$ Flex Shaft system.

| Item | Order \# | Description | Inside Diameter | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: |
| A | $\mathbf{3 4 - 2 2 1 7}$ | H.44T Handpiece |  | $\$ 49.00$ |
| B | $\mathbf{3 4 - 2 2 1 8}$ | H.44HT Handpiece | $\$ 52.00$ |  |
| REPLACEMENT PARTS |  |  |  |  |


| C | $\mathbf{3 4 - 2 1 1 0}$ | Collet Set of 7 (41-444 to 447-449) |  | $\$ 49.65$ |
| ---: | ---: | ---: | :--- | ---: |
| $\mathbf{3 4 - 2 1 1 3}$ | Collet | $3 / 32^{\prime \prime}$ | $\$ 8.00$ |  |
| $\mathbf{3 4 - 2 1 1 4}$ | Collet | $1 / 8^{\prime \prime}$ | $\$ 8.00$ |  |
| $\mathbf{3 4 - 2 1 1 5}$ | Collet | $5 / 32^{\prime \prime}$ | $\$ 8.00$ |  |



## FOREDOM ${ }^{\circledR}$ H. 8 AND H.8D HANDPIECES

Handpiece is anodized aluminum with tapered grip only $1 / 2$ " thick for comfortable fingertip control. Included are both $3 / 32^{\prime \prime}$ and $1 / 8^{\prime \prime}$ collets. Pin wrench also included. Permanently sealed, maintenance-free ball bearings make this an excellent alternative for continuous use.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{3 4 - 2 3 7 0}$ | H.28 Handpiece | $\$ 49.00$ |
| E | $\mathbf{3 4 - 2 1 0 0}$ | Collet Set of $4(34-2101$ to 34-2104) | $\$ 27.60$ |



## FOREDOM ${ }^{\circledR}$ H. 35 HANDPIECE

Precision, high-speed handpiece with unique, planetary drive that produces $21 / 2$ times the speed of the motor. This feature makes it the perfect tool for bright cutting with diamond flywheels and for other high-speed work with carbide and diamond points. Seven collets are available ranging from $1 / 16^{16}$ to $3 / 16$ " including metric sizes. Pre-lubricated, double shielded, ball bearings rated for speeds to 35,000 RPM and comes with $1 / 8^{\prime \prime}$ collet (unless other size is specified). Recommended motor speed is 14,000 RPM.

| Item | Order \# | Description | Inside Diameter | $1+$ |
| :---: | :---: | :---: | :---: | :---: |
| F | 34-2216 | H. 35 Handpiece |  | \$147.50 |
| REPLACEMENT PARTS |  |  |  |  |
| G | 34-2135 | Collet | $3 / 32^{1}$ | \$20.25 |
| H | 34-2138 | Collet | 1/6" | \$20.25 |
| J | 34-2139 | Collet | $3 / 81$ | \$20.25 |



FOREDOM ${ }^{\oplus}$ H. 30 AND H. 30 H HANDPIECES
Excellent in quality and popular for its general purpose use, these handpieces feature three-jaw Jacobº style chuck that fits shanks from O" to $5 / 32^{\prime \prime}$. Pre-lubricated ball bearings require no maintenance. H.3OH This heavy-duty handpiece is designed for use with the Foredom H Flex Shaft system. Chuck key included with all models.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| K | $\mathbf{3 4 - 2 2 2 0}$ | H.30H Handpiece | $\$ 62.50$ |
| L | $\mathbf{3 4 - 2 2 1 5}$ | H.30 Blue | $\$ 47.00$ |
| M | $\mathbf{3 4 - 2 2 1 5}$ | H.30 Pink | $\$ 47.00$ |
| N | $\mathbf{3 4 - 2 2 1 5}$ | H.30 Handpiece | $\$ 47.00$ |
| P | $\mathbf{2 8 - 2 1 1 4}$ | Plastic Chuck Key with Handle | $\$ 6.00$ |

FOREDOM ${ }^{\circledR}$ HAMMER STONE SETTING KIT
This high-torque/low-speed motor and Quick Change handpiece combination make this an ideal kit for stone setting, drilling, and other low-speed applications. Kit Includes:

- LX Permanent-Magnet Motor, high-torque/low-speed, 5,000 RPM - H15 Hammer Quick Change Handpiece with anvil point, pavé point, and carbide styles
- TXR Foot Speed Control - Tray

| Item | Order\# | Description | Style | 1+ |
| ---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{3 4 - 2 2 5 0}$ | Stone Setting Kit |  | $\$ 359.95$ |
| TIPS |  |  |  |  |
| B | $\mathbf{3 4 - 2 1 3 0}$ | Anvil Point | Flat | $\$ 6.90$ |
| C | $\mathbf{3 4 - 2 1 3 1}$ | Carbide Stylus | Point | $\$ 32.80$ |
| D | $\mathbf{3 4 - 2 1 3 2}$ | Pavé | Pavé Point | $\$ 38.55$ |

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FOREDOM ${ }^{\circledR}$ H. 15 AND H.15D HANDPIECES
Hammer handpiece used by professional jewelers for stone setting and decorative work. Has $1 / 32$ " stroke with adjustable impact and comes with an anvil point (34-2130). Can also be used with pavé point (34-2132) for special texturing. A stylus (34-2131) with pointed, carbide tip is available for texturing, marking, or scribing hardened steel. Recommended for use with LX Motor at speeds of 0-5,000 RPM. $1 / 2^{\prime \prime}$ diameter at tip, $6^{\prime \prime}$ long, and $40 z$.


| Item | Order \# | Description | Style | 1+ |
| :---: | :---: | :--- | :--- | ---: |
| E | $\mathbf{3 4 - 2 2 1 1}$ | H.15 Handpiece |  | $\$ 110.00$ |
| F | $\mathbf{3 4 - 2 2 1 2}$ | H.15D Handpiece |  |  |
| TIPS |  |  |  | $\$ 125.00$ |
| G | $\mathbf{5 3 - 1 9 0 5}$ | Diamond | Texturing | $\$ 36.70$ |
| H | $\mathbf{3 4 - 2 1 3 0}$ | Anvil Point | Flat | $\$ 6.90$ |
| J | $\mathbf{3 4 - 2 1 3 1}$ | Carbide Stylus | Point | $\$ 32.80$ |
| K | $\mathbf{3 4 - 2 1 3 2}$ | Pavé | Pavé Point | $\$ 38.55$ |

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K


GROBET USA ${ }^{\oplus}$ HAMMER-STYLE HANDPIECE


Designed to hit hard under control without excessive heat build-up.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| L | $\mathbf{3 4 - 2 3 5 1}$ | Hammer HP | $\$ 182.00$ |
| M | $\mathbf{3 4 - 2 3 5 2}$ | Hammer HP with Duplex Spring | $\$ 223.55$ |
| N | $\mathbf{3 4 - 2 3 5 3}$ | Hammer Point | $\$ 5.40$ |



SWISS HAMMER HANDPIECE
Lightweight slender aluminum body with a hardened steel inside mechanism. Comes with one screw-in cylinder non-hardened point.

| Item | Order \# | Description | Style | 1+ |
| ---: | ---: | :--- | :--- | ---: |
| P | $\mathbf{3 4 - 2 2 9 8}$ | Hammer Handpiece |  | $\$ 215.00$ |
| TIPS |  |  |  |  |
| Q | $\mathbf{5 3 - 1 9 0 5}$ | Diamond | Texturing | $\$ 36.70$ |
| R | $\mathbf{3 4 - 2 1 3 0}$ | Anvil Point | Flat | $\$ 6.90$ |
| S | $\mathbf{3 4 - 2 1 3 1}$ | Carbide Stylus | Point | $\$ 32.80$ |
| T | $\mathbf{3 4 - 2 1 3 2}$ | Pavé | Pavé Point | $\$ 38.55$ |


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## Badeco Micromotor Kits

This Swiss-made system is an investment for your shop. One tool does it all. Relying on quick-change technology, you'll move from rotary to reciprocating to hammer with ease. Enjoy smooth control with the convenient foot pedal. It replaces your flex shaft. Call us today to learn how you can add speed to your shop today with Badeco.


## BADECO MICROMOTOR KIT 1

Badeco micromotor kit 1 comes complete with a control unit, one micromotor, handpiece, and a foot pedal. Features include speed and rotation control, and hand or foot control.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: | ---: |
| A | $\mathbf{3 4 - 2 3 8 0}$ | Badeco Micromotor Kit 1 | $\$ 1,899.00$ |

## BADECO MICROMOTOR KIT 2

Badeco micromotor kit 2 comes complete with a control unit, three micromotors, three handpieces, and a foot pedal. Features include speed and rotation control, and hand or foot control.

| Item | Order \# | Description | 1+ |
| :---: | :---: | ---: | ---: |
| B | $\mathbf{3 4 - 2 3 8 1}$ | Badeco Micromotor Kit 2 | $\$ 2,900.00$ |

## BADECO MICROMOTOR KIT 3

Badeco micromotor kit 3 comes complete with an arm, control unit, four micromotor handpieces, and a foot pedal. Special features of this system include speed control, direction rotation control, automatic selection of micromotors, and speed control for four micromotors with one pedal. Just pull a handpiece out of its holster and that handpiece is ready for use.

| Item | Order \# | Description | 1+ |
| :---: | :--- | ---: | ---: |
| C | $\mathbf{3 4 - 2 3 8 2}$ | Badeco Micromotor Kit 3 | $\$ 3,800.00$ |

POWER MICROMOTOR
The 20,000 RPM micromotor is used with the Badeco micromotor kits 1,2 , and 3 (34-2380, 34-2381, and 34-2382).

| Order \# | Description | Inside Diameter | RPM | 1+ |
| :--- | :--- | :---: | :--- | ---: | ---: |
| $\mathbf{3 4 - 2 3 8 3}$ | Power Micromotor | 26 mm | 20,000 | $\$ 579.00$ |

HANDPIECES FOR POWER MICROMOTOR
All of these handpieces can be used with the power micromotor 34-2383.

| Item |  | Order \# | Description | RPM |
| :---: | :---: | :--- | :--- | ---: |
| A | $\mathbf{3 4 - 2 3 8 4}$ | Micropolishing Quick Exchange Handpiece | $500-5,000$ | $\$ 564.30$ |
| B | $\mathbf{3 4 - 2 3 8 5}$ | Quick Exchange Handpiece | 20,000 | $\$ 395.00$ |
| C | $\mathbf{3 4 - 2 3 8 6}$ | Exchangable Collet Handpiece | 20,000 | $\$ 386.50$ |
| D | $\mathbf{3 4 - 2 3 8 7}$ | Rivetting and Setting Mallet Handpiece | 8,000 | $\$ 564.30$ |

## QUICK EXCHANGE HANDPIECE

The Badeco quick change hand piece is used with your flexshaft. It is robust and handy and allows for quick clamping and unclamping. The hand piece has 3 ball bearings and is good for speeds up to $20,000 \mathrm{rpm}$.


| Order \# | Description | RPM | 1+ |
| :--- | :--- | :--- | ---: |
| $\mathbf{3 4 - 2 3 9 6}$ | Quick Exchange Handpiece | 20,000 | $\$ 323.70$ |

## RIVETTING AND SETTING MALLET

The Badeco quick exchange rivetting and setting mallet is used with your flexshaft and is a high precision quality mallet that is robust and handy. The handpiece allows the user to stroke up to 8,000 strokes per minute, delivered with an unhardened point.


| Order\# | Description | RPM | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{3 4 - 2 3 9 7}$ | Rivetting and Setting Mallet | 8,000 | $\$ 246.90$ |

MINI POLISHING AND FILLING QD HANDPIECE
The Badeco Mini Polishing/Filing hand piece works with your flexshaft and performs a reciprocating action. Great for use with ceramic stones. Stroke length is 1 mm , speed is $500-7,000$ strokes per minute.


| Order \# | Description | RPM | 1+ |
| :--- | :--- | :--- | ---: |
| 34-2399 | Mini QD Handpiece | $500-7,000$ | $\$ 411.45$ |

## QUICK EXCHANGE HANDPIECE

The Badeco quick exchange handpiece is used with your flexshaft. It is robust and handy and allows for quick clamping and unclamping. The hand piece has 3 ball bearings and is good for speeds up to 20,000 RPM.


| Order \# | Description | RPM | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{3 4 - 2 3 9 8}$ | Quick Exchange Handpiece | 20,000 | $\$ 323.70$ |



## BADECO SWISS HANDPIECE

Top-quality, high-precision handpieces designed for rugged use.
Two models available. Made in Switzerland.
Badeco Hammer Handpiece

- Adjustable striking force - Robust and handy
$-3,000$ strokes per minute - Comes with $3 / 32^{\prime \prime}$ collet

| Order\# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{3 4 - 2 1 9 0}$ | Hammer HP with Spring | $\$ 375.00$ |



## SILENTAIRE AIR COMPRESSOR

The Silentaire air compressor is virtually noiseless and is totally automatic. Unit includes a tank, line pressure gauge, line pressure regulator, moisture trap/filter/gauge, safety valve, air intake filter, and a carrying handle. The SIL-AIR models feature a heavy duty $1 / 2 h p$ pump for reliability and durability.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | :---: |
| A | 14-5000 | 4 gallon Compressor (1/2 hp) | \$1,065.90 |
|  | 14-4999 | 6 gallon Compressor (1/2 hp) | \$1,149.90 |
| ACCESSORIES |  |  |  |
| B | 14-5002 | 24 oz Compressor Oil | \$22.80 |
| C | 14-5001 | Hook-Up Hose ( $50{ }^{\prime} \times 11 / 4$ ) | \$42.35 |
|  | 14-4492 | Air Intake Filter | \$19.50 |
|  | 14-4493 | Filter Element (Pack of 4) | \$13.60 |
|  | 14-4494 | Filter Regulator WI | \$83.75 |
|  | 14-4495 | Pressure Gauge $1 / 8$ " - Rear | \$26.00 |
|  | 14-4496 | Filter Element WI | \$26.00 |
|  | 14-4497 | Filter Kit N Coalescent | \$47.20 |



## AIR FILTER/OIL REMOVAL KIT

A must for GRS equipment when using an oil lubricated compressor. Removes dirt and oil contamination from compressed air.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{1 4 - 5 0 0 4}$ | Air Filter / Oil Removal Kit | $\$ 105.95$ |

## QUICK DISCONNECT KIT

Saves time by letting you switch from one GRS ${ }^{\circ}$ Handpiece to another in seconds. Includes main body and two handpiece connectors.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: |
| E | $\mathbf{1 4 - 5 0 0 5}$ | Quick Disconnect Kit | $\$ 31.75$ |

## CHICAGO PNEUMATIC AIR SCRIBE® ${ }^{\circledR}$

Lightweight air scribe that is ideal for engraving, texturing, or deburring. Capable of marking material as hard as RC-64. Accurate throttle selection can be made by adjusting the sleeve valve. Operates on less than 1 CFM. Requires an air compressor and filter/regulator (which are not included). Comes with Stylus and 8 ft . of reinforced hose. Foot pedal sold separately.

| Item | Order\# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| F | $\mathbf{2 6 - 4 0 5 5}$ | Pneumatic Air Scribe | $\$ 435.45$ |
| G | $\mathbf{2 6 - 4 0 5 6}$ | Replacement Stylus Tip | $\$ 42.95$ |
| H | $\mathbf{2 6 - 4 0 5 7}$ | Foot Pedal | $\$ 63.00$ |

## Foredom ${ }^{\circledR}$ Work

## Bench System

Create your own custom bench system with Foredom ${ }^{\ominus}$. Combine the Foredom Flex Shaft Hanger with an innovative LED Light Bar and your choice of four different Tool Arms. This stainless steel system places everything within reach without cluttering your benchtop.

Everything is sold separately to allow a truly customizable experience. Purchase only what you need to make your bench a perfect place for you. The LED Light Bar swings up into a vertical position automatically turning off and getting out of your way when it isn't needed.

The four unique Tool Arms help to organize your bench in the best possible way. Choose from the Bur Holder Arm, Magnetic Tool Arm, Cup Holder Arm, and the Tray Arm to achieve a clean, clutter free work space.

## FOREDOM ${ }^{\circledR}$ WORK BENCH SYSTEM

$17-3 / 4$ " tall Support Rod for holding pivoting LED light bar and swinging arms.

| Item |  | Order \# | Description |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{3 4 - 1 0 1 0}$ | Support Rod 253/4" | $\mathbf{1 +}$ |
|  | $\mathbf{3 4 - 1 0 1 0}$ | Support Rod 173/4" | $\$ 42.00$ |
|  | $\mathbf{3 4 - 1 0 1 0}$ | Motor Hanger with LED Light Bar | $\$ 39.00$ |
| B | $\mathbf{3 4 - 1 0 1 0}$ | Motor Hanger Only | $\$ 189.00$ |
| C | $\mathbf{3 4 - 1 0 1 0}$ | LED Light Bar | $\$ 59.00$ |
| D | $\mathbf{3 4 - 1 0 1 0}$ | Bur Holder Arm | $\$ 139.00$ |
| E | $\mathbf{3 4 - 1 0 1 0}$ | Cup Holder Arm | $\$ 69.00$ |
|  | $\mathbf{3 4 - 1 0 1 0}$ | Peg Arm | $\$ 55.00$ |
| F | $\mathbf{3 4 - 1 0 1 0}$ | Magnetic Tool Arm | $\$ 69.00$ |
| G | $\mathbf{3 4 - 1 0 1 0}$ | Accessory Tray Arm | $\$ 109.00$ |
| H | $\mathbf{3 4 - 1 0 1 0}$ | Multi Handpiece Arm | $\$ 59.00$ |
| J | $\mathbf{3 4 - 1 0 1 0}$ | Dual Handpiece Rest | $\$ 75.00$ |
| REPLACEMENT PARTS | $\$ 29.00$ |  |  |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Adapter Plug for light |  |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Light Connector Cord Set | $\$ 39.00$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Light Shade | $\$ 6.00$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Micro Switch for light | $\$ 11.20$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | LED Light Strip | $\$ 1.50$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Hanger Hook with Spring | $\$ 59.00$ |
| K | $\mathbf{3 4 - 1 0 1 2}$ | 40ml Plastic Jars with Tops (Pack of 6) | $\$ 4.80$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | 4mm Head Hex Screw | $\$ 8.00$ |
| L | $\mathbf{3 4 - 1 0 1 2}$ | Base Mounting Plate | $\$ 0.50$ |
|  | $\mathbf{3 4 - 1 0 1 2}$ | Light Shade | $\$ 17.00$ |



WOLF BELT SANDER SET
The Belt sander is convenient, compact, and connects to a flex shaft for power. It can be clamped directly on to the bench or mounted with an adaptor into a GRS ${ }^{\circledR}$ BenchMate"' for greater support. Included is an attachment for hooking up to a dust collection system, and five assorted Ruby belts.

| Item | Order \# | Description | Grit | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: |
| A | $\mathbf{2 1 - 0 4 9 1}$ | Belt Sander with Assorted Ruby Belts |  | $\$ 189.00$ |
| B | $\mathbf{2 1 - 0 4 9 2}$ | GRS $^{\ominus}$ BenchMate ${ }^{\text {ww }}$ Adapter |  | $\$ 16.85$ |
| C | $\mathbf{2 1 - 0 4 6 5}$ | Ruby Belt | 180 | $\$ 3.80$ |
|  | $\mathbf{2 1 - 0 4 6 5}$ | Ruby Belt | 320 | $\$ 3.80$ |
|  | $\mathbf{2 1 - 0 4 6 5}$ | Ruby Belt | 240 | $\$ 3.80$ |
|  | $\mathbf{2 1 - 0 4 6 5}$ | Ruby Belt | 120 | $\$ 3.80$ |
|  | $\mathbf{2 1 - 0 4 6 5}$ | Ruby Belt | 80 | $\$ 3.80$ |

## 3M ${ }^{\circledR}$ REGAL XODUST 930DZ

These purple belts are coated with Cubitron ${ }^{\text {n" }}$ ceramic aluminum-oxide mineral, simply the best you can get. When removal of material is required at a fast rate. Applications include sprue removal and casting clean-up. Good for all types of metal, wood, and plastics.

| Item | Order \# | $\mathbf{G r i t}$ | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :--- | :--- | ---: | ---: | ---: |
|  | $\mathbf{2 1 - 0 4 9 3}$ | 80 | $1^{\prime \prime} \times 10^{1} / 2^{\prime \prime}$ | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |
| $\mathbf{2 1 - 0 4 9 4}$ | 120 | $1^{\prime \prime} \times 101 / 2^{\prime \prime}$ | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |  |
|  | $\mathbf{2 1 - 0 4 9 9}$ | 220 | $1^{\prime \prime} \times 10^{11} 2^{\prime \prime}$ | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |
| D | $\mathbf{2 1 - 0 5 0 1}$ | Set of three (one of each) | $\$ 5.60$ | $\$ 6.30$ | $\$ 7.00$ |  |

A vacuum cleaner may be attached to the plastic tube to remove dust particles. To keep the pieces you are sanding from being sucked into the vacuum, put a piece of plastic screening, available from hardware stores, over the end of the tube, before attaching the hose. The optional GRS ${ }^{\text {Tim }}$ Adapter BE-100 (not included) fits into the GRS ${ }^{\text {Tu }}$ pivoting BenchMate ${ }^{\text {Tw }}$ collar (also not included). This allows for the easiest, infinite angle positioning - including upside down positioning - to work in between the rollers.

## FOREDOM



FOREDOM ${ }^{\circledR}$ K. 1070 MICROMOTOR KITS
Ideal for high-speed applications up to 38,000 RPM, including light deburring of cast pieces, bright cutting in jewelry making, and fine detailing.
A. K. 1070 Rotary Kit Includes:

- Control-HP4
- Handpiece with $2.35 \mathrm{~mm}(3 / 32$ ") collet-MH-170
- Variable speed foot control-HP4-960
- Handpiece cradle-HP4-933
- Extra pair of motor brushes, spare fuses, collet changing wrenches
B. K. 1020 High Torque Kit includes:
- 20,000 RPM max speed
- High torque, $60 / 50 \mathrm{~Hz}, 4.82 \mathrm{Amps}$ DC
- Switch for either 110/120 or 220/240 voltage
- Dial control and foot control for variable speed
- Forward or reverse rotation
- Built-in overload protection
- CE compliant
- One-year Limited-Warranty

Kit Includes: Control Unit, Handpiece, Variable Speed Foot Control, Handpiece Cradle, Chuck key with handle, and extra set of motor brushes.
C. H.MH-120 features extra power and a geared three-jaw \#0 chuck that takes any size rotary accessory or drill bit with shanks up to $5 / 32^{\prime \prime}$ ( 4 mm ) diameter. CE compliant. Comes supplied in Kit K. 1020 and works with the same HP4-917 Control Unit that comes with Micromotor Kits K.1070,
 K. 1080, and K. 1090.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- |
| A | $\mathbf{3 4 - 6 1 1 5}$ | K. 1070 Rotary Micromotor Kit | $\$ 365.00$ |
| B | $\mathbf{3 4 - 6 1 1 4}$ | K. 1020 High Torque Kit | $\$ 499.00$ |
| C | $\mathbf{3 4 - 6 1 1 3}$ | High Torque Chuck Style Handpiece | $\$ 338.00$ |

FOREDOM ${ }^{\circledR} 1050$ BRUSHLESS MICROMOTOR KIT
The 1050 Micromotor features high torque throughout the speed range of 1,000 to 50,000 RPM. High speed provides smooth, clean, and sharp detailing in metal. It's also great for bright cutting, grinding, finishing, texturing, and polishing. Low speed offers extra control and power for stone setting and milling.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{3 4 - 6 1 1 6}$ | MicroMotor Kit | $\$ 899.00$ |




GEMLOGIS DIGITAL SORTING GAUGE
The Gemlogis SAFFRON provides direct digital readout as you pick up loose stones with ease. It is the most convenient way for sorting gemstones of various sizes. No need to hold a tweezer in one hand and a gauge in the other, . 02 accuracy.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| A | $\mathbf{3 5 - 1 2 0 2}$ | Gemlogis Digital Sorting Gauge | $\$ 101.95$ |

CARBON FIBER DIGITAL THICKNESS GAUGE
This digital thickness gauge is lightweight and easy to use. It features a large, easy to read LCD display and its carbon fiber composite construction makes it both lightweight and durable.

- 8 mm LCD display
- Measuring range: $0-12 \mathrm{~mm}$
- Resolution: 0.01 mm

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| B | $\mathbf{3 5 - 5 6 2 8}$ | Carbon Fiber Digital Thickness Gauge | $\$ 10.35$ |

## DIGITAL THICKNESS GAUGE

Special functions include inch/millimeter conversion and zero-set at any point.

- Measuring range: $0-12.7 \mathrm{~mm}$
- Resolution: $0.01 \mathrm{~mm} / 0.0005^{\prime \prime}$

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| C | $\mathbf{3 5 - 5 6 2 9}$ | Digital Thickness Gauge | $\$ 15.55$ |

## COMPACT DIGITAL GAUGE

Compact digital gauge measures from 0 to 25 mm and 0 to 1 ". Millimeter accurate to two decimal points and inch fractions to three decimal points. Stainless steel with high-impact plastic housing. Inside and outside measurements. Comes with protective case.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| D | $\mathbf{3 5 - 1 8 1 8}$ | Compact Digital Gauge | $\$ 68.00$ |

## DIAL THICKNESS GAUGE

Ideal for measuring pearls and other stones up to 10 mm .
Specifications: $0-10 \mathrm{~mm} \times 0.01 \mathrm{~mm}$.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| E | $\mathbf{3 5 - 2 3 0 1}$ | Dial Thickness Pearl Gauge | $\$ 29.00$ |

## MILLIMETER GAUGE

Excellent for measuring pearls and stones of all kinds. Smooth action assures accuracy. Gauge is made to zero out when closed, and open automatically. This assures a gentle force when measuring soft stones and pearls. Dial features "zero adjust" and is accurate to 0.1 mm . Maximum opening width is 20 mm . Made in Germany.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: |
| F | $\mathbf{3 5 - 1 2 0 0}$ | Millimeter Pearl Gauge | $\$ 33.00$ |





## ELECTRONIC DIGITAL CALIPER

Stainless steel, instant readout digital caliper. Measures inside, outside, and depth. Accurate to $0.0005^{\prime \prime}(0.01 \mathrm{~mm})$. Measuring range from 0 to $6^{\prime \prime}$ $(0$ to 100 mm ). Includes protective case and battery EBAT357.

| Item | Order\# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{3 5 - 1 7 9 7}$ | 100 mm Digital Caliper | $4^{\prime \prime}$ | $\$ 26.50$ |

## DIGITAL CALIPER

Electronic Digital Caliper with large LCD readout. Measures ID and OD from 0.0005 " $(0.01 \mathrm{~mm})$. Depth measures from 0 to 150 mm . Takes a SR44 (EBAT357) battery.

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: |
| B | $\mathbf{3 5 - 1 7 9 8}$ | 150mm Digital Caliper | $6^{\prime \prime}$ | $\$ 32.00$ |

DIAL CALIPER
Stainless steel dial caliper measures inside, outside, and depth. Accurate to 0.02 mm . Measuring range from 0 to 150 mm . Easy to read "adjust to zero" dial and thumb roller with lock. Maximum opening 6 ".

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | ---: | :---: | ---: | ---: |
| C | $\mathbf{3 5 - 1 8 3 0}$ | 150mm Dial Caliper | $938^{\prime \prime}$ | $\$ 23.70$ |

## STAINLESS STEEL VENIER CALIPER

Precision gauge measures in metric and inches up to 150 mm to ( 0.02 "). Four-way use with roll wheel.

| Item | Order\# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: |
| D | $\mathbf{3 5 - 1 7 9 6}$ | 150mm Stainless Steel Caliper | $6 "$ | $\$ 35.00$ |



## BRASS SLIDING GAUGES

Each gauge is a combination of millimeter and inches. Available in standard, pointed, or notched. (Notched jaw measures inside or out.) Made in Germany.

| Item | Order \# | Description | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 35-1522 | Standard | $31 / 4{ }^{1 /}$ | \$11.18 | \$11.84 | \$13.15 |
| F | 35-1520 | Standard | $21 / 4{ }^{1 /}$ | \$10.29 | \$10.89 | \$12.10 |
| G | 35-1524 | Notched | $21 / 4{ }^{1 /}$ | \$10.29 | \$10.89 | \$12.10 |
| H | 35-1526 | Pointed | 21/4" | \$12.07 | \$12.78 | \$14.20 |

## GAUGE DELUXE

Metal underplate holds small stones and parts in place to allow fast and accurate measurements. Also works great for normal measurements.
Plate is non-removable.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| J | $\mathbf{3 5 - 1 5 2 9}$ | Beadalon Gauge | $21 / 22^{\prime \prime}$ | $\$ 7.01$ | $\$ 7.43$ | $\$ 8.25$ |
| K | $\mathbf{3 5 - 1 5 2 8}$ | Stone Gauge | $31 / 4^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |

PRECISION WIRE AND SHEET GAUGE
American standard wire and sheet gauge used for measuring wire and sheet metals from 0 to 36 gauge. Chrome-finished, heavy-gauge, hardened and tempered tool steel. Decimal equivalents of each size are stamped on reverse side. Measures $3 / 34^{\prime \prime}$ diameter and $3 / 32^{\prime \prime}$ thick.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 0 9}$ | Wire/Sheet Gauge | $\$ 21.68$ | $\$ 22.95$ | $\$ 25.50$ |

## STAINLESS STEEL FLEXIBLE RULER

Overall length $6^{\prime \prime}$ and width $1 / 2^{\prime \prime}$. Top is graduated in millimeters and $1 / 32^{\prime \prime}$ increments across the lower half. All graduations are deeply etched.

| Order\# | Width | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 1 0 0}$ | $1 / 2^{\prime \prime}$ | $6^{\prime \prime}$ | $\$ 1.79$ | $\$ 1.89$ | $\$ 2.10$ |



JEWELRY MAKER'S SCALE
Covers all the jeweler's ring shank, bracelet, and sheet measuring needs. Stainless steel with etched graduations for permanent visibility. Six-inch scale graduated in $1 / 16^{\prime \prime}$, 150 mm scale graduated in millimeters. Shows metal length required for bracelet to fit any wrist size.


| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 1 1 5}$ | $6^{\prime \prime}$ | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |

## MULTI USE RULER GAUGE

This pocket tool performs several separate and distinct functions. The bevel protractor is used for measuring and laying out angles. The center finder locates centers of circles. The circle divider is used for dividing circles into sectors. Made of stainless steel, the ruler has etched graduations in inches and millimeters.

| Order\# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 1 0 4}$ | $4^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |

## STAINLESS STEEL PROTRACTOR

Set bevels, and measure and transfer angles with this stainless steel protractor. Made of ground stainless steel for optimum accuracy. Permanently etched graduations from 0 to $180^{\circ}$ in opposite directions. Six-inch adjustable protractor locks into position with knurled thumb nut and $33 / 8^{\prime \prime} \times 2$ " head.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 1 0 6}$ | Adjustable Protractor | $\$ 13.09$ | $\$ 13.86$ | $\$ 15.40$ |



MARK-A-SIZE
Used to scribe cutting lines accurately when reducing ring sizes. Consists of 12 sizes that are graduated in quarter ring sizes from $1 / 4^{\prime \prime}$ to 3 ". Made of hardened steel with sharp edges. Folds when not in use.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 0 7 0 5}$ | Mark-A-Size | $\$ 38.08$ | $\$ 40.32$ | $\$ 44.80$ |




## COMBINATION DEGREE GAUGE

Lightweight and made of polished steel with easy-to-read brass indices. Adjustable point for close tolerance work. Three-quarter inch jaw. Capacity 72 lignes and 120 mm .

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 0 1 4 0}$ | Combination Degree Gauge | $\$ 38.46$ | $\$ 40.73$ | $\$ 45.25$ |



## KERR ${ }^{\circledR}$ CALIPER

Stainless steel and calibrated in 0.1 mm . Excellent for measuring wall thicknesses. Rounded tip caliper is perfect for wax carving. The pointed tip is perfect for metal work.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 0 0 2 5}$ | Round Tip Caliper | $\$ 31.88$ | $\$ 33.75$ | $\$ 37.50$ |



## JO-DI DIAMOND WEIGHT GAUGE

Used to estimate carat weights for four basic diamond shapes (round, marquise, emerald, and pear) without removing stones from mounting. Measure depth and width with caliper and then compare with tables in the 70-page reference booklet provided. Instructions in four languages: English, French, Spanish, and German. Sold with wallet. Made of metal. One side measures in millimeters and the other in carats.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 5 1 0}$ | Diamond Weight Gauge | $\$ 33.96$ | $\$ 35.96$ | $\$ 39.95$ |



SPRING DIVIDER WITH ADJUSTABLE POINTS
Sharp, pointed tips are adjustable and can be replaced. Maximum opening 23/4" with tips retracted or $314^{\prime \prime}$ with tips extended. Special quick-adjustment nut and heavy-duty spring. Made in Germany.

| Item | Order \# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{3 5 - 0 8 0 5}$ | Spring Divider | $\mathbf{1 + 2 1}$ | $\$ 12.20$ | $\$ 12.92$ | $\$ 14.35$ |
| B | $\mathbf{3 5 - 0 8 0 6}$ | Replacement Tips (sold per pair) | $\$ 2.25$ | $\$ 2.38$ | $\$ 2.65$ |  |



## STARRET DIVIDER

Highly-polished dividers made of spring steel with hardened, tempered, and well-balanced round legs. Floating washer and thumb screw permit fast and positive adjustment.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 1 - 1 1 2 8}$ | Divider with 3 inch legs | $3^{\prime \prime}$ | $\$ 63.75$ | $\$ 67.50$ | $\$ 75.00$ |



## SPRING DIVIDER

Features heavy-duty, spring action with a special, quick-adjustment nut. The perfect tool for measuring distances between points and scribing circles and arcs. Made in Germany.

| Order\# | Max Opening | Leg Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 0 8 0 0}$ | $21 / 4^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 12.20$ | $\$ 12.92$ | $\$ 14.35$ |
| $\mathbf{3 5 - 0 8 0 2}$ | $61 / 2^{\prime \prime}$ | $6^{\prime \prime}$ | $\$ 13.18$ | $\$ 13.95$ | $\$ 15.50$ |

DEGREE GAUGE
Light weight and made of coated steel with and easy-to-read brass indices. Adjustable point for close tolerance work.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 0 2 0 0}$ | $0-10 \mathrm{~mm}$ Degree Gauge | $\$ 13.56$ | $\$ 14.36$ | $\$ 15.95$ |
| $\mathbf{3 5 - 0 3 0 0}$ | $0-15 \mathrm{~mm}$ Degree Gauge | $\$ 14.41$ | $\$ 15.26$ | $\$ 16.95$ |



## DIAMOND SIEVES

Used for sorting stones, beads, and pearls according to size. Complete set of 21 plates fit in zippered carrying case. Chart indicates plate size of stones per carat, weight, and millimeter size.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 1 - 0 5 6 0}$ | $17 / 8$ in. $(1.1 \mathrm{~mm}-4.5 \mathrm{~mm})$ | $\$ 59.46$ | $\$ 62.96$ | $\$ 69.95$ |
| B | $\mathbf{5 1 - 0 5 6 5}$ | $25 / 8$ in. $(0.74 \mathrm{~mm}-4.45 \mathrm{~mm})$ | $\$ 108.12$ | $\$ 114.48$ | $\$ 127.20$ |



## SIEVE HOLDER BOX

Plastic holder box for stone sieves. Designed to hold 42 sieves.

| Order \# | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 0 5 6 9}$ | $12^{\prime \prime} \times 4 \frac{1}{2} 2^{\prime \prime} \times 4 \frac{1}{2} 2^{\prime \prime}$ | $\$ 25.08$ | $\$ 26.55$ | $\$ 29.50$ |



## MELEEMETER ${ }^{\text {m }}$ MICROGAUGE SYSTEM

Meleemeter ${ }^{\text {r" }}$ microgauge system consists of 10 business-sized-card templates encased in a solid brass carrying case for safe keeping. These templates will eliminate the need for measuring and computing melee weights with 590 melee shapes and sizes placed around the edges, giving maximum access to mounted melee. Contains gauge for trillion diamonds including weight formulas.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 1 7}$ | MicroGauge System | $\$ 46.71$ | $\$ 49.46$ | $\$ 54.95$ |



## MEASUREMATE ${ }^{\circledR}$ REFERENCE CARD SET

Plastic reference cards for quick and simple jewelry related information. A great tool for the retail counter salesperson or bench jeweler. The cards contain information ranging from identifying birthstones to identifying diamond shapes to anniversary gifts. Cards come in protective sleeves. Black illustrations for easy reading in vinyl wallet.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 1 5}$ | 10-Piece Card Set | $\$ 10.20$ | $\$ 10.80$ | $\$ 12.00$ |




## DIAMOND SELLER

Used to show sizes of brilliant-cut diamonds. Cubic zirconias are mounted on stainless steel arms. Each arm is marked with size and carat weight. Shows 10 sizes from 0.1 to 2 carats. Folds within a protective cover when not in use.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 5 5 0}$ | Stainless Steel Diamond Seller | $\$ 50.62$ | $\$ 53.60$ | $\$ 59.55$ |



## K\&B DIAMOND AND STONE GAUGE

Pocket gauge used for measuring loose stones and settings ranging from three points to four carats. Made of aluminum. Reverse side is embossed with birthstone chart.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 0 2}$ | Aluminum Diamond and Stone Gauge | $\$ 6.67$ | $\$ 7.07$ | $\$ 7.85$ |



DIAMOND OR GEMSTONE FAN GAUGE
Pocket stainless steel gauge for measuring brilliant-cut, marquise, pear, square, emerald, and oval-cut stones. Measures $312^{\prime \prime}$ closed. Stone measurements are in carat weights. Made in the USA. Seven blades.

| Order \# | Description | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 1 0}$ | Diamond/Gem Fan Gauge | $31 / 2^{\prime \prime}$ | $\$ 15.56$ | $\$ 16.47$ | $\$ 18.30$ |

## STONE AND MOUNTING GAUGE

Aluminum gauge with holes used to measure stones, and the extensions are used to measure mountings. One side indicates millimeters; the other side indicates the corresponding carat measurement.

| Order \# | Description | Sizes | 12+ | $\mathbf{6 +}$ | 1+ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 5 1 5}$ | Stone and Mounting Gauge | $2-11 \mathrm{~mm}$ | $\$ 12.16$ | $\$ 12.87$ | $\$ 14.30$ |

DIAMOND GAUGE
Measures round and baguette stones from $1 / 1000$ to 2 carats.
Made of aluminum. Folds to $11 / 2^{\prime \prime}$ in diameter.

| Order\# | Description | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 6 0 0}$ | Diamond Gauge | $11 / 2$ | $\$ 6.33$ | $\$ 6.71$ | $\$ 7.45$ |



## PREMIUM BRACELET GAUGE

Quality bracelet size gauge for fitting bracelets. Adjustable band with sizes marked from $5^{\prime \prime}$ to $9^{\prime \prime}$ in $1 / 4$ " increments. Made of high-grade steel. Imported from France.

| Order \# | Description | Gauge Increments | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 2 6 1 2}$ | Bracelet Gauge | $1 / 4^{\prime \prime}$ | $\$ 17.00$ | $\$ 18.00$ | $\$ 20.00$ |

BANGLE/BRACELET GAUGE
Three sizes of bracelet gauges. All are heavy gauge base metal, nickel-plated, and securely attached to a handy $23 / 4^{\prime \prime}$ ring.

| Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 2 6 0 5}$ | Small | $1-9 \mathrm{~mm}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| $\mathbf{3 5 - 2 6 0 6}$ | Medium | $10-18 \mathrm{~mm}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| $\mathbf{3 5 - 2 6 0 7}$ | Large | $19-27 \mathrm{~mm}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



SHANK SIZE AND BRACELET GAUGE
Used for measuring wire or flat stock for proper size ring and bracelet shanks. Includes guide to various shapes and sizes of metal. Ring sizes from 1 to 14; bracelets from baby's to large men's sizes.

| Order\# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 0 4 2 5}$ | Shank and Bracelet Gauge | $6-26 \mathrm{~mm}$ | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |



## HANDY SIZER RING GAUGE

New, thin flat ring sizer that fits in your pocket. Customers can inconspicuously take it home to measure a ring. Has a handy millimeter gauge on the end.

| Order \# | Description | Sizes | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 5 1 1 7}$ | Plastic Gauge | $1.5-12 \mathrm{~mm}$ | $\$ 4.25$ | $\$ 4.50$ | $\$ 5.00$ |



## MULTI FINGER SIZER

Customers can easily and confidentially measure their own finger sizes from 0-17 with accurate full, half, and quarter sizes. The low price of this multi sizer means you can give them away when a customer wants to buy that surprise ring for a special gift. Multi sizers come in individual envelopes with instructions.

| Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 5 - 2 6 1 0}$ | Multi-Sizer | $1-17 \mathrm{~mm}$ | $\$ 0.43$ | $\$ 0.45$ | $\$ 0.50$ |

## PLASTIC FINGER GAUGE

The perfect complement to your standard ring sizer. Give your customer a perfect fit every time. Available in quarter sizes and a combination of full and half sizes. With easy-to-read rings on a metal chain and disposable rings on a sheet. U.S. standard sizes.

| Item Order \# |  |  |  |  |  |  |  | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{3 5 - 2 6 2 5}$ | Quarter Sizes (no half sizes) | $4.25-13.25 \mathrm{~mm}$ | $\$ 3.74$ | $\$ 3.96$ | $\$ 4.40$ |  |  |  |  |  |  |
| B | $\mathbf{3 5 - 2 6 5 0}$ | Full and Half Sizes | $4-12 \mathrm{~mm}$ | $\$ 1.49$ | $\$ 1.58$ | $\$ 1.75$ |  |  |  |  |  |  |
| C | $\mathbf{3 5 - 2 6 2 6}$ | Disposable Sheet | $2.5-14 \mathrm{~mm}$ | $\$ 0.43$ | $\$ 0.45$ | $\$ 0.50$ |  |  |  |  |  |  |



## ACCUSIZER

Sturdy, lightweight plastic that open and close identical Superfit ${ }^{\circ}$ shanks.

| Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 5 - 2 6 1 4}$ | Accusizer Ring Sizer | $2-11.5 \mathrm{~mm}$ | $\$ 7.48$ | $\$ 7.92$ | $\$ 8.80$ |



FINGER GAUGE
Nickel-plated finger gauges graduated in U.S. standard half-sizes.

| Item | Order \# | Description | Ring Sizes | Increments | 12+ | 6+ | + |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 35-2613 | $3 \mathrm{~mm} /$ Half-Round | 1-15 | $1 / 21$ | \$12.75 | \$13.50 | \$15.00 |
| B | 35-2615 | $2.8 \mathrm{~mm} /$ Flat | 1-15 | $1 / 2{ }^{1 /}$ | \$15.47 | \$16.38 | \$18.20 |
| C | 35-2620 | $6 \mathrm{~mm} /$ Flat | 1-15 | 1/2" | \$14.03 | \$14.85 | \$16.50 |
| D | 35-2622 | $3.9 \mathrm{~mm} /$ Flat | 16-24 | 1/2" | \$8.67 | \$9.18 | \$10.20 |
| E | 48-7525 | 4mm/Comfort-Fit | 1-15 | $1 / 21$ | \$14.03 | \$14.85 | \$16.50 |
| F | 35-2611 | 2.8mm/Flat | 1.25-12.75 | $1 / 4 / 1$ | \$14.03 | \$14.85 | \$16.50 |
| G | 35-2621 | $6.8 \mathrm{~mm} /$ Half Round |  | 1/2" | \$17.77 | \$18.81 | \$20.90 |
| H | 48-7526 | $7 \mathrm{~mm} /$ Comfort-Fit | 1-15 | 1/2" | \$14.96 | \$15.84 | \$17.60 |



## PRECISION RING GAUGES

J. Die-struck finger gauges are made to be an exact match to the graduated steel mandrels below.

PRECISION STEEL MANDRELS
K-L. Graduated or grooved. U.S. standard sizes.

| Item | Order \# | Description R | Ring Sizes | Increments | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $J$ | 38-2618 | Flat | 1-16 | 1/2" | \$12.16 | \$12.87 | \$14.30 |
| K | 35-2801 | Graduated/Grooved | ed 1-16 | $1 / 21$ | \$22.95 | \$24.30 | \$27.00 |
| L | 35-2802 | Graduated | 1-16 | 1/21 | \$23.84 | \$25.25 | \$28.05 |
|  | 35-2803 | Gauge and Mandrel (35-2801) Set |  |  | \$27.16 | \$28.76 | \$31.95 |

WOODEN RING MANDREL
Ring stick made of finely finished hardwood, excellent for glass counters and wire work. Will not mar or scratch the ring while hammering or shaping

| Item | Order \# | Description | Ring Sizes | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 35-2947 | Non-Roll Hex Handle | 3-15 | 121/2" | \$11.90 | \$12.60 | \$14.00 |
| N | 35-2945 | Shaping |  | 111/2" | \$5.61 | \$5.94 | \$6.60 |

## HOLLOW RING MANDRELS

Hollow, metal ring stick. Has gauge for material length needed to make specific size rings. Nickel-plated with wood handle. Graduated in U.S. standard quarter sizes.


| Item Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{3 5 - 2 8 4 0}$ | Grooved | $1-15$ | $\$ 22.82$ | $\$ 24.17$ | $\$ 26.85$ |
| B | $\mathbf{3 5 - 2 8 6 0}$ | Non-Grooved | $1-15$ | $\$ 17.98$ | $\$ 19.04$ | $\$ 21.15$ |



PLASTIC RING STICK
Plastic ring stick. Graduated in U.S. standard quarter sizes.

| Item Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{3 5 - 2 8 8 0}$ | Grooved | $1-15$ | $\$ 4.42$ | $\$ 4.68$ |

ALUMINUM RING MANDRELS
Solid, aluminum ring stick. Graduated in U.S. standard quarter sizes.

| Item Order\# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: |
| D | $\mathbf{3 5 - 2 8 0 0}$ | Grooved | $1-13$ | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |
| E | $\mathbf{3 5 - 2 8 2 0}$ | Non-Grooved | $1-13$ | $\$ 18.23$ | $\$ 19.31$ | $\$ 21.45$ |

## ALUMINUM RING MANDRELS

Solid, aluminum and gold anodized ring stick. Graduated in U.S. standard quarter sizes.

| Item Order \# | Description | Ring Sizes | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: |
| F | $\mathbf{3 5 - 2 9 9 9}$ | Grooved | $1-16$ | $\$ 26.52$ | $\$ 28.08$ | $\$ 31.20$ |
| G | $\mathbf{3 5 - 2 9 9 8}$ | Non-Grooved | $1-16$ | $\$ 26.52$ | $\$ 28.08$ | $\$ 31.20$ |




STEEL STEPPED RING MANDRELS
Avoid distortion caused by tapered mandrels on wide shank rings. Marked graduated sizes.

| Item | Order \# | Ring Sizes | Increments | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 35-2902 | 4-16mm | Whole | $131 / 2^{\prime \prime}$ | \$29.96 | \$31.73 | \$35.25 |
| $J$ | 35-2903 | $3.5-15.5 \mathrm{~mm}$ | Half | $131 / 2^{\prime \prime}$ | \$29.96 | \$31.73 | \$35.25 |



STEEL RING MANDRELS

| Item Order\# | Description | Ring Sizes |  | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: | ---: | ---: |
| K | $\mathbf{3 5 - 2 9 1 4}$ | Grooved | $1-12$ | $12^{\prime \prime}$ | $\$ 28.09$ | $\$ 29.75$ | $\$ 33.05$ |
| L | $\mathbf{3 5 - 2 9 1 2}$ | Non-Grooved | $1-12$ | $12^{\prime \prime}$ | $\$ 28.09$ | $\$ 29.75$ | $\$ 33.05$ |



DURSTON RING MANDRELS
Durston's new high quality forming and tapered ring mandrels. Hardened to 64 RC. Two sizes available: $10 \mathrm{~mm}-25 \mathrm{~mm}$ and $10 \mathrm{~mm}-28 \mathrm{~mm}$.

| Item | Order\# | Description | Ring Sizes | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: |
| M | $\mathbf{3 5 - 2 9 1 5}$ | Non-Grooved | $10-28$ | $16^{\prime \prime}$ | $\$ 33.74$ | $\$ 35.73$ | $\$ 39.70$ |
| N | $\mathbf{3 5 - 2 9 1 5}$ | Grooved | $10-25$ | $141 / 2^{\prime \prime}$ | $\$ 30.94$ | $\$ 32.76$ | $\$ 36.40$ |



N
$\qquad$


## STEEL RING MANDRELS

Larger mandrel for large rings, hoop earrings, and coin holders. Graduated solid steel mandrels in U.S. standard quarter sizes. Can be used for soldering. Made in the USA.

| Item | Order \# | Shape | Ring Sizes | Length | 1+ |
| :---: | ---: | :--- | :---: | :---: | ---: |
| C | $\mathbf{3 5 - 2 9 1 8}$ | Round | $16-24$ | $81 / 4^{\prime \prime}$ | $\$ 31.50$ |

## STEEL RING MANDRELS



## MICRO-MANDRELS

H. This micro-round mandrel is ideal for making jump rings and other small findings. The hardened steel is precision ground and 160 mm in length. Made in Switzerland.
J. This small, round mandrel is suited to fabricating and forming jump rings, small bezels, and rings. The hardened steel is precision ground and 220 mm in length. Made in Italy.
K. This small, oval mandrel is suited to fabricating and forming jump rings, small bezels, and rings. The hardened steel is precision ground and 220 mm in length. Made in Italy.
L. This small, square mandrel with sharp edges is used for making joints and bezels. The hardened steel is precision ground and 220 mm in length. Made in Italy.

| Item | Order \# | Shape | Tapers To $(\mathbf{m m})$ | Length | 1+ |
| :---: | :---: | :--- | :---: | ---: | ---: |
| $H$ | $\mathbf{3 5 - 2 9 8 0}$ | Round | $1.5-5$ | $614^{\prime \prime}$ | $\$ 36.40$ |
| J | $\mathbf{3 5 - 2 9 8 1}$ | Round | $3-10$ | $812^{\prime \prime}$ | $\$ 32.00$ |
| K | $\mathbf{3 5 - 2 9 8 2}$ | Oval | $3-10$ | $812^{\prime \prime}$ | $\$ 42.85$ |
| L | $\mathbf{3 5 - 2 9 8 3}$ | Square | $4-10$ | $9^{\prime \prime}$ | $\$ 38.50$ |



## TRUE-SIZE SIZING SYSTEM

The True-Size ring sizing system has 47 precise, comfort fit, 6 mm wide bands. The sizes include 1-16 which are in half sizes and the most popular sizes (4-12) come in quarter sizes also. The sizes are laser etched on a facet on the outside of each ring. The wood presentation box also has a sizing conversion chart.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{3 5 - 1 0 9 4}$ | Ring Sizing System | $\$ 195.00$ |



STEEL BEZEL MANDRELS
Bezel mandrels are case hardened, high polished, and precision ground. 11" long. Made in the USA.

| Item |  | Order \# | Shape | Ring Sizes | Length |
| :---: | :--- | :--- | :--- | :--- | ---: |
| A | $\mathbf{3 5 - 2 9 2 2}$ | Square | $2.5-8.9$ | $11^{\prime \prime}$ | $\$ 28.65$ |
| B | $\mathbf{3 5 - 2 9 2 9}$ | Triangle | $2.5-9.7$ | $11^{\prime \prime}$ | $\$ 28.65$ |
| C | $\mathbf{3 5 - 2 9 2 3}$ | Rectangle | $1.5 \times 3.6-7.8 \times 10.1$ | $11^{\prime \prime}$ | $\$ 28.65$ |
| D | $\mathbf{3 5 - 2 9 2 1}$ | Oval | $2.8 \times 3.6-11.4 \times 2.4$ | $11^{\prime \prime}$ | $\$ 26.45$ |
| E | $\mathbf{3 5 - 2 9 2 4}$ | Teardrop | $2.8 \times 4.1-11.4 \times 11.9$ | $11^{\prime \prime}$ | $\$ 28.65$ |
| F | $\mathbf{3 5 - 2 9 2 0}$ | Round | $3.8-12.4$ | $11^{\prime \prime}$ | $\$ 26.45$ |
| G | $\mathbf{3 5 - 2 9 3 0}$ | Teardrop | $9.5 \times 11.3-17.9 \times 20.3$ | $11^{\prime \prime}$ | $\$ 28.65$ |



NECKLACE MANDREL
Polished cast iron shapes necklaces perfectly and easily. Work metals or use this mandrel to form wax. Made in Italy.


## ROUND HOOP MANDREL

Hard chrome-plated steel with a highly polished surface and tapers for a wide range of rings, earrings, hoops, and bracelets. The mandrel gives a great variety of uses for goldsmiths, silversmiths, jewelers, and bead artists.

| Order \# | Shape | Ring Sizes | Length | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: |
| $\mathbf{3 5 - 2 8 1 0}$ | Round | $3 / 8^{\prime \prime}-2 "$ | $12^{\prime \prime}$ | $\$ 29.70$ |
|  |  |  |  |  |



ROUND WOOD BRACELET MANDRELS
Made of wood to help prevent marring and scratching when shaping and forming bracelets and other round items.

| Item | Order \# | Description | Tapers To | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 35-2940 | Small | 3/4-2" | \$12.16 | \$12.87 | \$14.30 |
| B | 35-2941 | Medium | $11 / 2^{1}-21 / 2^{1}$ | \$14.96 | \$15.84 | \$17.60 |
| C | 35-2942 | Large | 2"-31/2" | \$15.90 | \$16.83 | \$18.70 |

## TAPERED BRACELET MANDRELS

Hollow cone, case-hardened mandrels. Used for shaping, stretching, and forming bracelets and other items. Made in India.

| Item | Order \# | Shape | Tapers To | Length | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 43-0500 | Oval | $13 / 8^{\prime \prime} \times 17 / 8^{\prime \prime}-3^{\prime \prime} \times 31 / 22^{\prime \prime}$ | $15{ }^{\prime \prime}$ | \$39.65 |
| E | 43-0540 | Round | $13 / 44^{\prime \prime}-31 / 2{ }^{\prime \prime}$ | $15{ }^{\prime \prime}$ | \$39.65 |

## DURSTON RING MANDRELS

This high-quality, hardened, and polished steel mandrel is ideal for shaping and forming bracelets. Offered in two shapes of round and oval.

| Item |  | Order \# | Description | Length |
| :---: | :---: | :--- | :---: | ---: |
| F | $\mathbf{4 3 - 0 5 0 1}$ | Round | $15^{\prime \prime}$ | $\mathbf{1 +}$ |
| F | $\mathbf{4 3 - 0 5 0 2}$ | Oval | $15^{\prime \prime}$ | $\$ 119.60$ |



## BRACELET MANDRELS

Constructed of cast iron. Used for shaping and stretching bracelets and large ovals in a vise or a workbench. Each tang is $13 / 4^{\prime \prime}$. Made in the USA.
Stepped Mandrels Stepped mandrels have four steps each.
Tapered Mandrels Smooth taper.

| Item | Order \# | Shape/Style | Tapers To | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| G | 35-2925 | Round, Stepped | $2^{\prime \prime}, 21 / 4^{\prime \prime}, 2^{1 / 2} 2^{\prime \prime} 2^{3} / 4^{\prime \prime}-21 / 2 \times 23 / 4^{\prime \prime}$ | \$54.00 |
| H | 35-2926 | Oval, Stepped | $13 / 4^{\prime \prime}, 21 / 8^{\prime \prime}, 21 / 2^{\prime \prime}, 234^{\prime \prime}-21 / 2 \times 234^{\prime \prime}$ | \$54.00 |
| J | 35-2927 | Round, Tapered | 3"-2" | \$50.70 |
| K | 35-2928 | Oval, Tapered | $13 / 4^{\prime \prime} \times 21 / 8^{\prime \prime}-21 / 2^{\prime \prime} \times 23 / 4^{\prime \prime}$ | \$50.70 |

## IMAGEDOME MICRO

A new way to capture jewelry, bringing any area into view for you and your customer. Not just for close up work, it is designed to be your one-stop imaging platform. Traditional light boxes deliver a good image for general use, but the design limits the ability to capture the multiple angles needed for detailed inspection. A flat stage attachment allows you to lay out flat pieces and a surprisingly large field of view to accommodate neckwear and other large items. As with all equipment made for taking pictures of jewelry, lighting is critical. Easy-to-use but extremely flexible lighting system. LED lamps on each side aim at movable side panels to create indirect lighting and adjustable hotspots and reflection areas. Diffused light is delivered from a light ring around the camera. The on-board LED lights housed in the camera are diffused as well and can even be turned off from the control software. Kit includes Image Dome and Dino-Lite Camera, a ring holder, two stone holders, and a diffuser for the camera lights.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 1 5 1 1}$ | Image Box and Microscope Camera Kit | $\$ 1,595.00$ |
| $\mathbf{2 9 - 1 5 1 0}$ | Image Micro Light Box | $\$ 1,295.00$ |
| $\mathbf{2 9 - 1 5 1 2}$ | Accessory Kit | $\$ 179.00$ |



## PHOTOGRAPHY BOX

Designed for use with consumer-oriented digital cameras, this photo box puts the camera control in your hands. A single switch controls the two fluorescent $5500^{\circ} \mathrm{K}$ lights in the bottom and back. Bright white interior side panels and door provide the perfect reflective surfaces to complement the diffused lighting. Magnetically hinged door can easily be opened and removed. Creates a shadow-free, wraparound lighting environment ideal for jewelry photography.

- Sturdy construction and compact size for portability
- Reflective lighting - Flexible camera angles - No Software

| $\mathbf{O}$ Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{1 3 - 2 0 3 0}$ | Mini Photo Box | $10 " \times 8^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 269.00$ |
| $\mathbf{1 3 - 2 0 3 1}$ | Small Photo Box | $12^{\prime \prime} \times 9^{\prime \prime} \times 9^{\prime \prime}$ | $\$ 295.00$ |
| $\mathbf{1 3 - 2 0 3 2}$ | Medium Photo Box | $14^{\prime \prime} \times 12^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 495.00$ |
| $\mathbf{1 3 - 2 0 3 3}$ | Large Photo Box | $16^{\prime \prime} \times 1^{\prime \prime} \times 13^{\prime \prime}$ | $\$ 595.00$ |



## DINOLITE MICROSCOPE

This handheld digital microscope/camera is easy to use and comes with a USB output interface or AV/TV output interface. High-resolution magnification is at your fingertips with detailed examination of any area you choose. Additional accurate measurement (not available on Mac OS) allows detailed analysis and documentation of the captured images. Both cameras also have eight LEDs with an on/off feature for illumination, as well as glare reduction. Included with each Dino-Lite digital microscope is a copy of the DinoCapture software, enabling you to capture either a photograph, video, or time-lapse video with a simple click. Computer not included.

| Item Order \# |  | Description | 1+ |
| ---: | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 1 5 0 1}$ | Digital Microscope/Camera and Tabletop Stand | $\$ 499.00$ |
| B | $\mathbf{2 9 - 1 5 0 6}$ | Digital Microscope/Camera and Flexible Stand | $\$ 438.00$ |
| $\mathbf{2 9 - 1 5 0 2}$ | Digital Microscope/Camera (USB) | $\$ 399.00$ |  |
| $\mathbf{2 9 - 1 5 0 3}$ | Digital Microscope/Camera (TV) | $\$ 299.00$ |  |
| $\mathbf{2 9 - 1 5 0 4}$ | Tabletop Stand Only | $\$ 99.00$ |  |
| $\mathbf{2 9 - 1 5 0 5}$ | Flexible Desktop Stand Only | $\$ 39.00$ |  |



## GEMORO ${ }^{\circledR}$ ELITE MODEL 1067

SIGNATURE SERIES MICROSCOPE

- Precision 10X - 67X zoom with Japanese quality optics
- Offering the world's first LED darkfield/brightfield
- Rheostat controlled intensity LED darkfield/brightfield illumination with adjustable iris diaphragm and sliding baffle
- LED goose neck with interchangeable intense-beam UV/LED illumination
- Tilt with $55^{\circ}$
- Microscope head and base swivel $360^{\circ}$
- Includes a briefcase style metal carrying case, eye guards,

Full view gem clip, dust cover, and more

- Internationally adaptable 100 V -240V powered
- Five-year mechanical warranty
- Two-year electrical warranty


| Item Order \# | Description | 1+ |
| :---: | :--- | ---: |
| A | 29-4749 | Elite 1067 Series Microscope |$\$ 2,395.00$



## GEMORO ${ }^{\circledR}$ ELITE MODEL 1067ZX

- 10X - 67X zoom microscope with built-in additional overhead light source
- Superior Japanese quality optics
- True professional darkfield / brightfield illumination with a sliding baffle
- Adjustable iris diaphragm controls the width of the lower light
- $360^{\circ}$ rotating head for convenience
- Includes Full view gem clip stone holder, eye guards and dust cover
- Features a 5 -year mechanical warranty and a 2-year electrical warranty



## GEM SCOPE ELITE 1030 MICROSCOPE

- Superior Japanese quality optics
- 10X-30X magnification
- New European design, single-cast body
- True professional tungsten-halogen darkfield/brightfield illumination with sliding baffle
- Adjustable iris diaphragm controls width of the lower light
- Full-view gem clip
$-360^{\circ}$ rotating head
- Comfort eye guards
- Dust cover
- Five-year mechanical warranty
- Two-year electrical warranty


| Item Order\# | Description | 1+ |  |
| :---: | ---: | :--- | ---: |
| C | 29-4740 | Elite 1030 Microscope | $\$ 259.00$ |
| D | 29-4741 | Replacement Bulb, 12V/110W | $\$ 5.00$ |
| E | $\mathbf{2 9 - 4 7 4 4}$ | Replacement Stone Clip (fits models 1030 and 745) | $\$ 52.95$ |


$\qquad$


GEM SCOPE ELITE 745 ZOOM MICROSCOPE

- Superior Japanese Quality optics
- 7X-45X zoom magnification, zoom stays in focus through all magnifications
- European design, single-cast body
- True professional Darkfield/Brightfield illumination with "Sliding Baffle"
- Adjustable iris diaphragm controls width of the lower light
- Full-view gem clip
- Optional, overhead light source with fluorescent daylight light
tube easily attaches to base. Fluorescent, daylight light source for diamond color grading (sold separately.)
$-360^{\circ}$ rotating head
- Comfort eye guards
- Requires two bulbs


| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: |
| A | $\mathbf{2 9 - 4 7 4 2}$ | Elite 745 Zoom Microscope (without light) | $\$ 549.00$ |
| B | $\mathbf{2 9 - 4 7 4 5}$ | Replacement Bulb (29-4742), 6V/20W | $\$ 23.95$ |
| C | $\mathbf{2 9 - 4 7 4 3}$ | Optional Fluorescent Light Attachment | $\$ 84.35$ |
| D | $\mathbf{2 9 - 4 7 4 6}$ | Replacement Bulb (29-4743), 6V/12W | $\$ 21.35$ |



## GEM ZOOM MICROSCOPE

Ideal for retail counter sales presentations.

- 10X-40X magnification
- Darkfield illumination
- Iris diaphragm for illumination control
- Overhead spot illumination
- Stone holder
- Designed for 110V and 220V


| Item | Order \# | Description | Power | 1+ |
| :---: | ---: | :--- | :--- | ---: |
| E | $\mathbf{2 9 - 4 7 8 0}$ | Microscope | 10X -40X | $\$ 397.15$ |
| F | $\mathbf{2 9 - 4 7 8 2}$ | Replacement Bulb |  | $\$ 3.55$ |
| G | $\mathbf{2 9 - 4 7 8 3}$ | Replacement Iris |  | $\$ 63.55$ |



GEMOLOGICAL MICROSCOPE

- Great value at an affordable price
- View set and unset stones
- Versatile stone holder
- 20X-40X magnification
- Features built-in light and darkfield illumination


| Item | Order\# | Description | Power | 1+ |
| ---: | ---: | :--- | :--- | ---: |
| H | $\mathbf{2 9 - 1 6 0 5}$ | Microscope | 20X - 40X | $\$ 279.00$ |
| J | $\mathbf{2 9 - 4 7 8 2}$ | Replacement Bulb |  | $\$ 3.55$ |

DIAMOND INSCRIPTION READER DIGITAL MICROSCOPE This Product is useful for Jewelers outlets, wholesalers or retailers gemological students. 3.5" Color LCD screen to identify the diamond laser inscription Works with Windows XP, Windows Vista, Windows 7, Mac OS 10.6 or later LED Illumination help to provide the best view. his Product is useful for Jewelers outlets, wholesalers or retailers gemological students.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{1 3 - 1 8 4 0}$ | Inscription Reader" Digital Microscope | $\$ 279.00$ |



## DIAMOND GEM LIGHT

Lightweight and compact but big enough for the professional to grade diamonds and colored stones. It features a Verilux and UV long-wave light and has a deep grading cavity and a $90 \%$ cool white background that makes grading diamonds and detecting fluorescence in colored stones a breeze. Gemlight comes with a protective case, diamond cloth, and bulbs. Requires four AA batteries (not included).

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 3 - 1 7 0 8}$ | Gem Grading Light | $\$ 84.32$ | $\$ 89.28$ | $\$ 99.20$ |



## DENSITY DIFFRACTION GRATING SPECTROSCOPE

Compact unit produces clear bright spectra with low intensity light. Pocket-sized spectroscope has fixed focus and slit.


## CALCITE DICHROSCOPE

Determine if a stone is singularly or doubly refractive. Simultaneously view a gem's pleochroic colors in sharp contrast. Includes protective leather carrying case.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 29-3002 | Calcite Dischroscope | $\$ 58.52$ | $\$ 61.97$ | $\$ 68.85$ |

GEMORO LUMIGAUGE
Imagine a handheld gemological tool that featured quality 8 X magnification under bright illumination, with a built-in precision 0.1 mm measuring gauge.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 2 5 0 0}$ | $8 \times$ Magnification Gauge | $\$ 17.98$ | $\$ 19.04$ | $\$ 21.15$ |

## CHELSEA COLOUR FILTER ${ }^{T M}$ EMERALD LOUPE

Helpful for identifying certain red, blue, and green stones. Used to determine if a stone is natural or synthetic. Can also be used for detecting synthetic blue spinel and detecting dyes in certain gems. Made in England.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 29-6505 | Colour Filter Emerald Loupe | $\$ 30.18$ | $\$ 31.95$ | $\$ 35.50$ |



## CZ MASTER COLOR SET

These CZ Master Sets have superior color accuracy and are hand graded against GIA ${ }^{\oplus}$ color master diamonds. All CZs in the set fall within the first half of the color grade and give equal spacing between color grades.
All CZs are .80-1 carat diamond equivalent. Each set comes with a five-year manufacturer's warranty against color change.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 29-2710 | 5-Stone Set: D, F, H, J, L | $\$ 318.95$ |
| $\mathbf{2 9 - 2 7 1 1}$ | 5-Stone Set: E, G, I, K, M | $\$ 318.95$ |
| $\mathbf{2 9 - 2 7 1 2}$ | 10-Stone Set: D, E, F, G, H, I, J, K, L, M | $\$ 498.00$ |

## GemOro <br> - sumenion wimments



## GEMORO CZ MASTER SET PRO

Professionally color grade diamonds in seconds. Each stone in the set is treated with GemOro's COLORLAST Technology to ensure permanent color saturation. It is expertly hand graded to master diamond color standards using the GIA ${ }^{\circledR}$ grading scale. Yellow and white simulated gold display ring stone holders included.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| 29-2714 | 10 Stone: 1 carat: E, F, G, H, I, J, K, L, M, N | $\$ 335.75$ | $\$ 355.50$ | $\$ 395.00$ |
| $\mathbf{2 9 - 2 7 1 3}$ | 10 Stone: $1 / 2$ carat: E, F, G, H, I, J, K, L, M, N | $\$ 269.41$ | $\$ 285.26$ | $\$ 316.95$ |



## OPTICON FRACTURE SEALER

The standard sealer for sealing stone fractures. This sealer is highly effective in penetrating surfaces. Depending on the stone and mineral content, some of the fractures will not permit an invisible seal.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 6 - 6 0 0 8}$ | Opticon Fracture Sealer | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |

DIAMOND SHOVELS
Used for scooping and handling stones.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{5 1 - 0 9 5 0}$ | Nickel-Plated Chrome | $13 / 4^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 3.32$ | $\$ 3.51$ | $\$ 3.90$ |
| B | $\mathbf{5 1 - 0 9 5 1}$ | Square Chrome-Plated | $21 / 8^{\prime \prime} \times 3^{1 / 8 "}$ | $\$ 2.13$ | $\$ 2.25$ | $\$ 2.50$ |
| C | $\mathbf{5 1 - 0 9 5 2}$ | Black Finish | $13 / 4^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 2.93$ | $\$ 3.11$ | $\$ 3.45$ |



## SORTING TRAYS

Grooved trays are used for sorting pearls, stones, and findings.
Also has round indentations for size sorting as well.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{3 8 - 1 0 0 3}$ | Black Tray for Light Stones | 7 " $\times 33 / 4^{\prime \prime}$ | $\$ 4.40$ | $\$ 4.77$ | $\$ 5.30$ |
| E | $\mathbf{3 8 - 1 0 0 2}$ | Plastic Stone Sorting Tray | $7^{\prime \prime} \times 33 / 4^{\prime \prime}$ | $\$ 4.40$ | $\$ 4.77$ | $\$ 5.30$ |



## STONE SORTING TRAY

Used for sorting stones by size. Has various size grooves for eas-
 ily sorting stones. Made of solid, tough, unbreakable plastic.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 8 - 1 0 0 0}$ | Stone Sorting Tray | $81 / 2^{\prime \prime} \times 5 \frac{1}{2 \prime}$ | $\$ 4.88$ | $\$ 5.09$ | $\$ 5.30$ |

GEM PAPER TRAYS
Ultra white trays come flat and are scored for easy folding. High quality and a true white makes them perfect for sorting and grading diamonds or other gemstones.


## DISPLAY RINGS

Used to display diamonds and other precious stones. Provides a secure way to present loose stones to customer. Excellent sales aid.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{6 1 - 3 0 0 0}$ | Small Gold Ring Display | $\$ 2.96$ | $\$ 3.06$ | $\$ 3.40$ |
| H | $\mathbf{6 1 - 3 0 1 0}$ | Small Silver Ring Display | $\$ 2.96$ | $\$ 3.06$ | $\$ 3.40$ |
| J | $\mathbf{6 1 - 3 0 2 0}$ | Large Gold Ring Display | $\$ 2.96$ | $\$ 3.06$ | $\$ 3.40$ |
| K | $\mathbf{6 1 - 3 0 3 0}$ | Large Silver Ring Display | $\$ 2.96$ | $\$ 3.06$ | $\$ 3.40$ |





B



C


G


D


H


E


J

## DIAMOND INFORMATION FACT LABELS

Diamond information fact labels are applied to diamond papers for quick and exact reference to the grade of the stones. The two-fold labels have both views of a diamond table up and table down, for plotting inclusions, carbon, and other identifying features. Self-adhesive label has a chart for listing weight, clarity, color, dimensions, comments, and prices. Assortment contains one pack of each shape. Individual shapes are sold in packs of 50 .

| Item |  |  |  |  |  |  |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| A | $\mathbf{6 2 - 1 2 4 0}$ | 8 Pack Assortment | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 26.10$ | $\$ 27.00$ | $\$ 30.00$ |
| B | $\mathbf{6 2 - 1 2 4 1}$ | Round | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| C | $\mathbf{6 2 - 1 2 4 2}$ | Marquise | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| D | $\mathbf{6 2 - 1 2 4 3}$ | Pear | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| E | $\mathbf{6 2 - 1 2 4 4}$ | Emerald | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| F | $\mathbf{6 2 - 1 2 4 5}$ | Oval | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| G | $\mathbf{6 2 - 1 2 4 6}$ | Heart | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| H | $\mathbf{6 2 - 1 2 4 7}$ | Radiant | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |
| J | $\mathbf{6 2 - 1 2 4 8}$ | Princess | $3^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 10.14$ | $\$ 10.49$ | $\$ 11.65$ |

## DIAMOND FACT SHEET

Professional looking diamond sheet for notating comments regarding the stones. Pad of 100 .

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{6 1 - 1 6 4 9}$ | Diamond Fact Sheet | $81 / 2^{\prime \prime} \times 11 "$ | $\$ 14.31$ | $\$ 14.81$ | $\$ 16.45$ |

## APPRAISAL FORMS WITH ENVELOPES

These repair order forms highlight specific areas to indicate issues for jewelry or watch repair. The triple form allows for individual copies for record keeping and customers. Pack of 50 .

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: |
| K | $\mathbf{6 1 - 1 7 1 0}$ | Appraisal Forms with <br> Envelopes (Box of 50) | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 24.32$ | $\$ 25.16$ | $\$ 27.95$ |

## APPRAISAL FORMS

These repair order forms highlight specific areas to indicate issues for jewelry or watch repair. The triple form allows for individual copies for record keeping and customers. Pack of 100.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| L | $\mathbf{6 1 - 1 6 5 5}$ | Appraisal Form | $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 21.71$ | $\$ 22.46$ | $\$ 24.95$ |

STONE PAPERS
European-style quality papers.
Folded size measures $31 / 8^{\prime \prime} \times 13 / 4$ " (sold in packs of 25).

| Item | Order\# | Description | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | :---: | :---: | :---: |
| A | $\mathbf{6 1 - 0 5 1 7}$ | Diamond Papers | Blue/Blue | $\$ 5.18$ | $\$ 5.36$ | $\$ 5.95$ |
| B | $\mathbf{6 1 - 0 5 1 8}$ | Diamond Papers | Blue/White | $\$ 5.18$ | $\$ 5.36$ | $\$ 5.95$ |
| C | $\mathbf{6 1 - 0 5 1 9}$ | Diamond Papers | White/White | $\$ 5.35$ | $\$ 5.54$ | $\$ 6.15$ |
| GEMSTONE PAPERS |  |  |  |  |  |  |
| D | $\mathbf{6 1 - 0 5 3 5}$ | Sapphire | Double White/White | $\$ 2.91$ | $\$ 3.02$ | $\$ 3.35$ |
| E | $\mathbf{6 1 - 0 5 3 6}$ | Opal | Double Black/Black | $\$ 2.91$ | $\$ 3.02$ | $\$ 3.35$ |
| F | $\mathbf{6 1 - 0 5 3 7}$ | Ruby | Double Yellow/Yellow | $\$ 2.91$ | $\$ 3.02$ | $\$ 3.35$ |
| G | $\mathbf{6 1 - 0 5 3 8}$ | Emerald | Single Yellow | $\$ 2.91$ | $\$ 3.02$ | $\$ 3.35$ |



A


B
C


DIAMOND \& GEMSTONES SUPPLIES
Heavy Paper Weight (folds up when not in use) 6 inch

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 2 - 0 0 4 0}$ | $6^{\prime \prime}$ Diamond Paper Weight | $6^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 4.31$ | $\$ 4.46$ | $\$ 4.95$ |
| $\mathbf{6 2 - 0 0 4 4}$ | Sorting Pad with White Paper and <br> Heavy Cardboard Backing $(50$ sheets) $10^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 10.23$ | $\$ 10.58$ | $\$ 11.73$ |  |
|  |  |  |  |  |  |



GEMSTONE PARCEL BOXES AND WALLETS
H. Single row, black leatherette stone parcel box with soft-suede interior and removable inserts
J. Stone parcel box with soft-suede interior and removable inserts
K. Leather stone parcel box with zipper closure
L. Soft Black Pouch with Zipper Closure

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## DIAMOND INSCRIPTION VIEWER COMBO

The newly designed inscription loupe allows the user to view the certified number or information inscribed on the girdle of a diamond ring. It can also be used for loose stones with the aid of a stone holder or tweezers. The 20X triplet lens makes it easy to see the girdle of the stone. the swiveling pad allows you to view the ring in any direction.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{2 6 - 2 6 0 1}$ | Inscription Reader" | $\$ 57.00$ |



## PORTABLE POLARISCOPE

Easy to carry polariscope for testing single or double refraction, optical properties and pleochroism of gemstones. Comes with carrying pouch and flashlight.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{2 6 - 2 6 0 2}$ | Polariscope | $\$ 55.00$ |



POLARISCOPE WITH DUAL LIGHT
The dual light polariscope will help to identify double refracting stones and to distinguish between many genuine gemstones and their simulants. It has transmitted illumination for the polariscope and side illumination that can be used as a light source for refractometers. Comes complete with a conoscope and AC adapter.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 6 - 2 6 0 3}$ | Polariscope | $\$ 98.00$ |



## REFRACTOMETER

The refractometer has readings from 1.31 to 1.81 with pull out eyepiece. It gives you clear focus and reading. It has polarizing filter, monochromatic filter, and light source, supplied with 1.8 "OR1" liquid.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 6 - 2 6 0 4}$ | Refractometer | $\$ 159.00$ |

## LEICA ${ }^{\circledR}$ BENCH MICROSCOPE

Ergonomically designed workstations have been proven to increase performance and the quality of work results. Leica ${ }^{\circledR}$ microscope systems' many years of experience in ergonomics is evident in the Leica ${ }^{\oplus} \mathrm{A} 60$ : the $38^{\circ}$ viewing angle is close to a person's natural head posture. The zoom and focus knobs could not be more accessible; the rheostat of the focus drive can be adjusted to the preferences of a specific user. The operating elements of the ring illuminator are also intuitive and easily accessible, by left and right-handed users. The A60 has a large overview with a 46 mm object field with approximately $100 \%$ greater depth of field and the working distance is 122 mm .

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 4 7 5 8}$ | Microscope with Flex Arm Stand | $\$ 2,075.00$ |
| $\mathbf{2 9 - 4 7 5 8}$ | Horizontal Surface Mount | $\$ 167.00$ |
| $\mathbf{2 9 - 4 7 5 8}$ | Power Cord | $\$ 30.00$ |



## MODE $360^{\circ}$ PHOTO BOX

The MODE $360^{\circ}$ Photo Box is a semi-automatic lightbox for taking professional pictures called packshots with maximum product size $15 \times 15 \times 15 \mathrm{~cm}$. It is equipped with a built-in shadowless turntable necessary to compose 360 degree animations. Lighting is provided by a high quality LED system with optimal color temperature of light $6,500^{\circ} \mathrm{K}$.

TECHNICAL SPECIFICATIONS:

- Dimensions: $60 \times 60 \times 60 \mathrm{~cm}$
- Weight: 27 Pounds
- Power supply: $110-220 \mathrm{~V}$
- Power consumption: 175 W
- Diameter of revolving platform: 40 cm
- Number of built-in lights: 5 below the turntable, 2 from top
- Max size of photographed object: $15 \times 15 \times 15 \mathrm{~cm}$

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 0 2 0 0}$ | MODE $360^{\circ}$ Photo Box | $\$ 4,495.00$ |



## FLEXIBLE CAMERA STAND

The flexible camera stand is designed to work with the Dino Lite digital microscope (29-1502). It's tri-pod design with flexible legs allows you to wrap the legs around various objects to take pictures at many different angles.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| 29-1499 | Camera Stand | $\$ 29.00$ |


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## FRETZ HAMMERS

Fretz Hammers feature beautiful and strong Padauk wood handles, oil finished and tapering to a slender neck for flexibility. The head is cast from 420-grade stainless steel and hardened to 50 HRC for maximum durability. Faces are polished to a mirror shine.

Order \# 37-1550

| Item | Description | Length | Head Size (mm) | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | GOLDSMITH |  |  |  |  |  |
| A | HMR-21 | $9 "$ | 17 | \$45.99 | \$48.69 | \$54.10 |


| B | HMR1 | $9 "$ | 19 | $\$ 45.99$ | $\$ 48.69$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \$ | HM4.10 |  |  |  |  |
|  | RAISING |  | $\$ 66.30$ | $\$ 70.20$ | $\$ 78.00$ |


| D | HMR-2 Wide | $9^{\prime \prime}$ | $11 \times 9,8 \times 19$ | $\$ 45.99$ | $\$ 48.69$ | $\$ 54.10$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| E | HMR-3 Narrow | $9^{\prime \prime}$ | $7 \times 19,3 \times 19$ | $\$ 45.99$ | $\$ 48.69$ | $\$ 54.10$ |
| F | HMR-12 Sharp Texturing | $9^{\prime \prime}$ | $3 \times 19,1.5 \times 19$ | $\$ 45.99$ | $\$ 48.69$ | $\$ 54.10$ |
| G | HMR-4 Large Embossing | $9^{\prime \prime}$ | 12,16 | $\$ 45.99$ | $\$ 48.69$ | $\$ 54.10$ |
| H | HMR-5 Small Embossing | $9^{\prime \prime}$ | 5.7 | $\$ 45.99$ | $\$ 48.69$ | $\$ 54.10$ |
|  | CHASING |  |  |  |  |  |
| J | HMR-17 | $9 \prime$ | 22 | $\$ 48.62$ | $\$ 51.48$ | $\$ 57.20$ |



BENCH ANVILS

| Item |  | Order \# | Description | Diameter |  | $\mathbf{1 2 +}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{3 7 - 1 5 5 1}$ | Kit |  | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |  |
| K | $\mathbf{3 7 - 1 5 5 2}$ | Flat | $23 / 4^{\prime \prime}$ | $\$ 62.77$ | $\$ 66.47$ | $\$ 73.85$ |  |
| L | $\mathbf{3 7 - 1 5 5 3}$ | Low Dome | $23 / 4^{\prime \prime}$ | $\$ 62.77$ | $\$ 66.47$ | $\$ 73.85$ |  |
| M | $\mathbf{3 7 - 1 5 5 4}$ | Medium Dome | $23 / 4^{\prime \prime}$ | $\$ 62.77$ | $\$ 66.47$ | $\$ 73.85$ |  |
| N | $\mathbf{3 7 - 1 5 5 5}$ | High Dome | $23 / 4^{\prime \prime}$ | $\$ 62.77$ | $\$ 66.47$ | $\$ 73.85$ |  |

HOLDER FOR FRETZ STAKES
Fretz Stake Holder is used for the 100 series stakes. This holder securely supports stakes during use. Can be mounted to a wood bench or block.

| Order\# | Description | Length | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{3 7 - 1 5 5 9}$ | Stake Holder | $31 / 2 "$ | 10 mm | $\$ 46.75$ | $\$ 49.50$ | $\$ 55.00$ |



100 SERIES STAKES
Fretz 100 series stakes.

## Order \# 37-1560

| Model | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| M-102 | Low Dome Mushroom | $13 / 10^{\prime \prime}$ | $\$ 30.60$ | $\$ 32.40$ | $\$ 36.00$ |
| M-103 | Flat Mushroon Stake | $13 / 101$ | $\$ 28.90$ | $\$ 30.60$ | $\$ 34.00$ |
| M-104 | Large Concave Stake | $21 / 5^{\prime \prime}$ | $\$ 49.30$ | $\$ 52.20$ | $\$ 58.00$ |
| M-105 | Medium Concave Stake | $14 / 5^{\prime \prime}$ | $\$ 43.35$ | $\$ 45.90$ | $\$ 51.00$ |
| M-107 | Extra Concave Cone Stake | $2^{\prime \prime}$ | $\$ 66.30$ | $\$ 70.20$ | $\$ 78.00$ |
| M-108 | Slope Large Concave Stake | $2^{\prime \prime}$ | $\$ 53.55$ | $\$ 56.70$ | $\$ 63.00$ |
| M-110 | Sloped Convex Cone Stake | $2^{\prime \prime}$ | $\$ 68.85$ | $\$ 72.90$ | $\$ 81.00$ |
| M-112 | Convex Cuff Stake | $11 / 5^{\prime \prime}$ | $\$ 54.40$ | $\$ 57.60$ | $\$ 64.00$ |
| M-113A | Convex Cuff Stake | $12 / 5^{\prime \prime}$ | $\$ 36.55$ | $\$ 38.70$ | $\$ 43.00$ |
| M-113B | Convex Cuff Stake | $12 / 5^{\prime \prime}$ | $\$ 36.55$ | $\$ 38.70$ | $\$ 43.00$ |
| M-117 | Flat Cuff Stake | $21 / 10^{\prime \prime}$ | $\$ 84.15$ | $\$ 89.10$ | $\$ 99.00$ |
| M-118 | Flat Cuff Stake | $21 / 10 "$ | $\$ 78.20$ | $\$ 82.80$ | $\$ 92.00$ |
| M-122 | Shallow Concave Stake | $23 / 4^{\prime \prime}$ | $\$ 48.45$ | $\$ 51.30$ | $\$ 57.00$ |
| M-123 | Minimal Concave Stake | $23 / 4^{\prime \prime}$ | $\$ 48.45$ | $\$ 51.30$ | $\$ 57.00$ |



## DVD SET

Fretz DVD set and tools is an amazing buy for your bench. This is a top-quality, professional tools kit that can could last a lifetime. This set gives you everything you will need for your top-quality jewelry making needs.

Included in this set:

- Jeweler's planishing hammer, HMR-1; 88g head (37-1550)
- Jeweler's wide raising hammer, HMR-2; 85g head (37-1550)
- Jeweler's narrow raising hammer, HMR-3; 78g head (37-1550)
- Jeweler's double-ended hammer with inserts, HMR-7 (37-1550)
- Jeweler's rounded narrow raising hammer, HMR-8
- Jeweler's rounded wide raising hammer, HMR-9
- Steel stake holder, H-1 (37-1559)
- Double convex forming stake, F-2; $75 \times 14.5 \mathrm{~mm}$ (37-1557)
- Convex lining fluting stake, F-2A (37-1558)
- Convex sharp fluting stake, F-2B (37-1558)
- Convex extreme sharp fluting stake, F-2C
- Shell forming stake, F-6; $97 \times 15 \mathrm{~mm}$ (37-1557)
- Convex/concave forming stake, F-9; $77 \times 13 \mathrm{~mm}$ (37-1557)

Also included is the 90-minute DVD "Metalsmith Essentials: Basic Jewelry Hammering and Forming with Bill Fretz". This DVD puts renowned expert metalsmith and tool designer Bill Fretz right in your reach. You can learn from the ground up, starting with basic convex and concave forming techniques and continuing through eight lessons to begin mastering techniques such as planishing, raising, using stakes to form and flute metal, and many others. This is a set you want to have for all of your jewelry making needs.



HOLLOW RING STAKES
The R-1 and R-2 are raising stakes used to create bezels and stretch metal to fit custom stones.

## Order \# 37-1556

| Model | Description | 1+ |
| :---: | :--- | :---: |
| R-2 | Tapered Rounded Raising Stake | $\$ 45.00$ |
| R-1 | Standard Raising Stake | $\$ 45.00$ |

## FORMING STAKES

- The F-1 is a BEAK STAKE that allows you to expand your forming and shaping skills. With this beak stake you can roll the edge of a cone or tube shape inward and will make a slightly tapered end than other stakes.
- The F-2 is a DOUBLE CONVEX STAKE that will allow you to build your forming and shaping skills, allowing you to create domes. On the larger end of the stake you will be able to create bold, curved shapes; the smaller end allows you to create smaller radius shapes.
- The F-3 is a DOMING STAKE is used to form bezels, make hollow rings or perform any type of smithing that you could do with larger stakes, but on a smaller scale.
- The F-6 is a SHELL STAKE that allows you to increase your forming and shaping skills. This shell stake is used for bracelet-sized work, using this stake you can form dramatic concave shapes and small convex shapes.
- The F-8 is a HORN STAKE that allows you to increase your forming and shaping skills. This horn stake allows you to create a more domed shape. Used in large part to make hollow rings and large beads for tubing.
- The F-9 is a CONVEX/CONCAVE STAKE that will allow you to increase your forming and shaping skills. The curve end of this stake will give you a more subtle curve; and the concave end forms more concave shapes on cylinders and bracelets.

| Order \# | 37-1557 |  |
| :--- | :--- | :---: |
| Model | Description |  |
| F-1 | Beak Stake | $\mathbf{1 +}$ |
| F-2 | Double Convex Stake | $\$ 54.00$ |
| F-3 | Doming Stake | $\$ 54.00$ |
| F-6 | Shell Stake | $\$ 54.00$ |
| F-8 | Horn Stake | $\$ 54.00$ |
| F-9 | Convex/Concave Stake | $\$ 54.00$ |



## PROGRESSIVE STAKES

Fretz new forming stakes have progressively sharper angles.
These you can make fluted designs.


## GERMAN HAMMERS

The finest German-made hammers available. Precisely ground and hardened, each hand-forged steel head has highly polished tips and is mounted on a hickory handle. Each hammer offers just the precise weight and blance.

## SILVERSMITHS' HAMMERS

Basic and essential for all metal work. Suitable for a wide range of objects from small spoons to large trays.
A. Length: 5 " $(127 \mathrm{~mm})$

Weight: 1002
Small End: $13 / 16^{\text {" }}(21 \mathrm{~mm})$
Large End: $7 / 8^{\prime \prime}(22 \mathrm{~mm})$

| Item Order\# | Description | Length | Head Size | $\mathbf{1 +}$ |  |
| :---: | :--- | :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{3 7 - 1 2 3 0}$ | Hammer | $5^{"}$ | $7 / 8^{\prime \prime}$ | $\$ 5.70$ |

## PLANISHING HAMMERS

These planishing hammers are ideal for smoothing out imperfections and finishing surfaces that have been raised.

| B. - Length: $4^{3} / 8^{\prime \prime}(111 \mathrm{~mm})$ <br> - Weight: $140 z$ <br> - Small End: 1" (25mm) <br> - Large End: 1 1⁄" ${ }^{1}(29 \mathrm{~mm})$ |  |  | C. - Length: 3" 76 mm ) <br> - Weight: 702 <br> - Small End: ${ }^{15 / 16^{\prime \prime}}$ (24mm) <br> - Large End: 1" (25mm) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Order \# | Description | Length | Head Size | 1+ |
| B | 37-1240 | Hammer | $43 / 81$ | $1 / 2 \times 1{ }^{11}$ | \$55.70 |
| C | 37-1241 | Hammer | $3 "$ | $11 / 4 "$ | \$55.70 |

## EMBOSSING HAMMER

When driven against the inner walls of raised work, the embossing hammer can elevate positions of the surface. Can also be used for planishing.
D. Length: $3^{\prime \prime}(76 \mathrm{~mm})$

Weight: $70 z$
Small End: ${ }^{15} / 16^{\prime \prime}$ ( 24 mm )
Large End: 1" (25mm)

| Item Order \# | Description | Length | Head Size | 1+ |  |
| ---: | ---: | :--- | :---: | :---: | ---: | ---: |
| D | 37-1250 | Hammer | $3^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 55.70$ |



## DELRIN ADVANCED FORMING STAKES

Synclastic forming is the technique by which bowl-like metal shapes are created. Anticlastic forming results in a shape resembling a saddle. These advanced forming stakes are constructed from Delrin, a polymer notable for its high strength, hardness, and rigidity. Steel stakes require a good deal more planishing and provide somewhat less control than this range of stakes Designed to be mounted in a bench vise. Made in the USA.

| Item | Order \# | Description | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 37-5404 | $1 / 8{ }^{\text {" }}$ Forming Curve | $1 / 2^{\prime \prime} \times 8^{\prime \prime} \times 1^{\prime \prime}$ | \$66.26 | \$70.16 | \$77.95 |
| F | 37-5403 | $1 / 4^{\prime \prime}$ Forming Curve | $1 " \times 91 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$66.26 | \$70.16 | \$77.95 |
| G | 37-5402 | $11 / 2$ " Forming Curve | $1 " \times 93 / 4^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$55.63 | \$58.91 | \$65.45 |



## RASING HAMMER

These hammers are made of Delrin, a long lasting, non-marring material, perfect for forming and shaping non-ferrous metals using a stake. With its dead blow design there is little to no recoil when you strike, making it easy-to-use for long periods of time. Made in the USA.

| Item | Order \# | Description | Length | Head Size | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 37-5401 | Round | 101/2" | $11 / 4^{\prime \prime}$ | \$50.95 |
| B | 37-5400 | Flat | 101/2" | $11 / 4^{\prime \prime}$ | \$50.95 |



## TEXTURING HAMMER

With this hammer, the possibilities for patterns are endless. Never before has a hammer been designed to do so much. Use the small designs to pinpoint texture in a certain area and the large designs to cover a bigger area or use multiple tips to layer textures over one another. Each tip is easily and securely attached with a threaded collar. The tips are approximately $3 / 4^{11}$ with various textures.

| Order \# | Description | Length | Head Size | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: |
| 37-2169 | Hammer with 9 Faces | $91 / 2^{\prime \prime}$ | $1 / 2 "$ | $\$ 47.35$ |




C


D


E

TEXTURING HAMMER
These texturing hammers are for non-ferrous metals. Double-sided, they enable the user to make attractive patterns to give jewelry and other metal items a unique look. Two different patterns on each side.

| Item Order \# |  | Description | Length | Head Size | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C | 37-2170 | Sharp Stripe and Dimples | $10^{\prime \prime}$ | $21 / 2 \times 11 / 8^{\prime \prime}$ | \$20.70 |
| D | 37-2171 | Checkered and Wide Stripe | $10^{\prime \prime}$ | $31 / 2 \times 11 / 8^{\prime \prime}$ | \$20.70 |
| E | 37-2172 | Crosshatch and Stars | $10^{\prime \prime}$ | $23 / 4 \times 1 \times 3 / 81$ | \$20.70 |



MASTER-OUALITY, BALL PEEN HAMMER
Used for flattening, shaping, or removing dents. Made of high-carbon steel that provides extra strength for driving chisels, punches, and other tools.

| Item Order\# | Description | Length | Head Size | 1+ |  |
| :---: | :---: | :--- | :---: | :---: | ---: |
| A | $\mathbf{3 7 - 1 2 2 0}$ | 2 oz Peen Hammer | $10^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 22.05$ |
| B | $\mathbf{3 7 - 1 2 0 2}$ | $40 z$ Peen Hammer | $10 "$ | $2^{1 / 1 / 8}$ | $\$ 22.05$ |



GOLDSMITH HAMMER
Used for working on rings for sizing. Head has one round/flat end, $5 / 8^{\prime \prime}$ diameter and one chisel-shaped end. Has sturdy hardwood handle.

| Order \# | Description | Length | Head Size | 1+ |
| :--- | :--- | :---: | :---: | ---: |
| 37-0409 | 402 Hammer | $117 / 8^{\prime \prime}$ | $258^{\prime \prime}$ | $\$ 34.80$ |

## NYLON HAMMER

Seasoned ash handle with a drop-forged head and two nylon faces. Measures $11 / 8^{\prime \prime}(27 \mathrm{~mm})$. Faces can be removed with a half-turn. Made in Germany.

| Item | Order \# | Description | Length | Head Size |  | 1+ |
| ---: | ---: | :--- | :--- | :---: | :---: | ---: |
| C | $\mathbf{3 7 - 5 3 1 0}$ | Nylon Hammer | $10^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 14.10$ |  |
| D | $\mathbf{3 7 - 5 3 1 5}$ | Replacement Faces |  | $13 / 4^{\prime \prime}$ | $\$ 5.50$ |  |


D


BRASS HAMMER
With hardwood handle. This hammer will provide years of service.


| Order \# | Description | Length | Head Size | 1+ |
| :--- | :--- | :---: | :---: | ---: |
| 37-5300 | Brass Hammer | $10 "$ | $11 / 4^{\prime \prime}$ | $\$ 8.15$ |



## MALLETS WITH DETACHABLE FACES

Faces can be changed to provide any combination desired. Faces can also be replaced when worn. Sold with two different faces and a wrench to tighten or remove collars. Faces are brass and nylon.

| Item | Order \# | Description | Length | Head Size |  |
| :---: | :---: | :---: | :---: | :---: | ---: | 1+

REPLACEMENT FACES

| G | $37-5502$ | Nylon | $\$ 1.45$ |
| :---: | :---: | :---: | :---: |
| H | $37-5500$ | Brass | $\$ 1.45$ |
| J | $37-5902$ | Nylon | $\$ 1.45$ |
| K | $37-5900$ | Brass | $\$ 1.70$ |




## GRS® ${ }^{\circledR}$ CHASING HAMMER

These hammers are made from carefully heat-treated high alloy tool steel. The heads have a rich black oxide color treatment applied and then each end is beautifully hand polished. The hardwood handles are made from carefully selected wood that is superior to the wood used on lower quality hammers. The balance and fine craftsmanship of these chasing hammers add precision and satisfaction to your work.

| Item Order\# | Description | Length | Head Size | $\mathbf{1 +}$ |  |
| ---: | ---: | ---: | :---: | ---: | ---: |
| A | $37-0363$ | Flat | $10^{\prime \prime}$ | $1 / 2 \times 1^{\prime \prime}$ | $\$ 41.55$ |
| B | $37-0364$ | Round | $10^{\prime \prime}$ | $1 / 2 \times 1^{\prime \prime}$ | $\$ 41.55$ |



## CHASING HAMMER

Designed for silversmiths and arts and crafts work. Flat head is used to flatten, shape, and form objects to strike chasing tools. Round end is used for forming decorative patterns and designs. Made with hardwood handles. The forged head is wedge-mounted.

| Item | Order \# | Description | Length | Head Size | 1+ |
| :---: | :---: | :--- | :---: | :---: | ---: |
| C | 37-0365 | Chasing Hammer | $10 "$ | $1 "$ | $\$ 14.30$ |
| D | $\mathbf{3 7 - 0 3 6 6}$ | Chasing Hammer | $10 "$ | $11 / 8^{\prime \prime}$ | $\$ 15.40$ |
| E | $\mathbf{3 7 - 0 3 6 7}$ | Chasing Hammer | $10 "$ | $11^{\prime \prime}$ | $\$ 16.50$ |



E
REPLACEMENT CHASER HARDWOOD HANDLES

| $J$ | $\mathbf{3 7 - 0 4 1 0}$ | Pistol Handle | $10^{\prime \prime}$ | $\$ 5.70$ |
| :---: | :---: | :--- | :--- | :--- |
| K | 37-0411 | Round | $10^{\prime \prime}$ | $\$ 6.05$ |
| L | $\mathbf{3 7 - 0 4 1 2}$ | Oval | $10^{\prime \prime}$ | $\$ 7.45$ |



## RIVETING HAMMER

Used for forming, riveting, and tacking. One end is flat, and the other is chisel-shaped. Drop-forged, polished head is mounted on select hardwood handle. Face diameter $1 / 2^{\prime \prime}$.

| Item | Order\# | Description | Length | Head Size | 1+ |
| :---: | :---: | :--- | :---: | :---: | ---: |
| F | $\mathbf{3 7 - 2 1 6 0}$ | $40 z$ Riveting Hammer | $9^{\prime \prime}$ | $1 / 2{ }^{\prime \prime}$ | $\$ 32.35$ |
| G | $\mathbf{3 7 - 2 1 8 0}$ | $50 z$ Riveting Hammer | $9^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 35.85$ |



## ROUND FACE RIVETING HAMMER

One end is flat for general purpose, and the other end is chisel-shaped for spreading rivet heads. Round $3 / 8^{\prime \prime}$ face diameter. Made in Germany

| Item | Order \# | Description | Length | Head Size | $\mathbf{1 +}$ |
| :---: | :--- | :---: | :---: | ---: | ---: |
| H | $\mathbf{3 7 - 2 1 5 0}$ | Riveting Hammer | $9^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $\$ 25.25$ |

BRASS HAMMER
Soft, yellow brass heads and cushion, rubber grips offer non-marring striking on all metal surfaces. Perfect for stamping, dapping, chasing, using with design stamps, and using with disc cutters.

| Item | Order \# | Description | Length | Head Size |  | 1+ |
| ---: | ---: | ---: | :--- | :---: | :---: | :---: |
| A | $\mathbf{3 7 - 5 3 2 0}$ | 1 lb Brass Hammer | $9^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $\$ 26.45$ |  |
| B | $\mathbf{3 7 - 5 3 2 1}$ | 2 lb Brass Hammer | $9^{\prime \prime}$ | $13 / 16^{\prime \prime}$ | $\$ 39.95$ |  |



## PLASTIC MALLET

Made of durable, non-porous plastic with hardwood handle. Easy-to-clean. Non-marring plastic cushions the shock at impact. Has the "bounce back" similar to a rawhide mallet.

| Order \# | Description | Length | Head Size |  | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3 7 - 7 0 7 0}$ | 4 oz Mallet | $9^{\prime \prime}$ | $11 / 4^{\prime \prime}$ | $\$ 11.20$ |  |
| $\mathbf{3 7 - 7 0 7 1}$ | 6 oz Mallet | $9^{\prime \prime}$ | $1 \frac{1}{2 \prime}$ | $\$ 10.35$ |  |
| $\mathbf{3 7 - 7 0 7 2}$ | 9 oz Mallet | $9^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 15.30$ |  |
| $\mathbf{3 7 - 7 0 7 3}$ | 14 oz Mallet | $9^{\prime \prime}$ | $21 / 8^{\prime \prime}$ | $\$ 16.40$ |  |



ELASTOMER MALLET
Features an advanced resin material for long-lasting durability. Extra-long wooden handle protects hands.

| Order \# | Description | Length | Head Size | 1+ |
| :--- | :---: | :---: | :---: | ---: |
| $\mathbf{3 7 - 3 0 3 0}$ | 11 oz Mallet | $9^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 39.65$ |



## GARLAND RAWHIDE MALLETS

Heads are made of the finest quality, specially treated rawhide, which will not mark or scar metal. Handles are made of hardwood. Made in the USA.

| Item |  | Order\# | Description | Length | Head Size |
| :---: | :---: | :---: | :---: | :---: | ---: |
| C | $\mathbf{3 7 - 7 0 0 0}$ | 2 oz Mallet | $10^{\prime \prime}$ | $1 "$ | 1+ |
| D | $\mathbf{3 7 - 7 0 0 1}$ | 4 oz Mallet | $9^{\prime \prime}$ | $11 / 4^{\prime \prime}$ | $\$ 15.50$ |
| E | $\mathbf{3 7 - 7 0 0 2}$ | 6 oz Mallet | $9^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | $\$ 20.70$ |
| F | $\mathbf{3 7 - 7 0 0 3}$ | 9 oz Mallet | $9^{\prime \prime}$ | $13 / 4^{\prime \prime}$ | $\$ 22.80$ |
| G | $\mathbf{3 7 - 7 0 0 4}$ | 11 oz Mallet | $9^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 25.90$ |


$\qquad$

"FLOATING-ARM" JEWELER'S LAMP
Dazor ${ }^{\circledR}$ tube lamps are supplied with 15 watt daylight tubes $\left(6500^{\circ} \mathrm{K}\right)$ for a natural light. Your choice of two or three tube models. The Dazor ${ }^{\oplus}$ Floating Arm is easily positioned with a touch of a finger and will stay where you put it without springs or tightening screws. Rugged all metal construction has no exposed springs or wires. Now finished with powder coat for years of lasting use. Available in several colors, desk base models, clamp models, and two arm lengths. Clamp models will also fit into our bench-friendly Bushing Mount (13-1823). Tubes/bulbs not covered by five-year warranty.

| Item | Order \# | Color | Base Type | Arm Reach | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TWO TUBE LAMPS |  |  |  |  |  |
| A | 13-1802 | Dove Gray | Desk Lamp | 33" | \$232.05 |
| B | 13-1803 | Black | Desk Lamp | 33" | \$243.80 |
| C | 13-1801 | Black | Clamp | 43 " | \$209.95 |
| D | 13-1800 | Dove Gray | Clamp | 43 " | \$209.95 |

THREE TUBE LAMPS


| E | $\mathbf{1 3 - 1 8 0 8}$ | Black | Desk Lamp | 27" | $\$ 262.15$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{1 3 - 1 8 2 1}$ | Dove Gray | Clamp | $33^{\prime \prime}$ | $\$ 232.45$ |
|  | $\mathbf{1 3 - 1 8 0 5}$ | Dove Gray | Clamp | $43^{\prime \prime}$ | $\$ 225.95$ |
|  | $\mathbf{1 3 - 1 8 0 6}$ | Black | Clamp | $43^{\prime \prime}$ | $\$ 225.95$ |

New power switch


## DAZOR® ${ }^{\circledR}$ LED DIAMOND LIGHTS

These LED Diamond Lights are a combination of proven technology, cuttingedge research, and product development. Dazor's "Floating Arm" lighting solutions have been the industry standard in the jewelry industry since 1938. Our use of advanced technology coats the ore boards with a ceramic material that naturally dissipates the heat; no irritating, noisy fans. UV wavelength has been limited from the LED light spectrum. The light pattern from Dazor's LED luminaire is diffuse and color consistent. The phosphorous coating used in the powerful $1 / 2 \mathrm{~W}$ LED produces a single, white light. No striping, patterns of illumination "blotches," nor color distortion are present in the pattern of illumination. One-year warranty

| Item | Order\# | Arm Type | Color | Base Type | Arm Reach | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | $\mathbf{2 9 - 4 7 7 6}$ | Flexible Arm | Black | Clamp | 22" | $\$ 329.95$ |
| G | $\mathbf{2 9 - 4 7 7 7}$ | Classic Arm | Black | Clamp | $34^{\prime \prime}$ | $\$ 329.95$ |
| H | $\mathbf{2 9 - 4 7 7 8}$ | Classic Arm | Black | Clamp | $24^{\prime \prime}$ | $\$ 329.95$ |
| J | $\mathbf{1 3 - 1 7 9 9}$ | Flexible Arm | Black | Clamp | $25^{\prime \prime}$ | $\$ 160.40$ |

BENCH-FLEX JEWELER'S LAMP
Designed by a bench jeweler for Dazor", the Bench-Flex is made for the unique lighting demands of jewelry production. It can be moved to any angle for shadow-free or high-light viewing. The gooseneck is heavier than one would expect. It stays in position and does not droop. Bench-Flex is mounted on a 22 " flex-arm with 30 " reach, comes with two 15 watt $\left(6500^{\circ} \mathrm{K}\right)$ daylight tubes and our bench-friendly bushing mount for mounting directly into the bench or desk top. Its rugged all metal construction and durable powder coat allows for years of lasting use. Tubes/bulbs not covered by five-year warranty.




DAZOR ${ }^{\circledR}$ FLUORESCENT BULBS
The different types of lights come in several different color temperatures to best fit your needs.

| Item |  | Order\# | Description | Color Range | Color Temp |  | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | :---: | :---: |
| C | $\mathbf{1 3 - 1 8 2 4}$ | Tube | Cool White | $4,100^{\circ} \mathrm{K}$ | $\$ 8.95$ |  |  |
|  | $\mathbf{1 3 - 1 8 2 4}$ | Tube | Dallight | $6,500^{\circ} \mathrm{K}$ | $\$ 9.95$ |  |  |
|  | $\mathbf{1 3 - 1 8 2 4}$ | Tube | Full Spectrum | $5,500^{\circ} \mathrm{K}$ | $\$ 19.95$ |  |  |
|  | $\mathbf{1 3 - 1 8 1 0}$ | Tube | Daylight | $6,500^{\circ} \mathrm{K}$ | $\$ 13.95$ |  |  |
| D | $\mathbf{1 3 - 1 8 2 0}$ | U-Shape | Full Spectrum | $5,000^{\circ} \mathrm{K}$ | $\$ 17.00$ |  |  |
|  | $\mathbf{1 3 - 1 8 2 0}$ | U-Shape | Cool White | $4,100^{\circ} \mathrm{K}$ | $\$ 19.95$ |  |  |



## DAZOR ${ }^{\circledR}$ ECOFLEX

The innovative new Wolf EcoFlex LED Bench Light by Dazor is rugged and environmentally friendly LED bench light. The sleek head rotates 340 degrees vertically and $90^{\circ}$ horizontally, and features $7 \times 1$-Watt dimmable high brightness white LEDs optically mixed to produce an even light pattern. The 25 " flexible arm exceeds the depth of most jewelry benches and allows you to aim the light exactly where you need it, without the heat! The light features a grooved aluminum head design that removes heat and is comfortable to the touch. Dazor's clever thermal engineering allows the LEDs to achieve their rated life of 50,000 hours.

- Illumation is optically mixed for smooth, diffuse light output
- Beam of light can be positioned directly where needed
- Long arm reach 25 " $(63 \mathrm{~cm}$ ) exceeds depth of any jewelry bench
- Splash guard to protect against debris and liquids
- Dimmable down to $25 \%$ of full intensity
- Grooved aluminum head removes heat;comfortable to touch

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 13-1798 | LED Bench Light | $\$ 199.95$ |



PORTABLE FOLDING LAMP
Reasonably priced portable folding light with a 13 watt daylight bulb.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: |
| C | $\mathbf{1 3 - 1 7 0 1}$ | Black Folding Lamp | $\$ 26.45$ |
| D | $\mathbf{1 3 - 1 7 0 9}$ | Replacement Bulb | $\$ 5.05$ |

GEMORO ${ }^{\circledR}$ HORIZON LED DAYLIGHT DIAMOND COLOR GRADING LAMP
6000kt full spectrum natural daylight illumination task lamp with UV-free natural daylight illumination It's sleek, flexible, ergonomic design with superior LED lighting is perfect for jewelers, artists, hobbyists, students, and more Features a touch sensor power switch and dimmer, USB port for charging smartphones, ipods, etc. Fully adjustable light angles and multi-voltage adaptor

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 3 - 1 7 2 3}$ | Black LED Task Lamp | $\$ 119.95$ |
| $\mathbf{1 3 - 1 7 2 3}$ | Slate LED Task Lamp | $\$ 119.95$ |



MK DIGITAL LED FLEXIBLE BENCH LIGHT
This light is a breakthrough in illumination intensity. It provides 100\% even illumination throughout the entire length of the light. The cool white color temperature $\left(5500^{\circ} \mathrm{K}\right)$ unleashes the fine qualities of your jewelry. No other light source can match the prismatic effect of laboratory graded LEDs light the fire in your diamonds. It is UL approved and guaranteed in international standards of safety.

- Made by aluminum extrusion. The fan-cooled LED provides for an exceptional long life. No ultraviolet or infrared radiation. Energy saving product - only uses $3 / 4$ of an amp per linear foot.
One year warranty.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| A | $\mathbf{1 3 - 1 7 1 9}$ | LED Light | $\$ 324.95$ |
| B | $\mathbf{1 3 - 1 7 1 9}$ | Diffuser Plate | $\$ 42.95$ |



## TABLE TOP INSPECTION LAMP

| -11 w fluorescent bulb | - Weighed base |
| :--- | :--- |
| $-1-3 / 4 x$ magnification | - Moveable arm |
| - Sturdy construction | - Color-White |
| - Flip-up lens cover |  |


| Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: |
| $\mathbf{1 3 - 4 0 0 0}$ | Inspection Lamp | $\$ 25.95$ |

## LED INSPECTION LAMP

- Bright LED lights, 72 bulbs
- Weighted base
- 13/4X magnification
- Sturdy Construction
- Moveable arm
- Color: White
- Flip-up lens cover

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: |
| A | $\mathbf{1 3 - 4 1 0 0}$ | LED Lamp | $\$ 79.00$ |

## LED TABLE TOP INSPECTION LAMP

- Bright LED lights, 72 bulbs
- 13/4X magnification - Sturdy Construction
- Weighted base
- Moveable arm - Color: White
- Flip-up lens cover

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| B | $\mathbf{1 3 - 4 2 0 0}$ | LED Lamp | $\$ 69.95$ |

## BENCH LAMP

Suitable for workshop or desktop use. Three fluorescent bulbs provide ample illumination. The innovative design allows the user to raise, lower, or tilt, directing the light source quickly and efficiently onto your work.

- 110V/60HZ $3 \times 14 \mathrm{~W}$ - 14W T502

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: |
| C | $\mathbf{1 3 - 4 3 0 0}$ | Bench Lamp | $\$ 69.00$ |

## CIRCLINE MAGNIFIER

Designed for shadow-free inspection, soldering, and assembly work. The 3-diopter ( $75 \%$ magnification), $5^{\prime \prime}$-crown optical glass lens has a focal length of 13 ". Rugged all-metal construction and durable powder coat allows for years of lasting use. Clamp models will also fit into our bench-friendly bushing mount (sold separately). Supplied with 22 Watt daylight tube ( $6500^{\circ} \mathrm{K}$ ). Tubes/bulbs not covered by five-year warranty.

| Item | Order \# | Description |
| :---: | :--- | ---: |
| D | $\mathbf{1 3 - 8 1 2 2}$ | Clamp |

DAZOR ${ }^{\circledR}$ HI-LIGHTER MAGNIFYING DESK LAMP
Uses a 13 Watt, compact fluorescent tube (included) located behind the magnifying lens. The unique placement of the bulb casts light at an angle for highlighting object details. This unique shadowing feature makes details of uneven surfaces pop out to the viewer. This effect is especially well suited for precise details found in variations of an object's surface.
The 3-diopter (75\% magnification), 5"- crown optical glass lens has a focal length of 13 ".

Rugged all-metal construction and durable powder coat allows for years of lasting use. Clamp models will also fit into our bench-friendly bushing mount (sold separately). Supplied with 13 Watt daylight tube $\left(6500^{\circ} \mathrm{K}\right)$. Tubes/bulbs not covered by five-year warranty.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: |
| A | $\mathbf{1 3 - 1 8 1 8}$ | Magnifying Clamp Base Lamp | $\$ 236.90$ |
| B | $\mathbf{1 3 - 1 8 1 9}$ | Magnifying Desk Base Lamp | $\$ 266.00$ |



## 5" CLAMP-ON MAGNIFIER FOR BENCH LAMP

- 2 X and $4 \mathrm{X} / 1^{1 "}$ window
- The magnifier is made from optical quality acrylic
- Ideal accessory for use in jewelry making
- Magnifier includes all hardware to install
- Magnifier will flip upwards when not in use

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 4 7 9 0}$ | Clamp on Magnifier | $\$ 42.35$ |



## IVIEW HANDHELD LED/ UV MAGNIFIER

- Dual 5X and 10X magnification
- Crisp 55 mm and 20 mm optical quality lens
- 8 white natural daylight LED's and 1 UV LED
- Unique ergonomic design with a rubberized paint finish
- Includes 3 AAA batteries and carrying case
- May also be used for counterfeit bill identification and diamond fluorescence detection

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 2 5 0 3}$ | LED/ UV Magnifier | $\$ 19.95$ |




## SUPER LIGHTWEIGHT LOUPE

These super lightweight professional triplet loupes are made of anodized aircraft-grade aluminum alloy housing. Triplet lenses are made by cementing three lens elements to form to one single lens for aplanatic and achromatic color corrections. $21 \mathrm{~mm}, 10 \mathrm{X}$ hexagonal-cut shape, weight - 1.4 ounces.

| Item | Order \# | Color | Power | Lens Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 6 0 7 0}$ | Red | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |
| B | $\mathbf{2 9 - 6 0 7 1}$ | Gray | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |
| C | $\mathbf{2 9 - 6 0 7 2}$ | Purple | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |
| D | $\mathbf{2 9 - 6 0 7 3}$ | Blue | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |
| E | $\mathbf{2 9 - 6 0 7 4}$ | Black | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |
| F | $\mathbf{2 9 - 6 0 7 5}$ | Gold | $10 X$ | 21 mm | $\$ 16.87$ | $\$ 17.86$ | $\$ 19.85$ |



## LED ILLUMINATED TRIPLET LOUPE

The 10X lighted loupe features a 21 mm achromatic-aplanatic lens and contains six bright white LED lights that illuminate your field of view. These lighted loupes are great for poor lighting conditions and have an on/off switch so they can be used with or without the light.

- Features diffused LED light source
- Comes in a leather carrying case
- Bright white LED light battery operated
- Three Energizer ${ }^{\oplus}$ 395/399 batteries included

| Item | Order \# | Description | Power | $\begin{gathered} \text { Lens } \\ \text { Diameter } \end{gathered}$ | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | 29-6775 | LED Loupe | 10X | 21 mm | \$25.29 | \$26.78 | \$29.75 |
| H | 29-6060 | LED and UV Loupe | 10X | 21 mm | \$35.28 | \$37.35 | \$41.50 |



LARGE HEX 10X LOUPE
These 10X triplet loupes offer a wide 21.5 mm field of view. Case is hexagonal and the head is a 12 -faceted design. Leather case included.

| Item | Order \# | Color | Power | Lens Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| J | $\mathbf{2 9 - 6 0 4 7}$ | Black | $10 X$ | 21.5 mm | $\$ 14.15$ | $\$ 14.99$ | $\$ 16.65$ |
| K | $\mathbf{2 9 - 6 0 4 8}$ | Gold | 10 X | 21.5 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| L | $\mathbf{2 9 - 6 0 4 9}$ | Silver | 10 X | 21.5 mm | $\$ 14.15$ | $\$ 14.99$ | $\$ 16.65$ |



TRIPLET HEXAGON LOUPE
M. Optically correct for distortion-free viewing from edge to edge with color-corrected lens. Glare is reduced by black frames. Extra-large field of view. Sold with leather carrying case.

N . Three-piece bonded lenses. Comes with protective leather case.

|  | Lens |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: | :---: |
| Item | Order \# | Color | Power | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| M | $\mathbf{2 9 - 6 7 7 0}$ | Chrome/Black | $10 X$ | 20.5 mm | $\$ 11.69$ | $\$ 12.38$ | $\$ 13.75$ |  |
| N | $\mathbf{2 9 - 2 6 0 5}$ | Chrome/Black | $15 X$ | 20.5 mm | $\$ 19.85$ | $\$ 21.02$ | $\$ 23.35$ |  |

CARL ZEISS 10X LOUPE
High performance, top quality 18 mm optical loupe. The shape and function of the lens are a result of the latest research in the field of optics. The aplanatic-achromatic design of the lens is practically free of distortion and chromatic aberrations. Focal distance: $1^{1 \prime}$. Made in Germany.

| Order \# | Color | Power | Lens Diameter | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 2 6 0 6}$ | Black | 10 X | 13 mm | $\$ 94.56$ | $\$ 100.13$ | $\$ 111.25$ |



## OVAL TRIPLET 10X LOUPE

These are high-quality Hastings Triplet Loupes. Hastings lenses are constructed from three lens elements cemented together to form a single lens. The unmatched clarity of our triplet loupes is further enhanced by black, outer lens edges, which eliminate color distortion. All loupes come in a hard leather case. Loupes are available in a variety of colors with or without a non-slip, rubber grip also engravable. Lens diameter 18 mm .

| Item | Order \# | Color | Power | Lens <br> Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 6 0 1 0}$ | Pearl White | 10 X | 18 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| B | $\mathbf{2 9 - 6 0 1 2}$ | Blue Lapis | 10 X | 18 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| C | $\mathbf{2 9 - 6 0 1 3}$ | Green Malachite | 10 X | 18 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| D | $\mathbf{2 9 - 6 0 1 4}$ | Black Marble | 10 X | 18 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| E | $\mathbf{2 9 - 6 0 1 5}$ | Pink Marble | 10 X | 18 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |
| F | $\mathbf{2 9 - 6 0 3 0}$ | Gold | 10 X | 18 mm | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |
| G | $\mathbf{2 9 - 6 0 3 1}$ | Black | $10 X$ | 18 mm | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |
| H | $\mathbf{2 9 - 6 0 3 2}$ | Chrome | $10 X$ | 18 mm | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |



## HEXAGON TRIPLET 10X LOUPE

These are high-quality Hastings Triplet Loupes. Hastings lenses are constructed from three lens elements cemented together to form a single lens. The unmatched clarity of our triplet loupes is further enhanced by black, outer lens edges, which eliminate color distortion. All loupes come in a hard leather case. Loupes are available in a variety of colors with or without a non-slip, rubber grip. Lens diameter 21 mm .

| Item | Order \# | Color | Power | Lens Diameter | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | 29-6020 | Pearl White | 10X | 21 mm | \$19.42 | \$20.57 | \$22.85 |
| K | 29-6021 | Blue Lapis | 10X | 21 mm | \$19.42 | \$20.57 | \$22.85 |
| L | 29-6022 | Green Malachite | 10X | 21 mm | \$19.42 | \$20.57 | \$22.85 |
| M | 29-6023 | Black Marble | 10X | 21 mm | \$19.42 | \$20.57 | \$22.85 |
| N | 29-6024 | Pink Marble | 10X | 21 mm | \$19.42 | \$20.57 | \$22.85 |
| P | 29-6035 | Gold | 10X | 21 mm | \$15.30 | \$16.20 | \$18.00 |
| 0 | 29-6036 | Black | 10X | 21 mm | \$15.30 | \$16.20 | \$18.00 |
| R | 29-6037 | Chrome | 10X | 21 mm | \$15.30 | \$16.20 | \$18.00 |



K


L


M


0


N


R

VIGOR ${ }^{\circledR}$ ECONOMY LOUPE
Single lens loupe.

| Lens <br> Item <br> Order \# |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| Color | Power | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |  |
| S | $\mathbf{2 9 - 6 0 0 2}$ | Black | 10 X | 18 mm | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| T | $\mathbf{2 9 - 6 0 0 3}$ | Gold | 10 X | 18 mm | $\$ 11.86$ | $\$ 12.56$ | $\$ 13.95$ |
| U | $\mathbf{2 9 - 6 0 0 5}$ | Chrome | 10 X | 18 mm | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |


$\qquad$


VIGOR ${ }^{\oplus}$ ECONOMY LOUPE
Triplet with rubber grip. Sold with leather carrying case.

| Order\# | Color | Power | Lens Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 6 0 0 0}$ | Gold | $10 X$ | 18 mm | $\$ 13.39$ | $\$ 14.18$ | $\$ 15.75$ |



ECONOMY LOUPE WITH ALUMINUM HOUSING
Aluminum-body loupe doublet comes with box.

| Order \# | Color | Power | Lens Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 7 0 0 0}$ | Silver | $10 X$ | 15 mm | $\$ 3.27$ | $\$ 3.47$ | $\$ 3.85$ |



DIAMOND-CUT LOUPE
Diamond-cut impressions are not only attractive but are also functional allowing the user a better grip.

| Item | Order\# | Color | Power | Lens Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 6 0 4 0}$ | Black | 10 X | 18 mm | $\$ 11.86$ | $\$ 12.56$ | $\$ 13.95$ |
|  | $\mathbf{2 9 - 6 0 4 1}$ | Silver | 10 X | 18 mm | $\$ 11.82$ | $\$ 12.51$ | $\$ 13.90$ |
|  | $\mathbf{2 9 - 6 0 4 2}$ | Gold | 10 X | 18 mm | $\$ 11.69$ | $\$ 12.38$ | $\$ 13.75$ |
| B | $\mathbf{2 9 - 6 0 4 3}$ | Black | 10 X | 21.5 mm | $\$ 13.56$ | $\$ 14.36$ | $\$ 15.95$ |
|  | $\mathbf{2 9 - 6 0 4 5}$ | Silver | 10 X | 21.5 mm | $\$ 13.56$ | $\$ 14.36$ | $\$ 15.95$ |
|  | $\mathbf{2 9 - 6 0 4 4}$ | Gold | 10 X | 21.5 mm | $\$ 13.47$ | $\$ 14.27$ | $\$ 15.85$ |



HASTINGS TRIPLET 20X LOUPE

| Item | Order \# | Color | Power Lens Diameter |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{2 9 - 6 0 5 0}$ | Black | 20X | 18 mm | $\$ 17.00$ | $\$ 18.00$ | $\$ 20.00$ |
| D | $\mathbf{2 9 - 6 0 5 1}$ | Gold | $20 X$ | 18 mm | $\$ 17.00$ | $\$ 18.00$ | $\$ 20.00$ |
| E | $\mathbf{2 9 - 6 0 5 2}$ | Chrome | 20X | 18 mm | $\$ 17.00$ | $\$ 18.00$ | $\$ 20.00$ |




B\&L® POCKET HASTING TRIPLET LOUPE
Bausch \& Lomb's® finest quality loupe. This is one of the most highly corrected magnifiers available. The triplet lens system corrects spherical and chromatic aberrations. The wide field of view provides sharp focus and eliminates color degradation.

| Item | Order \# | $\begin{aligned} & \text { Lens } \\ & \text { Quantity } \end{aligned}$ | Power | Working Distance | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 29-2601 | Triplet | 10X | $1{ }^{1 \prime}$ | \$44.63 | \$47.25 | \$52.50 |
| G | 29-2602 | Triplet | 14X | $3 / 41$ | \$51.68 | \$54.72 | \$60.80 |
| H | 29-2603 | Triplet | 15X | 1/2" | \$51.68 | \$54.72 | \$60.80 |

## ESCHENBACH PRECISION FOLDING MAGNIFIERS

Body is made of reinforced glass-fiber, durable polyamide. The air tight body prevents dust, which produces scratches, from entering. Aplanatic lens provides a distortion-free image. The two planoconvex glass lenses offer distortion-free, superior optics throughout the viewing field.

| Order \# | Description | Color | Power | 12+ | 6+ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 8 7}$ | Aplanatic | Black | $10 X$ | $\$ 95.20$ | $\$ 100.80$ | $\$ 112.00$ |



## ESCHENBACH METAL PRECISION FOLDING MAGNIFIERS

Traditional technical folding magnifiers provide the high power optics and durability to meet any industry standard. Aplanatic lens provides a distortion-free image. The two plano-convex glass lenses offer distortion-free, superior optics throughout the viewing field.

| Order \# | Description | Color | Power | Lens Diameter | 1+ |
| :--- | :--- | :--- | :---: | :---: | ---: |
| $\mathbf{2 9 - 4 7 8 8}$ | Aplanatic | Silver | 10 X | 17 mm | $\$ 133.80$ |



## CHELSEA COLOUR FILTER ${ }^{\text {m" }}$ EMERALD LOUPE

Helpful for identifying certain red, blue, and green stones. Used to determine if a stone is natural or synthetic. Can also be used for detecting synthetic blue spinel and detecting dyes in certain gems. Made in England.

| Order \# | Description | Color | 12+ | 6+ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 6 5 0 5}$ | Colour Filter Emerald Loupe | White | $\$ 30.18$ | $\$ 31.95$ | $\$ 35.50$ |



## B\&L® ${ }^{\circledR}$ TRIPLE APLANATIC LOUPE

Corrected for spherical and chromatic aberration, little color degradation, and very sharp focus over the entire field of vision. One of the best triplets available. Made in Germany.

| Item | Order \# | Color | Power | Working Distance | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| E | $\mathbf{2 9 - 1 3 0 4}$ | Black | $10 X$ | $1^{\prime \prime}$ | $\$ 58.23$ | $\$ 61.65$ | $\$ 68.50$ |

GEMORO ${ }^{\circledR}$ ORIGINAL AND VIP LITE LOUPES
Superior optical quality, crisp, distoration free, Hasting triplet lens with durable scratch resistant coating.

| Item Order \# |  | Description | Power | Lens Diameter | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 29-7201 | Gold VIP Lite Loupe | 10X | 18 mm | \$19.95 |
|  | 29-7201 | Silver VIP Lite Loupe | 10X | 18 mm | \$19.95 |
|  | 29-7201 | Blue VIP Lite Loupe | 10X | 18 mm | \$19.95 |
|  | 29-7201 | Black VIP Lite Loupe | 10X | 18 mm | \$19.95 |
| B | 29-7202 | Blue Triplet Loupe | 10X | 20 mm | \$31.85 |
|  | 29-7202 | Silver Triplet Loupe | 10X | 20 mm | \$31.85 |
|  | 29-7202 | Black Triplet Loupe | 10X | 20 mm | \$31.85 |
|  | 29-7202 | Gold Triplet Loupe | 10X | 20 mm | \$31.85 |

## 10X LIGHTED MAGNIFIER WITH MAGLITE®

Attached directly to the Maglite ${ }^{\circledR}$ is a 10 X color-corrected compound triplet magnifier made of high-impact nylon composite with rubber eyepiece. The magnifier features a diffuser and one-way reflector so that the viewer's eye is directly above the light, giving the best possible view of diamonds, small gemstones, etc.

| Order \# | Description | Power | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 6 1 0 0}$ | Magnifier with Maglite | $10 X$ | $\$ 35.96$ | $\$ 38.07$ | $\$ 42.30$ |



## DIAMOND VIEW WITH MAGLITE®

Used with a Maglite, this instrument becomes a portable darkfield that allows the user to identify the fillings and flaws in diamonds. Features a high-intensity, miniature darkfield and distortion-free, 19mm, 10X triplet. Black-oxide finish allows glare-free viewing.

| Order\# | Power | Lens Diameter | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $29-6500$ | $10 X$ | 19 mm | $\$ 45.01$ | $\$ 47.66$ | $\$ 52.95$ |

## 10X LED SCALE LOUPE

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 6 9}$ | 10X LED Scale Loupe | $\$ 38.21$ | $\$ 40.46$ | $\$ 44.95$ |

LOUPE CHAINS AND CORDS

| Item Order\# |  | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{2 9 - 6 0 1 6}$ | Gold Tone (metal) | $19 "$ | $\$ 6.59$ | $\$ 6.98$ | $\$ 7.75$ |
| D | $\mathbf{2 9 - 6 0 1 7}$ | Silver Tone (metal) | $19^{\prime \prime}$ | $\$ 6.97$ | $\$ 7.38$ | $\$ 8.20$ |
| E | $\mathbf{2 9 - 6 0 1 8}$ | Blue Cord | $36^{\prime \prime}$ | $\$ 3.70$ | $\$ 3.92$ | $\$ 4.35$ |
| F | $\mathbf{2 9 - 6 0 2 5}$ | Black Cord | $36^{\prime \prime}$ | $\$ 5.78$ | $\$ 6.12$ | $\$ 6.80$ |
| G | $\mathbf{2 9 - 6 0 2 6}$ | Red Cord | $36^{\prime \prime}$ | $\$ 5.78$ | $\$ 6.12$ | $\$ 6.80$ |
| H | $\mathbf{2 9 - 6 0 2 7}$ | Gray Cord | $36^{\prime \prime}$ | $\$ 5.78$ | $\$ 6.12$ | $\$ 6.80$ |
| J | $\mathbf{2 9 - 6 0 2 8}$ | Yellow Cord | $36^{\prime \prime}$ | $\$ 4.29$ | $\$ 4.55$ | $\$ 5.05$ |

## EUROSCOPE

This scope was created for the diamond end-user to view the unique "heart" and "arrow" patterns in ideal-cut or other special cut diamonds.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| A | $\mathbf{2 9 - 4 7 3 2}$ | Diamond Viewer | $\$ 59.95$ |

## DIAMOND INSCRIPTION VIEWER

Our consumer-friendly device holds a ring and easily allows the user to view the mounted diamonds certificate number, which is laser inscribed on its girdle. Featuring a HOYA 20X Hastings triplet lens, swiveling ring pad, and simple focusing that stays in focus when handed to your customers.

| Item | Order \# | Description | 1+ |
| :---: | :--- | ---: | ---: |
| B | $\mathbf{2 9 - 4 7 3 1}$ | Inscription Viewer | $\$ 48.95$ |



## OPTIVISOR ${ }^{\circledR}$ BINOCULAR MAGNIFIER

OptiVISOR ${ }^{\circledR}$ lenses are ground and polished to precision ophthalmic standards. The OptiVISOR ${ }^{\circledR}$ frame is made of lightweight, durable, impact-resistant materials. The comfortable, continuous headband is fully adjustable to fit any size, quickly and easily. Adjustable pivot knobs hold visor in any position for easy flip-up viewing. Interchangeable lens plates are available for various applications. Not intended for use while soldering.

Order \# 10-10000
Sold Each

| C. OptiVISOR | DA10 | DA7 | DA5 | DA4 | DA3 | DA2 |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Focal Distance | $4^{\prime \prime}$ | $6^{\prime \prime}$ | $8^{\prime \prime}$ | $10^{\prime \prime}$ | $14^{\prime \prime}$ | $20^{\prime \prime}$ |
| Power | $31 / 2 \mathrm{X}$ | $23 / 4 \mathrm{X}$ | $21 / 2 \mathrm{X}$ | 2 X | $13 / 4 \mathrm{X}$ | $11 / 2 \mathrm{X}$ |
| $1+$ | $\$ 40.15$ | $\$ 40.15$ | $\$ 40.15$ | $\$ 40.15$ | $\$ 40.15$ | $\$ 40.15$ |

## Order \# 10-10002

Sold Each

| D. Lens Plates | \#10 | \#7 | \#5 | \#4 | \#3 | \#2 |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Focal Distance | $4^{\prime \prime}$ | $6^{\prime \prime}$ | $8^{\prime \prime}$ | $10^{\prime \prime}$ | $14^{\prime \prime}$ | $20^{\prime \prime}$ |
| Power | $31 / 2 X$ | $23 / 4 X$ | $21 / 2 X$ | $2 X$ | $13 / 4 X$ | $11 / 2 X$ |
| $1+$ | $\$ 28.50$ | $\$ 28.50$ | $\$ 28.50$ | $\$ 28.50$ | $\$ 28.50$ | $\$ 28.50$ |

OPTIVISOR ${ }^{\circledR}$ ACCESSORIES

| Item |  | Order\# | Description | Power |
| :---: | ---: | :--- | :---: | ---: |
| E | $\mathbf{2 9 - 4 7 0 0}$ | OptiLoupe Attachment | $\mathbf{2} 1 / 2 \mathrm{X}$ | $\mathbf{1 +}$ |
|  | $\mathbf{2 9 - 4 7 0 2}$ | Replacement Leather Headband | $\$ 12.50$ |  |
| F | $\mathbf{2 9 - 4 7 0 3}$ | Short Light Attachment | $\$ 16.50$ |  |


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"EASY EYES" HEAD MAGNIFIER
This lightweight magnifier has four magnifications in one. Magnification ranges from 1.8X to 4.8X. Has a convenient, flip-down loupe.

| Order\# | Description | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 3 0}$ | Head Magnifier | $1.8 X-4.8 \mathrm{X}$ | $\$ 8.07$ | $\$ 8.55$ | $\$ 9.50$ |



## OPTIVISOR ${ }^{\circledR}$ LX

The OptiVISOR ${ }^{\circledR}$ LX lightweight lenses and tough materials are designed to last a lifetime. It has optical prismatic lenses from precision ground and highly polished molds. The LX has adjustable side pivots that allow the visor to tilt at your fingertips, and a dial adjustment headband that conforms to comfortably fit all head sizes. The LX has a genuine leather padded comfort band with orthopedic felt for extra comfort.

## Order \# 10-10001

Sold Each

| OptivISOR LX | LX 3 |  | LX 7 | LX 5 |
| ---: | :---: | :---: | :---: | :---: |
| Focal Distance | $14^{\prime \prime}$ | $6^{\prime \prime}$ | $8^{\prime \prime}$ | $10^{\prime \prime}$ |
| Power | $11 / 2$ X | $23 / 4 \mathrm{X}$ | $21 / 2 \mathrm{X}$ | $2 X$ |
| $12+$ | $\$ 23.76$ | $\$ 24.27$ | $\$ 24.27$ | $\$ 23.76$ |
| $6+$ | $\$ 25.16$ | $\$ 25.70$ | $\$ 25.70$ | $\$ 25.16$ |
| $1+$ | $\$ 27.95$ | $\$ 28.55$ | $\$ 28.55$ | $\$ 27.95$ |



B\&L® MAGNA VISOR
Lightweight, can be worn over prescription glasses. Shatter-resistant, precision, optical lenses sharpen the tiniest details. Adjustable, comfort-fit headband and interchangeable lens plates offer the best in comfort and visibility. Includes all three frames.

| Order \# | Description | Power | Focal Distance | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29-1313 | Magna Visor | . $2.5 \times 2$ |  | 3978 | , |  |

REPLACEMENT LENS

| $\mathbf{2 9 - 1 3 1 0}$ | Lens Plate | 1.9 X | $12^{\prime \prime}$ | $\$ 10.84$ | $\$ 11.48$ | $\$ 12.75$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 9 - 1 3 1 1}$ | Lens Plate | 2.5 X | $8^{\prime \prime}$ | $\$ 10.84$ | $\$ 11.48$ | $\$ 12.75$ |
| $\mathbf{2 9 - 1 3 1 2}$ | Lens Plate | 2.75 X | $6^{\prime \prime}$ | $\$ 10.84$ | $\$ 11.48$ | $\$ 12.75$ |



## LED LIGHTING SYSTEM

Custom-fit lighting attachment for Optivisor type magnifying visor. This design utilizes the latest in LED technology. Reduces shadows and increases visibility in any environment. Lights up holes and deep cavities. Super long battery life. Light remains bright after 16 hours of straight use. Lasts up to 96 hours on a single set of batteries. Over 100,000 hour bulb life expectancy. Includes two AA batteries.

| Order\# | Description | Working Distance | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| 29-4781 | LED Lighting System | $6 "-14$ | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |

MULTIPLE-MAGNIFICATION HEADBAND MAGNIFIER
Four magnifications are built-in. The flip-down inner lens and the auxiliary loupe allow a range of magnification from $13 / 4^{\prime \prime}$ to $43 / 4$ " ( 44 to 121 mm ), with a working distance of 10 " to 3 " ( 254 to 75 mm ). Each side light requires two AAA batteries (not included).

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 5 6 1 0}$ | Black LED Magnifier with Headband | $\$ 34.68$ | $\$ 36.72$ | $\$ 40.80$ |



## OPTISIGHT ${ }^{\circledR}$ VISOR

Provides hands-free magnification for more accurate and efficient viewing.
The visor tilts up for normal viewing or down for magnification, and can also be worn over prescription glasses. Made of high strength plastic and precision optical grade acrylic prismatic lens. Comes with $3 \mathrm{X}, 4 \mathrm{X}$, and 5 X lenses.

| Order\# |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sold Each |  |  |  |  |  |  |  |
| 29-6105 |  |  |  |  |  |  |  |
| Color | Gray | Blue | Green | Purple | Red | Tan |  |
| $12+$ | $\$ 23.76$ | $\$ 23.76$ | $\$ 23.76$ | $\$ 23.76$ | $\$ 23.76$ | $\$ 23.76$ |  |
| $6+$ | $\$ 25.16$ | $\$ 25.16$ | $\$ 25.16$ | $\$ 25.16$ | $\$ 25.16$ | $\$ 25.16$ |  |
| $1+$ | $\$ 27.95$ | $\$ 27.95$ | $\$ 27.95$ | $\$ 27.95$ | $\$ 27.95$ | $\$ 27.95$ |  |



MEGA-VIEW COMPACT VISORS
Mega-View MG-2 and MG-3 includes 2X, 2.5X, and 3X Ienses. Easy to use and comfortable head mount for stone setting.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 4 7 3 8}$ | Black MG-2 Headband | $\$ 50.58$ | $\$ 53.55$ | $\$ 59.50$ |
| B | $\mathbf{2 9 - 4 7 3 9}$ | Black MG-3 Lightweight Frame | $\$ 50.58$ | $\$ 53.55$ | $\$ 59.50$ |




## ESCHENBACH GALILEAN SYSTEM

Comes complete with a clip-on attachment for eye-glass wearers. It can be used with the attachment or without as a hand-held monocular. Black plastic, reinforced with fiberglass. Comes with simulated leather zippered case.

| Order \# | Lens | Focal Distance | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 9 1}$ | Double | $3^{\prime \prime}-13^{\prime \prime}$ | $2.5 X$ | $\$ 609.28$ | $\$ 645.12$ | $\$ 716.80$ |
| $\mathbf{2 9 - 4 7 9 2}$ | Double | $1^{\prime \prime}-10^{\prime \prime}$ | $4 X$ | $\$ 609.28$ | $\$ 645.12$ | $\$ 716.80$ |



## ESCHENBACH MAX

A. Hands-free, head-mounted glasses provide 2 X magnification and can be adjusted so that each eye lens can be focused separately [ $\pm 3$ diopters]. The glasses will focus on near objects with working distances of 16 inches. Lens size: 32 mm , lens material: PXM plastic, temple length: 135 mm , bridge: open saddle, frame size: 137 mm , visual field: $20^{\circ}$, PD range: $60 \mathrm{~mm}-68 \mathrm{~mm}$, case included.
B. Telescopic magnification that attaches to prescription eyewear! Designed for patients who have a refractive error AND want the convenience of an off-the-shelf, near, telescopic system. 2X magnification, hands-free design, large working distance, and wide field of view. Five vertical lens heights from
 which to choose to assure correct pupil alignment. The convenient hinged clip mechanism allows the lenses to be flipped up, and out of the way, when not needed or not in use. Equipped with rubber-covered jaws to prevent the clip from scratching patient's eyewear. Provides the most valued benefit of a near Galilean telescopic system; a full 16 inch working distance! Case included.

| Item | Order\# | Description | Power | 1+ |
| ---: | ---: | :--- | ---: | ---: |
| A | $\mathbf{2 9 - 7 5 0 0}$ | Max Detail Adjustable Magnifier | $2 X$ | $\$ 199.60$ |
| B | $\mathbf{2 9 - 7 5 0 4}$ | Clip-on Max Detail | $2 X$ | $\$ 192.00$ |



OBRIRA CHROME BINOCULAR MAGNIFIER
Provides a sharp, clear stereoscopic image with 2.3 X magnification. The lightweight and comfortable design ensures fatigue-free wear. Both telescopes can be axially adjusted to fit your individual interpupillary distance. The Zeiss ${ }^{\text {® }}$ quality loupes are manufactured in Germany and frames are available in silver plating on sports frames. The normal working distance or focal length is $10^{\prime \prime}$. Magnification: 2.3X Working Distances: 10" Field of View: 2"

| Order \# | Description | Lens | Power | Focal Distance | 1+ |
| ---: | :--- | :--- | :---: | :---: | ---: | ---: |
| $\mathbf{2 9 - 4 6 0 0}$ | Binocular Magnifier | Single | $2.3 x$ | 10 | $\$ 583.00$ |



ESCHENBACH SPECTACLE
These spectacle magnifiers are ideal for people who wish to engage in extended viewing tasks requiring high magnification with hands-free usage. Comes with either magnified right eye or left eye.

| Order \# | Description | Lens | Power | Focal Distance | 1+ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| $\mathbf{2 9 - 7 5 0 5}$ | Lens for Left Eye | Single | $2 X$ | $10^{\prime \prime}$ | $\$ 556.20$ |
| $\mathbf{2 9 - 7 5 0 5}$ | Lens for Right Eye | Single | $2 X$ | $10^{\prime \prime}$ | $\$ 556.20$ |

## 10X TRIPLET DIAMOND LOUPE

Triplet Diamond Loupe are constructed from three lens elements cemented together to form a single lens. Loupe comes in a hard leather case.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 7 9}$ | Black 10X Triplet Diamond Loupe | $\$ 83.30$ | $\$ 88.20$ | $\$ 98.00$ |



## OPTICAID ${ }^{\circledR}$ CLIP-ON MAGNIFIER

The ultra-light eyeglass loupe is designed for maximum comfort and utility. Lenses are high quality, optical-grade materials from precision-ground and polished molds. Very superior durability. The lens pivots out of the way for normal viewing and easily aligns when magnification is needed. Changeable cams are included to fit eyeglass frames from $1 / 16^{\text {" }}$ to $1 / 4^{\prime \prime}$ temple width. The eyeglass clamp easily converts from right to left temple mounting. Made in the USA.

| Order\# | Lens | Lens Diameter | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 1 4 0 0}$ | Single | 15 mm | 10 X | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| $\mathbf{2 9 - 1 4 0 1}$ | Single | 24 mm | $7 X$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| $\mathbf{2 9 - 1 4 0 2}$ | Single | 24 mm | 5 X | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| $\mathbf{2 9 - 1 4 0 3}$ | Single | 24 mm | 4 X | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| $\mathbf{2 9 - 1 4 0 4}$ | Single | 24 mm | $3 X$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| $\mathbf{2 9 - 1 4 0 5}$ | Double | 24 and 15mm | $5 X$ and 10X | $\$ 24.23$ | $\$ 25.65$ | $\$ 28.50$ |
| $\mathbf{2 9 - 1 4 0 6}$ | Double | 15 and 24 mm | 4 X and 10X | $\$ 24.23$ | $\$ 25.65$ | $\$ 28.50$ |
| $\mathbf{2 9 - 1 4 0 7}$ | Double | 25 and 25 mm | $5 X$ and 7X | $\$ 24.23$ | $\$ 25.65$ | $\$ 28.50$ |
| $\mathbf{2 9 - 1 4 0 8}$ | Double | 24 and 25 mm | $4 X$ and 7X | $\$ 24.23$ | $\$ 25.65$ | $\$ 28.50$ |



## B\&L® METAL SPECTACLE LOUPES

Bausch \& Lomb is pleased to bring back a classic. These eyeglass loupes set the standard for quality optics, and now they are back with major enhancements.

- Made with precision optical glass
- Ideal for any detail work
- Available in single or double lens configuration
- Supplied with a high-quality case to protect your investment

| Order \# | Lens | Focal Distance | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 1 8 0 5}$ | Single | $11 / 2^{\prime \prime}$ | $7 X$ | $\$ 36.55$ | $\$ 38.70$ | $\$ 43.00$ |
| $\mathbf{2 9 - 1 8 0 7}$ | Single | $2^{1 / 2}$ | $4 X$ | $\$ 36.55$ | $\$ 38.70$ | $\$ 43.00$ |



## ESCHENBACH MAGNIFIERS

Bi-convex PXM ${ }^{\circledR}$ lightweight lens. Handle and frame are transparent. Lens size: 30 mm .

| Order \# | Description | Lens | Power | Per Pack | 1+ |
| :--- | :--- | :--- | :---: | :---: | ---: |
| 29-7502 | Magnifier | Single | $5 X$ | 10 | $\$ 54.95$ |



## LED MAGNIFIERS

Clamping glasses magnifier with LED lamp makes both hands free. It can easily be used for reading, drawing, handicraft, tailoring, viewing plants, and more. Contains three changeable lens magnifiers (1.5X, 2.5X, 3.5X). It can be used under insufficient light, and the angle of the lens is adjustable.


| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 4 8 1 1}$ | Clamp LED Magnifier and 3 Lenses | $\$ 19.81$ | $\$ 20.97$ | $\$ 23.30$ |
| B | $\mathbf{2 9 - 4 8 1 2}$ | Frame LED Magnifier and 3 Lenses | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |



OPTICAID ${ }^{\circledR}$ CLIP-ON MAGNIFIER
Easily clips onto any eyeglass frame. Provides hands-free magnification of small details without any distortion. Lenses are made of plastic and are optically designed. Sold with carrying case.

| Order \# | Lens \# | Focal Distance | Power | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29-7700 | \#3 | $14^{\prime \prime}$ | 13/4X | \$21.68 | \$22.95 | \$25.50 |
| 29-7701 | \#5 | 8" | 21/4X | \$21.68 | \$22.95 | \$25.50 |
| 29-7702 | \#7 | $6 "$ | 23/4 | \$21.68 | \$22.95 | \$25.50 |
| 29-7703 | \#10 | $4{ }^{4}$ | 23/4 | \$21.68 | \$22.95 | \$25.50 |
| 29-7704 | \#2 | 201 | $11 / 2 \mathrm{X}$ | \$21.68 | \$22.95 | \$25.50 |
| 29-7705 | \#4 | $10^{\prime \prime}$ | 2 X | \$21.68 | \$22.95 | \$25.50 |



CLIP-ON BINOCULAR MAGNIFIER
Excellent for small tasks that require hands-free work. Can be used with the comfortable binocular frame or can be clipped onto most eyeglass frames. - Dual lens system designed to reduce eye strain by convergence on focal point. - Easily flips up for normal viewing and down when magnification is required.

| Order\# | Lens\# | Focal Distance | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 9 - 4 7 2 5}$ | $\# 3$ | $14^{\prime \prime}$ | $13 / 4 \mathrm{X}$ | $\$ 26.86$ | $\$ 28.44$ | $\$ 31.60$ |
| $\mathbf{2 9 - 4 7 2 6}$ | $\# 4$ | $10^{\prime \prime}$ | $2 X$ | $\$ 26.86$ | $\$ 28.44$ | $\$ 31.60$ |
| $29-4727$ | $\# 5$ | $8^{\prime \prime}$ | $2^{11 / 2 X}$ | $\$ 26.86$ | $\$ 28.44$ | $\$ 31.60$ |
| $29-4728$ | $\# 7$ | $6^{\prime \prime}$ | $23 / 4 X$ | $\$ 26.86$ | $\$ 28.44$ | $\$ 31.60$ |



## HALF-FRAME TELESIGHT MAGNIFIER

High-quality prismatic lens in lightweight, half eyeglass frames. Used by those who do not wear glasses. Half-frames stay in place, and lenses lower for magnification and flip up when finished.

| Order \# | Lens \# | Focal Distance | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 7 6 0 0}$ | $\# 43$ | $14^{\prime \prime}$ | $13 / 4 X$ | $\$ 33.11$ | $\$ 35.06$ | $\$ 38.95$ |
| $\mathbf{2 9 - 7 6 0 1}$ | $\# 44$ | $11^{\prime \prime}$ | $2 X$ | $\$ 33.11$ | $\$ 35.06$ | $\$ 38.95$ |
| $\mathbf{2 9 - 7 6 0 2}$ | $\# 45$ | $9^{\prime \prime}$ | $21 / 4 X$ | $\$ 33.11$ | $\$ 35.06$ | $\$ 38.95$ |
| $\mathbf{2 9 - 7 6 0 3}$ | $\# 46$ | $7^{\prime \prime}$ | $21 / 2 X$ | $\$ 33.11$ | $\$ 35.06$ | $\$ 38.95$ |

## DIAMOND SETTING GLASSES

These optic glasses work terrific for diamond setting and repair, watch repair, dental labs, electronics, and hobbyist. All lenses and frames are safety glasses for extra protection. They come in various strengths for use at various working distances. All the optics is ISO and CE certified.


Both the regular glasses and the clip-on style come with carrying case, polishing cloth, screwdriver, and neck strap.

## MINI-FRAME READING GLASSES

Lightweight and attractive, these rimless-style glasses provide near magnification for reading and other close work. Chrome-plated with black leatherette case.

| Order \# | Focal Distance | Power | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 9 7}$ | $13^{\prime \prime}$ | $2.5 X$ | $\$ 17.51$ | $\$ 18.54$ | $\$ 20.60$ |
| $\mathbf{2 9 - 4 7 9 8}$ | $16^{\prime \prime}$ | $3 X$ | $\$ 17.51$ | $\$ 18.54$ | $\$ 20.60$ |
| $\mathbf{2 9 - 4 7 9 9}$ | $10^{\prime \prime}$ | $4 X$ | $\$ 17.51$ | $\$ 18.54$ | $\$ 20.60$ |



## ESCHENBACH CLIP-ON MAGNIFIER KIT

Designed to provide the eye care professional with a complete set of binocular and monocular clip-on lenses and two different lens mounting mechanisms. - Kit includes 6 lenses: 1.7X, 2X, 2.5X, 3.0X, 4.0X and 7.0X.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 4 7 9 3}$ | Clip-on Magnifier Kit (with 6 lenses) | $\$ 667.59$ | $\$ 706.86$ | $\$ 785.40$ |



## PORTABLE NECK MAGNIFIER

With a wide 4" $\times 5^{\prime \prime}$ viewing area, this portable magnifier leaves both hands comfortably free. Crystal clear, non-distracting frame with an adjustable neck cord holds magnifier steadily in place. Great for bead stringing.

| Order \# | Description | Focal Distance | Power | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29-7605 | Neck Magnifier | 101 | 2 X | \$13.39 | \$14.18 | \$15.75 |




## Fabricated Metals

| 338 | Casting Grain |
| :--- | :--- |
| 341 | Master Alloy |
| 343 | Sheet |
| 346 | Round Wire |
| 348 | Laser Wire/Speed Wire |
| 350 | Preform Sizing Stock |
| 351 | Sizing Stock |
| 356 | Tubing |
| 359 | Pattern Wire |
| 360 | Solder |
| 366 | Stampings |

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Refined Karats symbolizes our ongoing environmental consciousness in manufacturing and our promise to act responsibly in all areas of business and production, including water, waste, and energy management. Because of Stuller's compliance with Scientific Certification Systems' (SCS) strict environmental, social, and supply-chain management requirements, our certification allows you to add "earth-friendly" to the characteristics of the products you offer your customers.

As proof of our commitment to sustainability, Stuller earned recycled content certification in an SCS audit. SCS is a global leader in verification of environmental and sustainability claims with internationally recognized standards, and their certification ensures that all of Stuller's manufactured gold and silver product is certified $100 \%$ recycled content.

Stuller's SCS certification is just one part of our company's in-house green initiative, Refined Karats. So whenever you see the Refined Karats logo, you can be assured that product contains $100 \%$ recycled precious metal content.

## 100\% Recycled

Gold and other precious metals should be mined and refined in a sustainable and responsible manner that respects both the needs of humanity and our environment.

Our position on responsible mining procedures goes much further than the gold mining process itself. It encompasses all aspects of gold: appropriate mining methods on conservation, remediation and fair labor practices. It also includes proper refining; correct handling of aqua regia acid, scrubbing fumes and clean emissions.

Only specific, branded gold bars or grain are acceptable in our production operations and up to $100 \%$ of raw materials used in production are recycled internally.

We require that our vendors maintain policies and procedures, which mandate social and environmental responsibility for both themselves and their suppliers.


## How do changes affect you?

The latest revision of the European Nickel Directive is meant to address the concerns raised from the 2004 version. More stable artificial sweat solutions are used, which are likely more aggressive. The new requirements are outlined in the table below.

| Jewelry Type | Ni release value <br> ug/week/cm2) | Result |
| :--- | :--- | :--- |
| Intimate contact | $<0.11$ | Compliant |
| with skin | $0.11-0.35$ <br>  <br>  <br> 0.35 | Non-conclusive |
| Non-compliant |  |  |
| Direct and | $<0.28$ | Compliant |
| prolonged contact | $0.28-0.88$ | Non-conclusive |
| with skin | $>0.88$ | Non-compliant |

This new law went into effect on April 2013. The results now include an uncertainty factor where it is considered "non-conclusive." This still puts the burden on the manufacturer to prove it is compliant.
Note: The acceptable nickel release rates are much lower than in earlier standards.

## History of the European Directive

Based on the pioneering work on allergy to nickel in 1991 by Dr. Carola Linden, a Swedish dermatologist, the first European Nickel Directive became a law and came into force in June 1994 in all the European Community Countries. The supporting test method on nickel release became a Standard (EN 1811), which
outlines the requirements of the Directive and pass the nickel release test conducted on jewelry products. The test measures the leaching rate of nickel when the jewelry article is immersed in an artificial sweat solution.

The 1994 European Directive established two basic nickel requirements for jewelry alloys:

- It practically excludes the use of nickel in the alloys that come in intimate contact with parts of human body by restricting the nickel content to be less than $0.05 \%$ by weight. Earring posts, ear wire assemblies and other body piercing jewelry articles fall under this restriction.
- For jewelry articles that come into direct and prolonged contact with the skin, the test result should show the nickel release rate to be less than 0.5 microgram per square centimeter per week ( $0.5 \mu \mathrm{~g} / \mathrm{week} / \mathrm{cm} 2$ ). There is no restriction on the nickel content in the alloy used to make the jewelry articles.


## Previous Revision of European Directive

The practical exclusion of nickel and numerous discrepancies of testing instances brought about the first revision of the Directive in 2004 which dealt now only with nickel release rates and removed the restriction on the nickel content.

In spite if these improvements, the nickel release limits imposed by revisions of the standard have proved to be insufficient to avoid reactions in sensitized subjects. In addition, tests revealed that the artificial sweat degraded over the course of a week's testing which made the nickel release result to be suspect.

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- Sheet
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- Solder - including Color Match ${ }^{\text {™ }}$

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You tell us how much gold, platinum, or silver products you purchase per month (including grain, sheet, wire, stock, solder, tubing, etc.). Stuller will use this information to set up your Club Membership Level. You will receive your quantity pricing on each and every order, even the smaller ones. This allows you to purchase small quantities as needed, yet receive your total quantity price. Also, as long as you meet the quota for one metal quality, you get the quantity pricing for gold, platinum, and silver products! After a period of time (usually six months), Stuller will review your metals purchases, advise on how closely you have met your original purchasing estimates, and determine if a change in your Club Level would benefit you.

What are my Metals Club level options from which I can choose?
There are eight levels in which to choose from

- 20 dwt
- 100 dwt
- 500 dwt
- 1500 dwt
- 50 dwt
- 200 dwt
- 1000 dwt
- 2000 dwt


## How do I join?

Call the Stuller Metals Club Member Hotline toll free at 877-619-2173 or email clubinfo@stuller.com. One of our friendly Club specialists will walk you through the set-up process and answer any questions concerning the Metals Club price program. Remember, if you are not a Club member, you may be paying too much! For more information visit Stuller.com/MetalsClub.

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M E T A L CLEAN SCRAP PROGRAM

You've come to trust Stuller when purchasing mill products, findings, grain, castings, jewelry, diamonds, and thousands of other products. Discover today how you can earn cash or credits toward your Stuller account by sending us your scrap metals.

## Choose your preference:

## 1. Stuller account credit

2. $50 / 50$ : Stuller account credit / electronic payment or check
3. Electronic payment or check

## How does the scrap metal program work?

When your shipment arrives, we weigh it and verify the integrity of the metal. Next, we will melt your clean scrap and fire assay a sample. Then we apply value to your pure precious metal content based on your chosen payment option. All settlements will be based on after-melt weight at second London Fix on day of settlement.

See chart below to find melt value based on precious metal weight received. Scrap weighing more than 100 pennyweights will be processed by fire assay, and scrap weighting less than 100 pennyweights will be processed by $x$-ray fluorescence (XRF), unless otherwise noted on packing slip.

Settlement value will be applied to your Stuller account upon your approval.
A packing slip must accompany your precious metal scrap to assure proper payment. Packing slip available online,
Stuller.com/CleanScrap or contact your friendly Stuller sales associate.

## Metal Requirements:

- Send only clean karat gold, silver, platinum or palladium scrap with stones removed
- Fill out our Clean Scrap Packing Slip and include the weight of scrap and identify quality Remove anything that is not precious metal
- Package, insure adequately, and ship your scrap metal to:

Stuller, Inc.
ATTN Materials Management - 3616
302 Rue Louis XIV
Lafayette, LA 70508
OPTION 1
ACCOUNT CREDIT

| Qualty | accountabluty processing fee | Processing fee |  | accountablity | Processing fee |  | accountablity Processing fee |  |  | lab result | payout |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FA | XRF |  | FA | XRF |  | FA | XRF |  |  |
| Gold (Au) | 98\% | - | - | 97\% | \$50 | \$25 | 95\% | \$50 | \$25 | 3 working days | 5 working days |
| Silver (Ag) | 94\% | - | - | 92\% | \$50 | \$25 | 90\% | \$50 | \$25 | 3 working days | 5 working days |
| Platinum (Pt) | 90\% | \$100 | N/A | 87\% | \$100 | N/A | 85\% | \$100 | N/A | 7 working days | 9 working days |
| Palladium (Pd) | 85\% | \$100 | N/A | 82\% | \$100 | N/A | 80\% | \$100 | N/A | 7 working days | 9 working days |
| HIGH-GRADE BENCH FILINGS/GRINDING |  |  |  |  |  |  |  |  |  |  |  |
| Gold \& Silver | 97\% | \$100 | N/A | 95\% | \$100 | N/A | 94\% | \$100 | N/A | 7 working days | 9 working days |
| Platinum \& Palladium | 80\% | \$100 | N/A | 80\% | \$100 | N/A | 80\% | \$100 | N/A | 7 working days | 9 working days |

High-Grade Bench Filings/Grindings have a 10 ounce minimum (gross weight). Crucibles, emery paper, buffs or saw blades, computer parts, electronic parts, electrical parts, and plating solutions are not accepted for clean scrap (DO NOT SEND THESE ITEMS). Past due balances will be paid first before any funds are transferred to customer's bank.

We understand that you have concerns about the environmental and cultural impacts due to certain mining activities. We assure you that we are just as concerned as you are. We are committed to being true to you, our customer. To do so, we have always believed that this starts with our practices toward our environment and continues to follow through to our business applications. While others have just begun this journey, ours has been a way of life from the start.

We applaud your efforts to recycle your scrap metals. You are doing your part to lessen the impact on the environment.
For more information visit Stuller.com/CleanScrap.



Stuller karat gold casting grains are produced using only high purity raw materials. All metals used in Stuller alloys are certified to exceed 0.999+ in metallic purity. Each melt is analyzed by traditional fire assay and $x$-ray fluorescence techniques to ensure quality and consistency. Our karat gold casting alloys contain special additives that enhance casting characteristics, provide for less rejects and finishing work, and increase reusability factors. Grain for rolling is formulated specifically for sheet production and wire drawing applications. Our white gold alloys include 10kt, 14kt, 18kt and $\mathrm{X} 1{ }^{\oplus}$ white gold casting grain, which provide an exceptional white color and finish. Our 14kt clean-cast white is enhanced with elements to control grain structure and provide for clean, bright white castings and excellent surface finish. Platinum group metal casting alloys include .585 platinum (formulated with $100 \%$ platinum group metals) and .950 super palladium.

Stuller offers one of the most comprehensive selections of white precious metals for jewelry.

## Minimum order for grain is 1 pennyweight.

1. To determine the amount of metal needed for casting, multiply the wax weight (including sprue) by the corresponding density (specific gravity). Allow extra for button.
2. Optimal flask temperature will vary according to tree size and type of equipment used.

Note: 14K euro-yellow, 14K, 14K X1, 14 K palladium white, and all 18 K casting grains meet the European specifications for all gold fineness.

100\% Recycled Gold and Silver.
Visit Stuller.com/SensibleSourcing for more information.


| Quality | Description | Nominal Composition \% |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Copper | Silver | Zinc | Nickel | Palladium |
| 10K Standard Yellow | Popular medium yellow color | 44.3\% | 7\% | 6.9\% | - | - |
| 10K Bright Yellow | Our original bright yellow | 40.5\% | 11.2\% | 6.6\% | - | - |
| 10K Rich Yellow | Exceptional yellow luster | 41.9\% | 9.8\% | 6.5\% | - | - |
| 10K Yellow | Sheet/wire fabrication | 39.8\% | 9.4\% | 9.4\% | - | - |
| 10K Red | Rose/pink gold in color | 55\% | 3\% | 0.5\% | - | - |
| 14K Euro Yellow | Rich green /yellow . 585 | 22.7\% | 11.4\% | 7.6\% | - | - |
| 14K Standard Yellow | Standard medium yellow | 31.6\% | 5\% | 1.9\% | - | - |
| 14K Clean Cast Yellow | Grain refined; deoxidized | 28.50\% | 6.70\% | 6.70\% | - | - |
| 14K Yellow | Bright color highlights diamonds | 29\% | 8\% | 4.7\% | - | - |
| 14K Rich Yellow | Premium yellow luster | 28\% | 9.8\% | 3.8\% | - | - |
| 14K Lemon Yellow | Light/pale yellow color | 25\% | 8.6\% | 8\% | - | - |
| 14K Yellow | Sheet/wire fabrication | 28.4\% | 6.7\% | 6.7\% | - | - |
| 14K Red | Rose/pink gold in color | 39.2\% | 2\% | 0.4\% | - | - |
| 14K Green | Medium green color | 2\% | 39\% | 0.6\% | - | - |
| 18K Rich Yellow | Classic 18kt yellow color | 11.3\% | 12.5\% | 0.8\% | - | - |
| 18K Royal Yellow | Rich Italian green tint; popular in Europe | 6.7\% | 16.5\% | 1.5\% | - | - |
| 18K Yellow | Sheet/wire fabrication | 9.3\% | 15\% | 0.6\% | - | - |
| 18K Euro Yellow | Rich green yellow color | 5.9\% | 18.2\% | 0.6\% | - | - |
| 18K Red | Rose/pink gold in color | 23.30\% | 1.20\% | 0.20\% | - | - |
| 18K Green | Rich green color | 1.2\% | 23.2\% | 0.4\% | - | - |
| 22K Yellow | Deep yellow color | 3.5\% | 4.9\% | - | - | - |
| 24K Yellow | .9995+ pure gold | - | - | - | - | - |
| 10K White | Standard nickel white | 35.7\% | - | 12.3\% | 10.3\% | \% |
| 10K White | Sheet/wire fabrication | 33.8\% | - | 9\% | 16\% | - |
| 10K X1 ${ }^{\text {® }}$ White | Grade 1 bright white | 33.2\% | - | 9\% | 16\% | - |
| 14K Soft Nickel White | Low nickel-off white color | 25.5\% | - | 8.8\% | 7.5\% | - |
| 14K Standard White | Our original 14kt white | 23.80\% | - | 8.8\% | 9\% | - |
| 14K Bright White | Bright nickel white color | 21\% | - | 7.84\% | 12.73\% | \% - |
| 14K X1 ${ }^{\text {® }}$ White | Exceptional grade 1 white color | 17.5\% | - | 8.95\% | 15\% | - |
| 14K Clean Cast White | Grain refined; deoxidized | 21.5\% | - | 9\% | 11\% | - |
| 14K White | Low palladium-off white color | 4.6\% | 26.3\% | 0.5\% | - | 10.4\% |
| 14K White | High palladium, grade 1 white color . 585 | 7.2\% | 20\% | 0.75\% | - | 13.5\% |
| 14K White | Sheet/wire fabrication | 24.2\% | - | 6.4\% | 11.1\% | \% |
| 18K Soft White | Low nickel-off white color | 13.1\% | - | 5\% | 6.2\% | - |
| 18K X1 ${ }^{\text {® }}$ White | Grade 1 bright white color | 8.75\% | - | 4.1\% | 12\% | - |
| 18K White | Palladium, excellent cast ability, good color | 8.3\% | - | - | - | 13\% |
| 18K White | Good nickel white color | 11.4\% | - | 2\% | 11.4\% | - |
| 0.585 Platinum | 100\% PGM alloy | - | - | - | - | - |
| .900/.10 Platinum//ridium | Good casting characteristics | - | - | - | - | - |
| .950/.05 Platinum/Cobalt | Best color and castability | - | - | - | - | - |
| .950/.05 Platinum/Ruthenium | 95\% platinum | - | - | - | - | - |
| . 950 Super Palladium | Enhanced 95\% palladium alloy | - | - | - | - | 95\% |

LEAD TIMES: 10K yellow, 14K yellow, 14K white, 18K yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.





## Minimum order for silver casting grain is 10 pennyweights.

## Fine Silver

Melting Temperature Range: $1761-1860^{\circ} \mathrm{F}$ Specific Gravity: 10.5
$.9995+$ pure silver.

## Sterling Silver

Melting Temperature Range: $1590-1660^{\circ} \mathrm{F}$ Specific Gravity: 10.36
Our original standard sterling silver casting grain. Contains $92.7 \%$ silver and $7.3 \%$ copper.
(FORMERLY \#900)

## Continuum ${ }^{\circledR}$ Sterling Silver

Melting Temperature Range: $1680-1730^{\circ} \mathrm{F}$ Specific Gravity: 10.40
This platinum group sterling is by far the hardest sterling silver ever developed by Stuller®. It has over $95 \%$ precious metal content. Continuum ${ }^{\oplus}$ Sterling has a much higher as-cast hardness that allows setting of high quality stones in sterling silver jewelry, and a much tighter grain size allowing a better more lasting finish, superior oxidizing, and tarnish resistance benefits.

## Sterling 935

Melting Temperature Range: $1650-1750^{\circ} \mathrm{F}$ Specific Gravity: 10.23
Contains $93.5 \%$ silver instead of the traditional $92.5 \%$ in most other sterling silver casting grains. The additional silver content provides a white luster similar to pure silver, while maintaining the hardness and durability of standard sterling silver. Used by major manufacturers to enhance their silver product lines.

## Sterling 935 Deox

Melting Temperature Range: $1435-1610^{\circ} \mathrm{F}$ Specific Gravity: 10.23
Formulated to eliminate firescale and reduce porosity, while maintaining the hardness and durability of standard sterling silver. $93.5 \%$ silver content provides a richer silver luster as compared with standard sterling. Several times more tarnish resistant than standard sterling. May be reused with $50 \%$ fresh mix. Recommended casting temperature: $1800-1825^{\circ} \mathrm{F}$.

## Sterlium Plus

Melting Temperature Range: $1585-1655^{\circ} \mathrm{F} \quad$ Specific Gravity: 10.25
A superior deoxidized sterling silver designed to achieve maximum hardness and eliminate firescale and porosity. Developed to have a hardness approximately equal to standard sterling silver. Ultra white color. An all purpose application. Alloy extremely user friendly as it is easy to work with for casting as well as fabrication for rolling. *Stuller ${ }^{\circledR}$ now offers all manufactured silver mill product in Sterlium Plus.*

Super Sterling<br>Melting Temperature Range: $1555-1645^{\circ} \mathrm{F} \quad$ Specific Gravity: 10.37<br>Deoxidized sterling silver that is rather resistant to tarnishing. This alloy is softer than standard<br>sterling silver and casts very well. Designed to reduce firescale and porosity. Best used for<br>investment jewelry casting.

LEAD TIMES: 10 K yellow, 14 K yellow, 14 K white, 18 K yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.

CASTING ALLOY

| Used For | Item | Color | Silver Conten | Melting Point ${ }^{\circ} \mathrm{F}$ |  |  | 10 dwt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 10K | 14K | 18K |  |
| 10kt/14kt Yellow | CA03 | Bright Yellow | 13\% | $1617^{\circ} \mathrm{F}$ | $1610^{\circ} \mathrm{F}$ | - | \$0.53 |
| 10kt/14kt Yellow | CA04 | Lemon Yellow | 20.8\% | $1530^{\circ} \mathrm{F}$ | $1535{ }^{\circ} \mathrm{F}$ | - | \$0.55 |
| 10kt/14kt Yellow | ca08 | Deep Yellow | 12\% | $1590^{\circ} \mathrm{F}$ | $1580^{\circ} \mathrm{F}$ | - | \$0.47 |
| 10kt/14kt Yellow | ca09 | Yellow | 13.2\% | $1580^{\circ} \mathrm{F}$ | $1575{ }^{\circ} \mathrm{F}$ | - | \$0.48 |
| 10kt/14kt Yellow | CA10 | Reddish Yellow | 14.8\% | $1646^{\circ} \mathrm{F}$ | $1606^{\circ} \mathrm{F}$ | - | \$0.49 |
| 10kt/14kt Yellow | CA11 | Rich Yellow | 17.25\% | $1610^{\circ} \mathrm{F}$ | $1620^{\circ} \mathrm{F}$ | - | \$0.51 |
| 10kt/14kt Yellow | CA12 | Bright Yellow | 19.75\% | $1560^{\circ} \mathrm{F}$ | $1550^{\circ} \mathrm{F}$ | - | \$0.54 |
| 10kt/14kt Yellow | CA13 | Rich Lemon Yellow | 27.5\% | $1620^{\circ} \mathrm{F}$ | $1610^{\circ} \mathrm{F}$ | - | \$0.61 |
| 10kt/14kt Yellow | CA14 | Rich Yellow | 33.33\% | $1580^{\circ} \mathrm{F}$ | $1560^{\circ} \mathrm{F}$ | - | \$0.66 |
| 10kt/14kt Red | CA15 | Red | 5\% | $1780^{\circ} \mathrm{F}$ | $1720^{\circ} \mathrm{F}$ | - | \$0.40 |
| 18kt Yellow | CA05 | Bright Yellow | 60\% | - | - | $1705^{\circ} \mathrm{F}$ | \$0.90 |
| 18kt Yellow | CA20 | Reddish Yellow | 38.25\% | - | - | $1660^{\circ} \mathrm{F}$ | \$0.70 |
| 18kt Yellow | CA21 | Rich Yellow | 50.5\% | - | - | $1630^{\circ} \mathrm{F}$ | \$0.81 |
| 18kt Yellow | CA23 | Royal Yellow | 66.4\% | - | - | $1755^{\circ} \mathrm{F}$ | \$0.96 |
| 18kt/22kt Yellow | CA24 | Deep Yellow | 58\% | - | - | $1835{ }^{\circ} \mathrm{F}$ | \$0.88 |
| 10kt/14kt Standard White | CA02 | Standard White | - | $1840^{\circ} \mathrm{F}$ | $1710^{\circ} \mathrm{F}$ | - | \$0.36 |
| 10kt/14kt White | CA06 | Soft Nickel White | - | $1710^{\circ} \mathrm{F}$ | $1734{ }^{\circ} \mathrm{F}$ | - | \$0.36 |
| 14kt White | X1 | Extreme White | 39.6\% | - | $2250^{\circ} \mathrm{F}$ | - | \$0.46 |
| 14kt White | CA17 | Palladium White | 63\% | - | $1920^{\circ} \mathrm{F}$ | - | \$12.18 |
| 14kt/18kt Green | CA16 | Green | 93.6\% | - | $1800^{\circ} \mathrm{F}$ | $1860^{\circ} \mathrm{F}$ | \$1.20 |
| 18kt White | CA18 | Nickel White | 40\% | - | - | $1685^{\circ} \mathrm{F}$ | \$0.36 |
| 18kt palladium white | CA19/ | Palladium White | 2\% | - | - | $2040^{\circ} \mathrm{F}$ | \$26.75 |
|  | RA18 |  |  |  |  |  |  |

## ROLLING ALLOY

| Used For | Item | Color | Silver Content | Melting Point ${ }^{\circ} \mathrm{F}$ |  |  | 10 dwt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 10K | 14K | 18K |  |
| 10kt/14kt Yellow | RA03 | Rich Yellow | 16\% | $1605^{\circ} \mathrm{F}$ | $1600^{\circ} \mathrm{F}$ | - | \$0.50 |
| 10kt/14kt Yellow | RA05 | Yellow | 9.2\% | $1600^{\circ} \mathrm{F}$ | $1580^{\circ} \mathrm{F}$ | - | \$0.44 |
| 10kt/14kt Yellow | RA11 | Deep Yellow | 11.8\% | $1550^{\circ} \mathrm{F}$ | $1540^{\circ} \mathrm{F}$ | - | \$0.46 |
| 10kt/14kt Yellow | RA14 | Bright Yellow | 20\% | $1635^{\circ} \mathrm{F}$ | $1625^{\circ} \mathrm{F}$ | - | \$0.54 |
| 10kt/14kt Yellow | RA16 | Rich Yellow | 33.33\% | $1580^{\circ} \mathrm{F}$ | $1560^{\circ} \mathrm{F}$ | - | \$0.66 |
| 10kt/14kt Red | Ra09 | Red | 5\% | $1776{ }^{\circ} \mathrm{F}$ | $1707^{\circ} \mathrm{F}$ | - | \$0.41 |
| 18kt/22kt Yellow | RA06 | Deep Yellow | 58\% | - | - | $1835^{\circ} \mathrm{F}$ | \$0.88 |
| 18kt Yellow | RA08 | Bright Yellow | 60\% | - | - | $1665^{\circ} \mathrm{F}$ | \$0.90 |
| 18kt Yellow | RA15 | Royal Yellow | 66.4\% | - | - | $1765^{\circ} \mathrm{F}$ | \$0.96 |
| 10kt/14kt White | RA13 | Nickel White | - | $1850^{\circ} \mathrm{F}$ | $1760^{\circ} \mathrm{F}$ | - | \$0.36 |
| 10kt/14kt White | RA02 | Soft Nickel White | - | $1860^{\circ} \mathrm{F}$ | $1810^{\circ} \mathrm{F}$ | - | \$0.36 |
| 14kt White | RA17 | Palladium White | 63\% | - | $1920^{\circ} \mathrm{F}$ | - | \$12.18 |
| 14kt/18kt Green | RA10 | Green | 93.6\% | - | $1757^{\circ} \mathrm{F}$ | - | \$1.20 |
| 18kt White | RA12 | Nickel White | - | - | - | $1685^{\circ} \mathrm{F}$ | \$0.36 |

Stuller master alloys are produced with only the purest metals available. Our master alloys for casting grain are formulated to produce brighter castings, with reduced porosity and uniform grain structure and are non-oxidizing. Master alloys for rolling are specifically formulated for rolling and wire drawing applications. Casting and rolling alloys do not contain gold.


Minimum order for master alloy casting grain is $\mathbf{1 0}$ pennyweights.

Minimum order for master alloy rolling grain is 10 pennyweights.


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## BASE METALS FOR CASTING

## Order \# 54-4409

## ALLOY 99 REPLENISHER

Designed to deoxidize used gold for casting.
10kt Scrap: Add 5 dwt \#99 and 3.57 dwt of fine gold for each 100 dwt of 10kt scrap being melted.
14kt Scrap: Add 4 dwt \#99 and 5.60 dwt of fine gold for each 100 dwt of 14kt scrap being melted.
18kt Scrap: Add $2 \mathrm{dwt} \# 99$ and 6.00 dwt of fine gold for each 100 dwt of 18kt scrap being melted.
For white gold, the above ratios can be applied, but use will be limited to once or twice due to the yellowing of the white color.

2 troy ounce bag \$12.10


## Order \# 54-8100

## HERCULOY CASTING CUBES

An economical bronze alloy containing $5 \%$ zinc. The low zinc content releases little fumes or smoke when melted. Color approximates 14kt yellow gold. Readily accepts nickel, gold, or rhodium plating, and solders easily with silver solder. Sold by the pound. Melting point $1850^{\circ} \mathrm{F}$. Metal to wax ratio 8:1.

## \$21.20

## Order \# 54-8102

## ART BRASS CASTING CUBES

An economical brass alloy containing $30 \%$ zinc. The low casting temperature and bright yellow color lend itself to jewelry casting. Polishes bright and electroplates/solders beautifully. Overheating can create excessive fumes and smoke. Sold by the pound. Melting point $1700^{\circ} \mathrm{F}$. Metal to wax ratio 9:1.

## \$21.20

## Order \# 54-8104

## J S BRASS CASTING GRAIN

A high-quality brass casting alloy containing the same deoxidizing agents used in our karat gold casting grain. Castings are bright and firescale free. Color is very close to 14kt yellow. Highly recommended for sculpture. Sold by the pound. Melting point $1950^{\circ}$. Metal to wax ratio 9:1.
$\$ 23.40$


## Order \# 54-8106

## SILICON BRONZE CAStING GRAIN

Our silicon bronze's casting properties are superior to most other bronzes. Cast with few fumes or smoke and can readily be electroplated. Color is darker than our brass and Herculoy formulas. Highly recommended for sculpture. Sold by the pound. Melting point $1850^{\circ}$. Metal to wax ratio 9:1.

## \$21.20



## Order \# 54-8108

## WHITE BRONZE CASTING GRAIN

A nickel-free white bronze alloy with a low casting temperature of $1650^{\circ}$. Accepts rhodium plating after a nickel or gold pre-plate. Can be brazed and polished. Sold by the pound. Melting point $1850^{\circ}$. Metal to wax ratio 8:1.

## \$21.20

Base metals for casting shipping weights is 1 pound.

## SHEET

Karat Gold, Platinum, and Palladium sheets are supplied flat and $3 / 4$ hard temper unless otherwise requested. Additional options are available in our $14 \times 1{ }^{\oplus}$ white, which has a premium white color.

| Profile | Thickness |  |  | Approximate Pennyweights (dwt) Per Square Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gauge | mm | Inch | 10K | 14K | 18K | Plat/Ru | . 950 pd |
| - | 32 | 0.20 mm | .008" | 0.92 | 1.08 | 1.10 | 1.75 | 0.97 |
| - | 31 | 0.23 mm | .009" | 1.04 | 1.21 | 1.40 | 1.90 | 1.09 |
| - | 30 | 0.26 mm | .010" | 1.15 | 1.34 | 1.60 | 2.18 | 1.22 |
| - | 29 | 0.29 mm | .011" | 1.27 | 1.48 | 1.75 | 2.39 | 1.37 |
| - | 28 | 0.32 mm | .013" | 1.50 | 1.71 | 1.95 | 2.83 | 1.54 |
| - | 27 | 0.36 mm | .014" | 1.62 | 1.93 | 2.20 | 3.05 | 1.73 |
| - | 26 | 0.41 mm | .016" | 1.94 | 2.16 | 2.62 | 3.49 | 1.94 |
| - | 25 | 0.46 mm | .018 | 2.08 | 2.42 | 2.85 | 3.92 | 2.18 |
| - | 24 | 0.51 mm | .020" | 2.31 | 2.69 | 3.30 | 4.36 | 2.45 |
|  | 23 | 0.57 mm | .023" | 2.65 | 3.09 | 3.50 | 5.01 | 2.75 |
|  | 22 | 0.64 mm | .025" | 2.89 | 3.36 | 4.16 | 5.45 | 3.09 |
|  | 21 | 0.72 mm | .028" | 3.23 | 3.87 | 4.40 | 6.10 | 3.47 |
|  | 20 | 0.81 mm | .032" | 3.69 | 4.30 | 5.23 | 6.98 | 3.90 |
|  | 19 | 0.91 mm | .036" | 4.31 | 4.88 | 5.70 | 7.85 | 4.38 |
| $\square$ | 18 | 1.02 mm | .040" | 4.62 | 5.48 | 6.62 | 8.93 | 5.27 |
| $\square$ | 17 | 1.15 mm | .045" | 5.19 | 6.04 | 7.10 | 9.81 | 5.53 |
| $\square$ | 16 | 1.29 mm | .051" | 6.10 | 6.90 | 8.36 | 11.12 | 6.20 |
| $\square$ | 15 | 1.45 mm | .057" | 6.58 | 7.66 | 9.00 | 12.43 | 6.97 |
|  | 14 | 1.63 mm | .064" | 7.39 | 8.60 | 10.50 | 13.96 | 7.82 |
| $\square$ | 13 | 1.83 mm | .072" | 8.31 | 9.67 | 11.40 | 15.70 | 8.79 |
|  | 12 | 2.05 mm | .081" | 9.35 | 10.88 | 13.30 | 17.66 | 9.86 |
|  | 11 | 2.31 mm | .091" | 10.50 | 12.22 | 14.25 | 19.84 | 11.07 |
|  | 10 | 2.59 mm | .102" | 11.77 | 13.70 | 16.70 | 22.24 | 12.43 |
|  | 9 | 2.91 mm | .114" | 13.16 | 15.31 | 18.05 | 24.86 | 13.96 |
|  | 8 | 3.26 mm | .128" | 14.78 | 17.19 | 19.80 | 27.91 | 15.68 |


|  | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :--- | :---: | :---: | :---: |
| SHEET (Based on 20 Gauge) | $\mathbf{1} \mathbf{~ d w t}$ | $\mathbf{5 0} \mathbf{d w t}$ | $\mathbf{1 0 0} \mathbf{d w t}$ |
| $\mathbf{1 0 K}$ Yellow or White | $\$ 33.35$ | $\$ 31.52$ | $\$ 31.22$ |
| $\mathbf{1 4 K}$ Yellow or White | $\$ 44.17$ | $\$ 42.34$ | $\$ 42.03$ |
| $\mathbf{1 8 K}$ Yellow or White | $\$ 55.21$ | $\$ 53.38$ | $\$ 53.07$ |
| .950/.05 Platinum $/$ Ruthenium | $\$ 77.95$ | $\$ 76.92$ | $\$ 76.81$ |
| Palladium | $\$ 50.66$ | $\$ 49.63$ | $\$ 49.51$ |

LEAD TIMES: 10kt yellow, 14kt yellow, 14kt white, 18kt yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.


# - Minimum order is one square inch per size. - Maximum sheet size is $4 x 14$ for same or next day shipping. 

Longer lengths are available with additional lead time. Annealing available upon request.


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## STERLING SILVER

$6^{\prime \prime}$ Wide Sterling Sheet is available in dead soft temper as well as our original standard temper (medium-hard)/mill finish. One dimension must be 6 " when ordering sterling silver sheet. Sterling silver sheet is available in even gauges only. Maximum length is 6 " $\times 36^{\prime \prime}$.

| Profile | Thickness |  |  | Approximate Pennyweights (dwt) Per Size |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $6 " \times 1$ " |  | $6^{\prime \prime} \times 3^{\prime \prime}$ |  | $6^{\prime \prime} \times 6$ |  | $6 \mathrm{k} \times 12$ |  |
|  | Gauge | mm | Inch | Sterling | Fine | Sterling | Fine | Sterling | Fine | Sterling | Fine |
| - | 30 | 0.26 mm | .010" | 6.52 | 6.63 | 19.56 | 19.89 | 39.12 | 39.78 | 78.24 | 79.56 |
|  | 28 | 0.32 mm | .013" | 8.22 | 8.36 | 24.66 | 25.08 | 49.32 | 50.16 | 98.64 | 100.32 |
|  | 26 | 0.41 mm | .016" | 10.37 | 10.54 | 31.11 | 31.62 | 62.22 | 63.24 | 124.44 | 126.46 |
|  | 24 | 0.51 mm | .020" | 13.12 | 13.33 | 39.36 | 39.99 | 78.72 | 79.98 | 157.44 | 156.96 |
|  | 22 | 0.64 mm | .025" | 16.51 | 16.78 | 49.53 | 50.34 | 199.06 | 100.68 | 198.12 | 201.36 |
|  | 20 | 0.81 mm | .032" | 20.88 | 21.22 | 62.64 | 63.66 | 125.28 | 127.32 | 250.56 | 254.64 |
|  | 18 | 1.02 mm | .040" | 26.30 | 26.74 | 78.90 | 80.22 | 157.80 | 160.44 | 315.60 | 320.88 |
|  | 16 | 1.29 mm | .051" | 33.16 | 33.71 | 99.48 | 101.13 | 198.96 | 202.26 | 397.92 | 404.52 |
|  | 14 | 1.63 mm | .064" | 41.82 | 42.51 | 125.46 | 127.53 | 250.92 | 255.06 | 501.84 | 510.12 |
|  | 12 | 2.05 mm | .081" | 52.71 | - | 158.13 | - | 316.26 | - | 632.52 | - |
|  | 10 | 2.59 mm | .102" | 66.48 | - | 199.44 | - | 398.88 | - | 797.76 | - |
|  | 8 | 3.26 mm | .128" | 83.84 | - | 251.52 | - | 503.04 |  | 1006.08 |  |

Minimum order for sheet is $\mathbf{6 \times 1}$ inches.

## FINE SILVER

. 9995 Fine silver sheet is supplied dead soft in 6 " widths. Available in even gauges only. One dimension must be 6 " when ordering. Maximum length is $6^{\prime \prime} \times 24^{\prime \prime}$.

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.

|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6" SILVER SHEET | 1 dwt | 102 | 400 dwt | 20 oz | 1000 dwt | 50 oz |
| Fine Silver | \$1.25 | \$25.00 | \$1.19 | \$23.80 | \$1.17 | \$23.40 |
| Sterlium Plus | \$1.40 | \$28.00 | \$1.34 | \$26.80 | \$1.32 | \$26.40 |

## STERLING SILVER

Sterling silver 12 inch wide sheet is supplied dead soft with brush finish in $16,18,20,22,24$, and 26 gauge. One dimension must be 12 inches when ordering 12 inch wide sterling silver sheet.

| Profile | Thickness |  |  | dwt/inch | Approximate Pennyweights (dwt) Per Size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gauge | mm | Inch |  | $12^{\prime \prime} \times 1$ 1 | $12 \mathrm{C} \times 6^{\prime \prime}$ | 12 " 12 " | $12 \mathrm{C} \times 18^{\prime \prime}$ |
|  | 26 | 0.41 mm | .016" | 1.74 | 20.86 | 125.17 | 250.33 | 375.50 |
|  | 24 | 0.51 mm | .020" | 2.19 | 26.31 | 157.83 | 315.66 | 473.49 |
|  | 22 | 0.64 mm | .025" | 2.76 | 33.11 | 198.65 | 397.31 | 595.96 |
|  | 20 | 0.81 mm | .032" | 3.49 | 41.88 | 251.27 | 502.54 | 753.80 |
|  | 18 | 1.02 mm | .040" | 4.36 | 52.32 | 313.92 | 627.84 | 941.76 |
|  | 16 | 1.29 mm | .051" | 5.54 | 66.48 | 398.89 | 797.77 | 1196.66 |

## Minimum order for sheet is $12 \times 1$ inches.

|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12" SILVER SHEET | 1 dwt | 1 oz | 400 dwt | 25 oz | 1000 dwt | 50 oz |
| Sterling Silver | \$1.40 | \$28.00 | \$1.34 | \$26.80 | \$1.32 | \$26.40 |

LEAD TIMES: 10 K yellow, 14 K yellow, 14 K white, 18 K yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.


YELLOW GOLD-FILLED
10kt $1 / 10$ Single-Sided Sheet. 10\% 10kt yellow gold-filled by weight (10/10) mechanically bonded to bronze base metal. Stocked in soft 4" $\times 30$ " sheets. One dimension must be 4 " when ordering.
Minimum order for sheet is $\mathbf{4 \times 1}$ inches.

| Profile | Thickness |  |  | Approximate Pennyweights (dwt) Per Size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gauge | mm | Inch | $4{ }^{\prime \prime} \times 1$ 1 | $4{ }^{\prime \prime} \times{ }^{\prime \prime}$ | $4^{\prime \prime} \times 6$ | 4" $\times 12$ |
| 10kt $1 / 10$ Single-Sided Sheet. |  |  |  |  |  |  |  |
|  | 16 | 1.29 mm | .050" | 18.80 | 56.40 | 112.80 | 225.60 |
|  | 14 | 1.63 mm | .060" | 22.60 | 67.80 | 135.60 | 271.20 |

14kt $1 / 20$ Single-Sided Sheet. 5\% 14kt yellow gold-filled by weight $(14 / 20)$. Sheet is clad on one side. Great for stampings and jewelry requiring a single-sided, gold-filled surface. Stocked in soft $3^{\prime \prime} \times 30^{\prime \prime}$ sheets. One dimension must be 3 " when ordering.

## Minimum order for sheet is $\mathbf{3} \times \mathbf{1}$ inches.

| Profile | Thickness |  |  | Approximate Pennyweights (dwt) Per Size |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $3^{\prime \prime} \times 3^{\prime \prime}$ | $3^{\prime \prime} \times 6^{\prime \prime}$ | $3^{\prime \prime} \times 12^{\prime \prime}$ |
| 14kt $1 / 20$ Single-Sided Sheet. |  |  |  |  |  |  |  |  |
| $\underline{\square}$ | 22 | 0.64 mm | .025" | 7.20 |  | 21.60 | 43.20 | 86.40 |
|  | 20 | 0.81 mm | .032" | 14.10 |  | 42.30 | 84.60 | 169.60 |
| 14kt $1 / 40 \times 1 / 40$ Double-Sided Sheet. |  |  |  |  |  |  |  |  |
|  | 26 | 0.41 mm | .016" | 9.21 |  | 27.60 | 55.20 | 110.50 |
| YELLOW GOLD-FILLED SHEET |  |  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
|  |  |  | 1 dwt | 1 oz | 50 dwt | 25 oz | 100 dwt 50 oz |  |
| 1/1014K Yellow Gold Filled |  |  | \$4.30 | \$86.00 | \$3.84 | \$76.80 | \$3.69 \$73.80 |  |
| $1 / 2014 \mathrm{~K}$ Yellow Gold Filled |  |  | \$3.65 | \$73.00 | \$3.19 | \$63.80 | \$3.04 \$60.80 |  |
| 1/40 14K Yellow Gold Filled |  |  | \$3.65 | \$73.00 | \$3.19 | \$63.80 | \$3.04 \$60.80 |  |



14kt $1 / 40 \times 1 / 40$ Double-Sided Sheet. 5\% 14kt yellow gold-filled by weight $(14 / 40 \times 14 / 40)$. Excellent for earrings and other applications requiring double-sided, gold-filled surfaces. Stocked in soft 3 " $\times 30$ " sheets. One dimension must be $3^{\prime \prime}$ when ordering.
Minimum order for sheet is $\mathbf{3 \times 1} \mathbf{1}$ inches.

## GOLD STRIP

Karat gold strip is supplied flat with a $3 / 4$ hard-temper unless otherwise requested. Minimum order varies according to width of strip. Approximate pennyweights per inch (14kt) and corresponding minimum order length are listed below. Karat gold strip is available in lengths up to 14".

| Width | Minimum Order Length | 14K/Thickness, Approximate Pennyweights (dwt) by Inch |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 15 Gauge 0.057" | $\begin{gathered} 17 \text { Gauge } \\ 0.045{ }^{\prime \prime} \end{gathered}$ | $\begin{gathered} 20 \text { Gauge } \\ 0.032^{\prime \prime} \end{gathered}$ | $\begin{aligned} & 24 \text { Gauge } \\ & 0.020^{\prime \prime} \end{aligned}$ | $\begin{gathered} 26 \text { Gauge } \\ 0.016^{\prime \prime} \end{gathered}$ | $\begin{gathered} 28 \text { Gauge } \\ 0.013^{\prime \prime} \end{gathered}$ | $\begin{gathered} 30 \text { Gauge } \\ 0.010^{\prime \prime} \end{gathered}$ |
|  |  | - | $\square$ | $\square$ |  | - |  |  |
| 24 mm | 1.5" | 7.34 | 5.79 | 4.12 | 2.58 | 2.06 | 1.67 | 1.29 |
| 22 mm | 1.5" | 6.73 | 5.31 | 3.78 | 2.36 | 1.89 | 1.53 | 1.18 |
| 20 mm | 1.5" | 6.12 | 4.83 | 3.43 | 2.15 | 1.71 | 1.40 | 1.07 |
| 18 mm | 1.5 " | 5.50 | 4.35 | 3.09 | 1.93 | 1.55 | 1.26 | 0.97 |
| 16 mm | 1.5" | 4.89 | 3.86 | 2.75 | 1.71 | 1.37 | 1.12 | 0.86 |
| 15 mm | 2 " | 4.59 | 3.62 | 2.58 | 1.61 | 1.29 | 1.05 | 0.81 |
| 14 mm | 2 " | 4.28 | 3.38 | 2.40 | 1.50 | 1.20 | 0.98 | 0.75 |
| 13 mm | 2.5 " | 3.98 | 3.14 | 2.23 | 1.40 | 1.11 | 0.91 | 0.70 |
| 12 mm | $3{ }^{\prime \prime}$ | 3.67 | 2.90 | 2.06 | 1.29 | 1.03 | 0.84 | 0.64 |
| 11 mm | $3{ }^{\prime \prime}$ | 3.36 | 2.66 | 1.89 | 1.18 | 0.95 | 0.78 | 0.59 |
| 10 mm | 3 " | 3.06 | 2.41 | 1.71 | 1.07 | 0.86 | 0.70 | 0.55 |
| 9 mm | $3^{\prime \prime}$ | 2.75 | 2.17 | 1.55 | 0.97 | 0.77 | 0.69 | 0.48 |
| 8 mm | 3.5" | 2.45 | 1.93 | 1.37 | 0.86 | 0.69 | 0.56 | 0.43 |
| 7 mm | $4{ }^{\prime \prime}$ | 2.14 | 1.69 | 1.20 | 0.75 | 0.60 | 0.49 | 0.38 |



Annealing available upon request. For strips less than 7 mm wide, see flat bezel.

Available qualities include 10 kt , 14kt, 18kt, and 14 kt and 18kt palladium white.

| Approximate Pricing Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: |
| 1 dwt | 50 dwt | 100 dwt |
| \$55.21 | \$53.38 | \$53.07 |
| \$33.35 | \$31.52 | \$31.22 |
| \$44.17 | \$42.34 | \$42.03 |



## ROUND WIRE

Round wire is supplied in continuous coils with a medium-hard temper unless otherwise requested. Other metal qualities include $14 \mathrm{kt} \mathrm{X}{ }^{\oplus}$ white and .585 platinum, all of which have a premium white color. Straight wire is also available in numerous options. Annealing is available upon request.

| Profile | Thickness |  |  | Approximate Pennyweights (dwt) Per Square Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gauge | mm | Inch | 10K | 14K | 18K | Plat/Ru | . 950 pd |
|  | 30 | 0.26 mm | .010" | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 |
| - | 29 | 0.29 mm | .011" | 0.01 | 0.01 | 0.02 | 0.02 | 0.01 |
|  | 28 | 0.32 mm | .013" | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 |
| , | 27 | 0.36 mm | .014" | 0.02 | 0.02 | 0.03 | 0.03 | 0.02 |
| - | 26 | 0.41 mm | .016" | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 |
| - | 25 | 0.46 mm | .018" | 0.03 | 0.04 | 0.04 | 0.06 | 0.03 |
| - | 24 | 0.51 mm | .020" | 0.04 | 0.04 | 0.05 | 0.07 | 0.04 |
| - | 23 | 0.57 mm | .023" | 0.05 | 0.05 | 0.07 | 0.09 | 0.06 |
| - | 22 | 0.64 mm | .025" | 0.06 | 0.07 | 0.08 | 0.11 | 0.61 |
| - | 21 | 0.72 mm | .028" | 0.07 | 0.08 | 0.10 | 0.13 | 0.08 |
| - | 20 | 0.81 mm | .032" | 0.10 | 0.11 | 0.13 | 0.18 | 0.10 |
| - | 19 | 0.91 mm | .036" | 0.13 | 0.14 | 0.17 | 0.22 | 0.12 |
| - | 18 | 1.02 mm | .040" | 0.16 | 0.17 | 0.27 | 0.29 | 0.16 |
| - | 17 | 1.15 mm | .045" | 0.21 | 0.23 | 0.26 | 0.35 | 0.20 |
| $\bullet$ | 16 | 1.29 mm | .051" | 0.27 | 0.28 | 0.33 | 0.45 | 0.25 |
| $\bullet$ | 15 | 1.45 mm | .057" | 0.32 | 0.35 | 0.41 | 0.56 | 0.31 |
| $\bullet$ | 14 | 1.63 mm | .064" | 0.38 | 0.44 | 0.53 | 0.70 | 0.39 |
| $\bullet$ | 13 | 1.83 mm | .072" | 0.53 | 0.61 | 0.67 | 0.89 | 0.50 |
| - | 12 | 2.05 mm | .081" | 0.61 | 0.73 | 0.84 | 1.12 | 0.63 |
| - | 11 | 2.31 mm | .091" | 0.78 | 0.91 | 1.05 | 1.42 | 0.79 |
| - | 10 | 2.59 mm | .102" | 0.98 | 1.11 | 1.33 | 1.78 | 0.99 |
| - | 9 | 2.91 mm | .114" | 1.34 | 1.52 | 1.73 | 2.23 | 1.25 |
| - | 8 | 3.26 mm | .128" | 1.62 | 1.87 | 2.13 | 2.81 | 1.58 |
| ) | 7 | 3.67 mm | .144" | 2.00 | 2.32 | 2.65 | 3.55 | 2.00 |
| - | 6 | 4.12 mm | .162" | 2.97 | 2.80 | 3.49 | 4.50 | 2.52 |


|  | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :--- | :---: | :---: | :---: |
| ROUND WIRE (Based on 20 Gauge) | $\mathbf{1} \mathbf{~ d w t}$ | $\mathbf{5 0} \mathbf{~ d w t ~}$ | $\mathbf{1 0 0} \mathbf{d w t}$ |
| $\mathbf{1 0 K}$ Yellow or White | $\$ 33.23$ | $\$ 31.44$ | $\$ 31.14$ |
| $\mathbf{1 4 K}$ Yellow or White | $\$ 44.05$ | $\$ 42.25$ | $\$ 41.96$ |
| $\mathbf{1 8 K}$ Yellow or White | $\$ 55.09$ | $\$ 53.29$ | $\$ 52.99$ |
| .950/.05 Platinum/Ruthenium | $\$ 77.95$ | $\$ 76.92$ | $\$ 76.81$ |
| Palladium | $\$ 50.66$ | $\$ 49.63$ | $\$ 49.51$ |

## Minimum orders:

6-12 gauges -1 inch per size and quality.
14-24 gauges - 3 inches per size and quality.
25-30 gauges - 36 inches per size and quality.
18, 20, 22, 24, 28 and 30 gauges are also available in Stulladium (silver/palladium).

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.

## SILVER ROUND

Coiled Round Wire is available in soft or standard temper ( $1 / 2$ hard). Small Diameter Wire is sold in 100 pennyweight increments only. Supplied $1 / 2$ hard in plastic spools. Available in 26,28 , and 30 gauges. . $9995+$ Fine Silver Round Wire is supplied dead soft and coiled. 26,28 and 30 gauge wire are sold in 100 dwt spools only.

| Profile | Thickness |  |  | $\begin{aligned} & \text { Minimum } \\ & \text { Order } \end{aligned}$ | Approximate dwt/ft. Sterlium/Fine | $\begin{aligned} & 20 \mathrm{dwt}(1 \mathrm{oz} .) \\ & \text { Length (in.) } \end{aligned}$ |  |  | $\begin{gathered} 100 \mathrm{dwt}(5 \mathrm{oz} .) \\ \text { Length (ft.) } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gauge | mm | Inch |  |  | Sterlium | Fine | Continuum | Sterlium | Fine | Continuum |
| . | 30 | . 26 mm | .010" | $72^{\prime \prime}$ | 0.10 | 2342" | - | 2953" | 975.7 | 959.9 | 1230.4 |
| , | 28 | . 32 mm | .013" | 72 | 0.15 | $1475{ }^{\prime \prime}$ | - | 1861" | 614.8 | 604.8 | 775.2 |
| . | 26 | 41 mm | .016" | 72 | 0.23 | 927" | - | - | 386.1 | 379.8 | - |
| - | 24 | . 51 mm | .020" | $36^{\prime \prime}$ | 0.40 | 579" | 570 | 731" | 241.5 | 237.5 | 304.5 |
| - | 22 | . 64 mm | .025" | $36^{\prime \prime}$ | 0.65 | 366" | 360 | 461" | 152.4 | 150.0 | 192.2 |
| - | 21 | . 72 mm | .028" | 24 " | 0.80 | 288" | - | - | 120.1 | 120.1 | - |
| - | 20 | . 81 mm | .032" | 24 " | 1.00 | $229 "$ | $225{ }^{\prime \prime}$ | 288" | 95.3 | 93.7 | 120.2 |
| - | 18 | 1.02 mm | .040" | 24 " | 1.74 | $144 "$ | 142 " | 182" | 60.0 | 59.1 | 75.5 |
| - | 16 | 1.29 mm | .051" | $24 "$ | 2.71 | 911 | $89 "$ | $114{ }^{\prime \prime}$ | 37.8 | 37.2 | 47.6 |
| $\bullet$ | 14 | 1.63 mm | .064" | 12 " | 4.08 | $57{ }^{\prime \prime}$ | $56{ }^{\prime \prime}$ | 72 | 23.8 | 23.4 | 30.0 |
| - | 12 | 2.05 mm | .080" | 12 | 6.72 | $36^{\prime \prime}$ | - | - | 15.0 | 14.7 | - |
| - | 10 | 2.59 mm | .102" | 12 | 11.16 | 23 " | - | - | 9.4 | 9.2 | - |
| $\bigcirc$ | 9 | 2.91 mm | .114" | 12 | 13.44 | $18{ }^{\prime \prime}$ | - | $18{ }^{\prime \prime}$ | 7.5 | 7.5 | 7.5 |
| - | 8 | 3.26 mm | .128" | $12^{\prime \prime}$ | 16.80 | $14{ }^{\prime \prime}$ | - | - | 5.9 | 5.8 | - |
| ) | 6 | 4.12 mm | .162" | 12 " | 28.32 | $9 "$ | - | - | 3.7 | 3.7 | - |
|  | 4 | 5.19 mm | .204" | 12 " | 43.50 | $6 "$ | - | - | 2.3 | 2.3 | - |


| SILVER COILED WIRE | Approximate Pricing Per Pennyweight (dwt//0unce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 dwt | 102 | 400 dwt | 20 oz | 1000 dwt | 50 oz |
| Continuum ${ }^{\text {® }}$ Sterling Silver | \$2.84 | \$56.80 | \$2.77 | \$55.40 | \$2.75 | \$55.00 |
| Fine Silver | \$1.27 | \$25.40 | \$1.21 | \$24.20 | \$1.19 | \$23.80 |
| Sterlium Plus ${ }^{\text {m' }}$ | \$1.32 | \$26.40 | \$1.26 | \$25.20 | \$1.24 | \$24.80 |


| SILVER SPOOLED WIRE | Approximate Pricing Per Pennyweight (dwt//0unce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 dwt | 102 | 400 dwt | 20 oz | 1000 dwt | 50 oz |
| Continuum® Sterling Silver | \$2.84 | \$56.80 | \$2.77 | \$55.40 | \$2.75 | \$55.00 |
| Fine Silver | \$1.29 | \$25.80 | \$1.23 | \$24.60 | \$1.20 | \$24.00 |
| Sterlium Plus ${ }^{\text {m" }}$ | \$1.59 | \$21.80 | \$1.53 | \$30.60 | \$1.50 | \$30.00 |

## YELLOW GOLD-FILLED

$1 / 2014 \mathbf{k t}$ yellow gold-filled. $5 \% 14 \mathrm{kt}$ yellow gold by weight. Yellow gold-filled round wire is supplied soft and coiled in all gauges listed below. Half-hard coiled wire is available in 16 gauge through 24 gauge.

| Profile | Gauge | Thickness mm | Inch | $\begin{gathered} \text { Minimum } \\ \text { Order } \end{gathered}$ | Approximate dwt/ft. | 20 dwt (1 oz.) Length (in.) | 100 dwt (5 oz.) <br> Length (ft.) | Available Temper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . | 26 | 0.41 mm | .016" | 601 | 0.24 | 1000" | 416.7 | Soft |
| - | 24 | 0.51 mm | .020" | 601 | 0.36 | 667 " | 277.8 | $1 / 2$ Hard, Soft |
| - | 22 | 0.64 mm | .025" | 60 | 0.60 | 400 | 166.7 | 1/2Hard |
| - | 21 | 0.72 mm | .028" | $48{ }^{\prime \prime}$ | 0.71 | 339 " | 141.3 | 1/2Hard |
| - | 20 | 0.81 mm | .032" | $36^{\prime \prime}$ | 0.96 | 2501 | 104.1 | 1/2 Hard, Soft |
| - | 18 | 1.02 mm | .040" | $24{ }^{\prime \prime}$ | 1.45 | 167" | 69.5 | 1/2Hard, Soft |
| $\bullet$ | 16 | 1.29 mm | .051" | $24{ }^{\prime \prime}$ | 2.28 | 105" | 43.9 | $1 / 2$ Hard, Soft |
| $\bullet$ | 14 | 1.63 mm | .064" | $12^{\prime \prime}$ | 3.84 | 63 " | 26 | $1 / 2$ Hard, Soft |
| - | 12 | 2.05 mm | .080" | $12^{\prime \prime}$ | 4.80 | 50 | 17.9 | 1/2Hard |
| - | 10 | 2.59 mm | .102" | $6{ }^{\prime \prime}$ | 9.36 | $26^{\prime \prime}$ | 10.7 | Soft |
| - | 8 | 3.26 mm | .128" | $6^{\prime \prime}$ | 15.00 | $16^{\prime \prime}$ | 6.7 | Soft |


|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YGF ROUND WIRE | 1 dwt | 1 oz | 50 dwt | 2502 | 100 dwt | 50 oz |
| $1 / 20$ 14K Yellow Gold Filled | \$3.65 | \$73.00 | \$3.19 | \$63.80 | \$3.04 | \$60.80 |

S T U L L ER
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LASER WIRE SPOOLS
All laser wires are annealed dead soft to provide the best weld possible. They come packaged in reusable plastic spools and available in lengths, ranging from 3 feet to 20 feet. Prices based on 20 -foot spools unless otherwise noted. (*) Denotes those provided in 30 gauge spools.


| Metal Quality | 28 Gauge Kit30 Gauge Kit |  | Spool | Penn | divid | Spool | Spool | 20 ft. Spool |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$450.00 | \$270.00 | Gauge | 3 ft . | 5 ft . | 10 ft . | 20 ft . | Price |
| 10K Yellow | $\checkmark$ | - | 28 | - | 0.90 | 1.80 | 3.60 | \$139.42 |
| 10K Yellow | - | $\sqrt{ }$ | 30 | - | 0.59 | 1.19 | 2.27 | \$87.91 |
| 10K Yellow | - | - | 36 | - | 0.14 | 0.28 | 0.58 | \$22.60 |
| 14K Yellow | - | - | 28 | - | 1.01 | 2.02 | 4.00 | \$198.19 |
| 14K Yellow | - | - | 30 | - | 0.62 | 1.28 | 2.50 | \$123.87 |
| 14K Yellow | - | - | 32 | - | - | - | 1.64 | \$82.00 |
| 14K Yellow | - | - | 36 | - | 0.17 | 0.32 | 0.65 | \$32.53 |
| 14K Yellow (Zinc-Free) | $\sqrt{ }$ | - | 28 | - | - | - | 1.01 | \$218.30 |
| 14K Yellow (Zinc-Free) | - | $\sqrt{ }$ | 30 | - | - | - | 2.77 | \$137.57 |
| 14K Yellow (Zinc-Free) | - | - | 36 | - | - | - | 0.69 | \$34.74 |
| 14K White | - | - | 28 | - | - | - | 4.01 | \$198.34 |
| 14K White | - | - | 32 | - | - | - | 1.64 | \$81.94 |
| 14K White | - | - | 36 | - | - | . 316 | 0.63 | \$15.77 |
| 14K $\times 1{ }^{\oplus}$ White | - | - | 30 | - | 0.62 | 1.29 | 2.54 | \$125.69 |
| 14K Palladium White | $\sqrt{ }$ | - | 28 | - | 1.13 | 2.27 | 4.54 | \$246.84 |
| 14K Palladium White | - | $\sqrt{ }$ | 30 | - | 0.75 | 01.5 | 2.86 | \$155.42 |
| 14K Palladium White | - | - | 32 | - | - | - | 1.83 | \$100.31 |
| 14K Palladium White | - | - | 36 | - | 0.15 | 0.32 | 0.71 | \$38.99 |
| 14K Red | - | - | 30 | - | 0.65 | 1.25 | 2.50 | \$123.87 |
| 14K Red | - | - | 36 | - | - | 0.32 | - | \$16.05 |
| 18K Yellow | $\checkmark$ | - | 28 | - | . 021 | 1.22 | 2.49 | \$296.63 |
| 18K Yellow | - | $\sqrt{ }$ | 30 | - | 0.81 | 1.62 | 3.24 | \$196.30 |
| 18K Yellow | - | - | 33 | - | - | - | 1.55 | \$94.82 |
| 18K Yellow | - | - | 36 | - | 0.17 | 0.35 | 0.81 | \$49.30 |
| 18K Yellow (Zinc-Free) | - | - | 28 | - | - | - | 0.91 | \$58.05 |
| 18K Yellow (Zinc-Free) | - | - | 30 | - | - | - | 3.24 | \$197.80 |
| 18K Yellow (Zinc-Free) | - | - | 36 | - | - | - | 0.02 | \$49.67 |
| 18K White | $\sqrt{ }$ | - | 28 | - | 1.16 | 2.31 | 4.63 | \$280.01 |
| 18K White | - | $\sqrt{ }$ | 30 | - | 0.73 | 1.52 | 2.90 | \$175.31 |
| 18K White | - | - | 32 | - | - | - | 1.87 | \$114.10 |
| 18K White | - | - | 36 | - | 0.16 | 0.40 | 0.76 | \$46.32 |
| 18K Palladium White | $\sqrt{ }$ | - | 28 | - | 1.28 | 2.56 | 5.15 | \$346.34 |
| 18K Palladium White | - | $\sqrt{ }$ | 30 | - | 0.85 | 1.61 | 3.38 | \$227.58 |
| 18K Palladium White | - | - | 33 | - | - | - | 1.62 | \$109.98 |
| 18K Palladium White | - | - | 36 | - | 0.18 | 0.36 | 0.75 | \$50.81 |
| 18K Green | - | - | 36 | - | - | - | 0.78 | \$47.69 |
| 19K White | - | - | 30 | - | . 761 | 1.52 | 3.046 | \$198.89 |
| 19K White | - | - | 36 | - | . 19 | 0.38 | 0.76 | \$49.68 |
| 22K Yellow | - | - | 30 | - | - | 1.86 | - | \$132.43 |
| Silver Eye-Glass Frame Wire | $\left.\sqrt{ }{ }^{*}\right)$ | $\sqrt{ }$ | 30 | - | - | - | 2.41 | \$9.59 |
| Silver Eye-Glass Frame Wire | - | - | 36 | - | - | - | 0.58 | \$3.29 |
| Silver Weld-Hard | $\left.\sqrt{ }{ }^{*}\right)$ | $\sqrt{ }$ | 30 | - | - | - | 0.52 | \$9.54 |
| Silver Braze-Easy | , | $\sqrt{ }$ | 30 | - | - | - | 0.14 | \$8.80 |
| Silver Weld/Braze-Medium | - | - | 30 | - | - |  | 1.99 | \$9.20 |
| Super Sterling Silver | - | - | 28 | - | - | - | 3.31 | \$15.33 |
| Super Sterling Silver | - | - | 30 | - | - | - | 2.04 | \$9.45 |
| Super Sterling Silver | - | - | 36 | - | - | - | 0.51 | \$2.35 |
| Continuum ${ }^{\text {® }}$ Sterling Silver | - | - | 30 | - | - | - | 2.06 | \$13.31 |
| Continuum ${ }^{\text {® }}$ Sterling Silver | - | - | 36 | - | - | - | 0.53 | \$3.40 |
| Sterlium Plus | - | - | 30 | - | - | - | 2.07 | \$9.59 |
| Silver/Palladium (Stulladium) | - | - | 30 | - | - | - | 2.16 | \$53.50 |
| Titanium | $\left.\sqrt{ }{ }^{*}\right)$ | $\sqrt{ }$ | 30 | - | - | - | . 896 | \$9.95 |
| Stainless Steel | $\sqrt{ }$ | - | 28 | - | - | - | 2.11 | \$7.95 |
| Stainless Steel | - | $\sqrt{ }$ | 30 | - | - | - | 1.70 | \$7.95 |
| Stainless Steel | - | - | 36 | - | - | - | 0.38 | \$7.95 |
| .900/.10 Platinum/Iridium | $\sqrt{ }$ | - | 28 | - | - | - | 1.02 | \$79.47 |
| .900/.10 Platinum/Iridium | - | $\sqrt{ }$ | 30 | - | - | - | 0.64 | \$53.52 |
| .900/.10 Platinum/Iridium | - | - | 33 | - | - | - | 2.16 | \$169.14 |
| .900/.10 Platinum/Iridium | - | - | 36 | - | - | 0.54 | - | \$41.96 |
| .950/.05 Platinum/Ruthenium | - | - | 28 | 0.98 | - | - | - | \$81.68 |
| .950/.05 Platinum/Cobalt | $\sqrt{ }$ | - | 28 | 0.98 | - | - | - | \$81.70 |
| .950/.05 Platinum/Cobalt | - | - | 36 | 1.03 | - | - | - | \$86.37 |

## SPEEDWIRE DISPENSERS AND STAND

Ever dreamed of the day when you'd feed laser wire into a weld with ease! Today, with the Speedwire dispenser system, you can do it. The Speedwire system features a specially designed dispenser with a finger-controlled feed. Use this one-handed operation to get in as close as 2 mm from the weld. How's that for improving your accuracy?

Each reloadable dispenser is able to hold a ten-foot wire spool in its clear, sealed compartment. Monitor how much you've used while keeping it neat and clean. The wire feeds through a stainless steel guide for stability. No need to keep repositioning the wire to get it in just the right spot. The dispensers are color-coded so you can tell one metal from another. This is definitely a tool you won't want to live without.


| Order\# | Description | Jeweler's Cost |
| :--- | :--- | :---: | :---: |
| SPEEDWIRE:100:T | Dispenser Stand (Holds 8) | $\$ 19.95$ |
| SPEEDWIRE:101:T | Reloadable Blue Dispenser for White Wire | $\$ 23.00$ |
| SPEEDWIRE:102:T | Reloadable Red Dispenser for Yellow Wire | $\$ 23.00$ |
| SPEEDWIRE:103:T | Reloadable White Dispenser for Silver Wire | $\$ 23.00$ |
| SPEEDWIRE:104:T | Reloadable Purple Dispenser for Platinum/Palladium Wire | $\$ 23.00$ |
| SPEEDWIRE:19:T | Repair Kit (Includes axle, wheel, spring, plunger, and guide tube) | $\$ 6.00$ |

## SPEEDWIRE LASER WIRE

| Order \# | Description | Jeweler's Cost |
| :---: | :---: | :---: |
| SPEEDWIRE:138:P | 14kt White 28 Gauge (.32mm) 10ft. Spool | \$99.05 |
| SPEEDWIRE:106:P | $14 \mathrm{kt} \mathrm{X1}{ }^{\oplus}$ White 30 Gauge (.26mm) 10ft. Spool | \$62.00 |
| SPEEDWIRE:108:P | 14kt Palladium White 30 Gauge (.26mm) 10ft. Spool | \$77.71 |
| SPEEDWIRE:133:P | 14kt Yellow 28 Gauge (.32mm) 10ft. Spool | \$100.66 |
| SPEEDWIRE:105:P | 14kt Yellow 30 Gauge (.26mm) 10ft. Spool | \$63.62 |
| SPEEDWIRE:107:P | 14kt Yellow (Zinc-free) 30 Gauge (.26mm) 10ft. Spool | \$68.49 |
| SPEEDWIRE:110:P | 18kt White 30 Gauge (.26mm) 10ft. Spool | \$87.78 |
| SPEEDWIRE:126:P | 18kt Palladium White 28 Gauge (.32mm) 10ft. Spool | \$171.89 |
| SPEEDWIRE:112:P | 18kt Palladium White 30 Gauge (.26mm) 10ft. Spool | \$113.52 |
| SPEEDWIRE:117:P | 18kt Palladium White 33 Gauge (.18mm) 10ft. Spool | \$54.80 |
| SPEEDWIRE:130:P | 18kt Palladium White 33 Gauge (.18mm) 15ft. Spool | \$81.71 |
| SPEEDWIRE:121:P | 18kt Palladium White 36 Gauge (.13mm) 10ft. Spool | \$27.30 |
| SPEEDWIRE:127:P | 18kt Palladium White 36 Gauge (.13mm) 20ft. Spool | \$54.63 |
| SPEEDWIRE:109:P | 18kt Yellow 30 Gauge (.26mm) 10ft. Spool | \$93.35 |
| SPEEDWIRE:116:P | 18kt Yellow 33 Gauge (.18mm) 10ft. Spool | \$47.41 |
| SPEEDWIRE:125:P | 18kt Yellow (Zinc-free) 28 Gauge (.32mm) 10ft. Spool | \$150.92 |
| SPEEDWIRE:111:P | 18kt Yellow (Zinc-free) 30 Gauge (.26mm) 10ft. Spool | \$95.02 |
| SPEEDWIRE:124:P | 18kt Yellow (Zinc-free) 33 Gauge (.18mm) 10ft. Spool | \$48.13 |
| SPEEDWIRE:129:P | 18kt Yellow (Zinc-free) 33 Gauge (.18mm) 15ft. Spool | \$72.01 |
| SPEEDWIRE:123:P | 18kt Yellow (Zinc-free) 36 Gauge (.13mm) 10ft. Spool | \$23.93 |
| SPEEDWIRE:128:P | 18kt Yellow (Zinc-free) 36 Gauge (.13mm) 20ft. Spool | \$47.27 |
| SPEEDWIRE:122:P | 18kt Rose 34 Gauge (.16mm) 10ft. Spool | \$35.86 |
| SPEEDWIRE:134:P | 19kt White 30 Gauge (.26mm) 10ft. Spool | \$99.44 |
| SPEEDWIRE:132:P | Silver Weld-Hard 30 Gauge (.26mm) 10ft. Spool | \$4.12 |
| SPEEDWIRE:113:P | AGPD (Silver/Palladium) 30 Gauge (.26mm) 10ft. Spool | \$26.80 |
| SPEEDWIRE:136:P | Continuum ${ }^{\oplus}$ Sterling Silver 30 Gauge (.26mm) 10ft. Spool | \$6.67 |
| SPEEDWIRE:137:P | Continuum ${ }^{\oplus}$ Sterling Silver 36 Gauge (.13mm) 10ft. Spool | \$1.67 |
| SPEEDWIRE:114:P | PT58 (.585 Platinum) 30 Gauge (.26mm) 10ft Spool | \$131.65 |
| SPEEDWIRE:01180:P | PLIR (Platinum/Iridium) 28 Gauge (.32mm) 10ft. Spool | \$262.31 |
| SPEEDWIRE:011180:P | PLIR (Platinum/Iridium) 30 Gauge (.26mm) 10ft. Spool | \$166.80 |
| SPEEDWIRE:131:P | PLIR (Platinum/Iridium) 33 Gauge (.18mm) 15ft. Spool | \$125.76 |
| SPEEDWIRE:135:P | PLIR (Platinum/Iridium) 36 Gauge (.13mm) 20ft. Spool | \$83.30 |
| SPEEDWIRE:115:P | PLRU (Platinum/Ruthenium) 30 Gauge (.26mm) 10ft. Spool | \$171.54 |
| SPEEDWIRE:118:P | PLRU (Platinum/Ruthenium) 33 Gauge (.18mm) 10ft. Spool | \$84.57 |

Winner of<br>the 2010 MJSA<br>"Thinking Ahead"<br>Award

S T U L L ER
METALS CLUB
Call 877-619-2173 to join the Metals Club and start saving today.


Pre-Cut Preform Sizing Stock is pre-measured to size rings $1 / 2$ to $31 / 2$ sizes up in $1 / 2$ size increments in $1,11 / 2,2,3,4$, and 5 mm pre-cut lengths. Sterling silver pre-cut Preform Sizing Stock is available in 5 dwt minimums.


Maximum straight length is $\mathbf{3 6}$ inches.

Minimum order for:
Sterling Silver Bulk is 12 inches.
Gold Bulk is 1 inch.
PREFORM ${ }^{\text {Tw }}$ SIZING STOCK
Preform Sizing Stock is supplied in straight lengths with a medium hard temper unless otherwise requested. Available qualities will include 10kt, 14kt, 14X1®, 18kt, and sterling silver (limited sizes available). Additional sizes available in 2.5 mm thickness in sterling silver.

| Profile | Thickness |  | PREFORM BULK <br> Approximate Pennyweight (dwt) Per Inch |  |  | PREFORM PRE-CUT Approximate Price Per Piece Based on 14K Yellow Gold |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ( $\mathrm{mm} \times$ widt | m) | 10 K | 14 K | 18K | 1.5 mm | 2.0 mm | 3.0 mm | 4.0 mm | 5.0 mm |
| - | $1 \times .5$ | . $35-6$ | 0.38 | 0.43 | 0.51 | \$1.11 | \$1.53 | \$2.30 | \$3.07 | \$3.83 |
| - | $1 \times 1$ | . $35-6$ | 0.62 | 0.70 | 0.83 | \$1.86 | \$2.50 | \$3.72 | \$4.96 | \$6.20 |
|  | $1 \times 1.5$ | . $35-6$ | 0.86 | 0.97 | 1.15 | \$2.57 | \$3.43 | \$5.14 | \$6.86 | \$8.57 |
| $\square$ | $1 \times 2$ | . $35-6$ | 1.10 | 1.23 | 1.47 | \$3.28 | \$4.38 | \$6.52 | \$8.75 | \$10.94 |
|  | $1 \times 2.5$ | . $35-6$ | 1.35 | 1.51 | 1.80 | \$4.03 | \$5.37 | \$8.05 | \$10.74 | \$13.42 |
| $\square$ | $1 \times 3$ | . $35-6$ | 1.57 | 1.77 | 2.10 | \$4.70 | \$6.27 | \$9.41 | \$12.54 | \$15.68 |
| $\square$ | $1 \times 3.5$ | . $35-6$ | 1.83 | 2.06 | 2.45 | \$5.48 | \$7.31 | \$10.96 | \$14.62 | \$18.27 |
| $\bigcirc$ | $1.2 \times .5$ | .7-1.08 | 0.49 | 0.56 | 0.66 | \$1.48 | \$1.98 | \$2.93 | \$3.95 | \$4.94 |
|  | $1.2 \times 1$ | .7-1.08 | 0.77 | 0.87 | 1.04 | \$2.32 | \$3.09 | \$4.64 | \$6.19 | \$7.74 |
|  | $1.2 \times 1.5$ | .7-1.08 | 1.05 | 1.18 | 1.41 | \$3.15 | \$4.07 | \$6.29 | \$8.39 | \$10.49 |
|  | $1.2 \times 2$ | .7-1.08 | 1.34 | 1.51 | 1.79 | \$4.02 | \$5.35 | \$8.03 | \$10.70 | \$13.38 |
|  | $1.2 \times 2.5$ | .7-1.08 | 1.62 | 1.82 | 2.17 | \$4.85 | \$6.47 | \$9.70 | \$12.94 | \$16.17 |
| $\square$ | $1.2 \times 3$ | .7-1.08 | 1.91 | 2.15 | 2.55 | \$5.72 | \$7.62 | \$11.44 | \$15.25 | \$19.06 |
| $\square$ | $1.2 \times 3.5$ | .7-1.08 | 2.16 | 2.43 | 2.89 | \$6.48 | \$8.64 | \$12.95 | \$17.27 | \$21.59 |
| $\bigcirc$ | $1.5 \times .5$ | 1.09-1.36 | 0.69 | 0.77 | 0.92 | \$2.05 | \$2.73 | \$3.99 | \$5.47 | \$6.84 |
| $\bigcirc$ | $1.5 \times 1$ | 1.09-1.36 | 1.03 | 1.16 | 1.38 | \$3.09 | \$4.12 | \$6.28 | \$8.24 | \$10.30 |
| $\square$ | $1.5 \times 1.5$ | 1.09-1.36 | 1.39 | 1.56 | 1.86 | \$4.16 | \$5.54 | \$8.31 | \$11.08 | \$13.86 |
|  | $1.5 \times 2$ | 1.09-1.36 | 2.00 | 2.25 | 2.68 | \$4.78 | \$6.95 | \$10.42 | \$13.96 | \$19.98 |
| D | $1.5 \times 2.5$ | 1.09-1.36 | 2.14 | 2.40 | 2.86 | \$6.39 | \$8.53 | \$12.79 | \$17.05 | \$21.31 |
| $\square$ | $1.5 \times 3$ | 1.09-1.36 | 2.48 | 2.79 | 3.32 | \$7.44 | \$9.90 | \$14.87 | \$19.82 | \$24.78 |
| $\square$ | $1.5 \times 3.5$ | 1.09-1.36 | 2.85 | 3.20 | 3.81 | \$8.53 | \$11.37 | \$17.05 | \$22.73 | \$28.42 |
| - | $1.75 \times .5$ | 1.37-1.61 | 0.85 | 0.95 | 1.13 | \$2.53 | \$3.37 | \$5.06 | \$6.75 | \$8.44 |
| - | $1.75 \times 1$ | 1.37-1.61 | 1.25 | 1.40 | 1.67 | \$3.73 | \$4.97 | \$7.46 | \$9.94 | \$12.43 |
|  | $1.75 \times 1.5$ | 1.37-1.61 | 1.71 | 1.92 | 2.28 | \$5.12 | \$6.82 | \$10.23 | \$13.64 | \$17.05 |
| - | $1.75 \times 2$ | 1.37-1.61 | 2.00 | 2.25 | 2.68 | \$6.00 | \$7.99 | \$11.99 | \$15.99 | \$19.99 |
| $\square$ | $1.75 \times 2.5$ | 1.37-1.61 | 2.60 | 2.92 | 3.47 | \$7.78 | \$10.38 | \$15.56 | \$20.75 | \$25.94 |
| $\square$ | $1.75 \times 3$ | 1.37-1.61 | 2.87 | 3.22 | 3.83 | \$8.58 | \$11.44 | \$17.16 | \$22.88 | \$28.60 |
| $\rightarrow$ | $1.75 \times 3.5$ | 1.37-1.61 | 3.40 | 3.82 | 4.55 | \$10.18 | \$13.57 | \$20.36 | \$27.14 | \$33.93 |
| - | $2 \times .5$ | 1.62-1.86 | 1.04 | 1.17 | 1.39 | \$3.12 | \$4.16 | \$6.24 | \$8.32 | \$10.40 |
|  | $2 \times 1$ | 1.62-1.86 | 1.52 | 1.71 | 2.03 | \$4.56 | \$6.07 | \$9.11 | \$12.15 | \$15.18 |
|  | $2 \times 1.5$ | 1.62-1.86 | 2.00 | 2.25 | 2.68 | \$6.00 | \$7.99 | \$11.99 | \$15.99 | \$19.99 |
| $\square$ | $2 \times 2$ | 1.62-1.86 | 2.49 | 2.80 | 3.33 | \$7.46 | \$9.94 | \$14.92 | \$19.89 | \$24.86 |
| $\longrightarrow$ | $2 \times 2.5$ | 1.62-1.86 | 2.96 | 3.33 | 3.96 | \$8.87 | \$11.83 | \$17.74 | \$23.66 | \$29.57 |
| $\square$ | $2 \times 3$ | 1.62-1.86 | 3.52 | 3.95 | 4.70 | \$10.53 | \$14.03 | \$21.05 | \$28.06 | \$35.08 |
|  | $2 \times 3.5$ | 1.62-1.86 | 3.96 | 4.45 | 5.30 | \$11.86 | \$15.81 | \$23.71 | \$31.62 | \$39.52 |


|  | Approximate |  |  |  | Pricing Per Pennyweight (dwt) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PREFORM SIZING STOCK | $\mathbf{1} \mathbf{~ d w t}$ | $\mathbf{5 0} \mathbf{d w t}$ | $\mathbf{1 0 0} \mathbf{d w t}$ |  |  |
| $\mathbf{1 0 K}$ Yellow or White | $\$ 34.35$ | $\$ 32.52$ | $\$ 32.22$ |  |  |
| $\mathbf{1 4 K}$ Yellow or White | $\$ 45.17$ | $\$ 43.34$ | $\$ 43.03$ |  |  |
| $\mathbf{1 8 K}$ Yellow or White | $\$ 56.21$ | $\$ 54.38$ | $\$ 54.07$ |  |  |

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.

FLAT SIZING STOCK
Flat sizing stock is offered in straight lengths with $1 / 2$ hard temper unless otherwise requested. Annealing is available upon request.

|  | Profile | Minimum |  |  | Approximate Pennyweights (dwt) Per Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Size (mm) | Order | 10K | 14K | 18K | Plat/Ru | . 950 Pd | lium Plus ${ }^{\text {m }}$ |
| 1.5x | - | $1.5 \times .75$ | 3" | 0.20 | 0.24 | 0.26 | 0.38 | 0.21 | 0.19 |
|  | $\square$ | $1.5 \times 1$ | $3{ }^{\prime \prime}$ | 0.28 | 0.30 | 0.38 | 0.51 | 0.29 | 0.26 |
| 2x | - | $2 \times .75$ | 3 " | 0.29 | 0.39 | 0.35 | 0.51 | 0.29 | 0.26 |
|  | - | $2 \times 1$ | $3{ }^{\prime \prime}$ | 0.37 | 0.41 | 0.52 | 0.68 | 0.38 | 0.35 |
|  | $\square$ | $2 \times 1.25$ | $3 "$ | 0.49 | 0.54 | 0.64 | 0.85 | 0.48 | 0.42 |
|  | $\square$ | $2 \times 1.5$ | 3 " | 0.56 | 0.63 | 0.71 | 1.01 | 0.58 | 0.51 |
| 2.5x | - | $2.5 \times .75$ | 3 " | 0.34 | 0.39 | 0.44 | 0.63 | 0.35 | 0.32 |
|  | - | $2.5 \times 1$ | 3 " | 0.46 | 0.53 | 0.62 | 0.85 | 0.48 | 0.43 |
|  | $\square$ | $2.5 \times 1.25$ | $1{ }^{\prime \prime}$ | 0.56 | 0.63 | 0.75 | 1.06 | 0.60 | 0.51 |
|  | $\square$ | $2.5 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.68 | 0.79 | 0.91 | 1.27 | 0.68 | 0.64 |
|  | - | $2.5 \times 2$ | $1{ }^{\prime \prime}$ | 0.89 | 1.05 | 1.22 | 1.69 | 0.97 | 0.83 |
| 3x | - | $3 \times .75$ | $1{ }^{\prime \prime}$ | 0.40 | 0.50 | 0.57 | 0.76 | 0.44 | 0.37 |
|  | - | $3 \times 1$ | $1{ }^{\prime \prime}$ | 0.56 | 0.63 | 0.76 | 1.01 | 0.57 | 0.50 |
|  | $\square$ | $3 \times 1.25$ | $1{ }^{\prime \prime}$ | 0.68 | 0.78 | 0.93 | 1.27 | 0.73 | 0.63 |
|  | $\square$ | $3 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.82 | 0.94 | 1.12 | 1.52 | 0.87 | 0.74 |
|  | - | $3 \times 2$ | $1{ }^{\prime \prime}$ | 1.16 | 1.26 | 1.49 | 2.03 | 1.16 | 1.04 |
|  | - | $3 \times 2.5$ | $1{ }^{\prime \prime}$ | 1.35 | 1.50 | 1.83 | 2.54 | 1.45 | 1.24 |
| 3.5x | $\square$ | $3.5 \times 1$ | $1{ }^{\prime \prime}$ | 0.68 | 0.73 | 0.88 | 1.18 | 1.02 | 0.62 |
|  | $\square$ | $3.5 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.92 | 1.11 | 1.35 | 1.77 | 1.02 | 0.88 |
|  | $\square$ | $3.5 \times 2$ | $1{ }^{\prime \prime}$ | 1.31 | 1.45 | 1.74 | 2.37 | 1.35 | 1.25 |
|  |  | $3.5 \times 2.5$ | $1{ }^{\prime \prime}$ | 1.45 | 1.85 | 2.20 | 2.96 | 1.69 | 1.49 |
| 4x | - | $4 \times .75$ | $1{ }^{\prime \prime}$ | 0.58 | 0.62 | 0.75 | 1.01 | 0.65 | 0.57 |
|  | $\square$ | $4 \times 1$ | $1{ }^{\prime \prime}$ | 0.76 | 0.84 | 1.00 | 1.35 | 0.76 | 0.65 |
|  | $\square$ | $4 \times 1.25$ | $1{ }^{\prime \prime}$ | 0.95 | 1.04 | 1.28 | 1.69 | 1.09 | 0.82 |
|  | - | $4 \times 1.5$ | $1{ }^{\prime \prime}$ | 1.12 | 1.26 | 1.51 | 2.03 | 1.13 | 0.98 |
|  |  | $4 \times 2$ | $1{ }^{\prime \prime}$ | 1.49 | 1.68 | 1.93 | 2.70 | 1.74 | 1.32 |
|  |  | $4 \times 2.25$ | $1{ }^{\prime \prime}$ | 1.69 | 1.96 | 2.21 | 3.04 | 1.96 | 1.68 |
|  |  | $4 \times 3$ | $1{ }^{\prime \prime}$ | 2.17 | 2.69 | 2.98 | 4.06 | 2.61 | 2.10 |
| 4.5x | $\square$ | $4.5 \times 1$ | $1{ }^{\prime \prime}$ | 0.86 | 0.95 | - | 1.52 | 0.87 | 0.75 |
|  | $\square$ | $4.5 \times 1.5$ | $1{ }^{\prime \prime}$ | 1.22 | 1.44 | 1.67 | 2.28 | 1.31 | 1.15 |
|  |  | $4.5 \times 2$ | $1{ }^{\prime \prime}$ | 1.65 | 1.89 | 2.25 | 3.04 | 1.74 | 1.58 |
| 5 x | - | $5 \times .75$ | $1{ }^{\prime \prime}$ | 0.74 | 0.79 | 0.99 | 1.27 | 0.73 | 0.68 |
|  | $\square$ | $5 \times 1$ | 1 " | 0.94 | 1.07 | 1.27 | 1.69 | 0.95 | 0.81 |
|  | $\square$ | $5 \times 1.25$ | $1{ }^{\prime \prime}$ | 1.16 | 1.33 | 1.56 | 2.11 | 1.21 | 1.05 |
|  | $\square$ | $5 \times 1.5$ | 1 " | 1.40 | 1.58 | 1.85 | 2.54 | 1.45 | 1.24 |
|  |  | $5 \times 2$ | $1{ }^{\prime \prime}$ | 1.86 | 2.11 | 2.51 | 3.38 | 1.89 | 1.67 |
|  |  | $5 \times 2.5$ | $1{ }^{\prime \prime}$ | 2.26 | 2.59 | 3.13 | 4.23 | 2.42 | 2.22 |
| $6 \times$ | - | $6 \times 1$ | $1{ }^{\prime \prime}$ | 1.11 | 1.24 | 1.48 | 2.03 | 1.16 | 1.01 |
|  | $\square$ | $6 \times 1.5$ | $1{ }^{\prime \prime}$ | 1.65 | 1.89 | 2.28 | 3.04 | 1.74 | 1.51 |
|  |  | $6 \times 2$ | $1{ }^{\prime \prime}$ | 2.24 | 2.53 | 2.98 | 4.06 | 2.32 | 1.93 |
|  |  | $6 \times 2.5$ | 1 " | 2.93 | 3.15 | 3.80 | 5.07 | 2.84 | 2.62 |
| 7× | $\square$ | $7 \times 1$ | $1{ }^{\prime \prime}$ | 1.31 | 1.52 | 1.73 | 2.37 | 1.35 | 1.23 |
|  |  | $7 \times 1.5$ | 1 " | 1.97 | 2.21 | 2.63 | 3.55 | 2.03 | 1.75 |
|  |  | $7 \times 2$ | $1{ }^{\prime \prime}$ | 2.54 | 2.95 | 3.43 | 4.73 | 2.65 | 2.49 |
|  |  | $7 \times 2.5$ | $1{ }^{\prime \prime}$ | 3.44 | 3.71 | 4.43 | 5.92 | 3.39 | 3.09 |
| $8 \times$ |  | $8 \times 1$ | $1{ }^{\prime \prime}$ | 1.52 | 1.72 | 2.08 | 2.70 | 1.55 | 1.33 |
|  |  | $8 \times 1.5$ | 1 " | 2.21 | 2.48 | 2.96 | 2.32 | 2.32 | 2.05 |
|  |  | $8 \times 2$ | $1{ }^{\prime \prime}$ | 2.92 | 3.33 | 3.85 | 5.41 | 3.10 | 2.58 |
|  |  | $8 \times 2.5$ | $1{ }^{\prime \prime}$ | 3.67 | 4.12 | 5.06 | 6.76 | 3.78 | 3.29 |
| 10x | $\square$ | $10 \times 1$ | $1{ }^{\prime \prime}$ | 2.18 | 2.11 | 2.50 | 3.38 | 1.94 | 1.77 |
|  |  | $10 \times 1.5$ | $1{ }^{\prime \prime}$ | 2.75 | 3.17 | 3.83 | 5.07 | 2.90 | 2.54 |



In order to determine what size best fits your needs, you must first measure the width, width then the thickness.

|  | Approximate Pricing |  |  |
| :--- | :---: | :---: | :---: |
| FLAT SIZING STOCK | $\mathbf{1}$ dwt | $\mathbf{5 0}$ dwt | $\mathbf{1 0 0}$ dwt |
| $\mathbf{1 0 K}$ Yellow or White | $\$ 33.35$ | $\$ 31.52$ | $\$ 31.22$ |
| $\mathbf{1 4 K}$ Yellow or White | $\$ 44.17$ | $\$ 42.34$ | $\$ 42.03$ |
| $\mathbf{1 8 K}$ Yellow or White | $\$ 55.21$ | $\$ 53.38$ | $\$ 53.07$ |
| .950/.05 |  |  |  |
| Platinum/Ruthenium | $\$ 77.95$ | $\$ 76.92$ | $\$ 76.81$ |
| Palladium | $\$ 50.66$ | $\$ 49.63$ | $\$ 49.51$ |

## SILVER FLAT SIZING STOCK

Sterlium Plus ${ }^{\text {TM }}$
Approximate Pricing
1 dwt 1 oz 4000 dwt 20 oz 1000 dwt 50 oz
\$1.40 \$28.00
$\$ 1.32 \quad \$ 26.40$
$\$ 1.29 \quad \$ 25.80$

## Maximum straight length is $\mathbf{3 6}$ inches.

Minimum order for Sterling Silver is $\mathbf{1 2}$ inches per size.


Half-Round Sizing Stock is supplied in straight lengths with a $1 / 2$ hard temper unless otherwise requested. Coiled sizing stock can be made-to-order with additional lead times. Annealing is available upon request.

thickness
In order to determine what size best fits your needs, you must first measure the width, then the thickness.

LEAD TIMES: 10K yellow, 14K yellow, 14K white, 18 K yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.

Maximum straight length is 36 inches.
HALF-ROUND SIZING STOCK

| Profile |  | Size (mm) | Minimum Order | Approximate Pennyweights (dwt) Per Square Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 10 K |  | 14K | 18K | Plat/Ru | Sterlium Plus ${ }^{\text {m' }}$ |
| 1x | - |  | $1 \times .5$ | 3 " | 0.10 | 0.11 | 0.13 | 0.18 | 0.09 |
| 1.5x | - | $1.5 \times .75$ | 3" | 0.24 | 0.23 | 0.27 | 0.33 | 0.18 |
|  | - | $1.5 \times 1$ | 3 " | 0.24 | 0.27 | 0.42 | 0.47 | 0.21 |
| 1.75x | $\bullet$ | $1.75 \times 1$ | 3 " | 0.33 | 0.32 | 0.38 | 0.64 | 0.21 |
|  | - | $2 \times 1$ | 3" | 0.32 | 0.38 | 0.51 | 0.56 | 0.31 |
| $2 \times$ | - | $2 \times 1.5$ | $1{ }^{1 \prime}$ | 0.50 | 0.63 | 0.70 | 0.97 | 0.50 |
| 2.25x | - | $2.25 \times 1.5$ | $1{ }^{1 \prime}$ | 0.58 | 0.67 | 0.73 | 1.09 | 0.47 |
| 2.5x | - | $2.5 \times 1.25$ | $1{ }^{\prime \prime}$ | 0.53 | 0.58 | 0.69 | 0.92 | 0.42 |
|  | - | $2.5 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.63 | 0.73 | 0.83 | 1.17 | 0.54 |
|  | - | $2.5 \times 2$ | $1{ }^{\prime \prime}$ | 0.88 | 0.98 | 1.11 | 1.53 | 0.70 |
| 3x | - | $3 \times 1$ | $1{ }^{\prime \prime}$ | 0.51 | 0.56 | 0.55 | 0.77 | 0.37 |
|  | - | $3 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.74 | 0.83 | 1.01 | 1.35 | 0.67 |
|  | - | $3 \times 2$ | $1{ }^{1 \prime}$ | 0.98 | 1.11 | 1.34 | 1.83 | 0.84 |
| 3.5x | - | $3.5 \times 1.5$ | $1 "$ | 0.92 | 0.90 | 1.08 | 1.51 | 0.77 |
|  | - | $3.5 \times 2$ | $1{ }^{1 \prime}$ | 1.13 | 1.23 | 1.51 | 2.07 | 1.02 |
| $4 \times$ | - | $4 \times 1$ | $1{ }^{\prime \prime}$ | 0.55 | 0.61 | 0.73 | 1.01 | 0.55 |
|  | - | $4 \times 1.5$ | $1{ }^{\prime \prime}$ | 0.90 | 1.08 | 1.22 | 1.66 | 0.86 |
|  | - | $4 \times 2$ | $1{ }^{\prime \prime}$ | 1.18 | 1.44 | 1.66 | 2.39 | 1.18 |
| 4.5x | - | $4.5 \times 1.5$ | $1{ }^{1 \prime}$ | 1.03 | 1.11 | 1.71 | 1.89 | 0.93 |
|  | - | $4.5 \times 2$ | $1{ }^{\prime \prime}$ | 1.14 | 1.57 | 1.85 | 2.55 | 1.26 |
| 5x | - | $5 \times 1$ | $1{ }^{\prime \prime}$ | 0.93 | 0.95 | 0.93 | 1.29 | 0.75 |
|  | - | $5 \times 1.5$ | $1{ }^{\prime \prime}$ | 1.13 | 1.27 | 1.54 | 2.11 | 1.02 |
|  | - | $5 \times 2$ | $1{ }^{\prime \prime}$ | 1.52 | 1.77 | 2.11 | 2.92 | 1.37 |
|  | - | $5 \times 2.5$ | $1{ }^{\prime \prime}$ | 2.0241 | 2.16 | 2.53 | 4.00 | 1.76 |
|  | 0 | $5 \times 3$ | $1{ }^{1 \prime}$ | - | 2.66 | 3.32 | 4.33 | 2.12 |
| 6x | $\square$ | $6 \times 1$ | $1{ }^{\prime \prime}$ | 0.94 | 0.05 | 1.25 | 1.74 | 0.83 |
|  | $\xrightarrow{2}$ | $6 \times 1.25$ | $1{ }^{\prime \prime}$ | 1.24 | 1.32 | 1.52 | 2.31 | 1.08 |
|  | $\square$ | $6 \times 1.5$ | $1{ }^{1 \prime}$ | 1.26 | 1.49 | 1.78 | 2.52 | 1.13 |
|  | $\square$ | $6 \times 2$ | $1{ }^{\prime \prime}$ | 1.80 | 2.06 | 2.48 | 3.29 | 1.60 |
|  | $\square$ | $6 \times 2.5$ | $1{ }^{\prime \prime}$ | 2.25 | 2.54 | 3.06 | 4.16 | 2.52 |
|  | $\square$ | $6 \times 3$ | $1{ }^{1 \prime}$ | 2.77 | 3.20 | 3.83 | 5.32 | 2.52 |
| 7x | $\xrightarrow{\square}$ | $7 \times 1$ | $1{ }^{\prime \prime}$ | 1.15 | 1.29 | 1.54 | 2.13 | 1.02 |
|  | $\square$ | $7 \times 1.5$ | $1{ }^{\prime \prime}$ | 1.38 | 1.90 | 2.05 | 2.83 | 1.41 |
|  | $\square$ | $7 \times 2$ | $1{ }^{\prime \prime}$ | 2.03 | 2.41 | 2.88 | 3.61 | 1.83 |
|  | $\square$ | $7 \times 2.5$ | $1{ }^{\prime \prime}$ | 2.68 | 3.11 | 3.48 | 4.58 | 2.35 |
| 8x | $\square$ | $8 \times 1.25$ | $1{ }^{\prime \prime}$ | 1.59 | 1.69 | 1.98 | 2.97 | 1.40 |
|  | $\square$ | $8 \times 1.5$ | $1{ }^{1 \prime}$ | 1.69 | 2.02 | 2.42 | 3.17 | 1.50 |
|  | $\square$ | $8 \times 1.7$ | $1{ }^{\prime \prime}$ | 2.13 | 2.35 | 2.79 | 3.97 | 1.88 |
|  | $\square$ | $8 \times 2$ | $1{ }^{\prime \prime}$ | 2.27 | 2.79 | 3.18 | 4.22 | 2.03 |
| 10x | $\xrightarrow{\square}$ | $10 \times 1.25$ | $1{ }^{\prime \prime}$ | 2.04 | 2.27 | 2.96 | 3.80 | 1.77 |
| 12x | $\square$ | $12 \times 1.5$ | $1{ }^{\prime \prime}$ | 2.75 | 3.01 | 3.57 | 5.12 | 2.41 |
|  | $\square$ | $12 \times 1.7$ | $1{ }^{\prime \prime}$ | 3.79 | 3.60 | 4.15 | 5.95 | 2.80 |
| 15x | $\square$ | $15 \times 1.7$ | $1{ }^{\prime \prime}$ | 4.07 | 4.59 | 5.28 | 7.71 | 3.58 |
| 18x | $\longrightarrow$ | $18 \times 1.7$ | $1{ }^{\prime \prime}$ | 4.85 | 5.46 | 6.29 | 9.02 | 4.2 |

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for more information.

| Approximate Pricing Per <br> Pennyweight (dwt) <br> $\mathbf{1}$ dwt |  |  |
| :---: | :---: | :---: |
| $\mathbf{5 0}$ dwt | $\mathbf{1 0 0} \mathbf{d w t}$ |  |
| $\$ 33.35$ | $\$ 31.52$ | $\$ 31.22$ |
| $\$ 44.17$ | $\$ 42.34$ | $\$ 42.03$ |
| $\$ 55.21$ | $\$ 53.38$ | $\$ 53.07$ |
| $\$ 77.95$ | $\$ 76.92$ | $\$ 76.81$ |

HALF-ROUND SIZING STOCK
Sterlium Plus ${ }^{\text {m }}$
Approximate Pricing Per Pennyweight (dwt)/Ounce (oz)
1 dwt $1 \mathbf{~ o z} \quad 400$ dwt $\quad 20$ oz $\quad 1000$ dwt 50 oz

| $\$ 1.40$ | $\$ 28.00$ | $\$ 1.32$ | $\$ 26.40$ | $\$ 1.29$ | $\$ 25.80$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## COMFORT FIT SIZING STOCK

Perfect for fabricating comfort-fit rings and sizing comfort-fit bands. Supplied in straight lengths with $1 / 2$ hard temper unless otherwise requested. Coiled sizing stock can be made-to-order with additional lead times. Annealing is available upon request.

| Profile | Size (mm) | $\begin{aligned} & \text { Minimum } \\ & \text { Order } \end{aligned}$ | Approximate Pennyweights (dwt) Per Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10K | 14K | 18K | Plat/Ru | Sterilum Plus ${ }^{\text {m' }}$ |
| - | $3 \times 2$ | $1{ }^{1 \prime}$ | 0.98 | 1.11 | 1.32 | 1.81 | 0.87 |
| - | $4 \times 2$ | $1{ }^{\prime \prime}$ | 1.27 | 1.43 | 1.70 | 2.35 | 1.13 |
| $\bigcirc$ | $5 \times 2$ | $1{ }^{1 \prime}$ | 1.53 | 1.72 | 2.05 | 2.83 | 1.36 |
| $\rightarrow$ | $6 \times 2$ | $1{ }^{1 \prime}$ | 1.80 | 2.02 | 2.40 | 3.31 | - |



Maximum straight length is $\mathbf{3 6}$ inches.

| COMFORT-FIT SIZING STOCK | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 dwt | 50 dwt | 100 dwt |
| 10K Yellow or White | \$33.35 | \$31.52 | \$31.22 |
| 14K Yellow or White | \$44.17 | \$42.34 | \$42.03 |
| 18K Yellow or White | \$55.21 | \$53.38 | \$53.07 |
| .950/.05 Platinum/Ruthenium | \$77.95 | \$76.92 | \$76.81 |


|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SILVER ROUND TUBING | 1 dwt | 1 oz | 400 dwt | 20 oz | 1000 dwt | 50 oz |
| Sterlium Plus ${ }^{\text {mm }}$ | \$1.40 | \$28.00 | \$1.32 | \$26.40 | \$1.29 | \$25.80 |

## STERLING SILVER LOW DOME WIRE

Sterling silver low dome wire is particularly designed to eliminate the sharp edges on conventional half-round wires. Excellent for making bangle bracelets and rings. Supplied soft and coiled.

| Profile | $\begin{array}{c}\text { Width } \times \text { Thickness } \\ \text { (mm) } \\ \text { (inches) }\end{array}$ |  | $\begin{array}{c}\text { Minimum } \\ \text { Order }\end{array}$ |  | $\begin{array}{c}\text { Approximate } \\ \text { dwt/ft. }\end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | \(\left.\begin{array}{c}20 dwt (1 oz.) <br>

Length (inch)\end{array} \quad $$
\begin{array}{c}\text { 100 dwt (5 oz.) } \\
\text { Length (feet) }\end{array}
$$\right]\)

|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LOW DOME WIRE | 1 dwt | 1 oz | 400 dwt | 20 oz | 1000 dw | 50 oz |
| Sterling Silver | \$1.35 | \$27.00 | \$1.27 | \$25.40 | \$1.24 | \$24.80 |

## YELLOW GOLD FILLED HALF ROUND WIRE

$1 / 20$ 14kt yellow gold-filled half-round wire is supplied soft, or half hard as noted below.

| Profile | Gauge | Width $\times$ Thickness |  | Minimum Order | Approximate dwt/ft. | 20 dwt (1 oz.) <br> Length (inch) | Available Temper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | 18 | $1.02 \times 0.51$ | . $040 \times .020$ | $60^{\prime \prime}$ | 0.84 | 286.0 | Half-Hard |
| - | 8 | $3.25 \times 1.63$ | . $128 \times .064$ | $6{ }^{\prime \prime}$ | 7.44 | 32.0 | Soft |


|  | Approximate Pricing Per Pennyweight (dwt)/Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YGF HALF-ROUND WIRE | 1 dwt | 1 oz | 50 dwt | 2502 | 100 dwt | 50 oz |
| 1/20 14K Yellow Gold Filled | \$3.65 | \$73.00 | \$3.19 | \$63.80 | \$3.04 | \$60.80 |

S T U L L E R
METALS CLUB

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Square Sizing Stock is offered in straight lengths with $1 / 2$ hard temper unless otherwise requested. Coiled sizing stock can be made-to-order with additional lead times. Annealing is available upon request.

Maximum length is $\mathbf{3 6}$ inches.

Sterling Silver Square Wire is available coiled in soft and half-hard tempers as listed below.


## SQUARE SIZING STOCK

| Profile | Minimum |  |  | Approximate Pennyweights (dwt) Per Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Size (mm) | Order | 10K | 14K | 18K | Plat/Ru | Palladium | Sterlium Plus ${ }^{\text {™ }}$ |
| - | . $75 \times .75$ | 3 " | 0.11 | 0.12 | 0.14 | 0.19 | - | 0.09 |
| - | $1 \times 1$ | 3 " | 0.19 | 0.21 | 0.25 | 0.34 | 0.19 | 0.17 |
| ■ | $1.25 \times 1.25$ | 3 " | 0.30 | 0.35 | 0.38 | 0.53 | 0.30 | 0.26 |
| $\square$ | $1.5 \times 1.5$ | 3 " | 0.42 | 0.47 | 0.55 | 0.76 | 0.43 | 0.38 |
| $\square$ | $1.75 \times 1.75$ | 1 " | 0.58 | 0.67 | 0.76 | 1.04 | 0.58 | 0.53 |
| $\square$ | $2 \times 2$ | $1{ }^{\prime \prime}$ | 0.76 | 0.83 | 1.03 | 1.45 | 0.76 | 0.70 |
| $\square$ | $2.25 \times 2.25$ | $1{ }^{\prime \prime}$ | 0.85 | 1.05 | 1.14 | 1.71 | 0.96 | 0.88 |
|  | $2.5 \times 2.5$ | $1{ }^{\prime \prime}$ | 1.15 | 1.31 | 1.62 | 2.11 | 1.18 | 1.03 |
|  | $3 \times 3$ | $1{ }^{\prime \prime}$ | 1.72 | 1.83 | 2.25 | 3.04 | 1.70 | 1.52 |
|  | $3.5 \times 3.5$ | $1{ }^{\prime \prime}$ | 2.30 | 2.48 | 2.88 | 4.14 | 2.32 | 1.87 |
|  | $4 \times 4$ | $1{ }^{\prime \prime}$ | 3.01 | 3.28 | 3.95 | 5.41 | 3.03 | 2.63 |
|  | $5 \times 5$ | $1{ }^{\prime \prime}$ | 4.84 | 5.06 | 6.19 | 8.45 | - | 4.26 |
|  | $6 \times 6$ | $1{ }^{\prime \prime}$ | 6.94 | 7.51 | 9.14 | 12.17 | 6.81 | 6.11 |


| SQUARE SIZING STOCK | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 dwt | 50 dwt | 100 dwt |
| 10K Yellow | \$33.35 | \$31.52 | \$31.22 |
| 14K Yellow | \$44.17 | \$42.34 | \$42.03 |
| 18K Yellow | \$55.21 | \$53.38 | \$53.07 |
| .950/.05 Platinum/Ruthenium | \$77.95 | \$76.92 | \$76.81 |
| Palladium White | \$50.66 | \$49.63 | \$49.51 |

## STERLING SILVER SQUARE WIRE

| Profile | Gauge | mm | Inch | Minimum Order | Approximate dwt/ft. | 20 dwt (1 oz.) <br> Length (inch) | $100 \mathrm{dwt}(5 \mathrm{oz}$. <br> Length (feet) | Available Temper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | 22 | 0.64 mm | .025" | 601 | 0.84 | 286" | 119.0 | Soft |
| - | 20 | 0.81 mm | .032" | 36 " | 1.32 | 182" | 75.80 | $1 / 2$ Hard |
| - | 18 | 1.02 mm | .040" | 24" | 2.16 | 111" | 46.3 | $1 / 2$ Hard |
| - | 12 | 2.05 mm | .080" | 12 " | 8.40 | 29" | 11.9 | Soft |
| - | 8 | 3.26 mm | .128" | $6{ }^{\prime \prime}$ | 21.48 | 111 | 4.7 | Soft |


|  | Approximate Pricing Per Pennyweight (dwt//0unce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SILVER SQUARE WIRE | 1 dwt | 1 oz | 400 dwt | 20 oz | 1000 dwt | 50 oz |
| Sterling Silver | \$1.42 | \$28.50 | \$1.35 | \$27.00 | \$1.32 | \$26.40 |

## TRIANGLE SIZING STOCK

|  |  | Minimum Order | Approximate Pennyweights (dwt) Per Inch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profile | Size (mm) |  | 10K | 14K | 18K | Plat/Ru |
| - | $2 \times 1.75$ | $1{ }^{\prime \prime}$ | 0.33 | 0.44 | 0.42 | 0.72 |
| - | $4 \times 3.5$ | $1{ }^{\prime \prime}$ | 1.33 | 1.50 | 1.71 | 2.36 |
| - | $6 \times 5.5$ | $1{ }^{\prime \prime}$ | 3.00 | 3.38 | 3.86 | 5.58 |
|  | $8 \times 7$ | $1 "$ | 5.29 | 5.96 | 6.88 | 9.46 |

Triangle Sizing Stock is supplied in straight lengths with medium hard temper, unless otherwise requested.

Maximum straight length is 36 inches.


|  | Approximate |  |  |
| :--- | :---: | :---: | :---: |
| TRIANGLE SIZING STOCK | Per | Pennyweight (dwt) |  |
| 10K Yellow | $\$ 33.35$ | $\$ 31.52$ | $\$ 31.22$ |
| $\mathbf{1 4 K}$ Yellow | $\$ 44.17$ | $\$ 42.34$ | $\$ 42.03$ |
| $\mathbf{1 8 K}$ Yellow | $\$ 55.21$ | $\$ 53.38$ | $\$ 53.07$ |
| $\mathbf{~ 9 5 0 / . 0 5}$ Platinum/Ruthenium | $\$ 77.95$ | $\$ 76.92$ | $\$ 76.81$ |

BEZEL STOCK

|  | Profile | Thickness Gauge | Width Size (mm) | Minimum Approximate Pennyweights (dwt) Per Inch |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Order | 10K | 14K | 18K | Plat/Ru |
| $2 \times$ | - | 22 | 2 mm | $12^{\prime \prime}$ | 0.24 | 0.27 | 0.33 | 0.45 |
|  | - | 24 | 2 mm | 12 " | 0.20 | - | - | 0.36 |
|  | $\square$ | 26 | 2 mm | 12 " | 0.16 | 0.18 | 0.21 | 0.29 |
|  | - | 28 | 2 mm | 12 " | 0.13 | 0.14 | 0.17 | 0.23 |
|  | - | 30 | 2 mm | 12" | 0.13 | 0.10 | 0.11 | 0.18 |
| $3 \times$ | - | 22 | 3 mm | 6 " | 0.49 | 0.37 | 0.41 | 0.68 |
|  | - | 24 | 3 mm | $6 "$ | - | 0.39 | 0.33 | 0.54 |
|  | - | 26 | 3 mm | $6{ }^{\prime \prime}$ | 0.31 | 0.23 | 0.26 | 0.43 |
|  | - | 28 | 3 mm | 6 " | 0.25 | 0.19 | 0.20 | 0.27 |
|  | - | 30 | 3 mm | $6{ }^{\prime \prime}$ | 0.20 | 0.15 | 0.16 | 0.35 |
| 4x | $\square$ | 22 | 4 mm | $6{ }^{\prime \prime}$ | 0.65 | 0.49 | 0.55 | 0.90 |
|  | - | 24 | 4 mm | $6{ }^{\prime \prime}$ | 0.52 | 0.39 | 0.44 | 0.72 |
|  | - | 26 | 4 mm | $6{ }^{\prime \prime}$ | 0.42 | 0.31 | 0.35 | 0.58 |
|  | - | 28 | 4 mm | $6{ }^{\prime \prime}$ | 0.34 | 0.25 | 0.28 | 0.47 |
|  | - | 30 | 4 mm | $6{ }^{\prime \prime}$ | 0.26 | 0.19 | 0.22 | 0.36 |
| $5 \times$ | - | 22 | 5 mm | 6 " | 0.81 | 0.61 | 0.68 | 1.13 |
|  | - | 24 | 5 mm | $6 "$ | 0.49 | - | - | 0.90 |
|  | - | 26 | 5 mm | $6{ }^{\prime \prime}$ | 0.39 | 0.72 | 0.52 | 0.44 |
|  | - | 28 | 5 mm | $6{ }^{\prime \prime}$ | 0.32 | 0.59 | 0.42 | 0.36 |
|  | - | 30 | 5 mm | $6{ }^{\prime \prime}$ | 0.24 | 0.45 | 0.33 | 0.27 |
| $6 \times$ | - | 22 | 6 mm | $6{ }^{\prime \prime}$ | 0.73 | 1.35 | 0.98 | 0.81 |
|  |  | 24 | 6 mm | $6{ }^{\prime \prime}$ | 0.58 | 1.08 | . 78 | 0.66 |
|  | $\square$ | 26 | 6 mm | $6{ }^{\prime \prime}$ | 0.47 | 0.87 | - | 0.52 |
|  | - | 28 | 6 mm | $6{ }^{\prime \prime}$ | 0.38 | 0.70 | - | 0.43 |
|  | - | 30 | 6 mm | $6{ }^{\prime \prime}$ | 0.29 | 0.54 | 0.39 | 0.33 |



Flat Bezel Strips are supplied with a $3 / 4$ hard temper in lengths up to 14 inches. Annealing is available upon request.

| FLAT BEZEL | Approximate Pricing |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 dwt | 50 dwt | 100 dwt |
| 10K Yellow or White | \$33.45 | \$31.59 | \$31.28 |
| 14K Yellow or White | \$44.27 | \$42.41 | \$42.10 |
| 18K Yellow or White | \$55.31 | \$53.45 | \$53.14 |
| .950/.05 | \$77.95 | \$76.92 | \$76.81 |

## STEPPED BEZEL STOCK

Bezel wire is available in 14kt gold and sterling silver.

| Style | Thickness $\times$ Width $\times$ Height $(\mathrm{mm}) \quad$ (inches) |  | Approximate Pennyweights (dwt) |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Per Square Inch 14K | Per Foot Sterling |
| Milgrain | $0.29 \times 1.08 \times 2.5$ | . $011 \times .042 \times .098$ | 0.35 | 3.29 |
| Plain Step | $0.23 \times 0.86 \times 2.45$ | . $009 \times .034 \times .096$ | 0.27 | 2.18 |
| Plain Step | $0.27 \times 0.78 \times 5.56$ | . $011 \times .001 \times .022$ | 0.51 | 4.78 |


|  | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :--- | :---: | :---: | :---: |
| FLAT BEZEL STOCK | $\mathbf{1} \mathbf{~ d w t}$ | $\mathbf{5 0} \mathbf{d w t}$ | $\mathbf{1 0 0} \mathbf{d w t}$ |
| $\mathbf{1 4 K}$ Yellow or White | $\$ 44.27$ | $\$ 42.41$ | $\$ 42.10$ |
| Sterling Silver | $\$ 1.84$ | $\$ 1.63$ | $\$ 1.62$ |



Minimum order is $\mathbf{3}$ inches per size for gold. Sterling silver bezel wire is supplied in 1 foot increments (pieces), minimum order is $\mathbf{1 2}$ inches per size.



Seamless Round Tubing is available in all sizes listed for 14 kt yellow and 14kt palladium-white. Selected sizes are available in other qualities and supplied in straight lengths with a medium-hard temper.

## Sterlium Plus Round Tubing

Round tubing available in 12 " lengths only. Maximum order length is 24 inches. Same-day shipping subject to order specifications and inventory on hand at time of order. Sterling silver tubing is supplied in soft, straight, and stress-relieved.

GOLD ROUND TUBING

|  | Profile | Outsid | Diameter | D | Diameter | Minimum | App dwt | inc | ennyweights dwt (per foot) | Insert Wire |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (mm) | (inch) | (mm) | (inch) | Order | 14K | 18K | Sterlium Plus | (gauge) |
| Light <br> .010" <br> 30 ga | 。 | 1 L | .039" | 0.50 | .020" | 3" | 0.13 | 0.16 | 1.15 | 25 |
|  | - | 1.13 L | .044" | 0.63 | .025" | 3" | 0.15 | 0.18 | 1.42 | 23 |
|  | - | 1.25 L | .049" | 0.75 | .030" | 3" | 0.13 | 0.21 | 1.54 | 21 |
|  | - | 1.43 L | .056" | 0.93 | .037" | $1{ }^{\prime \prime}$ | 0.19 | . 228 | 1.82 | 20 |
|  | $\bigcirc$ | 1.6 L | .063" | 1.10 | .043" | $1{ }^{1 \prime}$ | 0.21 | 252 | 2.18 | 18 |
|  | $\bigcirc$ | 1.8 L | .071" | 1.30 | .051" | $1{ }^{\prime \prime}$ | 0.23 | 288 | 2.51 | 17 |
|  | $\bigcirc$ | 2.05 L | . 0811 | 1.55 | .061" | $1{ }^{1 \prime}$ | 0.31 | . 372 | 2.92 | 15 |
|  | $\bigcirc$ | 2.25 L | .089" | 1.75 | .069" | $1{ }^{\prime \prime}$ | 0.34 | . 408 | 3.25 | 14 |
|  | $\bigcirc$ | 2.55 L | .100" | 2.05 | .081" | $1{ }^{\prime \prime}$ | 0.38 | . 456 | 3.53 | 13 |
|  | $\bigcirc$ | 2.85 L | .112" | 2.35 | .093" | $1{ }^{\prime \prime}$ | 0.46 | . 552 | 4.00 | 12 |
|  | $\bigcirc$ | 3.13 L | .123" | 2.63 | .103" | $1{ }^{1 \prime}$ | 0.48 | 0.60 | 4.65 | 10 |
| Medium ,015" 26 ga | - | 2 M | .079" | 1.20 | .047" | $1{ }^{\prime \prime}$ | 0.41 | - | 3.80 | 16 |
|  | $\bigcirc$ | 2.5 M | .098" | 1.70 | .067" | $1{ }^{\prime \prime}$ | 0.53 | 0.60 | 4.80 | 14 |
|  | $\bigcirc$ | 3 M | .118" | 2.20 | .087" | $1{ }^{\prime \prime}$ | 0.71 | 0.86 | 6.01 | 12 |
|  | $\bigcirc$ | 3.3 M | .130" | 2.50 | .098" | $1{ }^{\prime \prime}$ | 0.75 | - | 7.50 | 11 |
|  | $\bigcirc$ | 3.56 M | .140" | 2.76 | .109" | $12^{\prime \prime}$ | - | - | 7.80 | 10 |
|  | $\bigcirc$ | 3.75 M | .148" | 2.95 | .116" | $1{ }^{1 \prime}$ | 0.88 | 1.06 | 7.45 | 9 |
|  | $\bigcirc$ | 4.06 M | .160" | 3.26 | .128" | 12 " | - | - | 9.00 | 8 |
|  | $\bigcirc$ | 4.8 M | .189" | 4.00 | .157" | $1{ }^{\prime \prime}$ | 1.09 | 1.31 | 11.38 | 7 |
|  | $\bigcirc$ | 5.08 M | .200" | 4.28 | .169" | $12^{\prime \prime}$ | - | - | 11.90 | 6 |
|  | $\bigcirc$ | 5.8 M | .228" | 5.00 | .197" | $1{ }^{\prime \prime}$ | 1.38 | 1.66 | 12.45 | 5 |
|  | $\bigcirc$ | 6.09 M | .240" | 5.29 | .208" | $12^{\prime \prime}$ | - | - | 14.50 | 4 |
| Heavy <br> .020" <br> 24 ga | $\bigcirc$ | 2 H | .079" | 1.00 | .039" | $1{ }^{1 \prime}$ | 0.49 | 0.59 | 4.85 | 19 |
|  | $\bigcirc$ | 2.25 H | .089" | 1.25 | .049" | $1{ }^{1 \prime}$ | 0.54 | 0.65 | 5.56 | 17 |
|  | 0 | 2.5 H | .098" | 1.50 | .059" | $1{ }^{\prime \prime}$ | 0.64 | 0.77 | 5.30 | 15 |
|  | $\bigcirc$ | 2.85 H | .112" | 1.85 | .073" | $1{ }^{\prime \prime}$ | 0.75 | 0.90 | 6.65 | 14 |
|  | $\bigcirc$ | 3.13 H | .123" | 2.13 | .084" | $1{ }^{\prime \prime}$ | 0.87 | 1.06 | 8.30 | 12 |
|  | $\bigcirc$ | 3.5 H | .138" | 2.50 | .098" | $1{ }^{1 \prime}$ | 1.02 | 1.22 | 9.07 | 11 |
|  | $\bigcirc$ | 4 H | .157" | 3.00 | .118" | $1{ }^{\prime \prime}$ | 1.23 | 1.48 | 11.02 | 9 |
|  | $\bigcirc$ | 4.25 H | .167" | 3.25 | .128" | $1{ }^{\prime \prime}$ | 1.33 | - | 11.83 | 8 |
|  | $\bigcirc$ | 4.5 H | .177" | 3.50 | .138" | $1{ }^{\prime \prime}$ | 1.35 | 1.62 | 12.63 | 8 |
|  | $0$ | 6.35 H | .250" | 5.35 | .211" | $12^{\prime \prime}$ | - | - | 19.20 | - |
| Extra <br> Heavy <br> .025" <br> 22 ga | $\bigcirc$ | 5.1 X | .201" | 3.83 | .151" | $1{ }^{1 \prime}$ | 1.75 | - | - | 7 |
|  | $0$ | 5.5 X | .217" | 4.23 | .167" | $1{ }^{\prime \prime}$ | - | 2.27 | - | 6 |
|  | $\bigcirc$ | 6 X | .236" | 4.73 | .186" | $1{ }^{1 \prime}$ | 2.12 | - | - | 5 |
|  | $\bigcirc$ | 6.5 X | .256" | 5.23 | .206" | $1{ }^{1 \prime}$ | 2.52 | - | - | 3 |


| ROUND TUBING | Approximate Pricing Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 dwt | 50 dwt | 100 dwt |
| 14K Yellow | \$46.37 | \$44.67 | \$44.43 |
| 18K Yellow | \$57.41 | \$55.71 | \$55.47 |


|  | Approximate Pricing Per Pennyweight (dwt//Ounce (oz) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SILVER ROUND TUBING | 1 dwt | 1 oz | 400 dwt | 20 oz | 1000 dw | 50 oz |
| Sterlium Plus | \$10.11 | \$202.20 | \$9.34 | \$186.80 | \$9.08 | \$181.60 |

Call 877-619-2173 to join the Metals Club and start saving today.


## Wedding Band Fabrication <br> and Design Made Seamless

Wedding bands mean big business. With more than two million weddings taking place every year, they double up to play a central role.

And with Stuller as your partner, you've got everything you need to establish your store as the place for bands. Now, you can purchase wedding bands at any step of the process.

We manufacture tubing and ring blanks here for use in our wedding band fabrication process. It starts with recycled grain. Then it is cast and drawn to the finger size needed. From this, ring blanks are cut to the widths specified.

From the stock bands that are ready to deliver profits to raw tubing and ring blanks to drive your
custom business, they are made from here from start to finish. And speaking of finishing, we can take it to whatever level you'd like. We can ship it raw, polish it, or add a special finish. The choice is yours. It's never been easier to create custom bands for your customers.

Metal qualities include: Sterlium Plus'", 10K, 14K, and 18K gold. Convenient ordering is available by millimeter size or inches with only a one millimeter minimum.

Finger Sizes:
3-3.5, 4-4.5, 5-5.5, 6-6.5, 7-7.5, 8-8.5, 9-9.5,
10-10.5, 11-11.5, and 12.
Minimum order: . 048 ", 1.0 mm minimum width Maximum order: .64", 12.7 mm maximum width



In order to determine what size best fits your needs, you must first measure the width, then the thickness.


## SLIT COIL

Sterlium Plus slit coiled wire is supplied with a dead soft temper in continuous lengths. Larger orders may receive multiple coils.

| Profile | Width $\times$ Thickness (inch) (mm) |  | Minimum Order | Approximate dwt/ft. | 20 dwt (1 oz.) 100 dwt (5 oz.) |  | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt |  |  |  | 100 dwt |
| - | $1 / 8{ }^{\prime \prime} \times .020^{\prime \prime}$ | $3.18 \times .51$ |  | $36^{\prime \prime}$ | 3.28 | $73^{\prime \prime}$ | 30.48 | \$1.57 | \$1.54 |
|  | $1 / 4{ }^{\prime \prime} \times .020^{\prime \prime}$ | $6.35 \times .51$ | $24 "$ | 6.55 | $37{ }^{\prime \prime}$ | 15.27 | \$1.57 | \$1.54 |
|  | $3 / 8{ }^{\prime \prime} \times .020 "$ | $9.52 \times .51$ | 12 " | 9.82 | $24{ }^{\prime \prime}$ | 10.18 | \$1.57 | \$1.54 |
|  | $1 / 2^{\prime \prime} \times .020{ }^{\prime \prime}$ | $12.70 \times .51$ | $12^{\prime \prime}$ | 13.10 | $18^{\prime \prime}$ | 7.63 | \$1.57 | \$1.54 |
|  | $5 / 81 \times .020^{\prime \prime}$ | $15.88 \times .51$ | $12^{\prime \prime}$ | 16.38 | $15{ }^{\prime \prime}$ | 6.11 | \$1.57 | \$1.54 |



FINE SILVER BEZEL
Flat bezel is supplied with a dead soft temper and coiled.

| Profile | Shape | Gauge | Width $\times$ Thickness (mm) (inches) |  | Minimum Order (inches) | Approximate dwt/ft. | Approximate Price 1 dwt 100 dwt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | Flat | 30 | $4.76 \times 0.255$ | $1.8{ }^{\prime \prime} \times .016^{\prime \prime}$ | $24 "$ | 21 | \$1.50 | \$1.44 |
| - | Flat | 30 | $3.18 \times 0.255$ | 1.81 ¢ . 016" | $48^{\prime \prime}$ | . 1389 | \$1.50 | \$1.44 |
| - | Flat | 30 | $2.38 \times 0.255$ | 1.81 ¢ . 016" | 60 " | . 1036 | \$1.50 | \$1.44 |
| - | Flat | 28 | $4.76 \times 0.321$ | 1.81 × . 016" | $24{ }^{\prime \prime}$ | 25 | \$1.50 | \$1.44 |
| - | Flat | 28 | $3.18 \times 0.321$ | $1.81 \times .016^{\prime \prime}$ | $36^{\prime \prime}$ | . 16 | \$1.50 | \$1.44 |
| - | Flat | 28 | $2.38 \times 0.321$ | $1.81 \times .016$ " | $48^{\prime \prime}$ | . 13 | \$1.50 | \$1.44 |
| - | Flat | 26 | $3.18 \times 0.405$ | $1.81 \times .016$ " | $24{ }^{\prime \prime}$ | . 2207 | \$1.50 | \$1.44 |



## STERLING SILVER DIAMOND-CUT WIRE

This amazing sterling silver wire sparkles just like a diamond-cut chain. Great for making earrings, neck wires, and more. Supplied in dead soft temper and coiled.

| Profile | Gauge | $\underset{(\mathrm{mm})}{\text { Outside Diameter }} \quad$ (inches) |  | $\begin{aligned} & \text { Minimum } \\ & \text { Order } \end{aligned}$ | Approximate dwt/ft. | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | 18 | 1.02 | .04" | $36{ }^{\prime \prime}$ | 1.68 | \$1.35 | \$1.30 |
| $\bullet$ | 16 | 1.29 | .05" | $36^{\prime \prime}$ | 2.28 | \$1.35 | \$1.30 |
| $\bullet$ | 14 | 1.63 | .06" | $36^{\prime \prime}$ | 3.38 | \$1.35 | \$1.30 |



## STERLING SILVER TWIST-WIRE

Twist wire is made by twisting round wire of the same diameter together.
Supplied in dead soft temper and coiled.

| Profile | Gauge | Outside Diameter(mm) $\quad$ (inches) |  | Minimum Order | Approximate dwt/ft. | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt |  | 100 dwt |
| - | 18 | 1.02 | .04" |  | $60 "$ | 0.84 | \$1.35 | \$1.30 |
| - | 14 | 1.63 | .067" | $36{ }^{\prime \prime}$ | 2.64 | \$1.35 | \$1.30 |
| $\bullet$ | 12 | 2.05 | .084" | 24 " | 3.96 | \$1.35 | \$1.30 |
| - | 10 | 2.58 | .102" | 12 " | 6.60 | \$1.35 | \$1.30 |

SILVER PATTERN WIRE
Sterling silver pattern wire is supplied soft and coiled.

|  | Profile | Style No. | Millimeter Width $\times$ Thickness | Approximate dwt (feet) | Approx <br> 1 dwt | ate Price 100 dwt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ens ankurn | $\longrightarrow$ | SS-210 | $7.63 \times 1.24$ | 13.80 | \$1.35 | \$1.30 |
|  | - | SS-211 | $4.13 \times 1.35$ | 8.40 | \$1.35 | \$1.30 |
|  <br>  | $\cdots$ | SS-212 | $4.7 \times 1.5$ | 9.00 | \$1.35 | \$1.30 |
|  | $\cdots$ | SS-213 | $5.35 \times 1.47$ | 11.76 | \$1.35 | \$1.30 |
|  | $\square$ | SS-214 | $5.67 \times 1.33$ | 10.80 | \$1.35 | \$1.30 |
|  | - | SS-215 | $2.4 \times 1.45$ | 4.80 | \$1.35 | \$1.30 |
|  | - | SS-216 | $2.04 \times 1.28$ | 3.84 | \$1.35 | \$1.30 |
| E, | - | SS-217 | $2.85 \times 1.5$ | 6.00 | \$1.35 | \$1.30 |
|  | $\bigcirc$ | SS-218 | $2.42 \times 1.27$ | 4.44 | \$1.35 | \$1.30 |
| E2\% ICESM | $\square$ | SS-219 | $1.55 \times 1.35$ | 3.36 | \$1.35 | \$1.30 |
| $3-3000$ | - | SS-240 | $2.6 \times 0.55$ | 2.20 | \$1.35 | \$1.30 |
|  | - | SS-242 | $3.67 \times 1.1$ | 7.44 | \$1.35 | \$1.30 |
|  |  | SS-244 | $6.45 \times 0.88$ | 7.20 | \$1.35 | \$1.30 |
|  | $\longrightarrow$ | SS-245 | $6.35 \times 1.58$ | 14.16 | \$1.35 | \$1.30 |
|  | $\sim$ | SS-246 | $3.54 \times 1.4$ | 7.68 | \$1.35 | \$1.30 |
|  | - | SS-247 | $3.45 \times 1.35$ | 7.20 | \$1.35 | \$1.30 |
|  |  | SS-249 | $19 \times 0.87$ | 31.39 | \$1.35 | \$1.30 |
|  | - | SS-250 | $9.55 \times 1.3$ | 24.00 | \$1.35 | \$1.30 |
|  |  | SS-402 | $5.6 \times 2.6$ | 11.88 | \$1.35 | \$1.30 |

Minimum order for pattern wire is 12 inches per size.

S T U L L E R metals club

Call 877-619-2173 to join the
Metals Club and start saving today.


## GOLD PLUMB SOLDER SHEET

## CADMIUM-BEARING

These karat gold sheet solders contain cadmium to improve solder flow characteristics, and are supplied in one pennyweight sheets.

## WARNING

Cadmium-bearing solders contain chemicals known to cause cancer, birth defects, and other health-related problems.

| Solder Quality | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | Flow Point ( ${ }^{\circ} \mathrm{F}$ ) | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 6K Yellow, Easy | $1165^{\circ} \mathrm{F}$ | $1220^{\circ} \mathrm{F}$ | \$23.15 | \$21.11 | \$20.77 |
| 8K Yellow, Easy | $1150^{\circ} \mathrm{F}$ | $1230^{\circ} \mathrm{F}$ | \$28.56 | \$26.52 | \$26.18 |
| 10K Yellow, Easy | $1170^{\circ} \mathrm{F}$ | $1240^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 10K Yellow, Medium | $1230^{\circ} \mathrm{F}$ | $1285{ }^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 10K Yellow, Hard | $1310^{\circ} \mathrm{F}$ | $1360^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 12K Yellow, Easy | $1070^{\circ} \mathrm{F}$ | $1165^{\circ} \mathrm{F}$ | \$39.40 | \$37.36 | \$37.02 |
| 14K Yellow, Ultra Easy | $1070^{\circ} \mathrm{F}$ | $1165^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Easy | $1180^{\circ} \mathrm{F}$ | $1320^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Medium | $1230^{\circ} \mathrm{F}$ | $1360^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Hard | $1410^{\circ} \mathrm{F}$ | $1460^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 18K Yellow, Easy | $1155^{\circ} \mathrm{F}$ | $1255^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 18K Yellow, Hard | $1480^{\circ} \mathrm{F}$ | $1550^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 21K Yellow, Hard | $1545^{\circ} \mathrm{F}$ | $1625^{\circ} \mathrm{F}$ | \$63.77 | \$61.73 | \$61.39 |
| 6K White, Easy | $1220^{\circ} \mathrm{F}$ | $1230^{\circ} \mathrm{F}$ | \$23.65 | \$21.61 | \$21.27 |
| 10K White, Easy | $1250^{\circ} \mathrm{F}$ | $1290^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |
| 14K White, Easy | $1235^{\circ} \mathrm{F}$ | $1275^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K White, Hard | $1330^{\circ} \mathrm{F}$ | $1380^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K Red, Weld | $1600^{\circ} \mathrm{F}$ | $1690^{\circ} \mathrm{F}$ | \$45.33 | \$43.29 | \$42.95 |
| 18K Red, Medium | $1395{ }^{\circ} \mathrm{F}$ | $1505^{\circ} \mathrm{F}$ | \$56.31 | \$54.27 | \$53.93 |
| 14K Green, Medium | $1390^{\circ} \mathrm{F}$ | $1425^{\circ} \mathrm{F}$ | \$45.58 | \$43.54 | \$43.20 |
| 18K Green, Medium | $1510^{\circ} \mathrm{F}$ | $1545{ }^{\circ} \mathrm{F}$ | \$56.48 | \$54.44 | \$54.10 |

## GOLD REPAIR SOLDER SHEET

## CADMIUM-BEARING

Karat gold repair solders are lower in karat than the work for which they are recommended. Repair solders are easier flowing than our plumb solders and are an economical way to perform various solder tasks.
Supplied in one pennyweight sheets.

| Solder Quality | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{aligned} & \text { Flow } \\ & \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{aligned}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 14K Yellow, Easy | $1170^{\circ} \mathrm{F}$ | $1230^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 14K Yellow, Hard | $1310^{\circ} \mathrm{F}$ | $1360^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 18K White, Easy | $1235{ }^{\circ} \mathrm{F}$ | $1275{ }^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.


## GOLD PLUMB SOLDER SHEET

## CADMIUM-FREE

These solders are cadmium-free and are offered in 1 dwt sheets. They are offered in standard karat golds and palladium.

| Solder Quality | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{aligned} & \text { Flow } \\ & \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{aligned}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 6K Yellow, Easy | $1245^{\circ} \mathrm{F}$ | $1300^{\circ} \mathrm{F}$ | \$23.15 | \$21.11 | \$20.77 |
| 8K Yellow, Easy | $1210^{\circ} \mathrm{F}$ | $1295{ }^{\circ} \mathrm{F}$ | \$28.56 | \$26.52 | \$26.18 |
| 10K Yellow, Easy | $1200^{\circ} \mathrm{F}$ | $1345^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 10K Yellow, Medium | $1260^{\circ} \mathrm{F}$ | $1375{ }^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 10K Yellow, Hard | $1395{ }^{\circ} \mathrm{F}$ | $1430^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 12K Yellow, Easy | $1210^{\circ} \mathrm{F}$ | $1365^{\circ} \mathrm{F}$ | \$39.40 | \$37.36 | \$37.02 |
| 14K Yellow, Easy | $1225^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Medium | $1300^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Hard | $1475{ }^{\circ} \mathrm{F}$ | $1500^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 18K Yellow, Easy | $1300^{\circ} \mathrm{F}$ | $1360^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 18K Yellow, Medium | $1360^{\circ} \mathrm{F}$ | $1405^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 18K Yellow, Hard | $1440^{\circ} \mathrm{F}$ | $1475{ }^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 8K White, Easy | $1345^{\circ} \mathrm{F}$ | $1370^{\circ} \mathrm{F}$ | \$29.06 | \$27.02 | \$26.68 |
| 10K White, Easy | $1240^{\circ} \mathrm{F}$ | $1290^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |
| 10K White, Hard | $1305^{\circ} \mathrm{F}$ | $1350^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |
| 12K White, Easy | $1270^{\circ} \mathrm{F}$ | $1305^{\circ} \mathrm{F}$ | \$39.90 | \$37.86 | \$37.52 |
| 14K White, Easy | $1235^{\circ} \mathrm{F}$ | $1305^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K White, Medium | $1335^{\circ} \mathrm{F}$ | $1365^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K White, Hard | $1450^{\circ} \mathrm{F}$ | $1470^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K Palladium White, Hard | $1370^{\circ} \mathrm{F}$ | $1445{ }^{\circ} \mathrm{F}$ | \$50.24 | \$48.20 | \$47.86 |
| 18K White, Easy | $1330^{\circ} \mathrm{F}$ | $1365{ }^{\circ} \mathrm{F}$ | \$56.28 | \$54.24 | \$53.90 |
| 18K White, Hard | $1490^{\circ} \mathrm{F}$ | $1525^{\circ} \mathrm{F}$ | \$56.28 | \$54.24 | \$53.90 |
| 18K Palladium White, Hard | $1750^{\circ} \mathrm{F}$ | $1775^{\circ} \mathrm{F}$ | \$63.08 | \$61.04 | \$60.70 |
| 19K White, Weld | $1635^{\circ} \mathrm{F}$ | $1670^{\circ} \mathrm{F}$ | \$58.86 | \$56.82 | \$56.48 |
| 20K White, Weld | $1570^{\circ} \mathrm{F}$ | $1600^{\circ} \mathrm{F}$ | \$61.79 | \$59.75 | \$59.41 |
| 14K Red, Medium | $1564^{\circ} \mathrm{F}$ | $1565^{\circ} \mathrm{F}$ | \$45.22 | \$43.18 | \$42.84 |
| 14K Red, Hard | $1569^{\circ} \mathrm{F}$ | $1571^{\circ} \mathrm{F}$ | \$45.22 | \$43.18 | \$42.84 |

## GOLD REPAIR SHEET

## CADMIUM-FREE

Karat gold repair solders flow easier than our plumb solders and are an economical way to perform various soldering tasks. These solders are lower in karat than the work for which they are recommended.
Sold in 1 pennyweight sheets.

| Solder Quality (Repair) | Gold Content | Melting <br> Point ( ${ }^{\circ}$ F) | $\begin{aligned} & \text { Flow } \\ & \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{aligned}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 14K Yellow, Easy | 10kt | $1200^{\circ} \mathrm{F}$ | $1345{ }^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 14K Yellow, Hard | 10kt | $1395{ }^{\circ} \mathrm{F}$ | $1430^{\circ} \mathrm{F}$ | \$34.05 | \$32.01 | \$31.67 |
| 14K White, Easy | 10kt | $1240^{\circ} \mathrm{F}$ | $1290^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |
| 14K White, Hard | 10kt | $1305^{\circ} \mathrm{F}$ | $1350^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |

LEAD TIMES: 10K yellow, 14K yellow, 14K white, 18 K yellow and sterling silver will ship same day in most cases. Back orders will ship the following day. All other metal qualities are MTO (made to order) and will ship within three working days in most cases. Same-day shipping subject to order specifications, special request, and inventory on hand at time of order. Additional charges and lead times may apply to odd quantities.


COLOR-MATCH SHEET GOLD PLUMB SOLDER
CADMIUM-FREE This solder is currently used in our day-to-day manufacturing. Our karat gold color match solders provide excellent soldering characteristics as they were formulated to match the color of our karat gold shanks, findings, mountings, and mill products. Each solder quality has been extensively tested in-house for color match, flow, and polishing characteristics.

| Solder Quality | Melting Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{gathered} \text { Flow } \\ \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{gathered}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 14K Yellow, Easy | $1270^{\circ} \mathrm{F}$ | $1280^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Medium | $1375^{\circ} \mathrm{F}$ | $1430^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Hard | $1450^{\circ} \mathrm{F}$ | $1480^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 18K Yellow, Medium | $1345^{\circ} \mathrm{F}$ | $1460^{\circ} \mathrm{F}$ | \$55.91 | \$53.87 | \$53.53 |
| 10K White, Easy | $1255^{\circ} \mathrm{F}$ | $1260^{\circ} \mathrm{F}$ | \$34.47 | \$32.43 | \$32.09 |
| 14K White, Easy | $1305^{\circ} \mathrm{F}$ | $1330^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K White, Hard | $1445^{\circ} \mathrm{F}$ | $1500^{\circ} \mathrm{F}$ | \$45.31 | \$43.27 | \$42.93 |
| 14K X1 White, Easy | $1300^{\circ} \mathrm{F}$ | $1330^{\circ} \mathrm{F}$ | \$45.66 | \$43.62 | \$43.28 |
| 14K X1 White, Medium | $1350^{\circ} \mathrm{F}$ | $1390^{\circ} \mathrm{F}$ | \$45.66 | \$43.62 | \$43.28 |
| 18K White, Hard | $1475^{\circ} \mathrm{F}$ | $1530^{\circ} \mathrm{F}$ | \$56.28 | \$54.24 | \$53.90 |



## PLATINUM PLUMB SOLDER SHEET

CADMIUM-FREE Plumb platinum solders provide a superior white color as compared to traditional solders for platinum work. Because of the higher platinum content ( $90 \%$ to $95 \%$ ), the color is nearly a perfect match with most platinum alloys. Polishing problems are also reduced as the hardness of these solders closely matches the surrounding platinum alloy. *Supplied in $1 / 2 \mathrm{dwt}$ sheets.

| Solder Quality Platinum, Plumb Solder | Platinum Content | Melting <br> Point ( ${ }^{\circ}$ F) | $\begin{gathered} \text { Flow } \\ \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{gathered}$ | 1/2dwt | 1 dwt | 50 dwt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Easy, Plumb | 90\% | $1300^{\circ} \mathrm{F}$ | $2372^{\circ} \mathrm{F}$ | \$12.66 | \$45.37 | \$44.21 |
| Medium, Plumb | 92.5\% | $1400^{\circ} \mathrm{F}$ | $2552^{\circ} \mathrm{F}$ | \$12.66 | \$45.37 | \$44.21 |
| Hard, Plumb | 95\% | $1500^{\circ} \mathrm{F}$ | $2732^{\circ} \mathrm{F}$ | \$12.66 | \$45.37 | \$44.21 |



PLATINUM REPAIR SOLDER SHEET
CADMIUM-FREE Solders for platinum are supplied in one pennyweight sheets. Prices are approximate and will fluctuate with platinum, palladium, gold, and silver markets.

| Solder For <br> Platinum ( ${ }^{\circ} \mathrm{C}$ ) | Platinum Content | Melting <br> Point ( ${ }^{\circ}$ F) | $\begin{aligned} & \text { Flow } \\ & \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{aligned}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 50 dwt | 100 dwt |
| $1000^{\circ} \mathrm{C}$ Extra Easy | 5\% | $1915{ }^{\circ} \mathrm{F}$ | $1932^{\circ} \mathrm{F}$ | \$37.49 | \$36.04 | \$35.88 |
| $1100^{\circ} \mathrm{C}$ Easy | 0\% | $2080^{\circ} \mathrm{F}$ | $2112^{\circ} \mathrm{F}$ | \$44.85 | \$43.41 | \$43.25 |
| $1200^{\circ} \mathrm{C}$ Medium | 3\% | $2185^{\circ} \mathrm{F}$ | $2292{ }^{\circ} \mathrm{F}$ | \$57.42 | \$55.98 | \$55.82 |
| $1300^{\circ} \mathrm{C}$ Hard | 0\% | $2372^{\circ} \mathrm{F}$ | $2472^{\circ} \mathrm{F}$ | \$71.70 | \$70.25 | \$70.09 |
| $1400^{\circ} \mathrm{C}$ Extra Hard | 5\% | $2552^{\circ} \mathrm{F}$ | $2652^{\circ} \mathrm{F}$ | \$69.95 | \$68.50 | \$68.34 |
| $1500^{\circ} \mathrm{C}$ Weld | 0\% | $2732^{\circ} \mathrm{F}$ | $2832^{\circ} \mathrm{F}$ | \$69.70 | \$68.25 | \$68.09 |
| $1600^{\circ} \mathrm{C}$ Special Weld | 7.5\% | $2912^{\circ} \mathrm{F}$ | $3012^{\circ} \mathrm{F}$ | \$58.15 | \$56.70 | \$56.54 |
| $1700^{\circ} \mathrm{C}$ Seamless | 70\% | $3092{ }^{\circ} \mathrm{F}$ | $3192^{\circ} \mathrm{F}$ | \$70.25 | \$68.80 | \$68.64 |
| $1773^{\circ} \mathrm{C}$ Weld | 100\% | $3224^{\circ} \mathrm{F}$ | $3324^{\circ} \mathrm{F}$ | \$80.70 | \$79.25 | \$79.09 |



SILVER SOLDER SHEET
CADMIUM-FREE Silver sheet solder supplied in 1 pennyweight sheets.

| Solder Quality | Silver Content | Melting Point ( ${ }^{\circ} \mathrm{F}$ ) | Flow Point ( ${ }^{\circ} \mathrm{F}$ ) | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 100 dwt |
| Silver, Easy | 60\% | $1160^{\circ} \mathrm{F}$ | $1285{ }^{\circ} \mathrm{F}$ | \$2.43 | \$2.33 |
| Silver, Medium | 70\% | $1300^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | \$2.43 | \$2.33 |
| Silver, Hard | 80\% | $1410^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$2.43 | \$2.33 |

## GOLD PLUMB SOLDER CHIPPED

## CADMIUM-BEARING

This karat gold chipped solder contains cadmium and is pre-cut to .045"-.045".

## WARNING

Cadmium-bearing solders contain chemicals known to cause cancer, birth defects, and other health related problems.

| Solder Quality | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | Flow Point ( ${ }^{\circ} \mathrm{F}$ ) | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 10K Yellow, Easy | $1170^{\circ} \mathrm{F}$ | $1230^{\circ} \mathrm{F}$ | \$37.05 | \$35.01 | \$34.67 |
| 14K Yellow, Ultra Easy | $1070^{\circ} \mathrm{F}$ | $1165^{\circ} \mathrm{F}$ | \$47.87 | \$45.83 | \$45.49 |
| 14K Yellow, Easy | $1180^{\circ} \mathrm{F}$ | $1320^{\circ} \mathrm{F}$ | \$47.87 | \$45.83 | \$45.49 |
| 14K Yellow, Hard | $1410^{\circ} \mathrm{F}$ | $1460^{\circ} \mathrm{F}$ | \$47.87 | \$45.83 | \$45.49 |
| 10K White, Easy | $1250^{\circ} \mathrm{F}$ | $1290^{\circ} \mathrm{F}$ | \$37.47 | \$35.43 | \$35.09 |
| 14K White, Easy | $1235^{\circ} \mathrm{F}$ | $1270^{\circ} \mathrm{F}$ | \$48.31 | \$46.27 | \$45.93 |
| 14K White, Hard | $1330^{\circ} \mathrm{F}$ | $1380^{\circ} \mathrm{F}$ | \$48.31 | \$46.27 | \$45.93 |
| 14K Red, Weld | $1600^{\circ} \mathrm{F}$ | $1690^{\circ} \mathrm{F}$ | \$49.83 | \$47.79 | \$47.45 |



## GOLD PLUMB SOLDER CHIPPED

## CADMIUM-FREE

This karat gold chipped solders are cadmium-free and are pre-cut to .045" x .045".

|  | Melting <br> Point $\left({ }^{\circ} \mathrm{F}\right)$ |  | Flow <br> Point $\left({ }^{\circ} \mathrm{F}\right)$ |  | Approximate Price Per Pennyweight (dwt) <br> $\mathbf{1}$ dwt <br> $\mathbf{5}$ <br> $\mathbf{1 0 K}$ Yellow, Easy |  | $1200^{\circ} \mathrm{F}$ | $1345^{\circ} \mathrm{F}$ | $\$ 37.05$ | $\$ 35.01$ | $\$ 34.67$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 0 K}$ Yellow, Hard | $1395^{\circ} \mathrm{F}$ | $1430^{\circ} \mathrm{F}$ | $\$ 37.05$ | $\$ 35.01$ | $\$ 34.67$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ Yellow, Easy | $1225^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | $\$ 47.87$ | $\$ 45.83$ | $\$ 45.49$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ Yellow, Medium | $1300^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | $\$ 47.87$ | $\$ 45.83$ | $\$ 45.49$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ Yellow, Hard | $1475^{\circ} \mathrm{F}$ | $1500^{\circ} \mathrm{F}$ | $\$ 47.87$ | $\$ 45.83$ | $\$ 45.49$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ White, Easy | $1235^{\circ} \mathrm{F}$ | $1305^{\circ} \mathrm{F}$ | $\$ 48.31$ | $\$ 46.27$ | $\$ 45.93$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ White, Medium | $1335^{\circ} \mathrm{F}$ | $1365^{\circ} \mathrm{F}$ | $\$ 48.31$ | $\$ 46.27$ | $\$ 45.93$ |  |  |  |  |  |  |
| $\mathbf{1 4 K}$ White, Hard | $1450^{\circ} \mathrm{F}$ | $1470^{\circ} \mathrm{F}$ | $\$ 48.31$ | $\$ 46.27$ | $\$ 45.93$ |  |  |  |  |  |  |
| $\mathbf{1 8 K}$ White, Hard | $1490^{\circ} \mathrm{F}$ | $1525^{\circ} \mathrm{F}$ | $\$ 56.28$ | $\$ 54.24$ | $\$ 53.90$ |  |  |  |  |  |  |
| $\mathbf{1 9 K}$ White, Weld | $1635^{\circ} \mathrm{F}$ | $1670^{\circ} \mathrm{F}$ | $\$ 61.86$ | $\$ 59.82$ | $\$ 59.48$ |  |  |  |  |  |  |



## SILVER CHIPPED SOLDER

## CADMIUM-FREE

Silver chipped solder is supplied in convenient pre-cut 1 mm squares.

| Solder Quality | Silver Content | Melting Point ( ${ }^{\circ} \mathrm{F}$ ) | Flow Point ( ${ }^{\circ} \mathrm{F}$ ) | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 100 dwt |
| Silver, Easy | 65\% | $1230^{\circ} \mathrm{F}$ | $1285^{\circ} \mathrm{F}$ | \$2.53 | \$2.42 |
| Silver, Medium | 70\% | $1300^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | \$2.53 | \$2.42 |
| Silver, Hard | 75\% | $1410^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$2.53 | \$2.42 |




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## WARNING

Cadmium-bearing solders contain chemicals known to cause cancer, birth defects, and other health related problems.

## CADMIUM-BEARING

| Solder Quality | Gauge | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{gathered} \text { Flow } \\ \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{gathered}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 50 dwt | 100 dwt |
| 14K Yellow,Ultra Easy | 24 | $1070^{\circ} \mathrm{F}$ | $1165^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Ultra Easy | 30 | $1070^{\circ} \mathrm{F}$ | $1211^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |
| 14K Yellow, Easy | 24 | $1080^{\circ} \mathrm{F}$ | $1320^{\circ} \mathrm{F}$ | \$44.87 | \$42.83 | \$42.49 |

## SILVER SOLDER WIRE

## CADMIUM-FREE

Easy and medium silver solder wire supplied in 20 gauge only.
Hard silver solder wire is supplied in 20 gauge and 28 gauge.

| Solder Quality | Gauge | Silver <br> Content | Melting <br> Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{gathered} \text { Flow } \\ \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{gathered}$ | Approximate Price 1 dwt 100 dwt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Silver, Easy | 20 | 56\% | $1160^{\circ} \mathrm{F}$ | $1285{ }^{\circ} \mathrm{F}$ | \$1.33 | \$1.28 |
| Silver, Medium | 20 | 70\% | $1300^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | \$1.33 | \$1.28 |
| Silver, Hard | 20 | 80\% | $1410^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$1.33 | \$1.28 |
| Silver, Hard | 28 | 80\% | $1410^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$1.33 | \$1.28 |
| Continuum ${ }^{\text {® }}$ Sterling Silver, Medium | 20 | 84\% | $1350^{\circ} \mathrm{F}$ | $1550^{\circ} \mathrm{F}$ | \$2.36 | \$2.32 |
| Continuum ${ }^{\text {® }}$ Sterling Silver, Hard | 20 | 86\% | $1470^{\circ} \mathrm{F}$ | $1600^{\circ} \mathrm{F}$ | \$2.48 | \$2.43 |

Minimum order is 5 feet (approximately 5 pennyweights) per quality.


## SILVER SOLDER STRIP

## CADMIUM-FREE

Supplied in convenient 12 " x .016" strips. Each silver strip weighs approximately five pennyweights.
Minimum order is one strip per quality.

| Solder Quality | Silver Content | Melting Point ( ${ }^{\circ} \mathrm{F}$ ) | Flow Point ( ${ }^{\circ} \mathrm{F}$ ) | Approximate Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 100 dwt |
| Silver, Easy | 56\% | $1230^{\circ} \mathrm{F}$ | $1285{ }^{\circ} \mathrm{F}$ | \$9.82 | \$9.31 |
| Silver, Medium | 70\% | $1300^{\circ} \mathrm{F}$ | $1335^{\circ} \mathrm{F}$ | \$9.82 | \$9.31 |
| Silver, Hard | 75\% | $1410^{\circ} \mathrm{F}$ | $1420^{\circ} \mathrm{F}$ | \$9.82 | \$9.31 |

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.

## Solder Tip

When soldering, wear protective goggles with a shade number of at least four to protect against infrared radiation.
They should be approved be the American National Standards Institute (ANSI). Full-faced shields are also available to protect the face. Use leather protective gloves to handle hot metals.


## GOLD PASTE SOLDER

## CADMIUM-FREE

Our paste solder is packaged in a syringe that contains one pennyweight of gold solder and flux. This paste is excellent for chain repair and fine detail work due to the special formula that leaves little or no carbon residue, providing clean, bright assemblies. It is compatible with our paste solder hand applicator.

| Solder Quality | Solder Type | Melting Point ( ${ }^{\circ} \mathrm{F}$ ) | $\begin{aligned} & \text { Flow } \\ & \text { Point }\left({ }^{\circ} \mathrm{F}\right) \end{aligned}$ | Approximate Price Per Pennyweight (dwt) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 dwt | 20 dwt | 50 dwt |
| 1K Yellow Gold Filled | Plumb | $1135^{\circ} \mathrm{F}$ | $1170^{\circ} \mathrm{F}$ | \$9.51 | \$7.81 | \$7.47 |
| 6K Yellow | Repair | $1110^{\circ} \mathrm{F}$ | $1295{ }^{\circ} \mathrm{F}$ | \$23.15 | \$21.45 | \$21.11 |
| 10K Yellow Easy | Plumb | $1195^{\circ} \mathrm{F}$ | $1290^{\circ} \mathrm{F}$ | \$34.05 | \$32.35 | \$32.01 |
| 10K Yellow Medium | Plumb | $1293{ }^{\circ} \mathrm{F}$ | $1375{ }^{\circ} \mathrm{F}$ | \$34.05 | \$32.35 | \$32.01 |
| 10K Yellow Hard | Plumb | $1395{ }^{\circ} \mathrm{F}$ | $1450^{\circ} \mathrm{F}$ | \$34.05 | \$32.35 | \$32.01 |
| 14K Yellow Easy | Plumb | $1185^{\circ} \mathrm{F}$ | $1330^{\circ} \mathrm{F}$ | \$44.87 | \$43.17 | \$42.83 |
| 14K Yellow Medium | Plumb | $1330^{\circ} \mathrm{F}$ | $1390^{\circ} \mathrm{F}$ | \$44.87 | \$43.17 | \$42.83 |
| 14K Yellow Hard | Plumb | $1400^{\circ} \mathrm{F}$ | $1440^{\circ} \mathrm{F}$ | \$44.87 | \$43.17 | \$42.83 |
| 18K Yellow Easy | Plumb | $1270^{\circ} \mathrm{F}$ | $1320^{\circ} \mathrm{F}$ | \$55.91 | \$54.21 | \$53.87 |
| 6K White | Repair | $1120^{\circ} \mathrm{F}$ | $1315{ }^{\circ} \mathrm{F}$ | \$23.15 | \$21.45 | \$21.11 |
| 10K White Easy | Plumb | $1130^{\circ} \mathrm{F}$ | $1260^{\circ} \mathrm{F}$ | \$33.97 | \$32.27 | \$31.93 |
| 10K White Medium | Plumb | $1200^{\circ} \mathrm{F}$ | $1320^{\circ} \mathrm{F}$ | \$33.97 | \$32.27 | \$31.93 |
| 10K White Hard | Plumb | $1340^{\circ} \mathrm{F}$ | $1450^{\circ} \mathrm{F}$ | \$33.97 | \$32.27 | \$31.93 |
| 14K White Easy | Plumb | $1160^{\circ} \mathrm{F}$ | $1280^{\circ} \mathrm{F}$ | \$44.81 | \$43.11 | \$42.77 |
| 14K White Medium | Plumb | $1325^{\circ} \mathrm{F}$ | $1405^{\circ} \mathrm{F}$ | \$44.81 | \$43.11 | \$42.77 |
| 14K White Hard | Plumb | $1335^{\circ} \mathrm{F}$ | $1445{ }^{\circ} \mathrm{F}$ | \$44.81 | \$43.11 | \$42.77 |
| 14K X1 ${ }^{\text {® }}$ White Ultra Easy | Plumb | $1040^{\circ} \mathrm{F}$ | $1280^{\circ} \mathrm{F}$ | \$45.16 | \$43.46 | \$43.12 |

## SILVER PASTE SOLDER

## CADMIUM-FREE

Silver paste solder is powdered and mixed with the proper proportion of flux, and packaged in convenient, disposable syringes. Specially formulated binders assure that little or no carbon residue is left on the joint when soldering. Each syringe contains three pennyweights of silver solder and flux, and is designed to work in our new paste solder hand applicator.

|  | Silver <br> Content | Melting <br> Point <br> $\left({ }^{\circ} \mathrm{F}\right)$ |  | Flow <br> Point <br> Solder $\left.{ }^{\circ} \mathrm{F}\right)$ |  | Approximate Per Syringe <br> 3 dwt |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Silver, Extra Easy | $56 \%$ | $1140^{\circ} \mathrm{F}$ | $1205^{\circ} \mathrm{F}$ | $\$ 4.77$ |  |  |
| Silver, Easy | $65 \%$ | $1240^{\circ} \mathrm{F}$ | $1325^{\circ} \mathrm{F}$ | $\$ 4.77$ |  |  |
| Silver, Medium | $70 \%$ | $1275^{\circ} \mathrm{F}$ | $1360^{\circ} \mathrm{F}$ | $\$ 4.77$ |  |  |
| Silver, Hard | $75 \%$ | $1365^{\circ} \mathrm{F}$ | $1450^{\circ} \mathrm{F}$ | $\$ 4.77$ |  |  |

## MK3 PASTE SOLDER DISPENSER

Manual solder dispenser designed to deposit paste solders with pinpoint accuracy. Use with Stuller paste solders syringes.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 1 0}$ | MK3 Solder Dispenser | $\$ 23.76$ | $\$ 25.16$ | $\$ 27.95$ |



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Metals Club and start saving today.


|  | ROUND |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Order \# | 30000 |  |  |  |  |  |  |  |  |
|  | Quality | 14K Yellow Gold |  |  |  |  |  |  |  |  |
| mm OD | 4.76 | 6.35 | 7.94 | 8.73 | 9.53 | 11.11 | 12.7 | 13.49 | 14.29 | 15.88 |
| Inches (OD) | 3/16" | $1 / 4 / 4$ | 5/6" | 11112" | 3/8" | 7/16" | $1 / 2{ }^{1 /}$ | 17/31" | 9/6" | 5/8" |
| Pennyweights (dwt) | 0.12 | 0.22 | 0.33 | 0.40 | 0.48 | 0.65 | 0.85 | 0.96 | 1.05 | 1.35 |
| 14K Yellow \$ | \$6.42 | \$11.90 | \$17.50 | \$21.21 | \$25.45 | \$34.55 | \$45.10 | \$50.77 | \$55.56 | \$71.65 |
| mm OD | 17.46 | 19.05 | 20.64 | 22.23 | 23.81 | 25.4 | 26.99 | 28.58 | 30.16 | 31.75 |
| Inches (OD) | 11/16" | $3 / 4{ }^{1 /}$ | 13/16" | 7/8" | 15/16" | $1{ }^{\prime \prime}$ | 11/18" | 11/8" | 13/16" | $11 / 4$ " |
| Pennyweights (dwt) | 1.59 | 1.91 | 2.29 | 2.64 | 3.79 | 3.47 | 3.89 | 4.35 | 4.85 | 5.32 |
| 14K Yellow \$ | \$84.18 | \$101.29 | \$121.55 | \$139.73 | \$200.79 | \$184.08 | \$206.10 | \$230.71 | \$256.91 | \$282.01 |
| mm OD | 33.34 | 34.93 | 38.1 | 41.28 | 44.45 | 47.63 | 50.8 | 57.15 | 63.5 |  |
| Inches (OD) | 15/6" | $13 / 8{ }^{\prime \prime}$ | $11 / 2$ " | 15/8" | $13 / 4$ " | 17/8" | 2 " | 21/4" | 21/2" |  |
| Pennyweights (dwt) | 5.93 | 6.40 | 7.66 | 9.10 | 10.23 | 11.84 | 13.58 | 17.17 | 21.20 |  |
| 14K Yellow \$ | \$314.39 | \$339.13 | \$405.99 | \$482.38 | \$542.36 | \$627.72 | \$720.10 | \$910.41 | \$1,123.96 |  |



## ROUND, UNDRILLED EYELET

|  | Order \# | 30000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quality | 14K Yell | w Gold |  |  |  |  |  |  |  |
| mm OD | 8 | 9.5 | 11 | 13.5 | 14.25 | 16 | 17.5 | 19 | 20.75 | 22.25 |
| Pennyweights (dwt) | 0.35 | 0.53 | 0.67 | 0.98 | 1.15 | 1.42 | 1.65 | 2.09 | 2.50 | 2.64 |
| 14K Yellow \$ | \$18.56 | \$28.33 | \$35.54 | \$51.84 | \$60.82 | \$75.35 | \$87.60 | \$110.58 | \$132.46 | \$140.09 |
| mm OD | 23.75 | 25.25 | 26 | 27.25 | 30 | 41.25 | 44.25 |  |  |  |
| Pennyweights (dwt) | 3.08 | 3.41 | 3.60 | 3.89 | 4.80 | 9.06 | 10.38 |  |  |  |
| 14K Yellow \$ | \$163.29 | \$180.70 | \$190.94 | \$206.34 | \$254.27 | \$480.44 | \$550.32 |  |  |  |



LONG OVAL
Order \# 30005
Quality $\quad 14 \mathrm{~K}$ Yellow Gold

| mm OD | $\mathbf{1 1 \times 5} \times \mathbf{1 2 . 5} \times \mathbf{6 . 7 5}$ | $\mathbf{1 9} \times \mathbf{7 . 7 5}$ | $\mathbf{2 0 . 5} \times \mathbf{1 0 . 7 5}$ | $\mathbf{2 4 . 5} \times \mathbf{1 2 . 7 5}$ | $\mathbf{2 6} \times \mathbf{9 . 5}$ | $\mathbf{4 2 \times 2 0}$ |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 0.28 | 0.45 | 0.77 | 1.91 | 1.68 | 1.32 | 4.31 |
| 14K Yellow \$ | $\$ 14.65$ | $\$ 23.88$ | $\$ 40.96$ | $\$ 63.31$ | $\$ 89.07$ | $\$ 69.98$ | $\$ 228.28$ |

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.


|  |  |  |  |  |  | OVAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Order \# | 30005 |
|  |  |  |  |  |  | Quality | 14K Yellow Gold |
| mm OD | $8.25 \times 6.75$ | $11 \times 9$ | $12.75 \times 11.25$ | $13.5 \times 9.25$ | $17.25 \times 12.75$ | $18.25 \times 11.25$ | $18.25 \times 13.75$ |
| Pennyweights (dwt) | 0.30 | 0.51 | 0.77 | 0.68 | 1.14 | 1.12 | 1.36 |
| 14K Yellow \$ | \$15.91 | \$27.23 | \$40.82 | \$36.05 | \$60.17 | \$59.23 | \$72.17 |
| mm OD | $18.75 \times 15.5$ | $19 \times 12.25$ | $22 \times 15.25$ | $26.5 \times 19.5$ | $31.75 \times 25.5$ | $37 \times 31$ | $38.25 \times 29$ |
| Pennyweights (dwt) | 1.51 | 1.22 | 1.74 | 2.77 | 4.30 | 6.11 | 5.87 |
| 14K Yellow \$ | \$80.23 | \$64.84 | \$92.10 | \$146.96 | \$228.11 | \$324.15 | \$311.42 |



OVAL, SMALL UNDRILLED EYELET

| mm OD | $\mathbf{1 9 . 7 5 \times \mathbf { 1 6 . 2 5 }}$ | $\mathbf{2 6 \times 1 6}$ | $\mathbf{2 8 . 2 5 \times 2 1 . 2 5}$ | $\mathbf{3 2 \times 2 5 . 5}$ |
| ---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 1.78 | 2.27 | 3.19 | 4.37 |
| 14 K Yellow \$ | $\$ 94.59$ | $\$ 120.57$ | $\$ 169.00$ | $\$ 231.74$ |

Order \# 30005
Quality 14 K Yellow Gold
OVAL, SMALL UNDRILLED EYELET

| $\mathbf{m m} \mathbf{0 D}$ | $\mathbf{2 8 . 5} \times \mathbf{2 1}$ | $\mathbf{3 1 . 7 5} \times \mathbf{2 3}$ |
| ---: | :---: | :---: |
| Pennyweights (dwt) | 3.33 | 3.98 |
| 14 K Yellow \$ | $\$ 176.75$ | $\$ 210.83$ |

Order \# 30005
Quality 14 K Yellow Gold


Note: Stampings are also available in sterling silver. Special orders requesting sterling silver require a minimum order quantity and additional lead times.

S T U L L ER metals Club

Call 877-619-2173 to join the Metals Club and start saving today.


## RECTANGLE

| Order \# | 30003 | mm OD | $8.5 \times 5.5$ | $13 \times 11$ | $17 \times 11.75$ | $19.25 \times 12.75$ | $19.25 \times 16.25$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quality | 14K Yellow Gold | Pennyweights (dwt) | 0.31 | 0.96 | 1.32 | 1.62 | 1.98 |
|  |  | 14K Yellow \$ | \$16.44 | \$50.79 | \$70.17 | \$85.96 | \$105.11 |
|  |  | mm OD | $20.75 \times 16.75$ | $22.5 \times 18.5$ | $25.5 \times 22.25$ | $28.75 \times 23.25$ | $32.75 \times 27$ |
|  |  | Pennyweights (dwt) | 2.34 | 2.78 | 3.73 | 4.52 | 5.86 |
|  |  | 14K Yellow \$ | \$124.06 | \$147.30 | \$197.89 | \$239.43 | \$310.74 |

LONG RECTANGLE, UNDRILLED EYELET

| Order \# | 30003 | mm OD | $13.75 \times 6.5$ | $19.25 \times 16.25$ | $22.25 \times 9.5$ | $27 \times 22.25$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quality | 14K Yellow Gold | Pennyweights (dwt) | 0.62 | 2.18 | 1.52 | 4.13 |
|  |  | 14K Yellow \$ | \$32.78 | \$114.96 | \$80.46 | \$219.18 |

## RECTANGLE, ROUND EDGE

\& UNDRILLED EYELET

| Order \# | $\mathbf{3 0 0 0 3}$ | $\mathbf{m m} \mathbf{0 D}$ | $\mathbf{2 0 . 5} \times \mathbf{1 6 . 2 5}$ | $\mathbf{2 1 . 5} \times \mathbf{1 4 . 2 5}$ | $\mathbf{3 7 . 5} \times \mathbf{2 8 . 2 5}$ |
| :--- | :--- | ---: | :---: | :---: | :---: |
| Quality | 14 K Yellow Gold | Pennyweights (dwt) | 2.54 | 2.19 | 7.20 |
|  |  | 14 K Yellow $\$$ | $\$ 119.50$ | $\$ 115.90$ | $\$ 381.59$ |

## RECTANGLE,

UNDRILLED EYELET

| Order \# | $\mathbf{3 0 0 0 3}$ |
| :--- | :---: |
| Quality | 14 K Yellow Gold |


| mm OD | $\mathbf{1 4 . 2 5 \times \mathbf { 1 9 }}$ | $\mathbf{1 7 . 5} \times \mathbf{2 2}$ | $\mathbf{1 9 . 2 5} \times \mathbf{2 2 . 5}$ | $\mathbf{1 9 . 5} \times \mathbf{2 5 . 5}$ | $\mathbf{2 1 \times \mathbf { 2 7 }}$ |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 1.84 | 2.64 | 2.95 | 3.40 | 3.90 |
| 14 K Yellow \$ | $\$ 97.55$ | $\$ 139.86$ | $\$ 156.17$ | $\$ 180.41$ | $\$ 206.63$ |


| mm OD | $\mathbf{2 2 . 2 5} \times \mathbf{2 5 . 5}$ | $\mathbf{2 4} \times \mathbf{3 2}$ | $\mathbf{2 6 . 2 5} \times \mathbf{3 2}$ | $\mathbf{2 9 . 7 5} \times \mathbf{3 2 . 5}$ |
| ---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 3.79 | 5.23 | 5.6433 | 6.585 |
| 14 K Yellow \$ | $\$ 200.93$ | $\$ 277.28$ | $\$ 299.19$ | $\$ 349.12$ |

RECTANGLE ROUND EDGE

| Order \# | $\mathbf{3 0 0 0 3}$ |
| :--- | :--- |
| Quality | 14 K Yellow Gold |


| mm OD | $\mathbf{1 8 . 2 5} \times \mathbf{1 3 . 5}$ | $\mathbf{2 2 . 2 5} \times \mathbf{1 8}$ | $\mathbf{2 2 . 2 5} \times \mathbf{1 9 . 5}$ | $\mathbf{2 2 . 5} \times \mathbf{1 1 . 2 5}$ |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 1.59 | 1.68 | 2.67 | 2.85 |
| 14 K Yellow \$ | $\$ 84.38$ | $\$ 141.50$ | $\$ 150.97$ | $\$ 88.96$ |

DIAMOND-SHAPE
UNDRILLED EYELET

| Order \# 30001 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quality 14K Yellow Gold |  |  |  |  |  |  |  |
| mm OD | $13 \times 13$ | $14 \times 14$ | $16 \times 16$ | $17 \times 17$ | $19 \times 19$ | $25.5 \times 25.5$ | $\mathbf{2 8 \times 2 8}$ |
| Pennyweights (dwt) | 1.1533 | 1.3233 | 1.755 | 2.035 | 2.4827 | 4.3137 | 5.54 |
| 14K Yellow \$ | \$61.14 | \$70.16 | \$93.05 | \$107.89 | \$131.63 | \$228.70 | \$293.71 |

100\% Recycled Gold and Silver. Visit Stuller.com/SensibleSourcing for more information.


OCTAGON
Order \# 30004
Quality 14K Yellow Gold

OCTAGON
UNDRILLED EYELET

| Order \# | $\mathbf{3 0 0 0 4}$ |
| :--- | :--- |
| Quality | $14 K$ Yellow Gold |

LONG OCTAGON

## Order \# 30004

| mm OD | $\mathbf{1 4 . 2 5 \times \mathbf { 1 2 . 2 5 }}$ | $\mathbf{1 5 . 5 \times \mathbf { 1 2 }}$ | $\mathbf{1 6 . 5 \times 1 5}$ |
| ---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 1.06 | 1.10 | 1.47 |
| 14 K Yellow \$ | $\$ 56.11$ | $\$ 58.32$ | $\$ 77.85$ |

LONG OCTAGON UNDRILLED EYELET

| mm OD | $\mathbf{2 7 . 5} \times \mathbf{2 7 . 5}$ | $\mathbf{3 2 \times 3 1 . 7 5}$ | $\mathbf{3 6} \times \mathbf{2 6 . 5}$ |
| ---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 4.64 | 5.43 | 6.05 |
| 14 K Yellow \$ | $\$ 320.75$ | $\$ 245.77$ | $\$ 287.83$ |


| Order \# | $\mathbf{3 0 0 0 4}$ |
| :--- | :--- |
| Quality | 14 K Yellow Gold |



## TEARDROP

| Order \# | $\mathbf{3 0 0 0 7}$ |
| :--- | :--- |
| Quality | 14 K Yellow Gold |


| mm OD | $\mathbf{1 1 . 5} \times \mathbf{8}$ | $\mathbf{1 4 \times 8 . 5}$ | $\mathbf{1 7 . 7 5} \times \mathbf{1 1 . 2 5}$ | $\mathbf{1 9} \times \mathbf{1 3}$ | $\mathbf{3 2 . 7 5} \times \mathbf{2 1 . 5}$ | $\mathbf{3 6 . 2 5} \times \mathbf{2 4 . 7 5}$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 0.42 | 0.50 | 0.93 | 1.18 | 3.30 | 4.37 |
| 14 K Yellow \$ | $\$ 22.37$ | $\$ 26.43$ | $\$ 49.31$ | $\$ 62.48$ | $\$ 174.74$ | $\$ 231.82$ |

Note: Stampings are also available in sterling silver. Special orders requesting sterling silver

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TRIANGLE

| Order \# | $\mathbf{3 0 0 0 8}$ |  | mm 0D | $\mathbf{2 0 . 7 5} \times \mathbf{2 4}$ | $\mathbf{2 7 . 5} \times \mathbf{2 5 . 5}$ |
| :--- | :--- | ---: | :---: | :---: | :---: |
| Quality | 14 K Yellow Gold | Pennyweights (dwt) | 2.14 | $\mathbf{3 3} \times \mathbf{3 8}$ |  |
|  |  | 14 K Yellow \$ | $\$ 113.40$ | $\$ 127.57$ | $\$ 218.96$ |

HEART


HEART, UNDRILLED
EYELET


| Order \# | $\mathbf{3 0 0 0 2}$ |
| :--- | :--- |
| Quality | 14 K Yellow Gold |


| mm OD | 6.75 $\times 6.75 *$ | $7.5 \times 5.5$ | $10 \times 9.25$ | $12.75 \times 13.25$ | * Available in 30 gauge only. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pennyweights (dwt) | 0.09 | 0.20 | 0.42 | 0.8 |  |
| 14K Yellow \$ | \$4.77 | \$10.39 | \$22.27 | \$45.04 |  |
| mm OD | $18.25 \times 18.75$ | $20 \times 19.25$ | $21.5 \times 20.5$ | $26 \times 24.25$ |  |
| Pennyweights (dwt) | 1.73 | 1.86 | 2.18 | 3.13 |  |
| 14K Yellow \$ | \$91.56 | \$98.65 | \$115.58 | \$165.90 |  |
| mm OD | $30.75 \times 31$ | $33.75 \times 31$ | $36.75 \times 36$ | $40 \times 39.5$ |  |
| Pennyweights (dwt) | 4.54 | 5.22 | 6.53 | 7.62 |  |
| 14K Yellow \$ | \$240.85 | \$276.57 | \$345.94 | \$404.12 |  |


| $\mathbf{3 2 9 7}$ | $\mathbf{3 3 9 0}$ |
| :---: | :---: |
| $6.25 \times 19.25$ | $5.25 \times 24.5$ |
| 0.24 dwt | 0.89 dwt |
| 14K Yellow \$12.72 | 14K Yellow \$47.26 |
| Available in 30 gauge only. |  | $\begin{array}{cc}\mathbf{3 3 9 7} & \mathbf{3 3 9 6} \\ 5.25 \times 33 \\ 1.22 \mathrm{dwt} \\ \text { 14K Yellow \$64.53 } & 1.86 \mathrm{dwt} \\ \text { 14K Yellow } \$ 99.45\end{array}$




|  |  |
| :--- | :--- |
| 3787 | 3161 |


3904
$28.75 \times 50.75$ 8.77 dwt \$464.43

* Chain sold separately

You are behind your sales counter when one of your repeat customers enters your store. One look at her immediately warns you that something is very wrong. After a short greeting, the customer produces a piece of jewelry that has missing prong tips, and, even worse, the diamond or gemstone is also missing. After a few questions and a quick visual examination, it becomes obvious that this is not the typical fracture as seen when a prong has been torn off. Closer inspection of the fracture surface reveals a grainy appearance that is very porous. The odd appearance of the fracture surface and the infrequency of this type of failure lead you to believe that the problem is "bad metal" or "bad casting." Was the problem really due to defective metal or casting, or is there another explanation and solution? The correct answer may surprise even the most skilled and experienced craftsman.

It is not surprising to initially blame the material as the cause of fracture, but, with the use of high-powered magnification and literature that is not readily available to the craftsman, the real cause can be found. The photos below illustrate several products with a "mysterious" failure that you may have encountered during your career. The prong tips broke off with little or no indication of onset of failure. As a matter of fact, they all appear to have fractured in a brittle manner showing very little ductility.

All of the examples in the photos below $(A-B)$ illustrate that none of the failed prongs exhibit evidence of ductility around the broken prong tip or on the fracture surface. Features like "orange peel" texture or a dimpled fracture surface are always present when a ductile alloy has been broken by bending, twisting or pulling too many times. Most karat gold alloys typically used to produce jewelry are usually quite ductile. You are able to bend each of the prongs to correctly seat the stone with no obvious complications.


This lack of ductility becomes very clear when the fracture surface of the broken prong tips are viewed under high magnification using a scanning electron microscope (SEM). The black and white photos seen below (C-D) are SEM images taken at lower magnifications, typically 20X to 100X. At higher magnifications, the fracture surfaces appear as shown in the SEM images on the following page.


The "rock candy" appearances of grains in these images are merely facets of grain boundaries. Each grain has separated from its neighbors along the grain boundaries it once shared with them. This is known as intergranular fracture, which is typically associated with the brittle mode of failure. The brittle fracture surface often appears specular or shiny (when it is not covered with debris) to the unaided eye. At low magnification, the intergranular fracture surface may appear porous (E). At higher magnification (F), it becomes apparent that the pockets are created by clusters of crystals being removed at multiple levels. This intergranular fracture is clear
evidence of how the initially ductile gold alloys used in jewelry applications have become brittle at the notched areas of the prong tip.

So, why did the prong fail in a brittle manner? Brittle mode failure of a ductile gold alloy is not typical. The three most common causes of brittle mode failure are stress corrosion, hot tearing and contamination of the alloy.

Hot tearing typically results in intergranular failure and occurs when stress is applied to the material at elevated temperatures near its melting point. These fractures usually exhibit oxidation on the fracture surface and a "waxy" appearance on the crystal facets. Examples of hot tearing would be fractures occurring during soldering operations and fractures found on castings due to fast quenching of investment molds. If these type fractures are present in a prong they would usually become obvious when the prong was manipulated during stone setting.

Gross contamination of gold alloys can also lead to intergranular fracture. Lead is a well documented contaminant in gold alloys and levels as little as $0.01 \%$ can result in brittle failure. Alloys with gross contamination would almost never make it through stressful operations such as rolling, drawing or stone setting without suffering severe cracking.

Stress corrosion cracking (SCC) is a brittle mode failure that is well documented and has been extensively studied in all families of different engineering alloys. For example, certain types of stainless steel are known to be susceptible to SCC when exposed to chlorine or chlorine containing compounds. copper alloys such as brass or bronze are susceptible to SCC when exposed to ammonia.

Elements that are known to promote SCC of gold jewelry alloys can be found in the halogen group. These corrosive elements include iodine, chlorine, fluorine, and bromine. For a karat gold jewelry piece to suffer SCC, two factors must be present and act simultaneously - residual stress (prong tension, etc...) and exposure to a corrosive environment. The jewelry will not fail due to SCC if either one of the components is absent.

Residual stresses remain in a metal after it is deformed. Operations such as bending, stretching, and compression are known sources of residual stresses. Increasing the level of residual stress also increases the chances of failure when exposed to a corrosive environment. Residual stress can be reduced or eliminated by either annealing or by using a low-temperature, stress-relieving, heat treatment cycle. The low-temperature treatment is preferred when stones or solder joints are involved and requires holding the jewelry at $650^{\circ} \mathrm{F}$ for one hour.


The detrimental effect of notching has been studied at great length in applications to structural assemblies. Notches and cuts which come to a sharp angle are undesirable due to the concentration of stress at the notch tip. There are many cases where notching is introduced to cause failure. Examples are scoring glass and sheetrock, and timber cutting.

Care must be taken when notching a prong for stone setting. A radius helps to distribute stress over a larger area and minimizes stress concentration. Avoid
manipulation of notched prong tips to prevent micro tears and rapid buildup of residual stress. Also avoid compressing notched prong tips too tightly against stones as this will increase the residual stress at the notched area of the prong by acting as a wedge.

Consideration should also be given to alloy selection to reduce chances of failure due to SCC. Platinum and gold alloys of 18K or higher are much more resistant to SCC than 14K and lower karat gold alloys. In a similar fashion, 14K palladium white gold alloys are extremely resistant to SCC where as 14 K nickel white alloys are susceptible to SCC.

Now that we know that the failure of a piece of jewelry due to SCC can only occur with certain alloys that have been exposed to a corrosive environment and only if residual stress exists, we can address the SCC phenomena by controlling many of the variables that cause SCC. Educating the end user about exposure of jewelry to corrosive environments is important but impossible to monitor. As a jeweler, you can minimize the risk of failure by SCC with proper alloy selection and stone setting techniques to reduce residual stress.

We hope that the above discussion has removed the mystique from this type of "mysterious" failure and provided you with the tools and knowledge to recognize and prevent prong failures incorrectly attributed to "bad metal" or "bad casting."

- Stuller's Metals Technology Team


## Precautionary Measures to Avoid Stress Corrosion

1) If stress has been applied or loaded into a product, coat piece with boric/alcohol, soak at $650^{\circ} \mathrm{F}$ for 45 minutes, allow to air cool. This will relieve the stress without adverse effects such as loss of temper. Standard torch or oven annealing is sufficient to relieve stress.
2) How much stress? When reducing sheet or wire, avoid overworking. This can be identified by edge notching, which is undesirable. Reductions of $50 \%$ are standard between anneals, $37 \%$ reduction is considered full hard.
3) Avoid sharp notching. Use a slight radius if applicable, especially if stretching and compression must be applied to the notched areas.
4) Use 18 K or platinum in key areas instead of low karat or nickel whites. These metals have a much higher tolerance to corrosives.
5) Avoid too much heat or excessive time exposure to heat. Allow pieces to cool slowly. Repetitious heating to red zones is not recommended unless sufficient cold work is applied between heats. Avoid dull cutting tools and use a lubricant to avoid generating excess heat.
6) Avoid contact with corrosive liquids, solids or gasses. The seacoast and semi-tropical areas produce chlorides which combine with the salts produced through perspiration to form a corrosive element that discolors the skin. Smog fumes filled with particles of silver dioxide and phosphate also gradually attack jewelry.
7) Prong work is of particular concern. Take care to not stretch prongs out of parallel. This increases the angle required to move the prong tip over the stone thus increasing stress and compression. It's the jeweler's responsibility to control and decrease stress. Make it a point to work "stress free."

## Differences Between Traditional Sterling Silver and Sterlium Plus ${ }^{\mathrm{TM}}$

## INVESTMENT CASTING

|  | Traditional Sterling | Sterlium Plus ${ }^{\text {su }}$ |
| :--- | :--- | :--- |
| Casting Temperature | $1778^{\circ} \mathrm{F}\left(970^{\circ} \mathrm{C}\right)$ | $1850^{\circ} \mathrm{F}\left(1010^{\circ} \mathrm{C}\right)$ (higher cast temperature) |
| Flask Temperature | Adjusts to size and weight of castings | Adjusts to size and weight of castings |
| Casting Flux | Boric Acid - skim off before casting | Boric Acid - skim off before casting |
| Quench Time, (4" $\times 8^{\prime \prime}$ flask) | 15 to 20 minutes | 20 to 25 minutes |
| Investment Removal | Any proprietary investment remover | Any proprietary investment remover |
| Pickling After Casting | Required to remove black oxidation | Usually not required, castings are white |
| Reuse | $50 \%$ scrap and $50 \%$ fresh metal | $50 \%$ scrap and $50 \%$ fresh metal |
| NOTE: | Remove all investment residues before reuse | Remove all investment residues before reuse |

## FABRICATION AND SOLDERING

|  | Traditional Sterling |
| :--- | :--- |
| Ingot Molds | Use two piece vertical molds |
| Note for both: Avoid using horizontal slot type molds for ingot casting as a shrink down the center of |  |
| of the rolled or drawn stock. Preheat the mold and use a light oil or spray graphite to keep the metal |  |
| Pouring Temperature | $1800^{\circ} \mathrm{F}\left(982^{\circ} \mathrm{C}\right.$ C |
| Flux | Borax or Boric Acid - skim before annealing |
| Quenching | Quench quickly after pouring |
| Rolling | Take $50 \%$ to $70 \%$ reduction before annealing |
| Annealing | $1250^{\circ} \mathrm{F}\left(676^{\circ} \mathrm{C}\right), 20$ to 30 minutes (use a fire coat for open annealing $)$ |
| Pickling | Ingots will need to be pickled to remove oxide |
| Cleaning | Scrub ingots clean before use |
| Soldering | Regular silver solder should be used |
| Fire Coat | A fire coat should be applied |
| Solder Flux | Use plenty of flux for soldering |

## Sterlium Plus"

Use two piece vertical molds
Note for both: Avoid using horizontal slot type molds for ingot casting as a shrink down the center of the ingot will cause an area of porosity down the center
of the rolled or drawn stock. Preheat the mold and use a light oil or spray graphite to keep the metal from sticking.

| Pouring Temperature | $1800^{\circ} \mathrm{F}\left(982^{\circ} \mathrm{C}\right)$ | $1886^{\circ} \mathrm{F}\left(1030^{\circ} \mathrm{C}\right)$ |
| :--- | :--- | :--- |
| Flux | Borax or Boric Acid - skim before annealing | Boric Acid - skim before annealing |
| Quenching | Quench quickly after pouring | Quench quickly after pouring |
| Rolling | Take $50 \%$ to $70 \%$ reduction before annealing | Take $50 \%$ reduction before annealing |
| Annealing | $1250^{\circ} \mathrm{F}\left(676^{\circ} \mathrm{C}\right), 20$ to 30 minutes (use a fire coat for open annealing) | $1150^{\circ} \mathrm{F}\left(676^{\circ} \mathrm{C}\right), 20$ to 30 minutes (use and fire coat for open annealing) |
| Pickling | Ingots will need to be pickled to remove oxide | Ingots will need to be pickled to remove oxide |
| Cleaning | Scrub ingots clean before use | Scrub ingots clean before use |
| Soldering | Regular silver solder should be used | Regular silver solders should be used |
| Fire Coat | A fire coat should be applied | A fire coat should be applied |
| Solder Flux | Use plenty of flux for soldering | Use plenty of flux for soldering (Will not oxidize as heavily, but needs |

Disclaimer: Sterlium Plus is not suitable for Mokume processes and is not appropriate for reticulating sterling silver.

## DURSTON ROLLING MILLS

Durston is the foremost manufacturer of rolling mills throughout the world. They are recognized for their reliability, robust construction, high quality, and fine finish.

These are exactly the same as their standard models but without the extension rollers on the end. Excellent choice for users who will not use the extension rollers. Own the only top quality rolling mill at a great price.

An affordable line of mills with a great degree of versatility for producing strip and wire. The roll gap is calibrated to allow the greatest reduction per pass with ease of turning. One-piece cast iron housing for great strength with maintenance-free bearings. Large easy-to-read calibrated discs.


## Model F130 R

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight |
| :--- | :---: | ---: |
| $\mathbf{2 8 - 1 9 9 8}$ | $16^{\prime \prime} \times 9^{\prime \prime} \times 14^{\prime \prime}$ | 101 lbs |

- Roll Size: $130 \mathrm{~mm} \times 60 \mathrm{~mm}$ - Width of Flat: 130 mm
- Sheet Capacity: 7 mm
- Gear Ratio: 5:1



## Model MINI C8O

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight |
| :---: | :---: | ---: |
| $\mathbf{2 8 - 2 0 0 2}$ | $10 " \times 4 \frac{1}{2} \times 10^{\prime \prime}$ | 38 lbs |


| - Roll Size: $80 \mathrm{~mm} \times 45 \mathrm{~mm}$ | - Wire Capacity: $6.5-1 \mathrm{~mm}$ |
| :--- | :--- |
| - Sheet Capacity: 6 mm | - Number of Wire Grooves: 4 |
| - Width of Flat: 60 mm | - Gear Ratio: Direct |
|  | - Extension Rollers: Drive |



## Model MINI F80

| Order \# | $\mathbf{W} \times \mathrm{D} \times \mathrm{H}$ | Shipping Weight | 1+ |
| :---: | :---: | :---: | :---: |
| 28-2003 | $10^{\prime \prime} \times 41 / 2^{\prime \prime} \times 10^{\prime \prime}$ | 38 lbs | \$728.00 |
| - Roll Size | $\mathrm{m} \times 45 \mathrm{~mm}$ | - Gear Ratio: Direct |  |
| - Sheet Ca | : 6 mm | - Extension Rollers: Drive |  |
| - Width of Flat: 80 mm |  |  |  |

Model C100 RE

| Order \# | $\mathbf{W} \times \mathrm{D} \times \mathrm{H}$ | Shipping Weight | 1+ |
| :---: | :---: | :---: | :---: |
| 28-2004 | $14^{\prime \prime} \times 8^{\prime \prime} \times 12^{1 / 2} 2^{\prime \prime}$ | 76 lbs | \$1,095.00 |
| Roll S | $100 \mathrm{~mm} \times 50 \mathrm{~mm}$ | - Wire Capacity: 7-1 mm |  |
| - Sheet | acity: 6 mm | Number of Wire Grooves: 9 |  |
| Width | Fat: 70 mm | - Gear Ratio: 4:1 |  |

## Model C130 RE

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight | 1+ |
| :---: | :---: | :---: | :---: |
| 28-2005 | $16^{\prime \prime} \times 81 / 2^{\prime \prime} \times 14^{\prime \prime}$ | 105 lbs | \$1,336.00 |
| Roll | $130 \mathrm{~mm} \times 60 \mathrm{~mm}$ | - Wire Capacity: 8-1 mm |  |
| Shee | acity: 7 mm | Number of Wire Grooves: 11 |  |
| Widt | Fat: 80 mm | - Gear Ratio: 5:1 |  |



## Model DRM RF 100 RE

| Order \# W $\times \mathbf{D} \times \mathbf{H}$ | Shipping Weight | 1+ |
| :---: | :---: | :---: |
| 28-1992 $\quad 14^{\prime \prime} \times 8^{\prime \prime} \times 121 / 2^{\prime \prime}$ | 70 lbs | \$1,312.00 |
| Roll Size: $100 \mathrm{~mm} \times 50 \mathrm{~mm}$ | Wire Capacity: 6-2 mm |  |
| Sheet Capacity: 5.5 mm | Number of Wire Grooves: 9 |  |
| Width of Flat: 45 mm | - Gear Ratio: 4:1 |  |



## Model DRM 130 RE




## CABINET STAND

Suited to the Durston D2 130 and D4 158 manual rolling mills. The stand is drilled and tapped with appropriate holes. Bolts are supplied for the mill required. The stand has excellent storage space with two shelves and a locking flush door with two keys. The construction is very sturdy and made of 0.25 " plate steel. Finish is attractive metallic silver coated paint inside and out. The stand should be secured to floor using appropriate bolts.

## PEDESTAL STAND

Suited to the Durston Mini Mill, DRM 130, and DRM150 manual mills. The stand is drilled and tapped with appropriate holes. Bolts are supplied for the mill required. The stand should be secured to floor using appropriate bolts.

| Item | Order \# | Description | $\mathbf{W} \times \mathrm{D} \times \mathrm{H}$ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| D | 28-2007 | Cabinet Stand | $1313 / 16^{\prime \prime} \times 1313 / 16^{\prime \prime} \times 357 / 16^{\prime \prime}$ | 397.00 |
| E | 28-2008 | Pedestal | $11^{13 / 16 " 1} \times 1313 / 16^{\prime \prime} \times 33$ " | 277.00 |




Model Double D2 130


## DURSTON ROLLING MILLS

Durston bench-top power mills are the most sought after powers mills in the world. These mills have cast iron bases, cast iron gear boxes with powerful motors, and, of course, the standard one-piece cast iron mill frame incorporating our high quality steel rollers, which run on heavy duty roller bearings.

## Model 130 DSP

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight |
| :--- | :---: | ---: |
| $\mathbf{2 8 - 1 9 9 1}$ | $161 / 2^{\prime \prime} \times 81 / 2^{\prime \prime} \times 211 / 4^{\prime \prime}$ | 400 lbs |


| - Roll Size: $130 \mathrm{~mm} \times 65 \mathrm{~mm}$ | - Wire Capacity: $10-1 \mathrm{~mm}$ |
| :--- | :--- |
| - Sheet Capacity: 6 mm | - Number of Wire Grooves: 19 |
| - Width of Flat: 130 mm |  |

## Model DOUBLE D2 130

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: |
| $\mathbf{2 8 - 2 0 0 6}$ | $161 / 2^{\prime \prime} \times 81 / 2^{\prime \prime} \times 22 \frac{1}{4} 4^{\prime \prime}$ | 155 lbs | $\$ 2,250.00$ |

- Roll Size: $130 \mathrm{~mm} \times 60 \mathrm{~mm}$
- Width of Flat: 130 mm
- Sheet Capacity: 7 mm
- Gear Ratio: 7:1


Model FSM 160

FSM 160 FLOOR STANDING MILL
Available in three speed configurations. Fixed speed, variable speed, and computer control panel that offers more information such as roll speed, pressure and oil indicator, and work light.

- Forward and reverse
- Automatic lubrication to roll bearings
- 130 mill flat, 19 square grooves
- Powerful 4kw motor
- Heavy duty cast iron gear box
- Digital roll gap meter (optional)
- Work lights (optional) Requires special ordering and 8 week delivery. Shipping fees included for model FSM 160 Floor Standing Mill.

Model FSM 160

| Order \# | $\mathbf{W} \times \mathbf{D} \times \mathbf{H}$ | Shipping Weight | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: |
| $\mathbf{2 8 - 1 9 9 4}$ | $49 " \times 191 / 2^{\prime \prime} \times 581 / 4^{\prime \prime}$ | $1,345 \mathrm{lbs}$ | $\$ 19,950.00$ |

$\begin{array}{ll}\text { - Roll Size: } 160 \mathrm{~mm} \times 86 \mathrm{~mm} & \text { - Wire Capacity: } 1-9 \mathrm{~mm} \\ \text { - Sheet Capacity: } 25 \mathrm{~mm} & \text { - Number of Wire Grooves: } 19\end{array}$

## TUNGSTEN-CARBIDE DRAWPLATES

Tungsten-carbide inserts are permanently fixed in marked steel plate. Angle of reduction is made to exact specifications for the smoothest possible pull.

| Hole: <br> Item |  |  |  |  |  |  |  | Number <br> Order \# <br> of Holes |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{2 8 - 0 4 2 2}$ | $1 \mathrm{~mm}-0.26 \mathrm{~mm}$ | 24 | $\$ 46.71$ | $\$ 49.46$ | $\$ 54.95$ |  |  |  |  |  |  |  |
| B | $\mathbf{2 8 - 0 4 2 3}$ | $2.8 \mathrm{~mm}-0.26 \mathrm{~mm}$ | 39 | $\$ 54.40$ | $\$ 57.60$ | $\$ 64.00$ |  |  |  |  |  |  |  |
| C | $\mathbf{2 8 - 0 4 2 5}$ | $6 \mathrm{~mm}-2.3 \mathrm{~mm}$ | 24 | $\$ 72.89$ | $\$ 77.18$ | $\$ 85.75$ |  |  |  |  |  |  |  |

## TOOL-STEEL DRAWPLATES

Made of thick, high-grade tool steel with accurately machined and smoothly beveled holes. This allows wire to be drawn easily from larger holes to successively smaller holes to obtain the size and shape wire needed. Works on brass, copper, gold, silver, platinum, and soft steel wire. Plate is stamped with style identifying letter and hole sizes. Beeswax can be used as a lubricant.

| Item | Order \# | Hole: Largest-Smallest | Number of Holes | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 28-0440 | $2.94 \mathrm{~mm}-0.56 \mathrm{~mm}$ | 31 | \$66.26 | \$70.16 | \$77.95 |
| E | 28-0460 | $4.76 \mathrm{~mm}-2.38 \mathrm{~mm}$ | 30 | \$141.06 | \$149.35 | \$165.95 |
| F | 28-0472 | 3.97 mm - Filigree | 20 | \$80.75 | \$85.50 | \$95.00 |



B


C


D


E


K (Half-Round)

F


00 (Square)

## LOWELL PATTERN HAND VISE

Combination hand vise ideal for gripping small objects or for use as a small draw tong. Made of forged steel. Long, firm grip handle and serrated jaws. Made in Poland.

| Order \# | Length | Jaw Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 8 - 1 4 1 2}$ | $51 / 2 "$ | $1 / 2 "$ | $\$ 25.08$ | $\$ 26.55$ | $\$ 29.50$ |



## DRAW TONGS

Made of forged steel. Used to pull wire through drawplates.
A strong grip is attainable due to the serrated jaws.

| Item | Order \# | Description | Length | Origin | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G | $\mathbf{5 7 - 0 5 6 0}$ | Draw Tong | 8' $^{\prime \prime}$ | India | $\$ 20.00$ |
| H | $\mathbf{5 7 - 0 5 8 0}$ | Draw Tong | 10 | India | $\$ 26.00$ |



## DURSTON BENCH

This draw bench has a working length of 38", a 4:1 gear ratio, and can handle a maximum thickness of 10 mm wire. German draw tongs included.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{2 8 - 2 0 0 9}$ | Draw Bench | $22^{\prime \prime} \times 55^{\prime \prime} \times 39 "$ | $\$ 1,020.00$ |

PRECIOUS METAL HAND STAMPS
Made of hand-cut steel to stamp impressions on metal surfaces. Bent: $1 / 32^{\prime \prime}(0.8 \mathrm{~mm})^{1 / 45^{\prime \prime}}(0.6 \mathrm{~mm})$
Straight: $1 / 32^{\prime \prime}(0.8 \mathrm{~mm})^{1 / 45^{\prime \prime}}(0.6 \mathrm{~mm})$

| Order \# | Description | Metal | Type | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55-3335 | Palladium | $1 / 32^{\prime \prime}$ | Bent | \$20.15 | \$21.33 | \$23.70 |
| 55-3336 | Palladium | 1/32" | Straight | \$20.15 | \$21.33 | \$23.70 |
| 55-3230 | Platinum | $1 / 45^{\prime \prime}$ | Bent | \$22.14 | \$23.45 | \$26.05 |
| 55-2722 | 18kt | 1/32" | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-2723 | 18kt | $1 / 45^{\prime \prime}$ | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-2622 | 14kt | 1/32" | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-2623 | 14kt | $1 / 45^{\prime \prime}$ | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-2922 | 14kt | 1/32 ${ }^{1 /}$ | Straight | \$16.36 | \$17.33 | \$19.25 |
| 55-2923 | 14kt | $1 / 45^{\prime \prime}$ | Straight | \$16.36 | \$17.33 | \$19.25 |
| 55-2522 | 10kt | 1/32" | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-2523 | 10kt | $1 / 45^{\prime \prime}$ | Bent | \$16.36 | \$17.33 | \$19.25 |
| 55-3022 | Sterling | 1/32 ${ }^{1 /}$ | Bent | \$22.53 | \$23.85 | \$26.50 |
| 55-3023 | Sterling | $1 / 45$ " | Bent | \$22.53 | \$23.85 | \$26.50 |
| 55-3122 | Sterling | $1 / 32^{\prime \prime}$ | Straight | \$22.95 | \$24.30 | \$27.00 |
| 55-3123 | Sterling | $1 / 45^{\prime \prime}$ | Straight | \$22.95 | \$24.30 | \$27.00 |
| 55-3222 | Copyright - © | $1 / 32^{\prime \prime}$ | Bent | \$21.12 | \$22.37 | \$24.85 |
| 55-3223 | Copyright - © | $1 / 45{ }^{\prime \prime}$ | Bent | \$17.00 | \$18.00 | \$20.00 |
| 55-3322 | Copyright - © | $1 / 321$ | Straight | \$21.55 | \$22.82 | \$25.35 |



JEWELRY MARKING MACHINE
Perfect impressions and identification markings on all rings, charms, disks, or any flat pieces. Kit includes: spring action lever machine with automatic return to upright positions, six punches (one each bent and straight 10kt, 14kt, 18kt), and three nylon anvils. Wooden base has storage for spare parts.

| $\mathbf{O r d e r} \#$ | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 5 - 2 5 5 3}$ | Jewelry Marking Machine Kit | $\$ 363.42$ | $\$ 384.80$ | $\$ 427.55$ |
| $\mathbf{5 5 - 2 5 5 4}$ | Nylon Anvil | $\$ 3.57$ | $\$ 3.78$ | $\$ 4.20$ |
| $\mathbf{5 5 - 2 5 5 5}$ | 10kt Straight Punch | $\$ 36.30$ | $\$ 38.43$ | $\$ 42.70$ |
| $\mathbf{5 5 - 2 5 5 6}$ | 14kt Straight Punch | $\$ 36.30$ | $\$ 38.43$ | $\$ 42.70$ |
| $\mathbf{5 5 - 2 5 5 7}$ | 18kt Straight Punch | $\$ 36.30$ | $\$ 38.43$ | $\$ 42.70$ |
| $\mathbf{5 5 - 2 5 5 8}$ | 10kt Bent Punch | $\$ 42.16$ | $\$ 44.64$ | $\$ 49.60$ |
| $\mathbf{5 5 - 2 5 6 2}$ | Sterling Bent Punch | $\$ 53.38$ | $\$ 56.52$ | $\$ 62.80$ |
| $\mathbf{5 5 - 2 5 5 9}$ | 14kt Bent Punch | $\$ 42.16$ | $\$ 44.64$ | $\$ 49.60$ |
| $\mathbf{5 5 - 2 5 6 0}$ | 18kt Bent Punch | $\$ 42.16$ | $\$ 44.64$ | $\$ 49.60$ |
| $\mathbf{5 5 - 2 5 6 1}$ | Sterling Straight Punch | $\$ 82.41$ | $\$ 87.26$ | $\$ 96.95$ |



StAinless steel Jewelry marking pliers
Used to stamp precious metals with karat stamps using little pressure. Use on curved or flat surfaces. No set-up or hammering required. Stamp inside rings as small as size four. Made of durable stainless steel. Adjustable screw-locks stamp in place. Punches sold individually.

| $\mathbf{O r d e r} \#$ | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 2 4 0 0}$ | Marking Pliers | $51 / 2 "$ | $\$ 65.45$ | $\$ 69.30$ | $\$ 77.00$ |
| $\mathbf{4 6 - 2 4 1 0}$ | Replacement Nylon Anvil |  | $\$ 3.40$ | $\$ 3.60$ | $\$ 4.00$ |
| $\mathbf{5 5 - 2 4 0 1}$ | 10kt Punch |  | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |
| $\mathbf{5 5 - 2 4 0 2}$ | 14kt Punch | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |  |
| $\mathbf{5 5 - 2 4 0 3}$ | 18kt Punch | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |  |
| $\mathbf{5 5 - 2 4 0 7}$ | Sterling Silver Punch | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |  |

## 27-PIECE LETTER STAMP SET

Hardened steel stamps of the complete alphabet and a period come in a hardwood storage box. Made in the USA.

| Order \# | Impression | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 5 - 2 5 5 1}$ | $1 / 16$ inch $(1.6 \mathrm{~mm})$ | $23 / \mathbf{l}^{\prime \prime}$ | $\$ 50.15$ | $\$ 53.10$ | $\$ 59.00$ |
| $\mathbf{5 5 - 2 5 5 2}$ | $1 / 8$ inch $(0.8 \mathrm{~mm})$ | $23 / 8^{\prime \prime}$ | $\$ 51.51$ | $\$ 54.54$ | $\$ 60.60$ |

## STEEL STAMPS

All stamp diameters $1 / 4^{\prime \prime}$.
Stamp lengths $23 / 8^{\prime \prime}$.
A Character size: $1 / 16^{\prime \prime}$. Figures: 0-8 (Use 6 as 9)
B Character size: $3 / 32$ ". Figures: $0-8$ (Use 6 as 9 )
C Character size: $1 / 16^{\prime \prime}$. Figures: $A-Z$ and period mark
D Character size: $3 / 32^{\prime \prime}$. Figures: $A-Z$ and period mark

| Item | Order \# | Description | Assortment 0ty | Size | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 55-2540 | Numbers 0-8 | 9 | 1/16" | \$20.61 | \$21.83 | \$24.25 |
| B | 55-2541 | Numbers 0-8 | 9 | $3 / 32^{\prime \prime}$ | \$20.61 | \$21.83 | \$24.25 |
| C | 55-2542 | Letters A-Z | 27 | 1/18" | \$46.84 | \$49.59 | \$55.10 |
| D | 55-2543 | Letters A-Z | 27 | $3 / 32^{\prime \prime}$ | \$46.84 | \$49.59 | \$55.10 |

BRASS STAMPING ANVIL
Brass anvil with graduated sizes within specific shapes to prevent flat spotting while stamping. One side for women and one side for men's rings.

| $\mathbf{O r d e r} \#$ | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 5 - 3 3 4 0}$ | Brass Stamping Anvil | $11 / 4 " \times 3 " \times 3 / 4 "$ | $\$ 19.25$ | $\$ 20.39$ | $\$ 22.65$ |




## METRIC TAP AND DIE SET

Precision metric tap and die set consists of eight dies covering the range from 1 mm to 3 mm , Also included is a die holder, adjustable tap holder, eight sets of three right taps (total 24), and a fitted hardwood case. Made in Germany.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 5 - 2 0 0 2}$ | Metric Tap \& Die Set | $\$ 438.00$ |




DURSTON 23 HOLE DAPPING BLOCK
This dapping block has 23 half spheres in sizes $3 \mathrm{~mm}, 4 \mathrm{~mm}, 5 \mathrm{~mm}, 6 \mathrm{~mm}$, $7 \mathrm{~mm}, 8 \mathrm{~mm}, 9 \mathrm{~mm}, 10 \mathrm{~mm}, 11 \mathrm{~mm}, 12 \mathrm{~mm}, 13 \mathrm{~mm}, 14 \mathrm{~mm}, 15 \mathrm{~mm}, 16 \mathrm{~mm}$, $17 \mathrm{~mm}, 19 \mathrm{~mm}, 21 \mathrm{~mm}, 23 \mathrm{~mm}, 25 \mathrm{~mm}, 27 \mathrm{~mm}, 30 \mathrm{~mm}, 34 \mathrm{~mm}$, and 38 mm

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 5 8 1}$ | Dapping Block | $31 / 4 " \times 53 / 4^{\prime \prime} \times 11 / 4^{4}$ | $\$ 76.50$ | $\$ 81.00$ | $\$ 90.00$ |



DURSTON 14 DEPRESSION FORMING BLOCK
This forming block has 14 half spheres in sizes $5 \mathrm{~mm}, 6 \mathrm{~mm}, 7 \mathrm{~mm}, 8 \mathrm{~mm}$, $9 \mathrm{~mm}, 10 \mathrm{~mm}, 11 \mathrm{~mm}, 13 \mathrm{~mm}, 15 \mathrm{~mm}, 16 \mathrm{~mm}, 17 \mathrm{~mm}, 22 \mathrm{~mm}, 23 \mathrm{~mm}$, and 24 mm . There are also 8 half cut outs in sizes $5 \mathrm{~mm}, 6 \mathrm{~mm}, 8 \mathrm{~mm}, 9 \mathrm{~mm}$, $15 \mathrm{~mm}, 16 \mathrm{~mm}, 17.5 \mathrm{~mm}, 22 \mathrm{~mm}$, and 26 mm

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 5 8 0}$ | Forming Block | $21 / 2^{\prime \prime} \times 3^{3} / 4^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 96.90$ | $\$ 102.60$ | $\$ 114.00$ |



## LARGER HARDWOOD SHAPING BLOCK

Exceptional hardwood will hold up to heavy work without the risk of marring your metal surface. It features two round 5 " depressions, one is 23 mm deep and the other is 28 mm deep. Four U channel grooves run the length of two sides of the block.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 5 2}$ | Shaping Block | $6 " \times 6^{6} \times 2 \frac{1}{2 "}$ | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |



## BENDING BLOCK WITH NYLON FORMING ROLLER

This high-quality hardwood forming block is great for bending and forming without marring. Lighter weight and less expensive than the steel version, the large grooves consist of three half-round ( $11 / 4^{\prime \prime}, 1 \frac{1}{2 \prime \prime}$, $13 / 4^{\prime \prime}$ ) and two larger third-round ( $21 / 2^{\prime \prime}, 3^{1 / 4} 4^{\prime \prime}$ ) channels.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 4 4 4}$ | Bending Block | $17 / 8^{\prime \prime} \times 7 \times 23 / 8^{\prime \prime}$ | $\$ 37.40$ | $\$ 39.60$ | $\$ 44.00$ |



## WOOD DAPPING BLOCK AND PUNCHES

Handmade, hardwood block with six depressions, one on each side. Block measures $21 / 4^{\prime \prime}$ square. Includes two punches. Use block in combination with punches to shape lockets, cases, and remove dents.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 5 0}$ | Dapping Block with Punches | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |



NON-MARRING SHAPING BLOCK
These domed hardwood punches and wood block are perfect for non-marring dapping work. The wood block also has a 3" x 3 " flat steel surface. Each of the seven depressions are $1 / 2^{\prime \prime}$ deep and have the following diameters: $2^{1 / 4} 4^{\prime \prime}, 1^{3} / 4^{\prime \prime}, 1 \frac{1}{2} 2^{\prime \prime} 1 \frac{1}{4} 4^{\prime \prime}, 1$ ", $7 / 8^{\prime \prime}$, and $3 / 4^{\prime \prime}$. The punches are $33 / 4^{\prime \prime}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 5 4}$ | Shaping Block | $\$ 33.58$ | $\$ 35.55$ | $\$ 39.50$ |



## GRADUATED DAPPING BLOCK AND PUNCH SET

This large, double-sided hardwood block features 10 machined half-spheres, clearly marked with the disc size they accept ( $65 \mathrm{~mm}-16 \mathrm{~mm}$ ) and matching punches. Concave dimensions largest to smallest: $21 / 2^{\prime \prime}$ to 5/8" (65mm-16mm).

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 5 3}$ | Shaping Block | $4^{\prime \prime} \times \mathbf{7}^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 72.25$ | $\$ 76.50$ | $\$ 85.00$ |

## DAPPING DIES AND BLOCKS

Hardened steel design blocks are used to form hemispheric depressions on different metals. Grooved edges are used for shaping and bending rings, settings, bezels, and other items.

A and B. 17 Round depressions measuring up to $13 / 4$ " in size on a hardened steel square die.
C. 27 Round depressions measuring $1.5 \mathrm{~mm}-25 \mathrm{~mm}$. Used in conjunction with dapping punches to produce hemispheres.
D. 17 Round depressions - $2 \mathrm{~mm}, 3 \mathrm{~mm}, 3.5 \mathrm{~mm}, 4 \mathrm{~mm}, 4.5 \mathrm{~mm}, 5 \mathrm{~mm}$, $5.5 \mathrm{~mm}, 6 \mathrm{~mm}, 7.5 \mathrm{~mm}, 8 \mathrm{~mm}, 8.5 \mathrm{~mm}, 9 \mathrm{~mm}, 11 \mathrm{~mm}, 11.5 \mathrm{~mm}, 13 \mathrm{~mm}, 17 \mathrm{~mm}$, $20 \mathrm{~mm} ; 5$ Oval depressions $-12.5 \mathrm{~mm} \times 19.5 \mathrm{~mm}, 14.5 \mathrm{~mm} \times 19 \mathrm{~mm}, 15 \mathrm{~mm} \times$ $22 \mathrm{~mm}, 20 \mathrm{~mm} \times 27 \mathrm{~mm}, 18 \mathrm{~mm} \times 26.5 \mathrm{~mm}$
3 V-shaped grooves - (w x d) - $4 \mathrm{~mm} \times 1.5 \mathrm{~mm}, 5 \mathrm{~mm} \times 2 \mathrm{~mm}, 6 \mathrm{~mm} \times 3 \mathrm{~mm}$ 20 Half-Round grooves $-2 \mathrm{~mm} \times 1.5 \mathrm{~mm}, 3 \mathrm{~mm} \times 1.75 \mathrm{~mm}, 3 \mathrm{~mm} \times 1.25 \mathrm{~mm}$, $3 \mathrm{~mm} \times 1 \mathrm{~mm}, 3 \mathrm{~mm} \times 2 \mathrm{~mm}, 3 \mathrm{~mm} \times 1.5 \mathrm{~mm}, 5 \mathrm{~mm} \times 2 \mathrm{~mm}, 5 \mathrm{~mm} \times 2.25 \mathrm{~mm}$, $6 \mathrm{~mm} \times 2.5 \mathrm{~mm}, 6 \mathrm{~mm} \times 3 \mathrm{~mm}, 7 \mathrm{~mm} \times 3 \mathrm{~mm}, 8 \mathrm{~mm} \times 4 \mathrm{~mm}, 9 \mathrm{~mm} \times 3.5 \mathrm{~mm}$, $10 \mathrm{~mm} \times 4 \mathrm{~mm}, 12 \mathrm{~mm} \times 4 \mathrm{~mm}, 14 \mathrm{~mm} \times 5 \mathrm{~mm}, 17 \mathrm{~mm} \times 6 \mathrm{~mm}, 20 \mathrm{~mm} \times 7 \mathrm{~mm}$, $21 \mathrm{~mm} \times 7 \mathrm{~mm}, 24 \mathrm{~mm} \times 8 \mathrm{~mm}$
E. 5 Half-Round grooves $-71 \mathrm{~mm} \times 13 \mathrm{~mm}, 69 \mathrm{~mm} \times 20 \mathrm{~mm}$,
$45 \mathrm{~mm} \times 21 \mathrm{~mm}, 55 \mathrm{~mm} \times 26 \mathrm{~mm}, 35 \mathrm{~mm} \times 16 \mathrm{~mm}$

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{2 5 - 0 5 7 0}$ | 17 Depressions | $2^{1 / 2 \prime}$ | $\$ 40.76$ | $\$ 43.16$ | $\$ 47.95$ |
| B | $\mathbf{2 5 - 0 5 7 1}$ | 17 Depressions | $2^{\prime \prime}$ | $\$ 32.26$ | $\$ 34.16$ | $\$ 37.95$ |
| C | $\mathbf{2 5 - 0 5 5 0}$ | 27 Depressions | $2^{11 / 2} \times 51 / 2^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 84.32$ | $\$ 89.28$ | $\$ 99.20$ |
| D | $\mathbf{2 5 - 0 4 4 0}$ | 22 Depressions | $35 \mathrm{~mm} \times 220 \mathrm{~mm} \times 35 \mathrm{~mm}$ | $\$ 37.44$ | $\$ 39.65$ | $\$ 44.05$ |
| E | $\mathbf{2 5 - 0 4 4 5}$ | 5 Grooves | $60 \mathrm{~mm} \times 160 \mathrm{~mm} \times 60 \mathrm{~mm}$ | $\$ 66.30$ | $\$ 70.20$ | $\$ 78.00$ |



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A


B

FORMING BLOCKS
Six grooved sides offer a wide variety of unique shapes in many different sizes. Half-round, triangle, square, and rectangular shapes provide great forming versatility. Machined from high-grade tool steel. Hardened to 50 RC.

| Item |  | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 5 - 0 5 6 5}$ | Small Forming Block | $21 / 4^{4}$ | $\$ 76.80$ | $\$ 81.32$ | $\$ 90.35$ |  |
| B | $\mathbf{2 5 - 0 5 6 6}$ | Large Forming Block | $23 / 4^{4}$ | $\$ 73.44$ | $\$ 77.76$ | $\$ 86.40$ |  |



C


D


E


F

CUPOLA SETS
High quality dapping sets for the professional jeweler who demands the best. All pieces are hardened, ground, and highly polished for perfect results. All pieces fit into a unique plastic carrying tray.

| Item | Order \# | Description | Punches |  | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{2 5 - 1 2 3 7}$ | Large Cupola Set | 6 | $50 \mathrm{~mm}-80 \mathrm{~mm}$ | $\$ 262.57$ | $\$ 278.01$ | $\$ 308.90$ |  |
| D | $\mathbf{2 5 - 1 2 3 4}$ | Small Cupola Set | 3 | $50 \mathrm{~mm}-57 \mathrm{~mm}$ | $\$ 63.75$ | $\$ 67.50$ | $\$ 75.00$ |  |
| E | $\mathbf{2 5 - 1 2 3 5}$ | Medium Cupola Set | 3 | $57 \mathrm{~mm}-64 \mathrm{~mm}$ | $\$ 90.95$ | $\$ 96.30$ | $\$ 107.00$ |  |
| F | $\mathbf{2 5 - 1 2 3 6}$ | Large Cupola Set | 3 | $78 \mathrm{~mm}-85 \mathrm{~mm}$ | $\$ 119.00$ | $\$ 126.00$ | $\$ 140.00$ |  |



## DURSTON DAPPING SET

High quality dapping set for the professional jeweler who demands the best. All pieces are hardened, ground, and highly polished for perfect results. Comes with 24 punches ranging from 3 mm to $50 \mathrm{~mm}(3-15,17,19,21,23,25,28,32,36,40$, 45 , and 50 mm ). Matching 65 mm square dapping block with 26 full half-spheres all fit into a neatly molded base with carrying handle.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 3 3}$ | Large Set (24 punches) | $\$ 266.05$ | $\$ 281.70$ | $\$ 313.00$ |

DAPPING PUNCHES SET
These perfectly matched punches are 1 mm smaller than the cavity diameters in our dapping blocks. This was done in order to allow for the thickness of the metal being formed, so the punch diameter will match the inside diameter of the dome being formed. Comes with wooden base.
Set of 5 : $27.6 \mathrm{~mm}, 30.8 \mathrm{~mm}, 37.1 \mathrm{~mm}, 43.5 \mathrm{~mm}, 49.8 \mathrm{~mm}$

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 2 9}$ | Set of 5 Punches | $\$ 105.32$ | $\$ 111.51$ | $\$ 123.90$ |



## DAPPING PUNCHES SET

Precision-made, highly polished dapping punches are made from tool steel and hardened to 50 RC on both hit and work ends. Unique tempering method leaves the shank of the punch at mill hardness of 32 RC-36 RC. This allows the handle to absorb the shock and prevent crystallization of the metal.
Set of 30: $2.8 \mathrm{~mm}, 3.2 \mathrm{~mm}, 3.6 \mathrm{~mm}, 4.0 \mathrm{~mm}, 5.6 \mathrm{~mm}, 6.4 \mathrm{~mm}, 7.1 \mathrm{~mm}, 7.9 \mathrm{~mm}$, $9.5 \mathrm{~mm}, 10.3 \mathrm{~mm}, 11.1 \mathrm{~mm}, 11.9 \mathrm{~mm}, 12.7 \mathrm{~mm}, 14.3 \mathrm{~mm}, 15.1 \mathrm{~mm}, 15.9 \mathrm{~mm}$, $17.5 \mathrm{~mm}, 18.3 \mathrm{~mm}, 19.1 \mathrm{~mm}, 19.8 \mathrm{~mm}, 20.6 \mathrm{~mm}, 22.2 \mathrm{~mm}, 23.0 \mathrm{~mm}, 24.6 \mathrm{~mm}$, $25.4 \mathrm{~mm}, 28.6 \mathrm{~mm}, 31.8 \mathrm{~mm}, 38.1 \mathrm{~mm}, 44.5 \mathrm{~mm}$, and 50.8 mm

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 2 8}$ | Set of 30 Punches | $\$ 186.49$ | $\$ 197.46$ | $\$ 219.40$ |



## DAPPING CUTTERS SET

Precision cutting punches provide you with fabrication and design versatility. Lightly hit the punch to create a surface texture in a variety of designs. The punch can be used to cut soft metals up to 28 gauge. The sharp milled edges will produce a sharp and clean cut.
Set of 22: $2.8 \mathrm{~mm}, 3.2 \mathrm{~mm}, 3.6 \mathrm{~mm}, 4.0 \mathrm{~mm}, 5.6 \mathrm{~mm}, 6.4 \mathrm{~mm}, 7.1 \mathrm{~mm}, 7.9 \mathrm{~mm}$, $9.5 \mathrm{~mm}, 10.3 \mathrm{~mm}, 11.1 \mathrm{~mm}$. $11.9 \mathrm{~mm}, 12.7 \mathrm{~mm}, 14.3 \mathrm{~mm}, 15.1 \mathrm{~mm}, 15.9 \mathrm{~mm}$, $17.5 \mathrm{~mm}, 18.3 \mathrm{~mm}, 19.1 \mathrm{~mm}, 19.8 \mathrm{~mm}, 20.6 \mathrm{~mm}$, and 22.2 mm

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 3 0}$ | Set of 22 Cutters | $\$ 116.03$ | $\$ 122.85$ | $\$ 136.50$ |



## DELUXE DAPPING SET

This dapping set includes a 2" dapping block with 18 depressions and 24 dapping punches. Punches range in size from $9 / 64$ "to 1 " and are composed of case-hardened steel for years of excellent performance. Also included is a 2" dapping block and a wooden stand to keep it all organized.
Features:

- Wood stand
- 2" dapping block with 18 depressions
- 24 dapping punches
- Case-hardened
- Punch sizes: $1^{\prime \prime}, 15 / 16^{\prime \prime}, 7 / 8^{\prime \prime}, 13 / 16^{\prime \prime}, 25 / 32^{\prime \prime}, 3 / 4^{\prime \prime}, 23 / 32^{\prime \prime},{ }^{11 / 16 ", ~ 5 / 8 ", ~}{ }^{19 / 32^{\prime \prime} \text {, }}$
 5/32", 7/64", 1/8", 9/64"
- Depression sizes: 35, 31, 28, 25, 21, 20, 19, 17, 15, 14, 12, 11, 9, 8, 6, 5, and two 3 mm

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 5 7 5}$ | Dapping Set | $41 / 2 " \times 8$ " $\times 51 / 2^{\prime \prime}$ | $\$ 70.64$ | $\$ 74.79$ | $\$ 83.10$ |

## FLAT DAPPING SET WITH BLOCK

Set includes high-grade, hardened steel with 14 hemispherical depressions in two rows. Graded in $1 / 16^{\prime \prime}$ increments from $1 / 8^{\prime \prime}$ to $7 / 8^{\prime \prime}$ plus 1 " and $11^{\prime \prime}$ matching punches. Block measures $51 / 8^{\prime \prime} \times 2 \frac{1}{2} 2^{\prime \prime} \times 3 / 4^{\prime \prime}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 0 5 7 3}$ | Flat Dapping Set with Block | $\$ 74.93$ | $\$ 79.33$ | $\$ 88.15$ |

BEZEL BLOCKS \& PUNCHES
Bezel blocks and punches used to form various shapes of conical bezels. Made from a hardened, tempered steel. Made in Italy.

| Item |  | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 5 - 0 6 0 0}$ | Oval Bezel Block | $\$ 165.75$ | $\$ 175.50$ | $\$ 195.00$ |  |
| B | $\mathbf{2 5 - 0 6 0 2}$ | Round Bezel Block | $\$ 106.25$ | $\$ 112.50$ | $\$ 125.00$ |  |



PROFESSIONAL FORMING SET
The set includes a forming block and has six grooved sides. Half-round, triangle, square, and rectangular shapes. Machined high groove steel.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 4 1}$ | 26 -Piece Professional Forming Set | $\$ 317.39$ | $\$ 336.06$ | $\$ 373.40$ |



## DURSTON BENDING BLOCK SET

A highly polished hardened steel bending block for forging and bending. The block includes a total of 15 half rounds in sizes $1 \mathrm{~mm}, 2 \mathrm{~mm}, 3 \mathrm{~mm}, 4 \mathrm{~mm}$, $5 \mathrm{~mm}, 6 \mathrm{~mm}, 7 \mathrm{~mm}, 8 \mathrm{~mm}, 9 \mathrm{~mm}, 10,12 \mathrm{~mm}$, and 16 mm . Also uniquely includes 10 holes in the side in sizes $10 \mathrm{~mm}, 9 \mathrm{~mm}, 8 \mathrm{~mm}, 7 \mathrm{~mm}, 6 \mathrm{~mm}, 5 \mathrm{~mm}, 4 \mathrm{~mm}$, $3 \mathrm{~mm}, 2 \mathrm{~mm}$, and 1 mm .

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 4 0}$ | Bending Block Set | $\$ 165.75$ | $\$ 175.50$ | $\$ 195.00$ |



## DURSTON DAPPING CUTTER/ TEXTURING SET

These dapping cutters are used to make creative designs. The sizes include $3 \mathrm{~mm}, 4 \mathrm{~mm}, 5 \mathrm{~mm}, 6 \mathrm{~mm}, 7 \mathrm{~mm}, 8 \mathrm{~mm}, 9 \mathrm{~mm}, 10 \mathrm{~mm}, 11 \mathrm{~mm}, 12 \mathrm{~mm}, 13 \mathrm{~mm}, 14 \mathrm{~mm}$, $15 \mathrm{~mm}, 17 \mathrm{~mm}, 19 \mathrm{~mm}$, and 20 mm .

| Order \# | Description | 12+ | 6+ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 2 4 1}$ | Dapping Cutter/ Texturing Set | $\$ 111.56$ | $\$ 118.13$ | $\$ 131.25$ |

## Plating Units

These new plating units are made in Italy to our specifications. Built for small or medium-sized operations, they are affordable and easy enough for a beginner to operate. Use them during finishing, sampling, and repair. Choose from the five-station unit, two-station unit, or the pen plater. Each is made of stainless steel with beakers. These units feature digital temperature control, a timer, and automatic shut off.

## PEN PLATING UNIT

A. This pen plating unit is a safe contained complete pen plating system. It comes complete with 3 plating beakers, digital controller, sensor thermocouple, and anode.

## TWO BEAKER RHODIUM PLATING UNIT

B. This 2 beaker plating unit is a self contained complete plating system. It comes complete with $2-600 \mathrm{ml}$ beakers, 1 heating element, digital controller, sensor thermocouple, digital timer, and anode. It features a stainless steel body and has a cover for the beakers when not in use.

FIVE BEAKER RHODIUM PLATING UNIT
C. This 5 beaker plating unit is a self contained complete plating system. It comes complete with $5-600 \mathrm{ml}$ beakers, 2 heating elements, digital controller, sensor thermocouple, digital timer, and anodes. It features a stainless steel body and has a cover for the beakers when not in use.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{4 5 - 4 0 2 0}$ | 110 V Pen Plating Unit | $\$ 575.00$ |
| B | $\mathbf{4 5 - 4 0 2 0}$ | 600 ml 2 Beaker Plating Unit, 1 Heater | $\$ 650.00$ |
| C | $\mathbf{4 5 - 4 0 2 0}$ | 600 ml 5 Beaker Plating Unit, 2 Heater | $\$ 995.00$ |



## ACCESSORIES

| Item |  | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 +}$ |  |  |  |  |  |
| D | $\mathbf{4 5 - 4 0 2 1}$ | Digital Controller | $\$ 67.96$ | $\$ 71.96$ | $\$ 79.95$ |
| E | $\mathbf{4 5 - 4 0 2 3}$ | Digital Timer | $\$ 67.96$ | $\$ 71.96$ | $\$ 79.95$ |
| F | $\mathbf{4 5 - 4 0 1 9}$ | Heating Element Complete | $\$ 54.36$ | $\$ 57.56$ | $\$ 63.95$ |
| G | $\mathbf{4 5 - 4 0 1 9}$ | Heating Element | $\$ 15.26$ | $\$ 16.16$ | $\$ 17.95$ |
| H | $\mathbf{4 5 - 0 3 2 7}$ | Titanium Anode | $\$ 47.56$ | $\$ 50.36$ | $\$ 55.95$ |
| J | $\mathbf{4 5 - 0 3 2 7}$ | Stainless Steel Anode | $\$ 19.51$ | $\$ 20.66$ | $\$ 22.95$ |
| K | $\mathbf{4 5 - 4 0 5 7}$ | White Felt Bullet Tips (Pack of 10) | $\$ 3.24$ | $\$ 3.65$ | $\$ 4.05$ |
| L | $\mathbf{4 5 - 4 0 5 8}$ | Fine-Point Fiber Tips (Pack of 3) | $\$ 2.12$ | $\$ 2.21$ | $\$ 2.30$ |
| M | $\mathbf{4 5 - 6 4 0 9}$ | 100ml Glass Beaker | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |
|  | $\mathbf{4 5 - 6 4 0 9}$ | 250ml Glass Beaker | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |
|  | $\mathbf{4 5 - 6 4 0 9}$ | 400ml Glass Beaker | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |




## QUATRO RHODIUM HOOD

- Eliminates odor, vapors, and particulate matter migrating throughout the workplace
- Illuminated work area
- Small footprint friendly
- Can operate 24/7, allowing beakers to be left inside contained area
- Designed for quiet operation
- Can be ducted to the outside

| Order\# | Description | Assortment 0ty |
| :---: | :--- | ---: |
| 47-6010 | Fume Hood, $29 \mathrm{~W} \mathrm{~W}^{\prime \prime} \times 381 / 2 \mathrm{H}$ " $\times 20 \mathrm{D}$ | 1+ |

REPLACEMENT FLLTERS

| $\mathbf{4 7 - 4 0 9 0}$ | BX Dust Filter | 1 | $\$ 9.95$ |
| :--- | :--- | :--- | ---: |
| 47-4216 | HEPA Filter | 1 | $\$ 137.70$ |
| 47-4091 | Odor Cartridge Filter | 1 | $\$ 149.00$ |
| 47-4093 | Odor Filter F1 Rhodium Plating | 1 | $\$ 175.00$ |
| $\mathbf{4 7 - 6 0 1 1}$ | Filter Kit (all 4 filters) | 4 | $\$ 316.15$ |



Important! Remove wax elimination tray from the furnace after wax is melted out of flasks. Residue from burnt wax will greatly shorten life of heating elements and/or cause damage to the furnace.


QUATRO DUCTLESS FUME HOOD DHF1000-B FOR RHODIUM
Capture odors via the Quatro Ductless Fume Hood and recirculate fresh air back into the room. Ideal for shops where it is difficult to access an outside wall, or you are not allowed to drill through an outside wall, or it is too costly to install duct work on the roof. Engineered to effectively work with the removal of plating fumes. Three-stage filtering process with maintenancefriendly design. Hood and stand sold separately.

- Overall Dimensions: 28" W x 23 " D x 45" H
- Stand Dimensions: $22^{1} / 2^{\prime \prime}$ W $\times 25^{\prime \prime} \mathrm{H} \times 12^{\prime \prime} \mathrm{D}$
- Intake hood: 28" W x 26" H x 23" D
- Weight: Operating 50 lbs
- Voltage: $115 \mathrm{~V} / 60 \mathrm{~Hz}, 1 \mathrm{amp}$


| Item | Order \# | Description | Assortment 0ty |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{4 7 - 3 0 8 5}$ | Ductless Fume Hood | $\mathbf{1 +}$ |
| B | $\mathbf{4 7 - 4 1 0 1}$ | Counter Stand | $\$ 1,164.00$ |
| REPLACEMENT FILTERS | $\$ 275.80$ |  |  |
|  |  |  |  |


| $\mathbf{4 7 - 4 0 8 6}$ | Dust Filters | 8 | $\$ 78.45$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 0 8 7}$ | \#1 Odor Filter | 1 | $\$ 159.00$ |
| $\mathbf{4 7 - 4 0 9 2}$ | Odor Filter Refill | 2 | $\$ 122.00$ |
| $\mathbf{4 7 - 3 0 8 8}$ | Odor Neutralizing Container and Filter | 1 | $\$ 200.55$ |
| $\mathbf{4 7 - 4 0 6 9}$ | Odor Filter Refill Only | 5 | $\$ 179.30$ |
| $\mathbf{4 7 - 3 0 8 7}$ | HEPA Filter | 1 | $\$ 128.00$ |



## RHODIUM PLATING KIT

Premium Rhodium Plating Kit is comprised of high quality components. This kit was created with the bench jeweler in mind. Durable items that will stand the test of time and can be depended on for years to come. Perfect for the bench jeweler looking to set up a rhodium plating section or for the jeweler looking to upgrade. Kit contains:

- 10 amp rectifier (45-4030) - Activator (45-2040)
- An immersion thermometer (45-6420) - Three 600ml Pyrex beakers (45-6400)
- Platinized titanium anode (45-0321) - ElectroCleaner (45-2020)
- A double burner (45-7120) - Three lip covers (45-6401)
- Stainless steel anode (45-0326)

| Order\# | Description | $\mathbf{1 +}$ |
| :---: | :--- | ---: |
| $45-0150$ | Rhodium Plating Kit | $\$ 580.00$ |

## RECTIFIER

Features industrial-grade, heavy-duty high-output transformers, oversized heat sinks, built-in cooling fan to prevent overheating, and an output current that is $99 \%$ filtered to ensure maximum and repeatable results. Insulated lead and clamp set. Adjustable voltage from 0-13v.

| Order \# | Description | Amp | 1+ |
| :--- | :--- | :---: | :---: |
| $\mathbf{4 5 - 4 0 4 4}$ | Rectifier with Leads | 25 amp | $\$ 356.40$ |



## DIGITAL RECTIFIER

Features dual voltage for use anywhere in the world, control to the hundredth (.01) of a volt and amp., $99 \%$ filtration, self-restoring internal short protection, less than $1 \%$ ripple in voltage output that provides a superior plated surface, and small footprint takes up less space on the bench. Comes with a set of lead wires with alligator clips.

| Order \# | Description | Amp | 1+ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 5 - 4 0 2 7}$ | Digital Rectifier | 10 amp | $\$ 389.95$ |
| $\mathbf{4 5 - 4 0 2 8}$ | Digital Rectifier | 25 amp | $\$ 398.95$ |



Find added video content on Stuller.com.


PLATING RECTIFIER
Precision built in the USA, continuous-duty, solid-state electronic units with a range of power to handle all plating needs. Works by means of the powerstat control to produce desired voltage. All units have pilot lights and both DC ampmeter and voltmeter for measuring current under load. All units come with a set of lead wires with alligator clamps and terminal lugs. Specification for 10A:

- 0 to 10 amps output, continuous duty - 0 to 10 volts DC output
- Runs plating baths up to 1 gallon (3.81) except for rhodium, which is 2 quarts (1.91)
- Steel cabinet measures $13^{\prime \prime} \mathrm{W} \times 8^{\prime \prime} \mathrm{H} \times 81 / 2^{\prime \prime} \mathrm{D}(330 \mathrm{~mm} \times 203 \mathrm{~mm} \times 216 \mathrm{~mm})$

| Order \# <br> 45-4030 | Description | 10A Plating Rectifier |
| :--- | :--- | ---: |
| 45-4037 | 10A Terminal Plating Lead | $\$ 389.95$ |



## MIXER AND TEMPERATURE CONTROLLER

Keeps the magnetic mixer and temperature controlled heat-plating solutions evenly throughout by constantly stirring the solution. This set solves the problem of inconsistent plating due to thermo climate. The magnetic mixer and temperature controller are sold as a kit, but can be used separately with different applications. Features dual voltage for use anywhere in the world, speed control for agitation, a small footprint takes up less space on your work bench, a sensor and heater in solution that provide far superior temperature control, Fahrenheit or Celsius readout, and a faceplate of thermal controller that changes from blue to green when the desired temperature is reached. Beaker sold separately.

| Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :---: |
| $\mathbf{2 8 - 2 0 4 2}$ | Mixer with Temperature Controller | $\$ 515.00$ |



## HOT PLATE

Three-ring tubular burners and infinite control switch. Unit has chrome top. 120 V AC with three-prong grounded cord. Shipping weight 6 lbs .

- Single burner measures $81 / 2^{\prime \prime} \times 81 / 2^{\prime \prime} \times 31 / 4^{\prime \prime}$ - Dual burner measures $17^{\prime \prime} \times 8 \frac{1}{2 \prime} \times 31 / 4^{\prime \prime}$

| Item | Order\# | Description | Amps | Watts | 1+ |
| :---: | ---: | :--- | :--- | :--- | :--- |
| A | 45-7119 | Single Burner | 6 amps | 700 watts | $\$ 56.05$ |
| B | $\mathbf{4 5 - 7 1 2 0}$ | Double Burner | 12 amps | 1400 watts | $\$ 95.35$ |




GLASS BEAKER

- Low-expansion borosilicate 3.3 glass
- Designed to be heat-resistant and non-conductive
- Heavy and uniform wall thickness
- Easy pour spouts and white printed graduation and marking area

| Item | Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 5 - 6 4 1 2}$ | 30 ml | $\$ 2.80$ | $\$ 3.20$ | $\$ 4.00$ |
| B | $45-6412$ | 250 ml | $\$ 3.15$ | $\$ 3.60$ | $\$ 4.50$ |
| C | $45-6412$ | 600 ml | $\$ 6.30$ | $\$ 7.20$ | $\$ 9.00$ |
| D | $45-6412$ | 1000 ml | $\$ 8.65$ | $\$ 9.88$ | $\$ 12.35$ |
| E | $45-6412$ | 1200 ml | $\$ 10.22$ | $\$ 11.68$ | $\$ 14.60$ |

These beakers are designed to be non-conductive and heat-resistant. Beakers are used to heat solutions during plating. To avoid spillage, beaker covers are available. Covers sold separately.

| Item | Order \# | Description | Container Volume | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 45-6411 | Beaker | 250 ml | \$5.44 | \$5.76 | \$6.40 |
| G | 45-6400 | Beaker | 600 ml | \$10.30 | \$10.75 | \$11.20 |
| H | 45-6410 | Beaker | 1000 ml | \$19.18 | \$20.02 | \$20.85 |
|  | 45-6401 | Cover (for 600 ml ) |  | \$5.06 | \$5.36 | \$5.95 |
|  | 45-6405 | Cover (for 1000 ml ) |  | \$5.47 | \$5.71 | \$5.95 |



STAINLESS STEEL BEAKERS
Made of all stainless steel, these beakers are perfect for holding electrocleaner or used in lieu of a stainless steel anode when a solution requires one. To avoid spillage, beaker covers are available. Covers sold separately.

| Item | Order \# | Description Container Volume | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| J | $\mathbf{4 5 - 6 4 0 2}$ | Beaker | 600 ml | $\$ 51.57$ | $\$ 53.81$ | $\$ 56.05$ |
| K | $\mathbf{4 5 - 6 4 0 4}$ | Beaker | 1200 ml | $\$ 72.40$ | $\$ 75.55$ | $\$ 78.70$ |
|  | $\mathbf{4 5 - 6 4 0 1}$ | Cover (for 600 ml ) | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |  |
|  | $\mathbf{4 5 - 6 4 0 5}$ | Cover (for 1200 ml ) | $\$ 5.47$ | $\$ 5.71$ | $\$ 5.95$ |  |



## PLATING ANODES

Anodes are used for the purpose of introducing electrical current and/or replenishing the metal ions in the plating bath. The stems of all anodes may be bent to hang on the edge of the beakers. There are two types of anodes: Soluble - Copper, nickel, and silver anodes dissolve into the bath, replacing metal ions as they are deposited onto the work piece during plating. Inert - Our stainless steel and platinum-clad anodes do not dissolve in the plating bath. Prices on anodes will fluctuate due to metal market prices.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{L}$ | $\mathbf{4 5 - 0 3 2 0}$ | Platinized Titanium | $1^{\prime \prime} \times 1014^{\prime \prime}$ | $\$ 50.69$ | $\$ 52.90$ | $\$ 55.10$ |
| M | 45-0321 | Platinized Titanium | $1^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 36.04$ | $\$ 38.16$ | $\$ 42.40$ |
| N | $\mathbf{4 5 - 0 3 2 3}$ | Platinized Titanium | $2^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 52.36$ | $\$ 55.44$ | $\$ 61.60$ |
| P | $\mathbf{4 5 - 0 3 2 2}$ | Stainless Steel 304 | $1^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 4.55$ | $\$ 4.75$ | $\$ 4.95$ |
| 0 | $\mathbf{4 5 - 0 3 2 4}$ | Copper | $1^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 4.19$ | $\$ 4.37$ | $\$ 4.55$ |
| R | $\mathbf{4 5 - 0 3 2 6}$ | Stainless Steel | $1^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 5.84$ | $\$ 6.10$ | $\$ 6.35$ |
| S | $\mathbf{4 5 - 0 3 3 0}$ | Nickel | $1^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 5.98$ | $\$ 6.24$ | $\$ 6.50$ |
| T | $\mathbf{4 5 - 0 3 3 2}$ | Fine Silver | $1^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 68.31$ | $\$ 71.28$ | $\$ 74.25$ |
| U | $\mathbf{4 5 - 0 3 3 4}$ | $24 k t$ Gold | $3^{\prime \prime} \times 1^{\prime \prime}$ | $\$ 136.62$ | $\$ 142.56$ | $\$ 148.50$ |

## SAMSON PEN PLATER

Heavy-duty, high-quality pen platers built for day-in, day-out use. These two amp pen platers employ the latest in technology for dependable results. Available in three models. One-year factory warranty. Made in the USA.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 5 - 4 0 0 0}$ | Economy Pen Plater | $\$ 101.66$ | $\$ 107.64$ | $\$ 119.60$ |
| B | $\mathbf{4 5 - 4 0 0 1}$ | Standard Pen Plater | $\$ 169.96$ | $\$ 179.96$ | $\$ 199.95$ |
| C | $\mathbf{4 5 - 4 0 0 2}$ | Deluxe Pen Plater | $\$ 237.83$ | $\$ 251.82$ | $\$ 279.80$ |
| REPLACEMENT PARTS |  |  |  |  |  |
| D | $\mathbf{4 5 - 4 0 0 6}$ | Red pen with 1/8" Fiber Tip | $\$ 36.55$ | $\$ 38.70$ | $\$ 43.00$ |
| D | $\mathbf{4 5 - 4 0 0 6}$ | Red Pen with $1 / 16^{\prime \prime}$ Male Fiber | $\$ 36.00$ | $\$ 38.12$ | $\$ 42.35$ |
| E | $\mathbf{4 5 - 4 0 0 7}$ | Black Lead with Clip | $\$ 15.94$ | $\$ 16.88$ | $\$ 18.75$ |
| F | $\mathbf{4 5 - 4 0 0 5}$ | Jar | $\$ 4.51$ | $\$ 4.77$ | $\$ 5.30$ |
| REPLACEMENT TIPS |  |  |  |  |  |
| G | $\mathbf{4 5 - 4 0 5 7}$ | Regular Fiber Tips (Pack of 5) | $\$ 1.98$ | $\$ 2.06$ | $\$ 2.15$ |
| H | $\mathbf{4 5 - 4 0 5 8}$ | Fine-Point Fiber Tips (Pack of 3) | $\$ 2.12$ | $\$ 2.21$ | $\$ 2.30$ |



## COMPACT PEN PLATER

This compact pen plater does an excellent job and will fill the void for the occasional user of a pen plater. The compact pen plater includes the plating unit, power supply, grounding wire, clip, pen with $1 / 8^{\prime \prime}$ tip, and instructions.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{4 5 - 4 0 4 0}$ | Compact Pen Plater | $\$ 48.62$ | $\$ 51.48$ | $\$ 57.20$ |



## PLATEMATE DISPOSABLE PEN PLATER

This is the easiest pen plater to use for gold or rhodium. It is small and lightweight so it can be used virtually anywhere. No need for a rectifier, the power source is a battery. Just add your gold or rhodium pen plating solution and you are ready to plate. Each pen will plate up to 90 minutes of continuous plating.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{4 5 - 4 1 0 0}$ | Disposable Pen Plater | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |



## EAR POST PROTECTORS

Silicon rubber sleeves to protect ear posts when plating, tumbling, or setting. Excellent for use on surgical steel, gold-filled, karat gold, and sterling silver posts.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 45-0500 | Earring Post Protectors | $1 / 2 "$ | $\$ 3.44$ | $\$ 3.65$ | $\$ 4.05$ |
| $\mathbf{4 5 - 0 5 0 1}$ | Earring Post Protectors | $5 / 8^{\prime \prime}$ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |




THE WIZARD ${ }^{\circledR}$ DISPOSABLE PEN PLATER
The next generation disposable pen plater is here. A new, sleek, ergonomic stainless steel body, and easily replaceable tips provide 6 volts capacity with no knobs to adjust. This battery operated, completely portable pen plater is great for touch ups and will run for up to an hour of continuous plating.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 5 - 4 0 7 0}$ | Wizard Disposable Pen Plater | $\$ 50.15$ | $\$ 53.10$ | $\$ 59.00$ |

## DELUXE PLATING PEN

- Easy to hold Pen - Titanium head with platinum plating for improved conductivity with the tip. - Flexible wire conductor and insulation on the 36 inch leads. - Replaceable tip - Positive contact pin connector fastens securely with the power source. - Protective cap over the tip for storage. - Attractive appearance continues over time and usage. These characteristics make for easy plating in hard-to-reach areas, development of graphics $\&$ designs, touch ups, repairs and more requires rectifier.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 45-4069 | Deluxe Plating Pen | $\$ 75.65$ | $\$ 80.10$ | $\$ 89.00$ |



DIGITAL PEN PLATING SYSTEM

- Precise digital voltage regulator
- Dual voltage, $115 \mathrm{~V}-60 \mathrm{~Hz}, 220 \mathrm{~V}-50 \mathrm{~Hz}$
- Includes three plating pens, three jars, nine felt tips,
three bullets, chisel, $x$-fine

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 5 - 4 0 6 3}$ | 3 Yellow Felt-Tip Plating Pen | $\$ 32.00$ | $\$ 33.89$ | $\$ 37.65$ |

WAX PEN REPLACEMENT TIPS

| B | $\mathbf{4 5 - 4 0 6 7}$ | Chisel (Pack of 10) | $\$ 3.15$ | $\$ 3.33$ | $\$ 3.70$ |
| :---: | :---: | :--- | :--- | :--- | :--- |
| C | $\mathbf{4 5 - 4 0 6 8}$ | Extra-Fine (Pack of 10) | $\$ 3.61$ | $\$ 3.83$ | $\$ 4.25$ |



## DIGITAL PLATING SYSTEM

The Neon Digital Pen Plater delivers precise and stable voltage output from 1.2 to 17.6 volts for optimum plating results. LED illumination helps to keep solutions matched with proper pen. Plating pens are designed for this unit only. Includes:

| - One plating pen | - Three felt tips |
| :--- | :--- |
| - Three containers | -115 volt adaptor |


| Order\# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| 45-4061 | Pen Plating System | $\$ 169.15$ | $\$ 179.10$ | $\$ 199.00$ |



## GREEN STOP-OFF PEN

The most effective means to prevent solder flow. This product has been used by Stuller's own assembly department for many years. Test on a piece of paper before you solder. Shake well then use like a felt-tip marker to mask the areas where you do not want the solder to flow. Use the ultrasonic for cleaning after the solder job is complete.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 3 9}$ | Green Stop-Off Pen | $\$ 8.63$ | $\$ 9.14$ | $\$ 10.15$ |

## COPPER PLATING WIRE

| Order \# | Description | Wire <br> Gauge | Unit <br> Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 3 - 6 4 2 1}$ | Plating Wire | 18 | $40 z$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |
| $\mathbf{4 3 - 6 4 2 3}$ | Plating Wire | 20 | $40 z$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |
| $\mathbf{4 3 - 6 4 2 2}$ | Plating Wire | 21 | $10 z$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |
| $\mathbf{4 3 - 6 4 2 4}$ | Plating Wire | 22 | $40 z$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |



BRASS PLATING WIRE
All-purpose wire for plating.

| Order \# | Description | Wire Gauge | Unit Weight | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43-5120 | Brass Plating Wire | 20 | 402 | \$10.63 | \$11.09 | \$11.55 |
| 43-5121 | Brass Plating Wire | 18 | 402 | \$9.82 | \$10.40 | \$11.55 |
| 43-5122 | Brass Plating Wire | 22 | 402 | \$9.82 | \$10.40 | \$11.55 |

PLATING RACKS
Well designed in rows with numerous hooks, these racks are made of heavygauge, poly-coated copper for protection when immersed in plating baths.

| Item | Order\# | Diameter | Rows | Hooks | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 5 - 0 4 0 0}$ | $2^{\prime \prime}$ | 1 | 8 | $\$ 28.69$ | $\$ 30.38$ | $\$ 33.75$ |
| B | $45-0402$ | $3^{\prime \prime}$ | 1 | 12 | $\$ 26.39$ | $\$ 27.95$ | $\$ 31.05$ |
| C | $45-0403$ | $3^{\prime \prime}$ | 2 | 24 | $\$ 41.06$ | $\$ 43.47$ | $\$ 48.30$ |



RHODIUM TESTER
Quickly and easily test your rhodium plating solution. Know precisely when to add rhodium replenisher.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 6 - 7 6 0 7}$ | Rhodium Tester | $\$ 103.62$ | $\$ 109.71$ | $\$ 121.90$ |



## RHODIUM CARBON TREATMENT KIT

Excellent for removing organic impurities that cause rhodium plating problems. Easy-to-follow instructions to ensure effective use.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| D | 45-4160 | Carbon Treatment Kit | $\$ 76.87$ | $\$ 80.21$ | $\$ 83.55$ |
| REPLACEMENT PARTS |  |  |  |  |  |
|  | $\mathbf{4 5 - 4 1 6 1}$ | Glass Stirring Rod |  |  |  |
|  | $\mathbf{4 5 - 4 1 6 2}$ | Activated Carbon Treatment | $\$ 13.82$ | $\$ 8.16$ | $\$ 8.50$ |
| E | $\mathbf{4 5 - 4 1 6 3}$ | Filter Paper 40 cm (10 Sheets) | $\$ 16.05$ | $\$ 16.75$ | $\$ 14.45$ |




## CERAMIT

A two-part, liquid system that produces a ceramic-like surface imitating kiln-fired enamels in appearance and physical properties. Low temperature curing $-200^{\circ} \mathrm{F}$ $\left(93.3^{\circ} \mathrm{C}\right.$ ) for one hour. Catalyst and color are mixed in a 2-to-1 proportion. Brush on, spray on, or apply with a spatula or squeeze bottle. Can be applied in a single coat or successive layers to obtain elegant finishes. Fourteen colors are available, which can be mixed to obtain an infinite variety of shades. Adheres to metals, wood, plastics, and ceramics. Can also be stoned and polished. Hardness of 60-75 on the Sward scale (as compared to kiln-fired enamel 65-80 that requires $1,500^{\circ} \mathrm{F}$ $\left(815.6^{\circ} \mathrm{C}\right.$ ) to cure). Can be cured in ordinary kitchen ovens, by infrared lamps, or forced air blowers.

| Item | Order \# | Description | Color | Container Volume | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 45-8000 | Ceramit"' Kit |  |  | \$70.15 | \$73.20 | \$76.25 |
| B | 45-8804 | Ceramit ${ }^{\text {tu }}$ Thinner |  | 1 pint | \$25.85 | \$26.98 | \$28.10 |
| CATALYST REFILLS |  |  |  |  |  |  |  |
| C | 45-8800 | Refill |  | 802 | \$15.23 | \$15.89 | \$16.55 |
| D | 45-8801 | Refill |  | 1 pint | \$29.26 | \$30.53 | \$31.80 |
| E | 45-8802 | Refill |  | 1 quart | \$41.77 | \$43.58 | \$45.40 |

REPLACEMENT COLORS

| $\mathbf{4 5 - 8 0 0 1}$ | Opaque | Black | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4 5 - 8 0 0 3}$ | Opaque | White | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 0 9}$ | Opaque | Red | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 1 3}$ | Opaque | Orange | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 1 6}$ | Opaque | Yellow | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 1 9}$ | Opaque | Jade | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 2 4}$ | Opaque | Turquoise | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 1}$ | Transparent | Red | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 3}$ | Transparent | Brown | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 5}$ | Transparent | Yellow | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 6}$ | Transparent | Green | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 7}$ | Transparent | Blue | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 4 8}$ | Transparent |  | $20 z$ | $\$ 7.64$ | $\$ 7.97$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 5 0}$ | Fluorescent | Red | $20 z$ | $\$ 7.06$ | $\$ 7.47$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 5 1}$ | Fluorescent | Green | $20 z$ | $\$ 7.06$ | $\$ 7.47$ | $\$ 8.30$ |
| $\mathbf{4 5 - 8 0 5 2}$ | Fluorescent | Blue | $20 z$ | $\$ 7.06$ | $\$ 7.47$ | $\$ 8.30$ |

Individual 2 oz. bottles can be ordered by product numbers listed with colors.


## U-NAMEL UV CURED ENAMEL SYSTEM

The U-Namel ultraviolet enamel application system cures in 1-2 minutes. Once cured the enamel becomes scratch and wear resistant. It will not chip, flake, peel, or shrink. The cured enamel is easily drilled, grinded, polished, carved, and sanded. The easy-tomix colors won't fade and can be inlaid into metal, glass, plastic, and ceramic. The enamels will adhere to flat surfaces and can be layered to create cabochons. The kit includes 5-7 gram jars of enamel in popular colors, bonding primer, UV lamp, safety goggles, and syringe with tips. This product is non-hazardous.

| Item Order \# | Description | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| A 45-8060 | UV Cured Enamel System | \$131.74 | \$137.47 | \$143.20 |
| ACCESSORIES |  |  |  |  |
| B 45-8062 | Bond Liquid | \$15.04 | \$15.70 | \$16.35 |
| C 45-8063 | Curing Light | \$28.15 | \$29.38 | \$30.60 |
| D 45-8064 | Mixing Pad | \$1.52 | \$1.58 | \$1.65 |
| E 45-8065 | Brushes | \$3.77 | \$3.94 | \$4.10 |
| F 45-8066 | Glasses | \$5.66 | \$5.90 | \$6.15 |
| G 45-8067 | Cloth | \$1.89 | \$1.97 | \$2.05 |
| H 45-8068 | Gloss Liquid | \$9.38 | \$9.79 | \$10.20 |
| REPLACEMENT COLORS |  |  |  |  |
| 45-8061 | Green | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Black | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Red | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Yellow | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Pearl | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Clear | \$22.54 | \$23.52 | \$24.50 |
| 45-8061 | White | \$15.04 | \$15.70 | \$16.35 |
| 45-8061 | Blue | \$15.04 | \$15.70 | \$16.35 |

## U-NAMEL

A new method of enameling utilizing fast curing ultraviolet sensitive material.

## ADVANTAGES:

- Scratch, wear and shock resistant surface
- Does not chip, crack, flake, peel, or shrink
- Easy to drill, grind, polish, carve, sand, and turned at high speeds
- Sold in 7 gram jars which can be transferred into the supplied UV syringe for application on flat or curved surfaces, or used directly
- Easy-to-mix colors that won't fade


## USES:

- Inlaid into precious or non-precious metal, glass, plastic, ceramic, enamel, or U-NAMEL
- Can be layered to make cabachons
- Can be used next to other U-NAMEL or mixed to make interesting designs

Starter Kit includes:

- 5-7 gram tubs in the following colors: black, white, red, blue and yellow
- Curing light
- Safety goggles
- Mixing pad
- Bond liquid
- Mixing/application tool
- Reusable syringe with 5 tips




Use with pen platers on pages 392.

RHODIUM PLATING SOLUTION
Super Bright-white rhodium for plating. No mixing required - ready to use. Concentrated formula produces bright-white finish, which reduces tarnish. Acid based. Approximate 8-9 month shelf life. Prices will fluctuate according to rhodium market. Hazardous material, must ship UPS Ground.

| Item | Order \# | Plating | Rhodium <br> Volume | Container <br> Volume | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{4 5 - 4 1 4 2}$ | Bath | 1 gram | 1 pint | Call for pricing |
| B | $\mathbf{4 5 - 4 1 4 3}$ | Bath | 2 gram | 1 pint | Call for pricing |
| C | $\mathbf{4 5 - 4 1 4 1}$ | Bath | $1 / 2$ gram | $1 / 2$ pint | Call for pricing |
| D | $\mathbf{4 5 - 4 1 4 7}$ | Pen | 1 gram | 25 ml | Call for pricing |
| E | $\mathbf{4 5 - 4 1 4 0}$ | Pen | $1 / 2$ gram | 25 ml | Call for pricing |
| F | $\mathbf{4 5 - 4 1 4 5}$ | Pen | $1 / 4$ gram | 102 | Call for pricing |
| G | $\mathbf{4 5 - 4 1 5 4}$ | Pen | 1 gram | 50 ml | Call for pricing |
| H | $\mathbf{4 5 - 4 1 4 6}$ | Pen | $1 / 3$ gram | 125 ml | Call for pricing |

## RHODIUM BATH KIT CONCENTRATE

Concentrate for pen plating. Perfect for touch-ups and small intense jobs. Follow mixing instructions. Prices will fluctuate according to rhodium market.

|  | Item | Order \# | Rhodium Volume | Container Volume |
| :---: | :---: | :---: | :---: | :---: |
| J | $\mathbf{4 5 - 4 1 5 2}$ | $1 / 2$ gram | $1 / 2$ pint | Call for pricing |
|  | $\mathbf{4 5 - 4 1 5 3}$ | 1 gram | $1 / 2$ pint | Call for pricing |



## SUPER BLACK RHODIUM PLATING SOLUTION

Black rhodium plating solution provides a long-lasting, tarnish-resistant gray-black finish. Use with a platinized titanium anode or carbon anode. Prices will fluctuate according to the rhodium market. Hazardous material, must ship UPS Ground.

| Item | Order \# | Plating | Rhodium <br> Volume | Container <br> Volume | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| L | $\mathbf{4 5 - 4 1 4 8}$ | Pen | $1 / 4$ gram | 102 | Call for pricing |
| M | $\mathbf{4 5 - 4 1 4 9}$ | Pen | $1 / 2$ gram | 25 ml | Call for pricing |
| N | $\mathbf{4 5 - 4 1 5 0}$ | Bath | 1 gram | 1 pint | Call for pricing |

## CLEAN EARTH PLATING SOLUTIONS

All Clean Earth" ${ }^{\text {™ }}$ plating solutions are cyanide-free. They are ecologically safer than standard plating solutions yet plate uniformly and produce a hard, durable finish. Used in bath plating.

| Item | Order \# | Description | Container Volume | 1+ |
| :---: | ---: | :--- | ---: | ---: |
| A | $\mathbf{4 5 - 2 2 2 0}$ | Nickel-Free | 4 quarts | $\$ 43.85$ |
| B | $\mathbf{4 5 - 2 1 0 0}$ | Nickel Mirror | 4 quarts | $\$ 38.20$ |
| C | $\mathbf{4 5 - 2 2 0 0}$ | Silver-Free | 4 quarts | $\$ 100.00$ |
| D | $\mathbf{4 5 - 2 0 6 0}$ | Copper Primer | 4 quarts | $\$ 33.75$ |
| E | $\mathbf{4 5 - 2 0 8 0}$ | Copper Mirror | 4 quarts | $\$ 33.75$ |
| F | $\mathbf{4 5 - 2 2 6 0}$ | Black-Free | 4 quarts | $\$ 39.35$ |

## CLEAN EARTH PLATING SOLUTIONS

All Clean Earth"' plating solutions are cyanide-free. They are ecologically safer than standard plating solutions yet plate uniformly and produce a hard, durable finish. Produces a uniform gold color. Use with a stainless steel or pure gold anode. Plate with the solution heated to $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ at $3-4$ volts for $30-45$ seconds. A change in the plating time will affect the color. Used in bath plating.

| Item | Order \# | Description | Container Volume | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: |
| G | 45-2120 | 14kt Gold | 1 quart | Call for pricing |
| H | $\mathbf{4 5 - 2 1 4 0}$ | $18 k t$ Gold | 1 quart | Call for pricing |
| J | $\mathbf{4 5 - 2 1 6 0}$ | $24 k t$ Gold | 1 quart | Call for pricing |

## CLEAN EARTH PEN PLATING

Clean Earth ${ }^{\text {tw }}$ is a resilient gold plating solution that deposits a flash plate of gold over nickel, sterling silver, gold, rhodium, and most other similar metals. Cyanide-free.

| Item | Order\# | Description | Container Volume | 1+ |
| :---: | :---: | :--- | :---: | :---: |
| K | 45-2500 | 14kt Gold | 1 fluid $0 z$ | $\$ 94.40$ |
| L | $45-2510$ | 18kt Gold | 1 fluid $0 z$ | $\$ 94.40$ |
| M | $45-2520$ | 24kt Gold | 1 fluid $0 z$ | $\$ 94.40$ |
| N | $45-2530$ | 24kt Rose Gold | 1 fluid $0 z$ | $\$ 94.40$ |



Pricing on plating solutions containing precious metals will fluctuate with the metal market.

## CLEAN EARTH ${ }^{\text {m }}$

Gold Plating Produces a uniform gold color. Use with stainless steel or pure gold anode. Plate with the solution heated to $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ at $3-4$ volts for $30-45$ seconds. Changing the plating time or solution temperature will affect the color.

Silver Produces a uniform silver plate. Use with stainless steel or pure silver anode. Plate with the solution at room temperature at 1.4-1.8 volts for $15-90$ seconds. The finish will reflect the surface of the underplate; shiny silver over shiny metals and matte silver over a dull surface.

Nickel Mirror Adds a decorative brilliance and a white mirror shine to dull finishes. Best if used over Copper Mirror. An excellent base for rhodium, gold, or silver plating. Use with pure nickel anode. Plate with solution at $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ at 2-4 volts for 2-10 minutes.

Nickel-Free A nickel-free alloy similar in color to nickel. Best if used over Copper Mirror. An excellent base for gold and silver plating. Use with nickel anode. Plate with solution $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ at 2-4 volts for $30-90$ seconds.

Copper Primer Used as a pre-plate to cover difficult to plate metals such as tin, lead, and zinc, die-cast metals. A excellent base for nickel plating. Use with a pure copper anode. Plate with solution at $130^{\circ} \mathrm{F}\left(54^{\circ} \mathrm{C}\right)$ at $1-2$ volts for 2-5 minutes.

Copper Mirror Produces a bright copper finish. Air bubble agitation produces superior uniformity and shine. Use with a pure copper anode. Plate with solution at room temperature at 2-3 volts for 2-10 minutes. Electroform at 1-1.3 volts for 30 minutes to 5 hours.

White-Free Deposits a beautiful bright, white finish. Best if used over Nickel Mirror or Copper Mirror. Use a stainless steel anode. Plate with a solution at room temperature at 2-4 volts for 30-60 seconds.

Black-Free Use to achieve an antique finish. After article is plated with Black-Free, highlights are relieved by polishing. Use with a stainless steel anode. Plate with solution at $120^{\circ} \mathrm{F}\left(50^{\circ} \mathrm{C}\right)$ at $3-6$ volts for $30-90$ seconds.


## CLEAN EARTH ELECTROCLEANER

A quick and effective method of cleaning objects prior to plating. The cleaning process uses an electrolytic bath, similar to plating operations. (The 2lb size makes 8 gallons; 5lb size makes 20 gallons.) Use with a stainless steel anode. Clean with the solution heated from $120^{\circ}-160^{\circ} \mathrm{F}$ $\left(50^{\circ}-71^{\circ} \mathrm{C}\right.$ ) at $2-6$ volts for $15-30$ seconds.


STULLER-GLO CYANIDE-FREE PEN PLATING SOLUTION This unique Stuller-Glo ${ }^{\text {t" }}$ pen plating solution deposits beautiful gold colors easily and is a fully cyanide-free, ecological solution. Packaged in double walled jars with a wide base to help prevent spills. Non-poisonous, cyanide-free chemicals means it does not incur the higher shipping charges that other hazardous materials do. A 1 ounce bottle can generally cover approximately 1,000 square inches. Works with all pen platers.

| Order \# | Description | Size | 1+ |
| :--- | :--- | :--- | ---: |
| 41-4150 | 14kt Pen Plating Solution | 1 oz jar | $\$ 51.70$ |
| 41-4155 | 18kt Pen Plating Solution | $10 z$ jar | $\$ 51.70$ |
| 41-4160 | 24kt Pen Plating Solution | 10 z jar | $\$ 51.70$ |
| $\mathbf{4 1 - 4 1 6 5}$ | Rose Pen Plating Solution | 1 oz jar | $\$ 51.70$ |

ACID NEUTRALIZER
Stops the pickling process when applied directly to an object; will also neutralize pickling solutions.

| Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 5 0 0 5}$ | 602 | $\$ 4.05$ | $\$ 4.22$ | $\$ 4.40$ |

## PALLADIUM PLATING SOLUTION

Easy-to-use, cyanide-free, and ecologically friendly, this tarnish-resistant bright white palladium bath provides uniform plating from start to finish. This product produces a consistent bright white mirror finish. It can be used as an intermediate layer over gold, silver, palladium, and platinum, as well as a final plate over low-end jewelry. Non-hazardous shipping.

| Order\# | Rhodium Volume | Size | 1+ |
| :--- | :--- | :--- | :--- | :--- |
| 45-4179 | $21 / 2$ gram | 1 quart | Call for pricing |



## ELECTRO CLEANER

A quick and effective method of cleaning objects prior to plating. The cleaning process uses an electrolytic bath, similar to plating operations. Clean with the solution heated from $120^{\circ}-160^{\circ} \mathrm{F}\left(50^{\circ}-71^{\circ} \mathrm{C}\right)$ at 2-6 volts at 15-30 seconds. Use with a stainless steel anode.

| Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| 45-0312 | 1 quart | $\$ 10.58$ | $\$ 11.04$ | $\$ 11.50$ |

## STOP-OFF BLUE

A very effective solution that may be used to mask areas that do not need to be plated. May be cleaned after use with acetone. Use with a red sable brush.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 45-4155 | Stop-Off Blue | $\$ 16.97$ | $\$ 18.41$ | $\$ 20.45$ |



## SILVER BLACK

An acid-based oxidizer that produces an instantaneous deep black patina on silver, gold, copper, or bronze.


| Item | Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 5 0 3 0}$ | $10 z$ | $\$ 3.77$ | $\$ 3.94$ | $\$ 4.10$ |
| B | $\mathbf{5 4 - 5 0 3 1}$ | $40 z$ | $\$ 7.68$ | $\$ 8.02$ | $\$ 8.35$ |
| C | $\mathbf{5 4 - 5 0 3 3}$ | $160 z$ | $\$ 21.93$ | $\$ 23.22$ | $\$ 25.80$ |



GROBET USA® LACQUER AND LACQUER STRIPPER
Lacquer protects metal surfaces from scratches and tarnish. To remove lacquer from metal surfaces to Lacquer Stripper, which can also be used to thin lacquer.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{4 5 - 7 9 9 0}$ | Lacquer | $80 z$ | $\$ 14.08$ | $\$ 14.69$ | $\$ 15.30$ |
| H | $\mathbf{4 5 - 7 9 9 5}$ | Lacquer Stripper | $80 z$ | $\$ 10.21$ | $\$ 10.66$ | $\$ 11.10$ |



LIVER OF SULPHUR
The most effective oxidizer for silver. This product is used to permanently "antique" silver and copper. It will not rub off or disappear during ultrasonic or steam cleaning. This product is NOT suitable for antiquing gold.


| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{4 5 - 5 0 0 0}$ | Pro-Craft" Lump Form | $80 z$ | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |
| E | $\mathbf{4 5 - 5 0 0 2}$ | Griffith | $40 z$ | $\$ 10.67$ | $\$ 11.14$ | $\$ 11.60$ |
| F | $\mathbf{4 5 - 5 0 0 4}$ | Griffith | $80 z$ | $\$ 18.31$ | $\$ 19.10$ | $\$ 19.90$ |

## DENATURED ALCOHOL

For use in alcohol lamps, making anti-oxidizers, and as a quick-drying dip to prevent spotting of plated pieces. Flammable, ships UPS Ground only.

| Item | Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| J | $\mathbf{5 4 - 8 0 4 0}$ | $80 z$ | $\$ 3.86$ | $\$ 4.03$ | $\$ 4.20$ |
| K | $\mathbf{5 4 - 8 0 4 1}$ | $160 z$ | $\$ 6.53$ | $\$ 6.82$ | $\$ 7.10$ |
| L | $\mathbf{5 4 - 8 0 4 2}$ | $320 z$ | $\$ 8.46$ | $\$ 8.83$ | $\$ 9.20$ |
| M | $\mathbf{5 4 - 8 0 4 3}$ | 1 gallon | $\$ 25.85$ | $\$ 26.98$ | $\$ 28.10$ |



## ANTIQUING SOLUTION

Provides a dark, matte, antique finish to class rings or any other jewelry. Adheres to metal and dries in minutes. High spots can be wiped clean with Aul Solvent (removes background color) and a lint-free cloth. The background solution is resistant to wear and needs no lacquer.


| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| 0 | 45-0130 | Antique Black | $20 z$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |
| R | 45-0132 | Antique Brown | $20 z$ | $\$ 16.79$ | $\$ 17.52$ | $\$ 18.25$ |
| S | $\mathbf{4 5 - 0 1 3 5}$ | Aul Solvent | $20 z$ | $\$ 10.35$ | $\$ 10.80$ | $\$ 11.25$ |




Find added video content on Stuller.com.

The main features of this electrolyte are as follows:

- Flash rhodium-plating until 0.5 microns
- Exceptional brilliant white deposits
- Wider plating range of voltage and amperage
- Possible to use at room temperature
- Good distribution and penetration power
- Exceptional coverage and deposition speed

LEGOR ULTRABRIGHT RHODIUM PLATING SOLUTION
Ultrabright Rhodium is a ready-to-use anti-burn rhodium plating bath with exceptional features. The properties of the deposit and its degree of whiteness make this plating bath a point of reference for the worldwide market. The higher degree of whiteness is due to a more compact deposition with respect to those achieved with the other white rhodium solutions in the market. As a result, a higher white will be achieved at the same working time.

| Order \# | Description | Rhodium <br> Volume |  |
| :---: | :---: | :---: | :---: |
| 45-2230 | Ultrabright Bath Plating, 500 ml | 1 g | Call for pricing |
| 45-2230 | Ultrabright Bath Plating, 1L | 2 g | Call for pricing |



## LEGOR BLUE RHODIUM PLATING SOLUTION

Ultrabright Blue Rhodium is a galvanic solution containing 2 g of $\mathrm{Rh} / 500$ ml of ready-to-use solution for blue rhodium decoration by immersion. RH2BLUE has been specifically developed for decorative application on the surface of precious metals and small non-ferrous items.

| Order \# | Description | Rhodium <br> Volume | 1+ |
| :--- | :--- | :--- | :--- |
| $45-2231$ | Ultrabright Blue Rhodium, 500 ml | 2 g | Call for pricing |



- Perfect functioning even at low gold concentration
- Wide current flow range
- Excellent distribution
- Low density gold deposits
- Easy to control and to maintain
- Calibrated to meet the new EU low-nickel-release laws
(UNI EN 1811:2011)


## LEGOR GOLD THICKNESS BATH PLATING SOLUTION

The GT Gold Plating Series is composed of weak acidic solutions designed to achieve thickness of up to 2 microns. GT solutions present the perfect ready-to-use answer to manufacturers who are looking to obtain a solid gold layer of metallic surfaces. The GT series products allow you to obtain hard, brilliant gold depositions of $22.5-24$ karat, with an excellent wear and corrosion resistance.

| Order\# | Description | Rhodium <br> Volume | 1+ |
| :--- | :--- | :--- | :--- | :--- |
| 45-2232 | 14kt Bath Plating Solution, 1 L | 2 g | Call for pricing |
| 45-2232 | 18kt Bath Plating Solution, 1 L | 2 g | Call for pricing |
| 45-2232 | 18kt Bath Plating Solution, 1 L | 2 g | Call for pricing |



## LEGOR BLUE RHODIUM PEN PLATING SOLUTION

Blue rhodium is a perfect option to add color to metallic surfaces while maintaining the precious aspect of the design. Most commonly used for plating the prong area to enhance the color of blue stones. This room temperature procedure makes it ideal for two-tone designs. The newly developed formula has proven to be one of the most stable on the market today.

| Order\# | Description | 1+ |
| :--- | :--- | :--- |
| 45-2234 | Blue Rhodium Pen Plating, 25 ml | Call for pricing |
| $\mathbf{4 5 - 2 2 3 4}$ | Blue Rhodium Pen Plating, 50 ml | Call for pricing |
| $\mathbf{4 5 - 2 2 3 4}$ | BlueRhodium Pen Plating, 100 ml | Call for pricing |

LEGOR GOLD FLASH BATH PLATING SOLUTION
The GF gold plating series has been designed for flash plating of up to 0.2 microns. This series is cyanide free and ready-to-use. The GF series is both nickel and cadmium free.

| Order \# | Description | Rhodium <br> Volume | 1+ <br> 45-2233 |
| :--- | :--- | :---: | :---: |
| Pink Bath Plating, 1L | 1 g | Call for pricing |  |
| $\mathbf{4 5 - 2 2 3 3}$ | Brown Bath Plating, 1L | 0.8 g | Call for pricing |



Find added video content on Stuller.com.


Pink Bath Plating Solution

- Cyanide free flash gold plating
- Working temperature: 50-60C
- Good penetrating power
- Good distribution


Brown Bath Plating Solution

- Light Brown color plating
- Non-toxic product, cyanide free flash gold plating
- Easy to use


## LEGOR PALLADIUM PLATING SOLUTION

Legor Palladium Plating Solution is a ready-to-use palladium plating bath purposely designed for both flash plating and thick deposits. It is suitable for the treatment of those details that requires the deposition of pure palladium and it is characterized by the high resistance and robustness of the galvanic deposit which makes it particularly suitable either as a finish in itself, or as a barrier layer plating process especially between copper or its alloy and gold. Besides, thanks to its characteristics, this bath is particularly suitable for nickel-free finishing systems.

| Order \# | Description | Palladium <br> Volume | 1+ |
| :--- | :--- | :---: | :---: |
| $45-2235$ | Palladium Plating Solution, 1L | 8 g | Call for pricing |



- Extremely white, bright, levelled deposits
- Good for both flash plating and thick deposits
- High plating speed
- Easy to control
- Very low toxicity
- Good corrosion tolerance
- Optimum performance as barrier layer especially between copper and gold
- Good tolerance to contaminant metals


## LEGOR PLATINUM PLATING SOLUTION

Legor Platinum Plating Solution decoration process is designed to be very easy to use. Its characteristics and the very high thickness uniformity make it a unique product. PT4 is an acid galvanic solution, but it is neither corrosive, nor dangerous to use.

| Order \# | Description | Platinum <br> Volume | 1+ |
| :--- | :--- | :---: | :---: |
| 45-2236 | Platinum Plating Solution, 1L | 4 g | Call for pricing |



- Brilliant, uniform platinum layers
- Good penetrating power
- Excellent distribution
- Easy to use

IMMERSION THERMOMETER
Indispensable for proper rhodium and palladium plating. Use to determine solution temperature. Temperature range $1-230^{\circ} \mathrm{F}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 5 - 6 4 2 0}$ | Immersion Thermometer | $\$ 38.59$ | $\$ 40.86$ | $\$ 45.40$ |



## DISPOSABLE LATEX GLOVES

These high-grade, expandable latex gloves are thin to allow good finger sensitivity and excellent dexterity but are tough enough to protect your hands from dirt, grit, and harsh chemicals. Excellent

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 0 7 4 5}$ | Disposable Latex Gloves, Small | $\$ 13.75$ | $\$ 14.35$ | $\$ 14.95$ |
| $\mathbf{1 7 - 0 7 4 6}$ | Disposable Latex Gloves, Medium | $\$ 13.75$ | $\$ 14.35$ | $\$ 14.95$ |
| $\mathbf{1 7 - 0 7 4 7}$ | Disposable Latex Gloves, Large | $\$ 10.76$ | $\$ 11.23$ | $\$ 11.70$ |



## POWDER-FREE BLUE NITRILE GLOVES

Offer better tactile sensitivity, comfort, dexterity, and puncture resistant than both rubber or vinyl. These powder-free gloves are made stronger through a process called fusion bonding, which integrates synthetic polymers into the material to create a multi-layer glove or enhanced protection.
Measures 4.4 mil (palm) and 4.7 mil (fingers) thickness $/ 99^{1} 2^{\prime \prime}$ length.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 0 8 4 6}$ | Small | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Medium | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Large | $\$ 11.32$ | $\$ 11.81$ | $\$ 12.30$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Extra-Large | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |



NEOPRENE PLATING APRON
Durable neoprene apron designed to protect against chemical spills during plating and other applications.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 0 6 8}$ | Apron | $36^{\prime \prime} \times 43^{\prime \prime}$ | $\$ 18.40$ | $\$ 19.20$ | $\$ 20.00$ |

## NEOPRENE GLOVES

Neoprene gloves provide superior quality and durability as well as protection against acids, caustics, oils, greases, and many solvents. Excellent all-around protection for plating. Black neoprene 14" coated gloves with knit lining. One size fits all.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 2 - 7 5 0 8}$ | Neoprene Gloves | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |

## TRONEX PRECISION PLIERS

- Bearing ring lap joint design that insures superior performance to other pliers made with only rivet joints or box joints
- Cushion grips (ESD safe) with stainless steel leaf springs
- Choice of standard handle length or long ergonomic handle length
- Polished, hand-crafted finish, entirely free of burrs or sharp edges
- 100\% quality assurance; each pliers individually checked; one year factory guarantee
- Special design elements such as "slightly rounded" inner jaw edges and induction hardened tips
- Short jaw pliers have induction hardened tips
- Made in the USA


Find added video

## LONG HANDLE

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 0 0 0 1}$ | Chain Nose - Smooth Jaw | $612^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| B | $\mathbf{4 6 - 0 0 0 2}$ | Chain Nose - Short Smooth Jaw | $6^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| C | $\mathbf{4 6 - 0 0 0 3}$ | Needle Nose | $612^{\prime \prime}$ | $\$ 33.70$ | $\$ 35.69$ | $\$ 39.65$ |
| D | $\mathbf{4 6 - 0 0 0 4}$ | Round Nose | $612^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| E | $\mathbf{4 6 - 0 0 0 5}$ | Round Nose - Short Jaw | $6^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| F | $\mathbf{4 6 - 0 0 0 6}$ | Flat Nose - Step Tip | $612^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| G | $\mathbf{4 6 - 0 0 0 7}$ | Flat Nose - Smooth Jaw | $612^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| H | $\mathbf{4 6 - 0 0 0 8}$ | Flat Nose - Short Smooth Jaw | $6^{\prime \prime}$ | $\$ 40.25$ | $\$ 42.62$ | $\$ 47.35$ |
| J | $\mathbf{4 6 - 0 0 0 9}$ | Bent Nose | $6^{\prime \prime}$ | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |



Find added video content on Stuller.com.

## STANDARD HANDLE

| Item | Order \# | Description | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 46-0010 | Chain Nose - Smooth Jaw | $51 / 2^{11}$ | \$37.44 | \$39.65 | \$44.05 |
| L | 46-0011 | Chain Nose - Short Smooth Jaw | $5{ }^{\prime \prime}$ | \$37.44 | \$39.65 | \$44.05 |
| M | 46-0012 | Needle Nose | 51/2" | \$37.44 | \$39.65 | \$44.05 |
| N | 46-0013 | Round Nose | $51 / 2^{11}$ | \$37.44 | \$39.65 | \$44.05 |
| P | 46-0014 | Round Nose - Short Jaw | $5{ }^{\prime \prime}$ | \$37.44 | \$39.65 | \$44.05 |
| 0 | 46-0015 | Flat Nose - Step Tip | 51/2" | \$37.44 | \$39.65 | \$44.05 |
| R | 46-0016 | Flat Nose - Smooth Jaw | 51/2" | \$39.31 | \$41.63 | \$46.25 |
| S | 46-0017 | Flat Nose - Short Smooth Jaw | $5{ }^{\prime \prime}$ | \$39.31 | \$41.63 | \$46.25 |
| T | 46-0018 | Bent Nose | $5{ }^{\prime \prime}$ | \$40.25 | \$42.62 | \$47.35 |



L


## TRONEX CUTTERS - OVAL AND TAPERED HEAD LONG ERGONOMIC HANDLE

- Superior cutting performance, cutting edge hardness
- 100\% quality assurance, each cutter individually checked; one year guarantee
- Unique lap joint design with matched bearing rings, Delrin washer, extra sturdy nut, and fine-pitched screw
- Cushion grips with choice of standard or long, ergonomic handle length
- Razor Flush ${ }^{\circ}$ edges provide exceptional flush cuts
- Made in the USA


| Item | Order \# | Description | Model \# | Length | Cutting Edge | Cutting Capacity | 12+ | $\mathbf{6 +}$ | 1+ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 6 - 0 0 1 9}$ | Mini Oval | 7312 | $7 "$ | Flush | $0.1 \mathrm{~mm}-1.25 \mathrm{~mm}, 38-16$ AWG | $\$ 43.05$ | $\$ 45.59$ | $\$ 50.65$ |
| B | $\mathbf{4 6 - 0 0 2 3}$ | Large Oval | 7512 | $7^{\prime \prime}$ | Flush | $.15 \mathrm{~mm}-1.5 \mathrm{~mm}, 35-15$ AWG | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |

NEX OVAL CUTTER - SEMI-FLUSH
Superior cutting performance, cutting edge hardness. 100\% quality assurance, each cutter individually checked; one year guarantee. Unique lap joint design with matched bearing rings, derlin washer, extra sturdy nut, and fine-pitched screw. Cushion grips with with choice of standard or long, ergonomic handle length. Razor Flush edges provide exceptional flush cuts. Made in the USA.


## TRONEX CUTTERS - OVAL AND TAPERED HEAD STANDARD ERGONOMIC HANDLE

- Superior cutting performance, cutting edge hardness
- 100\% quality assurance, each cutter individually checked; one year guarantee
- Unique lap joint design with matched bearing rings, Delrin washer, extra sturdy nut, and fine-pitched screw
- Cushion grips with choice of standard or long, ergonomic handle length
- Razor Flush ${ }^{\circ}$ edges provide exceptional flush cuts
- Made in the USA


| Item | Order\# | Description | Model \# | Length | Cutting Edge | Cutting Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 6 - 0 0 3 5}$ | Mini Oval | 5312 | $5^{\prime \prime}$ | Flush | $.1 \mathrm{~mm}-1.25 \mathrm{~mm}, 38-16$ AWG | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |
| B | $\mathbf{4 6 - 0 0 3 6}$ | Mini Oval | 5313 | $5^{\prime \prime}$ | Razor Flush | $.1 \mathrm{~mm}-.08 \mathrm{~mm}, 38-20$ AWG | $\$ 44.92$ | $\$ 47.57$ | $\$ 52.85$ |
| C | $\mathbf{4 6 - 0 0 3 7}$ | Oval Head | 5112 | $5^{\prime \prime}$ | Flush | $.15 \mathrm{~mm}-1.25 \mathrm{~mm}, 35-16$ AWG | $\$ 37.44$ | $\$ 39.65$ | $\$ 44.05$ |
| D | $\mathbf{4 6 - 0 0 3 8}$ | Oval Head | 5113 | $5^{\prime \prime}$ | Razor Flush | $.1 \mathrm{~mm}-1 \mathrm{~mm}, 38-18$ AWG | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |
| E | $\mathbf{4 6 - 0 0 3 9}$ | Large Oval | 5512 | $5^{\prime \prime}$ | Flush | $.15 \mathrm{~mm}-1.5 \mathrm{~mm}, 35-15$ AWG | $\$ 39.31$ | $\$ 41.63$ | $\$ 46.25$ |
| F | $\mathbf{4 6 - 0 0 4 0}$ | Large Oval | 5513 | $5^{\prime \prime}$ | Razor Flush | $.1 \mathrm{~m}-1.3 \mathrm{~mm}, 38-16$ AWG | $\$ 42.12$ | $\$ 44.60$ | $\$ 49.55$ |
| G | $\mathbf{4 6 - 0 0 4 1}$ | Large Oval Relief | 5522 | $5^{\prime \prime}$ | Flush | $.15 \mathrm{~mm}-1.4 \mathrm{~mm}, 35-15$ AWG | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |
| H | $\mathbf{4 6 - 0 0 4 2}$ | Large Oval Relief | 5523 | $5^{\prime \prime}$ | Razor Flush | $.1 \mathrm{~mm}-1.2 \mathrm{~mm}, 38-16$ AWG | $\$ 44.92$ | $\$ 47.57$ | $\$ 52.85$ |



| Item | Order \# | Description | Model \# | Length | Cutting Edge | Cutting Capacity | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $J$ | 46-0043 | Mini Taper Head | 5412 | $5{ }^{\prime \prime}$ | Flush | 1mm-1.25mm, 38-16 AWG | \$41.18 | \$43.61 | \$48.45 |
| K | 46-0044 | Mini Taper Head | 5413 | $5{ }^{\prime \prime}$ | Razor Flush | . 1 mm -08mm, 38-20 AWG | \$45.86 | \$48.56 | \$53.95 |
| L | 46-0045 | Taper Head | 5212 | $5^{\prime \prime}$ | Flush | . $15 \mathrm{~mm}-1.25 \mathrm{~mm}$, 35-16 AWG | \$39.31 | \$41.63 | \$46.25 |
| M | 46-0046 | Taper Head | 5213 | $5^{\prime \prime}$ | Razor Flush | . $1 \mathrm{~mm}-1 \mathrm{~mm}, 38-18$ AWG | \$43.05 | \$45.59 | \$50.65 |
| N | 46-0047 | Taper Relief | 5222 | $5{ }^{\prime \prime}$ | Flush | . 1 mm -1.2mm, 35-15 AWG | \$48.66 | \$51.53 | \$57.25 |
| P | 46-0048 | Taper Relief | 5223 | $5{ }^{\prime \prime}$ | Razor Flush | 1mm-08mm, 38-18 AWG | \$55.25 | \$58.50 | \$65.00 |
| 0 | 46-0049 | Large Taper | 5712 | $5{ }^{\prime \prime}$ | Flush | . $15 \mathrm{~mm}-1.4 \mathrm{~mm}, 35-16$ AWG | \$42.12 | \$44.60 | \$49.55 |
| R | 46-0050 | Large Taper | 5713 | $5{ }^{\prime \prime}$ | Razor Flush | 1mm-1.2mm, 38-16 AWG | \$44.92 | \$47.57 | \$52.85 |

## LONG HEAVY DUTY CUTTERS

This cutter, forged of carbon steel, has strength in the head and joint areas needed to cut heavier gauge wire or cable. Cushion grips provide operator comfort. A jaw restraining device is attached to insure spring retention.

| Order \# | Handle/Edge | Cutting Capacity |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 5 3}$ | Standard/Flush | 12 AWG $(2 \mathrm{~mm})$ | $\mathbf{1 +}$ |  |  |
| $\mathbf{4 6 - 0 0 5 4}$ | Long/Flush | $\mathbf{1 4}$ AWG $(1.6 \mathrm{~mm})$ | $\$ 42.12$ | $\$ 44.60$ | $\$ 49.55$ |



## TEBORG DIAGONAL CUTTERS

The finest cutters at the best price. Known as side cutters, they have semi-finished cutting edges for precision wire cutting of soft wires. Cushion grip provides comfort and retains precision alignment. Rockwell hardness, hardened and treated handles. Made in Sweden.


A


B


| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 6 0 1 0}$ | Micro-Bevel | $41 / 3^{\prime \prime}$ | $\$ 33.70$ | $\$ 35.69$ | $\$ 39.65$ |
| B | $\mathbf{4 6 - 6 0 1 1}$ | Small Pure Flush Cut | $41 / 3^{\prime \prime}$ | $\$ 45.86$ | $\$ 48.56$ | $\$ 53.95$ |
| C | $\mathbf{4 6 - 6 0 1 2}$ | Micro-Bevel | $47 / 16^{\prime \prime}$ | $\$ 34.21$ | $\$ 36.23$ | $\$ 40.25$ |
| D | $\mathbf{4 6 - 6 0 1 3}$ | Medium Flush Cut | $47 / 16^{\prime \prime}$ | $\$ 43.82$ | $\$ 46.40$ | $\$ 51.55$ |
| E | $\mathbf{4 6 - 6 0 1 4}$ | Flush Cut | $41 / 3^{\prime \prime}$ | $\$ 34.21$ | $\$ 36.23$ | $\$ 40.25$ |
| F | $\mathbf{4 6 - 6 0 1 5}$ | Semi Flush Cut | $45 / 16^{\prime \prime}$ | $\$ 45.86$ | $\$ 48.56$ | $\$ 53.95$ |
| G | $\mathbf{4 6 - 6 0 1 6}$ | Micro-Bevel | 5 " | $\$ 34.21$ | $\$ 36.23$ | $\$ 40.25$ |

## Introducing Ergo-tek from Ideal-tek

 Red Dot Design Award Winner 2014New cutters and pliers handles' set a new benchmark in ergonomics. Following the User-Centered Design approach of one of the world's most respected research universities (University of Milan), over a two year period, Ideal-tek gained a full understanding of the needs, wants and frustrations of end users. Subsequent painstaking attention to detail at every stage of the design process resulted in the creation of the ideal handles. Precision Swiss manufacture provides quality, accuracy and longevity. The addition of Italian design brings beauty and elegance.

Ergo-tek. Perfect synergy.


## IDEAL-TEK PLIERS

Ideal-Tek Swiss-made pliers feature a very fine tip and smooth or serrated jaws and inner edges. Features high-quality ball bearing steel (63-65 Rockwell Hardness [HRC]), pyrometer-controlled inductive hardening, two component ESD ergonomic handles with soft comfortable gripping surface, hard plastic core, dual leaf springs in blue steel, matched bearing rings, and friction lap joint with screw. The nut is made of hardened alloy steel in order to resist high cutting load. The screw is fine-pitched for perfect joint adjustment.


A


B


C


D

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 7 0 1 1}$ | Short Flat Nose | $51 / 4^{\prime \prime}$ | $\$ 34.51$ | $\$ 36.54$ | $\$ 40.60$ |
| B | $\mathbf{4 6 - 7 0 1 2}$ | Snipe Nose | $51 / 4^{\prime \prime}$ | $\$ 37.61$ | $\$ 39.83$ | $\$ 44.25$ |
| C | $\mathbf{4 6 - 7 0 1 3}$ | Snipe Nose Long | $51 / 2^{\prime \prime}$ | $\$ 37.83$ | $\$ 40.05$ | $\$ 44.50$ |
| D | $\mathbf{4 6 - 7 0 1 4}$ | Round Nose | $51 / 4^{\prime \prime}$ | $\$ 36.98$ | $\$ 39.15$ | $\$ 43.50$ |


$\qquad$

IDEAL-TEK CUTTERS
Ideal-Tek Swiss-made cutters are very slim and are relieved to maximize accessibility. Features high-quality ball bearing steel (63-65 Rockwell Hardness [HRC]), pyrometer-controlled inductive hardening, two component ESD ergonomic handles with soft comfortable gripping surface, hard plastic core, dual leaf springs in blue steel, matched bearing rings, and friction lap joint with screw. The nut is made of hardened alloy steel to resist the high cutting load. The screw is fine-pitched for perfect joint adjustment.


E


H

$\qquad$


E


G
LINDSTROM ${ }^{\circledR}$ SUPREME SERIES PLIERS
High-quality, extremely precise and accurate pliers. Specially forged box joint provides extra long contact surfaces. Joint moves smoothly for extra precision even at the tip. Box joint allows for smaller overall dimensions, improving accessibility in confined areas. With dual spring-loaded handles and comfortable cushion grips marked with information on pliers' capacity. Made in Sweden.

| Item | Order \# | Description | Length | Jaw Capacity | Model \# | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 46-7190 | Side Cutter | $41 / 4$ " | 11/12" | 7190 | \$50.00 |
| B | 46-7490 | Flat Nose | 43/4" | 25/3" | 7490 | \$45.00 |
| C | 46-7590 | Round Nose | 43/4" | 25/3" | 7590 | \$43.00 |
| D | 46-7291 | Flush Oblique End Cutter | 41/4" | 19/3" | 7291 | \$58.00 |
| E | 46-7893 | Short Chain Nose | 43/4" | 25/3" | 7893 | \$44.00 |
| F | 46-7892 | Long Chain | 51/4" | $11 / 41$ | 7890 | \$46.00 |
| G | 46-7894 | Curved Nose | $5{ }^{\prime \prime}$ | 11/8" | 7892 | \$50.00 |



L


M



J


K

LINDSTROM ${ }^{\circledR} 80$ SERIES YELLOW HANDLE CUTTERS
Advanced, diagonal-cutting nippers, screw-type precision, lap joint allows for optimum strength. Handles are dual spring-loaded, and oval jaw design allows ease of use. Made in Sweden.

| Item | Order \# | Description | Length | Jaw Capacity | Model \# | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 46-8140 | Small Oval Micro-Bevel | $43 / 81$ | $3 / 81$ | 8140 | \$50.00 |
| $J$ | 46-8150 | Medium Micro-Bevel | $41 / 2^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 8150 | \$51.00 |
| K | 46-8142 | Small Pure Ultra-Flush | $41 / 3^{\prime \prime}$ | 3/81 | 8142 | \$55.00 |
| L | 46-8160 | Small Oval Flush | $41 / 3^{\prime \prime}$ | $3 / 81$ | 8141 | \$53.00 |
| M | 46-8152 | Medium Ultra-Flush | $41 / 2^{\prime \prime}$ | $1 / 2^{11}$ | 8152 | \$59.00 |
| N | 46-8170 | Large Oval Micro-Bevel | 415/16" | 5/811 | 8160 | \$57.00 |
| P | 46-8162 | Large Oval Ultra-Flush | 415/16" | 5/81 | 8162 | \$71.00 |



0


R

LINDSTROM ${ }^{\circledR}$ NOSE PLIERS
The Lindstrom ${ }^{\circ}$ round-flat nose pliers are precision-crafted in Switzerland from hardened, high-chromium steel alloy and precision-ground to exact specifications. They are ideal for heavy-gauge metals and harder metals.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{0}$ | $\mathbf{4 6 - 7 9 0 1}$ | Chain Nose | $\mathbf{7 "}^{\prime \prime}$ | $\$ 52.83$ | $\$ 55.94$ | $\$ 62.15$ |
| R | $\mathbf{4 6 - 7 9 0 0}$ | Round-Flat Nose | $7^{\prime \prime}$ | $\$ 52.83$ | $\$ 55.94$ | $\$ 62.15$ |

## REVERE PLIERS

Introducing an exceptional line of quality pliers for the discriminating professional inspired and designed by Alan Revere, a master goldsmith and founder and director of the Revere Academy of Jewelry Arts. Alan's passion for unquestionable quality and the highest standards of workmanship result in a superior line of German-crafted tools made to meet his specifications. Made of highest quality carbon tool steel available. Hand-finished to meet exacting standards. Jaws are hand-finished with beveled corners. No plastic handles or springs for precise control and surface contact. Special tooling is used to create the unique Revere grip. Made in Germany.


C


| Item | Order\# | Description | Length | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | :---: |
|  | $\mathbf{4 6 - 0 3 9 9}$ | Revere Kit (4-Pieces) | $5^{\prime \prime}$ | $\$ 131.00$ |
| A | $\mathbf{4 6 - 0 4 0 0}$ | Chain Nose | $5^{\prime \prime}$ | $\$ 36.35$ |
| B | $\mathbf{4 6 - 0 4 0 1}$ | Round Nose | $5^{\prime \prime}$ | $\$ 36.35$ |
| C | $\mathbf{4 6 - 0 4 0 2}$ | Flat Nose | $5^{\prime \prime}$ | $\$ 36.35$ |
| D | $\mathbf{4 6 - 0 4 0 3}$ | Flat \& Half Flat | $5^{\prime \prime}$ | $\$ 38.70$ |

## BOX-JOINT PLIERS

Quality box-joint pliers at an affordable price. Pliers have a brushed satin finish and smooth, non-marring jaws. Comfortable foam-grip handles with double-leaf spring return.


## SLIM-LINE PLIERS

User-friendly line of pliers with black comfort grips and fine, precision points are offered at an exceptional price. $5^{\prime \prime}(127 \mathrm{~mm})$ in length with a gentle return spring. Uncompromising quality. The newest in comfort technology with black, oxidized, non-glare finish designed for precision work.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| J | $\mathbf{4 6 - 1 5 0 0}$ | Chain Nose | $5^{\prime \prime}$ | $\$ 7.48$ | $\$ 7.92$ | $\$ 8.80$ |
| K | $\mathbf{4 6 - 1 5 0 3}$ | Side Cutter | $5^{\prime \prime}$ | $\$ 7.91$ | $\$ 8.37$ | $\$ 9.30$ |




BOX-JOINT GERMAN PLIERS
Standard weight and size for medium to small work. These are precision pliers and nippers with box joints to eliminate side play and maintain alignment of jaws under stress. Heads are brightly polished, and handles have yellow, vinyl cushion grips.

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: |
| A | $\mathbf{4 6 - 1 0 0 0}$ | Box Joint Set | $51 / 4^{\prime \prime}$ | $\$ 137.75$ |
| B | $\mathbf{4 6 - 1 2 6 0}$ | Diagonal Cutter | $514^{\prime \prime}$ | $\$ 36.05$ |
| C | $\mathbf{4 6 - 1 0 2 0}$ | Flat Nose | $514^{\prime \prime}$ | $\$ 25.15$ |
| D | $\mathbf{4 6 - 1 0 4 0}$ | Round Nose | $51 / 4^{\prime \prime}$ | $\$ 25.15$ |
| E | $\mathbf{4 6 - 1 2 0 0}$ | Flush End Cutter | $514^{\prime \prime}$ | $\$ 33.90$ |
| F | $\mathbf{4 6 - 1 0 6 0}$ | Short Chain Nose | $51 / 4^{\prime \prime}$ | $\$ 25.15$ |
| G | $\mathbf{4 6 - 1 1 0 0}$ | Long Chain Nose | $514^{\prime \prime}$ | $\$ 27.40$ |
| H | $\mathbf{4 6 - 1 0 8 0}$ | Serrated Chain Nose | $51 / 4^{\prime \prime}$ | $\$ 25.15$ |
| J | $\mathbf{4 6 - 1 1 4 0}$ | Half-Round Nose/Flat Nose | $51 / 4^{\prime \prime}$ | $\$ 28.55$ |


B

C

D

E

F

G

H

$J$


STULLER COMFORT GRIP PLIERS
Made of the finest tool steel and beautifully polished, with box-joint construction and double-leaf springs, these pliers offer the latest in ergonomic design. The handle width and soft non-slip texture ensure the user of less fatigue than with conventional handles. Made in Germany.

| Item | Order \# | Description | Length | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| K | 46-1520 | Chain Nose | $43 / 41$ | \$25.20 |
| L | 46-1521 | Flat Nose | 43/4" | \$21.80 |
| M | 46-1522 | Round Nose | 43/4" | \$21.80 |
| N | 46-1523 | Flush Side Cutter | 43/4" | \$24.00 |
| P | 46-1524 | Flush End Cutter | 43/4" | \$38.55 |
| 0 | 46-1525 | Flush Oblique Cutter | 43/4" | \$38.55 |
| R | 46-1526 | Bent Chain Nose | 43/4" | \$22.70 |



K


L


M


N


P


0


R

## PLIERS

These pliers feature a comfortable rubber handle and a smooth operating box joint.

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: |
| A | $\mathbf{4 6 - 8 0 0 0}$ | Chain Nose | $51 / 9^{\prime \prime}$ | $\$ 9.65$ |
| B | $\mathbf{4 6 - 8 0 0 1}$ | Flat Nose | $51 / 9^{\prime \prime}$ | $\$ 9.65$ |
| C | $\mathbf{4 6 - 8 0 0 2}$ | Round Nose | $51 / 5^{\prime \prime}$ | $\$ 9.65$ |
| D | $\mathbf{4 6 - 8 0 0 3}$ | Bent Nose | $5 "$ | $\$ 9.65$ |
| E | $\mathbf{4 6 - 8 0 0 4}$ | Half-Round | $51 / 5^{\prime \prime}$ | $\$ 10.30$ |
| F | $\mathbf{4 6 - 8 0 0 5}$ | Round Concave | $51 / 6^{\prime \prime}$ | $\$ 10.30$ |
| G | $\mathbf{4 6 - 8 0 0 6}$ | Ring Holding | $59 / 10^{\prime \prime}$ | $\$ 11.00$ |
| H | $\mathbf{4 6 - 8 0 0 7}$ | Flat Half-Round | $51 / 5^{\prime \prime}$ | $\$ 9.65$ |








ECONOMY LAP JOINT PLIERS
Good quality carbon-steel work pliers have smooth jaws. With polished heads to prevent marking on soft metals and cushion grip handles.

| Item | Order \# | Description | Length | 1+ |
| :---: | :---: | :---: | :---: | :---: |
| $J$ | 46-0170 | Flat Nose | $4112{ }^{11}$ | \$6.20 |
| K | 46-0180 | Round Nose | $4112^{11}$ | \$6.20 |
| L | 46-0175 | Chain Nose | 41121 | \$5.30 |



SLIM-LINE PLIERS
High-quality, tool steel, box-joint construction. Plastic grips and leaf springs. Made in Germany.

| Item | Order \# | Description | Length | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | :---: |
| M | $\mathbf{4 6 - 0 5 2 6}$ | Diagonal Cutter | $43 / 4^{\prime \prime}$ | $\$ 24.90$ |
| N | $\mathbf{4 6 - 0 5 2 0}$ | Flat Nose | $43 / 4^{\prime \prime}$ | $\$ 21.95$ |
| P | $\mathbf{4 6 - 0 5 2 2}$ | Round Nose | $434^{\prime \prime}$ | $\$ 21.80$ |
| O | $\mathbf{4 6 - 0 5 2 8}$ | Oblique Flush Cutter | $43 / 4^{\prime \prime}$ | $\$ 28.55$ |
| R | $\mathbf{4 6 - 0 5 2 4}$ | Chain Nose | $43 / 4^{\prime \prime}$ | $\$ 21.80$ |
| S | $\mathbf{4 6 - 0 5 3 0}$ | Flush Cut End Cutter | $43 / 4^{\prime \prime}$ | $\$ 25.20$ |


PLIERS KIT
These pliers feature comfortable rubber handles and smooth operating box joint.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 3 9}$ | Slimline Pliers Kit Set of 4 | $\$ 13.94$ | $\$ 14.76$ | $\$ 16.40$ |



## ECONOMY TOOL KIT

This economy tool kit with zip pouch comes complete with all the tools you need to begin beading. It features chain nose pliers, round nose pliers, wire cutters, tweezers, a bead scoop, snips, and six modular and stackable drawers, all zipped into a handy storage pouch. The complete kit is ready to travel and keeps tools neatly organized. Store various findings and beads in the drawers.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 46-0516 | 7 Piece Repair Kit | $\$ 13.09$ | $\$ 13.86$ | $\$ 15.40$ |

## MICRO MINI PLIERS

These pliers are a great choice for product assembly or bead stringing. To open split rings, insert the tooth onto the side of the ring and squeeze gently.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 9 0 0 3}$ | Bent Flat Nose Pliers | $5^{\prime \prime}$ | $\$ 6.12$ | $\$ 6.48$ | $\$ 7.20$ |
| B | $\mathbf{4 6 - 3 0 7 0}$ | Split Ring Pliers | $51 / 4^{\prime \prime}$ | $\$ 7.78$ | $\$ 8.24$ | $\$ 9.15$ |
| C | $\mathbf{4 6 - 4 0 0 6}$ | Bead Knot Pliers | 5 " | $\$ 8.80$ | $\$ 9.32$ | $\$ 10.35$ |



## ROSARY PLIERS

Combination round nose pliers and side cutter all in one tool. Used for chain assembly. Loops and bends can be made easily. Wire can be cut without changing tools.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 4 0}$ | Rosary Pliers | $51 / 4^{\prime \prime}$ | $\$ 28.01$ | $\$ 29.66$ | $\$ 32.95$ |



## 90́․ BENT NOSE PLIERS

Perfect for stone setting, especially for small prongs and tennis bracelets. The $90^{\circ}$ angle makes precise work easier. Box-joint construction, cushion grips, and leaf spring.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 8 5}$ | $90^{\circ}$ Bent Nose Pliers | $5 "$ | $\$ 11.14$ | $\$ 11.79$ | $\$ 13.10$ |

## ROUND NOSE PLIERS

The ultimate ultra-fine round nose has fine smooth jaws that allow the user to make the smallest loops with utmost accuracy every time. The tip diameter measures less than 1 mm for the most delicate work. Smooth jaws are easy on the wire yet strong enough to hold without slipping. PVC comfort grip.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| 46-0541 | Ultra-Fine Tip Pliers | $41 / 2 "$ | $\$ 6.55$ | $\$ 6.93$ | $\$ 7.70$ |



## WRAP N TAP RING LOOPING PLIERS

The jeweler can wrap ring stock around the barrel-shaped jaw, then tap it slightly on a mandrel and instantly make a complete ring, half or quarter-shank for repair. Pliers are especially good for hollow rings and rings with a design on one side, because the lower jaw is covered with PVC tubing and cannot scratch or mark. You get a perfect circle time after time with stock up to 2 mm thick. Made of stainless steel with PVC cushion grips.

| Item | Order \# | Description | Outside Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 4 0 1 5}$ | Ladies' $^{\prime}$ | 14 mm | $6^{\prime \prime}$ | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| B | $\mathbf{4 6 - 4 0 1 6}$ | Gents | 16 mm | $6^{\prime \prime}$ | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |



## TRIPLE BAIL LOOPING PLIERS

Multi-size looping pliers can make a variety of loops from 2mm-9mm for a variety of combinations. Made of stainless steel with double-leaf spring.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 4 0 6}$ | Triple Bail Pliers | $53 / 4^{\prime \prime}$ | $\$ 15.90$ | $\$ 16.83$ | $\$ 18.70$ |



WIRE LOOPING PLIERS
Stainless steel wire looping pliers. Also known as coupling pliers. Enables the user to bend wire easily. Three round jaws in one and box-jointed for durability. Finely polished. One round and one concave jaw.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 8 0}$ | Wire Looping Pliers | $53 / 4^{\prime \prime}$ | $\$ 11.56$ | $\$ 12.24$ | $\$ 13.60$ |



## MASTER COILER PLIERS

Makes loops and coils without marking precious wire. Most concave/convex pliers nick, but the new "Master Coiler" allows one to hold the wire with the flat jaw while rotating the round jaw to form the perfect loop. Comfort grips, rust-resistant, highly polished, stainless steel jaws, and a standard step jaw for consistent loops and coils.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 9 0 0 5}$ | Master Coiler Pliers | $53 / 4^{\prime \prime}$ | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |



## WIRE-TWISTING PLIERS

Safely twists wire up to .06 gauge. Simple one-pull action and automatic return twists wire quickly into a strand that won't unravel. Hardened and tempered.


| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 9 0 1 0}$ | Wire-Twisting Pliers | $9 "$ | $\$ 20.49$ | $\$ 21.69$ | $\$ 24.10$ |

PARALLEL ACTION PLIERS

## Heavy Flat Nose Pliers:

Has V-slot running the length of the serrated jaws for holding wire. Combination Pliers:
Flat nose pliers with V-slot and serrated jaw combined with a wire cutter.
Chain Nose Pliers:
Smooth nose, non-serrated, tapered pliers for a variety of projects.


| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 5 0 6 0}$ | Heavy Flat Nose Pliers | $5^{1} / 2^{\prime \prime}$ | $\$ 20.40$ | $\$ 21.60$ | $\$ 24.00$ |
| B | $\mathbf{4 6 - 5 1 4 0}$ | Combination Pliers | $5^{\prime \prime}$ | $\$ 28.82$ | $\$ 30.51$ | $\$ 33.90$ |
| C | $\mathbf{4 6 - 5 1 6 0}$ | Combination Pliers | $5^{1} / 2^{\prime \prime}$ | $\$ 30.01$ | 31.77 | 35.30 |
| D | $\mathbf{4 6 - 5 2 0 0}$ | Chain Nose Pliers | $5^{"}$ | $\$ 28.73$ | $\$ 30.42$ | $\$ 33.80$ |



LIGHT FLAT NOSE PARALLEL PLIERS
Parallel action. A square, vise-like grip is provided by the jaws opening and closing parallel along entire length. Handles and jaws are nickel-plated.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| E | $\mathbf{4 6 - 5 1 0 0}$ | Serrated Jaws with V-Slot | $5^{\prime \prime}$ | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| F | $\mathbf{4 6 - 5 1 2 0}$ | Smooth Jaws | $5^{\prime \prime}$ | $\$ 22.14$ | $\$ 23.45$ | $\$ 26.05$ |
| G | $\mathbf{4 6 - 2 8 5 0}$ | Half-Round Jaws | $5^{\prime \prime}$ | $\$ 54.19$ | $\$ 57.38$ | $\$ 63.75$ |



## SWISS BENDING PLIERS

Bending pliers designed for bending flat and round stock, sheet metal, and wire into various shapes. Made of aircraft-quality aluminum. Bends up to 4 mm round or flat stock and 15 mm sheet width. Made in Switzerland.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| 46-9006 | Swiss Bending Pliers | $73 / 4^{\prime \prime}$ | $\$ 141.70$ | $\$ 150.03$ | $\$ 166.70$ |



## SUPERFIT ${ }^{\text {m" }}$ PARALLEL RING-BENDING PLIERS

Uses parallel action to bend and hold rings without distorting shanks.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 6 4}$ | Ring Bending Pliers | $51 / 2^{\prime \prime}$ | $\$ 51.55$ | $\$ 54.59$ | $\$ 60.65$ |



NYLON BENDING PLIERS
Nylon jaw pliers for bending or reshaping without scratching.
Jaw is made of nylon and highly polished stainless steel.

| Item | Order \# | Description | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 46-2086 | Bending | $51 / 41$ | \$19.42 | \$20.57 | \$22.85 |
|  | 46-2087 | Jaws Only (for 46-2086) |  | \$4.46 | \$4.72 | \$5.25 |
| B | 46-2092 | Tube Holding | $61 / 21$ | \$23.42 | \$24.80 | \$27.55 |
|  | 46-2093 | Jaws Only (for 46-2092) |  | \$4.68 | \$4.95 | \$5.50 |
| C | 46-2084 | Ring Bending | 51/4" | \$19.42 | \$20.57 | \$22.85 |
|  | 46-2085 | Jaws Only (for 46-2084) |  | \$4.46 | \$4.72 | \$5.25 |
| D | 46-2090 | Bracelet Bending | $5{ }^{\prime \prime}$ | \$19.08 | \$20.20 | \$22.45 |
|  | 46-2091 | Jaws Only (for 46-2090) |  | \$4.46 | \$4.72 | \$5.25 |
| E | 46-2088 | Ring Holding | 51/2" | \$19.42 | \$20.57 | \$22.85 |
|  | 46-2089 | Jaws Only (for 46-2088) |  | \$4.46 | \$4.72 | \$5.25 |
| F | 46-2080 | Thin Nose | 53/4" | \$12.67 | \$13.41 | \$14.90 |
|  | 46-2081 | Jaws Only (for 46-2080) |  | \$4.46 | \$4.72 | \$5.25 |
| G | 46-2082 | Flat Nose | 53/4" | \$12.67 | \$13.41 | \$14.90 |
|  | 46-2083 | Jaws Only (for 46-2082) |  | \$4.46 | \$4.72 | \$5.25 |



## NYLON SPECIALITY FORMING PLIERS

The nylon jaw pliers are a necessity for the discerning jeweler. The quality nylon will not mar, scratch, bend, or twist. Be creative with these new designer specialty pliers. Stainless steel box joint with comfort PVC grip allows for long periods of use without hand fatigue. Replacement jaws are available.



NYLON SPECIALITY FORMING PLIERS
High quality, stainless steel pliers have box joints and plastic comfort grips. These unique pliers have special nylon jaws to prevent marking or marring. Nylon can be filed and shaped for special jobs or applications. Replacement jaws are available. Made in Germany.

| Item | Order \# | Description | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | 46-3000 | 2 Flat Nose | 51/2" | \$36.17 | \$38.30 | \$42.55 |
| S | 46-3002 | Flat Nose/Half-Round Metal Nose | 51/2" | \$35.23 | \$37.31 | \$41.45 |
| T | 46-3004 | Flat Nose/Round Metal Nose | $51 / 21$ | \$35.22 | \$37.30 | \$41.44 |
| U | 46-3006 | Jaw Insert Only | $51 / 2$ " | \$6.55 | \$6.93 | \$7.70 |

SOLDER-CUTTER PLIERS WITH HOLE
Cuts sheet solder in $1 / 16^{\prime \prime}$ squares or wire solder up to 18 gauge in $1 / 16^{\text {" }}$ lengths for easy handling and melting. Made of stainless steel with box-joint construction.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 3 5}$ | Solder-Cutter Pliers | $51 / 2^{\prime \prime}$ | $\$ 17.43$ | $\$ 18.45$ | $\$ 20.50$ |



CONCAVE RING BENDING PLIERS
These unique box-joint pliers are made to round any size due to their exclusive shape. The lower (concave) jaw goes from 10.5 mm at the tip to 17 mm at the base.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 2 9 0 0}$ | Concave Ring Bending Pliers | $61 / 2^{\prime \prime}$ | $\$ 44.88$ | $\$ 47.52$ | $\$ 52.80$ |



## LARGE RING BENDING PLIERS

This ring bending plier has a box-joint with cushion grip handles for maximum leverage. Jaws are concave/convex for shaping shanks, with the convex being slightly thinner than the concave jaw. Made in Germany.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 2 9 0 5}$ | Large Ring Bending Pliers | $61 / 2 "$ | $\$ 35.32$ | $\$ 37.40$ | $\$ 41.55$ |



BENDING PLIERS WITH TEXTURED GRIPS
This new line of bending pliers offers the best quality/price combination anywhere. Stainless steel, boxed-joint construction, and blue textured PVC handles assure years of satisfaction. Working surfaces feature rounded corners and are highly polished to prevent scratching precious metals. You will not find better bending pliers.


## HEAVY DUTY RING BENDING PLIERS

Extra-heavy pliers used for bending metal at right angles, closing bows, and bending ring shanks.



## THE \#1 CONNER BEAD SETTING PLIERS

These \#1 pliers will replace the common beading tool on a great many jobs, making them considerably easier. No longer will you need to hold items in the ring clamp and on the bench pin, or fill a fragile item with shellac. This tool will give you the support from the underside you need to do common, everyday tightening and setting stones, plus many applications you'll discover as you use this great tool!

- Used like a beading tool $50 \%$ of the time - faster and easier
- Supports from underneath - no shellac needed
- Can be used to hold stones (culet to table) while being heat-set into wax models

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 9}$ | \#1 Beading Setting Pliers | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |



THE \#2 CONNER BEAD SETTING PLIERS
These \#2 pliers are especially helpful to set or tighten side stones on a basket setting as well as on other mounting types. One side of the pliers has a slot for the wire under the stone and the other side has a beading tool cup on it. Also great for setting earrings! Simply slide the post through the slotted side and bring the beading tool down on the prong, making this type of work much quicker and easier.

- Perfect for setting and tightening accent stones surrounding center stones
- Great for earrings, with or without under bezel wires
- Size of beading cup can be made smaller or larger

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 1 1}$ | \#2 Beading Setting Pliers | $\$ 11.99$ | $\$ 12.69$ | $\$ 14.10$ |



## SETTING PLIERS

Ideal for opening, closing, and tightening prongs. Slim nose allows for reaching small areas.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 5 8}$ | Stone Setting Pliers | $\$ 17.43$ | $\$ 18.45$ | $\$ 20.50$ |



## GEM SET PLIERS

Simplify stone setting. Lever action improves control and mechanical advantage. Adjustable parallel action to avoid over-tightening stones. Sold in two styles. Made in the USA.

- Heavy-Duty - with slightly shorter, less tapered jaws
- Standard - jaws taper to a finer tip allowing easy access to small stones

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 3 4 8 2}$ | Standard Jaw | $\$ 33.58$ | $\$ 35.55$ | $\$ 39.50$ |
| B | $\mathbf{4 6 - 3 4 8 3}$ | Heavy-Duty Jaw | $\$ 33.62$ | $\$ 35.60$ | $\$ 39.55$ |

## Meet the TOOLS TECH TEAM



You've spoken to them numerous times - like the time they talked you through that tough prong repair just before Christmas or that time they called to say hello on your store's anniversary. It's time to put a face with that name.

Combined, the Tools Tech Team holds more than 80 years of experience in the industry, including but not limited to the following areas of expertise:

| - Polishing | Assembly | . Quality Assurance |
| :--- | :--- | :--- |
| - Sales | . Plating | and Improvement |
| - Prepping | $\cdot$ Cleaning | Research and |
| - Tumbling | . Laser Training | Development |
| Findings |  |  |

Visit Benchjeweler.com to post a forum question or live chat with a member of the team. Or call anytime at 800-877-7777, extension 4300.

## STONE SETTING PLIERS

Used to tighten loose prongs or for initial setting of stones. Made in Germany.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 4 8 0}$ | Setting Pliers | $5^{\prime \prime}$ | $\$ 37.27$ | $\$ 39.47$ | $\$ 43.85$ |



## PERFECT SET PLIERS

Designed specifically for closing prongs on tennis bracelets quickly, efficiently, and properly. The angled jaw allows the user to properly bend the prong, making every setting job much easier than with conventional pliers. "Perfect Set" pliers also work great for setting stones on pins, cuff links, coin rings, and lightweight or promotional jewelry. Invented by a jeweler.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 2 4 3 0}$ | Perfect Set Pliers | $51 / 2^{\prime \prime}$ | $\$ 11.65$ | $\$ 12.33$ | $\$ 13.70$ |



## PRONG OPENING PLIERS

Ideal for opening prongs without fracturing stones. The top jaw is a claw that grips the prong cleanly, and the lower jaw is grooved to hold the prong. No pressure is applied on the top of the stone. Made in Germany.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 0}$ | Prong Opening Pliers | $41 / 2^{\prime \prime}$ | $\$ 31.45$ | $\$ 33.30$ | $\$ 37.00$ |



## PRONG OPENING PLIERS

These pliers feature a thinner claw to get behind prongs. The angle and length to bottom jaw provides precise leverage to minimize stone damage. Lower jaw is grooved to prevent sideways slipping. Made in Germany.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 9 9 0}$ | Prong Opening Pliers | $51 / 4^{4}$ | $\$ 35.32$ | $\$ 37.40$ | $\$ 41.55$ |



## PRONG LIFTING PLIERS

Prong lifting pliers designed for lifting prongs to remove set stones. The lower jaw supports the base of the prong while the knife-sharp upper jaw lifts the prong. Jaw length $0.125^{\prime \prime}(3 \mathrm{~mm})$. Made in Germany.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 4}$ | Prong Lifting Pliers | $51 / 4 "$ | $\$ 41.18$ | $\$ 43.61$ | $\$ 48.45$ |

## STONE REMOVAL PLIERS

Box joint allows perfect alignment of jaws. Cushion-grip handles for comfort. Removes stones easily, which prevents damage. Can be used on all prong settings, clusters, channels, fishtails, and baguettes. Tips are thin and narrow to fit into tight recessed areas and very small settings.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 5 9}$ | Stone Removal Pliers | $61 / 2 \mathbf{2}^{\prime \prime}$ | $\$ 10.71$ | $\$ 11.34$ | $\$ 12.60$ |



## BOW-OPENING PLIERS

Heavy-duty, special-joint pliers. Jaws are kept closed by spring in handle. When handles are compressed, jaws open. Used to open bows, links, and jump rings.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 3 0}$ | Bow-Opening Pliers | $53 / 4 "$ | $\$ 46.03$ | $\$ 48.74$ | $\$ 54.15$ |



## BOW-CLOSING PLIERS

Heavy-duty pliers used for closing small bows and loops. Strong and rugged enough to be used to bend ring shanks.


RING HOLDING PLIERS
Large, grooved, semi-circular jaws hold rings during filing or polishing. With box joint.


## HOLE PUNCH PLIERS

This handy tool allows you to punch additional holes to size leather or plastic bands. Allows a 2 mm punch with precise clearance for clean cut. Made of fine steel for long life. Euro-grip handles for comfort.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 5 0}$ | Hole Punch Pliers | $53 / 4^{4}$ | $\$ 9.18$ | $\$ 9.72$ | $\$ 10.80$ |



## PUNCH PLIERS

Powerful, lightweight hand tool for punching holes in all types of metals. Punch accurate, precision round holes in steel, aluminum, brass, copper, plastic, etc., with one hand. Great for use where electricity or power is not available. Comes with a side gauge for depth adjustment. It is perfectly balanced with curved handles for a natural grip. Will pierce up to 14 gauge mild steel. Comes with seven popular sizes:
$3 / 32^{2 \prime}, 1 / 8^{\prime \prime}, 5 / 32^{\prime \prime}, 3 / 16^{\prime \prime}, 7 / 32^{\prime \prime}, 1 / 4 "$, and $9 / 32^{\prime \prime}$.

| Order \# | Description | $\mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 0 0}$ | Round Power Punch | $83 / 4^{\prime \prime} \times 378^{\prime \prime}$ | $\$ 35.32$ | $\$ 37.40$ | $\$ 41.55$ |



## REVOLVING PUNCH PLIERS

A convenient, spring-tension, self-opening tool for punching round holes in leather, plastic, rubber, and similar materials. Made of plated steel with six tapered and hollow, hardened-steel punches. Punch sizes: 2.0, 2.5, 3.0, 3.5, 4.0 , and 4.5 mm .

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| 46-3057 | Revolving Punch Pliers | 9" | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |



METAL HOLE PUNCH PLIERS
Will punch copper or silver as thick as 18 gauge. With ergonomic handles and tempered replaceable pin, these pliers will save you time and money. The pliers are made of thick carbon steel and come with an extra $1 / 8^{\prime \prime}$ replaceable pin.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 0 4 0 4}$ | Metal Hole Punch Pliers | $51 / 4^{\prime \prime}$ | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |
| B | $\mathbf{4 6 - 0 4 0 5}$ | Replacement Pins | $14 / 5^{\prime \prime}$ | $\$ 6.55$ | $\$ 6.93$ | $\$ 7.70$ |



B

## SKILL ELECTRIC CUTTER

Remove rings almost instantly with this high-quality, powerful, cordless electric ring cutter with recharging unit. It will cut the strongest alloys in less than 10 seconds without heat or discomfort. The blade guard slips under the ring and completely protects the hand and fingers. Sterilization of the chrome blade assembly can be easily done. Three year warranty on cutting unit-excluding blade. Comes with 1 gasket. Also takes 4 AA batteries. US PAT 4864730.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | :--- |
| A | $\mathbf{4 8 - 1 8 0 3}$ | Electric Ring Cutter | $\$ 200.10$ |  |  |
| B | $\mathbf{4 8 - 1 8 0 4}$ | Replacement Blades (pack of 2) | $\$ 49.56$ | $\$ 52.47$ | $\$ 58.30$ |



RING CUTTER
Saws rings while on or off the finger. The lower jaw of the cutter slides between the ring and hand. The circular saw can be turned by the handle to cut through the ring. Handle is knurled and non-slip. Nickel-plated, except for saw. Will not cut titanium. Comes with attachment to hook to electric cutter.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{4 8 - 1 8 0 0}$ | Ring Cutter with 1 Saw | $41 / 2^{\prime \prime}$ | $\$ 44.92$ | $\$ 47.57$ | $\$ 52.85$ |
| D | $\mathbf{4 8 - 1 8 0 1}$ | Replacement Saw |  | $\$ 11.39$ | $\$ 12.06$ | $\$ 13.40$ |
| E | $\mathbf{4 8 - 1 8 0 2}$ | Replacement Saw (Diamond) | $\$ 37.44$ | $\$ 39.65$ | $\$ 44.05$ |  |
| F | $\mathbf{4 8 - 1 8 0 6}$ | Beaver Blade | $\$ 20.53$ | $\$ 21.74$ | $\$ 24.15$ |  |



## MICRO-SNIP BEADING SHEAR

Ideal for bead string and thread snipping.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 2 8 0 0}$ | $31 / 2^{\prime \prime}$ | $\$ 3.74$ | $\$ 3.96$ | $\$ 4.40$ |



## STULLER RING CRACKER

Allows you to crack any ceramic or tungsten ring with no pain to the wearer. Very easy to use anybody can assist with the removal of these alternative metals. The kit comes with a Ring Cracker, two pairs of safety glasses and instructions. Only removes tungsten and ceramic rings.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{5 8 - 2 4 4 0}$ | Ring Cracker | $\$ 93.70$ |



PRECISION SCISSORS
Used for beading and other delicate work. Handles are large and made of black ABS. Small, pointed blades are made of high quality stainless steel. Blades are held together with a stainless steel high-impact rivet and nylon washer, which provide smooth cutting and extended life.

| Order\# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 6 2 0 0}$ | $4^{\prime \prime}$ | $11 / 4^{\prime \prime}$ | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |



## CROWN SCISSORS

Made of forged steel, expertly tempered and hardened. Hand-ground edges retain a keen cut after long use. Straight blades are used to cut hard wire or sheet up to B\&S \#27 and soft wire up to B\&S \#16. Blades are short and stubby.

| Order\# | Blade Length | Blade Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 8 0 7 0}$ | $9 / 6^{\prime \prime}$ | $1 / 4^{4}$ | $\$ 17.68$ | $\$ 18.72$ | $\$ 20.80$ |



## 6" SIDE CUTTER

These cutters are disigned for larger jobs where strength and leverage are important. They are 6" -150 mm - sidecutters with cushioned grips, gentle coil-return spring and semi-flush jaws.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 7 0}$ | Side Cutter | $\$ 4.21$ | $\$ 4.46$ | $\$ 4.95$ |



## 6" SPRUCE CUTTER FOR PLASTIC

These cutters are totally flush and were manufactured to cut plastic sprues. They can also flush cut very small and softer wires. PVC grips and a coil spring return for ease of use. Length 6 " -150 mm .

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 0 7 1}$ | Spruce Cutter | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |




## XURON ${ }^{\circledR}$ WIRE SHEAR

This HWAC plier is rated for hard wire, music wire, and throttle cable. This is ideal for the craftsperson who needs to cut a variety of metals.

| Order \# | Description | Length | 12+ | 6+ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 4}$ | Perfect Set Pliers | $51 / 2^{\prime \prime}$ | $\$ 14.96$ | $\$ 15.84$ | $\$ 17.60$ |

## XURON ${ }^{\circledR}$ HIGH DURABILITY SCISSORS

Features precision ground high carbon steel cutting edges. Excellent for cutting solder and sheets of light gauge metal up to 0.030 " $(0.8 \mathrm{~mm})$. For line and all bead cords, these pliers have serrations on one edge to keep material secure while cutting.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| 46-0513 | High Durability Scissors | $6 "$ | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |

## XURON ${ }^{\circledR}$ HIGH PRECISION SCISSORS

Ultra-precise, the Xuron ${ }^{\text {t" }}$ scissor cuts fine or delicate items with a clean, square edge cut. Cushion grips and return spring provide increased comfort and precision. Rated for cutting soft metals up to 0.005 ". Including materials such as silk, embroidery, floss, or thin mylars.

| Order\# | Length | Jaw Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 8}$ | $5^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 14.96$ | $\$ 15.84$ | $\$ 17.60$ |

## XURON ${ }^{\circledR}$ MICRO SHEAR ${ }^{\circledR}$

A superior tool offering both precision cutting and exceptional life. The Xuron ${ }^{\text {T" }}$ Micro Shear" is ideal for cutting soft metals and solders. Cutting edges are heat treated to a hard 57-59 RC.

| Order \# | Length | Jaw Length | $\mathbf{1 2 +}$ | 6+ | 1+ |
| ---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 9}$ | $6^{\prime \prime}$ | $11 / 6^{\prime \prime}$ | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |

## MICRO SHEAR ${ }^{\circledR}$ FLUSH CUTTERS

Micro Shear is a registered trademark of Xuron Corporation, which is applied only to products that utilize blade by-pass shear-cutting action. This patented design requires about half the effort to cut a wire as compared to conventional compression-type wire cutters. All primary cutting surfaces are generated on high-precision, three microprocessor-controlled, self-diagnostic grinding equipment. This ensures that the grinding on every blade is as identical as computer controlled tolerances allow.
Features include:

- Ergonomic shape
- Xuro-rubber ${ }^{\text {T"W }}$ grips
- Black finish to eliminate glare
- Light Touch ${ }^{\text {"w }}$ return spring


## MICRO FLUSH CUTTER DELUXE

Made of hardened tool steel and induction-hardened jaws, the cutting edge is relieved for a clean cut with a fine point for tight work. With comfort grips and a steel spring, this cutter is perfect for those smaller jobs, and reasonably priced. Excellent for small prongs, chain, and other items.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 1 0}$ | Flush Cutter | $43 / 4^{\prime \prime}$ | $\$ 9.95$ | $\$ 10.53$ | $\$ 11.70$ |

## MAXI SHEAR ${ }^{\circledR}$ FLUSH CUTTERS

Tough $6^{\prime \prime}$ flush cutters featuring a patented Micro Shear ${ }^{\circ}$ cutting action. For cutting soft metals and wire up to 14 gauge ( 1.6 mm ) thick. Leaves clean square cuts. Ergonomic shape and non-slip Xuro-Rubber" grips. Two styles - Standard flush cutter and flush cutter with lead retainer that holds small pieces of wire as it is cut. Overall length $5.82^{\prime \prime}$. Jaw length $0.47^{\prime \prime}$.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 6 - 0 5 0 1}$ | Flush Cutter | $545^{\prime \prime}$ | $\$ 14.37$ | $\$ 15.21$ | $\$ 16.90$ |
| B | $\mathbf{4 6 - 0 5 0 7}$ | Flush Cutter w/ Retainer | $545^{\prime \prime}$ | $\$ 15.32$ | $\$ 16.22$ | $\$ 18.02$ |

MICRO SHEAR ${ }^{\circledR}$ FLUSH CUTTERS
This pair flush cuts soft wire up to 20 gauge ( 0.8 mm ) thick.

| Order\# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 0}$ | $5^{\prime \prime}$ | $1 / 2 "$ | $\$ 8.20$ | $\$ 8.69$ | $\$ 9.65$ |

## MICRO SHEAR ${ }^{\circledR}$ FLUSH CUTTERS

This tapered head design allows positioning, even on finepitch leads. Tapered head flush cuts soft wire up to 14 gauge ( 1.6 mm ) thick.

| Order \# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 0 5 0 3}$ | $5^{\prime \prime}$ | $1 / 3^{\prime \prime}$ | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |



## LIGHTWEIGHT METAL SNIPS

Used for cutting templates and patterns from metal sheet up to B\&S \#20, medium hard metal to B\&S \#16, and soft metal. Overall length $7^{\prime \prime}(178 \mathrm{~mm})$ with a $11 / 2^{\prime \prime}(38 \mathrm{~mm})$ cutting length. Made in Germany.


LINDSTROM ${ }^{\circledR}$ MULTIPURPOSE SHEAR
Ergonomic, cushion grip handles. Blades with a 57-59 Rockwell Hardness for long life. These Lindstrom ${ }^{\circ}$ shears cut easily through 28 gauge silver stock.

| Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 8 1 6 3}$ | $53 / 4^{\prime \prime}$ | $\$ 24.06$ | $\$ 25.47$ | $\$ 28.30$ |



## JEWELER'S SHEARS

Excellent for clipping chains, solders, and thin metals. The tempered steel, polished jaws provide an easy cut. Overall length 7 " ( 178 mm ).

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 5 0 1 5}$ | Straight Shear | $\$ 14.96$ | $\$ 15.84$ | $\$ 17.60$ |
| B | $\mathbf{4 6 - 5 0 1 6}$ | Straight Shear w/ Spring | $\$ 22.36$ | $\$ 23.67$ | $\$ 26.30$ |

## LIGHTWEIGHT METAL SNIPS

Used for cutting templates and patterns from metal sheet up to B\&S \#20, medium hard metal to BGS \#16, and soft metal. Overall length 7" (178mm) with a $1 \frac{1}{2} 2^{\prime \prime}(38 \mathrm{~mm})$ cutting length. Made in Germany.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{4 6 - 5 0 0 5}$ | Straight Snips | $\$ 14.01$ | $\$ 14.83$ | $\$ 16.48$ |
| D | $\mathbf{5 3 - 8 0 3 0}$ | Curve Snips | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |

JEWELER'S SNIPS
Used for cutting 24 gauge or thinner metals. Handles are coated with PVC.

| Order\# | Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 5 0 0 0}$ | $7^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | $\$ 14.01$ | $\$ 14.83$ | $\$ 16.48$ |



HEAVY DUTY CHAINMAKER SHEARS
These are chainmaker's shears that contain precision, fine blades and blue handles. Made in Germany.

| Order \# | Length | Blade Length | 12+ | 6+ | 1+ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 5 0 2 0}$ | $7^{\prime \prime}$ | $11 / 2^{\prime \prime}$ | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |

## ULTRA FLUSH CUTTER

Italian-made cutter has a newly added safety clip to keep wire or other materials from flying when cut. With new ergonomic handle to lessen fatigue.

| Order \# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 2 9}$ | Flush Cutter | $51 / 2 "$ | $\$ 22.95$ | $\$ 24.30$ | $\$ 27.00$ |  |



SEMI-FLUSH SIDE CUTTER
This new cutter made in Europe offers strength in a precision side cutter at an affordable price. Smooth spring return.

| Order \# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 46-4028 | Semi-Flush Side Cutter | $5^{\prime \prime}$ | $\$ 22.48$ | $\$ 23.81$ | $\$ 26.45$ |  |



## C. H. P. MILANO ITALIAN FLUSH CUTTER

Made of high grade tool steel, this Italian cutter is perfect for lighter jobs where a flush cut is essential. This "shear action" cutter, made in Italy, features a blackened non-glare head, return spring, and high friction ergonomic grips. Maximum cut is 16 gauge 1.5 mm copper wire.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 0 2}$ | Flush Cutter | $51 / 2^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



## POWER MAX ${ }^{\text {m" }}$ CUTTERS

Ergonomic, compound cutter. Jaws are made of induction-hardened, high-grade steel and feature a semi-flush bevel for close work. Its ergonomically shaped handles prevent fatigue and injury.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 4 0 2 0}$ | Cutter | $61 / 2^{\prime \prime}$ | $\$ 34.21$ | $\$ 36.23$ | $\$ 40.25$ |
| B | $\mathbf{4 6 - 4 0 2 5}$ | Full Flush Cutter | $61 / 2 "$ | $\$ 34.42$ | $\$ 36.45$ | $\$ 40.50$ |



## FULL FLUSH CUTTER

These cutters are specifically designed for multi-strand beading wire and full-flush with jaws induction hardened to 60-62 Rockwell. Used properly, this degree of hardness assures a clean cut, time after time. Cutting edges are precisely aligned and the black oxide non-glare head has a "relieved" design for reaching into tight areas. This quality German cutter also features double-leaf spring and yellow PVC handles. Use on flexible beading wire and soft wire only.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{4 6 - 4 0 1 3}$ | Cutter | $41 / 2^{\prime \prime}$ | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |
| D | $\mathbf{4 6 - 4 0 1 4}$ | Pointed Jaw Cutter | $41 / 2^{\prime \prime}$ | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |




COMPOUND CUTTER
Heavy-duty diagonal cutter with compound leverage for cutting sprues with minimal effort. Made in Germany.

| Order \# | Length | Cutting Capacity | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 3 - 9 3 2 6}$ | $71 / 2^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | $\$ 36.68$ | $\$ 38.84$ | $\$ 43.15$ |

## NYLON SPECIALITY FORMING PLIERS

High quality, stainless steel pliers have box joints and plastic comfort grips. These unique pliers have special nylon jaws to prevent marking or marring. Nylon can be filed and shaped for special jobs or applications. Replacement jaws are available. Made in Germany.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 3 0 0 0}$ | 2 Flat Nose | $51 / 2^{\prime \prime}$ | $\$ 36.17$ | $\$ 38.30$ | $\$ 42.55$ |

## TRX 8180 LINDSTROM ${ }^{\circledR}$ CUTTER

Use on copper wire and hard wire applications. Handles solid copper wire and hard steel wire from 24 gauge $-0.5 \mathrm{~mm} / 0.02$ inch- up to 9 gauge -2.75 $\mathrm{mm} / 0.11$ inch. This powerhouse cutter utilizes the new progressive cut beveled edges- suited for soft wire at the tip and hard wire closer to the jaw - for versatile operation. Micro-bevel cutting edges hardened to 63-65 for durable performance.

| Order\# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 8 1 6 4}$ | $8^{\prime \prime}$ | $\$ 55.80$ | $\$ 59.09$ | $\$ 65.65$ |



## BERGEON HEAVY-DUTY SPRUE CUTTER

These top-quality cutters help reduce hand fatigue from constant usage by using a special linkage that multiplies your hand pressure many times. Extra-long handles provide additional leverage to help make cutting easier. Cuts sprues up to $1 / 8$ " $(3 \mathrm{~mm})$ thick. Jaws are $7 / \mathrm{s}^{\prime \prime}(22 \mathrm{~mm})$ long and pointed for easier access to tight areas. Made in Switzerland.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 6 4 9 6}$ | Sprue Cutter | $\$ 124.61$ | $\$ 131.94$ | $\$ 146.60$ |

SPRUE CUTTER DELUXE
Features compound construction with hardened, tool-steel jaws and a chrome-vanadium steel. Cuts soft wire up to $1 / 8^{\prime \prime}(3 \mathrm{~mm})$ and hard wire up to 0.039 " ( 1 mm ). Weighs $121 / 202$.

| Order\# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 0 3 0}$ | $91 / 2 "$ | $\$ 78.46$ | $\$ 83.07$ | $\$ 92.30$ |



PARALLEL-ACTION DIAGONAL CUTTERS
Jaws open and close parallel along entire length, providing firm, vise-like grip. Spring-action handle.

| Order\# | Length | Jaw Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 5 3 2 0}$ | $51 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 34.60$ | $\$ 36.63$ | $\$ 40.70$ |

## GUILLOTINE SHEAR

Superior cutting, but small enough to fit right on your bench. The maximum size cut is $4^{\prime \prime}$ W. We recommend a maximum thickness of 18 gauge for gold, silver, and copper only. Never use on stainless steel or heat treated or hardened metals. Miter table cuts $15^{\circ}, 30^{\circ}$ and $45^{\circ}$ angles. The maximum cut width on angles is approximately $2^{\prime \prime}$.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: |
| $\mathbf{2 8 - 2 0 4 1}$ | 4 in. Shear | $61 / 4^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 321.40$ |




## QUATRO STAND-UP POLISHING UNIT

- Most efficient polishing station on the market
- True HEPA Filter, ensures $99.97 \%$ efficiency on the capture of precious metal particles
- 2 workstations with 2 SEPARATE collection bags, allowing for the separation of precious metals (platinum dust captured in one ClearView filter bag \& gold dust captured in the other)
- CoolBlue motor supplied is $1 / 2 \mathrm{hp}, 2$-speed
- Middle drawer provides for extra storage (additional drawers available)
- Quiet yet powerful
- ClearView Hoods provide for a dust-free work environment
- Continuous duty motor for long-term performance

| Order \# | Description | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | CFM | 1+ |
| :--- | :--- | :--- | :--- | ---: |
| 47-4221 | Single Motor Unit | $39 " \times 53^{\prime \prime} \times 19^{\prime \prime}$ | 1200 CFM | $\$ 2,570.00$ |



QUATRO REPLACEMENT PARTS

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 4 1 0 8}$ | Quatro Light Fixture | $\$ 84.15$ | $\$ 89.10$ | $\$ 99.00$ |
|  | $\mathbf{4 7 - 4 2 1 7}$ | Bulbs (Pack of 2) | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |
| B | $\mathbf{4 7 - 4 2 1 3}$ | Pre-Filter (Pack of 20) | $\$ 46.00$ | $\$ 48.00$ | $\$ 50.00$ |
|  | $\mathbf{4 7 - 4 2 1 4}$ | Pre-Filter (Pack of 500) | $\$ 121.44$ | $\$ 126.72$ | $\$ 132.00$ |
| C | $\mathbf{4 7 - 4 2 1 5}$ | Filter Bags (Pack of 6) | $\$ 61.00$ | $\$ 63.65$ | $\$ 66.30$ |
| D | $\mathbf{4 7 - 4 2 1 6}$ | HEPA Filter (Each) | $\$ 126.68$ | $\$ 132.19$ | $\$ 137.70$ |
| E | $\mathbf{4 7 - 4 7 5 2}$ | Replacement Flaps (2 Pair) | $\$ 24.61$ | $\$ 26.06$ | $\$ 28.95$ |
| F | $\mathbf{4 7 - 4 0 3 3}$ | On/Off Remote | $\$ 40.80$ | $\$ 43.20$ | $\$ 48.00$ |
|  | $\mathbf{4 7 - 2 7 2 2}$ | Right Spindle | 5" Length | $\$ 9.06$ | $\$ 9.46$ |
|  | $\mathbf{4 7 - 2 7 2 3}$ | Left Spindle | 5" Length | $\$ 9.05$ |  |

G


## GOLDMAT

Sticky surface captures and holds on to gold and precious metals. Each mat contains 30 sheets.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{4 7 - 4 1 0 6}$ | Goldmat | $24^{\prime \prime} \times 36^{\prime \prime}$ | $\$ 46.84$ | $\$ 49.59$ | $\$ 55.10$ |
|  | $\mathbf{4 7 - 4 1 1 1}$ | Goldmat | $24^{\prime \prime} \times 46^{\prime \prime}$ | $\$ 54.66$ | $\$ 57.87$ | $\$ 64.30$ |

QUATRO STAND-UP DOUBLE STATION POLISHING UNIT

- Most efficient polishing station on the market
- True HEPA Filter, ensures $99.97 \%$ efficiency on the capture of precious metal particles
- 2 workstations with 2 SEPARATE collection bags, allowing for the separation of precious metals (platinum dust captured in one ClearView filter bag \& gold dust captured in the other)
- CoolBlue motor supplied is $1 / 2 \mathrm{hp}, 2$-speed
- Middle drawer provides for extra storage (additional drawers available)
- Quiet yet powerful
- ClearView Hoods provide for a dust-free work environment
- Lapper Containment Hood (with LED) captures at lapper source
- Continuous duty motor for long-term performance

| Order \# | Description | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | CFM | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: |
| 47-4222 | Double Station | $45^{\prime \prime} \times 59^{\prime \prime} \times 19^{\prime \prime}$ | 1200 CFM | $\$ 2,999.00$ |



## QUATRO POLISH AND LAPPING UNIT

Premium Polishing-Grinding Recovery System

- Most efficient polishing station on the market
- True HEPA Filter, ensures $99.97 \%$ efficiency on the capture of precious metal particles
- 2 workstations with 2 SEPARATE collection bags, allowing for the separation of precious metals (platinum dust captured in one ClearView filter bag \& gold dust captured in the other)
- CoolBlue motor supplied is $1 / 2 \mathrm{hp}, 2$-speed
- Middle drawer provides for extra storage (additional drawers available)
- Quiet yet powerful
- ClearView Hoods provide for a dust-free work environment
- Lapper Containment Hood (with LED) captures at lapper source
- Continuous duty motor for long-term performance
- One Lapper hood *Lapper sold separately

| Order \# | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | CFM | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 2 2 3}$ | $45^{\prime \prime} \times 59^{\prime \prime} \times 19^{\prime \prime}$ | 1200 CFM | $\$ 2,784.00$ |



## JUNIOR POLISHING UNIT

- Design ensures that your shop is clean (model c/w ClearView)
- Capture your gold inside filter bag, then send it for refining
- HEPA filter guarantees clean environment and ensures that air leaving the unit is absolutely clean
- ClearView enclosure contains all precious metals
- Maximum free air 600 CFM, 2 speed motor $1 / 4 \mathrm{hp}$.
- Light bulb included

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 9 9 9}$ | Deluxe Polisher | $24^{\prime \prime} \times 20 " \times 50^{\prime \prime}$ | $\$ 1,595.00$ |





## QUATRO DUST COLLECTOR

Excellent for grinding, polishing, waxing, smoke, odors, and fumes. Also used for soldering smoke odors and fumes, rhodium


Customized example shown here. odors, and mixing investments.

| Item Order \# | Description | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: |
| A | $\mathbf{4 7 - 4 0 6 3}$ | Collect All | $17^{\prime \prime} \times 31^{\prime \prime} \times 14^{\prime \prime}$ |
| $\mathbf{4 7 - 4 2 4 5}$ | PG1 11 user $)$ | $22^{\prime \prime} \times 291 / 2144^{\prime \prime}$ | $\$ 1,495.00$ |
| $\mathbf{4 7 - 4 2 4 5}$ | PG2 $(1-2$ users $)$ | $22^{\prime \prime} \times 291 / 2^{\prime \prime} \times 14^{\prime \prime}$ | $\$ 1,195.00$ |

## VELOCITY X-SERIES DUST COLLECTOR

Includes four pre-filters and six feet of heavy-duty hose per port.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | Airflow | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| B | $\mathbf{4 7 - 4 0 4 0}$ | Single-Port | $16^{\prime \prime} \times 14^{\prime \prime} \times 25^{\prime \prime}$ | 175 CFM | $\$ 950.00$ |
| C | $\mathbf{4 7 - 4 0 4 3}$ | Double-Port | $17^{\prime \prime} \times 14^{\prime \prime} \times 25^{\prime \prime}$ | 360 CFM | $\$ 1,199.00$ |
| D | $\mathbf{4 7 - 4 0 4 6}$ | Four-Port | $23^{\prime \prime} \times 18^{\prime \prime} \times 25^{1} / 2^{\prime \prime}$ | 580 CFM | $\$ 1,495.00$ |

## 2

## SELECT YOUR POLISHING MOTOR

## QUATRO COOL BLUE MOTOR

Filter keeps dirt out, motor runs longer, cleaner and cool. Less heat = longer life. All motors are two-speed and accommodates a $1 / 2$ " straight spindle.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| E | $\mathbf{4 7 - 3 9 7 0}$ | $1 / 2 \mathrm{hp}$ Single Shaft | $81 / 2^{\prime \prime} \times 131 / 2^{\prime \prime} \times 93 / 4^{\prime \prime}$ | $\$ 339.00$ |
| F | $\mathbf{4 7 - 3 9 7 1}$ | $1 / 2 \mathrm{hp}$ Double Shaft | $81 / 2^{\prime \prime} \times 171 / 2^{\prime \prime} \times 93 / 4^{\prime \prime}$ | $\$ 369.95$ |
|  | $\mathbf{4 7 - 3 9 7 2}$ | $3 / 4 \mathrm{hp}$ Single Shaft | $81 / 2^{\prime \prime} \times 13^{\prime \prime} / 2^{\prime \prime} \times 93 / 4^{\prime \prime}$ | $\$ 349.00$ |
| $\mathbf{4 7 - 3 9 7 3}$ | $3 / 4 \mathrm{hp}$ Double Shaft | $81 / 2^{\prime \prime} \times 171 / 2^{\prime \prime} \times 93 / 4^{\prime \prime}$ | $\$ 389.00$ |  |
| $\mathbf{4 7 - 3 9 7 4}$ | Filter w/Support Kit | $6^{\prime \prime}$ | $\$ 25.45$ |  |
| $\mathbf{4 7 - 3 9 7 5}$ | Filter (6-Piece) | $6^{\prime \prime}$ | $\$ 29.00$ |  |

3
SElect your capture accessories
QUATRO POLISHING HOOD

| Item | Order \# | Description | $\mathbf{1 2 +}$ |  | $\mathbf{6 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| G | $\mathbf{4 7 - 4 2 0 9}$ | Double Enclosed ClearView Hood |  |  | $\mathbf{1 +}$ |
| H | $\mathbf{4 7 - 5 0 0 2}$ | ClearView Hood w/Drawer | $\$ 254.15$ | $\$ 269.10$ | $\$ 299.00$ |
|  | $\mathbf{4 7 - 4 7 5 3}$ | ClearView Hood | $\$ 245.65$ | $\$ 260.10$ | $\$ 289.00$ |
| J | $\mathbf{4 7 - 4 1 0 9}$ | Illumination Hood | $\$ 104.55$ | $\$ 110.70$ | $\$ 123.00$ |
| K | $\mathbf{4 7 - 4 0 9 4}$ | Fume Extraction Flex Arm w/Cone | $\$ 80.75$ | $\$ 85.50$ | $\$ 95.00$ |
|  | $\mathbf{4 7 - 4 0 6 4}$ | Fume Extraction Flex Arm w/Cone bracket | $\$ 164.05$ | $\$ 173.70$ | $\$ 193.00$ |

QUATRO ACCESSORIES

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{4 7 - 4 2 1 8}$ | Dual LED Light Kit | $\$ 119.00$ |
| B | $\mathbf{4 7 - 4 1 0 4}$ | Upgrade Kit for ClearView | $\$ 74.00$ |
| C | $\mathbf{4 7 - 4 0 9 5}$ | Slide Bar 2½ in. | $\$ 65.00$ |
| D | $\mathbf{4 7 - 4 0 9 6}$ | Slide Bar 3 in. | $\$ 44.75$ |
| E | $\mathbf{4 7 - 4 0 3 9}$ | On/Off Foot Pedal | $\$ 98.00$ |
|  | $\mathbf{4 7 - 4 7 5 2}$ | Replacement Flaps (2 Pair) | $\$ 28.95$ |

D

B



## HICAP

High capacity debris collection similar to the velocityX4. Lower maintenance required, due to high capacity precious metals storage. Comes with legs and plastic pail for easy debris removal. Quatro benefits of a proven design:

- Highest and most effective dust retention
- 99.9\% filter efficiency
- Maintenance-friendly design, filter accessed and cleaned in seconds
- High capacity precious metals debris storage allows for lower maintenance - Brushless motor, no motor maintenance

Dimensions with intake hood: 28" W x 6" H x 18" D
Weight: 50 lbs operating Voltage: $115 / 1 / 60,1.6 \mathrm{amps}$ (also available in $240 / 1 / 50$ ) CFM:800

| Order \# | Description | W $\times \mathrm{H} \times \mathrm{D}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 47-4182 | 4 Port Dust Collector | $22^{1 / 2} \times 20$ " $\times 131 / 2^{\prime \prime}$ | - |  | \$1,895.00 |
| 47-4183 | 8 Station Collector | $221 / 2^{\prime \prime} \times 20$ " $\times 131 / 2^{\prime \prime}$ | - | - | \$2,320.00 |
| 47-4049 | Pre-Filters (Pack of 20) |  | \$47.60 | \$50.40 | \$56.00 |
| 47-4048 | Replacement Cartridge Filter |  | \$100.30 | \$106.20 | \$118.00 |
| 47-4033 | On/Off Remote |  | \$40.80 | \$43.20 | \$48.00 |




## QUATRO CB POLISHER

- Three-stage filtration: rouge prefilter, extra surface dust filter, true 99.97\% HEPA filter
- Designed for use with inside ring polishers
- Built-in air purifier to purify the air in the room when you are not polishing
- Cool Blue Filtered Polishing Motor has emergency "safety-off" switch
- Vibration isolated polishing motor for extra quiet operation
- Extra large debris capture/intake area
- Extra large protection shield
- Illuminated work surface
- Includes $1 / 2$ " straight shaft spindles
- 300 CFM

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 2 0 8}$ | Table Top Polisher | $9^{\prime \prime} \times 20 " \times 9^{\prime \prime}$ | $\$ 699.00$ |



## QUATRO GOLD VAULT

Compact dust collector. Total collection inside the filter, no precious metal waste.
Whisper quiet. Comes with bag and refillable cartridge filter. Ideal for repair shops or any other areas where engraving, grinding, polishing, and mixing investments will be done. Electrical requirements: 120/1/60-7amps or 230/1/50-4amps.
Control panel: fused for current protection

- Small footprint for tight spaces
- High speed turbine
- Reusable cartridge filter
- Easily disposable bag filter collects all precious metals inside bag
- Includes 6 ft of heavy duty 1.5" hose and clamps
- CFM 150

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | Per Unit | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 1 7 2}$ | Dust Collector | $9^{\prime \prime} \times 20^{\prime \prime} \times 9^{\prime \prime}$ | Each | $\$ 648.00$ |
| $\mathbf{4 7 - 4 1 7 6}$ | Box Filter |  | Each | $\$ 90.80$ |

## QUATRO IVAC

Designed for systems that generate large volumes of dust, the iVAC is an intelligent "next generation" dust collector with Filter Cleaning System (FCS). FCS is fully automatic, self activating, and hands-free and sends accumulated dust from the filter into the collector as needed. Fully digital control panel indicates filter replacement and maintenance cycles. Built-in "slide \& glide" collector accumulates 6 gallons.

| $\mathbf{O r d e r} \#$ | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 2 4 0}$ | iVAC | $\mathbf{1 5} \times 20^{\prime \prime} \times 29^{\prime \prime}$ | $\$ 2,150.00$ |
| $\mathbf{4 7 - 4 0 4 4}$ | Filter | $12^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 104.00$ |
| $\mathbf{4 7 - 3 9 9 0}$ | HEPA Filter |  | $\$ 72.00$ |

## QUATRO JET STREAM

The Quatro Jet-Stream is a quiet, compact and powerful dust collector. It is easy to connect to your bench or workstation to help keep your breathing zone clean and free of particulate matter. The Jet- Stream uses a two-stage filtering system that starts with an easy access replaceable bag filter that captures larger particulates and then an OSHA approved HEPA filter that will remove particulate matter down to sub-micron particulate levels. Compact and comes with bag filter and HEPA filter. Whisper quiet-ideal for engraving applications or small repairs.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | Per Unit | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 4 1 9 5}$ | Jet Stream | $\mathbf{1 0 " ~} \times \mathbf{1 4} \times 12^{\text {" }}$ | Each | $\$ 699.00$ |
| $\mathbf{4 7 - 4 1 9 6}$ | Filter Bags |  | Pack of 5 | $\$ 55.20$ |
| $\mathbf{4 7 - 4 1 9 8}$ | Brushes |  | Pack of 2 | $\$ 20.00$ |

## BEST BUILT ENCLOSED POLISHER

The Best Built polishing system comes with a $3 / 4$ hp fully sealed, heavy duty, permanently lubricated ball bearing polishing motor. The hoods have efficient, cool fluorescent lighting. Lights are enclosed behind a glass shield, which protects and keeps the bulbs clean. With a unique double filter system, it combines the technology of a dense, pleated filter with a tightly woven cotton bag filter, ensuring maximum recovery.

- $1 / 2$ hp suction motor creates 450 CFM
- Rust-proof spindles
- Heavy-duty 12 gauge steel cabinet
- 110 volts/20 amps
- Access for hands can be customized


## BEST BUILT MOTORS

- Fully sealed ball bearing motor
$-1 / 2$ " straight shaft
- Rust resistant spindles

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{4 7 - 4 4 0 8}$ | Enclosed Double Unit | $37^{\prime \prime} \times 22^{\prime \prime} \times 52^{\prime \prime}$ | $\$ 1,995.00$ |
| B | $\mathbf{4 7 - 4 4 0 1}$ | Single Polisher | $26^{\prime \prime} \times 22^{\prime \prime} \times 52^{\prime \prime}$ | $\$ 1,500.00$ |
| C | $\mathbf{4 7 - 4 4 0 5}$ | Polishing Hood | $15^{3 / 4^{\prime \prime} \times 17^{\prime \prime} \times 163 / 4^{\prime \prime}}$ | $\$ 275.00$ |
| D | $\mathbf{4 7 - 4 4 0 0}$ | Double Spindle Unit | $41^{\prime \prime} 2^{\prime \prime} \times 193 / 4^{\prime \prime} \times 52^{\prime \prime}$ | $\$ 1,995.00$ |
| E | $\mathbf{4 7 - 4 4 0 6}$ | $3 / 4$ hp Single Spindle Motor | $\$ 299.00$ |  |
| F | $\mathbf{4 7 - 4 4 0 7}$ | $3 / 4$ hp Double Spindle Motor | $\$ 319.00$ |  |
|  | $\mathbf{4 7 - 4 3 9 9}$ | Top Only | $\$ 1,295.00$ |  |
|  | $\mathbf{4 7 - 4 4 0 9}$ | Filter (Pleated) | $\$ 100.00$ |  |
|  | $\mathbf{4 7 - 4 4 0 2}$ | Dust Collector Bag | $\$ 12.00$ |  |
|  | $\mathbf{4 7 - 4 4 0 4}$ | Dust Collector Bag | $\$ 16.00$ |  |



C



165 CFM

STULLER TABLE-TOP LARGE DOUBLE SPINDLE POLISHER
Squirrel cage blowers provide the strongest suction in their class. Sealed and insulated cabinets provide maximum dust collector efficiency. Quick and easy filter replacement. Totally sealed and permanently lubricated. Unique tapered and threaded shaft design virtually eliminate all vibration. Capable of handling up to $8^{\prime \prime}$ diameter buffs. Bulbs not included.

| Item Order \# | Description | $\mathbf{W} \times \mathrm{L} \times \mathrm{H}$ | 1+ |
| :---: | :---: | :---: | :---: |
| A 47-4993 | Large Double Polisher | $32^{1} 2^{\prime \prime} \times 22^{\prime \prime} \times 12^{\prime \prime}$ | \$495.00 |
| B 47-4994 | Double Polisher | $221 / 2^{\prime \prime} \times 17^{\prime \prime} \times 12^{\prime \prime}$ | \$389.00 |
| C 47-4995 | Single Polisher | $15^{\prime \prime} \times 17^{\prime \prime} \times 10^{\prime \prime}$ | \$339.00 |
| ACCESSORIES |  |  |  |
| 47-4147 | Double Spindle Motor | $15^{\prime \prime} \times 17^{\prime \prime} \times 10^{\prime \prime}$ | \$205.00 |
| 47-4142 | Tapered Spindle Right |  | \$9.00 |
| 47-4141 | Tapered Spindle Left |  | \$9.00 |
| 47-4148 | Single Spindle Motor | $15^{\prime \prime} \times 17^{\prime \prime} \times 10^{\prime \prime}$ | \$184.00 |
| 47-4127 | Replacement Single Filters (Pack of 3) | $93 / 4^{\prime \prime} \times 13^{\prime \prime} \times 2^{\prime \prime}$ | \$28.35 |
| 47-4128 | Replacement Double Filters (Pack of 3) | $12^{\prime \prime} \times 221 / 2^{\prime \prime} \times 2^{\prime \prime}$ | \$33.95 |
| 47-4129 | Replacement Large Filters (Each) | $113 / 4^{\prime \prime} \times 293 / 4^{\prime \prime} \times 2^{\prime \prime}$ | \$16.85 |



E


POLISHING HOOD
Designed and manufactured to complement dust collectors, the polishing hood maximizes the direction of airflow promoting maximum efficiency. The hood is fabricated out of heavy gauge sheet metal and has a powder coated finish.

| Item |  | Order \# | Description |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{4 7 - 4 7 6 9}$ | Incandescent Polishing Hood w/Light | 1+ |
| E | $\mathbf{4 7 - 4 1 4 5}$ | Socket for Incandescent Hood | $\$ 105.95$ |
| F | $\mathbf{4 7 - 4 1 4 6}$ | 3" Screen Inlet for Polishing Hood | $\$ 10.55$ |



## SPLIT LAP

Multi-laminated. Flexible. Impregnated cotton split laps with aluminum-oxide abrasive grains. Smooth, controlled, cool grinding action produces a consistent finish on most metals.

| Item | Order\# | Grit | OD | ID | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 5 0 1 1}$ | 180 | $6^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 36.20$ | $\$ 37.78$ | $\$ 39.35$ |  |
| B | $\mathbf{1 7 - 5 0 1 3}$ | 120 | $6^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 36.20$ | $\$ 37.78$ | $\$ 39.35$ |  |



## MARATHON SPLIT LAP

Each wheel is balanced, with holes in the precise center to ensure smooth operation. Perfectly concentric slits provide outstanding visibility of the item being polished.

| Item | Order\# | Grade | Diameter | Thickness |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| C | $\mathbf{1 7 - 9 4 6 0}$ | Medium | $6^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 27.03$ | $\$ 28.62$ | $\$ 31.80$ |  |
| D | $\mathbf{1 7 - 9 4 7 0}$ | Hard | $6^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 30.81$ | $\$ 32.63$ | $\$ 36.25$ |  |
| E | $\mathbf{1 7 - 9 4 8 0}$ | Rock Hard | $6^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 33.41$ | $\$ 35.37$ | $\$ 39.30$ |  |
| F | $\mathbf{1 7 - 9 4 9 0}$ | Flint Hard | $6^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 35.15$ | $\$ 37.22$ | $\$ 41.35$ |  |



## SILICONE SPLIT LAP

Requires no rouge or tripoli. Each wheel is impregnated with carefully graded silicone-carbide abrasive.

| Item | Order\# | Description | Grade |  | Diameter |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| G | $\mathbf{1 +}$ |  |  |  |  |  |  |  |
| G | $\mathbf{1 7 - 5 0 2 7}$ | White Silicone | Coarse | $6^{\prime \prime}$ | $\$ 48.15$ | $\$ 50.99$ | $\$ 56.65$ |  |
| H | $\mathbf{1 7 - 5 0 2 8}$ | Black Silicone | Medium | $6^{\prime \prime}$ | $\$ 48.15$ | $\$ 50.99$ | $\$ 56.65$ |  |
| J | $\mathbf{1 7 - 5 0 2 9}$ | Blue Silicone | Fine | $6^{\prime \prime}$ | $\$ 48.15$ | $\$ 50.99$ | $\$ 56.65$ |  |
| K | $\mathbf{1 7 - 5 0 3 0}$ | Pink Silicone | Extra Fine | $6^{\prime \prime}$ | $\$ 48.15$ | $\$ 50.99$ | $\$ 56.65$ |  |



## PARAMOUNT FELT SPLIT LAPS

The industry standard. All come with pinhole centers.

| Order\# | Grade | Diameter | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{1 7 - 9 5 6 0}$ | Medium | $6^{\prime \prime}$ | $1 / 2 "$ | $\$ 34.60$ | $\$ 36.63$ | $\$ 40.70$ |
| $\mathbf{1 7 - 9 5 6 2}$ | Medium | $6^{\prime \prime}$ | $1 / 21$ | $\$ 36.42$ | $\$ 38.57$ | $\$ 42.85$ |
| $\mathbf{1 7 - 9 5 7 0}$ | Hard | $6^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 36.44$ | $\$ 39.51$ | $\$ 43.90$ |
| $\mathbf{1 7 - 9 5 8 0}$ | Rock Hard | $6^{\prime \prime}$ | $1 / 21$ | $\$ 49.77$ | $\$ 51.94$ | $\$ 54.10$ |
| $\mathbf{1 7 - 9 5 9 0}$ | Flint Hard | $6^{\prime \prime}$ | $1 / 2 "$ | $\$ 49.27$ | $\$ 51.41$ | $\$ 53.55$ |

SILICONE 6 INCH SPLIT LAPS
Very clean, no rouge. Excellent finish.

| Order \# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 5 0 2 5}$ | Pre-Polish | 100 | $\$ 57.21$ | $\$ 60.57$ | $\$ 67.30$ |
| $\mathbf{1 7 - 5 0 2 6}$ | Polish | 180 | $\$ 57.21$ | $\$ 60.57$ | $\$ 67.30$ |



## SPANISH FELT SPLIT LAP WHEEL

These high-grade wheels are excellent for all-purpose polishing and buffing. Made in the USA.

| Order \# | Description | Diameter | Thickness | 12+ | 6+ $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17-5000 | Split Lap | $4 "$ | $1 / 21$ | \$16.05 | \$16.75 \$17.45 |


A. Complete solution for grinding, high precision honing, sharpening, and polishing. Sharpen carbide and grind exotic metals with $3 \mathrm{M}^{\text {M }}$ Diamond Abrasives. Excellent for any metal or wood applications. The included Cushion Pads allow higher accuracy and longer abrasive life. The brush permits polishing of crevices and contoured areas on any metal.

- 12 Ninja SEE-THRUTM Backpads
- 9 Ninja Cushion Pads: $3 \mathrm{M}^{\text {TM }}$ Bumpon ${ }^{\text {TM }}$
- $3 \mathrm{M}^{\text {™ }}$ Microfinishing Diamond ${ }^{\text {TM }}$ : 74, 45, 30, 20 Micron
-3M ${ }^{\text {™ }}$ Purple Ceramic ${ }^{\text {TM. }}$ : 80, 120, 220 Grit
- $3 \mathrm{M}^{\text {M }}$ Trizact $^{\text {™ }}: 35,20,10,5$ Micron
- Ninja ${ }^{\text {TM }}$ SEE-THRU ${ }^{\text {TM }}$ felt disc
- Jooltool ${ }^{\text {TM }}$ Polishing Compound
- 3M ${ }^{\text {M }} 3^{\text {" }}$ Bristle Brush: 1 Micron (polishing)
- Instructional DVD
B. The ideal solution for grinding, high precision honing, sharpening, and polishing. Great for metal and wood applications. The included Cushion Pads allow higher accuracy and longer abrasive life. The brush permits polishing of crevices and contoured areas on any metal.
- 4 Ninja SEE-THRUTM Backpads
- 3 Ninja Cushion Pads: $3 \mathrm{M}^{\text {TM }}$ Bumpon ${ }^{\text {TM }}$
- $3 \mathrm{M}^{\text {TM }}$ Purple Ceramic ${ }^{\text {TM }}: 80,120,220$ Grit
- $3 \mathrm{M}^{\text {TM }}$ Trizact $^{\text {TM }}$ : $35,20,10,5$ Micron
- Ninja ${ }^{\text {TM }}$ SEE-THRU ${ }^{\text {TM }}$ felt disc
- Jooltool ${ }^{\text {TM }}$ Polishing Compound
- 3M ${ }^{\text {™ }} 3$ " Bristle Brush: 1 Micron (polishing)
- Instructional DVD
C. Perfect as a start-up package, this kit includes grinding, sharpening and polishing abrasives. Great for metal and wood applications.
- 3 Ninja SEE-THRUTM Backpads

3M ${ }^{\text {TM }}$ Purple: $80,120,220$ Grit

- 3M $^{\text {TM }}$ Trizact ${ }^{\text {TM }}$ : 35, 20, 10, 5 Micron
- Ninja ${ }^{\text {TM }}$ SEE-THRUTM felt disc
- Jooltool ${ }^{\text {TM }}$ Polishing Compound
- Instructional DVD

THE JOOLTOOL FINISHING SYSTEM
The JoolTool" is a revolutionary, compact, multi-functional tool perfect for grinding, sharpening, sanding, deburring, polishing, and much more. The JoolTool ${ }^{\text {lw }}$ will help hobbyists and industrial professionals conquer any job. And in most instances they can replace the need for conventional bench grinders, belt sanders, sharpeners, etc. Why spend needlessly when the JoolTool" ${ }^{\text {ITw }}$ can do it all.

- Speed: variable - 500 to 5,000 RPM
- HP: 1/20 Horsepower
- Voltage: 110 DC
- Vent: 1.5" diameter (for optional vac hookup)
- Max. Wheel Diameter: 3" (Recommended)
- Dimensions: 12" tall x 8" diameter
- Fuse Protected: 5 amp (replaceable)
- Manufactured: USA

| Item | Order \# | Description |  |  | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 47-5296 | Deluxe Kit |  |  | \$495.00 |
| B | 47-5299 | Pro Kit |  |  | \$375.00 |
| C | 47-5300 | Basic Kit |  |  | \$270.00 |
| ACCESSORIES |  |  | Micron | Per Pack | 1+ |
|  | 47-5311 | Combo Kit |  | (Each) | \$70.25 |
|  | 47-5312 | Polishing Kit | 1,3 $\mu$ | (3 Each) | \$21.80 |
|  | 47-5305 | Green Disk | A-35 $\mu$ | (6 Pack) | \$20.15 |
|  | 47-5306 | Red Disk | A-20 $\mu$ | (6 Pack) | \$20.15 |
|  | 47-5307 | Blue Disk | A-10 $\mu$ | (6 Pack) | \$20.15 |
|  | 47-5308 | Orange Disk | A-5 $\mu$ | (6 Pack) | \$20.15 |
|  |  |  | Grit | Per Pack | 1+ |
|  | 47-5304 | Purple Disk | 220 | (6 Pack) | \$19.15 |
|  | 47-5313 | Diameter Disk | 220 | (2 Pack) | \$21.95 |
|  | 47-5309 | Purple Asst. | 80, 120, 220 | (3 Each) | \$41.65 |
|  | 47-5310 | Trizact ${ }^{\text {TM }}$ Asst. | 35, 20, 10, 5 | (3 Each) | \$47.50 |
|  |  |  | Grade | Per Pack | 1+ |
|  | 47-5324 | Scotch Brite Unitized Kit | Coarse, Medium, Fine | (Set of 3) | \$81.60 |
|  | 47-5325 | Flex Shaft Attachment |  | (Each) | \$29.58 |
|  | 47-5301 | Black Pad |  | (3 Pack) | \$42.20 |
|  | 47-5319 | 3 Buff \& Polish Felt |  | (Each) | \$39.35 |

BALDOR POLISHING LATHE
Completely enclosed and also uses moisture-resistant copper wiring in the stator winding to provide longer life. Balanced rotor and shaft provides vibration-free and quiet operation. Ball bearings are lubricated for life and sealed to be protected from dust and dirt. Limited 3 -year manufacturer's warranty. Ships UPS.


| Item | Order \# | Description | Motor Speed | Spindle | HP/V/Hz | RPM | Model | Shaft Diameter | Shaft Height | Lathe Size | Weight | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 47-4024 | One Spindle Lathe | 1 | 1 | $3 / 4 \mathrm{hp}, 115 / 60 \mathrm{~Hz}$ | 3,450 RPM | LPL75 | 5/8" | $8{ }^{\prime \prime}$ | 141/3" | 48 lbs | \$495.00 |
|  | 47-4023 | One Spindle Lathe | 1 | 1 | 1/2 hp, 115/60 Hz | 3,450 RPM | LPL50 | 5/8" | 8" | $141 / 3^{\prime \prime}$ | 43 lbs | \$415.00 |
| B | 47-4021 | Two Spindle Lathe | 1 | 1 | 1/2 hp, 120/60 Hz | 3,450 RPM | 3597 | $3 / 81$ | 51/4" | $141 / 3^{\prime \prime}$ | 36 lbs | \$425.00 |
|  | 47-4008 | Two Spindle Lathe | 2 | 2 | 1/4 hp, 120/60 Hz | 3,600/1,800 RPM | 340 | 3/8" | $4^{11 / 16 " 1}$ | 131/8" | 32 lbs | \$395.00 |
|  | 47-4019 | Two Spindle Lathe | 2 | 2 | 1/4 hp, 120/60 Hz | 3,450/1,725 RPM | $353 T$ | 3/8" | $4^{11 / 16 " 1}$ | $141 / 3^{\prime \prime}$ | 35 lbs | \$425.00 |



| Item | Order \# | Description | Motor Speed | Spindle | HP/V | RPM | Shaft Diameter | Shaft <br> Height | Lathe Size | Weight | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 47-4149 | Single Spindle Lathe | 1 | 1 | $3 / 4 \mathrm{hp}$ | 3,450 | 5/8" thread | $7{ }^{\prime \prime}$ | $11^{\prime \prime} \times 13^{\prime \prime}$ | 45 lbs | \$345.30 |
| D | 47-4150 | Double Spindle Motor |  | 2 | $3 / 4 \mathrm{hp}$ | 3,450 | 5/8" thread | 7" | $11^{\prime \prime} \times 16^{\prime \prime}$ | 49 lbs | \$369.10 |
| E | 47-4148 | Single Spindle Motor | 1 | 1 | $1 / 2 \mathrm{hp}$ | 3,450 | 1/2" screw |  | $9^{\prime \prime} \times 6^{\prime \prime}$ | 19 lbs | \$184.00 |
| F | 47-4147 | Double Spindle Motor | 2 | 2 | $1 / 2 \mathrm{hp}$ | 3,450 | $1 / 2{ }^{1}$ screw |  | $12^{\prime \prime} \times 6^{\prime \prime}$ | 22 lbs | \$205.00 |

## REDWING POLISHING LATHE



| Item | Order \# | Description | Motor Speed | Spindle | HP/V/Hz | RPM | Model | Shaft Diameter | Shaft Height | Weight | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | 47-4020 | One Spindle Lathe | 1 | 1 | $1 / 2 \mathrm{hp}, 115 / 60 \mathrm{~Hz}$ | 3,450 | 30 | 5/8" straight | $63 / 81$ | 36 lbs | \$315.95 |
| H | 47-4025 | Two Spindle Lathe | 2 | 2 | $1 / 4 \mathrm{hp}, 115 / 60 \mathrm{~Hz}$ | 3,450 | 26 | 5/8" thread | $67 / 81$ | 41 lbs | \$315.95 |



## TAPERED SPINDLES FOR BALDOR MOTORS

Spindles are made from tool steel (HR 32-38), and are machined allowing for perfect center. This minimizes vibration from the spindles. Spindles are nickel-plated to prevent corrosion. For use with Baldor" motors only.

| Item | Order \# | Description | Material | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 2 3 0 8}$ | Right Thread | Steel | $3 / 4^{\prime \prime}$ | $\$ 8.00$ | $\$ 8.35$ | $\$ 8.70$ |
|  | $\mathbf{4 7 - 2 3 0 9}$ | Left Thread | Steel | $3 / 4^{\prime \prime}$ | $\$ 8.00$ | $\$ 8.35$ | $\$ 8.70$ |
| B | $\mathbf{4 7 - 2 3 0 4}$ | Right Thread | Brass | $3 / 4^{\prime \prime}$ | $\$ 36.16$ | $\$ 37.73$ | $\$ 39.30$ |
|  | $\mathbf{4 7 - 2 3 0 5}$ | Left Thread | Brass | $3 / 4^{\prime \prime}$ | $\$ 36.16$ | $\$ 37.73$ | $\$ 39.30$ |

TAPERED SPINDLES FOR PRO-SERIES MOTORS

| Item | Order \# | Description | ID | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 47-4141 | Tapered Spindle Left | 1/21 | $31 / 2$ " | \$7.65 | \$8.10 | \$9.00 |
|  | 47-4142 | Tapered Spindle Right | $1 / 2^{\prime \prime}$ | $31 / 2{ }^{\prime \prime}$ | \$7.65 | \$8.10 | \$9.00 |
| D | 47-4144 | Tapered Spindle Left | 5/8" | $6 "$ | \$17.43 | \$18.19 | \$18.95 |
|  | 47-4143 | Tapered Spindle Right | 5/8" | $6 "$ | \$17.43 | \$18.19 | \$18.95 |



TAPERED SPINDLES WITH SET SCREW FOR STRAIGHT-SHAFT MOTORS Individually machined from hardened tool steel. Precision centered and balanced. Tolerances within 0.001 ". Machine threaded taper hold buffs securely centered for maximum performance. Used to mount soft-wheel buffs onto polishing or lapping motors. Fits any straight-shaft motor. Available with right- or left-handed threads and held to shaft by set screws. Ends are pointed, and threads are clear and deep. Made in the USA.

| Order \# | Description | Inside Diameter | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47-2708 | Right Thread | 5/81 | 5" | \$9.06 | \$9.46 | \$9.85 |
| 47-2710 | Right Thread | $1 / 4{ }^{\prime \prime}$ | $4{ }^{\prime \prime}$ | \$9.06 | \$9.46 | \$9.85 |
| 47-2712 | Right Thread | 3/8" | $4{ }^{\prime \prime}$ | \$11.22 | \$11.71 | \$12.20 |
| 47-2713 | Left Thread | $3 / 81$ | 4 " | \$9.06 | \$9.46 | \$9.85 |
| 47-2714 | Right Thread | $1 / 2^{\prime \prime}$ | 4 " | \$9.06 | \$9.46 | \$9.85 |
| 47-2715 | Left Thread | $1 / 2^{11}$ | 4 " | \$9.06 | \$9.46 | \$9.85 |
| 47-2716 | Right Thread | 5/8" | 4 " | \$9.06 | \$9.46 | \$9.85 |
| 47-2717 | Left Thread | 5/811 | 4 " | \$9.06 | \$9.46 | \$9.85 |
| 47-2718 | Right Thread | $1 / 41$ | $5{ }^{\prime \prime}$ | \$9.06 | \$9.46 | \$9.85 |
| 47-2719 | Left Thread | $1 / 41$ | $5{ }^{\prime \prime}$ | \$9.06 | \$9.46 | \$9.85 |
| 47-2720 | Right Thread | $3 / 81$ | 5" | \$9.06 | \$9.46 | \$9.85 |
| 47-2721 | Left Thread | $3 / 81$ | $5{ }^{\prime \prime}$ | \$9.06 | \$9.46 | \$9.85 |
| 47-2722 | Right Spindle | $1 / 2^{11}$ | 5" | \$9.06 | \$9.46 | \$9.85 |
| 47-2723 | Left Spindle | $1 / 2^{\prime \prime}$ | 5" | \$9.06 | \$9.46 | \$9.85 |
| 47-2725 | Left Thread | 5/8" | 5" | \$9.06 | \$9.46 | \$9.85 |

## BENCH TOP POLISHER

Polisher has pre-lubricated ball bearings and a dust-proof motor housing that makes it virtually maintenance free. The user will not sacrifice quality or speed with this well-balanced precision polisher. Works with standard wheels and buffs up to 4". Includes:

- Two $5 / 16^{\prime \prime}$ tapered spindles
- Two medium abrasive wheels
- Two replacement motor brushes - 110 volt, $1 / 6 \mathrm{hp}$ motor. UL listed.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 4 - 1 0 0 0}$ | Bench Top Polisher | $\$ 79.47$ | $\$ 84.15$ | $\$ 93.50$ |



FOREDOM ${ }^{\circledR}$ BL 1 LATHE
High-torque, $1 / 6$ hp lathe with permanent magnet motor sealed in a dustproof housing. Variable speeds from 1,800 to 7,000 RPM. No lubrication of ball bearings needed. Comes with two tapered spindles and tools.

| Item | Order \# | Description | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 34-2000 | Foredom BL 1 Lathe | \$194.65 | \$206.10 | \$229.00 |
| B | 34-2305 | Brushes (sold by pair) | \$7.23 | \$7.65 | \$8.50 |
| C | 34-2010 | Hood $85 / 8^{\prime \prime} \mathrm{W} \times 45 / 8^{\prime \prime} \mathrm{D} \times 61 / 2^{\prime \prime} \mathrm{H}$ | \$42.46 | \$44.96 | \$49.95 |
| ACCESSORIES |  |  |  |  |  |
| D | 34-2001 | Left Tapered Spindle | \$9.75 | \$10.18 | \$10.60 |
| E | 34-2002 | Right Tapered Spindle | \$9.75 | \$10.18 | \$10.60 |
| F | 34-2008 | Chuck Arbor with Key | \$44.11 | \$46.03 | \$47.95 |
| G | 34-2013 | Left Wheel Mandrel | \$15.26 | \$16.16 | \$17.95 |
| H | 34-2014 | Right Wheel Mandrel | \$15.26 | \$16.16 | \$17.95 |
| J | 34-2012 | Collet Holders w/3 Collets (for right side) | \$19.64 | \$20.50 | \$21.35 |



## FOREDOM ${ }^{\circledR}$ POLISHING HOOD

This new filter hood was designed for use at the bench in jewelry making, dental laboratories, and industrial operations to collect dust and larger particles produced from light grinding and polishing. The CE compliant hood is made of powder-coated, heavy-gauge steel. It has a removable water-tight metal tray, clear poly carbonate shield, and gooseneck LED light that is bright and long lasting. Three filters come packed with the unit that are easy to change and ship out to a refiner. It can be moved anywhere on a bench-top for use with a flexible shaft handpiece, micro motor, and other bench-top tools. Despite its small size, the filter hood offers strong suction power for removing particles of hazardous dust and reclaiming precious metal.

- Made of powder-coated, heavy-gauge steel
- Voltage selector switch for 110 or 220 operation
- Fan rating of 80 CFM

| Order \# | Description $\quad \mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{3 4 - 2 0 1 5}$ | Polishing Hood $6^{\prime \prime} \times 7 \frac{1}{2 \prime} \times 12^{3} / 4$ | $\$ 225.25$ | $\$ 238.50$ | $\$ 265.00$ |
| $\mathbf{3 4 - 2 0 1 6}$ | Filters (Pack of 5) | $\$ 4.46$ | $\$ 4.72$ | $\$ 5.25$ |

 content on Stuller.com.

(Motor not included).

BRASS BUR CHUCK
Bur chuck for tapered shaft motors $5 / 32^{\prime \prime}(4 \mathrm{~mm})$ capacity for right shaft. Brass body with steel knurl.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 47-2605 | Brass Bur Chuck | $\$ 18.72$ | $\$ 19.54$ | $\$ 20.35$ |



WOODEN HUB MANDREL
$1 / 6^{\prime \prime}$ diameter screw mounted on wooden handle. Heavy duty for right side. For use with tapered spindle.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 7 - 2 6 0 0}$ | Wood Hub Mandrel | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |

## A TAPERED CHUCK FOR BRUSHES

For use with tapered spindle on polishing motors. Fits brushes with $1 / 8$ " holes. Can be threaded onto the hardened, steel taper, which in turn can be threaded onto a standard tapered spindle.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 2 5 9 0}$ | Left-Handed | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |
| B | $\mathbf{4 7 - 2 5 8 0}$ | Right-Handed | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |



PLASTIC HUB MANDREL
Plastic hub mandrels designed to fit brushes with $1 / 8$ " arbor hole.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{4 7 - 2 6 0 8}$ | Right-Handed | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |
| D | $\mathbf{4 7 - 2 6 1 0}$ | Left-Handed | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |

Chucks and mandrels shown attached.
(Motors not included).


## HANDLE WITH CHUCK

Wooden handle with the end bored and reinforced. Small wheels and burs can be used on larger, polishing motors by threading onto tapered spindles. Chuck opens from $0.085^{\prime \prime}$ to $0.128^{\prime \prime}$. Accommodates $3 / 32^{\prime \prime}$ and $1 / 8^{\prime \prime}$ mandrels.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{3 7 - 7 6 0 0}$ | Handle with Chuck | $31 / 2^{\prime \prime}$ | $\$ 8.07$ | $\$ 8.55$ | $\$ 9.50$ |
| $\mathbf{3 7 - 7 6 0 1}$ | Replacement Chuck |  | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |

TAPERED WHEEL ADAPTER

| Item | Order \# | Description | Inside Diameter | Color | 1+ |
| :---: | ---: | :--- | :---: | :--- | ---: |
| E | $\mathbf{1 0 - 9 1 6 2}$ | Right Adapter | $3 / 8^{\prime \prime}$ | Black | $\$ 2.55$ |
| F | $\mathbf{1 0 - 9 1 6 3}$ | Left Adapter | $3 / 8^{\prime \prime}$ | Gray | $\$ 2.55$ |

## TAPERED SPINDLE ADAPTERS

MX Polishing Wheel features a consistent premium grade of silicone-carbide mineral along with brightness enhancers that result in controllable, consistent finishing and polishing of metal parts.

| Order \# | Description | Inside Diameter | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{1 0 - 8 2 0 8}$ | Adapter | 1 " | $\$ 6.10$ |

## rouges for gold and silver pre-finishing

## TRIPOLI

Coarse cutting compound to remove scratches and surface imperfections. All-Purpose Tripoli cuts similarly to regular tripoli but leaves a brighter finish. Platinum Tripoli is specially formulated to remove scratches from platinum, chromium, stainless steel, and other hard metals.

| Item | Order\# | Description | Grade | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 7 - 3 2 5 0}$ | Tripoli Tube | Aggressive | 1 lb | $\$ 2.81$ | $\$ 2.93$ | $\$ 3.05$ |
| B | $\mathbf{4 7 - 3 2 5 5}$ | All-Purpose Tripoli Tube | Extra Fine | 1 lb | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |
| C | $\mathbf{4 7 - 3 2 8 5}$ | Platinum Tripoli Tube | Aggressive | 1 lb | $\$ 3.13$ | $\$ 3.26$ | $\$ 3.40$ |

## GREY STAR

Dry, aggressive compound for removing scratches and imperfections. Works well on brass, gold, silver, and stainless steel, leaving a uniform finish. Made of very fine uniform abrasives, produces good cut with no mild scratches. May be used for cut and color as one step.

| Item | Order \# | Description | Grade | Grit | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{4 7 - 3 2 9 7}$ | Bar | Medium Coarse | 800 | 1 lb | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |




K


A


B


D

## ROUGES FOR GOLD AND SILVER FINISHING

WATER SOLUBLE ROUGE
Water-soluble polishing rouges, formulated to produce excellent results with quick and easy cleanup.

| Item | Order \# | Description | Grade | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 7 - 3 2 7 4}$ | $1 / 2 \mathrm{lb}$ Bar | Medium Fine | 6000 | Green | $\$ 9.14$ | $\$ 9.68$ | $\$ 10.75$ |
| B | $\mathbf{4 7 - 3 2 7 6}$ | $1 / 2 \mathrm{lb}$ Bar | Medium | 1200 | Yellow | $\$ 2.53$ | $\$ 2.64$ | $\$ 2.75$ |

## GREEN ROUGE

Specially formulated for silver, stainless steel, platinum, white gold, and rhodium. Sold in tubes or by bars. Produces a high luster for a final finish. Clean working leaving little residue.

| Item | Order \# | Description | Grade |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| C | $\mathbf{4 7 - 3 2 1 0}$ | 8 oz Tube | Medium Fine | $\$ 2.35$ | $\$ 2.45$ | $\$ 2.55$ |  |
| D | $\mathbf{4 7 - 3 2 1 5}$ | 16 oz Tube | Medium Fine | $\$ 5.47$ | $\$ 5.71$ | $\$ 5.95$ |  |
| E | $\mathbf{4 7 - 3 2 1 1}$ | $1 / 4 \mathrm{lb}$ Bar | Medium Fine | $\$ 3.36$ | $\$ 3.65$ | $\$ 4.05$ |  |

## ROUGES FOR GOLD AND SILVER FINAL FINISHING

## WATER SOLUBLE ROUGE

Water-soluble polishing rouges, formulated to produce excellent results with quick and easy cleanup.

| Item | Order \# | Description | Grade | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | $\mathbf{4 7 - 3 2 3 6}$ | 1 lb Bar | Extra Fine | 1500 | Red | $\$ 5.52$ | $\$ 5.76$ | $\$ 6.00$ |
| G | $\mathbf{4 7 - 3 2 2 2}$ | 1 lb Bar | Fine | 1200 | Blue | $\$ 3.31$ | $\$ 3.46$ | $\$ 3.60$ |

## RED ROUGE

Industry standard for a deep luster, final finish for gold, silver, and brass. Completely free of grit or other coarse matter. Provides a mirror finish on metal after prior cut down.

| Item | Order \# | Description | Grade | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| H | $\mathbf{4 7 - 3 2 3 0}$ | 802 Tube | Extra Fine | - | $\$ 4.55$ | $\$ 4.75$ | $\$ 4.95$ |
| J | $\mathbf{4 7 - 3 2 3 5}$ | 16 oz Tube | Extra Fine | - | $\$ 4.65$ | $\$ 5.04$ | $\$ 5.60$ |
| K | $\mathbf{4 7 - 3 2 3 6}$ | 1 lb Bar | Extra Fine | 1500 | $\$ 5.52$ | $\$ 5.76$ | $\$ 6.00$ |

## BLACK ROUGE

Produces a rich, darker luster on white gold, silver, and platinum.
Highly recommended for silver.

| Item | Order \# | Description | Grade |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| L+ |  |  |  |  |  |  |
| M | $\mathbf{4 7 - 3 2 0 0}$ | 8 oz Tube | Fine | $\$ 3.91$ | $\$ 4.08$ | $\$ 4.25$ |
| $\mathbf{4 7 - 3 2 0 5}$ | 16 oz Tube | Fine | $\$ 4.60$ | $\$ 4.80$ | $\$ 5.00$ |  |

## YELLOW ROUGE

Excellent for an ultra-bright final finish on yellow gold and hard metals.
Less greasy and cleaner to use than most other rouges.

| Item | Order\# | Description | Grade | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: |
| N | $\mathbf{4 7 - 3 2 7 0}$ | 802 Tube | Extra Fine | $\$ 3.20$ | $\$ 3.47$ | $\$ 3.85$ |
| P | $\mathbf{4 7 - 3 2 7 5}$ | 16 oz Tube | Extra Fine | $\$ 4.69$ | $\$ 5.09$ | $\$ 5.65$ |

## ROUGES FOR TITANIUM

 FINISHING
## TITANIUM POLISH

Titanium polish in different grades for use on your titanium metals.

| Item | Order \# | Description |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 3 2 9 9}$ | 16 oz TP-100 Bar | $\$ 18.02$ | $\$ 19.08$ | $\$ 21.20$ |  |
| B | $\mathbf{4 7 - 3 3 0 0}$ | 16 oz TP-200 Bar | $\$ 19.89$ | $\$ 21.06$ | $\$ 23.40$ |  |
| C | $\mathbf{4 7 - 3 3 0 1}$ | 16 oz TP-300 Bar | $\$ 11.31$ | $\$ 11.97$ | $\$ 13.30$ |  |
| D | $\mathbf{4 7 - 3 3 0 2}$ | 16 oz TP-400 Bar | $\$ 15.46$ | $\$ 16.13$ | $\$ 16.80$ |  |

## ROUGES FOR PLATINUM

FINISHING

PRE-FINISHING Use Tripoli or Graystar for your platinum pre-finishing.
See page 443 for our complete line of pre-finishing rouges.

## PICASSO BLUE

Ultra-bright finish for platinum and gold.

| Item | Order \# | Description | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :---: | :---: | :---: |
| E | $\mathbf{4 7 - 3 2 4 6}$ | $1 / 4 \mathrm{lb}$ Bar | Picasso Blue | $\$ 20.74$ | $\$ 21.96$ | $\$ 24.40$ |



ULTRA BLUE POLISH
For platinum and other white metals.

| Item | Order\# | Description | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| F | $\mathbf{4 7 - 3 2 4 7}$ | 1 lb Bar | 1000 | Light Blue | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |

## PLATINUM COMPOUNDS

Specially formulated compounds for platinum polishing. Blue Platinum removes light scratches and prepares for final polishing of platinum.

| Item | Order\# | Description | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| G | $\mathbf{4 7 - 3 2 7 1}$ | $1 / 4 \mathrm{lb}$ Bar | 1000 | Blue | $\$ 10.16$ | $\$ 10.76$ | $\$ 11.95$ |



## PLATINUM POLISH

Water-soluble polishing rouges, formulated to produce excellent results with quick and easy cleanup.

| Item | Order \# | Description | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| H | $\mathbf{4 7 - 3 3 8 0}$ | 1 lb Bar | 800 | White | $\$ 5.00$ | $\$ 5.63$ | $\$ 6.25$ |

## BRIGHT-WHITE PLATINUM

Breakthrough for platinum polishing. This new, white compound is much easier than existing compounds. Easy cleanup and leaves little residue.

| Item | Order \# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| J | $\mathbf{4 7 - 3 2 6 6}$ | $1 / 4 \mathrm{lb}$ Bars Polishing Compound | 800 | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |

## PLATINUM POLISH

Works extremely well on platinum and gold by cutting the polishing time in half. It is oil-less and greaseless. Tried and tested at Stuller.

| Item | Order\# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| K | $\mathbf{4 7 - 3 3 8 5}$ | 1 lb Bars Platinum Polish | 1000 | $\$ 4.66$ | $\$ 5.32$ | $\$ 6.65$ |



## MERARD POLISHING SOLUTION

Stuller is now able to offer you a polish that has been tried, tested, and used in our own manufacturing processes. The Merard brand of polish has outperformed all other polishes it been put up against. Stuller has taken it one step further by matching the proper buff to the polish. Exclusively from Stuller we bring you polishing solutions from Merard, the industry leader in polishing compounds and buffs. Top manufactures of fine luxury watches have now implemented this polishing solution into their processes especially for gold and stainless steel watch cases. Now it is available to you. Step 1-Avivor (47-3223) polish in conjunction with TPB buff (47-3228) Step 2- Oras (47-3225) polish in conjunction with STV buff (47-3229) For best results use a variable speed motor (47-2701) at 1800 RPM with light pressure.

| Item | Order\# | Description | Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | 47-3223 | Avivor | $80 z$ | $\$ 12.93$ | $\$ 13.49$ | $\$ 14.05$ |
| B | $\mathbf{4 7 - 3 2 2 5}$ | Oras | $80 z$ | $\$ 12.93$ | $\$ 13.49$ | $\$ 14.05$ |

## LUXOR ${ }^{\circledR}$ POLISHING ROUGE

Luxor Red has 6.5 micron grit and is used for preparation (high) and can be used on all metals, but it is an especially excellent pre-polish for platinum.
Luxor White has . 3 micron grit and is used for fine polishing and finishing and can be used with steel, stainless steel, silver, gray gold, white gold, and platinum.


Luxor Yellow has . 5 micron grit and is used for finishing and can be used on all kinds of gold, steel and stainless steel.
Luxor Orange has . 1 micron grit and is used for super finishing and can be used on precious metals and lacquers.
With the Luxor line you will:

- Save time and use less
- Have a cleaner piece with fewer residues
- Have a cleaner work area
- Use with 17-5565

They are smaller bars because you use less and they are easier to use.

| Order \# | Description | Micron | Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 2 2 4}$ | Pink | $6.5 \mu$ | $80 z$ | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{4 7 - 3 2 2 4}$ | White | $0.3 \mu$ | $80 z$ | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{4 7 - 3 2 2 4}$ | Yellow | $0.5 \mu$ | $80 z$ | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{4 7 - 3 2 2 4}$ | Orange | $0.1 \mu$ | $80 z$ | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |



LUXOR ${ }^{\circledR}$ KIT
Luxor Buff and Polishing Kit consist of the four Luxor polishes, pink, white, yellow, and orange. These are ultra-high quality polishes. Also the kit comes with the 4 inch TPB cotton buff and a 4 inch STV cotton buff.
The four polishes that come with this kit are used for the following:

- Luxor Pink is used for preparation (high) and can be used on all metals, but is especially good for platinum
- Luxor White is used for fine polishing and finishing and can be used with steel, stainless steel, silver, gray gold, white gold, and platinum
- Luxor Yellow is used for finishing and can be used on all kinds of gold, steel and stainless steel
- Luxor Orange is used for super finishing and can be used on precious metals and lacquers

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 47-3221 | 4 Polish, 2 Buff Ultimate Polishing Kit | $\$ 75.03$ | $\$ 78.29$ | $\$ 81.55$ |

## NEW HIGH OUALITY BUFFS

## LUXOR® MOC2 BUFFS

The softest Luxor buff made of white flannel scraped on two sides and extremely versatile. This buff can be used with Avivor, Oras, as well as Luxor White, Yellow and Orange polishing compounds. This buff is especially effective on Gold, Titanium, Platinum, and Silver jewelry.

| Order\# | Grade | Diameter |  | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 2 2 7}$ | Extra Soft | $6^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 20.61$ | $\$ 21.50$ | $\$ 22.40$ |  |
| $\mathbf{4 7 - 3 2 2 7}$ | Extra Soft | $4^{\prime \prime}$ | $1 / 22^{\prime \prime}$ | $\$ 14.03$ | $\$ 14.64$ | $\$ 15.25$ |  |



## LUXOR ${ }^{\circledR}$ TPB BUFFS

A bleached "shirting" material watch polishing buff used in combination with Avivor as the first step in the finest polishing process for watch cases. Also used with Luxor White for more delicate white metal jewelry pieces (Stainless Steel, Silver, White Gold, and Platinum)

| Order \# | Grade | Diameter | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 2 2 8}$ | Medium | $6^{\prime \prime}$ | $1^{\prime \prime}$ | $\$ 32.80$ | $\$ 34.22$ | $\$ 35.65$ |
| $\mathbf{4 7 - 3 2 2 8}$ | Medium | $4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 14.35$ | $\$ 14.98$ | $\$ 15.60$ |



## LUXOR ${ }^{\circledR}$ STV BUFFS

An extremely versatile buff of glazed Percale material. It is recommended for the second step of fine watch case polishing in conjunction with Oras. Also used with Luxor White for white metal jewelry pieces, Luxor Yellow for gold and steel, and Luxor Orange for precious metals, and even suitable for use with Avivor.

| Order \# | Grade | Diameter | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 2 2 9}$ | Soft | $6 "$ | $1 "$ | $\$ 28.11$ | $\$ 29.33$ | $\$ 30.55$ |
| $\mathbf{4 7 - 3 2 2 9}$ | Soft | $4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | $\$ 14.54$ | $\$ 15.17$ | $\$ 15.80$ |



## LIQUID POLISH FOR VIBRATORY FINISHING

This revolutionary new liquid polish is used with dry untreated walnut shell. Use approximately 2 tablespoons of liquid in a 1 cubic foot tumbler. Tumble for 6 to 8 hours.

| Order \# | Description | Color | Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 47-3226 | Step 1: Fine Polish | White | 1 kg | $\$ 18.72$ | $\$ 19.54$ | $\$ 20.35$ |
| $\mathbf{4 7 - 3 2 2 6}$ | Step 2: Super Fine Polish | Orange | 1 kg | $\$ 21.07$ | $\$ 21.98$ | $\$ 22.90$ |




A


B


## FABULUSTRE AND ZAM POLISHING COMPOUNDS

Fabulustre ${ }^{\circledR}$ - Provides a high luster finish on all types of precious metals. Greaseless, dry, not dusty, which allows for faster clean-up. For use in final buffing.
$Z^{2}{ }^{\text {Tm }}$ - Excellent rouge alternative. Crocus compound used to polish metals, stones, epoxies, and hard plastics. Will not scratch turquoise or soft stones.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{4 7 - 3 1 2 0}$ | $1 / 4 \mathrm{lb}$ Fabulustre ${ }^{\text {+ }}$ Tube | $\$ 4.05$ | $\$ 4.22$ | $\$ 4.40$ |
| G | $\mathbf{4 7 - 3 1 3 0}$ | 1 lb Fabulustre Tube | $\$ 5.98$ | $\$ 6.48$ | $\$ 7.20$ |
| H | $\mathbf{4 7 - 5 0 2 0}$ | $1 / 4 \mathrm{lb}$ Zam ${ }^{\text {m" }}$ Tube | $\$ 3.73$ | $\$ 3.89$ | $\$ 4.05$ |
| J | $\mathbf{4 7 - 5 0 3 0}$ | 1 lb Zam $^{\text {mi" }}$ Tube | $\$ 6.62$ | $\$ 6.91$ | $\$ 7.20$ |

## ROUGE INFORMATION

Stuller has received several questions about our polishing compounds. The most often asked is whether our compounds are water-soluble. When discussing polishing compounds, the term is sometimes technically incorrect. Stuller's compounds in the tear-away tubes contain similar vegetable and animal fats; however, our compounds are highly saponifiable. Saponifiable means that they will break down or mix with alkalis or soap resulting in easier cleanup. Stuller polishing compounds are made from the highest-quality raw materials. Our compounds are softer than many others are and tend to be more aggressive. This means that less compound is required on the buff. Applying too much compound on your buff is counterproductive, expensive, and may result in the surface of the piece appearing cloudy. Remember the old saying, "A little dab will do you!" You'll find that Stuller offers you a longer-lasting polishing compound with easier cleanup that will save you money all the way around.

## DIALUX POLISHING BARS

A select type of super abrasive uniformly blended with a carrier wax. These compounds have special features that allow good adhesion to the fibers of brushes, buffs, or felts. Only minimal quantities need to be used. Bar size 4 " $\times 1 \frac{1}{4} 4^{\prime \prime} \times 1 \frac{1}{1 / 8}$.
Red: Super finishing composition for gold
Orange: Produces a high luster on soft metals
Yellow: Gives a bright finish to soft brass, bronze, and copper
Green: Super finishing composition for hard metals (chrome and platinum)
Gray: Finishing composition for stainless steel
White: Finishing for all metals and some plastics in the dental range
Blue: Super finishing for all metals and plastics in the dental range

| Item | Order\# | Description | Grit | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 3 1 5 4}$ | $1 / 4 \mathrm{lb}$ Bar | 400 | Orange | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| B | $\mathbf{4 7 - 3 1 5 5}$ | $1 / 4 \mathrm{lb}$ Bar | 600 | Yellow | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| C | $\mathbf{4 7 - 3 1 5 0}$ | $1 / 4 \mathrm{lb}$ Bar | 800 | Red | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| D | $\mathbf{4 7 - 3 1 5 1}$ | $1 / 4 \mathrm{lb}$ Bar | 2000 | Green | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| E | $\mathbf{4 7 - 3 1 5 6}$ | $1 / 4 \mathrm{lb}$ Bar | 1200 | Gray | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| F | $\mathbf{4 7 - 3 1 5 2}$ | $1 / 1 \mathrm{lb}$ Bar | 1500 | White | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |
| G | $\mathbf{4 7 - 3 1 5 3}$ | $1 / 4 \mathrm{lb}$ Bar | 1800 | Blue | $\$ 4.80$ | $\$ 5.09$ | $\$ 5.65$ |



## WHITE COMPOUNDS

A selected grade of polishing compound formulated for ultra-bright finishing of platinum. Uniformly blended and manufactured under strict quality control. Exceptional adherence to buffs, brushes, or felts. Available in five different grades to achieve surfaces from matte to super shine. Made in Japan.

- Medium Cut-1500: For removal of light scratch marks

Fine-Cut-4000: To further improve the surface prior to final finishing
Extra Shine-6000: Enhances the surface to exhibit a bright finish
Super Shine-8000: Provides a very high luster and bright mirror finish

| Item | Order\# | Description | Grit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- |
| H | $\mathbf{4 7 - 3 2 4 1}$ | 1 lb Medium Cut | 1500 | $\$ 32.00$ | $\$ 33.89$ | $\$ 37.65$ |
| J | $\mathbf{4 7 - 3 2 4 2}$ | 1 lb Fine-Cut | 4000 | $\$ 34.13$ | $\$ 36.14$ | $\$ 40.15$ |
| K | $\mathbf{4 7 - 3 2 4 3}$ | 1 l lb Extra Shine | 6000 | $\$ 34.13$ | $\$ 36.14$ | $\$ 40.15$ |
| L | $\mathbf{4 7 - 3 2 4 4}$ | 1 lb Super Shine | 8000 | $\$ 36.72$ | $\$ 38.88$ | $\$ 43.20$ |



## KOYO PLATINUM COMPOUNDS

A finishing compound manufactured from carefully graded abrasives, blended with additives to give high reflective surfaces to non-ferrous metals and stainless steels.

- K-1 Green: General purpose for preliminary finishing applications
- K-2 Green: Intermediate stage finishing compound
- Alox-5 White: For final finish, to achieve a distinctive luster

| Item | Order \# | Description | Color | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 47-3261 | 1 lb K-1 | Green | \$26.56 | \$28.13 | \$31.25 |
| N | 47-3262 | $1 / 4 \mathrm{lb}$ K-2 | Green | \$11.36 | \$11.86 | \$12.35 |
| 0 | 47-3263 | 1/4 lb Alox-5 | White | \$8.46 | \$8.96 | \$9.95 |
| P | 47-3264 | 1 lb Alox-5 | White | \$22.91 | \$24.26 | \$26.95 |




## BUFF KITS

Stuller is proud to offer Premium Polishing kits that are perfectly suited for the shop's needs. We've drawn from our own production experience. These kits include the same materials we use everyday in our production area.

## STARTER BUFF KIT

This kit contains a selection of premium buffs and compounds that are perfect for gold and silver items. Includes: 17-7227 yellow buff, 17-7516 stitched muslin, 17-7726 loose buff, 17-7516 GrayStar, 47-3274 green rouge, 47-3236 red rouge

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 7 2 5 5}$ | Starter Buff Kit | $\$ 24.10$ | $\$ 25.52$ | $\$ 28.35$ |



## PLATINUM BUFF KIT

This kit contains a selection of premium buffs and compounds that are perfect for platinum items. Includes: 17-5612 orange buff, 17-7254 purple buff, 17-7726 loose buff, 47-3285 platinum tripoli, 47-3246 picasso blue, 47-3245 pica pink.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| B | $\mathbf{1 7 - 7 2 5 7}$ | Platinum Buff Kit | $\$ 57.67$ | $\$ 61.07$ |

## MINIATURES BUFF KIT

Includes: 17-6154 Two mini treated finex muslin buffs, 17-6152 Two mini treated finex muslin buffs, 17-6151 One mini finex muslin buff (pack of 12), 17-3679 One untreated felt wheel (pack of 10), 17-3770 One untreated felt wheel (pack of 100), 17-4904 Two 2" knife edge felt wheels, 43-1280 Three reinforced nickle-plated miniature mandrels, 47-3266 $1 / 4 \mathrm{lb}$ bright white platinum polish, 47-3211 $1 / 4 \mathrm{lb}$ green rouge.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{1 7 - 1 2 1 0}$ | Miniatures Buff Kit | $\$ 25.80$ | $\$ 27.32$ | $\$ 30.35$ |

## MINIATURE BUFF ASSORTMENTS

Contains buffs and mandrels to be used on flex shafts. Two $3 / 32^{\prime \prime}$ mandrels, chamois buff, muslin wheel, felt cone, and three wheels are packaged in a plastic box.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| D | $\mathbf{1 7 - 1 2 7 0}$ | 130 pc Buff Assortment | $\$ 59.62$ | $\$ 62.21$ | $\$ 64.80$ |
| E | $\mathbf{1 7 - 1 2 6 0}$ | 6 pc Miniature Buff Assortment | $\$ 5.89$ | $\$ 6.14$ | $\$ 6.40$ |

## ORANGE BUFFING WHEELS

A. Long-lasting, orange buffing wheels are best used for bobbing compounds and platinum tripoli. Thread count $86 \times 80$.

| $\mathbf{O r d e r} \#$ | $\mathbf{O D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 5 6 0 7}$ | $3^{\prime \prime}$ | 3 | 30 | $\$ 2.60$ | $\$ 2.75$ | $\$ 3.05$ |
| $\mathbf{1 7 - 5 6 0 8}$ | $4^{\prime \prime}$ | 3 | 50 | $\$ 3.57$ | $\$ 3.78$ | $\$ 4.20$ |
| $\mathbf{1 7 - 5 6 0 9}$ | $5^{\prime \prime}$ | 3 | 50 | $\$ 5.78$ | $\$ 6.12$ | $\$ 6.80$ |
| $\mathbf{1 7 - 5 6 1 0}$ | $5^{\prime \prime}$ | 3 | 60 | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |
| $\mathbf{1 7 - 5 6 1 1}$ | $6^{\prime \prime}$ | 4 | 50 | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |
| $\mathbf{1 7 - 5 6 1 2}$ | $6^{\prime \prime}$ | 4 | 60 | $\$ 9.15$ | $\$ 9.55$ | $\$ 9.95$ |

## PURPLE TREATED MUSLIN BERRY BUFFS

B. Stiff, chemically treated fine-weave muslin buffs with leather centers. Ideal for aggressive compounds and great for platinum.

| Order \# | Description | $\mathbf{O D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 7 2 5 0}$ | Knife-Edge | $4^{\prime \prime}$ | 7 | 12 | $\$ 3.73$ | $\$ 3.89$ | $\$ 4.05$ |
| $\mathbf{1 7 - 7 2 5 1}$ | Knife-Edge | $6^{\prime \prime}$ | 10 | 12 | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |
| $\mathbf{1 7 - 7 2 5 2}$ | Square-Edge | $4^{\prime \prime}$ | 3 | 40 | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |
| $\mathbf{1 7 - 7 2 5 3}$ | Square-Edge | $5^{\prime \prime}$ | 3 | 40 | $\$ 4.78$ | $\$ 4.99$ | $\$ 5.20$ |
| $\mathbf{1 7 - 7 2 5 4}$ | Square-Edge | $6^{\prime \prime}$ | 4 | 50 | $\$ 6.39$ | $\$ 6.67$ | $\$ 6.95$ |
| $\mathbf{1 7 - 7 2 5 8}$ | Square-Edge | $6^{\prime \prime}$ | - | 50 | $\$ 7.13$ | $\$ 7.44$ | $\$ 7.75$ |

CHEMKOTE TREATED MUSLIN BUFFS - SQUARE-EDGE STITCHED
C. Yellow $5 / 8$ " thick muslin buffs are chemically treated to make them last longer than white muslin. Made from fine-weave muslin with combed edges. Shellac center. Used for cutdown procedure on heavy, rough work.

| $\mathbf{O r d e r} \#$ | $\mathbf{O D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 5 5 3 3}$ | $3^{\prime \prime}$ | 3 | 30 | $\$ 2.59$ | $\$ 2.75$ | $\$ 3.05$ |
| $\mathbf{1 7 - 5 5 4 4}$ | $4^{\prime \prime}$ | 3 | 40 | $\$ 2.60$ | $\$ 2.93$ | $\$ 3.25$ |
| $\mathbf{1 7 - 5 5 4 5}$ | $4^{\prime \prime}$ | 3 | 50 | $\$ 3.65$ | $\$ 3.96$ | $\$ 4.40$ |
| $\mathbf{1 7 - 5 5 4 6}$ | $5 "$ | 3 | 45 | $\$ 4.12$ | $\$ 4.64$ | $\$ 5.15$ |
| $\mathbf{1 7 - 5 5 6 0}$ | $5^{\prime \prime}$ | 3 | 60 | $\$ 4.69$ | $\$ 5.09$ | $\$ 5.65$ |
| $\mathbf{1 7 - 5 5 6 5}$ | $6^{\prime \prime}$ | 4 | 50 | $\$ 5.12$ | $\$ 5.76$ | $\$ 6.40$ |
| $\mathbf{1 7 - 5 5 6 6}$ | $6^{\prime \prime}$ | 4 | 60 | $\$ 7.57$ | $\$ 8.01$ | $\$ 8.90$ |

CHEMKOTE TREATED MUSLIN BUFF - SQUARE-EDGE LOOSE
D. Leather center.

| Order \# <br> $\mathbf{1 7 - 7 2 0 0}$ | $\mathbf{0 D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 7 2 0 3}$ | $4^{\prime \prime}$ | 1 | 20 | $\$ 1.61$ | $\$ 1.68$ | $\$ 1.75$ |
| $\mathbf{1 7 - 7 2 2 4}$ | $6^{\prime \prime}$ | 3 | 20 | $\$ 1.98$ | $\$ 2.06$ | $\$ 2.15$ |
| $\mathbf{1 7 - 7 2 2 7}$ | $6^{\prime \prime}$ | 1 | 20 | $\$ 2.81$ | $\$ 2.93$ | $\$ 3.05$ |

CHEMKOTE TREATED MUSLIN BUFFS - KNIFE-EDGE
E. Leather center.

| Order\# | $\mathbf{0 D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 7 - 5 6 0 3}$ | $3^{\prime \prime}$ | 4 | 9 | $\$ 2.30$ | $\$ 2.43$ | $\$ 2.70$ |
| $\mathbf{1 7 - 5 6 0 4}$ | $4^{\prime \prime}$ | 6 | 12 | $\$ 2.82$ | $\$ 3.06$ | $\$ 3.40$ |
| $\mathbf{1 7 - 5 6 0 5}$ | $5 "$ | 7 | 12 | $\$ 3.74$ | $\$ 4.05$ | $\$ 4.50$ |
| $\mathbf{1 7 - 5 6 0 6}$ | $6^{\prime \prime}$ | 9 | 12 | $\$ 3.87$ | $\$ 4.10$ | $\$ 4.55$ |




All-Purpose


2FINISHING BUFFS

## FINEX COMBED MUSLIN BUFFS

A. Finex muslin has a very tight weave and is very soft. Excellent for use on all rouges. Buffs are chemically treated for longer life and manufactured of fine-weave muslin. All buffs can be used on a tapered spindle. An excellent finishing buff to be used with red rouge. Leather center.

| Order \# <br> $\mathbf{1 7 - 7 2 4 5}$ | $\mathbf{0 D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 7 5 1 0}$ | $3^{\prime \prime}$ | 3 | 20 | $\$ 3.91$ | $\$ 4.08$ | $\$ 4.25$ |
| $\mathbf{1 7 - 7 5 1 3}$ | $4^{\prime \prime}$ | 3 | 35 | $\$ 2.49$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 7 - 7 5 1 5}$ | $5^{\prime \prime}$ | 3 | 30 | $\$ 2.60$ | $\$ 2.93$ | $\$ 3.25$ |
| $\mathbf{1 7 - 7 5 1 6}$ | $6^{\prime \prime}$ | 3 | 45 | $\$ 4.36$ | $\$ 4.91$ | $\$ 5.45$ |
| $\mathbf{1 7 - 7 5 1 7}$ | $4^{\prime \prime}$ | 4 | 50 | $\$ 6.28$ | $\$ 7.07$ | $\$ 7.85$ |
| $\mathbf{1 7 - 7 5 1 9}$ | 5 | 3 | 50 | $\$ 3.36$ | $\$ 3.65$ | $\$ 4.05$ |
| $\mathbf{1 7 - 7 6 1 0}$ | $6^{\prime \prime}$ | 3 | 50 | $\$ 4.72$ | $\$ 5.31$ | $\$ 5.90$ |

## FINEX COMBED MUSLIN BUFFS

B. Finex combed muslin buff with shellac center. Finex muslin has a very tight weave and is very soft. Excellent for use on all rouges.

| $\mathbf{O r d e r} \#$ | $\mathbf{O D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 7 - 6 2 3 5}$ | $3^{\prime \prime}$ | 3 | 35 | $\$ 1.66$ | $\$ 1.80$ | $\$ 2.00$ |
| $\mathbf{1 7 - 6 2 4 3}$ | $4^{\prime \prime}$ | 4 | 30 | $\$ 2.24$ | $\$ 2.43$ | $\$ 2.70$ |
| $\mathbf{1 7 - 6 2 4 5}$ | $4^{\prime \prime}$ | 4 | 50 | $\$ 2.82$ | $\$ 3.06$ | $\$ 3.40$ |
| $\mathbf{1 7 - 6 2 5 5}$ | $5^{\prime \prime}$ | 3 | 45 | $\$ 3.15$ | $\$ 3.42$ | $\$ 3.80$ |
| $\mathbf{1 7 - 6 2 5 6}$ | $5^{\prime \prime}$ | 5 | 55 | $\$ 3.98$ | $\$ 4.32$ | $\$ 4.80$ |
| $\mathbf{1 7 - 6 2 5 7}$ | $5^{\prime \prime}$ | 3 | 50 | $\$ 4.00$ | $\$ 4.50$ | $\$ 5.00$ |
| $\mathbf{1 7 - 6 2 6 5}$ | $6^{\prime \prime}$ | 4 | 50 | $\$ 4.90$ | $\$ 5.31$ | $\$ 5.90$ |
| $\mathbf{1 7 - 6 2 6 6}$ | $6^{\prime \prime}$ | 6 | 60 | $\$ 5.27$ | $\$ 5.72$ | $\$ 6.35$ |

## MUSLIN BUFFS

C. All-purpose buffs used for initial polishing. Excellent for use with tripoli and bobbing compounds. Shellac-hardened centers. Stitched, cotton-flannel buffs have soft, thick material for general polishing. Excellent for use on gold and silver.

| Order \# | Description | OD | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 2 0 0 5}$ | Cotton-Flannel | $4^{\prime \prime}$ | 3 | 30 | $\$ 3.57$ | $\$ 3.87$ | $\$ 4.30$ |
| $\mathbf{1 7 - 2 0 0 6}$ | Cotton-Flannel | $5^{\prime \prime}$ | 3 | 30 | $\$ 4.57$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{1 7 - 2 0 0 7}$ | Cotton-Flannel | $6^{\prime \prime}$ | 4 | 30 | $\$ 6.29$ | $\$ 6.66$ | $\$ 7.40$ |
| $\mathbf{1 7 - 5 7 1 3}$ | All-Purpose | $4^{\prime \prime}$ | 3 | 42 | $\$ 2.59$ | $\$ 2.75$ | $\$ 3.05$ |
| $\mathbf{1 7 - 5 7 1 4}$ | All-Purpose | $5 "$ | 3 | 45 | $\$ 3.44$ | $\$ 3.87$ | $\$ 4.30$ |
| $\mathbf{1 7 - 5 7 1 5}$ | All-Purpose | $6^{\prime \prime}$ | 4 | 50 | $\$ 4.96$ | $\$ 5.58$ | $\$ 6.20$ |

## KNIFE-EDGE FINEX MUSLIN BUFFS

D. Excellent for polishing areas where conventional buffs cannot reach. Stitching makes edge firm and helps maintain buff shape. Leather center.

| Order\# | $\mathbf{O D}$ | Stitching Rows | Ply | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 6 4 3 0}$ | $3^{\prime \prime}$ | 3 | 9 | $\$ 2.61$ | $\$ 2.84$ | $\$ 3.15$ |
| $\mathbf{1 7 - 6 4 3 1}$ | $4^{\prime \prime}$ | 5 | 12 | $\$ 4.28$ | $\$ 4.46$ | $\$ 4.65$ |
| $\mathbf{1 7 - 6 4 3 2}$ | $5^{\prime \prime}$ | 7 | 12 | $\$ 3.98$ | $\$ 4.32$ | $\$ 4.80$ |
| $\mathbf{1 7 - 6 4 3 3}$ | $6^{\prime \prime}$ | 9 | 12 | $\$ 3.88$ | $\$ 4.37$ | $\$ 4.85$ |

3
FINAL FINISHING BUFFS

## FINEX COMBED MUSLIN BUFFS

A. Finex muslin has a very tight weave and is very soft. Excellent for use on all rouges.

| Order \# | OD | Ply | Center Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 7 7 1 9}$ | $4^{\prime \prime}$ | 50 | Leather | $\$ 4.46$ | $\$ 4.72$ | $\$ 5.25$ |
| $\mathbf{1 7 - 7 7 2 2}$ | $5^{\prime \prime}$ | 50 | Leather | $\$ 4.69$ | $\$ 5.36$ | $\$ 6.70$ |
| $\mathbf{1 7 - 7 7 2 6}$ | $6^{\prime \prime}$ | 50 | Leather | $\$ 5.43$ | $\$ 6.20$ | $\$ 7.75$ |

FINEX COMBED WHITE MUSLIN BUFFS
B. Finex fine-combed, unstitched buffs with hard, plastic center.

| Order\# | OD | Ply | Center Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | ---: | ---: | :---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 7 1 6 0}$ | $3^{\prime \prime}$ | 36 | Plastic | $\$ 2.81$ | $\$ 2.93$ | $\$ 3.05$ |
| $\mathbf{1 7 - 7 1 6 5}$ | $4^{\prime \prime}$ | 36 | Plastic | $\$ 3.45$ | $\$ 3.60$ | $\$ 3.75$ |
| $\mathbf{1 7 - 7 1 7 0}$ | $5^{\prime \prime}$ | 54 | Plastic | $\$ 4.65$ | $\$ 4.85$ | $\$ 5.05$ |
| $\mathbf{1 7 - 7 1 7 5}$ | $6^{\prime \prime}$ | 54 | Plastic | $\$ 5.75$ | $\$ 6.00$ | $\$ 6.25$ |

## LEAD CENTER MUSLIN BUFFS

C. Loose muslin buffs with lead centers boxed to thread onto tapered spindles. Made in the USA.

| Order\# | OD | Ply | Center Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | ---: | ---: | ---: |
| 17-7162 | $3^{\prime \prime}$ | 36 | Lead | $\$ 4.97$ | $\$ 5.18$ | $\$ 5.40$ |
| $\mathbf{1 7 - 7 1 6 3}$ | $4^{\prime \prime}$ | 36 | Lead | $\$ 6.12$ | $\$ 6.38$ | $\$ 6.65$ |
| $\mathbf{1 7 - 7 1 6 4}$ | $5^{\prime \prime}$ | 54 | Lead | $\$ 9.89$ | $\$ 10.32$ | $\$ 10.75$ |
| $\mathbf{1 7 - 7 1 6 6}$ | $6^{\prime \prime}$ | 54 | Lead | $\$ 9.57$ | $\$ 9.98$ | $\$ 10.40$ |

HIGH-QUALITY CHAMOIS BUFF
D. Produces a high-mirror finish on precious metals. Also very effective for final mirror finish of platinum when using platinum rouge. Leather center

| Order \# | OD | Ply | Center Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 1 3 8 3}$ | $3^{\prime \prime}$ | 12 | Leather | $\$ 7.77$ | $\$ 8.11$ | $\$ 8.45$ |
| $\mathbf{1 7 - 1 3 8 4}$ | $4^{\prime \prime}$ | 18 | Leather | $\$ 15.04$ | $\$ 15.70$ | $\$ 16.35$ |
| $\mathbf{1 7 - 1 3 8 5}$ | $5^{\prime \prime}$ | 18 | Leather | $\$ 23.60$ | $\$ 24.62$ | $\$ 25.65$ |

## WHITE COTTON FLAP BRUSHES

E. This wheel has cotton flaps inside, with crossed and opposite orientation of the cotton "weft and wrap" more or less at $45^{\circ}$ of inclination. These particular properties allow it to polish some metals as cotton discs do, but it also profiles the wheel continuing the polishing operation for a lot of pieces without losing the required and previously given form.

| Order\# | OD | ID | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 0 - 7 0 8 0}$ | $43 / 8^{\prime \prime}$ | $1 / 4 "$ | $13 / 6 "$ | $\$ 30.64$ | $\$ 31.97$ | $\$ 33.30$ |

## GRAY WOOL FLAP BRUSHES

F. "Sister" of the white cotton flap brushes, with the same kind of construction but with flaps of natural selected army wool texture. Particularly suited for polishing metals that need a lot of heating to shine like bronze, copper, silver, and brass (with compound). It maintains the capacity to profile like white cotton flap brushes without losing its form.

| Order \# | OD | ID | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 9 0}$ | $43 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $13 / 16^{\prime \prime}$ | $\$ 29.58$ | $\$ 30.86$ | $\$ 32.15$ |



## MICROFIBRA BUFFS

Comprised of an innovative paper fiber material that is designed to not obstruct polishing motor filters, produce dust, or heat objects. Ideal for use on all surfaces, these buffs have a more favorable yield compared to cotton discs and do not leave residual hairs behind. Use with suitable paste for finishing on stones and enamels. It works well on motors with turns from 2,800 (RPM) upward. It is normally dispatched through the recovery of the metals.

| Order\# | OD | Thickness | Rows | Ply | Center | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 1 1 1 0}$ | $7 / 8^{\prime \prime}$ |  |  |  | Mounted | $\$ 2.89$ | $\$ 3.06$ | $\$ 3.40$ |
| $\mathbf{1 7 - 7 1 0 0}$ | $6^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | 2 | 35 | Plastic | $\$ 11.36$ | $\$ 11.86$ | $\$ 12.35$ |
| $\mathbf{1 7 - 7 1 0 1}$ | $6^{\prime \prime}$ | $13 / 16^{\prime \prime}$ | 2 | 52 | Plastic | $\$ 14.49$ | $\$ 15.12$ | $\$ 15.75$ |
| $\mathbf{1 7 - 7 1 0 2}$ | $4^{3} 34^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | 2 | 36 | Plastic | $\$ 9.11$ | $\$ 9.50$ | $\$ 9.90$ |
| $\mathbf{1 7 - 7 1 0 3}$ | $4 "$ | $7 / 16^{\prime \prime}$ | 2 | 26 | Plastic | $\$ 7.06$ | $\$ 7.47$ | $\$ 8.30$ |



## COAGULATED CLOTH BUFFS

Woven of a pure cotton impregnated with caucciú (a natural gum substance), these coagulated cloth buffs can be used to mirror polishing without creating superficial halos. Suitable for use on difficult surfaces, the buffs produce a minimal amount of dust, but after being impregnated with paste, this ceases to occur. Normally dispatched through the recovery of metals, the buffs tend to heat the object being polished.

| Order \# | OD | Thickness | Rows | Ply | Center | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 1 1 1 1}$ | $7 / 8^{\prime \prime}$ |  |  |  | Mounted | $\$ 3.23$ | $\$ 3.42$ | $\$ 3.80$ |
| $\mathbf{1 7 - 7 1 0 4}$ | $4^{\prime \prime}$ | $7 / 8^{\prime \prime}$ | 1 | 20 | Shellac | $\$ 9.29$ | $\$ 9.70$ | $\$ 10.10$ |
| $\mathbf{1 7 - 7 1 0 5}$ | $6^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | 2 | 32 | Shellac | $\$ 20.61$ | $\$ 21.50$ | $\$ 22.40$ |



## WHITE CLOTH BUFFS

Suitable for all types of metals. Ideal for final polishing and brilliant finish. To be used with semi-dry red paste.

| Order\# | OD | Thickness | Rows | Ply | Center | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{1 7 - 7 1 0 6}$ | $4^{4 \prime}$ | $7 / 16^{\prime \prime}$ | 1 | 65 | Plastic | $\$ 9.56$ | $\$ 10.13$ | $\$ 11.25$ |



## CAMBRIQUE CLOTH BUFFS

Very soft cloth and very compact. Suitable for high level finishing and polishing.

| Order \# | $\mathbf{0 D}$ | Thickness | Rows | Ply | Center | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| $\mathbf{1 7 - 7 1 0 7}$ | $43 / 4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | 1 | 96 | Plastic | $\$ 22.68$ | $\$ 23.66$ | $\$ 24.65$ |

WOODEN POLISHING SPINDLE
Innovative tool used to polish chains, bracelets, watch bands, and pendants. Helps the jeweler do the perfect job quickly and easily. Just place and hold the jewelry piece in the Polish It cradle while rotating the tool against the buff wheel of the polishing machine. Made of solid wood. Will not conduct heat from the rotating buff wheel.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 43-0606 | Wooden Polishing Spindle | $\$ 11.68$ | $\$ 12.19$ | $\$ 12.70$ |



## BUFF CLEANING RAKE

Buff rakes are necessary to clean off compound buildup on buffs. The rakes should be used often to remove buildup from compounds, remove metal particles that cause draglines, and open up the buff to receive fresh polish compounds.

| Order \# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 3 - 0 6 1 0}$ | Buff Rake | $15^{\prime \prime}$ | $\$ 15.90$ | $\$ 16.83$ | $\$ 18.70$ |

## LEATHER STRIPS

Genuine cowhide leather strap is used for holding jewelry and rings while polishing, buffing, or grinding. Protects fingers from heat.

| Order \# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 0 9 0 5}$ | Leather Strips | $3^{\prime \prime}$ | $\$ 8.59$ | $\$ 9.09$ | $\$ 10.10$ |



## TUXEDO STYLE COTTON GLOVES

Presentation style gloves that work well for keeping a high polish on all jewelry.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 0 7 5 1}$ | Cotton Gloves (1 pair) | $\$ 2.38$ | $\$ 2.72$ |

## JEWELRY HANDLING GLOVES

Excellent for setting up fingerprint-free displays. Used to protect jewelry, silverware, and other items from fingerprints, spotting, and tarnishing. Used extensively in jewelry stores and manufacturing facilities.

| Item | Order\# | Description | Size | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| B | $\mathbf{1 7 - 0 7 5 0}$ | Heavyweight Cotton Gloves (12 pair) | Small | $\$ 5.81$ | $\$ 6.19$ | $\$ 6.45$ |
|  | $\mathbf{1 7 - 0 7 5 2}$ | Lightweight Cotton Gloves (12 pair) | Large | $\$ 7.29$ | $\$ 7.78$ | $\$ 8.10$ |
|  | $\mathbf{1 7 - 1 0 2 0}$ | Heavyweight Cotton Gloves (12 pair) | Medium | $\$ 8.77$ | $\$ 8.86$ | $\$ 8.95$ |

## POLISHING GLOVES

This left- or right-handed glove is specially treated to polish silver, gold, and plated items. Works great to remove tarnish from silver.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{1 7 - 0 7 4 9}$ | Polishing Gloves | $\$ 5.15$ | $\$ 5.58$ | $\$ 6.20$ |

MINIATURE MUSLIN BUFFS
Use with mandrels 43-1280 or 43-1282.

| Item | Order\# | OD | Rows | Ply | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 6 1 5 2}$ | $\mathbf{7}^{\prime \prime}$ | 1 | 16 | Yellow | $\$ 0.75$ | $\$ 0.81$ | $\$ 0.90$ |
| B | $\mathbf{1 7 - 6 1 5 3}$ | $1^{\prime \prime}$ | 2 | 16 | Yellow | $\$ 0.79$ | $\$ 0.86$ | $\$ 0.95$ |
| C | $\mathbf{1 7 - 6 1 5 4}$ | $11 / 4^{\prime \prime}$ | 2 | 16 | Yellow | $\$ 1.06$ | $\$ 1.10$ | $\$ 1.15$ |
| D | $\mathbf{1 7 - 6 1 5 0}$ | $1 / 8^{\prime \prime}$ | 1 | 16 | White | $\$ 5.52$ | $\$ 5.99$ | $\$ 6.65$ |
| E | $\mathbf{1 7 - 6 1 5 1}$ | $1^{\prime \prime}$ | 1 | 16 | White | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |
| F | $\mathbf{1 7 - 6 1 5 6}$ | $1^{\prime \prime}$ | 2 | 16 | White | $\$ 0.62$ | $\$ 0.68$ | $\$ 0.75$ |
| G | $\mathbf{1 7 - 6 1 5 7}$ | $11 / 4^{\prime \prime}$ | 3 | 16 | White | $\$ 0.68$ | $\$ 0.72$ | $\$ 0.80$ |



SOUARE-EDGE SOLID FELT WHEELS
These high-grade wheels are excellent for all-purpose polishing and buffing. All have pinhole centers. Made in the USA.

| Order \# | Grade | OD | Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17-4500 | Soft | $3{ }^{\prime \prime}$ | $1 / 21$ | \$7.22 | \$7.54 | \$7.85 |
| 17-4501 | Soft | $4{ }^{\prime \prime}$ | 1/2" | \$9.29 | \$9.70 | \$10.10 |
| 17-4502 | Soft | $5{ }^{\prime \prime}$ | 1/2" | \$14.54 | \$15.17 | \$15.80 |
| 17-4503 | Soft | $6^{\prime \prime}$ | $1 / 21$ | \$17.53 | \$18.29 | \$19.05 |
| 17-4499 | Medium | 21/2" | $1 / 21$ | \$4.46 | \$4.72 | \$5.25 |
| 17-4505 | Medium | $3{ }^{\prime \prime}$ | $1 / 2{ }^{1 / 2}$ | \$8.05 | \$8.40 | \$8.75 |
| 17-4506 | Medium | $4{ }^{\prime \prime}$ | $1 / 21$ | \$11.27 | \$11.76 | \$12.25 |
| 17-4507 | Medium | $5{ }^{\prime \prime}$ | $1 / 21$ | \$17.39 | \$18.14 | \$18.90 |
| 17-4508 | Medium | $6^{\prime \prime}$ | $1 / 2 /$ | \$23.28 | \$24.29 | \$25.30 |
| 17-4510 | Hard | 3 " | 1/2" | \$9.57 | \$9.98 | \$10.40 |
| 17-4511 | Hard | $4{ }^{\prime \prime}$ | $1 / 2{ }^{1 / 2}$ | \$11.73 | \$12.24 | \$12.75 |
| 17-4512 | Hard | $5{ }^{\prime \prime}$ | $1 / 2{ }^{1 / 2}$ | \$17.39 | \$18.14 | \$18.90 |
| 17-4513 | Hard | $6{ }^{\prime \prime}$ | 1/2" | \$25.12 | \$26.21 | \$27.30 |
| 17-4514 | Hard | $6^{\prime \prime}$ | $1{ }^{1 \prime}$ | \$44.39 | \$46.32 | \$48.25 |
| 17-4516 | Rock Hard | $3{ }^{\prime \prime}$ | 1/2" | \$12.79 | \$13.34 | \$13.90 |
| 17-4517 | Rock Hard | $4{ }^{\prime \prime}$ | 1/2" | \$16.05 | \$16.75 | \$17.45 |
| 17-4518 | Rock Hard | $5{ }^{\prime \prime}$ | $1 / 21$ | \$20.61 | \$21.50 | \$22.40 |

MINIATURE, SOLID FELT WHEELS
These high-quality, unmounted, felt wheels are excellent for all general polishing applications. Wheels are $1 / 8^{\prime \prime}$ thick ( 3.18 mm ) and are unmounted.

| Item | Order \# | Description | OD | Per Unit | $\mathbf{1 2 +}$ |  | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 3 5 5 9}$ | Soft | $1 / 2^{\prime \prime}$ | 10 | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |
|  | $\mathbf{1 7 - 3 5 6 0}$ | Soft | $1 / 2^{\prime \prime}$ | 100 | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |
| B | $\mathbf{1 7 - 3 6 3 9}$ | Soft | $5 / 8^{\prime \prime}$ | 10 | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |
|  | $\mathbf{1 7 - 3 6 4 0}$ | Soft | $5 / 8^{\prime \prime}$ | 100 | $\$ 13.89$ | $\$ 14.50$ | $\$ 15.10$ |
| C | $\mathbf{1 7 - 3 6 7 9}$ | Soft | $3 / 4^{\prime \prime}$ | 10 | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |
|  | $\mathbf{1 7 - 3 6 8 0}$ | Soft | $3 / 4^{\prime \prime}$ | 100 | $\$ 14.08$ | $\$ 14.69$ | $\$ 15.30$ |
|  | $\mathbf{1 7 - 3 6 8 1}$ | Extra Soft | $3 / 4^{\prime \prime}$ | 100 | $\$ 11.73$ | $\$ 12.24$ | $\$ 12.75$ |
| D | $\mathbf{1 7 - 3 7 6 9}$ | Soft | $1 "$ | 10 | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |
|  | $\mathbf{1 7 - 3 7 7 0}$ | Soft | $1 "$ | 100 | $\$ 20.33$ | $\$ 21.22$ | $\$ 22.10$ |
|  | $\mathbf{1 7 - 4 8 9 0}$ | Soft | $11 / 4^{\prime \prime}$ | Each | $\$ 1.10$ | $\$ 1.15$ | $\$ 1.20$ |
| E | $\mathbf{1 7 - 3 5 1 9}$ | Hard | $1 / 2^{\prime \prime}$ | 10 | $\$ 2.12$ | $\$ 2.21$ | $\$ 2.30$ |
|  | $\mathbf{1 7 - 3 5 2 0}$ | Hard | $1 / 2^{\prime \prime}$ | 100 | $\$ 15.04$ | $\$ 15.70$ | $\$ 16.35$ |
| F | $\mathbf{1 7 - 3 5 9 9}$ | Hard | $5 / 8^{\prime \prime}$ | 10 | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
|  | $\mathbf{1 7 - 3 6 0 0}$ | Hard | $5 / 8^{\prime \prime}$ | 100 | $\$ 15.32$ | $\$ 15.98$ | $\$ 16.65$ |
| G | $\mathbf{1 7 - 3 6 5 9}$ | Hard | $3 / 4^{\prime \prime}$ | 10 | $\$ 3.08$ | $\$ 3.22$ | $\$ 3.35$ |
|  | $\mathbf{1 7 - 3 6 6 0}$ | Hard | $3 / 4^{\prime \prime}$ | 100 | $\$ 15.41$ | $\$ 16.08$ | $\$ 16.75$ |
| H | $\mathbf{1 7 - 3 7 1 1}$ | Hard | $1 "$ | 10 | $\$ 2.44$ | $\$ 2.54$ | $\$ 2.65$ |
|  | $\mathbf{1 7 - 3 7 2 0}$ | Hard | $1 "$ | 100 | $\$ 16.88$ | $\$ 17.62$ | $\$ 18.35$ |



## MOUNTED midget buffs

$3 / 32^{1 "}$ shanks. One-inch diameter.

| Item | Order \# | Description | Tool Shape |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| J | $\mathbf{1 7 - 1 1 0 5}$ | Felt | Square-Edge | $\$ 11.73$ | $\$ 12.24$ | $\$ 12.75$ |  |
| K | $\mathbf{1 7 - 1 1 0 6}$ | Chamois | Square-Edge | $\$ 20.61$ | $\$ 21.50$ | $\$ 22.40$ |  |
| L | $\mathbf{1 7 - 1 1 0 7}$ | Muslin | Square-Edge | $\$ 6.99$ | $\$ 7.30$ | $\$ 7.60$ |  |
| M | $\mathbf{1 7 - 1 1 0 8}$ | String | Round | $\$ 1.53$ | $\$ 1.62$ | $\$ 1.80$ |  |
| N | $\mathbf{1 7 - 1 1 0 9}$ | String | Round | $\$ 1.66$ | $\$ 1.73$ | $\$ 1.80$ |  |



MOUNTED midget-felt buffs
$3 / 32^{\prime \prime}$ shanks.

| Item | Order \# | Tool Shape | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: | ---: |
| P | $\mathbf{1 7 - 1 2 0 1}$ | Cylinder | 12 | $\$ 8.46$ | $\$ 8.83$ | $\$ 9.20$ |
| 0 | $\mathbf{1 7 - 1 2 0 2}$ | Round | 12 | $\$ 11.73$ | $\$ 12.24$ | $\$ 12.75$ |
| R | $\mathbf{1 7 - 1 2 0 3}$ | Bud | 12 | $\$ 12.47$ | $\$ 13.01$ | $\$ 13.55$ |
| S | $\mathbf{1 7 - 1 2 0 4}$ | Point | 12 | $\$ 12.47$ | $\$ 13.01$ | $\$ 13.55$ |
| T | $\mathbf{1 7 - 1 2 0 7}$ | Square | 12 | $\$ 8.97$ | $\$ 9.36$ | $\$ 9.75$ |



## MOUNTED midget buffs

$3 / 32$ " shanks.

| Item | Order \# | Grade | Color | ODxThickness 12+ |  | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U | 11-8281 | Coarse | Light Brown | $7 / 811{ }^{11} \times 14^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| V | 11-8280 | Medium | Brown | $7 / 8^{11} \times 1 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |
| W | 11-8279 | Fine | Purple | $7 / 81 \times 1 / 4^{11}$ | \$1.27 | \$1.35 | \$1.50 |
| Y | 11-8278 | Luster Bright | Peach | $7 / 8^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$1.27 | \$1.35 | \$1.50 |



A

B

SOLID, FELT, RING BUFFS
Unmounted. Used directly on tapered spindles. Regular length.

| Item | Order \# | Outside Diameter | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | ---: | ---: | :---: |
| A | $\mathbf{1 7 - 3 3 2 0}$ | $9 / 16^{\prime \prime}$ | $3^{\prime \prime}$ | $\$ 2.08$ | $\$ 2.25$ | $\$ 2.50$ |
| B | $\mathbf{1 7 - 3 3 2 5}$ | $5 / 8^{\prime \prime}$ | $4^{\prime \prime}$ | $\$ 2.08$ | $\$ 2.25$ | $\$ 2.50$ |

TAPERED, FELT-INSIDE RING BUFF
Ring buffs are mounted on wooden mandrels. Attaches to a spindle motor.

| Item | Order \# | Outside Diameter | Length | Taper | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | :---: |
| C | $\mathbf{1 7 - 3 1 5 0}$ | $9 / 16^{\prime \prime}$ | $3^{\prime \prime}$ | $5 / 16^{\prime \prime}$ | $\$ 2.57$ | $\$ 2.79$ | $\$ 3.10$ |
| D | $\mathbf{1 7 - 3 1 5 4}$ | $7 / 8^{\prime \prime}$ | $4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $\$ 2.68$ | $\$ 2.84$ | $\$ 3.15$ |
| E | $\mathbf{1 7 - 3 1 5 5}$ | $1^{\prime \prime}$ | $5^{\prime \prime}$ | $11 / 16^{\prime \prime}$ | $\$ 3.74$ | $\$ 4.05$ | $\$ 4.50$ |



FELT BUFF AND KNIFE-EDGE WHEEL
Felt combination buff. Mounted on wood mandrel. Has knife-edge wheel.

| Item | Order \# | $\mathbf{I D} \times \mathbf{L} \times$ Taper | Wheel <br> Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| F | $\mathbf{1 7 - 3 4 1 3}$ | $3 / 4^{\prime \prime} \times 3 \times 7 / 16^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |
| G | $\mathbf{1 7 - 3 4 1 4}$ | $7 / 8^{\prime \prime} \times 4 \times 5 / 8^{\prime \prime}$ | $2^{\prime \prime}$ | $\$ 5.52$ | $\$ 5.76$ | $\$ 6.00$ |



## FELT COMBINATION BUFFS

Consists of a wheel buff and an inside-ring buff mounted on a wooden mandrel. Allows polishing of the inside and outside of rings without changing buffs.

| Item | Order \# | ID $\times \mathrm{L} \times$ Taper | Wheel Diameter | Wheel Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 17-3400 | $3 / 4^{\prime \prime} \times 3^{\prime \prime} \times 9 / 16^{\prime \prime}$ | 2 " | $1 / 2^{11}$ | \$5.28 | \$5.94 | \$6.60 |
| $J$ | 17-3410 | $7 / 8^{\prime \prime} \times 4^{\prime \prime} \times 5 / 8^{\prime \prime}$ | 2 " | $9 / 16^{17}$ | \$5.28 | \$5.94 | \$6.60 |
| K | 17-3401 | $5 / 88^{\prime \prime} \times 3^{\prime \prime} \times 13 / 16^{\prime \prime}$ | $21 / 2^{\prime \prime}$ | $1 / 2{ }^{11}$ | \$5.28 | \$5.94 | \$6.60 |

## FELT BRACELET BUFF

High grade, pure solid felt, these medium density buffs are mounted on a hardwood core. Shaped to fit the larger diameters of bangles and bracelets. Use on tapered spindle polishers.

| Order\# | $\mathbf{0 D} \times$ Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 7 - 3 3 1 5}$ | $2^{\prime \prime} \times 2^{\prime \prime}$ | $\$ 8.05$ | $\$ 8.40$ | $\$ 8.75$ |

## MOUNTED miniature satin-finish buffs

Made of synthetic fiber. Produces a satin finish on gold, silver, and other metals. Mounted on $3 / 32^{\prime \prime}$ mandrel.

| Item | Order \# | Grade | Diameter | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 7 - 9 0 0 1}$ | Fine | $3 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.24$ | $\$ 1.30$ | $\$ 1.35$ |
| B | $\mathbf{1 7 - 9 0 0 2}$ | Medium | $3 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.33$ | $\$ 1.39$ | $\$ 1.45$ |
| C | $\mathbf{1 7 - 9 0 0 3}$ | Fine | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.43$ | $\$ 1.49$ | $\$ 1.55$ |
| D | $\mathbf{1 7 - 9 0 0 4}$ | Medium | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 1.52$ | $\$ 1.58$ | $\$ 1.65$ |



STULLER ALUMINUM-OXIDE FLAP WHEELS
The most popular item in the jewelry world. Used for every kind of satin finishing pattern, from the roughest (Grit A/Coarse) to the finest (Grit/Ultra-Fine).

| Order \# | Grade | OD | Thickness | Hole ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 7 0}$ | Coarse | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |
| $\mathbf{1 0 - 7 0 7 1}$ | Medium | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |
| $\mathbf{1 0 - 7 0 7 2}$ | Fine | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |
| $\mathbf{1 0 - 7 0 7 3}$ | Extra Fine | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |

STULLER SILICONE-CARBIDE FLAP WHEELS

| Order \# | Grade | $\mathbf{O D}$ | Thickness | Hole ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 0 - 7 0 7 4}$ | Fine | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |
| $\mathbf{1 0 - 7 0 7 5}$ | Super Fine | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |
| $\mathbf{1 0 - 7 0 7 6}$ | Ultra-Fine | $4^{\prime \prime}$ | $1^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | $\$ 9.61$ | $\$ 10.17$ | $\$ 11.30$ |



ALUMINUM-OXIDE FLAP WHEELS
Versatile wheels that can be used for light deburring and polishing on gold, silver, and other non-ferrous metals. Excellent for producing a satin finish. $4^{\prime \prime}(101.6 \mathrm{~mm})$ diameter, $3 / 4^{\prime \prime}(19.1 \mathrm{~mm})$ thick, and $1 / 4^{\prime \prime}(6.4 \mathrm{~mm})$ arbor hole.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 7 - 8 7 3 4}$ | Coarse | $\$ 13.69$ | $\$ 14.49$ | $\$ 16.10$ |
| F | $\mathbf{1 7 - 9 5 5 2}$ | Medium | $\$ 13.69$ | $\$ 14.49$ | $\$ 16.10$ |
| G | $\mathbf{1 7 - 8 7 3 2}$ | Fine | $\$ 14.81$ | $\$ 15.46$ | $\$ 16.10$ |
| H | $\mathbf{1 7 - 9 5 5 0}$ | Extra-Fine | $\$ 14.96$ | $\$ 15.84$ | $\$ 17.60$ |



## SATIN-FINISH WHEELS

Used to obtain matte finishes on metal and plastic. Abrasive granules are impregnated into the nylon fibers. 4" ( 101.6 mm ) diameter, ${ }^{3 / 4} 4^{\text {" }}(19.1 \mathrm{~mm})$ thick, and $1 / 4$ " $(6.4 \mathrm{~mm})$ arbor hole.

| Item | Order \# | Grade | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| J | $\mathbf{1 7 - 8 7 2 0}$ | Coarse | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |
| K | $\mathbf{1 7 - 8 7 1 0}$ | Medium | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |
| L | $\mathbf{1 7 - 8 7 0 0}$ | Fine | $\$ 4.00$ | $\$ 4.18$ | $\$ 4.35$ |




LEATHER FINGER COTS
Soft leather guard necessary for use in protecting fingers from compounds, heat, and abrasion during grinding and finishing.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | :---: | :---: |
| 47-5266 | Small/Medium (Women's) | $\$ 13.44$ | $\$ 15.12$ | $\$ 16.80$ |
| 47-5267 | Medium/Large (Men's) | $\$ 13.44$ | $\$ 15.12$ | $\$ 16.80$ |
| 47-5268 | Thumb Size (Men's ) | $\$ 13.44$ | $\$ 15.12$ | $\$ 16.80$ |

FINGER COTS
Comfortable cotton and elastic finger cots help protect your fingers as well as your skin while adding support and security when handling jewelry.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 47-5269 | Finger Cots | $\$ 6.76$ | $\$ 7.16$ | $\$ 7.95$ |



LEATHER FINGER GUARDS
Elastic-backed, leather finger guards are a must for polishing or grinding.
Protects fingers from heat, compounds, and abrasives. Split Leather: Has a rough
texture that resists cuts, abrasions, and wear, longer than grain leather.

| Item | Order\# | Description | Material | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 5 2 6 0}$ | Open-End Finger Guard | Split Leather | $\$ 0.78$ | $\$ 0.82$ | $\$ 0.85$ |
| B | $\mathbf{4 7 - 5 2 6 1}$ | Open-End Thumb Guard | Split Leather | $\$ 0.83$ | $\$ 0.86$ | $\$ 0.90$ |
| C | $\mathbf{4 7 - 5 2 6 2}$ | Over-End Finger Guard | Split Leather | $\$ 0.97$ | $\$ 1.01$ | $\$ 1.05$ |
| D | $\mathbf{4 7 - 5 2 6 3}$ | Over-End Thumb Guard | Split Leather | $\$ 0.97$ | $\$ 1.01$ | $\$ 1.05$ |
| E | $\mathbf{4 7 - 5 2 6 4}$ | Over-End Finger Guard | Grain Leather | $\$ 1.10$ | $\$ 1.15$ | $\$ 1.20$ |
| F | $\mathbf{4 7 - 5 2 6 5}$ | Closed-End Finger Guard | Grain Leather | $\$ 1.29$ | $\$ 1.34$ | $\$ 1.40$ |



RUBBER FINGER PADS
Superior quality rubber finger pads. These pads have sure grip and are ventilated for comfort.

| Item Order\# |  | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| G | $\mathbf{6 9 - 1 1 0 1}$ | \#11 Small | $\$ 5.89$ | $\$ 6.14$ | $\$ 6.40$ |
| H | $\mathbf{6 9 - 1 1 0 2}$ | \#12 Medium | $\$ 5.70$ | $\$ 5.95$ | $\$ 6.20$ |
| J | $\mathbf{6 9 - 1 1 0 3}$ | \#13 Large | $\$ 5.89$ | $\$ 6.14$ | $\$ 6.40$ |
| K | $\mathbf{6 9 - 1 1 0 4}$ | \#14 Extra-Large | $\$ 5.89$ | $\$ 6.14$ | $\$ 6.40$ |



FINGER PRO TAPE
Finger Pro is the ultimate finger protection from cuts, burns, and abrasions. It is thin and tough and allows the user to handle small articles much better than conventional cots or gloves. This unique tape sticks only to itself and not to your skin.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| L | $\mathbf{2 3 - 2 5 0 0}$ | Finger Tape | $3 / \mathbf{4}^{\prime \prime} \times 90^{\prime}$ | $\$ 1.75$ | $\$ 1.82$ | $\$ 1.90$ |
| M | $\mathbf{2 3 - 2 5 0 1}$ | Finger Tape | $1^{\prime \prime} \times 90^{\prime}$ | $\$ 1.98$ | $\$ 2.06$ | $\$ 2.15$ |

## VETRAP ${ }^{\text {TM }}$ TAPE

The ultimate in finger protection from cuts, burns, and abrasions. Allows user to handle small articles. Unique tape that only sticks to itself.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{N}$ | $\mathbf{2 3 - 2 4 0 0}$ | Blue | $2^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| P | $\mathbf{2 3 - 2 4 0 1}$ | Hunter Green | $2^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| 0 | $\mathbf{2 3 - 2 4 0 2}$ | Hot Pink | $2^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| R | $\mathbf{2 3 - 2 4 0 3}$ | Red | $2^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |
| S | $\mathbf{2 3 - 2 4 0 4}$ | White | $2^{\prime \prime} \times 15^{\prime \prime}$ | $\$ 2.07$ | $\$ 2.16$ | $\$ 2.25$ |

## SELVYT ${ }^{m "}$ CLOTH

Lint-free jewelry cleaning cloths. SR quality.

| Item | Order \# | Style | $\mathbf{W} \mathbf{x L}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | :--- | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{1 7 - 0 8 0 0}$ | 0 | $5^{\prime \prime} \times 5^{\prime \prime}$ | $\$ 1.44$ | $\$ 1.54$ | $\$ 1.60$ |
| $\mathbf{1 7 - 0 8 0 1}$ | A | $10^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 5.38$ | $\$ 5.74$ | $\$ 5.98$ |  |
| $\mathbf{1 7 - 0 8 0 2}$ | $B$ | $14^{\prime \prime} \times 14^{\prime \prime}$ | $\$ 6.26$ | $\$ 6.67$ | $\$ 6.95$ |  |
| $\mathbf{1 7 - 0 8 0 3}$ | C | $17^{\prime \prime} \times 14^{\prime \prime}$ | $\$ 9.14$ | $\$ 9.74$ | $\$ 10.15$ |  |

FABULUSTRE ${ }^{\oplus}$ POLISHING CLOTH
Double-cloth, one side impregnated with jeweler's rouge and the other side for final polish.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 7 - 0 7 6 0}$ | Polishing Cloth | $9^{\prime \prime} \times 11^{\prime \prime}$ | $\$ 4.65$ | $\$ 4.85$ | $\$ 5.05$ |

## MAGIC CLOTH

Space-age cleaning cloth will revolutionize the cleaning of loose stones. The "Magic Cloth" with its specially treated microfiber is simply the best and most effective way to clean your loose stones. No lint residue. Removes dust, dirt, and fingerprints, and won't scratch.

| Item | Order\# | Color | $\mathbf{W} \mathbf{x} \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{1 7 - 0 7 6 2}$ | Green | $7^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| D | $\mathbf{1 7 - 0 7 6 3}$ | Blue | $7^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| E | $\mathbf{1 7 - 0 7 6 4}$ | Gray | $7^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |
| F | $\mathbf{1 7 - 0 7 6 5}$ | Maroon | $7^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 2.02$ | $\$ 2.11$ | $\$ 2.20$ |



## BRILLIANT POLISHING CLOTH

Newly developed chemical treatment polishers help prevent tarnish from reappearing. Polishes brass, chrome, copper, silver, and gold without the rouge mess on your hands.

| Item | Order\# | Color | $\mathbf{W} \mathbf{x} \mathbf{L}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{1 7 - 0 7 7 0}$ | Blue | $4^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 2.03$ | $\$ 2.17$ | $\$ 2.26$ |
| H | $\mathbf{1 7 - 0 7 7 5}$ | Blue | $12^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 2.93$ | $\$ 3.12$ | $\$ 3.25$ |
|  | $\mathbf{1 7 - 0 7 7 6}$ | Yellow (not shown) | $12^{\prime \prime} \times 8^{\prime \prime}$ | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |

## GEMBRIGHT LINTLESS CLOTH

Gembright Lintless Cloth. Microfiber for maximum softness for cleaning stones or metal surfaces. Untreated and an excellent value. Also a great resale item.

| Item | Order \# | Description | W x L | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | 17-0820 | Lintless Cloth | $9 \mathrm{\prime} \mathrm{\prime} \times 10^{\prime \prime}$ | \$3.73 | \$3.89 | \$4.05 |

## REVOLUTIONARY HIGH PERFORMANCE POLISHING CLOTH

The high performance cloth is new technology that provides ultra cleaning power because of its knitted interwoven design

- Scratch-, smear-, streak-, and lint-free
- Easy removal of smudges, grease, dust, and polish residue
- Can be used wet or dry
- Machine washable up to 25 or 30 times
- Clean because no polishing compounds are in the cloth.

| Item | Order \# | Description | $\mathbf{W} \mathbf{x} \mathbf{L}$ | $\mathbf{6 +}$ | $\mathbf{3 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| $K$ | $\mathbf{1 7 - 1 0 0 0}$ | Polishing Cloth | $12^{3 / 4^{\prime \prime} \times 14^{\prime \prime}}$ | $\$ 3.92$ | $\$ 4.18$ | $\$ 4.35$ |
| L | $\mathbf{6 1 - 9 4 2 4}$ | Polishing Cloth | $6^{\prime \prime} \times 7^{\prime \prime}$ | $\$ 2.17$ | $\$ 2.30$ | $\$ 2.55$ |



RAYTECH MAGNETIC FINISHER
Small Capacity with programmable functions and can hold 8 to 12 small rings or findings. Unit includes bowl, stainless steel pins, and tumbling soap. Unit features a green start button, red stop button, timer and speed control with forward and reverse function.

| Item | Order \# | Description | Ring Capacity | Pin Capacity | 1+ |
| :---: | :--- | :--- | :---: | :---: | ---: |
| A | $\mathbf{4 7 - 5 0 0 7}$ | Raytech CFM 410 | $8-12$ | 100 | $\$ 675.00$ |
| ACCESSORIES |  |  |  |  |  |
| B | $\mathbf{4 7 - 5 0 0 8}$ | Dry Bowl | 4" Diameter |  | $\$ 165.00$ |
| C | $\mathbf{4 7 - 5 0 0 9}$ | Wet Bowl | 4" Diameter | $\$ 159.00$ |  |
| D | $\mathbf{4 7 - 5 0 1 2}$ | Parts Holder |  | $\$ 55.00$ |  |

## RAYTECH MAGNETIC FINISHER

Holds 30 to 50 small rings or findings. Unit, also programmable, includes bowl, stainless steel pins, and tumbling soap. Unit features a green start button, red stop button, timer, and speed control with forward and reverse function.

| Item | Order \# | Description |  | Ring Capacity | Pin Cap | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 47-5021 | Raytech CFM 610 |  | 30-50 | 200 | \$1,298.00 |
| ACCESSORIES |  |  |  |  |  |  |
| F | 47-5022 | Dry Bowl | 6" Diameter |  |  | \$179.00 |
| G | 47-5023 | Wet Bowl | 6 " Diameter |  |  | \$179.00 |
| H | 47-5024 | Parts Holder |  |  |  | \$69.95 |

Only with Raytech's
Flex-System can you
utilize three types of functions. Raytech's models 410 and 610 have compatible bowls.

Change and rinse as frequently as required to keep the process clean.

## Wet Burnishing Pins:

-High luster burnishing
-Edge smooth/light radiusing

## Abrasive (wet): CBW bowls required

-Surface refinement
-Edge radiusing
-Uniform surface quality
-cut down

## Dry Processing: CBD bowls required

-Decorative finish
-Bright, refined and uniform buff-like, high luster quality

## RAYTECH FINISHING MEDIA

J. Dri-Buff Media: A corn-based media that will provide a mirror finish and can be used in our CMF dry bowls with cycles of approximately $30-40$ minutes. As with the Dri-Shine VII, alternate the media between cycles to prevent overheating of the media. Note-when using Dri-Buff in the CMF-410 or CMF-610 finishers, run the machine at half speed.
K. Dri-Shine VII Media: A nut-based media that can be used as a final polish in most applications and was designed specifically for use with our CMF-410 and CMF-610 dry bowls. Fill to the media line on the bowl. Cycle times will run from 20-45 minutes depending on your application. Use approximately four to six cycles and then reactivate with our Dri-Shine VII Reactivator. Note-to prevent condensation, change the media between cycles.
L. Dri-Shine VII Reactivator: Reactivate every four to six cycles to keep the media active. Reactivator will work into the Dri-Shine VII in only a few minutes. Use $1 / 2$ teaspoon of Reactivator in the CMF-410 dry bowl, and 1 teaspoon in the CMF-610 dry bowl.

| Item | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| J | $\mathbf{4 7 - 5 0 1 5}$ | Dri-Buff | 4 lb Bucket | $\$ 26.39$ | $\$ 28.62$ | $\$ 31.80$ |
| K | $\mathbf{4 7 - 5 0 1 3}$ | Dri-Buff | 5 lb Bucket | $\$ 36.42$ | $\$ 38.57$ | $\$ 42.85$ |
| L | $\mathbf{4 7 - 5 0 1 4}$ | Dri-Shine (recharger) | 1 lb Bucket | $\$ 26.39$ | $\$ 28.62$ | $\$ 31.80$ |

## MAGNETIC TUMBLER

Help cut down on polishing time by using one of these tumblers. Best Built tumblers polish those intricate pieces where normal polishing doesn't work. Replacement bowls are under same tumbler order number.
Features:

- Workhorse AC motor
- One-year warranty
- Direct Drive 60-minute timer
- 110 volt
- Auto shut-off
- Select models include speed control
- Heavy-duty plastic bowls

| Order \# | Watts | Weight | Ring Capacity | Bowl Size | 1+ |
| ---: | :--- | :--- | :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 4 1}$ | 15 | 12 lbs | $1-6$ | $31 / 2^{\prime \prime} \times 23 / 4^{\prime \prime}$ | $\$ 249.00$ |
| $\mathbf{4 7 - 5 0 4 2}$ | 40 | 18 lbs | $1-8$ | $43 / 8^{\prime \prime} \times 31 / 8^{\prime \prime}$ | $\$ 450.00$ |
| $\mathbf{4 7 - 5 0 4 3}$ | 90 | 22 lbs | $10-22$ | $51 / 8^{\prime \prime} \times 43 / 8^{\prime \prime}$ | $\$ 695.00$ |
| $\mathbf{4 7 - 5 0 4 4}$ | 150 | 30 lbs | $20-29$ | $578^{\prime \prime} \times 433^{\prime \prime}$ | $\$ 820.00$ |
| $\mathbf{4 7 - 5 0 4 5}$ | 175 | 35 lbs | $25-40$ | $61 / 2^{\prime \prime} \times 41 / 2^{\prime \prime}$ | $\$ 995.00$ |
| $\mathbf{4 7 - 5 0 4 6}$ | 300 | 70 lbs | $50-100$ | $77 / 8^{\prime \prime} \times 41 / 2^{\prime \prime}$ | $\$ 1,795.00$ |



## MAGNETIC PIN SEPARATOR

Eliminates tedious separation of parts from stainless steel media. Insert the wand into your bowl, pull the trigger to activate, and stir. The stainless steel media will attach to the wand until you release the trigger.


| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| 47-5058 | Magnetic Pin Separator | $\$ 123.50$ |



STAINLESS STEEL PINS
These stainless steel pins are approximately $5 \mathrm{~mm} \times 0.5 \mathrm{~mm}$. Use with our magnetic finishers. Use with Stuller finishing soap \#54-4453.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 5 5}$ | Steel Pins | $\$ 19.45$ |




## NOVA FINISHING SYSTEMS

The Nova Vibratory Finishers are specifically designed and engineered to meet the rugged demands of large production shops and small jewelers. The Nova finishers feature a welded metal base that has chemically resistant paint. Each machine has an on/off timer with a 0 to 60 minute cycle or constant. The unique, hard-mount, spring system permits maximum use of energy into amplitude or vibration and will roll steel shot. The work chamber bowl is of one-piece construction and is $5 / 8^{\prime \prime}$ thick instead of the standard $3 / 8^{\prime \prime}$ which extends the bowl life by an additional 3 to 5 years. The Nova Finisher can run wet or dry media. There is a $1 / 2^{\prime \prime}$ drain system with chokeoff clamp for wet applications. The motors operate at 1,725 RPM, 115 volt, single phase, 60 Hz and are rated for 138,000 hours of service.
A. Nova $\mathbf{2 5 0}$ HT Motor - $1 / 6$ hp - Volume: $1 / 4$ " cubic feet - Liquid: 2 gallons Capacity: 100-120 lbs. of steel media, $35-50 \mathrm{lbs}$ of ceramic media $70-90 \mathrm{lbs}$ of ceramic media - Bowl dimensions: 14" OD x $5^{\prime \prime}$ ID x $6^{\prime \prime} \mathrm{H}$
B. Nova 500 HT Motor - $1 / 4 \mathrm{hp}$ - Volume: $1 / 2^{\text {" }}$ cubic feet - Liquid: 4 gallons

- Capacity: 200-230 lbs. of steel media, $70-90 \mathrm{lbs}$ of ceramic media
- Dimensions: 17" OD x 6" ID x 7½" H

| Order \# | Description | $\mathbf{1 +}$ |
| ---: | ---: | ---: |
| 47-5070 | 250HT Finisher | $\$ 799.95$ |
| $47-5075$ | 500 HT Finisher | $\$ 1,242.00$ |

## ECO-MINI DRY POLISHER

Used for dry polishing with walnut shell media. Ideal for restoring a brilliant luster to tarnished jewelry. Capable of polishing gold, silver, or platinum to a high degree of machined quality. Process time: 1-4 hours. Made in Germany. Includes:

- 2 oz polishing paste
-2.2 lb of coarse impregnated walnut shell
- 12 hour timer
-2.2 lb of fine impregnated walnut shell
Specifications:
- Volume: 3 liters
- Power: 50 watts
- Voltage: 110 V (60hz)
- Dimensions: 9"D x 13" H
- Weight: 8 lbs

For heavy items, use the ring holder to keep heavy items suspended in media.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 1 0 0}$ | Eco-Mini Dry Finisher | $\$ 1,098.95$ |



## BARRELL TUMBLERS

D. Versatile, two barrel $6 \mathrm{lb}(2.7 \mathrm{~kg})$ capacity tumbler uses two-3 lb long life molded rubber barrel. Ideal for small batches of jewelry. Continuous duty, fan cooled motor with overload protection.
E. Professional quality tumbler features a larger, more powerful, continuousduty, fan-cooled motor with overload protection. Steel hexagon barrel with removable liner ensures long, efficient- and quiet operation. 15 lb capacity, with a five-year warranty on the barrel and liner.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: |
| C | $\mathbf{4 7 - 5 1 6 0}$ | Two Barrel Tumbler | $\$ 169.50$ |
| D | $\mathbf{4 7 - 5 1 6 4}$ | Heavy Duty Barrel Tumbler | $\$ 263.85$ |

Red Box Diamonds offer one-of-a-kind options ideal for your custom designs. Choose any number of shapes, qualities, report types, and price points to find the perfect match.

## Red Box Diamonds Benefits

## Accurate Grading

Red Box Diamonds come with a report from an independent gemological laboratory or with a Red Box Diamond grading report. We guarantee that the Red Box Diamond grading report is accurate.*

## Guaranteed Value

When your customer is ready to upgrade her Red Box Diamond, we offer a Trade-Up Program. Sell confidence to your customer that the diamond they are purchasing will hold its value over time. Your customer can trade it in for a stone of greater value and receive a credit toward their new purchase of a Red Box Diamond.**

## Committed to Excellence

We are committed to selling diamonds ethically and with integrity. All Red Box Diamonds comply with the Kimberley Process, which is a system of warranties that ensure that diamonds are conflict-free.

Free Loss Protection for One Year
All Red Box Diamonds come with free loss protection against theft, loss, or mysterious disappearance for one year. Free coverage begins on the postmarked date of the registration form. There is no deductible.

## Secure Identification

Each Red Box Diamond comes with the added security of a unique identification number, laser-engraved on the girdle of the stone to match the grading report. This number allows for proof positive identification.
*Learn more about diamond grading reports at Stuller.com/DiamondReportsDisclaimer. **Diamonds must be in their original condition to qualify for the Trade-Up Program


## VIBRATORY TUMBLERS

Use dry only-cannot be used with Flow-Through system.

- Capacity approximately 50 rings
- 3-quart capacity
- . 10 cu. ft.
- Holds 3 lbs dry shot
- Bowl size 10" x 4" high
- Ship weight 12 lbs .

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $47-5053$ | $3 q t ~ D r y$ | $\$ 249.00$ |



VIBRATORY TUMBLERS
Three Quart: Can be used wet or dry.

- Capacity approximately 50 rings
- 3 quart capacity
- .10 cu. ft.
- Holds 8 lbs of plastic shot
- 3 lbs dry shot
- Ship weight 12 lbs
- Bowl size 10" x 4" high

Six Quart: Can be used wet or dry.

- Capacity approximately 100 rings
- 6 quart capacity
- . 20 cu. ft. holds 15 lbs . of plastic shot
- 6 lbs dry shot
- Ship weight 19 lbs
- Bowl size $1112^{\prime \prime} \times 6$ " high

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 5 4}$ | 3qt Wet/Dry | $\$ 349.00$ |
| $\mathbf{4 7 - 5 0 5 4}$ | 6qt Wet/Dry | $\$ 479.00$ |



## RAYTECH VIBRATORY TUMBLERS

A. The industrial model TV-10 has light duty drive and suspension combined with a tough, cross-linked polyethylene 10 inch bowl. Has a noise reducing lid and a liquid drain. The machine is equipped for use with Raytech's FT-20 compound rinsing system. Do not run steel shot in this machine; doing so will void the warranty.

- Volume Capacity (Decimal Cu. Ft.) 0.10 (35 to 40 rings)
- Wet/Dry Operation
- Horsepower 1⁄15
- Drain For Recirculation Yes
- Adjustable Amplitude No
- Tilt Feature No
- Maximum Voltage Rating 115 V
- Shipping Weight 12lbs
- Outside Diameter 10"
B. This machine is specifically designed for use where steel or stainless steel media processing is required although all medias can be used. It is designed with a heavy duty drive and suspension system and has adjustable amplitude. The AV-25SS has all the features of our larger machines and is a popular size for small production lots. The 14 -inch bowl has a discharge port for easier unloading and a capacity of .22 cubic feet. Steel or stainless steel media capacity is 40 pounds including parts. CE
- Stationary base with adjustable vibration amplitude
- Convenient unloading plug
- 7qt. flow-thru bowl 14"Diameter x 51⁄4" Depth
- Capacity 3 cups (100 rings)
$-110 \mathrm{~V}$


All prices are subject to change. For current pricing and/or additional price breaks not shown, call 800-877-7777, or visit us at stuller.com. |



## MEDIA SCREENS

Screens for manually spearating parts from media are $141 / 2$ inches in diameter $\times 21 / 2$ inches deep (approximately . 25 cubic feet). They are also useful for separating undersize media from useable media. Made of high impact polymer with integral screen, one-piece molding eliminates problems with parts and media sticking at the joints of two-piece screens. Screens nest for storage.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 47-5038 | Set of 5 Screens with Container | $\$ 125.00$ |
| 47-5038 | Set of 5 Screens | $\$ 105.00$ |
| 47-5038 | Screen Container | $\$ 30.00$ |
| 47-5038 | $1 / 4^{\prime \prime}$ Screen | $\$ 25.00$ |
| 47-5038 | $3 / /^{\prime \prime}$ Screen | $\$ 25.00$ |
| 47-5038 | $1 / 2^{\prime \prime}$ Screen | $\$ 25.00$ |
| 47-5038 | $3 / 4^{\prime \prime}$ Screen | $\$ 25.00$ |
| $\mathbf{4 7 - 5 0 3 8}$ | 1 " Screen | $\$ 25.00$ |

## TUMBLING MEDIA

Formulated for very fine surface conditioning, low RMS finishes are commonly achieved. Plastic medias are widely used in the precision metal industries. Also due to the fine surface finishes achieved, parts are prepared for pre-plate, pre-anodize, or decorative polishing. Brown, V-Cut, Cone (medium cut), Green (light cut), and White (very fine cut). Density: $55 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 47-5037 | $1 / 4$ " Brown Pyramids | $\$ 54.00$ |
| 47-5037 | $1 / 4$ " White Pyramids | $\$ 54.00$ |

## TUMBLING MEDIA

Porcelain balls are utilized to achieve bright finishes without the use of steel media. Because of its shape, it imparts a single point of contact resulting in a very fine finish to almost any area it can reach. Porcelain balls will not leave impingement marks that steel media produces on some other softer metals and/or flat surfaces. Their lighter weight lessens the distortion potential for lighter work and wire forms. Very popular for delicate parts, fine edge blanking and precious metal burnishing. Use with Raytech's Compound D. Mixing the sizes is recommended for good vibratory action. Please note that a break-in period of 4 to 6 hours is required. Density: $125 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 47-5039 | 2 mm Porcelain Balls | $\$ 50.00$ |
| $\mathbf{4 7 - 5 0 3 9}$ | 3 mm Porcelain Balls | $\$ 49.00$ |
| $\mathbf{4 7 - 5 0 3 9}$ | 4 mm Porcelain Balls | $\$ 47.95$ |
| $\mathbf{4 7 - 5 0 3 9}$ | 6 mm Porcelain Balls | $\$ 47.95$ |
| $\mathbf{4 7 - 5 0 3 9}$ | 1 mm Porcelain Balls | $\$ 50.00$ |

## TUMBLING MEDIA

Ceramic is the heaviest media and is also the fastest finisher. Bonded of the highest quality materials available, selected aluminum oxide abrasives produce constant quality. This durable, long-lasting media is extremely versatile for deburring machined, cast or fabricated parts. Density: $90 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 47-5049 | Ceramic Triangle Media | $\$ 74.50$ |

## TUMBLING MEDIA

Formulated for very fine surface conditioning, low RMS finishes are commonly achieved. Plastic medias are widely used in the precision metal industries. Also due to the fine surface finishes achieved, parts are prepared for pre-plate, pre-anodize, or decorative polishing. Brown, V-Cut, Cone (medium cut), Green (light cut), and White (very fine cut). Density: $55 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 5 1}$ | $5 / 8^{\prime \prime}$ V Cut Cylinders | $\$ 71.40$ |
| $\mathbf{4 7 - 5 0 5 1}$ | $1 / 2^{\prime \prime}$ V Cut Cylinders | $\$ 101.00$ |



## TUMBLING MEDIA

Ceramic is the heaviest media and is also the fastest finisher. Bonded of the highest quality materials available, selected aluminum oxide abrasives produce constant quality. This durable, long-lasting media is extremely versatile for deburring machined, cast or fabricated parts. Density: $90 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 5 2}$ | $5 / 16^{\prime \prime} \times 3 / 4^{\prime \prime}$ Ceramic Angle Cut Cylinders 20lbs | $\$ 72.00$ |
| $\mathbf{4 7 - 5 0 5 2}$ | $3 / 8^{\prime \prime} \times 7 / 8^{\prime \prime}$ Angle Cut Cylinders | $\$ 79.00$ |



## TUMBLING MEDIA

Ceramic is the heaviest media and is also the fastest finisher. Bonded of the highest quality materials available, selected aluminum oxide abrasives produce constant quality. This durable, long-lasting media is extremely versatile for deburring machined, cast or fabricated parts. Density: $90 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{4 7 - 5 0 5 7}$ | $3 / 8 "$ Polyhedrons | $\$ 99.00$ |



TUMBLING MEDIA
Formulated for very fine surface conditioning, low RMS finishes are commonly achieved. Plastic medias are widely used in the precision metal industries. Also due to the fine surface finishes achieved, parts are prepared for pre-plate, pre-anodize, or decorative polishing. Brown, V-Cut, Cone (medium cut), Green (light cut), and White (very fine cut). Density: $55 \mathrm{lbs} / \mathrm{cu} \mathrm{ft}$.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | ---: | ---: |
| $\mathbf{4 7 - 5 0 6 1}$ | $9 / 16^{\prime \prime}$ XF Cones | $\$ 115.00$ |




Find added video content on Stuller.com.

## POLYCHEM MF610 BURNISHING COMPOUND

This concentrated liquid is a mildly acidic finishing product for high-speed burnishing and tumbling and burnishing applications using magnetic needles. Contains special lubricating additives and produces a lustrous and polished finish to silver, gold, platinum, rhodium, and their alloys, as well as other precious metals. Mixing ratio: one part Polychem MF610 to 50 parts water.

| Order \# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 4 - 4 4 5 3}$ | Polychem MF610 | 1 Gallon | $\$ 20.68$ | $\$ 23.27$ | $\$ 25.85$ |

## LIQUID SHOT CONDITIONER

A non-abrasive, deburring, and cleaning compound for use with steel shot. Provides excellent rust and corrosion protection. Fully biodegradable. Concentrated, mix 1 to 2 oz per gallon.

| Order \# | Description | Weight |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 4 - 4 4 6 3}$ | Liquid Shot Conditioner | 1 Gallon | $\$ 29.54$ | $\$ 31.28$ | $\$ 34.75$ |  |



## POLISH PASTE

Paste compounds are used to treat organic materials such as wood shapes, sawdust, corn cob, and walnut shell to create treated compound media to enhance the finishing process. Comes in 1 quart concentrate.

| Item | Order\# | Description | Used For | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- |
| A | $\mathbf{4 7 - 5 2 2 2}$ | Aluminum Paste | General Purpose | $\$ 34.13$ | $\$ 35.62$ | $\$ 37.10$ |
| B | $\mathbf{4 7 - 5 2 2 3}$ | Green Paste | White Metals | $\$ 32.98$ | $\$ 34.42$ | $\$ 35.85$ |
| C | $\mathbf{4 7 - 5 2 2 4}$ | Red Paste | Yellow Metals | $\$ 30.27$ | $\$ 31.58$ | $\$ 32.90$ |



MIXED STEEL SHOT
A fast form of tumbling used to burnish metal to a mirror bright finish. Uniform in size and shape, non-abrasive, and carefully tempered to ensure long life. Carbon steel requires special storage to prevent rust and corrosion. Stainless steel shot is rust- and corrosion resistant, requiring no special storage and making it ideal for use in wet, flow-through systems. The mix consists of $3 / 16^{\prime \prime}(4.8 \mathrm{~mm})$ balls, $3 / 16^{\prime \prime}$ $(4.8 \mathrm{~mm})$ ballcones, $1 / 8^{\prime \prime} \times 3 / 8^{\prime \prime}(3.2 \mathrm{~mm} \times 9.5 \mathrm{~mm})$ pins, and $1 / 8^{\prime \prime}(3.2 \mathrm{~mm})$ diagonals for maximum coverage on a wide variety of pieces.

| Item | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{4 7 - 5 2 4 0}$ | Carbon Steel | 10 lb | $\$ 103.36$ | $\$ 107.86$ | $\$ 112.35$ |
| E | $\mathbf{4 7 - 5 2 4 1}$ | Stainless Steel | $\mathbf{1 0 ~ \mathrm { Ib }}$ | $\$ 189.84$ | $\$ 198.10$ | $\$ 206.35$ |

## CERAMIC FINISHING MEDIA

Ceramic media is recommended for heavy deburring or material removal on castings, machined ferrous metals, and stainless steel. Use with our \#54-4453 burnishing compound.
Cylinder Wedge: General purpose cylinder wedge for aggressive

deburring. Produces a dull matte finish in 10 to 20 minutes.
Cone: Angel-cut triangle good on small parts. Produces a dull finish in 15 to 30 minutes.

| Item | Order\# | Grade | $\mathbf{W} \times \mathbf{L}$ | Shape | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| A | $\mathbf{4 7 - 5 2 3 0}$ | Coarse | $3 / 4 " \times 5 / 8^{\prime \prime}$ | Cylinder Wedge | $\$ 39.35$ |
| B | $\mathbf{4 7 - 5 2 3 1}$ | Medium | $3 / 16^{\prime \prime} \times 3 / 8^{\prime \prime}$ | Cone | $\$ 33.75$ |

## PLASTIC FINISHING MEDIA

Plastic media is recommended for general purpose deburring and material removal on non-ferrous castings, gold, silver, brass, and copper. Plastic media comes in either a polyester or urea-bonded shape and produces a dull matte to slight luster on parts. Use with our \#54-4464 burnishing compound.
Cylinder Wedge: Used for aggressive deburring. Produces a dull matte luster in 15 to 20 minutes.
Cone: Produces a smooth finish and a slight luster on parts in 30 to 60 minutes. Good for small parts.
Pyramid: Produces a smooth finish and a good luster in 60 to 180 minutes. Good for detail work.

| Item | Order \# | Grade | Size | Shape | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| C | $\mathbf{4 7 - 5 2 3 5}$ | Coarse | $5 / 8^{\prime \prime}$ | Cylinder Wedge | $\$ 36.75$ |
| D | $\mathbf{4 7 - 5 2 3 6}$ | Medium | $3 / 8^{\prime \prime}$ | Cone | $\$ 50.25$ |
| E | $\mathbf{4 7 - 5 2 3 7}$ | Fine | $1 / 4^{\prime \prime}$ | Pyramid | $\$ 64.45$ |$\quad 10 \mathrm{lbs}$



TREATED DRY POLISHING MEDIA
This media can be used on all metals to produce an excellent mirror finish.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| F | $\mathbf{4 7 - 5 2 1 5}$ | Corn Cob | $\$ 43.85$ |
| G | $\mathbf{4 7 - 5 2 1 6}$ | Walnut Shell | $\$ 46.95$ |



## TREATED RED DRY MEDIA

This red polishing material contains soft iron oxide and is used for finishing yellow metals such as gold, brass, copper, or bronze.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | :--- |
| 47-5219 | Corn Cob Red Media | $\$ 39.30$ |
| 47-5220 | Walnut Shell Red Media | $\$ 39.80$ |$\quad 10 \mathrm{lbs}$




## KAGAN RING STRETCHER/REDUCER

Reduce and enlarge wedding bands up to size 14. Reducing disc has 12 different sizes, and the mandrel has eight splines. Made in the USA.

| Item | Order \# | Description | Ring Sizes | $\mathbf{W} \times \mathbf{H}$ | 1+ |
| :---: | ---: | :--- | :---: | :--- | ---: |
| A | $\mathbf{4 8 - 7 5 2 0}$ | Kagan Ring Sizer | $2-14$ | $16^{\prime \prime} \times 18^{\prime \prime}$ | $\$ 590.00$ |
| B | $\mathbf{4 8 - 7 5 3 5}$ | Kagan Replacement Sleeve |  | $\$ 162.00$ |  |



D

RING STRETCHER WITH REDUCTION WHEEL
Allows reduction or enlargement of rings. Has six-spline mandrel. Graduated in U.S. sizes. This upright style has a reversible base plate with 16 smoothly honed reduction dies that will not scratch. Allows for reducing bands by compression. Italian-made.

| Item | Order\# | Description | Ring Sizes | 1+ |
| :---: | :--- | :---: | ---: | ---: |
| C | $\mathbf{4 8 - 7 5 1 0}$ | Stretcher with Reduction Wheel | $3-15$ | $\$ 395.75$ |

## RATHBURN RING STRETCHER

Perfect for stretching rings size six or larger. Simply tapping the end spreads the outer mandrel and stretches the ring. Not for use on stone set rings.

| Item Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | ---: | ---: | ---: | ---: |
| D | $\mathbf{4 8}-\mathbf{7 5 5 0}$ | Ring Stretcher | $\$ 12.71$ | $\$ 13.46$ | $\$ 14.95$ |



## GRS® ${ }^{\circledR}$ RING SIZE CUTTER

This ring cutter saves time by neatly shearing a controlled amount of ring shank material. The ring remains perfectly parallel so your soldering is neat and fast. Comes with seven different size blades: $1 / 2,3 / 4,1,1 \frac{1}{4}, 1 \frac{1}{2}, 13 / 4$, and 2. These sizes correspond to the change in ring size. Blades change quickly and easily with no tools. Replacement blades sold separately.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 6 - 4 1 5 0}$ | Ring Size Cutter | $\$ 309.90$ |

## KAGAN RING ROLLER WITH HANDLE

Enlarges rings with set stones. Parallel rollers stretch the ring and shank without moving the stones. Sizer comes with eight dies for oval, half-round, knife-edge, and flat shanks. Can use as a mini rolling mill. Made in the USA.

| Order \# | Description | $\mathbf{W} \times \mathbf{H} \times$ Depth | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 8 - 7 5 3 0}$ | Kagan King Roller with Handle | $4^{1 / 2} \times 7^{\prime \prime} \times 5^{\prime \prime}$ | $\$ 599.00$ |



## SUPER RING BENDING TOOL

Super Ring Bending Tool is the most versatile ring bending set on the market. This bending tool makes both round and angled bends. Includes bending unit, seven dies and seven matching mandrels, steel block with screws that can be fastened to bottom of unit for vise mounting and an attractive aluminum powder coated base for easy part selection and storage. Eccentric base and handle provide high torque, requiring user to exert less effort to bend metal. Supplied with $12,14,16,20$ and 22 mm round dies and $60^{\circ}$ and $90^{\circ}$ angled dies. Made in the USA.

| Order \# | Description | 1+ |
| ---: | ---: | ---: |
| $\mathbf{4 8 - 0 5 1 5}$ | Super Ring Bending Tool | $\$ 239.15$ |



## DURSTON RING STRETCHER/REDUCER

High precision ring stretcher/reducer featuring an eight spline mandrel and 12 polished countersunk dies. This high quality ring stretcher ensures exceptionally accurate ring sizing. Its countersunk polished steel reducing plate will reduce bands up to 12 mm wide.

| Order \# | Description | 1+ |
| :---: | :--- | ---: |
| 48-7512 | Stretcher/Reducer | $\$ 391.00$ |
| 48-7512 | Stretcher/Reducer \& Bender w/dies | $\$ 399.00$ |



## RING ENLARGER

This tool allows you to "roll out" ring shanks to enlarge stone set rings. Includes a roller for flat, wide shanks, and a series of half-round concave rollers for shanks up to 4 mm wide. Total of 16 rollers. Made in the USA.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | :--- |
| $\mathbf{4 8 - 7 5 4 0}$ | Ring Enlarger | $\$ 68.70$ |



## SAFETY GLASSES

A. Adjustable temples allow a comfortable, custom fit. Lenses are high-impact polycarbonate. Black nylon frame is rugged but lightweight. The DX ${ }^{\text {m" }}$ Lens coating is anti-fog, anti-scratch, anti-UV, anti-static, and has excellent chemical resistance. Complies with ANSI 287.1-1989 standards. Made in the USA.
B. Engineered with an innovative molding process that actually allows the frame to serve as a shock absorber that can diffuse and deflect impact. A ventilation channel between the frame and brow bumper directs airflow under the lens to reduce moisture build-up and fogging. three-position ratchet lens inclination system with adjustable length temples allows you a custom fit.
C-D. Adjustable temples for comfortable, custom fit. High-impact, polycarbonate lens has new lens coating for anti-fog, anti-UV, anti-static, and anti-scratch. ANSI 287.1-1989 standards.
E. Single wrap around lens design with integral side shields, metal alloy temples with rubber head grips for a custom fit and a strong, yet lightweight, polycarbonate lens.
F. Wraparound metal frame offers both protection and style. Dual polycarbonate lens design provides built-in side protection and superior coverage. Spring hinge temples, soft rubber temple tips, and an adjustable saddle pad nosepiece produce a comfortable and secure fit with Uvextra"' anti-fog coating.

| Item | Order \# | Description | Lens <br> Shade/Color | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 29-0030 | N-SPECS ${ }^{\text {® }}$ | \#5.0/Green | \$17.43 | \$18.19 | \$18.95 |
| B | 29-0012 | Direct Safety ${ }^{\text {® }}$ Kavalry | Clear | \$7.50 | \$7.82 | \$8.15 |
| C | 29-0010 | Crews Blackjack | Clear | \$7.31 | \$7.63 | \$7.95 |
| D | 29-0009 | UVEX Slate | Clear | \$9.57 | \$9.98 | \$10.40 |
| E | 29-0058 | UVEX Genesis | \#5.0/Green | \$16.31 | \$17.68 | \$19.65 |
| F | 29-0059 | Crews Storm | \#5.0/Green | \$8.08 | \$9.09 | \$10.10 |

## ANTI-FOG GOGGLES

Clear, vinyl goggles with elastic headband for firm fit. Clear frame provides excellent front and peripheral vision. Complies with ANSI 287.1-1989 standards. Made in the USA.

| Item |  | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| G | $\mathbf{2 9 - 0 0 4 0}$ | Cover Goggles | $\$ 3.68$ | $\$ 3.84$ | $\$ 4.00$ |
| H | $\mathbf{2 9 - 0 0 5 0}$ | Fogless Lens Splash Goggles | $\$ 4.14$ | $\$ 4.32$ | $\$ 4.50$ |

FACE SHIELD WITH VISOR
Lightweight plastic provides full-face protection when polishing, soldering, or mixing investment. Comes with adjustable vinyl head band.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| J | $\mathbf{2 9 - 0 0 1 3}$ | Face Shield with Visor | $\$ 25.85$ | $\$ 26.98$ | $\$ 28.10$ |
|  | $\mathbf{2 9 - 0 0 1 4}$ | Visor Only | $\$ 8.33$ | $\$ 8.69$ | $\$ 9.05$ |



## PLATINUM WELDING GOGGLES

Soft, vinyl body with ventilated slots. The \#10 shade provides recommended eye protection for platinum melting. Lenses are impact resistant but not unbreakable. Meets ANSI 287.1 requirements.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | 29-0068 | Welding Goggles | $\$ 25.85$ | $\$ 26.98$ | $\$ 28.10$ |
|  | 29-0069 | \#10 Lens for Platinum | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |



DRY BROW SWEAT BANDS
Providing a soft, cool, and sanitized way to dry your brow, these sweatbands absorb perspiration before it trickles down into the eyes or onto spectacles. Fits a wide range of safety hats and headgear, such as OptiVISOR®.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 0 0 3 2}$ | Dry Brow Sweatbands | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |

## CORDED EARPLUGS

Disposable hearing protectors with convenient cord to prevent loosening. Soft, foam plug conforms and seals quickly and comfortably. Earplugs provide 29dB of sound protection. Made in the USA.

| Order \# | Description | Per Box | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 0 0 1 5}$ | Corded Earplugs | Box of 10 | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |
| $\mathbf{2 9 - 0 0 1 6}$ | Corded Earplugs | Box of 100 | $\$ 27.88$ | $\$ 29.09$ | $\$ 30.30$ |



STULLER RING CRACKER
Allows you to crack any ceramic or tungsten ring with no pain to the wearer. Very easy to use anybody can assist with the removal of these alternative metals. The kit comes with a Ring Cracker, two pairs of safety glasses and instructions. Only removes tungsten and ceramic rings.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 4 0}$ | Ring Cracker | $\$ 79.65$ | $\$ 84.33$ | $\$ 93.70$ |



## 3M ${ }^{\circledR}$ RESPIRATORS

Respirator selection should first be based on the contaminant (e.g. lead, metal, fume, solvents) and the concentration of the contaminant in the workplace. Particulates (requiring filters) in the jewelry industry can include: metal fumes, silica, dust, and some acids (phosphoric and sulfuric). Gases and vapors involved in this trade may include: solvents such as toluene and xylene. Half-mask respirators protect a worker up to 10 times the PEL (OSHA's Permissible Exposure Limit), and full-face respirators up to 50 times the PEL (when quantitatively fit). The appropriate filter or carbon cartridge (or a combination of both) must be selected based on the contaminant(s) and their concentrations. After this first phase of selection is complete, there may be other criteria that influences the selection process. As an example, the use of acids should prompt consideration of appropriate eye/face protection or a full-face respirator should be considered.


## HALF AND FULL-FACEPIECE RESPIRATORS

The 6000 series respirators provide versatility with comfort and ease of use. These low-maintenance units are approved for use with a wide range of easily fitted cartridges and filters for particulate or gas and vapor protection NIOSH approved. Cartridges and filters sold separately.

| Item | Order \# | Description | Model | Size |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{2 9 - 0 0 0 6}$ | Full-Face | 6800 | Medium | $\$ 143.15$ | $\$ 149.38$ | $\$ 155.60$ |  |
| B | $\mathbf{2 9 - 0 0 2 6}$ | Half-Face | 6100 | Small | $\$ 18.06$ | $\$ 19.13$ | $\$ 21.25$ |  |
| C | $\mathbf{2 9 - 0 0 2 7}$ | Half-Face | 6200 | Medium | $\$ 18.06$ | $\$ 19.13$ | $\$ 21.25$ |  |
| D | $\mathbf{2 9 - 0 0 2 8}$ | Half-Face | 6300 | Large | $\$ 18.06$ | $\$ 19.13$ | $\$ 21.25$ |  |



P100 ORGANIC VAPOR/ACID GAS
P-100 Filter. OV/AG. 99.97\% efficient aglint solid and liquid aerosols including oil. Relief from nuisance levels of acid gas. ring . Refiom hisance levels of acid gas.

| Item | Order \# | Description | Model | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{2 9 - 0 0 0 5}$ | P100 Organic Vapor/Acid Gas | $3 M 60923$ | $\$ 21.07$ | $\$ 21.98$ | $\$ 22.90$ |

## P100 PARTICULATE FILTER



P100 particulate filter fits -6000 series respirators. 99.97\% efficient aglint solid and liquid aerosols including oil.

| Item | Order \# | Description | Model | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| F | $\mathbf{2 9 - 0 0 0 7}$ | P100 Particulate Filters | 3M2091 | $\$ 8.50$ | $\$ 9.00$ | $\$ 10.00$ |

## MERCURY VAPOR/ACID GAS CARTRIDGE

Mercury vapor cartridge. End of service life indicator

| Item | Order \# | Description | Model | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| G | $\mathbf{2 9 - 0 0 3 1}$ | Mercury Vapor/Chlorine Cartridges | R6009 | $\$ 22.36$ | $\$ 23.67$ | $\$ 26.30$ |



## ORGANIC VAPOR/ACID CARTRIDGE

Organic vapors and acid gases. Sold in pairs. Organic vapors/cholorine/ hydrogen chloride/sulfur dioxide/hydrogen flouride/hydrogen sulfide (escape only).

| Item | Order \# | Description | Model | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| H | $\mathbf{2 9 - 0 0 2 9}$ | Organic Vapor/Acid Gas Cartridges | 3 M6003 | $\$ 12.33$ | $\$ 12.86$ | $\$ 13.40$ |

## RESPIRATORS

Lightweight, filtering face pieces that provide greater user comfort and acceptance in a wide variety of applications and certain particulates.
RESPIRATOR SELECTION PROCESS: Under NIOSH 42 CFR 84 there are nine classes of filter comprised of three levels of minimum filter efficiency and three categories of the resistance to the effects of oil in the workplace. The three levels of filtration efficiency are $95 \%, 99 \%$, and $97 \%(100)$ against the most difficult particle size to filter. The three categories of resistance to the effect of oil are N-Not resistant to oil, R-Resistant to oil, P-Oil-Proof.

## MOLDEX RESPIRATORS

A. NIOSH Rating: R95. Applications: soldering, braising, torch cutting, metal pouring, polishing, and buffing.
B. NIOSH Rating: N100. Applications: welding, cutting and metal pouring.
3M ${ }^{\circledR}$ RESPIRATORS
C. NIOSH Rating: N95. Applications: grinding and sanding.

| Item | Order\# | Model | Size | Per Box |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{2 9 - 0 0 4 8}$ | 2740 | Medium/Large | 10 | $\$ 37.26$ | $\$ 38.88$ | $\$ 40.50$ |  |
| B | $\mathbf{2 9 - 0 0 4 9}$ | 2730 | Medium/Large | 5 | $\$ 39.38$ | $\$ 41.09$ | $\$ 42.80$ |  |
| C | $\mathbf{2 9 - 0 0 1 9}$ | 8511 | Universal | 10 | $\$ 22.63$ | $\$ 23.62$ | $\$ 24.60$ |  |



3M ${ }^{\circledR}$ RESPIRATORS
D. NIOSH Rating: N95. Applications: welding, soldering, cutting, grinding and sanding.
E. NIOSH Rating: N95. Applications: welding, soldering and where metal fumes are present.
F. NIOSH Rating: N100. Applications: welding, metal pouring and work involving exposure in concentrations of up to 10X.

| Item Order \# |  | Model | Size | Per Box | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| D | $\mathbf{2 9 - 0 0 2 2}$ | 8515 | Universal | 10 | $\$ 31.05$ | $\$ 32.40$ | $\$ 33.75$ |
| E | $\mathbf{2 9 - 0 0 2 1}$ | 8212 | Universal | 10 | $\$ 59.66$ | $\$ 62.26$ | $\$ 64.85$ |
| F | $\mathbf{2 9 - 0 0 0 3}$ | 8233 | Universal | Each | $\$ 8.79$ | $\$ 9.17$ | $\$ 9.55$ |

## 3M ${ }^{\circledR}$ RESPIRATORS

G. Applications: grinding and sanding.
H. NIOSH Rating: N95. Applications: sanding and polishing.
J. NIOSH Rating: R95. Applications: where partiles and nuisance of levels of organic vapors may be present.

| Item | Order \# | Model | Size | Per Box | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | :---: | ---: | ---: | ---: |
| G | $\mathbf{2 9 - 0 0 1 7}$ | 8210 | Universal | 20 | $\$ 23.09$ | $\$ 24.10$ | $\$ 25.10$ |
| H | $\mathbf{2 9 - 0 0 0 8}$ | 8110 S | Small | 20 | $\$ 19.47$ | $\$ 20.61$ | $\$ 22.90$ |
| J | $\mathbf{2 9 - 0 0 0 4}$ | 8247 | Universal | 20 | $\$ 68.72$ | $\$ 71.71$ | $\$ 74.70$ |

## DIRECT SAFETY RESPIRATORS

K. NIOSH Rating: N95. Applications: dust irritants.

## SPERIAN RESPIRATORS

L. NIOSH Rating: N95.Applications: grinding, polishing and sanding.
M. NIOSH Rating: N95. Applications: welding, soldering, braising, grinding, sanding, metal machining, polishing and buffing.

| Item | Order\# | Model | Size | Per Box | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 29-0045 | 8610/8615 | Universal | 20 | \$12.42 | \$12.96 | \$13.50 |
| L | 29-0046 | 14110391F | Medium/Large | e 20 | \$23.41 | \$24.43 | \$25.45 |
| M | 29-0047 | \#2207 | Medium/Large | 20 | \$23.63 | \$25.02 | \$27.80 |


$\qquad$

RUBBER GLOVES

| Item | Order \# | Description | Length |  |  | PAIR |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{2 3 - 0 0 4 3}$ | Unlined | $18^{\prime \prime}$ | $\$ 23.89$ | $\$ 25.29$ | $\$ 28.10$ |
| B | $\mathbf{2 3 - 0 0 4 3}$ | Lined | $15 "$ | $\$ 13.37$ | $\$ 15.28$ | $\$ 19.10$ |



## DELUXE WELDERS GLOVES

Heat-resistant welding gloves feature an inner layer of aluminized Mylar® film that protects the back of the hand from radiant heat. The Mylar® film sits between a full-foam lining and a premium, side-split cowhide leather shell. Has double reinforced palm and thumb. Designed for the ultimate in comfort, wear, and protection.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 7 5 0 2}$ | Pair Welding Gloves | $\$ 13.66$ | $\$ 14.26$ | $\$ 14.85$ |

## KEVLAR PLUS SERIES GLOVES

Manufactured from 22-ounce, basket-weave Kevlar Plus. The glove material offers superior abrasion and cut resistance due to Kevlar, which is blended with nomex and fiberglass. Can be used in applications up to $800^{\circ} \mathrm{F}\left(426.7^{\circ} \mathrm{C}\right)$, or up to $1,000^{\circ} \mathrm{F}\left(537.8^{\circ} \mathrm{C}\right)$ for brief contact. Glove linings are standard heavyweight $100 \%$ wool. Features extra-wide cuff openings that allow the gloves to be dropped with a flick of the wrist in case of molten splash or excess heat buildup. 14" long.

| Item Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| C | $\mathbf{2 2 - 7 5 0 0}$ | Pair Wool-Lined Gloves | $\$ 50.28$ | $\$ 52.46$ | $\$ 54.65$ |

## KEVLAR KNIT GLOVES

Provides exceptional cut resistance. Kevlar seamless knit gloves are constructed for long life. Sold by the pair.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| D | $\mathbf{2 2 - 7 5 0 6}$ | Pair Knit Gloves | $\$ 7.77$ | $\$ 8.11$ | $\$ 8.45$ |

## GLOVES

Use these gloves for clean work, assembly, light manufacturing, delicate tool and instrument applications, or anywhere extreme dexterity is required. Gloves are constructed of a seamless nylon shell dipped in nitrile coating. Gloves feature more nitrile than similar gloves, producing greater wear, improved tact, a better grip, and more cut protection. Nitrile Coated Gloves have more abrasion resistance and longer wear.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 2 - 7 5 1 1}$ | Nitrile Coated Gloves | $\$ 3.08$ | $\$ 3.52$ | $\$ 4.40$ |



## NEOPRENE GLOVES

Neoprene gloves provide superior quality and durability as well as protection against acids, caustics, oils, greases, and many solvents. Excellent all-around protection for plating. Black neoprene 14" coated gloves with knit lining. One size fits all.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 2 - 7 5 0 8}$ | Neoprene Gloves | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |

## DISPOSABLE LATEX GLOVES

These high-grade, expandable latex gloves are thin to allow good finger sensitivity and excellent dexterity but are tough enough to protect your hands from dirt, grit, and harsh chemicals. Excellent to use during buffing or polishing. Gloves fit either hand.

| Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 0 7 4 5}$ | Small | $\$ 13.75$ | $\$ 14.35$ | $\$ 14.95$ |
| $\mathbf{1 7 - 0 7 4 6}$ | Medium | $\$ 13.75$ | $\$ 14.35$ | $\$ 14.95$ |
| $\mathbf{1 7 - 0 7 4 7}$ | Large | $\$ 10.76$ | $\$ 11.23$ | $\$ 11.70$ |



## POWDER-FREE BLUE NITRILE GLOVES

Offer better tactile sensitivity, comfort, dexterity, and puncture resistant than both rubber or vinyl. These powder-free gloves are made stronger through a process called fusion bonding, which integrates synthetic polymers into the material to create a multi-layer glove or enhanced protection. Measures 4.4 mil (palm) and 4.7 mil (fingers) thickness $/ 91 / 2^{\prime \prime}$ length.

| Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 7 - 0 8 4 6}$ | Small | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Medium | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Large | $\$ 11.32$ | $\$ 11.81$ | $\$ 12.30$ |
| $\mathbf{1 7 - 0 8 4 6}$ | Extra Large | $\$ 13.80$ | $\$ 14.40$ | $\$ 15.00$ |

PR88 HAND PROTECTION
Excellent hand protection that will keep grease and grime from penetrating the skin. Just apply before beginning work. Washes off with soap and water.

| Order \# | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 4 6 2}$ | $31 / 202$ container | $\$ 9.06$ | $\$ 9.46$ | $\$ 9.85$ |
| $\mathbf{5 4 - 4 4 6 2}$ | 1 liter container | $\$ 27.92$ | $\$ 29.14$ | $\$ 30.35$ |



## ALLERGY JEWELRY SHIELD

Shields sensitive skin from jewelry irritation. Gives consumers unlimited personal choice in jewelry selection. Use on "all" skin irritating jewelry. Prevents skin discoloration. $1 / 2$ ounce jar. Shipping weight 0.10 lb .

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 9 - 0 0 3 5}$ | Allergy Jewelry Shield | $\$ 5.99$ | $\$ 6.35$ | $\$ 7.05$ |



## LEATHER WELDING APRON

Leather welding aprons are made of side-split leather and sewn together with Kevlar® ${ }^{\circledR}$ thread for extra strength. The apron features a comfortable strap assembly with a quick release buckle. Comes with a two-compartment chest pocket.

| Item | Order\# | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 3 0 6 7}$ | $24 " \times 36^{\prime \prime}$ | $\$ 28.98$ | $\$ 30.24$ | $\$ 31.50$ |

## NEOPRENE PLATING APRON

Durable neoprene apron designed to protect against chemical spills during plating and other applications.

| Item | $\mathbf{O r d e r} \#$ | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| $B$ | $\mathbf{4 7 - 3 0 6 8}$ | $36^{\prime \prime} \times 43^{\prime \prime}$ | $\$ 18.40$ | $\$ 19.20$ | $\$ 20.00$ |

## DENIM APRON

Heavy-duty, washable, denim work apron. Can be burned to reclaim precious metals. Note: Color of apron may vary from light to dark blue to black.

| Item | $\mathbf{O r d e r} \#$ | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{C}$ | $\mathbf{4 7 - 3 0 6 0}$ | $28^{\prime \prime} \times 36^{\prime \prime}$ | $\$ 8.22$ | $\$ 8.91$ | $\$ 9.90$ |

## FIRE RETARDANT APRON

Designed for the working jeweler by a working jeweler with 30 years experience. The apron material is a highly burn-resistant fabric. When hot metal is dropped on it, it leaves a barely noticeable scorch mark. It's a smooth fabric that will not lose its fire-retardant qualities even after many launderings. The top of the apron was designed to be wider, to protect more of the neck and chest, and has an adjustable neck strap that won't get stuck in long hair, as velcro will. The tie straps are long to wrap around and tie in front. The apron is $36^{\prime \prime}$ long to cover the lap adequately when sitting, and has a little flap at the bottom to catch runaway parts or metal filings falling into the apron.

| Item | Order \# | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{4 7 - 3 0 6 5}$ | $38 "$ | $\$ 27.83$ | $\$ 29.04$ | $\$ 30.25$ |



B


C


D

BRADLEY ${ }^{\circledR}$ FAUCET-MOUNTED EYE WASH
Mount this eye wash to both standard and gooseneck faucets. No special plumbing is required. Integral flow control assures a steady flow of water under varying water supply conditions. Unit is constructed of chrome-plated brass and comes standard with an adapter, diverter, twin sprayheads and pop-off plastic dust caps.

Note: To eliminate the risk of scalding eyes during use, it is recommended that the hot water supply to the faucet be disconnected or that tempered water be provided.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 0 1 0 1}$ | Faucet-Mounted Eye Wash | $\$ 71.75$ |



## EYE-WASH-STATION VISI-SIGNS SIGN

Offering $180^{\circ}$ visibility, this three-dimensional mounted design projects $31 / 2^{\prime \prime}$ out from the wall at a $45^{\circ}$ angle, making your message seen from all sides. The $53 / 4^{11} \times 83 / 4^{\prime \prime}$ sign is constructed of 0.125 acrylic with pre-drilled mounting holes.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 0 1 0 2}$ | Faucet-Mounted Eye Wash | $\$ 21.00$ |



## EYE WASH VINYL STICKER

Let people know where to go in an emergency by placing this large sticker next to your eye wash station.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 9 - 0 1 0 3}$ | Eye Wash Vinyl Sticker | $10 " \times 7^{\prime \prime}$ | $\$ 6.25$ | $\$ 6.62$ | $\$ 7.35$ |

## EYE WASH

## FIRST AID KIT

Be prepared! New first aid kits treat wounds and save lives. Discover the best value in first aid kits in this new Northern Kit that lets you set up a first aid station instantly, anywhere. Premium quality contents treat up to 25 people. Six partitioned areas keep contents organized. Features convenient molded carry handle.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{2 9 - 0 1 0 0}$ | First Aid Kit | $\$ 23.65$ |



STULLER ${ }^{\circledR}$ PREMIUM SWISS SAW BLADES
Genuine, premium Swiss-made saw blades made to our exacting standards.

Note: 5/0 is smallest size, \#5 is largest.


PIKE® ${ }^{\circledR}$ GOLD SAW BLADES
Tried and tested at Stuller. Premium Swiss-made saw blades.
Note: $8 / 0$ is smallest size, \#14 is largest.




Sold by the Dozen (12 per unit)

| Order \# | Blade Size | Per <br> Unit | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50-4080 | 8/0 | Dozen | \$3.74 | \$3.96 | \$4.40 |
| 50-4070 | $7 / 0$ | Dozen | \$3.74 | \$3.96 | \$4.40 |
| 50-4060 | 6/0 | Dozen | \$3.57 | \$3.78 | \$4.20 |
| 50-4050 | 5/0 | Dozen | \$3.40 | \$3.60 | \$4.00 |
| 50-4040 | 4/0 | Dozen | \$2.72 | \$2.88 | \$3.20 |
| 50-4030 | 3/0 | Dozen | \$2.81 | \$2.97 | \$3.30 |


| Order\# | Blade <br> Size | Per <br> Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 + +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 0 - 4 0 2 0}$ | $2 / 0$ | Dozen | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |
| $\mathbf{5 0 - 4 0 1 0}$ | 0 | Dozen | $\$ 2.48$ | $\$ 2.63$ | $\$ 2.92$ |
| $\mathbf{5 0 - 4 0 0 1}$ | $\# 1$ | Dozen | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |
| $\mathbf{5 0 - 4 0 0 2}$ | $\# 2$ | Dozen | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |
| $\mathbf{5 0 - 4 0 0 3}$ | $\# 3$ | Dozen | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |
| $\mathbf{5 0 - 4 0 0 4}$ | $\# 4$ | Dozen | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |


| Order \# | Blade Size | Per Unit | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50-4005 | \#5 | Dozen | \$3.06 | \$3.24 | \$3.60 |
| 50-4006 | 6 | Dozen | \$3.40 | \$3.60 | \$4.00 |
| 50-4008 | \#8 | Dozen | \$3.57 | \$3.78 | \$4.20 |
| 50-4100 | \#10 | Dozen | \$4.34 | \$4.59 | \$5.10 |
| 50-4120 | 12 | Dozen | \$4.68 | \$4.95 | \$5.50 |
| 50-4140 | \#14 | Dozen | \$5.06 | \$5.36 | \$5.95 |


| Order \# <br> $\mathbf{4 9 - 4 0 8 0}$ | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 9 - 4 0 7 0}$ | $7 / 0$ | Gross | $\$ 25.20$ | $\$ 26.69$ | $\$ 29.65$ |
| $\mathbf{4 9 - 4 0 6 0}$ | $6 / 0$ | Gross | $\$ 23.33$ | $\$ 24.71$ | $\$ 27.45$ |
| $\mathbf{4 9 - 4 0 5 0}$ | $5 / 0$ | Gross | $\$ 21.46$ | $\$ 22.73$ | $\$ 25.25$ |
| $\mathbf{4 9 - 4 0 4 0}$ | $4 / 0$ | Gross | $\$ 18.53$ | $\$ 21.74$ | $\$ 24.15$ |
| $\mathbf{4 9 - 4 0 3 0}$ | $3 / 0$ | Gross | $\$ 19.76$ | $\$ 21.95$ |  |
| $\mathbf{4 9 - 4 0 1 0}$ | $1 / 0$ | Gross | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{4 9 - 4 0 0 1}$ | 1 | Gross | $\$ 17.77$ | $\$ 19.75$ |  |
| $\mathbf{4 9 - 4 0 0 2}$ | 2 | Gross | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{4 9 - 4 0 0 3}$ | 3 | Gross | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{4 9 - 4 0 0 4}$ | $\mathbf{4}$ | Gross | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{4 9 - 4 0 0 5}$ | 5 | Gross | $\$ 20.53$ | $\$ 21.74$ | $\$ 24.15$ |
| $\mathbf{4 9 - 4 0 0 6}$ | 6 | Gross | $\$ 21.46$ | $\$ 22.73$ | $\$ 25.25$ |
| $\mathbf{4 9 - 4 0 0 8}$ | 8 | Gross | $\$ 24.27$ | $\$ 25.70$ | $\$ 28.55$ |
| $\mathbf{4 9 - 4 1 0 0}$ | 10 | Gross | $\$ 26.56$ | $\$ 28.13$ | $\$ 31.25$ |
| $\mathbf{4 9 - 4 1 2 0}$ | 12 | Gross | $\$ 31.28$ | $\$ 33.12$ | $\$ 36.80$ |
| $\mathbf{4 9 - 4 1 4 0}$ | 14 | Gross | $\$ 34.09$ | $\$ 36.09$ | $\$ 40.10$ |

Sold by the gross. (144 per unit)

| Order \# <br> 49-4200 | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 9 - 4 2 0 1}$ | $5 / 0$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 2}$ | $3 / 0$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 3}$ | $2 / 0$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 4}$ | $1 / 0$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 5}$ | 1 | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 6}$ | $\# 2$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 7}$ | $\# 3$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 8}$ | $\# 4$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 4 2 0 9}$ | $\# 5$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |

Sold by the dozen. (12 per unit)

| Order \# | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 0 - 4 2 0 0}$ | $5 / 0$ | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 1}$ | $4 / 0$ | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 2}$ | $3 / 0$ | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 3}$ | $2 / 0$ | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 4}$ | $1 / 0$ | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 5}$ | 1 | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 6}$ | 2 | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 7}$ | 3 | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 8}$ | 4 | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |
| $\mathbf{5 0 - 4 2 0 9}$ | 5 | Dozen | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |

Sold by the gross. (144 per unit)

Sold by the gross. (144 per unit)

| Order \# <br> 49-4220 | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 9 - 4 2 2 1}$ | $3 / 0$ | Gross | $\$ 21.89$ | $\$ 23.18$ | $\$ 25.75$ |
| $\mathbf{4 9 - 4 2 2 2}$ | $2 / 0$ | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| $\mathbf{4 9 - 4 2 2 3}$ | $1 / 0$ | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| $\mathbf{4 9 - 4 2 2 4}$ | 1 | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| $\mathbf{4 9 - 4 2 2 5}$ | 2 | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| $\mathbf{4 9 - 4 2 2 6}$ | 3 | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.35$ |
| $\mathbf{4 9 - 4 2 2 7}$ | 4 | Gross | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |

Sold by the dozen. (12 per unit)

| Order \# | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 0 - 4 2 2 0}$ | $4 / 0$ | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 1}$ | $3 / 0$ | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 \boldsymbol { 2 }}$ | $2 / 0$ | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 3}$ | $1 / 0$ | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 4}$ | 1 | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 5}$ | 2 | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 6}$ | 3 | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |
| $\mathbf{5 0 - 4 2 2 7}$ | 4 | Dozen | $\$ 3.49$ | $\$ 3.69$ | $\$ 4.10$ |

Sold by the gross. (144 per unit)

| Order \# <br> $\mathbf{4 9 - 1 0 0 0}$ | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :--- | ---: | ---: | ---: |
| $\mathbf{4 9 - 1 0 0 1}$ | $7 / 0$ | Gross | $\$ 27.07$ | $\$ 28.67$ | $\$ 31.85$ |
| $\mathbf{4 9 - 1 0 0 2}$ | $6 / 0$ | Gross | $\$ 26.14$ | $\$ 27.68$ | $\$ 30.75$ |
| $\mathbf{4 9 - 1 0 0 3}$ | $5 / 0$ | Gross | $\$ 23.33$ | $\$ 24.71$ | $\$ 27.45$ |
| $\mathbf{4 9 - 1 0 0 4}$ | $4 / 0$ | Gross | $\$ 22.40$ | $\$ 23.72$ | $\$ 26.35$ |
| $\mathbf{4 9 - 1 0 0 5}$ | $3 / 0$ | Gross | $\$ 18.53$ | $\$ 21.74$ | $\$ 24.15$ |
| $\mathbf{4 9 - 1 0 0 6}$ | $2 / 0$ | Gross | $\$ 19.76$ | $\$ 21.95$ |  |
| $\mathbf{4 9 - 1 0 0 7}$ | $1 / 0$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 1 0 0 8}$ | $\# 1$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 1 0 1 0}$ | $\# 2$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 1 0 1 1}$ | $\# 3$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 1 0 1 2}$ | $\# 4$ | Gross | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 1 0 1 3}$ | $\# 5$ | Gross | $\$ 20.53$ | $\$ 21.74$ | $\$ 24.15$ |
| $\mathbf{4 9 - 1 0 1 4}$ | $\# 6$ | Gross | $\$ 22.40$ | $\$ 23.72$ | $\$ 26.35$ |
| $\mathbf{4 9 - 1 0 1 5}$ | $\# 7$ | Gross | $\$ 26.78$ | $\$ 28.35$ | $\$ 31.50$ |
| $\mathbf{4 9 - 1 0 1 6}$ | $\# 8$ | Gross | $\$ 27.84$ | $\$ 29.48$ | $\$ 32.75$ |
| $\mathbf{4 9 - 1 0 1 8}$ | $\# 10$ | Gross | $\$ 29.33$ | $\$ 31.05$ | $\$ 34.50$ |
| $\mathbf{4 9 - 1 0 2 0}$ | $\# 12$ | Gross | $\$ 38.67$ | $\$ 40.95$ | $\$ 45.50$ |
| $\mathbf{4 9 - 1 0 2 2}$ | $\# 14$ | Gross | $\$ 42.46$ | $\$ 44.96$ | $\$ 49.95$ |

Sold by the dozen. (12 per unit)

| Order \# | $\begin{aligned} & \text { Blade } \\ & \text { Size } \end{aligned}$ | Per Unit | 12+ | $6+$ | 1+ | Order \# | Blade Size | Per Unit | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50-1000 | 8/0 | Dozen | \$3.83 | \$4.05 | \$4.50 | 50-1007 | 1/0 | Dozen | \$3.15 | \$3.33 | \$3.70 |
| 50-1001 | 7/0 | Dozen | \$3.83 | \$4.05 | \$4.50 | 50-1008 | \#1 | Dozen | \$3.15 | \$3.33 | \$3.70 |
| 50-1002 | $6 / 0$ | Dozen | \$3.61 | \$3.83 | \$4.25 | 50-1010 | \#2 | 144 | \$3.15 | \$3.33 | \$3.70 |
| 50-1003 | 5/0 | Dozen | \$3.44 | \$3.65 | \$4.05 | 50-1011 | \#3 | 144 | \$3.15 | \$3.33 | \$3.70 |
| 50-1004 | 4/0 | Dozen | \$3.44 | \$3.65 | \$4.05 | 50-1012 | \#4 | 144 | \$3.15 | \$3.33 | \$3.70 |
| 50-1005 | 3/0 | Dozen | \$3.15 | \$3.33 | \$3.70 | 50-1013 | \#5 | 144 | \$3.44 | \$3.65 | \$4.05 |
| 50-1006 | 2/0 | Dozen | \$3.15 | \$3.33 | \$3.70 | 50-1014 | \#6 | 144 | \$3.44 | \$3.65 | \$4.05 |

YELLOW DAGGER SAW BLADES
Swiss-made, these sawblades provide great performance not normally seen in this price range.



Sold by the gross. (144 per unit)

| Order\# | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{4 9 - 6 0 0 0}$ | $8 / 0$ | 144 | $\$ 23.33$ | $\$ 24.71$ | $\$ 27.45$ |
| $\mathbf{4 9 - 6 0 0 1}$ | $7 / 0$ | 144 | $\$ 21.46$ | $\$ 22.73$ | $\$ 25.25$ |
| $\mathbf{4 9 - 6 0 0 2}$ | $6 / 0$ | 144 | $\$ 19.59$ | $\$ 20.75$ | $\$ 23.05$ |
| $\mathbf{4 9 - 6 0 0 3}$ | $5 / 0$ | 144 | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 6 0 0 4}$ | $4 / 0$ | 144 | $\$ 16.79$ | $\$ 17.77$ | $\$ 19.75$ |
| $\mathbf{4 9 - 6 0 0 5}$ | $3 / 0$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 0 6}$ | $2 / 0$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 0 7}$ | $1 / 0$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 0 8}$ | $\# 1$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 1 0}$ | $\# 2$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 1 1}$ | $\# 3$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 1 2}$ | $\# 4$ | 144 | $\$ 15.85$ | $\$ 16.79$ | $\$ 18.65$ |
| $\mathbf{4 9 - 6 0 1 3}$ | $\# 5$ | 144 | $\$ 18.66$ | $\$ 19.76$ | $\$ 21.95$ |
| $\mathbf{4 9 - 6 0 1 4}$ | $\# 6$ | 144 | $\$ 19.59$ | $\$ 20.75$ | $\$ 23.05$ |
| $\mathbf{4 9 - 6 0 1 6}$ | $\# 8$ | 144 | $\$ 22.40$ | $\$ 23.72$ | $\$ 26.35$ |
| $\mathbf{4 9 - 6 0 1 8}$ | $\# 10$ | 144 | $\$ 32.34$ | $\$ 34.24$ | $\$ 38.05$ |

## SKIP-A-TOOTH SAW BLADES

These blades are designed for wax cutting. Every other tooth is eliminated, which provides smooth cutting and non-loading action.

Sold by the gross. (144 per unit)

| Order \# | Blade Size | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| 49-3008 | 1 | Gross | $\$ 2.76$ | $\$ 2.93$ | $\$ 3.25$ |

SPIRAL SAW BLADES
Used to cut rubber, plastic, wax, and plaster. Cut in any direction.

Sold by the dozen. (12 per unit)

| A | $\mathbf{4 9 - 3 0 0 2}$ | \#2 | Dozen | $\$ 3.23$ | $\$ 3.42$ | $\$ 3.80$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | $\mathbf{4 9 - 3 0 0 3}$ | $\# 3$ | Dozen | $\$ 3.23$ | $\$ 3.42$ | $\$ 3.80$ |
| C | $\mathbf{4 9 - 3 0 0 4}$ | $\# 4$ | Dozen | $\$ 3.23$ | $\$ 3.42$ | $\$ 3.80$ |
| D | $\mathbf{4 9 - 3 0 0 6}$ | $\# 6$ | Dozen | $\$ 3.23$ | $\$ 3.42$ | $\$ 3.80$ |

## DIAMOND SAW BLADES

We offer you another quality engineered product-our diamond-coated saw blades. Made by electroplating diamond particles onto piano wire, our diamond blades are the best quality available at prices well below the competition. Our manufacturer offers a generous supply of diamond for long life and quick cutting. Blades come individually packaged and are $53 / 8^{\text {" long }}$ to fit existing saw frames. Great for glass, ceramic, and stones. Sold each.


E


F


G


H

| Item | Order \# | Grit | Grade | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| E | 49-0995 | 60 | Coarse | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |
| F | 49-0996 | 100 | Medium | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |
| G | 49-0997 | 120 | Medium | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |
| H | 49-0998 | 140 | Fine | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |

BACK SAW FOR METALS
Reinforced hardened steel blade with contoured wooden handle. Fine tooth back saw blade is excellent for cutting metal rods and tubing. Also useful for cross cutting, trimming, and notching light metals. Made in the USA.

| Order \# | Overall Length | Blade Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 9 - 4 3 0 0}$ | $91 / 2^{\prime \prime}$ | $5 "$ | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |



## PRECISION JOINT CUTTER

Precision-machined joint cutter provides accurate $45^{\circ}$ and $90^{\circ}$ cuts on sheet, wire, and tubing. Easily secures in a vise for cutting or can be held by hand. Made of high carbon tool steel. Nine grooves are designed to hold a wide range of wire and tubing.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 5 - 1 3 7 0}$ | Tube Cutter | $17 / 8^{\prime \prime} \times 2^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 100.77$ | $\$ 106.70$ | $\$ 118.55$ |



## TUBE CUTTER JIG

Reinforced hardened steel blade with contoured wooden handle. Fine tooth back saw blade is excellent for cutting metal rods and tubing. Also useful for cross cutting, trimming, and notching light metals. Holds tubing up to 6 mm round or 7.5 mm square. Made in the USA.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 8 - 2 4 6 2}$ | Tube Cutter Jig Economy | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |
| B | $\mathbf{5 8 - 2 4 6 5}$ | Tube Holder | $\$ 36.51$ | $\$ 38.66$ | $\$ 42.95$ |



## TUBE CUTTER

Tube cutter with four angles $-30,45,60$, and $90^{\circ}$. The cutter is hardened to HRC 45 with a removable handle so that it can be mounted in a vice. The thumb lock ensures a good grip on the material being cut and the adjustable slide/stop can be set with the lock screw, making repeated length of cuts easy. A deep V groove holds the material firmly in place.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 4 7 0}$ | Tube Cutter | $\$ 102.00$ | $\$ 108.00$ | $\$ 120.00$ |



## MASTER SIZING VISE COMPLETE SET

The main features of this vise include built-in measuring guide, rubber covered cutting posts, locking posts, and filing and sanding blocks. Comes with an instructional DVD.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 6 - 4 1 9 7}$ | Sizing Vise | $\$ 52.70$ | $\$ 55.80$ | $\$ 62.00$ |




## ADJUSTABLE SAW FRAMES

For use with piercing, flat, and spiral saw blades. Serrated clamps hold blades firmly. Strongly constructed with flat steel frames, hardwood handles, and thumbscrew locking devices. Most common depth is $21 / 4^{\prime \prime}(57 \mathrm{~mm})$ while others are for use when greater cutting depth is required.

| Item | Order \# | Description | Blade Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 49-7230 | Frame | $3 "$ | \$8.07 | \$8.55 | \$9.50 |
| B | 49-7235 | Frame | 4" | \$8.07 | \$8.55 | \$9.50 |
| C | 49-7240 | Frame | $5 "$ | \$10.84 | \$11.48 | \$12.75 |
| REPLACEMENT PARTS |  |  |  |  |  |  |
|  | 49-7245 | Wing-Screw (H | ds Blades) | \$1.66 | \$1.76 | \$1.95 |
|  | 49-7246 | Blade Block-N | Pad-Washer \& Wing-Nut | \$6.33 | \$6.71 | \$7.45 |
|  | 49-7247 | Wing-Nut (Tig | ens Blade) | \$1.66 | \$1.76 | \$1.95 |
|  | 49-7248 | Washer (Holds | lade) | \$1.66 | \$1.76 | \$1.95 |
|  | 49-7249 | Blades Pad |  | \$3.27 | \$3.47 | \$3.85 |
|  | 49-7250 | Wing-Screw (H) | ds Frame) | \$1.66 | \$1.76 | \$1.95 |
|  | 49-7251 | Saw Handle |  | \$1.66 | \$1.76 | \$1.95 |



## SWISS SAW FRAMES

Revolutionary new design in two lightweight, perfectly balanced saw frames. Ergonomic handles reduce fatigue and provide dexterity. Patented blade-lock design eases blade insertion, maintains perfect alignment, and eliminates wobble. This helps reduce blade loss during use. Set screws can be used on either left or right side. Easy blade insertion. Genuine Swiss-made.

| Item | Order \# | Description | Blade Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 49-7200 | Adjustable Frame | 23/4" | \$13.90 | \$14.72 | \$16.35 |
| E | 49-7220 | Fixed Frame | 23/4" | \$13.90 | \$14.72 | \$16.35 |
| F | 49-7221 | Replacement Screw |  | \$4.63 | \$4.91 | \$5.45 |



MINI SAW FRAME
These handy mini frames provide control for delicate operations such as gem cutting or making relief cuts on prongs that have been partially folded over stones. Their small size and light weight give the handler a better feel for what is being cut. The frames support standard blades or your broken blades if they break long enough. To insert a new blade, spring the saw slightly with your hand, or push one end against your bench. These frames can also be used with abrasive film cut to the proper length.

| Order \# | Description | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 9 - 7 2 1 3}$ | Mini Saw Frame Kit | Set of 3 | $\$ 21.25$ | $\$ 22.50$ | $\$ 25.00$ |
| $\mathbf{4 9 - 7 2 1 0}$ | Red Saw Frame | Each | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |
| $\mathbf{4 9 - 7 2 1 1}$ | Blue Saw Frame | Each | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |
| $\mathbf{4 9 - 7 2 1 2}$ | Yellow Saw Frame | Each | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |

## Sawing Practices

The jeweler's sawblade is mounted in the saw frame, under tension, with the teeth pointing downward toward the handle. The simplest way to set the tension for the blade is to adjust the length of the frame so that one end of the blade is set to the bottom of the clamp and the end of the blade is centered on the thumbscrew of the other clamp. This will allow the frame to be sprung inward from $1 / 4$ " to $1 / 2$ " to set the proper tension on the blade. Smaller sized blades will require less tension than the larger sizes.

There are two main types of sawing action, severing and contour sawing (this includes piercing). Severing is the process of cutting a piece off or separating parts (such as when sizing a ring) in a straight line. Flat sawblades are the best choice for this process because they generally track straighter due to their design. For contour cutting, piercing sawblades are preferred. In choosing the proper size saw blade for the most efficient cutting, the thickness of the material to be cut should be taken into consideration.

Ideally, there should always be between 3 and 5 teeth in contact with the thickness of the metal. If less than 3 teeth are in contact, the cut becomes ragged and the blade has a tendency to grab. If more that 5 teeth contact the metal, the cutting process is unnecessarily slowed. Sawing is generally done with the blade at a right angle to the work. This is especially important for contour cutting. For cutting straight lines, the blade can be tilted ever-so-slightly forward ( $5^{\circ}$ to $15^{\circ}$ ) to aid in tracking. Although not required, lubricating the blade prior to and during the sawing process will extend the blade life as well as enhance the cutting action.

$1 \mathrm{~mm}=0.0400$ inch

| Size | Piercing Saw Blades |  | Drill Size | Flat Saw Blades |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thickness | Width |  | Thickness | Width |
| 8/0 | 0.0063 | 0.0126 | 80 | - | - |
| 7/0 | 0.0067 | 0.0130 | 80 | - |  |
| 6/0 | 0.0070 | 0.0140 | 79 | - | - |
| 5/0 | 0.0080 | 0.0157 | 78 | - | - |
| 4/0 | 0.0086 | 0.0175 | 77 | - | - |
| 3/0 | 0.0095 | 0.0190 | 76 | - | - |
| 2/0 | 0.0130 | 0.0204 | 75 | - | - |
| 1/0 | 0.0110 | 0.0220 | 75 | - | - |
| 0 | 0.0110 | 0.0230 | 73 | - | - |
| 1 | 0.0120 | 0.0240 | 74 | 0.0070 | 0.0290 |
| 2 | 0.0134 | 0.0276 | 70 | 0.0080 | 0.0340 |
| 3 | 0.0140 | 0.0290 | 70 | 0.0080 | 0.0370 |
| 4 | 0.0150 | 0.0307 | 68 | 0.0080 | 0.0430 |
| 5 | 0.0158 | 0.0331 | 65 | 0.0080 | 0.0510 |
| 6 | 0.0173 | 0.0370 | 58 | 0.0080 | 0.050 |
| 7 | 0.0189 | 0.0400 | 56 | 0.0080 | 0.0570 |
| 8 | 0.0197 | 0.0400 | 55 | 0.0086 | 0.0750 |
| 9 | - | - | - | 0.0086 | 0.0830 |
| 10 | 0.0215 | 0.0510 | 51 | 0.0086 | 0.0950 |
| 11 | - | - | - | 0.0086 | 0.1060 |
| 12 | 0.0236 | 0.0650 | 51 | 0.095 | 0.1180 |
| 14 | 0.0236 | 0.0690 | 50 | - | - |



## A\&D EVEREST SERIES

- Gold and precious stones scales
- Multiple weighing units: (caret, gram, troy ounce, pennyweight, pound, ounce, grain, \& Tael )
- Large LCD display ( 16 mm height) with backlight
- Control zero, mode selection, and data output with standard RS-232C
- Counting function with Automatic Counting Accuracy Improvement
- Standard comparator function--HI/OK/LO annunciator
- Full digital calibration with optional user definable mass setting
- Conformity to GLP with I.D. and serial number outputs
- Auto power off
- Portable compact size, lightweight, rugged body
- Sealed key panel protection against dust and spills
- Low profile and small footprint for minimal space requirement
- Optional battery pack
- Overload protection


Not Canada Legal

- Underhook weighing
- Security ring to prevent theft
- Stainless steel weighing pan

| Item | Order \# | Model | Pan Size | Trade Legal | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{5 1 - 4 0 6 8}$ | EK-610J | 4.3" Round | Y $^{*}$ | $\$ 357.59$ |
| B | $\mathbf{5 1 - 4 0 7 2}$ | EK/EW-I | $5.2^{\prime \prime} \times 6.7^{\prime \prime}$ | Y | $\$ 299.00$ |
|  | $\mathbf{5 1 - 4 0 6 9}$ | EK-6100J | $5.2^{\prime \prime} \times 6.7^{\prime \prime}$ | Y $^{*}$ | $\$ 948.70$ |

*NTEP Approval Legal-For-Trade is legal up to the first decimal point.

| Model | Carat | Gram | Troy Ounce | Pennyweight | Pound | Grain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EK-610j | $3000 \times 0.1$ | $600 \times 0.01$ | $19.29 \times 0.001$ | $385.81 \times 0.01$ | $1.2338 \times 0.0001$ | $9259.4 \times 0.2$ |
| EK-1200i | $6000 \times 0.5$ | $1200 \times 0.1$ | $38.58 \times 0.005$ | $771.6 \times 0.1$ | $2.6455 \times 0.0005$ | $18518 \times 2$ |
| EK-6100j | $3000 \times 1$ | $6100 \times 0.01$ | $192.90 \times 0.01$ | $3858.1 \times 0.1$ | $13.228 \times 0.001$ | $9259.4 \times 2$ |

## A\&D HR SERIES

- Diamond scale
- HR-60 is legal-for-trade, class II

- Large weighing chamber holds up to a 250 mm volumetric flask
- Wide angle LCD display
- Good Laboratory Practices [GLP] Software
- Multi-functional weighing: gram, troy ounce,
pennyweight, pound, ounce, \& grain
- Separate, clearly marked operating keys
- Full range tare
- Counting Function: Maximizes accuracy with

Automatic Counting Accuracy Improvement Function [ACAI]

- Push button calibration
- Front key selectable weighing filters: Ensures fast and stable results in all environmental conditions without switching off the balance
- Digital tare
- Outputs serial number of the balance: Identifies stolen balance and greatly reduces capital goods inventory control
- Enter balance's ID Number: for GLP records and identifying the balance
- Body and frame constructed of extra strong
die-cast aluminum alloy
- Percentage and counting modes
- Digital preset tare
- One-touch printing
- Last digit suppression
- GLP/LIMS/ISO compliant
- Five-year warranty

| Order \# | Model | Trade Legal | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{5 1 - 4 0 7 6}$ | $H R-60$ | $Y$ | $\$ 1,299.00$ |


| Model | Carat | Gram | Troy Ounce | Pennyweight | Grain |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HR-60 | $300 \times 0.001$ | $60 \times 0.001$ | $1.9 \times 0.000005$ | $38 \times 0.0001$ | $925 \times 0.002$ |

## A\&D FX SERIES

- Compact SHS (Super Hybrid Sensor) 1 Second Stabilization
- Quick USB interface (FXi-02)
- Standard RS-232C interface
- Comparator function
- Digital calibration function
- LAN-Ethernet interface (FXi-08) with WINCT-Plus Software
- Five-year limited manufacturer's warranty

| Item | Order\# | Model | Pan Size | Trade Legal | 1+ |
| :---: | ---: | :--- | :---: | :---: | ---: |
| A | $\mathbf{5 1 - 4 0 7 3}$ | FX-600CT | $5.1^{\prime \prime}$ | N | $\$ 769.00$ |
| B | $\mathbf{5 1 - 4 0 7 4}$ | FX-120GD | $5.1^{\prime \prime}$ | N | $\$ 639.00$ |
| C | $\mathbf{5 1 - 4 0 7 5}$ | FX-300GD | $5.1^{\prime \prime}$ | N | $\$ 695.00$ |
| D | $\mathbf{5 1 - 4 0 9 0}$ | FX-300IN | $5.2^{\prime \prime}$ | Y | $\$ 1,099.00$ |


*Grams only legal in USA and Canada. Legal to. 1 gram.

| Model | Carat | Gram |
| :---: | :---: | :---: |
| FX-600CT | $600 \times 0.001$ | $120 \times 0.001$ |
| FX-120GD | $610 \times 0.001$ | $122 \times 0.001$ |
| FX-300GD | $1600 \times 0.005$ | $320 \times 0.001$ |
| *FX-300IN | $300 \times 0.01$ | - |



## A\&D HT-500 SCALE

The HT Series is a multi-functional, durable, compact scale.

- Clear LCD display
- Four AA batteries included
- Auto power-off function
- Hard plastic carrying case included
- Not trade legal
- Two-year warranty
- AC adaptor included
- Measures in grams, ounces, pound-ounce, tael, ticals, and Newtons, carat weight, pennyweight, troy ounce


| Order\# | Description | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 4 0 8 4}$ | HT-500GD | 510 g | 0.1 g | $\$ 118.96$ | $\$ 125.96$ | $\$ 139.95$ |

## A\&D EJ SERIES SCALE

The EJ "Newton" precision compact balances offer a multitude of features for a diverse variety of weighing applications.

- LCD display with backlight
- Percentage and counting
- Full digital calibration
- AC power or alkaline battery operation (batteries not included)

- RS232C and USB output optional
- Five-year warranty
- Not trade legal

| Item | Order\# | Model | Capacity | Readability | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :---: | ---: | ---: | ---: |
| E | $\mathbf{5 1 - 4 0 8 0}$ | EJ-2000 | 2100 g | 0.1 g | $\$ 168.30$ | $\$ 178.20$ | $\$ 198.00$ |
| F | $\mathbf{5 1 - 4 0 8 2}$ | EJ-120 | 120 g | 0.01 g | $\$ 216.75$ | $\$ 229.50$ | $\$ 255.00$ |
| G | $\mathbf{5 1 - 4 0 8 3 K I T}$ | EJ-120 Scale with Density Kit | $\$ 291.93$ | $\$ 309.11$ | $\$ 343.45$ |  |  |
| H | $\mathbf{5 1 - 4 0 8 1}$ | Density Kit |  | - | - | $\$ 69.00$ |  |


$111 / 2^{\prime \prime} \times 91 / 10^{\prime \prime} \times 71 / 5^{\prime \prime}$


## CITIZEN ${ }^{\text {™ }}$ HIGH PERFORMANCE SCALES

A. - HBM high precision strain gauge loadcell

- Rugged construction with stainless steel platform
- Auto zero tracking, auto calibration
- Backlit LCD display
- Standard RS232C interface
- Various weighing units like carat, gram, pennyweight, ounce, grain, pounds, troy ounce
- An AC adapter 110 V or 6 AA batteries (not included)
B. - Fastest response time with highly stable reading
- Standard SR232 interface
- Large backlit LCD display for easy viewing
- Parts counting units like carat, gram, pennyweight, ounce, grain, pound, tory ounce
- Die-cast aluminium design for long term stability and accurate results - Specially designed for diamond weighing

| Item | Order \# | Model | Capacity | Readability | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 1 - 2 1 0 8}$ | CT1202 | 1200 g | 0.01 g | $\$ 318.75$ | $\$ 337.50$ | $\$ 375.00$ |
| B | $\mathbf{5 1 - 2 1 1 0}$ | CT603 | 600 ct | 0.001 ct |  |  | $\$ 895.50$ |



Find added video content on Stuller.com.


## CITIZEN ${ }^{\text {m }}$ HIGH PERFORMANCE DIAMOND BALANCE

Citizen's new and improved precision series incorporates unique and unequaled high end technology built to match the highest international standards. The result is a TEN fold increase in weighing performance, which maintains our proven, simple, and easy to use operator interface. Attractive quality of this new design is demonstrated by the CZ mark of conformity.

- Compact and space saving
- Standard RS232C interface data output
- Back-lite LCD display for easy viewing function
- Six different weighing units such as grain, pounds, ounces, carat, penny weight, troy ounce
- Piece counting and percentage weighing function
- CZ1200 and CZ1202 are legal for trade
- With AC adapter

| Item | Order\# | Model | Capacity | Readability | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| C | $\mathbf{5 1 - 2 1 0 5}$ | $C Z 602$ | 600 g | 0.01 g | $\$ 322.15$ | $\$ 341.10$ | $\$ 379.00$ |
|  | $\mathbf{5 1 - 2 1 1 1}$ | $C Z 1200$ | 1200 g | 0.1 g | $\$ 265.80$ | $\$ 281.43$ | $\$ 312.70$ |
| D | $\mathbf{5 1 - 2 1 1 2}$ | $C Z 1202$ | 1200 g | 0.01 g |  |  | $\$ 689.00$ |

[^0]
## CITIZEN ${ }^{\text {TM }}$ HIGH PERFORMANCE COMPACT SCALES

These jewelry scales have hinged wind screens, stainless steel platform, and a lid display. They include a case, an adapter, scoop, and individual weight.

- Multiple weighing units like carat, gram, pieces, ounce, penny weight, troy ounce, grain
- Integrated overload protection that protects in transport
- Fastest response time with highly stable reading
- Fully automatic calibration for 100\% accuracy
- 4 AA batteries (not included)

| Item | Order\# | Model | Capacity | Readability | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 1 - 2 1 0 6}$ | $C B 30$ | $30 / 150 \mathrm{~g}$ | 0.01 g | 165.75 | 175.50 | 195.00 |
|  | $\mathbf{5 1 - 2 1 0 9}$ | CB 100 | 100 g | 0.002 g | 247.78 | 262.35 | 291.50 |



## GEMORO ${ }^{\circledR}$ PLATINUM PRO 6000

- penny weight, troy ounce, ounce, pound
- Push button digital calibration, tare, memory, overload protection, battery saving auto-off, and beep tone functions
- Parts counting PCS
- Precision load cell technology
- Adjustable height feet and leveling bubble indicator
- Low battery and weight stability indication
- Large size, adjustable, bright blue backlit LCD display
$-6.5^{\prime \prime} \times 4.5$ " removable stainless steel weighing platform
- Removable protective splash guard dust cover
- Powered by 6 AA batteries or included auto-adjustable, universal voltage 100V-240V AC adapter
- Heavy-duty, long-life ABS construction with exclusive protective rubberized paint finish
- Five-year limited replacement warranty


| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 8 9}$ | PRO 6000 | 6000 g | 0.1 g | $\$ 152.15$ | $\$ 161.10$ | $\$ 179.00$ |

## GEMORO ${ }^{\circledR}$ PLATINUM PRO 1601

Offers significantly greater capacity than competitive scales, plus the precision, durability, and features you need!
$-1600 \times 01$.g, penny weight, troy ounce, grain, ounce

- Parts counting
- Push-button digital calibration, tare, memory, overload protection and auto-off functions
- Large stainless steel weighing platform
- Extra large adjustable backlit LCD display
- Durable ABS construction with exclusive protective rubberized Dura-Paintº with removable protective splash guard dust cover
- Adjustable feet and leveling bubble
- Powered by long-lasting AA alkaline batteries or by its exclusive universal voltage 100V-240V AC Adapter
- Batteries and stainless steel calibration weight included
- Five-year limited replacement warranty


| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 7 7}$ | PRO 1601 | 1600 g | 0.1 g | $\$ 105.40$ | $\$ 111.60$ | $\$ 124.00$ |



## GEMORO® PLATINUM 800SS

The Platinum 800SS is the jewelry industry's most popular pocket sized gold scale for many reasons. It is an ultra thin design, but offers an extra large stainless steel weighing platform capable of accommodating most any size gold or platinum jewelry. This scale is built to last, with premium quality digital electronics, long-life ABS construction, overload protection and more.
$-800 \mathrm{~g} \times 0.1 \mathrm{~g}$, penny weight, troy ounce, ounce

- Large stainless steel weighing platform
- Bright blue backlit LCD display
- Push button digital calibration, tare, memory, low battery indicator and battery saving auto-off functions
- Powered by (2) included CR2032 lithium batteries
- Includes protective leatherette carrying pouch and built-in removable tray for holding jewelry, findings and more
- Durable ABS construction
- 5 -year limited replacement warranty

| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 3 0 0}$ | $800 S S$ | 800 g | 0.1 g | $\$ 22.91$ | $\$ 24.26$ | $\$ 26.95$ |



## GEMORO ${ }^{\circledR}$ PLATINUM PRO 801

- penny weight, troy ounce, pound, gram, ounce
- Parts counting
- Push-button digital calibration, tare, memory, overload protection, and auto-off functions
- Powered by long-lasting AA alkaline batteries or by its exclusive universal voltage 100V-240V AC adapter
- Batteries and stainless steel calibration weight included
- 5 -year limited manufacturer's replacement warranty

| Order \# | Model | Capacity | Scale | 12+ | 6+ | 1+ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 9 4}$ | PRO 801 | 800 g | 0.1 g | $\$ 63.71$ | $\$ 67.46$ | $\$ 74.95$ |

## GEMORO ${ }^{\circledR}$ PLATINUM V300

Features an ultra bright blue backlit display and protective cover that slides off and also serves as an ideal weighing tray. - penny weight, troy ounce, ounce

- Push-button digital calibration, tare, backlight, memory, low-battery indicator, and battery saving auto-off functions
- Powered by long-life AAA batteries (included)
- 5 -year limited manufacturer's replacement warranty.

| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 9 7}$ | V300 | 300 g | 0.1 g | $\$ 16.96$ | $\$ 17.95$ | $\$ 19.95$ |
| $\mathbf{5 1 - 2 0 9 7}$ | $V 600$ | 600 g | 0.1 g | - | - | $\$ 11.95$ |

## GEMORO ${ }^{\circledR}$ PLATINUM XP500

The XP500 from GemOro is our extra precision gold scale with amazing accuracy of 0.01 g and the best scale for the job!
$-500 \mathrm{~g} \times 0.01 \mathrm{~g}$, penny weight, troy ounce, carat, grain, ounce

- Bright blue backlit LCD display
- Push button digital calibration, tare, memory, low battery indicator and battery saving auto-off functions
- Parts counting
- Convenient 4-button control panel
- Powered by (2) included long-life AAA alkaline batteries
- Includes both an extra large and low profile protective cover that also serves as a tray for holding jewelry, findings and more
- Black EZ-grip rubberized paint finish
- 5 -year limited replacement warranty

| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 3 4}$ | XP500 | 500 g | 0.01 g | $\$ 33.96$ | $\$ 35.96$ | $\$ 39.95$ |



## GEMORO ${ }^{\oplus}$ PLATINUM PRO501VXP

The Platinum PR0501VXP offers the extra precision you want, combined with the durability and features you need.

- Capacity / Readability: $500 \mathrm{~g} \times 0.01 \mathrm{~g}$, troy ounce, ounce, penny weight, carat, grain
- Pushbutton digital calibration, tare, memory, overload protection and battery saving auto-off function
- Parts counting PCS
- Stainless steel weighing platform
- Adjustable height feet and leveling bubble indicator
- Low battery and weight stability indication
- Large bright blue backlit LCD display
- Powered by 4 supplied AA batteries or included universal voltage 100V-240V AC adapter
- Includes (2) 200 g calibration weights
- Black EZ-grip rubberized paint finish
- 2-year limited replacement warranty


| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 3 6}$ | 501 VXP | 500 g | 0.01 g | $\$ 76.46$ | $\$ 80.96$ | $\$ 89.95$ |

## GEMORO® PLATINUM PR01001V

The Platinum PR01001V offers the precision you want, combined with the durability and features you need.

- Capacity / Readability: $1000 \mathrm{~g} \times 0.1 \mathrm{~g}$, troy ounce, ounce, penny weight, carat, grain, kilogram
- Pushbutton digital calibration, tare, memory, overload protection and battery saving auto-off function
- Parts counting PCS
- Large stainless steel weighing platform
- Adjustable height feet and leveling bubble indicator
- Low battery and weight stability indication
- Large bright blue backlit LCD display
- Powered by (4) supplied long-lasting AA alkaline batteries
- 2-year limited replacement warranty


| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 3 7}$ | 1001 V | 1000 g | 0.1 g | $\$ 46.71$ | $\$ 49.46$ | $\$ 54.95$ |


GEMORO® PLATINUM PCT 101 CARAT SCALE

- gram, pennyweight, ounce, troy ounce, carat, and grain
- Parts counting function
- Large stainless steel weighing platform and bright blue backlit display
- Push-button digital calibration, tare, memory, low battery indicator, and battery saving auto-off functions - Innovative low profile tinted draft shield manually expands for weighing large diamonds, gemstones, and parcels - Durable ABS construction with UltraGrip rubberized paint finish
- Includes a rubberized protective travel/storage case with compartments containing scale, stainless steel calibration weight, stainless steel weighing platform, scoop, AC adapter, and Swiss-style locking diamond tweezers
- Powered by four long-life included AAA batteries or its supplied universal voltage 100-240V AC adapter
- 5 -year limited replacement warranty

| Order \# | Model | Capacity | Readability |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 7 5}$ | PCT101 | 100 g | 0.005 ct | $\$ 71.40$ | $\$ 75.60$ | $\$ 84.00$ |  |

## GEMORO® ${ }^{\circledR}$ PLATINUM PCT 251 CARAT SCALE

- gram, pennyweight, ounce, troy ounce, and grain
- Parts counting function
- Large stainless steel weighing platform and bright blue backlit display
- Push-button digital calibration, tare, memory, low battery indicator, and battery saving auto-off functions
- Innovative low profile tinted draft shield manually expands for weighing large diamonds, gemstones, and parcels
- Durable ABS construction with UltraGrip rubberized paint finish
- Includes a rubberized protective travel/storage case with compartments containg scale, stainless steel calibration weight, stainless steel weighing platform, scoop, AC adapter, and Swiss-style locking diamond tweezers
- Powered by four long-life included AAA batteries or its supplied universal voltage 100-240V AC adapter
- 5 -year limited replacement warranty

| Order \# | Model | Capacity | Readability |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | ---: | :---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 7 6}$ | PCT251 | 250 g | 0.005 ct | $\$ 84.15$ | $\$ 89.10$ | $\$ 99.00$ |  |

## GEMORO® ${ }^{\circledR}$ PLATINUM ${ }^{\oplus}$ MP601

This scale gives you the features and performance you would expect from a scale which costs twice the price.


- $600 \mathrm{~g} \times 0.1$ gram, troy ounce, ounce, and pennyweight
- Large stainless steel weighing platform
- Bright blue backlit LCD display
- Push button digital calibration, tare, memory, low battery indicator and battery saving auto-off functions
- Parts counting
- Hinged cover is removable and also serves as a convenient weighing tray
- Powered by (2) included long-life AAA alkaline batteries
- Includes stainless steel weighing platform, tray and a protective leatherette
carrying pouch
- Black EZ-grip rubberized paint finish
- 5-year limited replacement warranty

| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 2 0 9 8}$ | MP601 | 600 g | 0.1 g | $\$ 25.46$ | $\$ 26.96$ | $\$ 29.95$ |

## TANITA ${ }^{\text {m" }}$ SCALE 1230 CARAT SCALE

- 100 carat capacity with 0.1 carat readability $(20 \mathrm{~g} \times 0.002 \mathrm{~g})$
- Weighs in carat, gram, pennyweight, and grain
- Large, easy-to-read five digit LCD display
- Simple, automatic calibration with included 20 g calibration weight
- Programmable automatic power off (0 to 60 seconds)
- Energy saving feature saves batteries
- Overload indicator
- Large transparent lid protects balance
- 4.5 cm platform - Dimensions: $15.5 \times 8.4 \times 2.8 \mathrm{~cm}$
- Three-year manufacturer's warranty

Specifications:
Capacity: 100 carat
Accuracy: Carat 0-50/0-100ct 0.01ct.
Troy ounces 0-0.32toz. 0.0001toz.
Grain $0-154 \mathrm{gn} 0.05 \mathrm{gn}$
Gram 0-1
Measures 6" $\times 41 / 2$ " $\times 1$ "

| Order \# | Model | Capacity | Scale | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 1 - 2 0 0 5}$ | 1230 | 100 g | 0.1 g | $\$ 224.36$ | $\$ 237.56$ | $\$ 263.95$ |



## BENCH SCALES

A. Weighs in grams, ounces, troy ounces, and pennyweights. Large plate makes weighing large objects easy. Use a 9 V battery which is included.
B. Weighs in grams, ounces, troy ounces, and pennyweights. Removable scale cover can be used to hold items to be weighed. Spring-loaded display and keyboard retracts into scale body. Comes with a soft cover. Uses four AAA batteries, which are included.
C. Weighs in grams, ounces, pennyweight and grains. Also has parts counting.

Protective cover folds out of the way so larger objects can be weighed. Comes with a weighing pan protector that can be used to hold objects to be weighed. Uses two AAA batteries, which are included.

| Item | Order\# | Description | Capacity | Readability | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 1 - 4 0 6 0}$ | Bench Scale | 1000 g | 0.1 g | $\$ 38.72$ | $\$ 41.00$ | $\$ 45.55$ |
| B | $\mathbf{5 1 - 4 0 6 1}$ | Scale | 2000 g | 0.1 g | $\$ 29.71$ | $\$ 31.46$ | $\$ 34.95$ |
| C | $\mathbf{5 1 - 4 0 6 2}$ | Pocket Scale | 500 g | 0.1 g | $\$ 19.81$ | $\$ 20.97$ | $\$ 23.30$ |



## SCALE WEIGHTS

Made from durable, polished stainless steel. Can be used to calibrate bench scales.

| Order \# | Capacity | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 1 - 0 0 0 0}$ | 50 g | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |
| $\mathbf{5 1 - 0 0 0 0}$ | 100 g | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |
| $\mathbf{5 1 - 0 0 0 0}$ | 200 g | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |
| $\mathbf{5 1 - 0 0 0 0}$ | 500 g | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |
| $\mathbf{5 1 - 0 0 0 0}$ | 1000 g | $\$ 26.99$ | $\$ 28.58$ | $\$ 31.75$ |
| $\mathbf{5 1 - 0 0 0 0}$ | 5000 g | $\$ 54.02$ | $\$ 57.20$ | $\$ 63.55$ |




PRECISION-MADE SCREWDRIVER SET
Nine color-coded screwdrivers on rotating stand and replacement blades with set screws to hold blade firmly. Hexagonal swivel head prevents rolling. Length is proportional to blade size. Length ranges from $41 / 8^{\prime \prime}$ to $31 / 4^{\prime \prime}$. Magnetic.

| Item | Order \# | Description |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 2 - 5 4 0 0}$ | Screwdriver Set 9 -Pieces) |  | $\$ 53.34$ | $\$ 56.48$ | $\$ 62.75$ |  |
| B | $\mathbf{5 2 - 5 4 0 1}$ | Replacement Set Screw for Blade |  | $\$ 1.32$ | $\$ 1.40$ | $\$ 1.55$ |  |
|  |  |  |  |  |  |  |  |
| Item | Order \# | Blade Size $\quad$ Length | Color | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| INDIVIDUAL BLADES |  |  |  |  |  |  |  |


| $\mathbf{5 2 - 5 4 0 6}$ | 0.6 mm | $.024^{\prime \prime}$ | Pink | 3 | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 2 - 5 4 0 8}$ | 0.8 mm | $.031^{\prime \prime}$ | Yellow | 3 | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{5 2 - 5 4 1 0}$ | 1 mm | $.039^{\prime \prime}$ | Black | 3 | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{5 2 - 5 4 1 2}$ | 1.2 mm | $.047^{\prime \prime}$ | Red | 3 | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{5 2 - 5 4 1 4}$ | 1.4 mm | $.055^{\prime \prime}$ | Gray | 3 | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |
| $\mathbf{5 2 - 5 4 1 6}$ | 1.6 mm | $.063^{\prime \prime}$ | Purple | 3 | $\$ 1.87$ | $\$ 1.98$ | $\$ 2.20$ |
| $\mathbf{5 2 - 5 4 2 0}$ | 2 mm | $.078^{\prime \prime}$ | Green | 3 | $\$ 1.87$ | $\$ 1.98$ | $\$ 2.20$ |
| $\mathbf{5 2 - 5 4 2 5}$ | 2.5 mm | $.089^{\prime \prime}$ | Blue | 3 | $\$ 2.25$ | $\$ 2.38$ | $\$ 2.65$ |
| $\mathbf{5 2 - 5 4 3 0}$ | 3 mm | $.118^{\prime \prime}$ | Brown | 3 | $\$ 2.25$ | $\$ 2.38$ | $\$ 2.65$ |

C INDIVIDUAL SCREWDRIVERS

| $\mathbf{5 2 - 5 5 0 8}$ | 0.6 mm | Pink | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 2 - 5 5 0 7}$ | 0.8 mm | Yellow | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 6}$ | 1 mm | Black | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 5}$ | 1.2 mm | Red | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 4}$ | 1.4 mm | Gray | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 3}$ | 1.6 mm | Purple | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 2}$ | 2 mm | Green | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 5 5 0 1}$ | 2.5 mm | Blue | Each | $\$ 4.25$ | $\$ 4.50$ | $\$ 5.00$ |
| $\mathbf{5 2 - 5 5 0 0}$ | 3 mm | Brown | Each | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |



## ECONOMY SCREWDRIVER SET

Set of nine screwdrivers in an aluminum base holder with an extra blade storage compartment. Blade sizes range from 0.6 to 2.0 mm . Made in India.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{5 2 - 5 4 7 0}$ | Screwdriver Set $(9-P i e c e s)$ | $\$ 12.62$ | $\$ 13.37$ | $\$ 14.85$ |

EUROPEAN FIXED-BLADE SCREWDRIVER SET
European fixed-blade screwdrivers with color-coded bands to indicate sizes.
Precisely ground, tempered blades with nickel handles and hex heads. Excellent quality matched with economy make these a winner.

| Item | Order \# | Description | Blade Size | Color | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 52-1037 | Screwdriver | et (6-Pieces) |  | \$15.05 | \$15.93 | \$17.70 |
| INDIVIDUAL SCREWDRIVERS |  |  |  |  |  |  |  |
|  | 52-1043 |  | 2.0 mm | Green | \$2.30 | \$2.43 | \$2.70 |
|  | 52-1042 |  | 1.6 mm | Violet | \$2.30 | \$2.43 | \$2.70 |
|  | 52-1041 |  | 1.4 mm | Gray | \$2.00 | \$2.12 | \$2.35 |
|  | 52-1040 |  | 1.2 mm | Red | \$2.00 | \$2.12 | \$2.35 |
|  | 52-1039 |  | 1.0 mm | Black | \$2.00 | \$2.12 | \$2.35 |
|  | 52-1038 |  | 0.8 mm | Yellow | \$2.00 | \$2.12 | \$2.35 |

SCREWDRIVER SET IN POUCH
Six-piece screwdriver set in a pouch. Popular series of screwdrivers featuring color-coded hex heads and reversible blades. Blades are tempered and finely ground to exact specifications. Made in France.

| Item Order\# | Description | Blade Size $\quad$ Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 2 - 1 0 4 5}$ | Screwdriver Set (6-Pieces) | $\$ 20.36$ | $\$ 21.56$ | $\$ 23.95$ |
| B | $\mathbf{5 2 - 1 0 4 6}$ | Replacement Blade Set, 3 sizes each (18-Pieces) | $\$ 9.01$ | $\$ 9.54$ | $\$ 10.60$ | INDIVIDUAL BLADES


| $\mathbf{5 2 - 1 0 6 0}$ | 0.6 mm | Blue | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 2 - 1 0 5 9}$ | 0.7 mm | Silver | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| $\mathbf{5 2 - 1 0 5 8}$ | 0.8 mm | Red | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| $\mathbf{5 2 - 1 0 5 7}$ | 1.0 mm | Brown | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| $\mathbf{5 2 - 1 0 5 6}$ | 1.2 mm | Green | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| $\mathbf{5 2 - 1 0 5 5}$ | 1.3 mm | Black | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |
| $\mathbf{5 2 - 1 0 5 4}$ | 1.5 mm | Orange | $\$ 1.83$ | $\$ 1.94$ | $\$ 2.15$ |



MINI SCREWDRIVER KIT
Our value-engineered screwdriver set features three straight blades and three Phillips screwdrivers, all in small sizes.
Set includes one each of the following:
Phillips: $1.4 \mathrm{~mm}, 1.6 \mathrm{~mm}$, and 2 mm .
Flathead: $1.2 \mathrm{~mm}, 1.4 \mathrm{~mm}$, and 1.6 mm .
This may be the handiest set available today for small jobs.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 6 5}$ | Screwdriver Set (6-Pieces) | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |



## MASCOT ${ }^{T M}$ SCREWDRIVER SET

This handsome set consists of six ergonomically shaped, lightweight screwdrivers molded in texturized plastic. The screwdriver shafts are molybdenum steel, hardened and chrome plated for strength and torque. Set includes one each of the following 50 mm screwdrivers:
Phillips: .90 mm , and 1 mm .
Flathead: $1.5 \mathrm{~mm}, 2 \mathrm{~mm}, 2.4 \mathrm{~mm}$, and 3 mm .

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 7 0}$ | Screwdriver Set (6-Pieces) | $\$ 11.05$ | $\$ 11.70$ | $\$ 13.00$ |



NON-MAGNETIC SCREWDRIVERS
Precision European screwdrivers. Made with hexagonal swivel heads, which prevent rolling. Handles are knurled to allow a firm grip. Each screwdriver has a color-identifier band to allow easy selection. Blades are held in place with set screws. Flat head only.

| Order \# | Description | Blade Size | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 0 9 0 2}$ | Screwdriver | 0.8 mm | Yellow | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 0 9 0 3}$ | Screwdriver | 1 mm | Black | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 0 9 0 4}$ | Screwdriver | 1.2 mm | Red | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 2 - 0 9 0 5}$ | Screwdriver | 1.4 mm | Gray | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |

REPLACEMENT BLADES

| $\mathbf{5 2 - 0 9 0 6}$ | $.024^{\prime \prime}$ (length) | 0.6 mm | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 2 - 0 9 0 7}$ | .031 " (length) | 0.8 mm | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |
| $\mathbf{5 2 - 0 9 0 8}$ | $.035^{\prime \prime}$ (length) | 1 mm | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |
| $\mathbf{5 2 - 0 9 0 9}$ | $.047^{\prime \prime}$ (length) | 1.5 mm | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |
| $\mathbf{5 2 - 0 9 1 0}$ | $.055^{\prime \prime}$ (length) | 1.4 mm | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |



SCREWDRIVER SETS
A. Economical screwdrivers with steel blade set firmly in metal handles. Hexagon swivel head prevents rolling on bench. Includes $1.8 \mathrm{~mm}, 1.5 \mathrm{~mm}$, $1.2 \mathrm{~mm}, 1.0 \mathrm{~mm}, 0.8 \mathrm{~mm}, 0.7 \mathrm{~mm}$, and 0.6 mm .
B. Set includes four straight blade screwdrivers $(1.4 \mathrm{~mm}, 2 \mathrm{~mm}, 2.4 \mathrm{~mm}, 3 \mathrm{~mm})$ along with 3 mm and 3.5 mm Phillips screwdrivers. All have hexagonal swivel heads. Packed in a convenient, hard plastic box.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 2 - 5 1 4 0}$ | Screwdriver Set (7-Pieces) | $\$ 35.57$ | $\$ 37.67$ | $\$ 41.85$ |
| B | $\mathbf{5 2 - 1 0 6 6}$ | Screwdriver Set (6-Pieces) | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |



## COMBINATION PHILLIPS AND

## FLAT COMFORT GRIP SCREWDRIVER SET

C. Includes: 3 - Phillips head screwdrivers

3 - Flat head screwdrivers ( $1.4 \mathrm{~mm}, 1.8 \mathrm{~mm}$, and 2.4 mm )
D. Includes: 6 - Flat head screwdrivers
$(1.4 \mathrm{~mm}, 1.6 \mathrm{~mm}, 1.8 \mathrm{~mm}, 2.0 \mathrm{~mm}, 2.4 \mathrm{~mm}$, and 3.0 mm )

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C | $\mathbf{5 2 - 5 4 4 5}$ | Combination Set | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |
| D | $\mathbf{5 2 - 5 4 4 0}$ | Flat Head Set | $\$ 2.81$ | $\$ 2.97$ | $\$ 3.30$ |

## COLOR-CODED HEXHEAD SCREWDRIVER SET

A popular series of screwdrivers that feature color-coded hex heads, reversible blades, and are nickel-plated to prevent rusting. Blades are tempered and finely ground to exact specifications. Made in France.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 2 - 1 0 2 5}$ | Screwdriver Set (7-Pieces) | $\$ 33.53$ | $\$ 35.51$ | $\$ 39.45$ |



Order\# Blade Size Length No. Per Unit $\quad$ 12+ $6+\quad$ 1+ REPLACEMENT BLADES

| $\mathbf{5 2 - 1 0 2 6}$ | 1.5 mm | $.050 "$ | 3 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 2 - 1 0 2 7}$ | 1.28 mm | $.050 "$ | 4 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{5 2 - 1 0 2 8}$ | 1.2 mm | $.047^{\prime \prime}$ | 5 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{5 2 - 1 0 2 9}$ | 1 mm | $.039 "$ | 6 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{5 2 - 1 0 3 0}$ | 0.8 mm | $.031^{\prime \prime}$ | 7 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{5 2 - 1 0 3 1}$ | 0.7 mm | $.027^{\prime \prime}$ | 8 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| $\mathbf{5 2 - 1 0 3 2}$ | 0.6 mm | $.024^{\prime \prime}$ | 9 | 12 | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |

POCKET SCREWDRIVER SET
This pen-size, aluminum holder with nicely finished anodized barrel and pocket clip has a built-in chuck made of steel and pressed into the barrel to firmly hold screwdriver blades and prevent turning. The screwdriver blades are made of heat treated alloy steel for strength and durability, and may be stored inside the barrel. Designed for convenience and versatility. Length $33 / 4^{\prime \prime}$. Barrel diameter $3 / 8^{\prime \prime}$. A quality, U.S.-made product.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 3 5}$ | Screwdriver Set (5-Pieces) | $\$ 17.17$ | $\$ 18.18$ | $\$ 20.20$ |
| $\mathbf{5 2 - 1 0 3 6}$ | Replacement Blades (5-Pieces) | $\$ 9.27$ | $\$ 9.81$ | $\$ 10.90$ |

## 16 PIECE SCREWDRIVER AND TOOL SET

Includes:
4 - Phillips head screwdrivers
6 - Flat head screwdrivers
$(1.0 \mathrm{~mm}, 1.4 \mathrm{~mm}, 2.0 \mathrm{~mm}, 2.4 \mathrm{~mm}, 3.0 \mathrm{~mm}$, and 3.8 mm )
3 - Hex head tools ( $1.5 \mathrm{~mm}, 2.0 \mathrm{~mm}$, and 2.5 mm )
3 - Nut drivers $(3.0 \mathrm{~mm}, 4.0 \mathrm{~mm}$, and 5.0 mm )

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 5 4 5 0}$ | Screwdriver Set (16-Pieces) | $\$ 5.36$ | $\$ 5.67$ | $\$ 6.30$ |



## PRECISION SCREWDRIVER

Aluminum knurled body for a sure grip and hex-swivel head that won't roll with four reversible blades.


## REVERSIBLE SCREWDRIVER

Includes blades: $1.5 \mathrm{~mm}, 1.6 \mathrm{~mm}, 1.8 \mathrm{~mm}, 2.0 \mathrm{~mm}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 3 3}$ | Reversible Screwdriver | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |



## SCREWDRIVER SHARPENER

Spring action holds screwdriver firmly in place as tool is rolled back and forth on a sharpening stone. Steel wheels are carefully set into body to provide even action when wheeling over stone.

| Order \# | Description | Width | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 1 1}$ | Screwdriver Sharpener | $1916^{\prime \prime}$ | $\$ 9.73$ | $\$ 10.31$ | $\$ 11.45$ |



## DOUBLE-ENDED WAX CARVER SET

Polished hardwood stand for screwdrivers and wax carvers. Carborundum stone built into base for sharpening.

| Order \# | $\mathbf{W} \times \mathbf{H}$ | Depth | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 2 - 1 0 1 2}$ | $4^{\prime \prime} \times 2^{1 / 2 "}$ | $25 / 8^{\prime \prime}$ | $\$ 9.05$ | $\$ 9.59$ | $\$ 10.65$ |



## Rofin Laser Welders

The new Performance redefines the manual laser welding with many application-driven innovations and numerous technical refinements in an entirely newly designed housing. Rofin took a close look at how users were using their lasers and entirely redesigned the working chamber and access to it. The new hinged cover provides wide and completely free access to a spacious working area and can be operated with one hand whilst using the other hand to hold the workpiece.

- Entirely New Housing Design - Ergonomic microscope and arm position. Slender foot area offers comfortable seating position. Flat surface for placing workpieces and tools.
- Revolutionary Working Chamber Design - Easy, barrier-free access through wide opening door. Single-handed opening, other hand may stay in working position. Removable bottom plate for huge and bulky workpieces.
- Quality Engineering - Meets latest German industrial standards. iC driven control board and state of the art power supply. Exhaust system with HEPA and integrated spark filter.
- Easy Access and Maintenance - Easy and fast exchange of flash lamp. Tool-free access to cooling water and exhaust filter. Exhaust system with filter diagnostics. Control board with easy diagnostics.
- SweetSpot ${ }^{\oplus}$ - Patented resonator design. No first-pulse effect. Constant weld quality from the very first pulse. Assures a reliable welding process.
- MicroWeld ${ }^{\text {m" }}$ - Weld spots with less than 0.1 mm diameter. For extremely fine welds and delicate workpieces.
- TrueView ${ }^{\text {m" }}$ - Ensures a $100 \%$ hit-rate even when working out of focus. The laser beam is always aligned to the crosshair. No parallax misalignment.
- Strong and Reliable - Powerful power supply for high repetition rates. Generously sized cooling unit.
- Large Color Touch Screen - Brilliant 5.7" screen with high contrast. Entirely menu-driven operation via touch screen. Laser status indicator, direct access to laser parameters. Comfortable graphic pulse-shape editor.
- Dynamic Foot Switch - Offers sensitive control of an arbitrary laser parameter. Acts like a foot throttle and is easy to configure. Triggers start-and end-ramp when using Pulse Ramping mode. Adjusts welding speed or power during welding.
- ECOmode ${ }^{\text {m" }}$ - Switches off system parts during idle times. Only 10 W power consumption vs. 200 W in standby mode. Fast restart within less than 1 sec at any time. Reduced costs due to less lamp wear.
- SPEEDmode ${ }^{\text {m" }}$ - Significant power increase within a certain timespan. Shorter process time through higher pulse frequencies. System reloading during welding intermissions for workpiece handling.
- BURSTmode ${ }^{\text {t" }}$ - Fires laser pulses of a predefined number. Stops automatically when number of pulses is reached. Risk-free working with fast pulse sequences. Increased processing speed.
- Pulse Ramping - Successively increases/decreases the power of first/last laser pulses. Ideally suited for closed seam welds and gastight housings. A good choice for starting a weld on highly reflective material. Reduced risk of piercing thin material. Pulse Shaping - Graphic shape editor for defining the pulse intensity over time. Precise control of coupling, fusion and cooling phase. Preset pulse shapes for many materials. Perfect welds even of highly reflective metals and alloys.
- IPMmode ${ }^{\text {mis }}$ - Intelligent Pulse Management. Guarantees high pulse to pulse stability. Especially suited for micro welds. Optimized lamp operation due to sophisticated control.


## ROFIN STARWELD JEWELRY MICROWELDER

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{1 4 - 0 1 1 0}$ | Starweld Performance 7002 | $\$ 28,500.00$ |

## ROFIN STARWELD PERFORMANCE 6002 BASIC

- Egonomically designed for operational comfort; built by the world's most experienced laser technology company
- Manual spot/seam microwelding system with max energy to 80 joules
- Ideal for spot and seam welding for gold, silver, platinum, titanium, copper, aluminum and high-grade steel alloys
- Time-saving technique - Welding even in the direct vicinity of heat sensitive parts, such as precious stones, without removing them from their settings
- The unique Sweet Spot Resonator ${ }^{\text {T" }}$ improves laser beam quality and increases the ease of use for the operator
- Patented Pulse Shaping for designed and controlled laser energy
- Independently-opening gull-wing doors
- Variable-size workspace (removable bottom plate)
- Easy-to-use programming and real text information on graphic display
- Noise reduction for all moving parts; allows operation in quiet environment
- Nominal output power max. - 40 watt
- Pulse energy max. - 80 Joule
- Pulse peak power max. - 4.0 kW
- Pulse width - 0.5-20 msec
- Pulse frequency - Single Shot - 20 Hz
- Motorized beam expansion - 0.25-2.0 mm
- Electrical - 208-240V, 16A, 50/60 Hz, single phase
- Power consumption max. - 1.3-1.7 kW
- Cooling unit - Internal water-air heat exchanger
- Shielding gas - Connection for shielding gas



## ROFIN STARWELD DESKTOP MICROWELDER

Packed in an attractive housing design with a small footprint, this new Desktop laser is outstanding. Smaller than ever and yet equipped with more power, the Desktop benefits from the innovative technology of its big brother, the StarWeld Performance. Computer-controlled laser pulses and monitored cooling make it a very reliable tool. Everyday work processes are made comfortable thanks to easy handling and supportive weld assist systems. The modern housing design is tailor made for shops with little room available and at the same time provides a large working chamber.

- Compact and modern housing design with small footprint
- Easy set-up, automatic adjustment to power available $100 \mathrm{~V} / 230 \mathrm{~V}$
- Color TFT touch display
- Weld assist systems
- TrueView ${ }^{\text {T" }}$
- BURSTmode ${ }^{\text {tm }}$
- ECOmode ${ }^{\text {tw }}$
- Nominal power-60W
- Max. power with SPEEDmode ${ }^{\text {Tw }}-100 \mathrm{~W}$
- Pulse peak power -8 kW
- Pulse energy - 60 Joule
- Pulse frequency - single, $1-50 \mathrm{~Hz}$
- Pulse width - 0.3-50 msec
- Focal diameter $-0.3-2 \mathrm{~mm}$
- Electrical - 110/230V, $60 / 50 \mathrm{~Hz}, 16 / 13 \mathrm{~A}$ (single phase)
- Standy consumption - 200W
- 540 mm W x $460 \mathrm{~mm} \mathrm{H} \times 690 \mathrm{~mm}$ D
- Nominal power consumption - 1700W
- ECOmode ${ }^{\text {Tw }}-10 \mathrm{~W}$


| SPECIAL ORDER REPLACEMENT PARTS |  |  |  | ACCESSORIES: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14-0115 | Scipe Optics for AB Laser | 14-0125 | Lens Paper Pack of 50 | $23-2500 \mathrm{Fi}$ | Finger Tape |
| 14-0116 | Mini-Camera for Laser | 14-0127 | Flow Plate | 46-7892 L | Long Chain |
| 14-0117 | Laser Cuffs for Laser | 14-0128 | 6002 Series Air Filter | 46-8160 S | Small Oval Flush |
| 14-0120 | Flash Lamp | 14-0129 | Lab Jack | 26-4167 | Microball |
| 14-0121 | 2 mm Protection Glass | 14-0130 | Empty Wire Spools | 10-9104 3 | 3M Bristle Disc, 42-Piece Kit, 3/4" |
| 14-0122 | Water Filter | 14-0132 | Leica ${ }^{\text {® }}$ Wedge |  |  |
| 14-0123 | 5002 Series Air Filter | 14-0133 | Laser Head Rest |  |  |
| 14-0124 | "12V, 20W Halogen Lamp" | 14-0136 | Argon Regulator Flow Meter Kit |  |  |

## orion



## ORION 200 i $^{2}$ FEATURES:

- New 10 " touch screen display
- New Pico mode for extremely small and precise welds
- 3 Pulse Waveforms - Classic, new Triangle, new Square
- New Seam mode - weld up to 30 welds/second
- High frequency agitation - including new negative agitation
- New Internal weld monitoring to provide weld consistency and automatically optimize weld parameters
- Advanced waveform shaping options
- Adaptive Weld Ignition ${ }^{\text {TM }}$ - for extended electrode tip life
- Intelligent Welding ${ }^{\text {TM }}$ and MyWeld ${ }^{\text {TM }}$ software
- Updateable software via USB port
- Pulse arc and resistance welding technology in one machine
- $5 x-10 x$ Microscope with built-in shutter for superior viewing without green lens obstruction


## ORION PULSE 200I WELDER

| Order \# | Description | 1+ |
| :---: | :--- | :---: |
| 14-0160 | Orion 200i | $\$ 7,900.00$ |

## ORION $200 \mathrm{i}^{2}$

Introducing the new Orion $200 \mathrm{i}^{2}$ (patent pending) - An evolution in micro pulse arc welding! Built on the stability of the Orion platform - the Orion $200 \mathrm{i}^{2}$ takes that next leap forward by delivering the most innovative and versatile welder on the market today.

The Orion $200 \mathrm{i}^{2}$ is packed with new features that will simplify the welding needs of any jeweler, goldsmith, or silversmith. Innovative new features include - the new Pico weld mode for intricate welds as small as 0.01 Joules of energy, to achieve truly microscopic weld joints; user selectable up to 200 joules of energy for large silver or platinum pieces; a large 10 " touch screen interface with one-touch access to all welding parameters; the ultimate space saving design; and 3 unique pulse shape wave form options to choose from: Classic Orion (for Orion users that have come to love welds produced by the Orion 150i), Triangle (for weld smoothing), and Square (laser like welding).

And introducing the new Seam mode - a revolutionary breakthrough in micro pulse arc welding. Seam mode allows users to mimic laser welding with weld speeds up to 30 welds/sec. Keeping in the Orion tradition of excellent customer service, training, and support we have added on-screen resources, which include video tutorials and a detailed product user manual. The patent pending Orion $200 \mathrm{i}^{2}$ gives you the precision and speed of a laser with the versatility, power, and ease of a pulse arc welder.


## ORION $200 \mathrm{i}^{2}$ INTERFACE:

- Large 10" touch screen interface
- Weld energy selection - Set energy by dial, or by keypad. Adjustable from 0.01 - 200 Joules
- Adjust your welds based on energy, peak power or weld current
- One-touch access to weld waveform, ignition, and agitation options
- Weld speed controls with up to 30 welds per second - Seam mode
- Waveform displayed to help users understand pulse arc shaping effects
- Spot size indicator
- Save, load, and advanced settings
- On-screen resources including videos and user manual


## ABOUT ORION:

In 2008 Sunstone Engineering's PhD led team of engineers developed the first Orion Welder. The motivation for this bold move was from the multiple needs expressed by jewelers, goldsmiths, and silversmiths to have an innovative micro welding solution. Applying product features from an extensive micro welding background, Sunstone Engineering created Orion Welders loaded with innovative features that are easy-to-use.
Users can be assured that each Orion Welder is designed, engineered, and manufactured to high quality standards in the U.S.A. The Orion customer support and technical teams can be reached for any user questions, from Orion set-up to welding techniques, the Orion team is a phone call away. Our website and other social media sites offer extensive video archives and Orion community input.

With three models to choose from - the new Orion $200 \mathrm{i}^{2}$, the Orion 150 s, and the Orion 100 c , Orion welders are affordable and versatile for any budget.

## ORION 150s

Like the Orion $200 \mathrm{i}^{2}$, the Orion 150 s has both Pulse-Arc and Tack welding capabilities. Tack can be used to temporarily place or permanently join two pieces together. The 150s pulse-arc mode utilizes two separate energy banks, Pulse-Arc and Micro, allowing proper arc ignition regardless of the power settings. Agitation options can also be added in addition to the main weld pulse to allow for added penetration and weld joint strength. The Orion 150s has the power, features and versatility to make it one of the most effective and affordable welding solutions on the market.

- 1-150 Joules of energy
- Pulse Arc and Tack modes of operation
- 7" touch screen interface
- Simple to use interface with easy adjustments and save settings
- USB port for software upgrades
- Microscope and optical shutter for superior work piece viewing

| Item | Order \# | Description | 1+ |
| :---: | :--- | :--- | ---: |
| A | $\mathbf{1 4 - 0 1 4 3}$ | ORION 150s | $\$ 4,800.00$ |



## ORION 100c

The Orion 100c is a compact, entry-level Pulse Arc welder. It was designed and developed for a smaller space saving bench footprint. It includes an easy-to-use touch screen interface for quick access and adjustments of welding parameters and a simple high-frequency agitation option for difficult to weld metals. The Orion 100c is a great entry-level welder that is affordable for any budget.

- 3-100 Joules of energy
- Pulse Arc operation
- 4.2" touch screen interface
- Simple to use interface with easy adjustments and save settings
- USB port for software upgrades
- Microscope and optical shutter for superior work piece viewing


| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| B | $\mathbf{1 4 - 0 1 4 1}$ | ORION 100c | $\$ 3,700.00$ |

ACCESSORIES
Use with any Orion Welder.

| Item | Order \# | Description | Tip Diameter |  | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: |
| C | $\mathbf{1 4 - 1 6 2 8}$ | Argon Gas Regulator | $\$ 79.50$ |  |  |
| D | $\mathbf{1 4 - 0 1 4 5}$ | Free Floating Microscope Swing Arm | $\$ 1,000.00$ |  |  |
| E | $\mathbf{1 4 - 0 8 1 1}$ | Tungsten Electrode Tip | 1.0 mm | $\$ 45.00$ |  |
|  | $\mathbf{1 4 - 0 8 1 1}$ | Tungsten Electrode Tip Set | $1.0 \mathrm{~mm}-.5 \mathrm{~mm}$ | $\$ 60.00$ |  |
|  | $\mathbf{1 4 - 0 8 1 1}$ | Tungsten Electrode Tip | .5 mm | $\$ 45.00$ |  |

## TORCH FUEL INFORMATION

## Natural Gas

A common composition for natural gas as supplied to the consumer contains 93 parts methane, 5 parts ethane, and 2 parts propane. It is available in both liquefied and gaseous form. This fuel type is considered the most practical fuel for use in making jewelry. When supplied in its liquefied form, it is the least expensive fuel gas traditionally used by jewelers; due in part to its relatively slow burn rate (when compared to hydrogen). When using this gas type in its liquefied form, a regulator is required. A pressure setting of 6-8 PSI is adequate for all jewelry torch work. When supplied in its gaseous form by most utility companies, it is regulated down from 25-36 PSI in the large mains to about 8 PSI for general consumer use. This allows the option of direct piping (which eliminates the need for another tank), and a regulator is not required for reducing the gas pressure. When mixed with oxygen, it burns with a clean, carbon-free flame.

## Acetylene

Acetylene is a gaseous hydrocarbon formed by joining hydrogen and carbon in an electrical arc, by the incomplete combustion of other hydrocarbons, or by other means. Although colorless, it has an unpleasant odor, similar to ether, caused by impurities. When combined with oxygen, it produces the hottest, brilliant white flame which is why it is preferred in welding. Although commonly used by many jewelers, it does not burn cleanly, and, due to the presence of unburned hydrocarbons, it is not recommended for working on platinum. Often, these unburned hydrocarbons will produce blackened deposits on jewelry items that have been melted or soldered. A regulator that is specified for use with acetylene is required and a pressure setting between 8015 PSI is suitable for jewelry work.

## Propane (LP)

Propane consists of propyl and methane and is supplied in a liquefied form for consumer use. It is an inexpensive fuel and tank refills are widely available. A regulator is required for lowering and stabilizing fuel pressure from the tank. The standard pressure setting for jewelry work is 6-8 PSI. Present regulators, which are sold through most RV (recreational vehicle) supply centers, are available in the pressure ranges that can be used for jewelry. When mixed with oxygen, it burns at a temperature slightly higher than natural gas and produces a clean, carbon-free flame.

NOTE: Although these fuel types combined with compressed air are capable of producing temperatures above the melting point of platinum (see table \#1), it is marginal and, therefore, not recommended for platinum work.

CAUTION: Always wear proper eye and face protection.

TABLE \#1
MAXIMUM TEMPERATURES FOR GAS \& COMPRESSED AIR

| FUEL | $\mathbf{F}^{\circ}$ TEMPERATURES |  |
| :---: | :---: | :---: |
| Natural Gas | $3,565^{\circ}$ | $1,962.8^{\circ}$ |
| Propane | $3,494^{\circ}$ | $1,923.3^{\circ}$ |
| Acetylene | $3,848^{\circ}$ | $2,120^{\circ}$ |

TABLE \#2
MAXIMUM TEMPERATURES FOR GAS \& OXYGEN

| FUEL | TEMPERATURES |  |
| :---: | :---: | :---: |
| $\mathbf{F}^{\circ}$ |  |  |
| Natural Gas | $5,120^{\circ}$ | $2,826.7^{\circ}$ |
| Propane | $5,252^{\circ}$ | $2,900^{\circ}$ |
| Acetylene | $5,080^{\circ}$ | $2,804.4^{\circ}$ |

## SAFETY TIP: EYE PROTECTION

Most soldering, and all welding operations on platinum jewelry, involve temperatures in excess of $1,500^{\circ} \mathrm{C}\left(2,732^{\circ} \mathrm{F}\right)$ at the joint face, and between $2,000^{\circ} \mathrm{C}\left(3,632^{\circ} \mathrm{F}\right)$ and $2,800^{\circ} \mathrm{C}\left(5,072^{\circ} \mathrm{F}\right)$ in the heat source. The white radiation at these temperatures is intense and is hazardous to the unprotected eye. Even a short exposure is certain to leave an after-image on the retina that will persist for several minutes and distort both positioning and color judgement. Longer exposures will produce "arc-eye" or even permanent damage to the retina. Choosing a correct filter system requires a reasonable compromise between filtering out all possible dangerous radiation and leaving enough intensity and color to enable the operator to judge position, temperature, and the condition of the piece of the jewelry being heated. Platinum sections are likely to be lightweight, but they are melted at even higher temperatures than steel. Grade 5/GW (Shade 5, gas welding) filters can be used for short work periods when soldering platinum alloys, but choose at least grade $6 / \mathrm{GW}$ when using the highest temperature platinum
solders for longer periods. BS679 9EW, or its international equivalent (Shade 9 , electric welding), to 11 EW filter glasses, should be used for long welding exposures.

Although perhaps less dangerous to the eye itself, the infrared component of high temperature flames also needs to be guarded against. While an occasional short exposure to the skin may not be harmful in itself (Personal discomfort usually quickly reminds the occasional operator that welding and soldering heat sources radiate heat very directly!!, repeated or prolonged exposure is dangerous. The skin should be covered, or the head and shoulder area screened, not just the eyes.

Warning: Never try using even the densest sunglasses. At the ultraviolet end of the spectrum, they may offer some protection against general sunlight, but not against a sharp concentrated image of an arc or oxy-gas flame.


## TURBO BRAZE HYDROFLUX WELDER

The Hydroflux oxyhydrogen generator operates by converting distilled water into an oxygen/hydrogen fuel gas. The Hydroflux Welder creates gas on a demand basis, this means there is no potentially saved gas. A self-contained, stainless steel, gas dryer and filter to prevent moisture and contaminants from mixing with flux and flame. You no longer have to waste fluxing compound because of frequent dumpings. Uses no exotic chemicals or formulas for its flux, has a readable distilled water usage gauge, and uses 30 -gauge to 18 -gauge disposable needles. Also has a stainless steel check valve to prevent flame blow-back.

Includes: chemicals, extra in-line dryer filter, 8-piece needle set, one torch, and 4 ft of flexible hose. Made in the USA.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| A | $\mathbf{1 4 - 1 5 0 9}$ | Turbo Braze ${ }^{\ominus}$ Welder | $16^{\prime \prime} \times 19^{\prime \prime} \times 10^{\prime \prime}$ | $\$ 1,275.00$ |

REPLACEMENT PARTS

| B | $\mathbf{1 4 - 1 5 1 1}$ | Torch Handle with 4 ft Hose | $\$ 124.40$ |
| :---: | ---: | :--- | ---: |
| C | $\mathbf{1 4 - 1 0 0 2}$ | Potassium Hydroxide Pellets, 10 oz | $\$ 67.45$ |
| D | $\mathbf{1 4 - 1 5 0 0}$ | HydroTorch Flux, 16 oz | $\$ 13.50$ |
| E | $\mathbf{1 4 - 1 5 0 1}$ | HydroTorch Electrolyte*, 16 oz | $\$ 21.50$ |
| F | $\mathbf{1 4 - 1 5 0 2}$ | Cotton Dryer Filter | $\$ 9.30$ |
| G | $\mathbf{1 4 - 1 5 0 3}$ | Filter for In-Line | $\$ 11.75$ |
| H | $\mathbf{1 4 - 1 5 0 4}$ | Filter for Handpiece | $\$ 11.75$ |
| J | $\mathbf{1 4 - 1 5 0 5}$ | Large 0-Ring for Handpiece | $\$ 2.50$ |
| K | $\mathbf{1 4 - 1 5 0 6}$ | Small On/Off Ring for Valve | $\$ 2.50$ |
| L | $\mathbf{1 4 - 1 5 0 7}$ | Gasket | $\$ 28.80$ |
| M | $\mathbf{1 4 - 1 5 0 8}$ | Tubing, 12" | $\$ 4.55$ |
| N | $\mathbf{1 4 - 1 5 1 0}$ | Set of 9 Tips for Hydro Torch | $\$ 5.00$ |

* HydroTorch Electrolyte hazardous, ships UPS Ground only.

REDI-PRONG VACUUM APPLICATION SYSTEM
Once jewelers use Redi-Prongs ${ }^{\circledR}$ they never go back to conventional
 methods for retipping prongs. This is what makes the vacuum system such an effective tool. It increases productivity. You can pay for the system with just a few retipping jobs. Can be used with torch or laser welder applications. Includes: one high power vacuum unit, one vacuum application handpiece, two niobium fire tools, three stainless applicator tips, two easy application dispensers, and 250 Redi-Prongs.

| Item | Order\# | Description | 1+ |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{5 7 - 7 7 7 0}$ | Vacuum Application System | $\$ 295.00$ |
| B | $\mathbf{5 4 - 1 1 1 5}$ | Soldering Pad | $\$ 49.75$ |
| C | $\mathbf{5 4 - 1 1 1 6}$ | Application Handpiece | $\$ 54.75$ |
|  | $\mathbf{5 4 - 1 1 1 7}$ | Niobium Fire Tools | $\$ 4.85$ |
|  | $\mathbf{5 4 - 1 1 1 8}$ | Applicator Tips | $\$ 4.85$ |
|  | $\mathbf{5 4 - 1 1 1 9}$ | Parts TMY | $\$ 6.00$ |
|  | $\mathbf{5 4 - 1 1 2 1}$ | Replacement Vacuum Pump | $\$ 225.60$ |
|  | $\mathbf{5 4 - 1 1 2 2}$ | Prong Dispenser | $\$ 147.90$ |



REDI PRONGS KIT

| Item | Order \# | Description | 1+ |
| :---: | :--- | :--- | ---: |
| D | $\mathbf{2 3 0 5}$ | Round Retipping Kit | $\$ 321.84$ |
| E | $\mathbf{2 1 4 6 1}$ | Round Retipping Kit | $\$ 219.63$ |
| F | $\mathbf{2 3 4 0 6}$ | Round Solderless Retipping Kit | $\$ 325.02$ |
| G | $\mathbf{2 3 3 8 4}$ | Solderless Retipping Kit | $\$ 163.59$ |
| H | $\mathbf{2 1 4 5 9}$ | Princess Retipping Kit | $\$ 460.29$ |
| J | $\mathbf{2 3 0 6}$ | Marquise Retipping Kit | $\$ 199.47$ |
| K | $\mathbf{2 1 4 6 0}$ | Baguette Retipping Kit | $\$ 137.76$ |
| L | $\mathbf{2 7 7 0}$ | Redi-Channel Retipping Kit | $\$ 161.79$ |



M (Deluxe Kit)

## SOLDERING KIT

These soldering kits have the essentials tools you need to get started. With these kits you can begin to create or repair all types of jewelry. For a entire list of kit components, visit stuller.com.

| Item | Order \# | Description | 1+ |
| :---: | :---: | :--- | :--- |
| M | $\mathbf{1 4 - 0 0 0 8}$ | Deluxe Kit | $\$ 579.00$ |
| N | $\mathbf{1 4 - 0 0 0 9}$ | Basic Kit | $\$ 439.00$ |



## QUATRO SOLDERPURE

Eliminate solder smoke and fumes at the source, before they migrate through the room. Three-step filtering process effectively removes smoke and fumes from soldering, wax work, solvent vapors, and rhodium plating. Two-year factory warranty.

- Extremely quiet (52 dba)
- Casters allow mobility
- 99.9\% filter efficiency
- Brushless motor, no motor maintenance
- Maintenance-friendly design, filters accessed in seconds


## Specifications:

Dimensions: $12^{3} / 4$ " W x $153 / 4$ " D x 20 " H
Weight: Operating 48 lbs.
Voltage: 120/1/60 (1 amp)


| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | :---: | :--- | ---: | ---: | ---: | :---: |
| A | 47-4089 | SolderPure Soldering | - | - | $\$ 1,195.00$ |  |
|  | 47-4099 | SolderPure Rhodium-Plating | - | - | $\$ 1,295.00$ |  |
| ACCESSORIES |  |  |  |  |  |  |
| B | 47-4091 | Odor Cartridge Filter (box of 6) | $\$ 126.65$ | $\$ 134.10$ | $\$ 149.00$ |  |
| C | $\mathbf{4 7 - 4 2 1 6}$ | HEPA Filter | $\$ 126.68$ | $\$ 132.19$ | $\$ 137.70$ |  |
| D | $\mathbf{4 7 - 4 0 9 3}$ | Odor Filter F1 Rhodium Plating | $\$ 148.75$ | $\$ 157.50$ | $\$ 175.00$ |  |
| E | $\mathbf{4 7 - 4 0 9 4}$ | Fume Extraction Flex Arm w/Cone | $\$ 80.75$ | $\$ 85.50$ | $\$ 95.00$ |  |
|  | $\mathbf{4 7 - 4 0 9 8}$ | 8 SolderPure Hose | $\$ 22.91$ | $\$ 24.26$ | $\$ 26.95$ |  |
| F | $\mathbf{4 7 - 4 0 5 7}$ | Bracket Holder | $\$ 38.25$ | $\$ 40.50$ | $\$ 45.00$ |  |

B


C


D


## TORCH BOOSTER

The TB-30 Torch Booster replaces acetylene, propane, and other fuel gas cylinders to provide a steady supply of 25 psi natural gas directly from your standard utility gas line. Connect your torch booster to a single torch or shop manifold. Once started torch boosters supply all the gas you need all day without further operator attention. Just turn it off at the end of the day. The TB-30 Torch Booster supplies 30cf/hr and is the right choice for jewelry casting and manufacturers with up to five bench jewelers.

- Dimensions: $12^{\prime \prime}$ W x $12^{\prime \prime} \mathrm{H} \times 16^{\prime \prime}$ D
- Operates on 110 V 60 Hz 15 amp power
- Use $3 / 4$ " steel pipe to supply <1 psi natural gas to torch booster
- Regulator, flashback arrestor, and flexible 5' hose and shutoff valve are included

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: |
| G | $\mathbf{5 4 - 4 5 6 9}$ | G-TEC TB-30 Natural Gas Pressure Booster Kit | $\$ 1,999.00$ |
|  | $\mathbf{5 4 - 4 5 6 7}$ | Regulator for G-TEC Pressure Booster | $\$ 299.00$ |
|  | $\mathbf{5 4 - 4 5 6 8}$ | Regulator Mount Flashback Arrestor Pair | $\$ 75.00$ |


$\qquad$


LITTLE TORCH CADDY KITS
Includes torch, 8 foot covered hoses, preset propane regulator, oxygen regulator, oxygen cylinder, caddy carrier, check valve, and complete instruction manual. The 14.1 disposable LP tank provides up to 12 hours of running time with a \#5 tip. Also works with 14.1 disposable MAPP® tank.

| Item | Order \# | Description | Tip\# | 1+ |
| :---: | :---: | :--- | :--- | :--- | :--- |
| A | $\mathbf{1 4 - 5 0 1 0}$ | Propane Caddy | \#3-7 | $\$ 499.00$ |
| B | $\mathbf{1 4 - 5 0 2 0}$ | Acetylene | \#3-7 | $\$ 575.00$ |
| C | $\mathbf{1 4 - 5 0 1 5}$ | Propane/Oxygen | \#3-7 | $\$ 640.00$ |



## LITTLE TORCH KIT

Includes torch, 6 foot hose, curved tips, and instructions. Includes five tips in each kit. Packaged in display box. Hoses fit any standard regulator and can be used with any fuel - gas or oxygen. B ( $9 / 16^{\prime \prime}$ ) fitting.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 4 - 0 0 2 1}$ | Torch kit for Propane/Natural Gas | $\$ 135.00$ |
| $\mathbf{1 4 - 0 0 2 5}$ | Red Replacement Valve | $\$ 27.95$ |
| $\mathbf{1 4 - 0 0 2 5}$ | Green Replacement Valve | $\$ 27.95$ |



LITTLE TORCH KIT WITH REGULATORS
Includes torch, 8 foot hose, curved tips, and instructions. Includes five tips in each kit. Packaged in display box. Hoses fit any standard regulator and can be used with any fuel-gas or oxygen.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{1 4 - 0 0 2 2}$ | Acetylene/Oxygen Kit | $\$ 349.00$ |
| E | $\mathbf{1 4 - 0 0 2 4}$ | Propane/Oxygen Kit | $\$ 349.00$ |

## LITTLE TORCH TIP

Tip size \#2 is for use with oxygen and acetylene or oxygen and hydrogen only. All others may be used with any fuel/gas.

| Item | Order\# | Tip Shape | Tip\# | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 0 0 1 2}$ | Curved | $\# 2$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| B | $\mathbf{1 4 - 0 0 1 3}$ | Curved | $\# 3$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| C | $\mathbf{1 4 - 0 0 1 4}$ | Curved | $\# 4$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| D | $\mathbf{1 4 - 0 0 1 5}$ | Curved | $\# 5$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| E | $\mathbf{1 4 - 0 0 1 6}$ | Curved | $\# 6$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |
| F | $\mathbf{1 4 - 0 0 1 7}$ | Curved | $\# 7$ | $\$ 20.83$ | $\$ 22.05$ | $\$ 24.50$ |



LITTLE TORCH TIP

| Item |  |  |  |  |  |  |  |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| Order \# | Description | Tip\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| G | $\mathbf{1 4 - 1 0 1 5}$ | Acetylene/Hydrogen |  | $6^{\prime \prime}$ | $\$ 27.63$ | $\$ 29.25$ | $\$ 32.50$ |
| H | $\mathbf{1 4 - 1 0 1 6}$ | Propane/Oxygen | $6^{\prime \prime}$ | $\$ 34.27$ | $\$ 35.76$ | $\$ 37.25$ |  |
| J | $\mathbf{1 4 - 1 0 1 7}$ | Propane/Natural Gas/Oxygen | $5^{\prime \prime}$ | $\$ 33.15$ | $\$ 35.10$ | $\$ 39.00$ |  |
| K | $\mathbf{1 4 - 1 0 2 4}$ | Twin Flame | $\# 4$ |  | $\$ 33.58$ | $\$ 35.55$ | $\$ 39.50$ |
| L | $\mathbf{1 4 - 1 0 2 5}$ | Twin Flame | $\# 5$ |  | $\$ 33.58$ | $\$ 35.55$ | $\$ 39.50$ |
| M | $\mathbf{1 4 - 1 0 2 6}$ | Twin Flame | $\# 6$ |  | $\$ 33.58$ | $\$ 35.55$ | $\$ 39.50$ |

## OXYGEN/GAS HOKE ${ }^{\oplus}$ TORCH

Oxygen and natural gas torch sold with three tips. Fingertip control from a large flame to a very small flame. The length of the torch is nine inches, and the openings will accommodate a $1 / 4$ " hose, item 14-0782 C-clamp connections needed.

| Item Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| :---: | ---: | :--- | ---: | ---: | ---: |
| N | $\mathbf{1 4 - 1 2 2 0}$ | Oxygen/Gas Torch | $\$ 41.95$ | $\$ 44.42$ | $\$ 49.35$ |



7-PIECE HOKE ${ }^{\circledR}$ ADAPTER SET
Expand the capabilities of your Hoke ${ }^{\circledR}$ torch with this adapter set. It is ideal for soldering, welding, and even melting jobs. You will be able to solder the finest of chains to the heaviest of silver hollowware. These tips will produce a non-oxidizing flame, which means less pickling, and the piece will come out with less cleanup time. The higher the number, the smaller the hole size.

TIPS FOR STANDARD MODEL JEWEL HOKE® TORCH
Extra tips for oxygen/artificial gas, oxygen/acetylene, or oxygen/ natural gas standard model jewel hoke torches.

| Order\# | Description | Flame Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 4 - 1 3 0 0}$ | Oxygen/Artificial Gas | Pinpoint | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 1}$ | Oxygen/Artificial Gas | Pencil | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 2}$ | Oxygen/Artificial Gas | Small | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 3}$ | Oxygen/Artificial Gas | Large | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 6}$ | Oxygen/Acetylene | Pinpoint | $\$ 2.13$ | $\$ 2.25$ | $\$ 2.50$ |
| $\mathbf{1 4 - 1 3 0 7}$ | Oxygen/Acetylene | Pencil | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 8}$ | Oxygen/Acetylene | Small | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 3 0 9}$ | Oxygen/Acetylene | Large | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 4 0 2}$ | Oxygen/Natural Gas | Pencil | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 4 0 3}$ | Oxygen/Natural Gas | Small | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 1 4 0 4}$ | Oxygen/Natural Gas | Large | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |


| Order \# | Description | Tip \# | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14-0600 | Adapter Set with 6 Tips |  | \$19.81 | \$20.97 | \$23.30 |
| 14-0601 | Adapter |  | \$6.12 | \$6.48 | \$7.20 |
| INDIVIDUAL TIPS |  |  |  |  |  |
| 14-0602 | Tip (largest) | \#1 | \$2.98 | \$3.15 | \$3.50 |
| 14-0603 | Tip | \#2 | \$2.98 | \$3.15 | \$3.50 |
| 14-0604 | Tip | \#3 | \$2.55 | \$2.70 | \$3.00 |
| 14-0605 | Tip | \#4 | \$2.55 | \$2.70 | \$3.00 |
| 14-0606 | Tip | \#5 | \$2.55 | \$2.70 | \$3.00 |
| 14-0607 | Tip (smallest) | \#6 | \$2.55 | \$2.70 | \$3.00 |



PRIMO ${ }^{\circledR}$ FIRE RESISTANT LITTLE TORCH HOSE
Primo ${ }^{\oplus}$ fire resistant torch hoses are designed for the Little Torch ${ }^{\text {"M }}$. These hoses are $1 / 3$ lighter weight per foot and larger in diameter.
Available in lengths of 6, 8, 10 and 12'.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 4 - 0 5 2 7}$ | PRIM0 Torch Hose | 6 ft | $\$ 33.96$ | $\$ 35.96$ | $\$ 39.95$ |
| $\mathbf{1 4 - 0 5 2 7}$ | PRIMO Torch Hose | 8 ft | $\$ 39.06$ | $\$ 41.36$ | $\$ 45.95$ |
| $\mathbf{1 4 - 0 5 2 7}$ | PRIMO Torch Hose | 10 ft | $\$ 44.16$ | $\$ 46.76$ | $\$ 51.95$ |
| $\mathbf{1 4 - 0 5 2 7}$ | PRIMO Torch Hose | 12 ft | $\$ 48.41$ | $\$ 51.26$ | $\$ 56.95$ |



HOSE CLAMPS
Hose Clamps used for PRIMO fire resistant torch hoses.

| Order\# | Description | ID | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 4 - 0 7 5 1}$ | Hose Clamp | $1 / 8^{\prime \prime}$ | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{1 4 - 0 7 5 1}$ | Hose Clamp | $3 / 16^{\prime \prime}$ | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |

## PRIMO® ${ }^{\circledR}$ FIRE RESISTANT MECO TORCH HOSE

Primo ${ }^{\circledR}$ fire resistant torch hoses are designed for the Meco Midget Torch ${ }^{\text {™ }}$. These hoses are $1 / 3$ lighter weight per foot and larger in diameter. Available in lengths of $6,8,10$ and 12 and inside diameters of $1 / 8^{\prime \prime}$ and $3 / 16^{\prime \prime}$.

| Order \# | Description | Length | ID | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14-0753 | PRIMO Torch Hose | 6 ft | 1/8" | \$38.21 | \$40.46 | \$44.95 |
| 14-0753 | PRIMO Torch Hose | 8 ft | $1 / 8{ }^{\prime \prime}$ | \$44.16 | \$46.76 | \$51.95 |
| 14-0753 | PRIMO Torch Hose | 10 ft | $1 / 8{ }^{\prime \prime}$ | \$50.11 | \$53.06 | \$58.95 |
| 14-0753 | PRIMO Torch Hose | 12 ft | $1 / 8^{\prime \prime}$ | \$53.51 | \$56.66 | \$62.95 |
| 14-0753 | PRIM0 Torch Hose | 6 ft | 3/16" | \$56.06 | \$59.36 | \$65.95 |
| 14-0753 | PRIMO Torch Hose | 8 ft | 3/16" | \$63.71 | \$67.46 | \$74.95 |
| 14-0753 | PRIMO Torch Hose | 10 ft | 3/16" | \$67.96 | \$71.96 | \$79.95 |
| 14-0753 | PRIMO Torch Hose | 12 ft | 3/16" | \$73.91 | \$78.26 | \$86.95 |



SWISS TORCH HOSE KIT
The Swiss Torch Hose Kit includes the The Swiss Torch and the hose in the length of you choice. The hoses come in $6,8,10$, and 12 '.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{1 4 - 1 6 5 9}$ | Swiss Torch Hose - 6' Kit | $\$ 348.95$ |
| $\mathbf{1 4 - 1 6 5 9}$ | Swiss Torch Hose - 8' Kit | $\$ 355.95$ |
| $\mathbf{1 4 - 1 6 5 9}$ | Swiss Torch Hose - 10' Kit | $\$ 359.95$ |
| $\mathbf{1 4 - 1 6 5 9}$ | Swiss Torch Hose - 12' Kit | $\$ 365.95$ |

PRIMO ${ }^{\circledR}$ FIRE RESISTANT SWISS TORCH HOSE
Primo ${ }^{\oplus}$ fire resistant torch hoses are designed for The Swiss Torch ${ }^{\text {mi. }}$. These hoses are $1 / 3$ lighter weight per foot and larger in diameter. Available in lengths of $6,8,10$ and 12 and inside diameter $3 / 16^{\prime \prime}$.

| Order \# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 4 - 1 6 6 7}$ | PRIMO Torch Hose | 6 ft | $\$ 50.11$ | $\$ 53.06$ | $\$ 58.95$ |  |
| $\mathbf{1 4 - 1 6 6 7}$ | PRIMO Torch Hose | 8 ft | $\$ 56.06$ | $\$ 59.36$ | $\$ 65.95$ |  |
| $\mathbf{1 4 - 1 6 6 7}$ | PRIMO Torch Hose | 10 ft | $\$ 63.71$ | $\$ 67.46$ | $\$ 74.95$ |  |
| $\mathbf{1 4 - 1 6 6 7}$ | PRIMO Torch Hose | 12 ft | $\$ 67.96$ | $\$ 71.96$ | $\$ 79.95$ |  |

## READY-OX OXYGEN GENERATOR TORCH SYSTEM

The new Ready $0 \times$ System is capable of performing most any jewelry or dental soldering, brazing or heating operation with just a standard electrical wall outlet and inexpensive, clean burning propane fuel from a disposable 14 or 16 ounce tank available at most any hardware store. The torch produces a sharp $5400^{\circ} \mathrm{F}$ flame for pinpoint accuracy and control. The oxygen generator will provide hundreds of hours of trouble free service. Inexpensive,
disposable propane tanks are capable of providing over 20 hours of service. Never again worry about running out of oxygen or the hassle of refilling your tanks. Never worry about safety issues, insurance restrictions or fire code restrictions associated with high pressure tanks. This system may be used in your home or business and is excellent for on-site repairs especially in Malls where pressurized gas cylinders are not allowed. It is easy to set up and easy to use, simply plug it in, turn on the gas, adjust the flow and light the torch.

Oxygen Generator Benefits:

- No fire code restrictions
- Safe to use indoors
- Never run out of oxygen
- Never have to travel again to a welding gas supplier for oxygen
- Never worry about high pressure oxygen tank safety issues
- Never lug around another heavy oxygen tank
- Easy to set-up and use
- Eliminate the need for an expensive high pressure oxygen regulator
- Designed to provide hundreds of hours of worry free service
- Generator plugs into any 115 V home electrical service
- Capable of running two little torches

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| A | $\mathbf{5 4 - 4 5 8 1}$ | Torch System | $\$ 795.00$ |
|  | $\mathbf{5 4 - 4 5 8 0}$ | Generator Only | $\$ 469.00$ |



The Ready-0x System includes the oxygen generator, a Genuine Smith Little Torch with eight foot hoses, 5 -tips (sizes 3 through 7), regulator for disposable propane tank, propane tank bracket, spark lighter, reverse flow safety check valves and step-by-step set-up and operation instructions.

## PREMIUM SOLDERING PICK WITH SHIELD

This soldering tool makes your job easier. With its non-slip grip and stainless steel heat shield, you'll enjoy extended use while protecting your hands. It is made in the USA and comes with two $1 / 16^{\prime \prime}$ diameter tungsten steel tips.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| B | $\mathbf{4 8 - 3 0 0 0}$ | Soldering Pick with Sheild | $\$ 16.11$ | $\$ 17.06$ | $\$ 18.95$ |
|  | $\mathbf{4 8 - 3 0 0 0}$ | Replacement Tungsten Pick | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |



## CITRIC ACID PICKLE

Natures Touch Citric Acid Pickle is a mild solution. It can be used for sterling silver, gold, brass, copper, and stainless steel. This biodegradable solution is safe, yet effective.

| Order \# | Description | Container Volume | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 6 0 0}$ | Citric Acid Pickle | $320 z$ | $\$ 11.43$ | $\$ 12.11$ | $\$ 13.45$ |



GENTEC has been selling torches and welding accessories worldwide for over 60 years. The "Small Torch" regulators and other accessories are high quality, manufactured to world standards, and offer great value. Braze and solder material from the tiniest up to $1 / 8^{\prime \prime}$ thick steel. Easy manipulation in very tight spaces. Provides stable and precise concentrated feather flame adapter included. All components carry a limited two-year warranty from the factory.



GENTEC SMALL TORCH BASIC KIT
Each basic kit contains the Small Torch handle, five tips, and $12{ }^{\prime}$ oxygen and fuel hoses with "B" fittings ( $9 / 16$ ") and "A" ( $3 / 8$ ") adapter.

| Order \# | Description | Tip\# | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 4 - 0 7 5 8}$ | For Oxygen/Propane | $\# 3-7$ | $\$ 110.46$ | $\$ 116.96$ | $\$ 129.95$ |

## GENTEC SMALL TORCH OXYGEN/PROPANE KIT

Convenient portable kit for use with disposable tanks comes complete with torch handle, \#4 tip, 6-foot hoses, and preset regulators for propane and oxygen. Wire tank holder included.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| 14-0756 | For Oxy/Propane Disposable Tanks | $\$ 165.75$ | $\$ 175.50$ | $\$ 195.00$ |



GENTEC SMALL TORCH KIT WITH REGULATORS
Contains The Small Torch handle, five tips, 12' oxygen and fuel hoses with "B" fittings $\left(9 / 16^{\prime}\right)$, fitting adapter "A" ( $3 / 8$ "), and oxygen and acetylene or propane regulators. Precision machined brass regulators feature a compact rear entry design. Chrome-plated housing caps with plastic adjustment knob for smooth "easy touch" pressure setting.

| Order \# | Description | Tip\# | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 4 - 0 7 6 0}$ | For Oxy/Propane | $\# 3-7$ | $\$ 246.46$ | $\$ 260.96$ | $\$ 289.95$ |
| $\mathbf{1 4 - 0 7 5 9}$ | For Oxy/Acetylene | $\# 2-6$ | $\$ 237.96$ | $\$ 251.96$ | $\$ 279.95$ |



## GENTEC REGULATORS

Gentec regulators are manufactured using the latest state-of-the-art equipment. With chrome-plated housing caps and body machined from class "A" brass bar stock, our regulators are single stage with rear entry construction. This compact rear mounted design allows the regulators to better fit in caddy systems and stay safely out of the way. Internal safety pressure relief valve and stem type seat assembly for more reliable seating.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 1 6 3 0}$ | Oxygen Regulator | $\$ 76.46$ | $\$ 80.96$ | $\$ 89.95$ |
| B | $\mathbf{1 4 - 1 6 3 1}$ | Propane Regulator | $\$ 76.46$ | $\$ 80.96$ | $\$ 89.95$ |
| C | $\mathbf{1 4 - 1 6 3 2}$ | Acetylene Regulator | $\$ 76.46$ | $\$ 80.96$ | $\$ 89.95$ |



GENTEC SMALL TORCH HOSE
Durable and flexible hoses for The Small Torch come standard with "B" fitting and include an "A" fitting adapter with each.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| D | $\mathbf{1 4 - 0 7 6 1}$ | Small Torch Replacement Hose, 12' | $\$ 41.65$ | $\$ 44.10$ | $\$ 49.00$ |

## THE SWISS TORCH

The most versatile, handy, lightweight, and reliable torch on the market. Use with propane and natural gas/oxygen. Not for use with acetylene. The selection of heads permit pinpoint to large flames for melting. $100 \%$ made in Switzerland.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 1 6 6 0}$ | Swiss Torch Body | $\$ 101.15$ | $\$ 107.10$ | $\$ 119.00$ |
| B | $\mathbf{1 4 - 1 6 6 1}$ | Micro Head w/3 Needle Nozzles | $\$ 131.75$ | $\$ 139.50$ | $\$ 155.00$ |
| C | $\mathbf{1 4 - 1 6 6 2}$ | Hoke ${ }^{\circledR}$ Standard Head | $\$ 131.75$ | $\$ 139.50$ | $\$ 155.00$ |
| D | $\mathbf{1 4 - 1 6 6 3}$ | Short Melting Head | $\$ 97.75$ | $\$ 103.50$ | $\$ 115.00$ |
| E | $\mathbf{1 4 - 1 6 6 4}$ | Long Melting Head | $\$ 97.75$ | $\$ 103.50$ | $\$ 115.00$ |
| F | $\mathbf{1 4 - 1 6 6 5}$ | Platinum Head | $\$ 89.68$ | $\$ 94.95$ | $\$ 105.50$ |

## HI-HEAT TORCH

The mixing chamber of the Model D blowpipe is designed for use with natural, artificial, or bottled gas, but not for acetylene. Produces intense, perfectly formed flame. Use standard $1 ⁄ 2$ " hose with C-clamps.

| Item | Order \# | Description | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G | 54-4535 | Hi-HeatTorch | \$59.46 | \$62.96 | \$69.95 |
| EXTRA TIPS |  |  |  |  |  |
| H | 54-4536 | Large Gas/Air Torch | \$11.86 | \$12.56 | \$13.95 |
| $J$ | 54-4537 | Small Gas/Air Torch | \$6.72 | \$7.11 | \$7.90 |
| K | 54-4538 | Oxygen/Gas Torch | \$6.72 | \$7.11 | \$7.90 |



## MIDGET TORCH

Small, lightweight, and ideal for jewelry welding and brazing. Control valves are conveniently positioned and hold flame adjustment precisely. Can be used with oxygen and acetylene, hydrogen, natural gas, propane, or butane. Sold with three tips and slip-on hose, with connectors for a $3 / 16^{\text {" }}$ hose. Also fits hose 14-0783.

| Item Order\# | Description | Length Tip\# | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |
| ---: | ---: | :---: | :---: | :---: | :---: | ---: |
| L | $\mathbf{1 4 - 1 6 0 0}$ | Midget Torch | $63 / 4^{\prime \prime}$ | - | - | $\$ 245.00$ |


| M | $\mathbf{1 4 - 1 6 0 1}$ | Small | $\# 1 / 0$ | $\$ 13.81$ | $\$ 14.63$ | $\$ 16.25$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N | $\mathbf{1 4 - 1 6 0 2}$ | Medium | $\# 1$ | $\$ 13.81$ | $\$ 14.63$ | $\$ 16.25$ |
| P | $\mathbf{1 4 - 1 6 0 3}$ | Large | $\# 2$ | $\$ 13.81$ | $\$ 14.63$ | $\$ 16.25$ |



## WELDING TORCHES

Top quality butane torch (14-0090) features electronic ignition (no lighter necessary), A maximum burn time of 90 minutes at $2,370^{\circ}$. Easy to adjust, ensuring you have the right flame for the job. Max flame butane torch (14-0092) has a maximum output of $2,500^{\circ} \mathrm{F}$ and a $40 \%$ larger tank than the 14-0090. Sturdy no-tip base.

| Item | Order\# | Description | Height | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :---: | :---: | ---: | ---: | ---: |
| 0 | $\mathbf{1 4 - 0 0 9 0}$ | Butane Torch | $6^{\prime \prime}$ | $\$ 34.21$ | $\$ 36.23$ | $\$ 40.25$ |
| R | $\mathbf{1 4 - 0 0 9 2}$ | Butane Torch | $71 / 4^{\prime \prime}$ | $\$ 36.00$ | $\$ 38.12$ | $\$ 42.35$ |




CASTING AND MELTING TORCH
Complete with torch handle, type 17 \#5 melting tip, and dual hose with A-B connections.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| 14-0755 | Casting Torch | $\$ 147.00$ |

PLATINUM MELTING TORCH KIT
Produces a super-hot, hydrogen flame (exceeding $6,000^{\circ}$ F.). Perfect for melting platinum as well as gold or silver. The large melting tip will melt several ounces of platinum.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- |
| 14-0765 | Platinum Melting Torch Kit |  | $\$ 455.95$ |  |

REPLACEMENT PARTS

| $\mathbf{1 4 - 5 0 6 0}$ | Smith Torch Handle | $\$ 140.25$ | $\$ 148.50$ | $\$ 165.00$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 4 - 0 7 7 0}$ | Oxygen Flashback Arrestor | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |
| $\mathbf{1 4 - 0 7 7 1}$ | Fuel Flashback Arrestor | $\$ 107.23$ | $\$ 113.54$ | $\$ 126.15$ |
| $\mathbf{1 4 - 0 7 7 2}$ | Hydrogen Regulator |  |  | $\$ 122.35$ |
| $\mathbf{1 4 - 2 0 5 0}$ | Lighter (sold with one flint) | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| $\mathbf{1 4 - 0 7 8 2}$ | Propane/Oxygen Dual Hose | $\$ 59.46$ | $\$ 62.96$ | $\$ 69.95$ |

## ACETYLENE TORCH OUTFIT

Allows mixing of acetylene with air at the torch head. No other source of air is necessary. Suitable for jewelry soldering (except small work) and melting. Supplied with four interchangeable tips that produce a range of flame sizes from small to large. Acetylene is stored in tanks as a liquid and only becomes a gas when the valve is opened. Outfit includes torch handle, four tips, a regulator for "B" tank, and a six-foot hose with fittings.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{1 4 - 2 3 5 0}$ | Acetylene Torch Outfit | $\$ 199.75$ | $\$ 211.50$ | $\$ 235.00$ |



## SMITH CASTING TORCHES

Smith torch handle is nickel plated. For casting platinum, gold, or silver. Note: Flashback arrestors recommended for use with all casting torches.
UL listed with a lifetime warranty.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 5 0 6 0}$ | Smith Torch Handle | $\$ 140.25$ | $\$ 148.50$ | $\$ 165.00$ |
| B | $\mathbf{1 4 - 5 0 6 2}$ | Oxygen/Acetylene Tip | $\$ 103.95$ | $\$ 103.95$ | $\$ 103.95$ |
| C | $\mathbf{1 4 - 5 0 6 3}$ | Oxygen/Acetylene Heating Tip | $\$ 84.41$ | $\$ 89.37$ | $\$ 99.30$ |
| D | $\mathbf{1 4 - 5 0 6 4}$ | Oxygen/Propane Tip | $\$ 53.98$ | $\$ 57.15$ | $\$ 63.50$ |

REGULATORS
Dual stage regulators are used where a steady delivery pressure is required over a range of decreasing cylinder inlet pressures. Delivery pressures will remain constant until inlet pressure is nearly deleted. Recommended when using more than two torches. UL listed.


| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 1 6 2 4}$ | Dual Stage Oxygen Regulator | $\$ 161.46$ | $\$ 170.96$ | $\$ 189.95$ |
| B | $\mathbf{1 4 - 1 6 2 5}$ | Dual Stage Heavy Duty Oxygen Regulator | $\$ 212.46$ | $\$ 224.96$ | $\$ 249.95$ |
| C | $\mathbf{1 4 - 1 6 2 6}$ | Dual Stage Heavy Duty Acetylene Regulator | $\$ 212.46$ | $\$ 224.96$ | $\$ 249.95$ |



## SINGLE STAGE REGULATORS

- Machined brass body, polished chrome bonnet
- Easy-to-read single scale $21 / 2^{\prime \prime}$ gauges
- 2" Tri-layered reinforced neoprene diaphragm
- Heavy duty mechanical stem type seat and nozzle assembly
- Delrin bushing for smooth flow adjustment
- Fine mesh filter screen between inlet and seat
- Pressure relief device for low pressure gauge protection only
-5½" D x 71⁄4"W x 6" H
- Weight: 3 lbs

| Item | Order \# | Description | Outlet Connection | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 14-1607 | Acetylene Regulator | "B" (LH) 9/16-18 (M) | \$96.60 | \$102.29 | \$113.65 |
| E | 14-1609 | Propane Regulator | "B" (LH) 9/16-18 (M) | \$96.60 | \$102.29 | \$113.65 |
| F | 14-1610 | Oxygen Regulator | "B" (LH) 9/16-18 (M) | \$96.60 | \$102.29 | \$113.65 |



## CHECK VALVES/FLASHBACK ARRESTORS

Stops flashback fires by preventing reverse gas flow with automatic reset between flashes. Solid brass case is durable and easy to install. Fits standard $9 / 16$ " "B" connections.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| G | $\mathbf{1 4 - 0 7 6 9}$ | For Fuel Gas Lines | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |
| H | $\mathbf{1 4 - 0 7 7 0}$ | Oxygen Flashback Arrestor | $\$ 35.70$ | $\$ 37.80$ | $\$ 42.00$ |



## CHECK VALVE

Used to help prevent dangerous reverse gas flow.

| Order \# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 4 - 1 7 9 0}$ | For Fuel Gas Regulator | $9 / 6 \mathrm{LH}$ | $\$ 12.45$ | $\$ 13.19$ | $\$ 14.65$ |
| $\mathbf{1 4 - 1 7 9 5}$ | For Oxygen Regulator | $9 / 16 \mathrm{RH}$ | $\$ 12.45$ | $\$ 13.19$ | $\$ 14.65$ |



"Y" CONNECTORS
Used in multiple-torch hook-ups. With a single regulator, shut-off valve.

| Item | Order \# | Description | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 14-1840 | Fuel Gas $9 / 16^{\prime \prime} \mathrm{LH}$ to $9 / 16^{\prime \prime}-18 \mathrm{LH}$ | \$40.85 | \$42.62 | \$44.40 |
| B | 14-1845 | Oxygen 9/6" RH to $9 / 66^{\prime \prime}-18$ RH | \$40.85 | \$42.62 | \$44.40 |
| C | 14-1850 | Oxygen Little Torch | \$50.74 | \$52.94 | \$55.15 |
| D | 14-1855 | Fuel Little Torch | \$51.24 | \$53.47 | \$55.70 |

RIGHT-HAND THREADED CONNECTORS FOR OXYGEN Used on regulators so that standard ID hose can be used.

| Item | Order \# | Description In | Inside Diameter | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 14-0777 | Connection for Oxygen | 9/18"-181/4" | \$4.97 | \$5.27 | \$5.85 |
| F | 14-0778 | Connection for Oxygen | 9/16"-183/16" | \$4.97 | \$5.27 | \$5.85 |
| G | 14-0779 | Connection for Oxygen | $3 / 88^{\prime \prime}-243 / 16^{\prime \prime}$ | \$4.97 | \$5.27 | \$5.85 |

LITTLE TORCH ${ }^{\text {m }}$ HOSES AND CONNECTORS
Designed for the Little Torch ${ }^{\text {m", }}$, the hoses are supplied with hose fittings and a connection tool. Hoses measure $8^{\prime}$ length $\times 1 / 8^{\prime \prime}$ inside diameter. Available in single or twin hose types.

| Item | Order \# | Description | Type | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| H | $\mathbf{1 4 - 0 5 2 4}$ | Oxygen/Fuel Hose | Twin | $\$ 67.96$ | $\$ 71.96$ | $\$ 79.95$ |
| J | $\mathbf{1 4 - 0 5 2 2}$ | Red Fuel Gas Hose | Single | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |
| K | $\mathbf{1 4 - 0 5 2 3}$ | Green Oxygen Hose | Single | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |
| L | $\mathbf{1 4 - 0 5 2 5}$ | Hose Ferrule |  | $\$ 7.95$ | $\$ 8.41$ | $\$ 9.35$ |
| M | $\mathbf{1 4 - 0 5 2 6}$ | Crimping Tool for Hose Ferrule | $\$ 7.95$ | $\$ 8.41$ | $\$ 9.35$ |  |

## TORCH HOSES

Twin oxygen/fuel hoses for casting and brazing torches, $3 / 16^{\text {" }}$ diameter by 12 long. Twin fuel gas/oxygen hoses.

- R-Grade Oxygen/Acetylene Hose "B ", $9 / 16^{\prime \prime}$ ( 14.3 mm ) fittings
- R-Grade Oxygen/Acetylene Hose "A", $3 / 8$ " $(9.5 \mathrm{~mm})$ fittings
- T-Grade Oxygen/LP Hose "B", $3 / 16^{\prime \prime} \times 12$ ', $9 / 16^{\prime \prime}$ ( 14.3 mm ) fittings

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| N | $\mathbf{1 4 - 0 7 8 0}$ | R-Grade Oxygen/Acetylene B Hose | $\$ 37.78$ | $\$ 40.01$ | $\$ 44.45$ |
| P | $\mathbf{1 4 - 0 7 8 1}$ | R-Grade Oxygen/Acetylene A Hose | $\$ 37.78$ | $\$ 40.01$ | $\$ 44.45$ |
| 0 | $\mathbf{1 4 - 0 7 8 2}$ | T-Grade Propane/Oxygen Dual Hose | $\$ 59.46$ | $\$ 62.96$ | $\$ 69.95$ |

## WELDING TANKS

With a sturdy no-tip base, these tanks provide standard capacities for most jewelry manufacturing. Tanks are sold empty due to shipping laws.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| R | $\mathbf{1 4 - 5 0 3 0}$ | Oxygen Tank | 20 cubic feet | $\$ 133.72$ | $\$ 139.54$ | $\$ 145.35$ |
| S | $\mathbf{1 4 - 5 0 3 4}$ | Propane Tank | 5 lbs | $\$ 98.53$ | $\$ 102.82$ | $\$ 107.10$ |

## REGULATORS FOR DISPOSABLE TANKS

This regulator is designed to work with disposable tanks and give a controlled flow of fuel and oxygen for the Little Torch.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| T | $\mathbf{1 4 - 0 4 1 0}$ | Oxygen Regulator | $\$ 42.50$ | $\$ 45.00$ | $\$ 50.00$ |
| U | $\mathbf{1 4 - 0 4 2 0}$ | Gas Regulator | $\$ 42.50$ | $\$ 45.00$ | $\$ 50.00$ |

MAGNETIC TORCH HOLDER
Magnetic torch holder keeps your torch nearby on your bench. Heavy metal base keeps holder in place. Has holes for extra tip storage.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{1 4 - 2 0 3 2}$ | Magnetic Torch Holder | $\$ 29.33$ | $\$ 31.05$ | $\$ 34.50$ |

## WEIGHTED TORCH STAND

Allows you to rest torch while working. Rod is made of stainless steel, which ensures easy placement and removal of torch without sacrificing safety. Base is made of textured cast iron. Also provides storage space for extra tips.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| B | $\mathbf{1 4 - 2 0 3 0}$ | Torch Stand | $\$ 12.54$ | $\$ 13.28$ | $\$ 14.75$ |

UNIVERSAL TORCH HOLDER
Mounts to bench-top for easy access. Width $1 \frac{1}{2 \prime \prime}$, height $31 / 2^{\prime \prime}$.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | :---: | :---: |
| C | $\mathbf{1 4 - 2 0 1 1}$ | Torch Holder | $\$ 5.36$ | $\$ 5.67$ | $\$ 6.30$ |

## TORCH HOLDER

Mounts anywhere on bench to accommodate most torches.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :---: | ---: | ---: | ---: |
| D | $\mathbf{1 4 - 2 0 1 0}$ | Hook-Type Torch Holder | $\$ 2.55$ | $\$ 2.70$ |

## TORCH LIGHT

Produces spark to light gas without an open flame.

| Item |  | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| E | $\mathbf{1 4 - 2 0 5 0}$ | Lighter (sold with one flint) | $\$ 2.55$ | $\$ 2.70$ | $\$ 3.00$ |
| F | $\mathbf{1 4 - 2 0 5 5}$ | Lighter (sold with five flints) | $\$ 2.13$ | $\$ 2.25$ | $\$ 2.50$ |



## TORCH-MATE ${ }^{\circledR}$ LIGHTER

Electric torch lighter. When the activator bar is depressed, a spark instantly lights the torch. Uses two AA batteries, not included.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| G | $\mathbf{1 4 - 2 0 4 0}$ | Torch Light | $\$ 28.26$ | $\$ 29.93$ | $\$ 33.25$ |



GRS ${ }^{\circledR}$ THIRD-HAND SOLDER STATIONS
Precise soldering is easy by holding parts in the exact position needed with unequalled flexibility. These third-hands can twist, rotate, and bend in all directions. GRS ${ }^{\circledR}$
Soldering Stations combine third-hands with durable non-asbestos soldering boards.
These convenient packages help to reduce bench clutter and speed up soldering jobs.
Sits on a bench or fits BenchMate ${ }^{\text {t" }}$ fixed mounting plate.

| Item | Order \# | Description | $\mathbf{W} \times \mathrm{L}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 26-4146 | Short Double Third-Hand Solder Station |  | \$75.65 | \$80.10 | \$89.00 |
| B | 26-4117 | Standard Double Third-Hand Station |  | \$110.46 | \$116.96 | \$129.95 |
| ACCESSORIES |  |  |  |  |  |  |
| C | 26-4145 | Short Third-Hand Attachment |  | \$32.77 | \$34.70 | \$38.55 |
| D | 26-4115 | Standard Third-hand Attachment |  | \$35.10 | \$37.17 | \$41.30 |
| E | 26-4116 | Standard Third-hand on Metal Base |  | \$46.71 | \$49.46 | \$54.95 |
| F | 26-4118 | Soldering Station | $6 " \times 6$ " | \$48.58 | \$51.44 | \$57.15 |
|  | 26-4119 | Soldering Station | 4 " $\times 4^{\prime \prime}$ | \$27.16 | \$28.76 | \$31.95 |
| G | 26-5118 | Solder Board | $6 " \times 6$ " | \$12.42 | \$12.96 | \$13.50 |
|  | 26-5119 | Solder Board | $4^{\prime \prime} \times 4^{\prime \prime}$ | \$8.19 | \$8.54 | \$8.90 |



THIRD-HAND WITH TWEEZER AND ROUND BASE
Cross-locking, $61 / 2^{\prime \prime}$ tweezers are mounted on a heavy, non-tipping, round base. Ball-joint attachments located on the base allow work to be positioned at any angle. Frees both hands by positioning pieces to be joined by solder or adhesive.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| H | $\mathbf{5 4 - 0 8 0 1}$ | Third-Hand with Tweezer | $\$ 12.75$ | $\$ 13.50$ | $\$ 15.00$ |
| J | $\mathbf{5 7 - 7 6 1 5}$ | Blunt/Serrated Points | $\$ 4.00$ | $\$ 4.23$ | $\$ 4.70$ |

## MAGNETIC THIRD-HAND BASE

Magnetic ball rotates with ease and precision. Weighing 750 gm . ( $13 / 4 \mathrm{lb}$ ), this tool will hold your work in place. It holds 5 oz. of weight at the end of a $6^{\prime \prime}$ tweezer. $3^{\prime \prime} \mathrm{D} \times 3^{1 / 2} 2^{\prime \prime} \mathrm{H}$ dimensions, and works superbly with our straight soldering tweezer, \#57-7600.

| Item |  | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| K | $\mathbf{5 4 - 4 4 7 4}$ | Third-Hand Base | $\$ 31.83$ | $\$ 33.71$ | $\$ 37.45$ |  |
| L | $\mathbf{5 7 - 7 6 0 0}$ | Straight Soldering Tweezers | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |  |

DELUXE THIRD-HAND
Heavy metal base holds $61 / 2$ " self-locking tweezers (included), and adjusts to all angles. Made in the USA. Shipping weight 1.2 lbs .

| Item |  | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 5 6 0}$ | Deluxe Third-Hand | $\$ 15.56$ | $\$ 16.47$ | $\$ 18.30$ |  |
| B | $\mathbf{5 7 - 7 6 0 0}$ | Straight Soldering Tweezers | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |  |



## SOLDERITE ${ }^{m \mathrm{~m}}$ SOLDERING PADS

Clean, long-lasting, asbestos-free solder pads made from reinforced calcium silicate. Excellent heat reflection and cools quickly without cracking or crumbling. The soft pads may be pinned, drilled, or shaped to hold components while soldering. Meets OSHA standards as an asbestos-free substitute.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 1 8 9 0}$ | Hard | $6^{\prime \prime} \times 6^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 7.65$ | $\$ 8.10$ | $\$ 9.00$ |
| D | $\mathbf{5 4 - 1 8 9 1}$ | Hard | $6^{\prime \prime} \times 12^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 12.11$ | $\$ 12.83$ | $\$ 14.25$ |
| E | $\mathbf{5 4 - 1 8 9 2}$ | Hard | $12^{\prime \prime} \times 12^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 20.19$ | $\$ 21.38$ | $\$ 23.75$ |
| F | $\mathbf{5 4 - 1 8 8 0}$ | Soft | $6^{\prime \prime} \times 6^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 8.46$ | $\$ 8.96$ | $\$ 9.95$ |
| G | $\mathbf{5 4 - 1 8 8 1}$ | Soft | $6^{\prime \prime} \times 12^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 12.11$ | $\$ 12.83$ | $\$ 14.25$ |
| H | $\mathbf{5 4 - 1 8 8 2}$ | Soft | $12^{\prime \prime} \times 12^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 20.70$ | $\$ 21.92$ | $\$ 24.35$ |



TRANSITE-SOLDERING HARD BOARDS
Durable, non-asbestos heat reflective material. Flame resistant to protect surfaces from burning. Withstands temperatures up to $2,800^{\circ} \mathrm{F}$.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| J | $\mathbf{5 4 - 1 9 0 0}$ | Transite Board | $6^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 12.33$ | $\$ 12.86$ | $\$ 13.40$ |
| K | $\mathbf{5 4 - 1 9 0 1}$ | Transite Board | $6^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 17.43$ | $\$ 18.19$ | $\$ 18.95$ |
| L | $\mathbf{5 4 - 1 9 0 2}$ | Transite Board | $12^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 34.13$ | $\$ 35.62$ | $\$ 37.10$ |



CERAMIC SOLDERING BOARDS
Tolerates temperatures of up to $2,000^{\circ}$. Resistant to molten metals and most chemicals and solvents. Hard surface.

| Item |  |  |  |  |  |  |  | Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | $\mathbf{5 4 - 1 9 0 4}$ | Ceramic Board | $6^{\prime \prime} \times 6^{\prime \prime}$ | $\$ 11.86$ | $\$ 12.56$ | $\$ 13.95$ |  |  |  |  |  |  |  |
| N | $\mathbf{5 4 - 1 9 0 5}$ | Ceramic Board | $6^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 17.08$ | $\$ 19.22$ | $\$ 21.35$ |  |  |  |  |  |  |  |
| P | $\mathbf{5 4 - 1 9 0 6}$ | Ceramic Board | $12^{\prime \prime} \times 12^{\prime \prime}$ | $\$ 23.46$ | $\$ 24.48$ | $\$ 25.50$ |  |  |  |  |  |  |  |



## SKAMOLEX SOLDERING BOARDS

Skamolex soldering boards are lightweight, produce no fumes, and are asbestos-free. Like on charcoal blocks, the heat will remain concentrated on the jewelry pieces. They are non-combustible, though it looks like wood, it won't burn. Clean, unlike charcoal, and good to keep the workplace tidy. Tools, tweezers, picks, etc. can be inserted into these boards.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 54-1910 | Block | $23 / 4^{\prime \prime} \times 13 / 8^{\prime \prime} \times 51 / 2^{\prime \prime}$ | \$3.83 | \$4.05 | \$4.50 |
| R | 54-1911 | Round Disk | $41 / 2^{12} \times 1 / 2^{\prime \prime}$ | \$8.59 | \$9.09 | \$10.10 |
| S | 54-1912 | Round Disk | $53 / 4{ }^{1} \times 1 / 2^{11}$ | \$9.56 | \$10.13 | \$11.25 |




ROTATING NON-ASBESTOS SOLDERING TABLE
Lazy-Susan-style, grooved work surface disk. Rotates on ball bearings that provide $360^{\circ}$ access. Ideal for soldering small parts.

| Item |  | Order\# | Description | OD | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 1 1 0 0}$ | Soldering Table | $41 / 21$ | $\$ 23.63$ | $\$ 25.02$ | $\$ 27.80$ |  |
| B | $\mathbf{5 4 - 1 1 0 1}$ | Replacement Disk | $41 / 2^{\prime \prime}$ | $\$ 8.97$ | $\$ 9.49$ | $\$ 10.55$ |  |




HONEYCOMB DESIGN CERAMIC SOLDERING BLOCKS
Lightweight blocks that contain hundreds of tiny holes to accelerate heat loss from parts being soldered. Holes also provide anchor points for pins or wires used to hold parts in place on the surface. Contains no asbestos. Withstands temperatures up to $2,000^{\circ} \mathrm{F}\left(1,093.3^{\circ} \mathrm{C}\right)$.

| Item | Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 1 7 8 4}$ | Soldering Block | $33 / 4 \times 51 / 1^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 7.76$ | $\$ 8.73$ | $\$ 9.70$ |
| D | $\mathbf{5 4 - 1 7 8 5}$ | Soldering Block | $51 / 2^{\prime \prime} \times 73^{\prime \prime} \times 1 / 2^{\prime \prime}$ | $\$ 11.04$ | $\$ 11.97$ | $\$ 13.30$ |

HIGH-TEMP SOLDERING BLOCK FOR PLATINUM
This non-asbestos soldering board made of silquar will take temperatures up to $3,200^{\circ} \mathrm{F}\left(1,093.3^{\circ} \mathrm{C}\right)$.

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 1 8 0 0}$ | Soldering Block | $41 / 4^{\prime \prime} \times 41 / 4^{14} \times 1 / 2^{\prime \prime}$ | $\$ 18.77$ | $\$ 19.58$ | $\$ 20.40$ |



CHARCOAL SOLDERING BLOCKS
Made from select, close-grained, knot-free wood chemically prepared by a special process. The charcoal under flame creates a reducing atmosphere and reflects heat back into the work for effective soldering conditions. Heat is reflected to provide uniform intensity. Soft enough to be easily punctured to hold soldering work. Wrapping block in binding wire before use will retard cracking.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E | 54-1894 | Soldering Block | $21 / 4^{\prime \prime} \times 31 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$7.01 | \$7.43 | \$8.25 |
| F | 54-1895 | Soldering Block | $3^{\prime \prime} \times 43 / 4^{\prime \prime} \times 1 \frac{112}{21}$ | \$10.58 | \$11.48 | \$12.75 |
| G | 54-1896 | Soldering Block | $4 " \times 7^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$21.62 | \$23.45 | \$26.05 |

## MAGNESIA SOLDERING BLOCK

Porous, fibrous, non-asbestos, fire-proof material used as a surface for soldering. Reflects heat and is soft enough to allow work to be pinned or pressed into the block for wireless soldering. Longer lasting than charcoal. Withstands temperatures up to $2,000^{\circ} \mathrm{F}\left(1,093.3^{\circ} \mathrm{C}\right)$.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 1 8 8 8}$ | Soldering Block | $3^{\prime \prime} \times 6^{\prime \prime} \times 11 / 2^{\prime \prime}$ | $\$ 4.61$ | $\$ 5.00$ | $\$ 5.55$ |

DOUBLE CLAMP-ON STAND
Horseshoe-base stand with two spring-loaded clips. Ball joint attachments allow work to be positioned at any angle. Frees both hands for work. Cross-locking tweezers and other accessories may be added to increase versatility.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| 54-0802 | Double Clamp-on Stand | $\$ 14.15$ | $\$ 14.99$ | $\$ 16.65$ |



CERAMIC RING STAND
Six-inch tapered, heat-resistant, ceramic mandrel holds rings in place while you solder. Mounted on base with swivel to provide the exact position or angle desired. Equipped with a clamp, which releases the rod for replacement.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | :---: | ---: |
| A | $\mathbf{5 4 - 1 1 0 8}$ | Ring Stand | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |
| B | $\mathbf{5 4 - 1 1 0 9}$ | Replacement Ceramic Rod | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |



## CARBON RING STAND

Six-inch tapered, carbon rod in fixed position on a heat-resistant (non-asbestos) base. Prevents collapse or movement when fitting shank sections together.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 1 1 1 2}$ | Ring Stand | $\$ 22.78$ | $\$ 24.12$ | $\$ 26.80$ |
| D | $\mathbf{5 4 - 1 1 1 3}$ | Replacement Carbon Rod | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



## SOLDERING BOX

For tough solder jobs on earrings, rings, pendants, etc.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 1 7 9 1}$ | Soldering Box | $\$ 20.36$ | $\$ 21.56$ | $\$ 23.95$ |



## TRIPOD WITH MESH SCREEN

Used to solder or heat from underneath. Works with alcohol lamp or with torch and can be placed over Bunsen ${ }^{\circledR}$ burner.

| Item | Order \# | Description | Height | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{1 4 - 3 1 2 0}$ | Tripod with Mesh Screen | $61 / 2 "$ | $\$ 11.90$ | $\$ 12.60$ | $\$ 14.00$ |
| F | $\mathbf{1 4 - 3 1 2 5}$ | Replacement Mesh Screen |  | $\$ 3.19$ | $\$ 3.38$ | $\$ 3.75$ |



ROTATING SOLDERING PANS


Our 7 inch soldering pans rotate 360 degrees with easy access. The heat reflecting pumice is perfect for supporting your project in any position - flat or embedded. This pan comes with an attachable third hand custom designed to fit with our pans. Each pan includes pumice.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 1 2 0 1}$ | Soldering Pan with Attachable Third Hand | $\$ 30.56$ | $\$ 32.35$ | $\$ 35.95$ |
| B | $\mathbf{5 4 - 1 2 0 0}$ | Soldering Pan | $\$ 25.46$ | $\$ 26.96$ | $\$ 29.95$ |



## ANNEALING PAN

Twelve-inch diameter pan that rotates on ball bearings, providing $360^{\circ}$ access. Allows positioning of work while annealing or soldering on a heat-reflecting material such as pumice. $21 / 2 \mathrm{lbs}$ of lump pumice included.

| Item | Order\# | Description | Weight | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 1 1 0 4}$ | Annealing Pan | 6 lbs | $\$ 49.47$ | $\$ 52.38$ | $\$ 58.20$ |
| D | $\mathbf{5 4 - 1 1 0 5}$ | Pumice | $21 / 2 \mathrm{lbs}$ | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |



COOL CUP
Used to keep the stone cool while soldering. Simply fill the cup with cool water and submerge the stone and mounting while soldering. Includes special sized, negative locking tweezer, which is designed to slip on and off the post.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | ---: |
| $\mathbf{5 4 - 7 0 0 0}$ | Cool Cup | $\$ 12.58$ | $\$ 13.32$ | $\$ 14.80$ |

RING HOLDER FOR SOLDERING
Heavy, cast-iron base keeps holder and ring from moving during soldering. Prongs are adjustable for different size rings. Base diameter is 3 " and total height is $2^{\prime \prime}$.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 1 1 2 0}$ | Ring Holder | $\$ 7.48$ | $\$ 7.92$ | $\$ 8.80$ |



## BINDING WIRE

Bind parts together for soldering or stringing parts to be plated.
Sold in 8 oz. spools.

| Order \# | Description | Gauge | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{4 3 - 6 3 8 0}$ | Wire | 24 Gauge | $\$ 9.06$ | $\$ 9.46$ | $\$ 9.85$ |
| 43-6400 | Wire | 26 Gauge | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |
| 43-6410 | Wire | 27 Gauge | $\$ 10.63$ | $\$ 11.09$ | $\$ 11.55$ |
| 43-6420 | Wire | 28 Gauge | $\$ 10.72$ | $\$ 11.18$ | $\$ 11.65$ |

TITANIUM SOLDERING PICS
Titanium machined tip, built to last. Grooved aluminum handle designed to quickly transfer heat away from the operator. Available in three colors for jobs that require different gold karats and colors. Overall length 61/4". Tip length $15 / 8^{\prime \prime}$. Not for use with platinum.

| Order \# <br> $\mathbf{5 4 - 1 8 1 7}$ | Description | Color | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 1 8 1 8}$ | Titanium Soldering Pick | Red | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |
| $\mathbf{5 4 - 1 8 1 9}$ | Titanium Soldering Pick | Gold | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |



## SOLDERING PICKS

A. Niobium Pick: Hardwood handle soldering picks, Niobium point soldering pick has a melting temperature of $4,474^{\circ} \mathrm{F}\left(2,467.8^{\circ} \mathrm{C}\right)$. Safe for platinum, silver, gold, or any other precious metal.
B. Titanium Pick: Wood handle with sharp-pointed tip for placing, holding, and positioning solder in just the right place. Solder will not adhere, and wood will not heat up. Not for use with platinum.
C. Tungsten Pick: Tungsten high-temperature soldering pick is designed specifically for platinum. This pick withstands higher temperatures than titanium and does not contaminate platinum.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\mathbf{5 4 - 1 8 1 0}$ | Niobium Pick | $\$ 6.33$ | $\$ 6.71$ | $\$ 7.45$ |
| B | $\mathbf{5 4 - 1 8 1 5}$ | Titanium Pick | $\$ 4.59$ | $\$ 4.86$ | $\$ 5.40$ |
| C | $\mathbf{5 4 - 1 8 0 5}$ | Tungsten Pick | $\$ 6.33$ | $\$ 6.71$ | $\$ 7.45$ |

## FLUXIT DISPENSER BOTTLE

Dispenser bottle with 22-gauge needle tip for applying exact amount of flux.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 4 0 1 5}$ | Fluxit Bottle | $\$ 4.63$ | $\$ 4.91$ | $\$ 5.45$ |



D

## FLUX DISPENSER PUMP

This compact dispenser pump is designed to dispense the right amount of flux into the well. The one-way pump holds the fluid in the well of the cap, preventing contamination of the unused fluid. For best results and to avoid clogging, the well should be emptied and the cap cleaned between use.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 4 0 3 5}$ | Flux Dispenser Pump | $\$ 22.14$ | $\$ 23.45$ | $\$ 26.05$ |



## SOLVENT DISPENSER

These dispensers have no stopper or cap to remove. Just touch the dispensing dish with a brush, cloth, or other applicator and the solvent is brought to the surface the instant it is needed. Stainless steel valves seal contents in the bottle until used, preventing spills, dripping, and escaping fumes. Fluid pumped into the dish does not drip back into the bottle, keeping stored liquids uncontaminated. Made of static dissipative plastic with Teflon tube.

| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: |
| F | $\mathbf{5 4 - 4 0 3 6}$ | Small | 120 ml | $\$ 16.01$ | $\$ 16.70$ | $\$ 17.40$ |
| G | $\mathbf{5 4 - 4 0 3 7}$ | Small Anti-Splash | 120 ml | $\$ 16.51$ | $\$ 17.23$ | $\$ 17.95$ |
| H | $\mathbf{5 4 - 4 0 3 8}$ | Large | 180 ml | $\$ 16.01$ | $\$ 16.70$ | $\$ 17.40$ |

$\qquad$


## FIRESCOFF ${ }^{\circledR}$

Revolutionary spray ceramic coating that prevents oxidation and scale, acts as a flux, and features easy removal with just warm water. With Firescoff, no additional pickle flux is required, and no pickle solution is needed. Protects gemstones from heat oxidation in multiple soldering operations without waiting; consistent void-free, non-brittle, welds. Ideal for jewelry amnufacturers, repair jewelers, and stone setters. Non-flammable. Odor-free, alcohol-free.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 1 3}$ | Small Bottle | 102 | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |
| B | $\mathbf{5 4 - 4 4 1 4}$ | Large Bottle | $41 / 202$ | $\$ 23.89$ | $\$ 25.29$ | $\$ 28.10$ |
| C | $\mathbf{5 4 - 4 4 1 4}$ | Bulk Dispenser | 1000 ml bulk | $\$ 191.41$ | $\$ 199.73$ | $\$ 208.05$ |
|  | $\mathbf{5 4 - 4 4 1 4}$ | Bulk Dispenser | 3000 ml bulk | - | - | $\$ 509.10$ |



TIX ${ }^{\circledR}$ FLUX
A non-corrosive, liquid flux that works well with soft solder and has a melting temperature under $450^{\circ} \mathrm{F}\left(232.2^{\circ} \mathrm{C}\right)$. Harmless to skin and clothing. Washes off with water even after drying.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 4 0 2 2}$ | Flux | $1 / 20 z$ bottle | $\$ 4.23$ | $\$ 4.42$ | $\$ 4.60$ |

TIX® ${ }^{\circledR}$ ANTI-FLUX
Liquid that brushes on to prevent solder from flowing to unwanted areas.
Used for both hard and soft soldering.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 4 0 2 4}$ | Anti-Flux | $1 / 20 z$ bottle | $\$ 3.77$ | $\$ 3.94$ | $\$ 4.10$ |

TIX ${ }^{\circledR}$ SOLDER
Hardest soft solder on earth. Has a melting point of $275^{\circ} \mathrm{F}\left(135^{\circ} \mathrm{C}\right)$, and has a holding power of $4,300 \mathrm{PSI}$. Adheres to all ordinary, solderable materials. Works well with gun, iron, torch, or soldering machine. No cadmium or bismuth, stays white, and does not tarnish. Can be used with silver.

| Item | Order\# | Description | Length | Per Unit | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :---: | :---: | ---: | ---: | ---: | ---: |
| F | $\mathbf{5 4 - 4 0 5 0}$ | Tix ${ }^{\text {® }}$ Solder Sticks | $3^{\prime \prime}$ | 20 | $\$ 15.50$ | $\$ 16.18$ | $\$ 16.85$ |

## STAY-BRITE SOLDER KIT

High-strength, silver-bearing solder that melts and flows at $430^{\circ} \mathrm{F}\left(221.1^{\circ} \mathrm{C}\right)$. Cadmium-free and non-toxic. Provides strength without distortion caused by high temperature brazing. Retains bright silver finish after cooling. Kit contains $1 / 2$ oz of solder and $1 / 2$ oz flux.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{5 4 - 4 0 2 0}$ | Solder Kit | $\$ 22.77$ | $\$ 23.76$ | $\$ 24.75$ |



## DANDIX ${ }^{\circledR}$ PASTE FLUX

Paste flux for use in low temperature brazing and silver soldering. Dissolves oxides at $800^{\circ} \mathrm{F}\left(426.7^{\circ} \mathrm{C}\right)$ and is fluid between $1,100^{\circ} \mathrm{F}$ and $1,600^{\circ} \mathrm{F}\left(593.3^{\circ} \mathrm{C}\right.$ and $\left.871.1^{\circ} \mathrm{C}\right)$. Contains no fluoride.

| Item | Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| $H$ | $\mathbf{5 4 - 4 4 1 8}$ | $16 \mathrm{oz}(473 \mathrm{ml})$ | $\$ 12.62$ | $\$ 13.37$ | $\$ 14.85$ |
| J | $\mathbf{5 4 - 4 4 1 7}$ | $80 z(237 \mathrm{ml})$ | $\$ 8.41$ | $\$ 8.91$ | $\$ 9.90$ |
| K | $\mathbf{5 4 - 4 4 1 6}$ | $11 / 20 z(44 \mathrm{ml})$ | $\$ 3.74$ | $\$ 4.05$ | $\$ 4.50$ |

MAGIC BORAX ${ }^{\text {m }}$
Borax Granular powder is an excellent, general purpose flux. Excellent also for glazing clay crucibles to extend crucible life.

| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 3 2}$ | Boric Acid Granular | 1602 | $\$ 7.31$ | $\$ 7.63$ | $\$ 7.95$ |

MAGIC BORIC ACID POWDER®
High-grade, superfine boric acid powder. Use as high-grade flux and deoxidizing agent. Can also be mixed with denatured alcohol to make soldering flux.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{5 4 - 4 4 3 3}$ | Boric Acid Powder | $160 z$ | $\$ 7.86$ | $\$ 8.32$ | $\$ 9.25$ |



GRIFFITH BORIC ACID POWDER
Used as an anti-oxidizer during soldering or in making flux.


| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 8 0 3 5}$ | Boric Acid Powder | $70 z$ | $\$ 5.19$ | $\$ 5.63$ | $\$ 6.25$ |
|  | $\mathbf{5 4 - 8 0 3 6}$ | Boric Acid Powder | $160 z$ | $\$ 6.35$ | $\$ 6.89$ | $\$ 7.65$ |



GRIFFITH BORIC ACID GRANULES
Used as an anti-oxidizer during soldering or in making flux.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 8 0 3 0}$ | Boric Acid | $70 z$ | $\$ 3.60$ | $\$ 4.05$ | $\$ 4.50$ |
|  | $\mathbf{5 4 - 8 0 3 1}$ | Boric Acid | $160 z$ | $\$ 6.14$ | $\$ 6.66$ | $\$ 7.40$ |



GRIFFLUX NO. 1
A hard-soldering paste flux for use on all ferrous and non-ferrous metals and alloys.

| Item | Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{5 4 - 8 0 7 0}$ | $11 / 20 z$ | $\$ 4.88$ | $\$ 5.09$ | $\$ 5.30$ |
| G | $\mathbf{5 4 - 8 0 7 1}$ | $80 z$ | $\$ 9.25$ | $\$ 9.65$ | $\$ 10.05$ |
| H | $\mathbf{5 4 - 8 0 7 2}$ | 1602 | $\$ 16.05$ | $\$ 16.75$ | $\$ 17.45$ |



F

$\qquad$


MAGIC BORIC ${ }^{\oplus}$ SOLDERING DIP
Safe, non-flammable, longer-lasting soldering dip with built-in flux. Used for coating before soldering, no flux needed.

| Item | Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 4 1 5}$ | 16 oz bottle | $\$ 7.82$ | $\$ 8.16$ | $\$ 8.50$ |

GRIFFITH SOFT SOLDER FLUX
For use with lead-tin and lead-tin bismuth solders that melt below $450^{\circ} \mathrm{F}$.

| Item | Order\# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: | ---: |
| B | $\mathbf{5 4 - 8 0 8 9}$ | 4 oz bottle | $\$ 5.06$ | $\$ 5.28$ | $\$ 5.50$ |
| C | $\mathbf{5 4 - 8 0 9 0}$ | $80 z$ bottle | $\$ 8.10$ | $\$ 8.45$ | $\$ 8.80$ |

BATTERNS ${ }^{\circledR}$ SELF-PICKLING FLUX
Self-pickling, hard-soldering flux. For hard soldering on gold, silver, or platinum. Coat piece with this mixture of boric acid and denatured alcohol.

| $\mathbf{O r d e r} \#$ | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 0 0}$ | 1 oz bottle | $\$ 1.87$ | $\$ 2.03$ | $\$ 2.25$ |
| $\mathbf{5 4 - 4 0 0 2}$ | 3 oz bottle | $\$ 3.40$ | $\$ 3.83$ | $\$ 4.25$ |
| $\mathbf{5 4 - 4 0 0 4}$ | 8 oz bottle | $\$ 3.74$ | $\$ 4.05$ | $\$ 4.50$ |
| $\mathbf{5 4 - 4 0 0 6}$ | 16 oz bottle | $\$ 5.85$ | $\$ 6.35$ | $\$ 7.05$ |
| $\mathbf{5 4 - 4 0 0 8}$ | 32 oz bottle | $\$ 10.75$ | $\$ 11.66$ | $\$ 12.95$ |

GRIFFITH SOFT SOLDER FLUX
For use with lead-tin and lead-tin bismuth solders that melt below $450^{\circ} \mathrm{F}$.

| $\mathbf{O r d e r} \#$ | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 8 0 8 0}$ | 1 oz bottle | $\$ 2.67$ | $\$ 2.78$ | $\$ 2.90$ |
| $\mathbf{5 4 - 8 0 8 1}$ | 4 oz bottle | $\$ 3.40$ | $\$ 3.55$ | $\$ 3.70$ |
| $\mathbf{5 4 - 8 0 8 2}$ | 8 oz bottle | $\$ 4.55$ | $\$ 4.75$ | $\$ 4.95$ |
| $\mathbf{5 4 - 8 0 8 3}$ | 16 oz bottle | $\$ 8.28$ | $\$ 8.64$ | $\$ 9.00$ |



## GRIFFITH PRIP'S FLUX

A liquid hard soldering flux that prevents the formation of firecoat and firescale during soldering.

| Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 8 0 7 5}$ | 4 oz bottle | $\$ 3.77$ | $\$ 3.94$ | $\$ 4.10$ |
| $\mathbf{5 4 - 8 0 7 6}$ | 8 oz bottle | $\$ 4.69$ | $\$ 4.90$ | $\$ 5.10$ |
| $\mathbf{5 4 - 8 0 7 7}$ | 16 oz bottle | $\$ 7.91$ | $\$ 8.26$ | $\$ 8.60$ |
| $\mathbf{5 4 - 8 0 7 8}$ | 32 oz bottle | $\$ 11.36$ | $\$ 11.86$ | $\$ 12.35$ |

## MK3 PASTE SOLDER DISPENSER

Manual solder dispenser designed to deposit paste solders with pinpoint accuracy. Use with Stuller paste solders syringes.

| $\mathbf{O r d e r} \#$ | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 1 0}$ | MK3 Solder Dispenser | $\$ 23.76$ | $\$ 25.16$ | $\$ 27.95$ |



## DISPENSABLE BRAZING FLUX

This product is a concentrated general-purpose brazing flux suitable for use on gold, silver, and most non-precious metals. The product is a homogenous blend of fluxing agents and a neutral binder that has been optimized for dispensing from syringes. This product is restrictive, which means that it tends to stay in place where it is applied. This allows excellent control over flux placement, usage, and effectiveness. Also, because of the tackiness of this product, it can be used as an aid in holding solder chips in the joint area.


| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 1 1}$ | Dispensable Brazing Flux | $\$ 2.72$ | $\$ 2.88$ | $\$ 3.20$ |

## THERMO SHIELD

The new, revolutionary, environmentally safe, protective barrier for retarding the transfer of heat. This product will adhere to vertical, non-absorbent surfaces as well as to stones. You will no longer have to remove the stone. Dab the Thermo Shield on the area you would like to protect and hit it with the flame. No heat will transfer. Absorbs temperatures up to $3,000^{\circ}$ F. Water soluble.

| Item |  | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 4 0 3 0}$ | Heat Blocker | 1 lbjar | $\$ 15.85$ | $\$ 17.19$ | $\$ 19.10$ |  |
| D | $\mathbf{5 4 - 4 0 3 1}$ | Heat Blocker | 2 lb jar | $\$ 22.87$ | $\$ 24.80$ | $\$ 27.55$ |  |



## SOLDER PRINTS

Solder Print ${ }^{\text {TM }}$ liquid formula quickly and easily exposes previously soldered joints before you heat the area, reducing work on older jewelry.

- Apply to the jewelry surface using a non-metallic applicator or flux brush: solder joints will immediately show as darker lines, so you can see exactly where previous repairs have been preformed
- Easily polish easy any joint discoloration

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 5 5 0 0}$ | Joint Detector | $\$ 11.99$ | $\$ 12.69$ | $\$ 14.10$ |



## GRIFFITH ANTI-FLUX

Effectively prohibits the flow of solder to unwanted areas.

| Item | Order \# | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 4 - 4 0 3 4}$ | 1 oz bottle | $\$ 3.50$ | $\$ 3.65$ | $\$ 3.80$ |

## KOOL JOOL® ${ }^{\oplus}$

Protects jewels from heat damage while soldering. Unnecessary to remove jewels from settings (except opals). The jewel will stay cool if flame is used for soldering. Rinses off in plain water. Eliminates oxidizing, will not turn when heated.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| F | 54-4026 | Kool Jool ${ }^{\text {® }}$ | $\$ 7.54$ | $\$ 7.87$ | $\$ 8.20$ |



## GREEN STOP-OFF PEN

The most effective means to prevent solder flow. This product has been used by Stuller's own assembly department for many years. Test on a piece of paper before you solder. Shake well then use like a felt-tip marker to mask the areas where you do not want the solder to flow. Use the ultrasonic for cleaning after the solder job is complete.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 4 - 4 0 3 9}$ | Green Stop-Off Pen | $\$ 8.63$ | $\$ 9.14$ | $\$ 10.15$ |



## PRO-CRAFT ${ }^{\oplus}$ YELLOW OCHRE

When mixed with water or alcohol, yellow ochre creates a paste that is used to prevent solder flowing to unwanted areas such as previously soldered joints or the moving parts of a catch.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| A | $\mathbf{5 4 - 4 0 5 5}$ | Yellow Ochre | $1 / 2 \mathrm{lb}$ can | $\$ 7.40$ | $\$ 7.83$ | $\$ 8.70$ |

GRIFFITH YELLOW OCHRE
Mix with alcohol to produce an anti-flux for soldering.

| Item | Order\# | Description | Size | 12+ | $\mathbf{6 +}$ | 1+ |
| :---: | ---: | :---: | :---: | ---: | ---: | ---: | ---: |
| B | $\mathbf{5 4 - 4 0 6 0}$ | Yellow Ochre | $20 z$ jar | $\$ 3.60$ | $\$ 4.05$ | $\$ 4.50$ |

MAGIC PICKLE ${ }^{\circledR}$
Safe pickle compound. Dry granular compound for cleaning and removing surface oxidation and firescale. Produces a clean, bright surface. Requires heat. One tablespoon to one pint liquid.

| Item | Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 4 4 3 1}$ | Pickle Compound | 24 oz jar | $\$ 7.22$ | $\$ 7.54$ | $\$ 7.85$ |

## "BLACK MAGIC" PICKLE ${ }^{\circledR}$

A non-acid pickle for all metals; no fumes, no corrosion, safe to use at the bench. Long lasting, not adversely affected by steel. Pre-measured dry compound shipped in a one gallon container; fill with tap water for correct pickle formulation. Saves 8 pounds of shipping cost.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| D | $\mathbf{5 4 - 4 4 3 5}$ | Pickle Compound | 1 gallon | $\$ 9.56$ | $\$ 10.13$ | $\$ 11.25$ |

## SPAREX PICKLE

Dry granular, acid compound used for pickling, cleaning, and removing surface oxidation and scale from copper and silver. This product is non-flammable and non-explosive. Requires heat.

| Item | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 5 - 1 2 0 7}$ | Pickle | $21 / 2 \mathrm{lb}$ bag | $\$ 6.67$ | $\$ 6.96$ | $\$ 7.25$ |
| B | $\mathbf{4 5 - 1 2 0 8}$ | Pickle | 10 oz can | $\$ 3.63$ | $\$ 3.79$ | $\$ 3.95$ |



PICKLE POT
Economical, pickle pot made for basic pickling. Well insulated with a stainless steel outer shell. Maximum temperature $150^{\circ}$. Comes with plastic lid to prevent the evaporation of the pickle solution.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| 45-3015 | Pickle Pot | 1602 | $\$ 20.87$ | $\$ 22.10$ | $\$ 24.55$ |



GRIFFITH PICKLE SAFE
A dry, granular acid compound used to pickle gold, silver, and other non-ferrous metal castings.

| Item |  | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 4 - 5 0 2 0}$ | Pickle Safe | 10 oz tub | $\$ 4.69$ | $\$ 4.90$ | $\$ 5.10$ |
| D | $\mathbf{5 4 - 5 0 2 2}$ | Pickle Safe | $21 / 2 \mathrm{lb}$ tub | $\$ 9.34$ | $\$ 9.74$ | $\$ 10.15$ |


ferris electric picklers
Pickler which automatically keeps solution at the right temperature. This prevents solution from boiling away. Plastic basket is included which will hold articles in solution.

| Item |  | Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| E | $\mathbf{4 5 - 3 0 0 6}$ | Pickler | $120 z$ | $\$ 99.88$ | $\$ 105.75$ | $\$ 117.50$ |
| F | $\mathbf{4 5 - 3 0 0 7}$ | Replacement Basket | $120 z$ | $\$ 16.24$ | $\$ 17.19$ | $\$ 19.10$ |



## COPPER TONGS

Used for pickling and acid solutions. Will not contaminate solutions or corrode.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{5 7 - 0 6 9 0}$ | Curved Tip | $81 / 2^{\prime \prime}$ | $\$ 6.38$ | $\$ 6.75$ | $\$ 7.50$ |
| H | $\mathbf{5 7 - 0 6 9 1}$ | Fishtail Tip | $81 / 2^{\prime \prime}$ | $\$ 6.29$ | $\$ 6.66$ | $\$ 7.40$ |




## CIEL 3-IN-1 MULTI TESTER

A. For testing and differentiating diamond, moissanite, and synthesis using thermal and electrical conductivity. The ergonomic tester is equipped with a special surface coating that ensures a comfortable grip and handling. The probe of the tester is slightly angled, allowing a more accurate and easier placement on the stone tablet. The test result is immediately displayed on the built-in LED display and also supports acoustic. Fast start and no waiting time between tests is necessary. - For stone from 0.02 carats, any forms, loose or set spring-loaded probe (consistent pressure and protect the tip)

- Mounting collar for housing units built in
- Auto-off after 10 minutes of inactivity to conserve battery power
- Operates with three AAA alkaline batteries (not included)


## PISTACHIO REFERENTIAL METER

B. Designed to further expand the analog readings displayed on the Gelologis Ciel 3-in-1 tester and AZURE gem tester. It provides an instant, simple, and laboratory proven way to segregate diamond, moissanite and a variety of popular gemstones at an affordable price. This unique instrument communicates with the main unit, Gemologis CIEL/AZURE, via an infrared interface that provides wireless usability. Features:

- Three AAA NiMH rechargeable batteries (not included) and universal 110-240V charger
- Foolproof reference test disc for diamond, simulant and glass to ensure that the device provides accurate test results
- Testing size above 0.002 carats of any shape regardless of loose or mounted stones
- Batteries will last up to 80 hours of continuous usage
- Built-in power down function after 10 minutes of inactivity to maximize battery life

| Item | Order \# | Description | 1+ |
| :---: | :---: | :---: | :---: |
| A | $\mathbf{5 6 - 7 7 1 2}$ | Multi Tester | $\$ 263.95$ |
| B | $\mathbf{5 6 - 7 7 1 3}$ | Referential Meter | $\$ 168.55$ |

## AZURE DIAMOND TESTER

The Gemlogis AZURE electronic diamond tester distinguishes diamonds from diamond simulants. It features a fast warm-up time and provides an instant test result on loose or mounted stones. AZURE also communicates with PISTACHIO add-on tool (sold separately) via an infrared system to provide further analysis on the specific simulant or colored gemstone. Features:

- Testing size above 0.02 carats of any shapes regardless of loose or mounted stones
- Retractable test tip designed to maintain a consistent pressure against the stones to avoid damages when excessive force is applied - Operates on AAA alkaline batteries (included) Lasts up to two hours
- Includes carry pouch and aluminum stone rest for handling loose stones
- AZURE has a built-in power down function to maximize battery life span after 10 minutes of inactivity
- LED bar indicator:

GREEN = Diamond or moissanite
YELLOW = Metal
RED ZONE (Centre LED's) = Simulant indication Round
RED LED = Low battery warning
I.R = Infrared signal

READY = Ready for use

- Fast tip warm-up time of approximately 10 seconds
- Working temperature: $65^{\circ} \mathrm{F}$ to $86^{\circ} \mathrm{F}$, relative humidity below $80 \%$

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 7 1 1}$ | Diamond Tester | $\$ 121.40$ |

## GEMORO® ${ }^{\circledR}$ TESTERS

The state-of-the-art digital electronics and features make these testers the industry's most accurate, reliable and popular testers in their class.

Features:

- State-of-the-art Ultra digital electronics
- Bright white LED stone illuminator light

Durable and protective spring-loaded retractable ULTRA probe tip
Glowing probe tip indicator
ULTRAgrip rubberized paint finish

- Ergonomic shape with angled probe tip
- Powered by three included user-replaceable long life NiMH rechargeable batteries. Alkaline batteries may be used in place of the NIMH rechargeable batteries if needed. May be used with GemOro ${ }^{\circ}$ UltraDock battery charging stand accessory.
- LED bar graph/beep provides audible and visual alerts
- Auto sleep-mode function
- Protective probe tip cap and carrying case, NiMH rechargeable batteries, AC adaptor/charger, premium leatherette storage box, and loose stone holder included.
- Limited lifetime warranty




## CERES DUAL XL TESTER

Differentiates between natural diamond and all common simulants, as well as moissanite. Operates on three AAA nickel-cadmium rechargeable batteries or on wall adapter.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 8 0 7}$ | Dual XL Tester | $\$ 229.00$ |



## CERES RELIANCE DIAMOND TESTER

Limited warranty, does not cover tip, batteries, or adapter.

- Alkaline-battery powered - Fast, 10-second warm up time
(no adapter)
- Auto shut-off
- Spring-loaded tip
- Metal warning buzzer
- Requires three AA batteries
- Includes carrying case

| Item | Order\# | Description | 1+ |
| :---: | :---: | :---: | ---: |
| A | $\mathbf{5 6 - 7 8 0 4}$ | Diamond Tester | $\$ 135.00$ |
| B | $\mathbf{5 6 - 7 8 0 5}$ | Adapter | $\$ 21.15$ |



CERES AC MODEL DIAMOND TESTER
Limited warranty, does not cover tip, batteries, or adapter.

- AC powered only, no battery - Fast, four-second, warm up time
- Metal warning buzzer
- Loose stone holder
- Spring-loaded tip
- Diamond/simulant test plate
- Auto shut-off

| Order \# | Description | $\mathbf{1 +}$ |
| ---: | :--- | ---: |
| 56-7806 | Reliance Diamond Tester | $\$ 120.00$ |



## CERES CZECKPOINT DIAMOND TESTER

Limited warranty, does not cover tip, batteries, or the adapter.

- Hand-held, portable
- Metal warning buzzer
- Spring-loaded tip
- Audible/visual diamond indicator
- User-replaceable, NI-CAD batteries
- AC adapter
- Includes carrying case
- Auto shut-off
- Fast, 10-second, warm up time

| Order \# | Description | 1+ |
| :---: | :---: | ---: |
| $\mathbf{5 6 - 7 8 0 0}$ | Checkpoint Diamond Tester | $\$ 129.95$ |



## C3 MOISSANITE/DIAMOND TESTER

The C3 Tester is designed to differentiate between colorless and near colorless faceted diamonds and moissanite gemstones only after a thermal probe instrument test has given a "diamond" indication. The C3 Moissanite Tester is a precision fiber optic electronic instrument and must be used in a normal room environment. The C3 Tester can be wall-mounted or used on a counter surface. Operates on 120V, 60 hz , and the current at 120 V . AC is 0.16 A .

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 8 2 0}$ | Moissanite/Diamond Tester | $\$ 41.55$ |

GEMORO® ${ }^{\circledR}$ AURACLE AGT3 DIGITAL
GOLD \& PLATINUM TESTER
The NEW advanced digital AGT3 is the ultimate verification instrument for gold and platinum testing. This state-of-the-art portable handheld tester has exceptional precision, is simple to use and in seconds provides accurate results showing both the digital karat value and gold percentage - Tests all colors of gold from 6K to 24K and tests platinum

- Alphanumeric LCD display shows both karat value and gold percentage
- Two test modes: Fast Test Yellow \& Enhanced Mode
- Easy one-step calibration using either 14K or 18K yellow gold
- Scratch resistant, durable nickel plated stainless steel testing plate
- Auto-check pen probe function
- Sleek, contoured and ergonomic design
- Built-in storage compartment for pen probe
- Easy to read LCD display
- Automatic low battery indicator
- Follow easy steps to identify non-gold, gold plate and gold filled as NA

- Simply touch pen probe to filed gold or platinum and results are shown in seconds
- Replaceable pen probe provides thousands of tests with proper care
- Compact and portable
- Powered by included 9V alkaline battery or 100V-240V AC adaptor INCLUDES: AGT3, pen probe, file, battery, AC adaptor and rubberized carrying case

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 6 1 8}$ | Digital Tester | $\$ 549.00$ |
| $\mathbf{5 6 - 7 6 1 3}$ | Replacement Pen | $\$ 24.95$ |



## GEMORO AURACLE AGT-2 ELECTRONIC MOBILE GOLD AND PLATINUM TESTER

The revolutionary and best performing AuRACLE gold tester has evolved to a new generation in a mobile version that makes it faster, easier, and more convenient than ever before. Amazingly you may now use your favorite Apple iOS or Android device for testing gold and platinum!

- Works with iPhone, iPad, iPod Touch, and Android phones and tablets
- Mobile software application included
- One-touch easy pen probe calibration for consistent results
- Save results instantly for tracking testing history
- Optional downloadable iTune or Android Apps available for increased productivity and screen customization
- World's most user-friendly, best performing handheld electronic gold tester with unmatched accuracy - PATENTED with Patents Pending
- Tests all colors of gold from 6kt to 24kt, and platinum
- Follow easy steps to identify non-gold, gold-plated and gold-filled as NA - Simply touch pen probe to gold or platinum and read the test results on one of two dynamic displays
- Digital bar graph numerical readout, Analog meter readout
- Pen probe provides approximately 5,000 tests with proper care
- No messy gel. No staining chemicals. No dangerous acid.
- Compact and portable
- Small enough to easily fit into your pocket - No external power required - Variable karat gold options may be used to calibrate this instrument INCLUDES: pen probe, file, mobile device stand, testing plate, and easy to follow instructions (mobile device not included)

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 6 0 2}$ | Mobile Tester for Android/Windows Users | $\$ 299.00$ |
| $\mathbf{5 6 - 7 6 0 2}$ | Mobile Tester for Apple Users | $\$ 299.00$ |




## GXL-24 PRO GOLD TESTER

State-of-the-art electronic gold testing technology that allows for the measurement of low to high karat gold products. Assures the buyer of gold content in the most critical gold alloys. UL listed. Three-year warranty. Operates on two 9 -volt batteries (not included). Comes with instructional video.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: |
| A | $\mathbf{5 6 - 7 6 3 0}$ | GXL-24 Pro Gold Tester | $12^{\prime \prime} \times 10^{\prime \prime} \times 3^{\prime \prime}$ | $\$ 510.60$ |

## GT-4000 GOLD TESTER

Accurately measures white, yellow, pink, and green gold along with platinum, in a full range to 24 karat. Accurate to the nearest karat in the 6 to 18 range, plus 20,22 and 24 karat readings. Ecologically safe, does not with not mix harmful chemicals. UL listed. Three-year warranty. - Operates on two 9-volt batteries.

- Instructional video included.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: |
| B | $\mathbf{5 6 - 7 6 3 5}$ | GT-4000 Gold Tester | $12^{\prime \prime} \times 9^{\prime \prime} \times 1^{3 / 4^{\prime \prime}}$ | $\$ 344.80$ |

## GT-3000 GOLD TESTER

The most accurate low-cost tester available. Backed by dependable service, the GT- 3000 measures white, yellow, pink, and green gold in a full range of values from 6 to 18 karat. No mixing of chemicals or fluids. UL Listed. Comes with instructional video.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: |
| C | $\mathbf{5 6 - 7 6 4 0}$ | GT-3000 Gold Tester | $12^{\prime \prime} \times 9^{\prime \prime} \times 1^{3 / 4}$ | $\$ 227.15$ |

## REPLACEMENTS

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{5 6 - 7 6 4 8}$ | Pro Cleaning Solution | $\$ 17.50$ |
| E | $\mathbf{5 6 - 7 6 4 7}$ | Replacement Tester Gel Tube | $\$ 21.35$ |
| F | $\mathbf{5 6 - 7 6 4 9}$ | Replacement 24 Pro Sensor | $\$ 59.75$ |
| G | $\mathbf{5 6 - 7 6 5 0}$ | Replacement 4000 or 3000 Sensor | $\$ 60.45$ |

## GXL-NEXT TESTER

The GXL-Next is the most complete electronic tester in the world. With the ability to test gold, silver, and platinum, it is the only tester you'll ever need. This tester has a full range of karat determaintion from 6 to 24 karats. The quick mode feature instantly test and measures yellow gold in $10,14,18,20,22$, and 24 karats. Also the new mode allows for testing without the push of a button. the GXL-Next does require calibration with each use and is capable of $1000+$ clear and cleanper cartridge. Our liquid testing solution is harmless and contains no toxic chemicals.

| Item |  | Order\# | Description |
| :---: | ---: | :--- | ---: |
| A | $\mathbf{5 6 - 7 6 2 0}$ | GXL-Next Tester | $\mathbf{1 +}$ |
| B | $\mathbf{5 6 - 7 6 2 1}$ | Silver Testing Solution | $\$ 18.00$ |
| C | $\mathbf{5 6 - 7 6 2 1}$ | Gold Testing Solution | $\$ 18.40$ |
| D | $\mathbf{5 6 - 7 6 2 2}$ | AC/DC Power Supply | $\$ 20.40$ |
| E | $\mathbf{5 6 - 7 6 2 2}$ | Silver Sensor | $\$ 51.00$ |
| F | $\mathbf{5 6 - 7 6 2 2}$ | Sensor | $\$ 51.00$ |
| G | $\mathbf{5 6 - 7 6 2 2}$ | Sensor Cap | $\$ 3.10$ |
|  | $\mathbf{5 6 - 7 6 2 2}$ | Test Wire Assembly | $\$ 10.20$ |
|  | $\mathbf{5 6 - 7 6 2 2}$ | Plastic Test Plate with Tri Wire | $\$ 20.40$ |
|  | $\mathbf{5 6 - 7 6 2 2}$ | Stainless Steel Test Plate with 2 Screws | $\$ 15.30$ |

## MIZAR ${ }^{\text {TM }}$ METAL TESTERS

These electronic gold testers accurately and quickly determine gold karat values of yellow, white, green and red gold shown on their LED display. These units can also help identify platinum and can distinguish non-gold or gold plate for the true karat gold. Mizar electronic gold testers are very reliable, safe, fast, portable and are very easy-to-use. Made in the USA.

- NOTE: For accuracy, all testers should be tested on a regular basis
- Uses 9 volt battery (not included)
- Sold with chemicals and has a six month shelf-life after initial opening


## MIZAR ${ }^{\text {TM }}$ M18A9

Determines gold karat values equal to or greater than 10kt, 14kt, 18kt gold, and helps identify platinum. The ET 18 uses a 9 volt battery and has a oneyear limited manufacturer's warranty.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| $H$ | $\mathbf{5 6 - 7 6 0 3}$ | ET18 Gold Tester | $\$ 114.70$ |
| J | $\mathbf{5 6 - 7 6 0 1}$ | Replacement Chemical | $\$ 29.15$ |

MIZAR ${ }^{\text {T" }}$ M24
Determines 9 kt , 10kt, 12kt, 14kt, 16kt, 18kt, 20kt, 22kt and 24kt in seconds. Uses a 9 volt battery. Two-year limited manufacturer's warranty.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| K | $\mathbf{5 6 - 7 6 0 5}$ | M24 Gold Tester | $\$ 199.00$ |
| L | $\mathbf{5 6 - 7 6 0 6}$ | Replacement Chemical | $\$ 31.65$ |




## DELUXE TEST ACID KIT

A must for purchasing, appraising, and testing precious metals. Includes eight compartment wooden box, test acid for 10kt, 14kt, 18kt, 22 kt , and silver. Also includes a gold testing star plate and a black glass testing stone.

| Order \# | Description | Container Volume | 1+ |
| :---: | :---: | :---: | :---: |
| 56-0809 | Deluxe Test Acid Kit |  | \$136.75 |
| 56-8010 | 10kt Gold | 1/202 | \$2.70 |
| 56-8014 | 14kt Gold | 1/202 | \$2.70 |
| 56-8018 | 18kt Gold | 1/202 | \$2.70 |
| 56-8022 | 22kt Gold | 1/202 | \$2.70 |
| 56-8030 | Silver | 1/202 | \$2.70 |



GOLD TESTING KIT
This scale and tester kit contains everything you need to buy and sell gold. Combine the most affordable, accurate trade legal scale on the market with a test acid kit for a lucrative profit center.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{5 1 - 4 0 8 5}$ | A\&D 1200i Scale and Metal Testing | $\$ 319.00$ |



## GOLD TEST PRESENTATION BOX

Used to appraise and test gold, silver, platinum, brass, nickel, and German silver. Shipped in a wooden case which contains three acid bottles with ground-glass stoppers and applicators, test stones, and a set of five testing needles. Acids not included.

| Item | Order\# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| A | $\mathbf{5 6 - 0 8 0 6}$ | 3 Bottle Test Kit | $\$ 78.40$ |
| B | $\mathbf{5 6 - 0 8 0 7}$ | 8 Slot Box (only) | $\$ 17.25$ |
| C | $\mathbf{5 6 - 0 8 0 5}$ | Deluxe Slot Box | $\$ 22.45$ |

## NEUTRALIZER SOLUTION

The JSP neutralizer will prepare a test stone for accurate testing and also help spare your fingers and clothes from burns and stains while using gold testing acid. Simply drop the formula onto the test stone and clean with a tissue to prevent cross contamination with previous tests. If test acid comes in contact with skin or other objects, rub the neutralizing solution on the spill to stop further damage.

| Order \# | Description | Container Volume | 1+ |
| :--- | :--- | :---: | ---: |
| $\mathbf{5 6 - 8 0 0 0}$ | Neutralizer Solution | 502 | $\$ 10.10$ |

## ACID BOTTLES

Replacement bottles for holding chemicals used to test the accuracy of metals. Acids not included.

| Item | Order \# | Description | Container Volume | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 6 - 9 0 0 0}$ | Square Acid Bottle | $1 / 20 z$ | $\$ 5.43$ | $\$ 5.66$ | $\$ 5.90$ |
| B | $\mathbf{5 6 - 9 0 0 1}$ | Round Acid Bottle | $11 / 20 z$ | $\$ 19.27$ | $\$ 20.11$ | $\$ 20.95$ |



## TEST STONES

Used for testing the karat value of gold. Rub the article to be tested and a test needle on the stone and apply a test solution to determine karat value.

| Item | Order \# | Description | W $\times \mathrm{L} \times$ Thickness | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 56-7100 | Stone | $11 / 2^{\prime \prime} \times 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ | \$12.92 | \$13.68 | \$15.20 |
| D | 56-7140 | Genuine Arkansas | $11 / 2^{\prime \prime} \times 2{ }^{1 / 2} 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$17.68 | \$18.72 | \$20.80 |
| E | 56-7101 | Natural River Danube | $11 / 2^{\prime \prime} \times 2 \frac{1}{21} 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ | \$11.22 | \$11.88 | \$13.20 |
| F | 56-7102 | Black Glass | $11 / 2^{\prime \prime} \times 21 / 2^{\prime \prime} \times 3 / 16^{\prime \prime}$ | \$4.68 | \$4.95 | \$5.50 |



## TEST STONES

Larger test stones used for determining the karat value of articles being tested.

| Item | Order \# | Description | $\mathbf{W} \times \mathbf{L} \times$ Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| G | $\mathbf{5 6 - 7 1 3 0}$ | Glass Test Stone | $3^{\prime \prime} \times 6^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 16.66$ | $\$ 17.64$ | $\$ 19.60$ |
| $H$ | $\mathbf{5 6 - 7 1 3 1}$ | Natural Test Stone | $4^{\prime \prime} \times 6^{\prime \prime} \times 3 / 8^{\prime \prime}$ | $\$ 23.80$ | $\$ 25.20$ | $\$ 28.00$ |



## RARE EARTH MAGNET

Check for base metal (non-precious metals containing nickel or iron). Most items attracted by a magnet will not contain precious metal and most refiners will not accept them when you want to sell gold or silver. Neodymium magnets are brittle and can be broken or can splinter. One should wear gloves and protective glasses when handling these magnets. Magnets will lose their magnetic properties if heated above $175^{\circ} \mathrm{F}\left(80^{\circ} \mathrm{C}\right)$.

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 6 - 8 0 0 1}$ | Rare Earth Magnet | $1 / 21 \times 2 " \times 1 / 8^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



## 6 PIECE TEST NEEDLE SET

Includes: 1-8kt, 1-10kt, 1-12kt, 1-14kt, 1-18kt, 1-999s.
Test needle pricing can change with the metal market.

| Order\# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 6 - 7 0 0 6}$ | Test Needle Set | $\$ 47.00$ |



## GOLD TEST STAR PLATE

Solid gold tips that can be used to test for 10 kt , 14kt, 18kt, 21 kt , and 22 kt gold as well as silver. Measures $21 / 4^{\prime \prime}$ in diameter and is provided in a fitted case.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 6 - 7 0 0 7}$ | Test Plate | $\$ 72.25$ | $\$ 76.50$ | $\$ 85.00$ |



LAVAQUE HEAD AND SHANK TWEEZER
The LaVaque locking tweezer allows the user to accurately align the ring shank with the head. The heat resistant, replaceable glass allows the user to view all angles for perfect alignment. The glass is not intended for high heat, such as welding or platinum soldering.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 0 1}$ | Head and Shank Tweezer | $\$ 23.76$ | $\$ 25.16$ | $\$ 27.95$ |
| $\mathbf{5 7 - 6 0 0 2}$ | Glass Lens for LaVaqueTweezer | $\$ 6.16$ | $\$ 6.53$ | $\$ 7.25$ |



IDEAL-TEK STAINLESS STEEL LOCKING TWEEZERS
Made of stainless steel, these tweezers feature serrated tips and handles as well as a locking system.

| Item | Order \# | Tip | Length |  | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-6188 | Fine | $61 / 4^{\prime \prime}$ |  | \$18.66 | \$19.76 | \$21.95 |
| B | 57-6189 | Medium | 61/4" | Grooved | \$18.66 | \$19.76 | \$21.95 |
| C | 57-6190 | Fine | 61/4" |  | \$22.48 | \$23.81 | \$26.45 |
| D | 57-6191 | Medium | 61/4" | Grooved | \$22.48 | \$23.81 | \$26.45 |
| E | 57-6192 | Fine | 61/4" | Grooved | \$18.66 | \$19.76 | \$21.95 |
| F | 57-6193 | Fine | $61 / 41$ | Grooved | \$22.48 | \$23.81 | \$26.45 |



IDEAL-TEK STAINLESS STEEL
NON-LOCKING TWEEZERS
Made of stainless steel, these tweezers offer serrated tips and handles.

| Item | Order \# | Tip | Length |  | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | 57-6182 | Fine | $61 / 4 /$ |  | \$14.83 | \$15.71 | \$17.45 |
| H | 57-6183 | Fine | $61 / 4{ }^{\prime \prime}$ | Grooved | \$14.83 | \$15.71 | \$17.45 |
| J | 57-6184 | Medium | $61 / 4{ }^{\prime \prime}$ |  | \$14.83 | \$15.71 | \$17.45 |
| K | 57-6185 | Medium | $61 / 4 /$ | Grooved | \$17.72 | \$18.77 | \$20.85 |
| L | 57-6187 | Medium | $61 / 4{ }^{1 /}$ | Grooved | \$18.66 | \$19.76 | \$21.95 |



$$
\begin{aligned}
& \square \\
& \hline \\
& \text { Medium/Grooved }
\end{aligned}
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## DUMONT DIAMOND TWEEZERS

The Swiss-made Dumont ${ }^{\circ}$ Diamond tweezers have finely serrated jaws to hold stones and small objects firmly. They offer an improved locking system, a superb finish, and balance with the legendary Dumont ${ }^{\circ}$ flexibility.

| Item | Order \# | Tip | Metal Type | Length | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-6025 | Fine | Stainless Steel | $61 / 2$ " | \$28.90 | \$30.60 | \$34.00 |
| B | 57-6026 | Fine | Black Matte | 61/2" | \$28.90 | \$30.60 | \$34.00 |
| C | 57-6027 | Medium | Stainless Steel | 61/2" | \$28.90 | \$30.60 | \$34.00 |
| D | 57-6028 | Medium | Black Matte | 61/2" | \$26.35 | \$27.90 | \$31.00 |
| E | 57-6029 | Fine Locking | Stainless Steel | 61/2" | \$30.60 | \$32.40 | \$36.00 |
| F | 57-6030 | Fine Locking | Black Matte | 61/2" | \$33.41 | \$35.37 | \$39.30 |
| G | 57-6031 | Medium Locking | Stainless Steel | 61/2" | \$34.68 | \$36.72 | \$40.80 |
| H | 57-6032 | Medium Locking | Black Matte | 61/2" | \$33.41 | \$35.37 | \$39.30 |
| J | 57-6033 | Medium w/ Groove | Stainless Steel | $61 / 2$ " | \$30.56 | \$32.35 | \$35.95 |



## GENUINE SWISS DIAMOND TWEEZERS

Self-locking tweezers. Available in black or matte stainless steel finishes.


## TITANIUM DIAMOND TWEEZERS

Superb quality with serrated points allows the handling of stones with ease. Very light and sensitive.

| Item | Order\# | Tip | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :---: | ---: | ---: | ---: |
| M | $\mathbf{5 7 - 6 2 5 0}$ | Medium | $6^{\prime \prime}$ | $\$ 50.41$ | $\$ 53.37$ | $\$ 59.30$ |
| N | $\mathbf{5 7 - 6 2 6 0}$ | Fine | $6^{\prime \prime}$ | $\$ 49.51$ | $\$ 52.43$ | $\$ 58.25$ |


$\qquad$


## SWISS DIAMOND TWEEZERS

High quality reasonably priced diamond tweezers equal to the quality of more expensive brands. Available in black or matte stainless finish. Made in Italy.

| Item | Order \# | Tip | Metal Type | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-6052 | Fine | Stainless Steel | $61 / 2$ " | \$10.41 | \$11.03 | \$12.25 |
| B | 57-6072 | Fine | Black SS | $61 / 21$ | \$11.48 | \$12.15 | \$13.50 |
| C | 57-6062 | Medium | Stainless Steel | $61 / 2$ " | \$10.41 | \$11.03 | \$12.25 |
| D | 57-6082 | Medium | Black SS | $61 / 2^{11}$ | \$11.48 | \$12.15 | \$13.50 |
| E | 57-6085 | Fine Locking | Stainless Steel | $61 / 2^{11}$ | \$11.48 | \$12.15 | \$13.50 |
| F | 57-6086 | Fine Locking | Black SS | $61 / 2^{11}$ | \$13.18 | \$13.95 | \$15.50 |
| G | 57-6087 | Medium Locking | Stainless Steel | $61 / 2^{11}$ | \$11.48 | \$12.15 | \$13.50 |
| H | 57-6088 | Medium Locking | Black SS | $61 / 21$ | \$13.18 | \$13.95 | \$15.50 |

## RUSHIT INOX TWEEZER

These tweezers are made of a lightweight steel making working with them comfortable for long periods of time. The tweezers feature finely grooved tips to enable a good grip on the diamonds when picking and holding them.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| J | $\mathbf{5 7 - 6 0 4 0}$ | Extra-Fine Grip | $\$ 7.23$ | $\$ 7.65$ | $\$ 8.50$ |
| K | $\mathbf{5 7 - 6 0 4 1}$ | Fine Grip | $\$ 7.23$ | $\$ 7.65$ | $\$ 8.50$ |
| L | $\mathbf{5 7 - 6 0 4 2}$ | Medium-Fine Grip | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |
| M | $\mathbf{5 7 - 6 0 4 3}$ | Large Grip | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |

DIAMOND TWEEZER WITH SCOOP
Fine serrated points, ribbed shanks.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 6 6 0}$ | Tweezers with Scoop | 7 " | $\$ 3.36$ | $\$ 3.56$ | $\$ 3.95$ |

IDEAL-TEK TITANIUM TWEEZERS (NON MAGNETIC)
These tweezers are handcrafted to perfect tip symmetry and balance, with polished edges and superior no-scratch/antiglare satin finish. The right tweezers and material make for a successful application.

| Item | Order \# | Shape | Tip | Length | Style | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-6150 | Straight | Fine | 43/4" | \#1 | \$24.44 | \$25.88 | \$28.75 |
| B | 57-6151 | Extra Sharp | Fine | $41 / 4{ }^{11}$ | \#3C | \$24.44 | \$25.88 | \$28.75 |
| C | 57-6152 | Sharp | Fine | $5 "$ | AA | \$16.11 | \$17.06 | \$18.95 |



IDEAL-TEK PRECISION TWEEZERS
Made of anti-magnetic, anti-acid stainless steel, these tweezers have strong, thick flat edges and a superior finish. Made of chromium, nickel, and molybdenum with low carbon content. Applications include watch making, jewelry, and moderate chemical environments.

## STAINLESS STEEL

| Item | Order \# | Description | Tip | Length | Style | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 57-6161 | Strong Flat Edge |  | $43 / 41$ | \#00 | \$17.72 | \$18.77 | \$20.85 |
| E | 57-6163 | Short |  | 41/4" | \#3C | \$17.72 | \$18.77 | \$20.85 |
| F | 57-6164 |  | Extra Fine | 41/4" | \#5 | \$18.66 | \$19.76 | \$21.95 |
| G | 57-6165 | Curved | Extra Fine | 41/2" | \#7 | \$20.53 | \$21.74 | \$24.15 |
| H | 57-6160 |  | Extra Fine | $51 / 2^{\prime \prime}$ | SS | \$17.72 | \$18.77 | \$20.85 |
| J | 57-6180 | Anti-Magnetic/Anti-Acid |  | $5 "$ | AA | \$9.27 | \$9.81 | \$10.90 |
| K | 57-6181 | Anti-Magnetic/Anti-Acid |  | $5 "$ | MM | \$9.27 | \$9.81 | \$10.90 |



## INOX STEEL

| Item | Order \# | Description | Tip | Length | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | 57-6194 | Diamond | Extra Fine | 61/4" | \$20.61 | \$21.83 | \$24.25 |
| M | 57-6195 | Diamond | Fine | 61/4" | \$20.61 | \$21.83 | \$24.25 |
| N | 57-6196 | Diamond | Medium | 61/4" | \$20.61 | \$21.83 | \$24.25 |
| P | 57-6197 | Diamond | Large | 61/4" | \$20.61 | \$21.83 | \$24.25 |
| 0 | 57-6198 | Diamond | Extra Large | 61/4" | \$20.61 | \$21.83 | \$24.25 |


$\qquad$


## IDEAL-TEK SUPER ALLOY TWEEZERS

Made of chromium, nickel, and molybdenum super alloy, these tweezers offer strong, flat, accurate tips and a superior finish. Application includes aggressive chemical, salt, and acid environments.

- Excellent strength up to $800^{\circ} \mathrm{C}$
- Excellent corrosion resistance to most chemicals
- Six times harder than anti-magnetic stainless steel
- Fully non-magnetic
- Very high, sharp extension

| Item | Order \# | Shape | Tip | Length | Style | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-6171 | Flat Edge |  | 43/4" | \#2A | \$27.16 | \$28.76 | \$31.95 |
| B | 57-6172 | Flat Round |  | 43/4" | \#3C | \$27.16 | \$28.76 | \$31.95 |
| C | 57-6173 | Extra Sharp | Fine | 41/4" | \#5 | \$27.16 | \$28.76 | \$31.95 |
| D | 57-6174 |  | Extra Fine | 41/4" | SS | \$27.16 | \$28.76 | \$31.95 |
| E | 57-6170 |  | Extra Fine | $51 / 2$ " | \#1 | \$27.16 | \$28.76 | \$31.95 |



## IDEAL-TEK BRASS TWEEZERS

These tweezers offer strong, sharp tips. Made of a brass and copper zinc alloy. Good to excellent corrosion resistance. All copper alloys resist corrosion by fresh water and steam. Applications include handling scratch-sensitive parts and watch components.

| Item Order\# |  | Tip | Length | Style | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :---: | :---: | ---: | ---: | ---: |
| F | 57-6178 | Fine | $5 "$ | $\# 2$ | $\$ 17.81$ | $\$ 18.86$ | $\$ 20.95$ |
| G | $57-6179$ | Fine | $4^{3 / 4}$ | $\# 27 C$ | $\$ 17.81$ | $\$ 18.86$ | $\$ 20.95$ |



DUMONT TWEEZERS
Dumont - Finest Quality
Dumont II - Excellent Quality
Pattern \#3C - Excellent for handling all miniature and micro-miniature parts. Shanks have tapered beveled edges with very sharp, honed points.
Pattern \#5 - Ideal for handling microscopic parts. Needle-like shape and sharpness.
Pattern \#7 - Excellent for handling all miniature and micro-miniature parts and components. Curved shanks have beveled edges and points are very sharp with a plain finish.
Pattern A - General utility tweezer used for assembly, inspection, and sorting. Thick shanks with flat edges enable the user to grip and hold the edge as well as the tip. Has plain points with wide blunt tips.
Pattern AA - Used for assembly, sorting, and soldering.
Pattern SS - Anti-acid, non-magnetic tweezer with fine,
long narrow points.

| Item | Order \# | Description | Length | Style | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 57-0400 | Dumont I\| Stainless Steel | $41 / 21$ | \#3C | \$30.35 | \$32.13 | \$35.70 |
| J | 57-5030 | Dumont II Stainless Steel | $41 / 4^{\prime \prime}$ | \#5 | \$28.05 | \$29.70 | \$33.00 |
| K | 57-0420 | Dumont I\| Stainless Steel | $41 / 2^{1 \prime}$ | \#7 | \$34.00 | \$36.00 | \$40.00 |
| L | 57-0430 | Dumont ${ }^{\text {S Stainless Steel }}$ | $41 / 2^{11}$ | A | \$38.21 | \$40.46 | \$44.95 |
| M | 57-5010 | Dumont II Stainless Steel | $43 / 41$ | AA | \$22.53 | \$23.85 | \$26.50 |
| N | 57-0440 | Dumont ${ }^{\text {c Carbon Steel }}$ | 41/2" | SS | \$31.45 | \$33.30 | \$37.00 |
| P | 57-7635 | Dumont ${ }^{\text {T Titanium }}$ | 43/4" | \#3 | \$32.73 | \$34.65 | \$38.50 |
| 0 | 57-7636 | Dumont ${ }^{\circ}$ Titanium | 47/8" | AA | \$30.18 | \$31.95 | \$35.50 |

SWISS PATTERN TWEEZERS SATIN FINISH
The satin soft touch provides a comfortable, non-slip grip. These tweezers provide symmetry and balance for shaping, adjusting, and finishing.

| Item | Order \# | Description | Length | Style | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 57-0570 | Orange Grip Non-Slip | $5{ }^{\prime \prime}$ | \#3 | \$20.19 | \$21.38 | \$23.75 |
| B | 57-0571 | Orange Grip Non-Slip | $5{ }^{\prime \prime}$ | \#0 | \$20.19 | \$21.38 | \$23.75 |
| C | 57-0572 | Orange Grip Non-Slip | $5 "$ | \#2A | \$20.19 | \$21.38 | \$23.75 |
| E | 57-0573 | Orange Grip Non-Slip | $5{ }^{\prime \prime}$ | \#5 | \$24.44 | \$25.88 | \$28.75 |
| F | 57-0574 | Orange Grip Non-Slip | $5{ }^{\prime \prime}$ | \#5A | \$24.44 | \$25.88 | \$28.75 |



## PEER VIGOR PATTERN TWEEZERS

Boley-style tweezers are used for general utility work. Shanks are tapered and have beveled edges.

Pattern AM - Heavy brass version excellent for handling parts that scratch easily.
Pattern NN - A short tweezer for assembly, inspection, and sorting.
Pattern RR - Extra thick, heavy-duty tweezers.
Pattern AA - For assembly, inspection, sorting, soldering.
Pattern MM - Heavy-duty for assembly, sorting, and soldering.

| Item | Order\# | Description | Length | Style | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | 57-5035 | Brass | $5{ }^{\prime \prime}$ | AM | \$25.50 | \$27.00 | \$30.00 |
| H | 57-5042 | Nickel-Plated | 41/21 | NN | \$16.41 | \$17.37 | \$19.30 |
| ECONOMY |  |  |  |  |  |  |  |
| J | 57-5015 | Non-Magnetic | $43 / 4^{11}$ | AA | \$16.66 | \$17.64 | \$19.60 |
| K | 57-5025 | Anti-Magnetic | $5{ }^{\prime \prime}$ | MM | \$9.35 | \$9.90 | \$11.00 |



## PEARL-HOLDING TWEEZERS

Used to hold pearls. Tips are epoxy coated and will not damage pearls.

| Order\# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 + 6 0 1 3}$ | Holding Tweezers | $53 / 4^{\prime \prime}$ | $\$ 10.16$ | $\$ 10.76$ | $\$ 11.95$ |



## BEADING TWEEZERS

Fiber tips make these tweezers a must for handling pearls or beads.
Tips will not scratch round objects being held or sorted.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 1 8}$ | Beading Tweezers | $6 "$ | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |


"SOFTIE" STONE TWEEZERS


Never worry about damaging the edges of soft stones with our new "Softie" stone tweezer. It features nylon attached to a fine stainless steel shank that gives this stone handling tool a nice tooth.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 5 3 0}$ | Softie Stone | $61 / 2^{\prime \prime}$ | $\$ 4.42$ | $\$ 4.68$ | $\$ 5.20$ |



## GEM HOLDER

Used to hold stones or other small items for examination. Four-prong jaws. Spring-loaded with contracting wire jaws.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 7 - 6 3 5 0}$ | Gem Holder | $21 / 4^{\prime \prime}$ | $\$ 3.36$ | $\$ 3.56$ | $\$ 3.95$ |



## STONE/DIAMOND POCKET HOLDER

Used to hold stones securely. Wire jaws contract into body, and plunger in end opens wire jaws. Small enough to fit in pocket.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 1 5}$ | Stone Pocket Holder | $2 "$ | $\$ 4.76$ | $\$ 5.04$ | $\$ 5.60$ |



PRONGED HOLDING TWEEZERS
Used for gripping and holding small objects such as stones and diamonds. Plunger in handle opens wire jaws that contract into handle.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| A | $\mathbf{5 7 - 6 0 1 6}$ | 3-Prong Holder | $43 / 4^{\prime \prime}$ | $\$ 4.76$ | $\$ 5.04$ | $\$ 5.60$ |
| B | $\mathbf{5 7 - 6 0 1 7}$ | 4-Prong Holder | $43 / 4^{11}$ | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |

## EASY LOOP GEM HOLDER

The Easy Loop Gem Holder gently holds delicate stones the correct way for viewing. The two prongs hold the stone by its girdle to prevent scratching.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 57-6021 | Easy Loop Gem Holder | $41 / 2 "$ | $\$ 4.38$ | $\$ 4.64$ | $\$ 5.15$ |

LONG SOLDER/UTILITY TWEEZERS
Heavy-duty tweezer, extra long with straight serrated points.
Made of stainless steel.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 5 0 5}$ | Long Solder Tweezer | $7^{\prime \prime}$ | $\$ 4.89$ | $\$ 5.18$ | $\$ 5.75$ |

## SOLDERING TWEEZERS

Zirconia ceramic precision tips. Contamination-free, and high temperature $\left(1500^{\circ} \mathrm{C}\right)$ wear and solder resistant. Stainless steel handles. Alignable replaceable tips system.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 7 - 6 2 0 0}$ | Soldering Tweezers | $43 / 4^{\prime \prime}$ | $\$ 26.99$ | $\$ 28.58$ | $\$ 31.75$ |
| B | $\mathbf{5 7 - 6 2 0 1}$ | Soldering Tweezers | $43 / 4^{\prime \prime}$ | $\$ 26.99$ | $\$ 28.58$ | $\$ 31.75$ |

## HEAD AND SHANK SOLDERING TWEEZER

Slide-locking, stainless steel tweezers with a curved, grooved tip and a flat, serrated base. Design holds setting and shank in position for easy soldering.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 0 0}$ | Soldering Tweezers | $51 / 2^{11}$ | $\$ 7.61$ | $\$ 8.06$ | $\$ 8.95$ |

RING SOLDERING TWEEZERS
Holds ring from inside for easy soldering. Also holds two rings being soldered together as a set, which makes it ideal for wedding band sets.


| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 8 - 2 3 0 0}$ | Ring Soldering Tweezers | $41 / 4^{\prime \prime}$ | $\$ 4.68$ | $\$ 4.95$ | $\$ 5.50$ |

## HALF-SHANK TWEEZER

Made specifically for the difficult task of holding half or quarter shanks in place while soldering with no fumbling or misalignment. Made of stainless steel with a third-hand base. Top arm of the tweezer swings out of the way when not in use.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| C | $\mathbf{5 7 - 7 6 5 7}$ | Half-Shank Tweezer with Base | $\$ 18.70$ | $\$ 19.80$ | $\$ 22.00$ |
| D | $\mathbf{5 7 - 7 6 5 8}$ | Half-Shank Tweezer | $\$ 12.96$ | $\$ 13.73$ | $\$ 15.25$ |



COPPER TONGS
Used for pickling and acid solutions. Will not contaminate solutions or corrode.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| E | $\mathbf{5 7 - 0 6 9 0}$ | Curved Tip | $8 \frac{1}{2} / 2^{\prime \prime}$ | $\$ 6.38$ | $\$ 6.75$ | $\$ 7.50$ |
| F | $\mathbf{5 7 - 0 6 9 1}$ | Fishtail Tip | $8 \frac{1}{2} / 2^{\prime \prime}$ | $\$ 6.29$ | $\$ 6.66$ | $\$ 7.40$ |




TUNGSTEN TIPPED TWEEZERS
Tungsten-tipped tweezers designed for platinum soldering. Crosslocking, fiber-grip tweezers with replaceable tungsten-carbide tips.

| Item | Order \# | Description | Length |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 7 - 6 2 8 0}$ | Tungsten-Tipped Tweezers | $83 / 4^{11}$ | $\$ 40.08$ | $\$ 42.44$ | $\$ 47.15$ |  |
| D | $\mathbf{5 7 - 6 2 8 1}$ | Replacement Tips Set of 2 | $83 / 4^{11}$ | $\$ 8.29$ | $\$ 8.78$ | $\$ 9.75$ |  |



CROSS-LOCKING REVERSE-ACTION TWEEZERS
Used to hold objects for soldering. Can also be used in a variety of general applications. When pressure is applied to the handles, tips open. Once pressure is released from the handles, tips automatically close. Made of nickel-plated steel. Excellent heat sink when soldering.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| E | $\mathbf{5 7 - 7 6 1 5}$ | Blunt/Serrated Points | $61 / 2^{\prime \prime}$ | $\$ 4.00$ | $\$ 4.23$ | $\$ 4.70$ |
| F | $\mathbf{5 7 - 7 6 2 0}$ | Sharp/Serrated Points | $61 / 2^{\prime \prime}$ | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |
| G | $\mathbf{5 7 - 7 6 2 5}$ | Sharp Points | $43 / 4^{\prime \prime}$ | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |



## 5-PIECE SOLDER/UTILITY TWEEZER KIT

Contains two self-closing general purpose tweezers and three utility/solder types in a deluxe pouch.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 7 - 6 0 3 8}$ | Solder/Utility Kit | $\$ 26.35$ | $\$ 27.90$ | $\$ 31.00$ |



## 4-PIECE UTILITY TWEEZER KIT

Four popular tweezers in a handy PVC pouch. The set features the following styles: $43 / 4^{" 1}$ general purpose, $61 / 2$ " insulated cross-locking, $61 / 2^{\prime \prime}$ bent nose, and $41 / 2^{\prime \prime}$ cross-locking tweezer.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 57-6037 | Utility Tweezer Kit | $\$ 9.31$ | $\$ 9.86$ | $\$ 10.95$ |

## HEMOSTAT FORCEPS

Used as clamps when working with small articles. Made of stainless steel. Box-joint construction and serrated jaws allow firm holding. Contains three-position locking device.

| Item | Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| A | $\mathbf{4 6 - 4 5 4 5}$ | Straight Forceps | $5^{\prime \prime}$ | $\$ 5.74$ | $\$ 6.08$ | $\$ 6.75$ |
| B | $\mathbf{4 6 - 4 5 5 0}$ | Curved Forceps | $5^{\prime \prime}$ | $\$ 5.53$ | $\$ 5.85$ | $\$ 6.50$ |



## STEAMOSTAT

Made of stainless steel, the Steamostat features PVC-covered tips for holding jewelry while steam cleaning.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{4 6 - 4 5 5 5}$ | Steamostat | $8^{\prime \prime}$ | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |



## ECONOMICAL STEAM TWEEZERS

Chrome-plated. Chemical resistance is provided by the plastic coating on tips. Plastic coating may vary in color.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 9 2 0 0}$ | Steam Tweezers | $10 "$ | $\$ 6.16$ | $\$ 6.53$ | $\$ 7.25$ |



## COATED FORCEPS/STEAM TWEEZERS

Used for handling items being steamed and/or cleaned in ultrasonics. Plastic coating on tips provide chemical resistance along with a firm grip for retrieving items without scratching. Made of nickel-plated steel. Plastic coating may vary in color.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :---: | ---: | ---: | ---: |
| C | $\mathbf{5 7 - 7 5 1 0}$ | Cross-Locking | $61 / 2^{\prime \prime}$ | $\$ 9.99$ | $\$ 10.58$ | $\$ 11.75$ |
| D | $\mathbf{5 7 - 7 5 1 5}$ | Straight | $8^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |
| E | $\mathbf{5 7 - 7 5 1 6}$ | Straight | $100^{\prime \prime}$ | $\$ 10.20$ | $\$ 10.80$ | $\$ 12.00$ |

## BAMBOO TWEEZERS

Tweezers made from bamboo have a gentle grip and will not damage small delicate objects. Bamboo tweezers are highly recommended for use in optical inspection and production environments. They have excellent insulation and are chemical-resistant.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| F | $\mathbf{5 7 - 7 5 1 7}$ | Small Pointed | $6^{\prime \prime}$ | $\$ 4.04$ | $\$ 4.28$ | $\$ 4.75$ |
| G | $\mathbf{5 7 - 7 5 1 8}$ | Large Pointed | $97 / 8^{\prime \prime}$ | $\$ 4.21$ | $\$ 4.46$ | $\$ 4.95$ |
| H | $\mathbf{5 7 - 7 5 1 9}$ | Large Flat Blunt | $7^{\prime \prime}$ | $\$ 4.89$ | $\$ 5.18$ | $\$ 5.75$ |

## PLASTIC TWEEZERS

Plastic tweezers for handling watch batteries or electronic parts for watches.

| Item | Order\# | Color | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :---: | ---: | ---: | ---: |
| J | $\mathbf{5 7 - 7 5 2 0}$ | White | $41 / 2$ " $^{\prime \prime}$ | $\$ 0.77$ | $\$ 0.81$ | $\$ 0.90$ |
| K | $\mathbf{5 7 - 7 5 2 2}$ | Red | $5^{\prime \prime}$ | $\$ 1.23$ | $\$ 1.31$ | $\$ 1.45$ |
| L | $\mathbf{5 7 - 7 5 2 1}$ | Orange | $7^{\prime \prime}$ | $\$ 1.27$ | $\$ 1.35$ | $\$ 1.50$ |

## SCREW-HOLDING TWEEZERS

Ideal for battery clamps and screws, the v-shaped notch makes it possible to hold the smallest screws for assembly.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 57-7525 | Screw-Holding Tweezers | $43 / 8^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |

## SPLIT RING TWEEZERS

An easy-to-use tweezer for opening small to medium split rings. Just put the split ring under the claw and squeeze. The tweezer is made of stainless steel.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 6 4 0}$ | Split Ring Tweezers | $41 / 2^{\prime \prime}$ | $\$ 4.21$ | $\$ 4.46$ | $\$ 4.95$ |

## ECONOMY BOLEY STYLE TWEEZER

General-utility tweezer for handling miniature parts. Heavier than style AA. Shanks are slightly longer, and the corner of the handle is rounded.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 5 0 2 0}$ | Boley Style Tweezer | $5 "$ | $\$ 3.40$ | $\$ 3.60$ | $\$ 4.00$ |

SMALL SOLDERING/UTILITY TWEEZER
Heavy-duty tweezer with beveled edge. Points are sharp and beveled. Made of nickel-plated steel.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 57-7500 | Soldering/Utility Tweezer | $43 / 4^{\prime \prime}$ | $\$ 4.59$ | $\$ 4.86$ | $\$ 5.40$ |



| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 7 - 7 3 0 2}$ | Tweezer with Strong Tips | 5" | $\$ 18.57$ | $\$ 19.67$ | $\$ 21.85$ |
| B | $\mathbf{5 7 - 7 3 0 3}$ | Replacement Tips for 57-7302 |  | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |
| C | $\mathbf{5 7 - 7 3 0 4}$ | Tweezer with Very Fine Tips | 5" | $\$ 21.68$ | $\$ 22.95$ | $\$ 25.50$ |
| D | $\mathbf{5 7 - 7 3 0 5}$ | Replacement Tips for 57-7304 |  | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |

## JEWEL PICKERS

The Jewel Picker is the ultimate tool for jewelry making, beading, stone setting, etc. This unique item was designed to replace sticky wax as a means to pick up stones to place them in a setting during the stone setting operation. The advantage of using this stick is that you can place your item with pin-point control. No more struggling with tweezers. When tip becomes dirty, just use steam, wash with warm water, or simply roll on adhesive tape to clean it up.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{5 7 - 0 4 5 1}$ | Small | $\$ 8.20$ | $\$ 8.69$ | $\$ 9.65$ |
| F | $\mathbf{5 7 - 0 4 5 0}$ | Medium | $\$ 8.20$ | $\$ 8.69$ | $\$ 9.65$ |



A


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| Item | Order\# | Title/Description | 1+ |
| :---: | :---: | :--- | :--- | :---: |
| A | $\mathbf{6 2 - 4 5 1 1}$ | Practical Clock Repairing. By Donald de Carle, FBHI. Deals with the usual faults likely to develop in each type of movement in general <br> use, from grandfather to alarm clocks. All tools and equipment are described and illustrated, along with information on proper use. With <br> 400 illustrations. Hardcover, 240 pages. | $\$ 53.20$ |
| B | $\mathbf{6 2 - 4 5 1 4}$ | Practical Watch Repairing. By Donald de Carle, FBHI. This book contains 550 illustrations describing the theories and processes of <br> repairing and adjusting the modern watch precisely and with meticulous detail. Hardcover, 299 pages. | $\$ 17.60$ |
| C | $\mathbf{6 2 - 4 5 1 3}$ | Repairing Clocks \& Watches. By Anthony Whiten. Geared for the less affluent collector. Concentrates on the more common timepieces <br> available and how to deal with each component, suggesting original short cuts and ingenious ideas for making simple tools. Step-by-step <br> sequences and complete movements with all important parts identified in position. High readability and originality. Hardcover, 296 pages. | $\$ 50.95$ |
| D | $\mathbf{6 2 - 4 4 3 7}$ | Ring Repair. By Alan Revere. This is the first of six books on jewelry repair based on Alan Revere's long running series in JCK Magazine. <br> Follow 15 ring repairs ranging from a simple stretching job to installing a spring insert, enlarging a bi-color shank, replacing a platinum <br> half-shank, adding an adjustable ring mechanism, and more. With 143 close-up color images, 91 sketches, and 125 pages, this book is <br> essential for anyone doing repairs at the bench. Softcover, 125 pages. | $\$ 70.80$ |
| E | $\mathbf{2 1 - 0 4 9 6}$ | 22-Page Instruction Booklet (only). Tools designed to revolutionize your wax carving process. Master modelmaker and educator <br> Kate Wolf shares her 25 years of wax carving experience. Her wax carving tools are a must for you, the wax carver, to experience new <br> techniques illustrated in her book. Softcover, 25 pages. | $\$ 13.3$ |



| Item | Order \# | Title/Description | G |
| :---: | :--- | :--- | :--- |
| G2-4440 | Practical Casting. By Tim McCreight. A handy, bench reference for casters that thoroughly covers model making, sprueing, investing, <br> vacuum, and centrifugal and sand casting. It also covers unusual techniques such as steam and sling casting. A complete appendix <br> includes charts and tables not available elsewhere. Softcover, 122 pages, spiral-bound book. | $\$ 19.35$ |  |
| H | $\mathbf{6 2 - 4 4 3 2}$ | Centrifugal or Lost Wax Jewelry Casting. By Murray Bovin. This well-illustrated book is a must for anyone who does professional <br> work. Covers mold making, waxing, forming, investing, burnout, and casting. Also contains charts, tables, and descriptions. Softcover, <br> 144 pages, spiral-bound book. | $\$ 24.00$ |
| J | $\mathbf{6 2 - 4 4 5 4}$ | Jewelry Wax Molding. By Adolfo Mattielo. This book takes you step by step through all aspects of design, layout, and carving with <br> Matt <br> for wax designers. 161 pages. | $\$ 59.10$ |
| K | $\mathbf{6 2 - 4 4 7 9}$ | Wax Molding. By Adolfo Mattielo. This is an instructional book that shows how to get the most out of the Matt-Gun and extruding <br> technique. Softcover, 113 pages. | $\$ 27.55$ |
| L | $\mathbf{6 2 - 5 5 0 2}$ | Hinges and Hinge-Based Catches. Charles Lewton-Brain analyzes hinges and hinge-like mechanisms and focuses on the design of <br> all types of pins for the many different hinges. His guiding prin ciples in each section touch on the basic hinge to the hard to make cast <br> type hinge. Softcover, 112 pages with 200 line drawings. | $\$ 35.55$ |
| M | $\mathbf{6 2 - 4 4 5 9}$ | Experts Guide to Graver Sharpening. This DVD is sponsored by Sam Alfano. He will teach the professional jeweler with step-by-step <br> close-ups of how to sharpen square, flat, and round gravers. Get the tips and tricks to engraving. DVD, 1 hour. | $\$ 50.95$ |



| Item | Order \# | Title/Description | 1+ |
| :---: | :---: | :--- | :--- | :--- |
| A | $\mathbf{6 2 - 4 4 9 8}$ | The AJM Handbook. MJSA/AJM Press has printed expert advice on how to adapt business strategies that streamline financial control <br> and create healthy profit margins. Softcover, 96 pages. | $\$ 22.45$ |
| B | $\mathbf{6 2 - 4 3 8 8}$ | Gellars Blue Book Version 5.0. This new Gellar's blue book set concentrates on jewelry repairs. How to set your price for repair prices <br> and stay profitable with the sensitive customer. 1 package set. | $\$ 423.30$ |
| C | $\mathbf{6 2 - 4 4 3 0}$ | Jewelers Resource. A reference of gems, metals, formulas, and terminology for jewelers. A unique, practical tool that serves as <br> the most complete counter reference available to the retail jeweler. Covers areas such as mathematical formulas, measurements, <br> conversions, and comparison tables. The book offers extensive listing of gems and gem properties; diagrams of more than 40 gem-cutting <br> styles; legal standards for diamond, gold, and silver marketing; numerous formulas and chemical preparations; and much more. <br> Softcover, 112-page, spiral-bound book. | $\$ 24.70$ |
| D | $\mathbf{6 2 - 4 5 9 0}$ | Jewelry Handbook. Practical guide to selecting the right jewelry for your lifestyle, budget, and body type. You'll learn the benefits and <br> drawbacks of various setting styles, mountings, chains, and metals. | $\$ 22.45$ |
| E | $\mathbf{6 2 - 4 4 3 4}$ | Jewelry Making. By Murray Bovin. Excellent book written in clear, easy to understand terms. Contains photographs and diagrams of <br> fundamental processes and techniques such as enameling, plating, and etching. Softcover, 288-page, spiral-bound book. | $\$ 32.15$ |
| F | $\mathbf{6 2 - 4 4 3 6}$ | Jewelry Concepts and Technology. By Oppi Untracht. Excellent reference book for all jewelers. Contains 1,700 photographs that <br> illustrate step-by-step instructions. Also contains measurement tables, conversion charts, refining procedures, quality control, plus a <br> history of the origin of jewelry making. Hardcover, 864-page book. | $\$ 135.00$ |



G


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| Item | Order \# |
| :---: | :---: |
| $G$ | $62-4445$ |
| $H$ | $62-4463$ |
| J | $62-4482$ |
| $K$ | $62-4475$ |
| $L$ | $62-4396$ |

Title/Description
The Jewelers Bench Reference. This book by Harold O'Connor clearly and concisely explains all types of jewelry-making techniques. Instructions on the care and use of equipment. Contains vital information about fabricating, soldering, stone setting, plating, and casting. Could be considered a problem-solving handbook. Softcover, 67 page, spiral-bound book.
The Jewelers Bench Book. In The Jeweler's Bench Book, acclaimed metalsmith Charles Lewton- Brain offers expert advice on how you can choose the bench that best meets your needs-then modify it for maximum efficiency. With plentiful full-color illustrations, The Jeweler's Bench Book covers everything from the basics of bench design to ingenious tips for tool storage and arrangement. It also includes real-life "tours" of how renowned jewelers have set up their own bench areas.
101 Bench Tips for Jewelers. Bench Tips simply makes the jewelers life more productive. The tips or trade secrets cover soldering, stone setting, and final polishing. This is an everyday bench source. Softcover, 120 pages.
At The Bench. By Stuller's very own experts: Gregg Todd and Greg Gilman. Double awardwinning book based on the popular AJM column of the same name, At the Bench offers step-by-step, illustrated instruction on the repair and fabrication of gold and silver jewelry, as well as insight into common alloys, bench preparation, safe practices for bench jewelers, and tips for taking in repairs. With more than 200 full-color photographs and countless tips, this book is destined to earn a spot near every jeweler's bench.
Adventures at the Bench. Renowned platinumsmith Jurgen J. Maerz offers his best bench tricks from innovative uses for clothespins and table salt to ingenious homemade tools, as well as relates lessons learned from his earliest days as an apprentice. He also provides illustrated step-by-step guides on everything from the basics of fabricating platinum sheet, alloy, and chain to using the jeweler's newest best friend, the laser. "This book is full of clever tips, shortcuts, and homemade tools: Read through this book, and see if you aren't amazed at the information it holds," says Alan Revere, noted designer, author, and founder of the Revere Academy of Jewelry Arts.


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| Item | Order\# | Title/Description | A |
| :---: | :---: | :--- | :--- |
| $\mathbf{6 2 - 4 4 6 5}$ | Gemstone Buying Guide. By Reneé Newman, GG. Written for both consumers and professionals in an easy-to-read format, this guide <br> features more than 150 colored photos. A comprehensive guide to evaluating, identifying, selecting, and caring for a variety of colored <br> gemstones. 148 pages. | $\$ 24.50$ |  |
| B | $\mathbf{6 2 - 4 4 9 9}$ | Colored Gemstone Guide Edition 3. The author, Antoinette Matlins, also wrote, Jewelry \& Gems. This buying guide has been updated <br> and expanded on how to select, buy, care for, and enjoy colored gems. Softcover, 199 pages. | $\$ 24.70$ |
| C | $\mathbf{6 2 - 4 4 9 7}$ | Working with Gemstones. Author's Arthur Skuratowicz and Julie Nash share their insights on how to work on gem-set jewelry. The <br> book discusses the various gemstones that react to heat and pressure, mountings modifications, and what tools to use for the different <br> characteristics of the gemstones being mounted. Softcover. | $\$ 37.25$ |
| D | $\mathbf{6 2 - 4 4 6 7}$ | Gem Identification Made Easy. By Antoinette L. Matlins \& A.C. Bonanno. This book explains in nontechnical terms how to use pocket, <br> portable, and laboratory instruments to identify diamonds and colored gems. It also shows how to separate real gems from imitations and <br> look-a-likes. Hardcover, 270 pages. | $\$ 37.70$ |
| E | $\mathbf{6 2 - 4 5 0 0}$ | Gemstone Weight Estimation. By Charles I. Carmona, G.G. This handbook gives you all of the formulas and tables necessary to help you <br> learn to confidently and accurately estimate the weights of all mounted gemstones. This handbook is a must for the workbench, desktop, <br> and/or library of anyone related to the jewelry trade. Softcover, 400 pages. | $\$ 63.75$ |
| F | $\mathbf{6 2 - 4 4 8 6}$ | Gem Care Book. Fred Ward's revised edition illustrates that gems have different characteristics, hardnesses, toughnesses, and their <br> susceptibility to heat, light, and acids. The author's tips help with keeping your gems safe.Softcover, 33 pages. | $\$ 0.00$ |




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| Item | Order \# | Title/Description | 1+ |
| :---: | :---: | :---: | :---: |
| A | 62-4466 | The Pearl Buying Guide. By Reneé Newman, GG. An indispensable guide with details on judging pearl quality and value. Written in easy-to-read, everyday English by consumer author Reneé Newman, a gemologist with broad experience in pricing, evaluating, and selling gemstones and jewelry. 156 pages. | \$25.70 |
| B | 62-4478 | The Pearl Book. By Antoinette Matlins. This revised and updated third edition is a comprehensive, authoritative guide that tells readers everything they need to know about pearls to fully understand and appreciate them, and avoid any unexpected - and costly disappointments, now and in future generations. 232 pages. | \$24.50 |
| C | 62-4413 | Pearl \& Bead Stringing. Excellent step-by-step video by Henrietta Virchick teaches you how to make a beautiful mother of pearl necklace and bracelet. It includes various techniques for creating genuine, precious and semi-precious high-fashion jewelry. Video is very useful for beginners or experienced craftsmen. Running time: 50 minutes. | \$35.20 |
| D | 62-4476 | Diamond Buying Guide. By Antoinette Matlins. This comprehensive guide, from diamond expert and best-selling author Antoinette Matlins, is the "unofficial bible" for all diamond buyers who want to get the most for their money. 220 pages. | \$19.90 |
| E | 62-4455 | Straight Talk on Diamonds. By Barry Ellin. Straight Talk on Diamonds is a short course on diamonds, explaining diamond quality in a clear and concise manner. The book and CD set stresses how the different quality factors affect value. The book contains dozens of pictures and diagrams that are easy to follow. This book and CD set is a valuable learning tool and is perfect for salespeople at jewelry stores or anyone new to the field of diamonds. | \$87.75 |




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| Item | Order \# | Title/Description | 1+ |
| :---: | :--- | :--- | :--- | :--- |
| F | $\mathbf{6 2 - 4 4 2 7}$ | Diamond Setting Manual. By Robert R. Wooding. This manual is an incredible source for common diamond setting procedures. It <br> is intended for experienced professional diamond setters, as well as students under the supervision of a qualified, diamond setting <br> instructor. The text is divided into 17 units of instruction and presented in step-by-step sequence. This manual will help diamond setters <br> to progress to high echelons of diamond setting. Softcover, 223 pages, spiral-bound book. | $\$ 40.75$ |
| G | $\mathbf{6 2 - 4 4 2 1}$ | Diamond Setting. By Robert R. Wooding. The most complete, diamond setting book available. Basic enough to be understood by an <br> apprentice who has little jewelry background. It is also sufficient in depth to benefit an experienced diamond setter. Teaches basic and <br> advanced diamond setting with complete step-bystep details for a variety of procedures. Contains illustrated line drawings of necessary <br> tool preparation, techniques, and procedures. Alternative methods to setting diamonds are also included. Hardcover, 178 pages. | $\$ 30.55$ |
| H | $\mathbf{6 2 - 4 4 2 3}$ | Channel Setting Diamonds. By Robert R. Wooding. The most advanced, instructional book for channelsetting diamonds. Book is <br> divided into two general sections. The first describes each phase of the channel-setting procedure in-depth. The second describes a <br> variety of complete channel-setting procedures illustrated. Topics covered include: inspection, layout, cutting channels, cutting bearings, <br> inlaid channels, finishing, basic closed channel, basic open channel, curved channels, tapered channels, angular channels, and securing <br> diamonds. Hardcover, 136 pages. | $\$ 32.15$ |
| J | $\mathbf{6 2 - 4 3 9 5}$ | The Art of Setting Princess Cuts. Hundreds of tips for the stone setter to set princess-cut and fancy-cut stones in standard and <br> V-prong settings. DVD, two hours, 30 minutes. | $\$ 181.60$ |
| K | $\mathbf{6 2 - 4 4 2 2}$ | Bead-Setting Diamonds with Pavé Applications. By Robert R. Wooding. Step-by-step instruction book on bead setting from a <br> simple operation with one stone to pavé setting many stones. Provides more than 250 close-up photographs of bead-setting tasks <br> supported by detailed line drawings where necessary, to clarify each phase of bead setting. Presented in-depth is tool preparation | $\$ 30.55$ |
| required to raise beads from plate metal and bright cutting. Hardcover, 192 pages. |  |  |  |

L 62-4391
(Tis video focuses on bead and bright-cut diamond seting. These skills are regarded as a necessary part of advanced bench work. You will learn how to bead-set stones and set multiple small stones in an easy-to follow sequence. From drilling and sizing the stone seats to raising each bead through final bright cuts, and you will see how to exactly do it. Running time: 2 hours.

| Item | Order \# | Title/Description | 1+ |
| :---: | :---: | :---: | :---: |
| A | 62-4447 | Moods in Wire. By Ed Sinclair. This book, with several hundred illustrations and 111 pages of explanation, provides a clear introduction to wire wrapping. Learn to make simple and fancy rings, bracelets, earrings, crosses, stick pins, and pendants. Softcover, 112 pages, spiral-bound book. | \$30.55 |
| B | 62-4435 | The Art of Engraving. By James B. Meek. A magnificent book that includes text, photographs, and drawings ranging from design and layout to selecting proper tools and equipment. This book offers a detailed introduction in layman's terms. The main focus is on gun engraving, but the techniques can be universally applied. Hardcover, 196 pages. | \$47.60 |
| C | 62-4453 | Jewelry Engravers Manual. This book concentrates on jewelry engraving with special emphasis on lettering, monogramming, and ring engraving. Use of tools and proper work techniques are clearly described. Softcover, 143 pages. | \$9.70 |
| D | 62-4397 | Successful Jewelry Engraving. Sam Alfano presents this instructional video designed to get you up to speed in the jewelry engraving field quickly. Learn basic to advanced techniques that local stores and manufacturers demand. Learn high-end techniques of relief engraving, sculpting, bright-cut leaf borders, and more. Enjoy 120 minutes of close-up video focusing on ring engraving. | \$54.10 |
| E | 62-4393 | Engraving Methods and Techniques DVD. This two-DVD set puts years of engraving experience into a four-hour video presentation. Three of the world's most popular engraving methods are shown: hand engraving, chasing hammer engraving, and powerassisted hand engraving. | \$40.75 |
| F | 62-4399 | The Platinum Expert Vol. IV. The popularity of platinum jewelry has created a demand for accurate information for the bench jeweler. Explore how to work and fabricate platinum jewelry. DVD; 60 minutes. | \$0.00 |



| Item | Order \# | Title/Description | 1+ |
| :---: | :---: | :--- | :--- |
| G | 62-4433 | Silversmithing and Art Metal. By Murray Bovin. Excellent reference guide for all who do metalsmithing. Contains step-by-step text, <br> detailed diagrams, and photographs of metal working, forming techniques, and the decorative process. Softcover, 184-page book. | $\$ 25.50$ |
| H | $\mathbf{6 2 - 4 4 7 1}$ | The Complete Metalsmith. By Tim McCreight. An illustrated handbook describing everything from metals and their properties to tools <br> and how to use them. Easy-to-follow index makes the answers easy to find. Softcover, 150 pages. | $\$ 21.40$ |
| J | $\mathbf{6 2 - 4 4 8 8}$ | Student Edition. This Student Edition (160pgs) is perfect for hobbyists, students, and others who are just getting started in <br> metalworking. It covers the basics including a section on metal clay. This Professional Edition (312pgs) covers the same material but goes <br> into greater depth with expanded information for serious artists. | $\$ 15.90$ |
| J | $\mathbf{6 2 - 4 4 8 8}$ | Professional Edition. This Student Edition (160pgs) is perfect for hobbyists, students, and others who are just getting started in metal- <br> working. It covers the basics including a section on metal clay. This Professional Edition (312pgs) covers the same material but goes into <br> greater depth with expanded information for serious artists. | $\$ 31.80$ |
| K | $\mathbf{6 2 - 4 4 0 1}$ | The Complete Metalsmith Video. A video encyclopedia that covers basic jewelry-making techniques. Some of the processes included <br> are elements of joining, cutting, forming, and surface techniques. Also included is a section illustrating techniques for making three <br> pieces of jewelry. Running time: 70 minutes. | $\$ 33.50$ |
| L | $\mathbf{2 1 - 0 5 4 1}$ | Matt Techniques of Jewelry IIlustration and Color Rendering Kit. This book provides a splendid array of methods and styles of <br> jewelry illustrations. It includes a method of quick sketching based on the use of templates to guide the beginner as well as the advanced <br> student in the production of precise renderings. Hardcover, 150 pages. | $\$ 44.90$ |

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## WATCHBAND SELLING SYSTEMS

Selling watchbands couldn't be easier. Our selling systems include spinners, folders, and a space-saving cabinet. Each interchangeable system conveniently displays our best-selling bands and bracelets, giving your customer a multitude of choices. Customize a combination that works for your store.


## SINGLE SPINNER

Houses 84 straps or bracelets and 14 trays. One tray in each face of the spinner and 10 trays in center storage. Measures 13" x 13" x 12 " closed.
61-5403 Leather/Metal Spinner with 48 straps, 30 metal bracelets; 14 trays
61-5408 Metal Spinner with 54 metal bracelets and 14 trays
61-5407 Leather Spinner with 84 leather straps and 14 trays

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{6 1 - 5 4 0 3}$ | Single Leather/Metal Watchstrap Spinner | $\$ 649.00$ |
| $\mathbf{6 1 - 5 4 0 8}$ | Single Metal Watchstrap Spinner | $\$ 599.00$ |
| $\mathbf{6 1 - 5 4 0 7}$ | Single Leather Watchstrap Spinner | $\$ 549.00$ |



## DOUBLE SPINNER

Houses 168 straps or bracelets and 28 trays. Two trays in each face of the spinner and 20 trays in center storage. Measures $13^{\prime \prime} \times 13^{\prime \prime} \times 22^{\prime \prime}$
61-6491 Leather/Metal Spinner with 75 straps, 30 metal bracelets,
and 16 center storage trays
61-6493 Metal Spinner with 72 bracelets and 16 storage trays
61-6494 Leather Spinner with 120 watchbands and 16 center storage trays

| Order \# | Description | 1+ |
| :--- | :--- | :--- |
| $\mathbf{6 1 - 6 4 9 1}$ | Double Leather/Metal Watchstrap Spinner | $\$ 899.00$ |
| $\mathbf{6 1 - 6 4 9 3}$ | Double Metal Watchstrap Spinner (Ladies' and Men's) | $\$ 849.00$ |
| $\mathbf{6 1 - 6 4 9 4}$ | Double Leather Watchstrap Spinner (Ladies' and Men's) | $\$ 799.00$ |



## COUNTERTOP CABINET

Wood countertop cabinet with storage for up to 60 straps or bracelets. Measures $10^{3 / 4} 4^{\prime \prime} \times 12^{1 / 2 " ~} \times 22^{3 / 4} 4^{\prime \prime}$.
61-5413 Contains 36 straps and 24 metal bracelets; 10 extra storage trays
61-5412 Contains 60 metal bracelets; 10 extra storage trays
61-5411 Contains 60 leather straps; 10 extra storage trays

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{6 1 - 5 4 1 3}$ | Leather and Metal Watchstrap Cabinet | $\$ 529.00$ |
| $\mathbf{6 1 - 5 4 1 2}$ | Metal Watchstrap Cabinet | $\$ 649.00$ |
| $\mathbf{6 1 - 5 4 1 1}$ | Leather Watchstrap Cabinet | $\$ 449.00$ |



## LIBRARY STYLE WATCH STRAP STORAGE

Our two-gate and four-gate watchband folders make a perfect library-style storage system that conserves precious counter space. See our complete folder collection, including Select straps, at Stuller.com/WatchStraps.

## GIFT SET FOLDER FOR STRAPS

Perfect for travel, our black padded leatherette folder has room for three bands and extra compartments for buckles. The lined cover protects the crystal from scratches while changing bands. Measures $51 / 4^{\prime \prime} \times 103 / 4^{\prime \prime}$ closed.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| LA-505 | Gift Set Folder | $\$ 12.95$ |



LEATHER WATCHSTRAP FOUR-GATE FOLDER
Black, padded leatherette folder holds 40 watchbands. Removable universal trays fit into spinners and storage cabinets. Measures $14^{\prime \prime} \times 6^{1 ⁄ 2} 2^{\prime \prime} \times 3$ " closed.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| LA-501 | Men's Leather Folder Assortment | $\$ 239.00$ |
| LA-503 | Ladies' Leather Folder Assortment | $\$ 239.00$ |
| LA-500 | Folder Only | $\$ 24.95$ |



## METAL BRACELET TWO-GATE FOLDER

Black, padded leatherette folder holds 12 metal bracelets or straps. Removable universal trays fit into spinners and storage cabinets. Measures $91 / 4^{\prime \prime} \times 10 \frac{1}{4} 4^{\prime \prime} \times 13 / 4^{\prime \prime}$ closed.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| LA-502 | Men's Metal Bracelet Assortment | $\$ 125.00$ |
| LA-504 | Ladies' Metal Bracelet Assortment | $\$ 125.00$ |
| LA-499 | Folder Only | $\$ 19.99$ |



Innovative features and quality designs make Stuller watchbands the best on the market. Simplify your business with next-day delivery and no minimum purchase.

## SPRING



All leather straps are packaged with replacement spring bars, eliminating the worries of stocking the proper size spring bars.


## EZ - EASY CHANGE

No longer is a specialized tool needed to change your straps.
Keep up with current fashions or just match today's wardrobe with the simple sliding of a bar.


MP - MULTI-END PIECE
Our multiple end piece system allows you to order a single metal bracelet to fit multiple sizes-straight or curved. Our metal bands give you complete customization options with reduced inventory costs.

## WY - WHITE AND YELLOW BUCKLE

Both gold color options are available and come packaged with each leather strap purchased. Each individual buckle lets you meet a variety of customer needs.

## SS - STULLER SELECT

With elegant color match stitching, superior craftsmanship, and distinct padding, this new collection has European style down to the buckle. You can easily identify our new Select line of watchstraps by the silver highlighted packaging.

## LEATHER STRAPS

Our selection of $100 \%$ premium-grade leather straps are the most durable and highest quality available. Made from an elegant assortment of hides and certified exotic skins, and in a variety of popular styles and eye-catching colors, this collection is always fashionable.


## METAL BRACELETS

Using all stainless steel construction, our expansion and link model metal bracelets are the perfect accessories. Our Multi-End design allows you to fit nearly any style watch in any size with ease.


## DIVER BANDS

Durability and comfort are what can always be expected from our polyurethane diver and silicone rubber sport bands. What may surprise you, however, is the new assortment of vibrant colors now being made available in this bold style.


## WATCH BUCKLES



LADIES' BUCKLE WITH STINGRAY PATTERN

| Order \# | Metal Quality | Outside Diameter |  |
| :---: | :---: | :---: | ---: |
| $\mathbf{2 8 1 7 1}$ | 14 kt | 8 mm | $\mathbf{1 +}$ |
| $\mathbf{2 8 1 7 1}$ | 14 kt | 10 mm | $\$ 150.64$ |
| $\mathbf{2 8 1 7 1}$ | 18 kt | 8 mm | $\$ 84.74$ |
| $\mathbf{2 8 1 7 1}$ | 18 kt | 10 mm | $\$ 207.80$ |
| $\mathbf{2 8 1 7 1}$ | Sterling Silver | 8 mm | $\$ 43.85$ |
| $\mathbf{2 8 1 7 1}$ | Sterling Silver | 10 mm | $\$ 47.65$ |



MEN'S BUCKLE WITH STINGRAY PATTERN

| Order \# <br> $\mathbf{2 8 1 4 5}$ | Metal Quality | Outside Diameter |  |
| :---: | :---: | :---: | ---: |
| $\mathbf{2 8 1 4 5}$ | 14 kt | 12 mm | $\mathbf{1 +}$ |
| $\mathbf{2 8 1 4 5}$ | 14 kt | 14 mm | $\$ 211.54$ |
| $\mathbf{2 8 1 4 5}$ | 18 kt | 16 mm | $\$ 344.79$ |
| $\mathbf{2 8 1 4 5}$ | 18 kt | 12 mm | $\$ 281.26$ |
| $\mathbf{2 8 1 4 5}$ | 18 kt | 14 mm | $\$ 388.20$ |
| $\mathbf{2 8 1 4 5}$ | Sterling Silver | 16 mm | $\$ 500.00$ |
| $\mathbf{2 8 1 4 5}$ | Sterling Silver | 12 mm | $\$ 49.11$ |
| $\mathbf{2 8 1 4 5}$ | Sterling Silver | 14 mm | $\$ 53.19$ |



MEN'S BUCKLE WITH BEZEL ACCENT

| Order \# <br> $\mathbf{2 8 1 3 4}$ | Metal Quality | 14kt | Outside Diameter |
| :---: | :---: | :---: | ---: |
| $\mathbf{2 8 1 3 4}$ | 14 kt | 8 mm | $\mathbf{1 +}$ |
| $\mathbf{2 8 1 3 4}$ | 14 kt | 10 mm | $\$ 145.18$ |
| $\mathbf{2 8 1 3 4}$ | 14 kt | 12 mm | $\$ 237.13$ |
| $\mathbf{2 8 1 3 4}$ | 14 kt | 14 mm | $\$ 284.41$ |
| $\mathbf{2 8 1 3 4}$ | 18 kt | 16 mm | $\$ 374.26$ |
| $\mathbf{2 8 1 3 4}$ | 18 kt | 8 mm | $\$ 199.61$ |
| $\mathbf{2 8 1 3 4}$ | 18 kt | 10 mm | $\$ 248.80$ |
| $\mathbf{2 8 1 3 4}$ | 18 kt | 12 mm | $\$ 325.49$ |
| $\mathbf{2 8 1 3 4}$ | 18 kt | 14 mm | $\$ 410.22$ |
| $\mathbf{2 8 1 3 4}$ | Sterling Silver | 16 mm | $\$ 544.76$ |
| $\mathbf{2 8 1 3 4}$ | Sterling Silver | 1 mm | $\$ 45.52$ |
| $\mathbf{2 8 1 3 4}$ | Sterling Silver | 12 mm | $\$ 47.46$ |
| $\mathbf{2 8 1 3 4}$ | Sterling Silver | 14 mm | $\$ 50.74$ |
| $\mathbf{2 8 1 3 4}$ | Sterling Silver | 16 mm | $\$ 54.04$ |

## LADIES' DESIGNER WATCH BUCKLE

| Order \# <br> $\mathbf{2 8 0 9 6}$ | Metal Quality | Outside Diameter | $\mathbf{1 4 +}$ |
| :---: | :---: | :---: | ---: |
| $\mathbf{2 8 0 9 6}$ | 14 kt | 8 mm | $\$ 115.03$ |
| $\mathbf{2 8 0 9 6}$ | 14 kt | 10 mm | $\$ 228.05$ |
| $\mathbf{2 8 0 9 6}$ | 14 kt | 12 mm | $\$ 228.55$ |
| $\mathbf{2 8 0 9 6}$ | 14 kt | 14 mm | $\$ 281.27$ |
| $\mathbf{2 8 0 9 6}$ | 18 kt | 16 mm | $\$ 340.75$ |
| $\mathbf{2 8 0 9 6}$ | 18 kt | 8 mm | $\$ 159.33$ |
| $\mathbf{2 8 0 9 6}$ | 18 kt | 12 mm | $\$ 310.10$ |
| $\mathbf{2 8 0 9 6}$ | 18 kt | 14 mm | $\$ 391.21$ |
| $\mathbf{2 8 0 9 6}$ | Sterling Silver | 16 mm | $\$ 499.56$ |
| $\mathbf{2 8 0 9 6}$ | Sterling Silver | 8 mm | $\$ 32.84$ |
| $\mathbf{2 8 0 9 6}$ | Sterling Silver | 10 mm | $\$ 35.44$ |
| $\mathbf{2 8 0 9 6}$ | Sterling Silver | 12 mm | $\$ 39.23$ |
| $\mathbf{2 8 0 9 6}$ | Sterling Silver | 16 mm | $\$ 42.47$ |

## EZ CHANGE SPRING BAR KITS AND REFILLS

This 84-piece Spring Bar Kit includes 12 pieces of each per vial: $10 \mathrm{~mm}, 12 \mathrm{~mm}, 14 \mathrm{~mm}, 16 \mathrm{~mm}, 18 \mathrm{~mm}, 20 \mathrm{~mm}$, and 22 mm . Refills may be ordered by size.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | :--- |
| $\mathbf{5 9 - 2 0 5 0}$ | 84-Piece Kit | $\$ 32.00$ | $\$ 34.70$ | $\$ 38.55$ |
| $\mathbf{5 9 - 2 0 5 1}$ | Refills (order by size 12 piece per vial) | $\$ 6.76$ | $\$ 7.61$ | $\$ 8.45$ |

Enlarged to Show Detail Tool Length: $3 / 8^{" 7}-7 / 8^{"}$



STAINLESS STEEL DOUBLE SHOULDER SPRING BARS
Kit consists of 288 pieces total. Color of holding case may vary.

| Item | Order \# | Description |  | 12+ | $6+$ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 59-2020 | Spring Bar Assortment Kit (288-Pieces) |  | \$15.64 | \$16.32 | \$17.00 |
| A | 59-1300 | $1 / 4{ }^{\text {" }}$ Shoulder Thin | BTL \#1 | \$0.64 | \$0.68 | \$0.75 |
| B | 59-1301 | 5/66" Shoulder Thin | BTL \#2 | \$0.64 | \$0.68 | \$0.75 |
| C | 59-1302 | $3 / 8$ " Shoulder Thin | BTL \#3 | \$0.64 | \$0.68 | \$0.75 |
| D | 59-1303 | 7/16" Shoulder Thin | BTL \#4 | \$0.64 | \$0.68 | \$0.75 |
| E | 59-1304 | $1 / 2$ " Shoulder Thin | BTL \#5 | \$0.64 | \$0.68 | \$0.75 |
| F | 59-1305 | 9/6" Shoulder Thin | BTL \#6 | \$0.64 | \$0.68 | \$0.75 |
| G | 59-1306 | 5/8" Shoulder Thin | BTL\#7 | \$0.64 | \$0.68 | \$0.75 |
| H | 59-1307 | 11/16" Shoulder Thin | BTL \#8 | \$0.64 | \$0.68 | \$0.75 |
| J | 59-1308 | $3 / 44^{\text {" Shoulder Thin }}$ | BTL \#9 | \$0.64 | \$0.68 | \$0.75 |
| K | 59-1309 | ${ }^{13 / 16818}$ Shoulder Thin | BTL\#10 | \$0.64 | \$0.68 | \$0.75 |
| L | 59-1310 | 15/6" Shoulder Thin | BTL\#11 | \$0.64 | \$0.68 | \$0.75 |
| M | 59-1311 | 5/8" Stainless Double Flange Short Tip | BTL\#12 | \$0.64 | \$0.68 | \$0.75 |
| N | 59-1312 | $1 / 21$ Stainless Double Flange Short Tip | BTL\#13 | \$0.64 | \$0.68 | \$0.75 |
| P | 59-1313 | ${ }^{11} / 6^{\prime \prime}$ Stainless Double Flange Short Tip | BTL\#14 | \$0.64 | \$0.68 | \$0.75 |
| 0 | 59-1314 | 9/6" Double Shoulder Curved | BTL\#15 | \$0.64 | \$0.68 | \$0.75 |
| R | 59-1315 | 5/8" Double Shoulder Curved | BTL\#16 | \$0.64 | \$0.68 | \$0.75 |
| S | 59-1316 | $11 / 16$ " Double Shoulder Curved | BTL\#17 | \$0.64 | \$0.68 | \$0.75 |
| T | 59-1317 | 3/4" Double Shoulder Curved | BTL\#18 | \$0.64 | \$0.68 | \$0.75 |
| U | 59-1318 | 1/4" - 5/6" Telescopic | BTL\#19 | \$0.64 | \$0.68 | \$0.75 |
| V | 59-1319 | 3/8" - 7/16" Telescopic | BTL \#20 | \$0.64 | \$0.68 | \$0.75 |
| W | 59-1320 | 1/2" - 9/6" Telescopic | BTL\#21 | \$0.64 | \$0.68 | \$0.75 |
| Y | 59-1321 | 5/8" - 11/6" Telescopic | BTL \#22 | \$0.64 | \$0.68 | \$0.75 |
| Z | 59-1322 | 11/16"-3/4" Telescopic | BTL \#23 | \$0.64 | \$0.68 | \$0.75 |
| AA | 59-1323 | $13 / 16^{\prime \prime}-7 / 8{ }^{\prime \prime}$ Telescopic | BTL \#24 | \$0.64 | \$0.68 | \$0.75 |



SEMI-STAINLESS STEEL DOUBLE SHOULDER SPRING BARS
Kit consists of 400 semi-stainless pieces of the most commonly used spring bars. 200 pieces are extra thin and 200 pieces are regular. Made of semi-stainless steel.

| Item | Order \# | Description |  | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 59-2030 | Spring Bar Asso |  | \$13.66 | \$14.26 | \$14.85 |
| AB | 59-1344 | $1 / 44^{\text {" Extra-Thin }}$ | BTL \#1 | \$0.68 | \$0.72 | \$0.80 |
| AC | 59-1345 | 5/18" Extra-Thin | BTL \#2 | \$0.68 | \$0.72 | \$0.80 |
| AD | 59-1346 | $3 / 8{ }^{\prime \prime}$ Extra-Thin | BTL \#3 | \$0.68 | \$0.72 | \$0.80 |
| AE | 59-1347 | 7/16" Extra-Thin | BTL \#4 | \$0.68 | \$0.72 | \$0.80 |
| AF | 59-1348 | $1 / 2$ "Extra-Thin | BTL \#5 | \$0.68 | \$0.72 | \$0.80 |
| AG | 59-1349 | 9/6" Extra-Thin | BTL \#6 | \$0.68 | \$0.72 | \$0.80 |
| AH | 59-1350 | 5/8" Extra-Thin | BTL \#7 | \$0.68 | \$0.72 | \$0.80 |
| AI | 59-1351 | 11/6" Extra-Thin | BTL \#8 | \$0.68 | \$0.72 | \$0.80 |
| AJ | 59-1352 | $3 / 4{ }^{\text {" Extra-Thin }}$ | BTL \#9 | \$0.68 | \$0.72 | \$0.80 |
| AK | 59-1353 | 13/6" Extra-Thin | BTL\#10 | \$0.68 | \$0.72 | \$0.80 |
| AL | 59-1354 | 5/16" Regular | BTL\#11 | \$0.68 | \$0.72 | \$0.80 |
| AM | 59-1355 | $3 / 8$ " Regular | BTL\#12 | \$0.68 | \$0.72 | \$0.80 |
| AN | 59-1356 | 7/16" Regular | BTL \#13 | \$0.68 | \$0.72 | \$0.80 |
| A0 | 59-1357 | 1/2" Regular | BTL\#14 | \$0.68 | \$0.72 | \$0.80 |
| AP | 59-1358 | 9/6" Regular | BTL \#15 | \$0.68 | \$0.72 | \$0.80 |
| A0 | 59-1359 | 5/8" Regular | BTL \#16 | \$0.68 | \$0.72 | \$0.80 |
| AR | 59-1360 | 11/6" Regular | BTL\#17 | \$0.68 | \$0.72 | \$0.80 |
| AS | 59-1361 | 3/4" Regular | BTL\#18 | \$0.68 | \$0.72 | \$0.80 |
| AT | 59-1362 | 13/16" Regular | BTL\#19 | \$0.68 | \$0.72 | \$0.80 |
| AU | 59-1363 | 15/6" Regular | BTL \#20 | \$0.68 | \$0.72 | \$0.80 |

DOUBLE SHOULDER SPRING BAR KIT
Includes: 700 regular pieces total.

- 100 5/16" $(.90 \mathrm{~mm})$
- $1003 / 8^{\prime \prime}(1.10 \mathrm{~mm})$
- 100 7/16" (1.20mm)
- 100 ½" $(1.50 \mathrm{~mm})$
- 100 5/8" $(1.80 \mathrm{~mm})$
- $100^{11 / 16 " ~(1.90 m m) ~}$



## EXTRA-THIN SPRING BAR ASSORTMENT KIT

Includes: 200 semi-stainless pieces total.

- 20 ( $1 / 44^{\prime \prime}$ ) - \#1
- 20 (5/16") - \#2
- $20\left(3 / 8^{\prime \prime}\right)$ - \#3
- $20\left(7 / 16^{\prime \prime}\right)$ - \#4
- $20(1 / 2 ")$ - \#5
- $20\left(9 / 16^{\prime \prime}\right)$ - \#6
- 20 ( $5 / 8^{\prime \prime}$ ) - \#7
- 20 ( ${ }^{\left.11 / 16^{\prime \prime}\right) ~-~ \# 8 ~}$
- 20 ( $3 / 4$ ") - \#9
- 20 ( $13 / 16^{\prime \prime}$ ) - \#10



## COTTER PIN ASSORTMENT

Five pieces each in 33 different lengths: 4.5 mm to 20.50 mm in 0.5 mm increments. All in 0.9 mm diameter, being the most commonly used.

| Order \# | Description | Length (mm) | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 0 3}$ | Cotter Pin Assortment | $\$ 25.08$ | $\$ 26.55$ | $\$ 29.50$ |  |
| $\mathbf{5 8 - 2 5 0 5}$ | Refills (by size, 10 pieces per vial) 4.5-22.0 | $\$ 2.51$ | $\$ 2.66$ | $\$ 2.95$ |  |



## STAINLESS STEEL STRAIGHT

BRACELET PIN ASSORTMENT
60-piece assortment offering six each of 10 diameters
( 0.8 mm through 1.8 mm in 0.1 mm increments). 30 mm length.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 0 2}$ | Bracelet Pin Assortment | $\$ 8.50$ | $\$ 9.00$ | $\$ 10.00$ |



## STAINLESS STEEL STAMPED

## END BRACELET PINS ASSORTMENT

One end is stamped for a tight friction fit. 27 mm length with five different diameters ( $0.8 \mathrm{~mm}, 0.9 \mathrm{~mm}, 1.0 \mathrm{~mm}, 1.1 \mathrm{~mm}$, and 1.2 mm ). Each pin size comes with a heavy and light stamp.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 0 1}$ | 60-Piece Pin Assortment | $\$ 8.50$ | $\$ 9.00$ | $\$ 10.00$ |

GASKET ASSORTMENT
A wide selection of popular sizes, meticulously separated by thickness. Four pieces each of 36 different diameters (14.5 to $32.0 \mathrm{~mm})$. Fits Seiko ${ }^{\circledR}$, Citizen ${ }^{\circledR}$, and most modern quartz watches.

| Item | Order \# | Thickness | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 1 0 5 0}$ | .04 mm | $\$ 7.04$ | $\$ 7.68$ | $\$ 8.00$ |
| B | $\mathbf{5 9 - 1 0 5 2}$ | .05 mm | $\$ 7.04$ | $\$ 7.68$ | $\$ 8.00$ |
| C | $\mathbf{5 9 - 1 0 5 4}$ | .06 mm | $\$ 7.04$ | $\$ 7.68$ | $\$ 8.00$ |
| D | $\mathbf{5 9 - 1 0 5 6}$ | .07 mm | $\$ 7.04$ | $\$ 7.68$ | $\$ 8.00$ |



66-PIECE THIN O-RING ASSORTMENT
Three each of 22 popular numbers.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 1 0 6 2}$ | Thin O-Ring Gasket Assortment | $\$ 20.70$ | $\$ 21.60$ | $\$ 22.50$ |



## OPTICAL SCREWS

Assorted yellow and white screws for eyeglasses.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 0 0}$ | Optical Screw Assortment | $\$ 13.56$ | $\$ 14.36$ | $\$ 15.95$ |

90-PIECE O-RING GASKET ASSORTMENT
Three each of 30 popular numbers.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 1 0 6 1}$ | 0-Ring Gasket Assortment | $\$ 20.47$ | $\$ 21.36$ | $\$ 22.25$ |



90-PIECE FLAT GASKET ASSORTMENT
Three each of 30 popular numbers.

| Order \# | Description | 12+ | 6+ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| 59-1060 | Flat Gasket Assortment | $\$ 45.91$ | $\$ 47.90$ | $\$ 49.90$ |



105-PIECE ROLEX ${ }^{\circledR}$ CASEBACK GASKET ASSORTMENT
Three each of 35 sizes, flat and round.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 1 0 6 5}$ | Caseback Gasket Assortment | $\$ 59.80$ | $\$ 62.40$ | $\$ 65.00$ |



UV LIGHT BOX
This UV light box is designed to speed up the curing time for all UV glues.

| Order \# | Description | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 0 5 4}$ | UV Light Box | $\$ 36.13$ | $\$ 38.25$ | $\$ 42.50$ |




## "UV" CLEAR GLASS ADHESIVE

Creates a crystal clear bond. Expose to UV light to cure in seconds. Use for bonding glass to metal. Can also be used for bonding light colored stained glass, but it is not recommended for deep colored stained glass. 3cc syringe.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 0 5 3}$ | Clear Glass Adhesive | $\$ 6.53$ | $\$ 6.82$ | $\$ 7.10$ |

## SUC ROCKET CRYSTAL CEMENT

Highly adhesive, quality cement ensures greater holding power. Can be used on any unbreakable crystal or foil-back jobs. Needlepoint tube ensures proper use and does not permit the cement to solidify in the nozzle.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 2 1 0 0}$ | Crystal Cement (20 second curing time) | $\$ 6.12$ | $\$ 6.38$ | $\$ 6.65$ |

## COMPOUND 7 SILICONE WATCH SEALANT

Silicone compound withstands high pressures and vacuums. No leaking in water or air even under the most drastic conditions. Unaffected by temperatures $280^{\circ} \mathrm{F}$ to $485^{\circ}$. Will not evaporate, vaporize, harden, break down, and will not effect watch oils.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 5 7}$ | Silicone Watch Case Sealant | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |



## "RE-NEW-ALL" PLASTIC RENEWER

Makes any plastic watch crystal look brand new. Wheel is charged with compound, and plastic crystal is gently buffed.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{4 7 - 3 1 0 0}$ | Crystal Polisher | $60 z$ bar | $\$ 5.20$ | $\$ 5.42$ | $\$ 5.65$ |



## SILICONE SEALANT BOX

Keep watch gaskets lubricated and flexible with the silicone sealant box. Sponges are impregnated with silicone grease. Simply insert your gaskets, close the lid, and twist for a gasket with a tighter, longer seal.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 1 1 2}$ | Silicone Sealant Box | $\$ 4.97$ | $\$ 5.18$ | $\$ 5.40$ |



## RODICO ${ }^{\circledR}$ CLEANING COMPOUND

Special watchmaker's product for removing fingerprints, stains, and excess oil. Soft and pliable, it comes with two sticks per box.

| Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 8 0 5}$ | Rodico Cleaning Compound | 1602 | $\$ 14.75$ | $\$ 15.62$ | $\$ 17.35$ |

MICRO-LUBE 2, SYRINGE
Stem and winding gear lubricant in a 5cc syringe with one tip.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 5 6}$ | Gear Lubricant in Syringe | $5 c c$ | $\$ 6.58$ | $\$ 6.86$ | $\$ 7.15$ |



MICRO-LUBE 2, JAR
Stem and winding gear lubricant extra-fine grease exceptional for stem and winding gears. Will not run or spread. Perfect for chronographs.

| Order \# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 5 8}$ | Gear Lubricant | 1 oz jar | $\$ 4.00$ | $\$ 4.18$ | $\$ 4.35$ |

## DIP OILER SET

Non-rolling handles are color-coded for quick identification. Oilers are $31 / 4$ " overall; shaft, $2^{1 ⁄} 4^{\prime \prime}$. Comes with 1 each of green, red, blue and black dips.

| Order \# | Description | 12+ | 6+ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 5 5 5}$ | Dip Oiler Set (4 piece set) | $\$ 8.93$ | $\$ 9.45$ | $\$ 10.50$ |



## QUICKEN ${ }^{\circledR}$ LUBE

NanoLube contains NanoDiamonds, which act as ball bearings and eliminate friction and wear. NanoDiamonds are 0.1-4 nanometer synthetic diamond ball bearings that never wear out. On average, it takes 80,000 NanoLube particles to span the width of a human hair-and all particles are spherical, synthetic diamond.

| Item | Order \# | Description | Size | 1+ |
| :---: | :---: | :--- | :--- | :--- | ---: |
| A | $\mathbf{5 8 - 2 5 4 0}$ | NanoLube for Clock | 2 ml jar | $\$ 27.00$ |
| B | $\mathbf{5 8 - 2 5 4 1}$ | NanoLube for Watch | 2 ml jar | $\$ 27.00$ |
| C | $\mathbf{5 8 - 2 5 4 2}$ | NanoLube for Multi-Purpose Watch | 2 ml jar | $\$ 27.00$ |



MOEBIUS WATCH AND CLOCK OIL
Efficient and reliable high-quality lubricants for wrist watches, pocket watches, and small and large clocks. Very good adherence, non-toxic, and good viscosity. Range of application: $-36^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$.

| Item | Order\# | Description | Size | 1+ |
| :---: | :---: | :--- | :--- | :--- | ---: |
| D | $\mathbf{5 8 - 2 5 5 0}$ | Quartz Watch 0il | 20 ml jar | $\$ 38.55$ |
| E | $\mathbf{5 8 - 2 5 5 1}$ | Wrist Watch Oil | 20 ml jar | $\$ 40.00$ |
| F | $\mathbf{5 8 - 2 5 5 2}$ | Pocket Watch 0il | 20 ml jar | $\$ 20.15$ |
| G | $\mathbf{5 8 - 2 5 5 3}$ | Clock 0il | 20 ml jar | $\$ 20.45$ |


D

E

F

G


TRIPLE-DUTY REPAIR ENVELOPES
Each numbered envelope has two detachable stubs with corresponding numbers; one for the customer and one for filing. Printed on standard kraft paper. Measures $31 / 8^{\prime \prime} \times 53 / 4^{\prime \prime}$. Sold in packs of 1,000 .

1000

| $\mathbf{O r d e r} \#$ | Description | Envelope \# | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 1 - 1 5 1 0}$ | Repair Envelope | $1-1000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 2 0}$ | Repair Envelope | $1001-2000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 3 0}$ | Repair Envelope | $2001-3000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 4 0}$ | Repair Envelope | $3001-4000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 0}$ | Repair Envelope | $4001-5000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 5}$ | Repair Envelope | $5001-6000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 6}$ | Repair Envelope | $6001-7000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 7}$ | Repair Envelope | $7001-8000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 8}$ | Repair Envelope | $8001-9000$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |
| $\mathbf{6 1 - 1 5 5 9}$ | Repair Envelope | $9001-9999$ | $\$ 36.98$ | $\$ 38.25$ | $\$ 42.50$ |


$53 / 4^{\prime \prime} W \times 101 / 4^{\prime \prime} L \times 11 / 4^{\prime \prime}$ Thickness

$6^{\prime \prime} W \times 91 / 2^{\prime \prime} L \times 1^{\prime \prime}$ Thickness

ORGANIZATION TRAYS AND VIALS
Paper-covered trays with magnetic closure and clear view lid.
Vials have swing-top lids.
Small Bottle: 6 mm hole ( $1 / 22^{\prime \prime} \mathrm{W} \times 11 / 2^{\prime \prime} \mathrm{H}$ )
Large Bottle: 10 mm hole (1 $1 / 2^{\prime \prime} \mathrm{H}$ )

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 2 1 1 5}$ | Black Tray (24 lime green vials) | $\$ 22.49$ | $\$ 22.98$ | $\$ 24.45$ |
| B | $\mathbf{5 9 - 2 1 0 5}$ | Black Tray (36 black vials) | $\$ 17.31$ | $\$ 17.91$ | $\$ 19.90$ |
| C | $\mathbf{5 9 - 2 1 1 0}$ | Large Plastic Vial with Lime Green Lid | $\$ 0.83$ | $\$ 0.86$ | $\$ 0.95$ |
| D | $\mathbf{5 9 - 2 1 0 0}$ | Small Plastic Vial with Black Lid | $\$ 0.52$ | $\$ 0.54$ | $\$ 0.60$ |




MOVEMENT TRAYS
Stackable round five compartment trays.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 5 - 2 0 7 4}$ | Movement Trays (set of 6) | $31 / 4^{\prime \prime} \times 3 / 4^{\prime \prime}$ | $\$ 11.18$ | $\$ 11.66$ | $\$ 12.15$ |

ROUND TIN CANS
Made of tin and perfect for storing watch parts, stones, or findings.


WATCH REPAIR TRAY WITH COVER
Six-compartment tray with clear cover. Stackable trays.

| Order\# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ |  |  | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 5 - 2 0 7 3}$ | Repair Tray with Cover | $91 / 2^{\prime \prime} \times 43 / 8^{\prime \prime} \times 3 / 4^{4}$ | $\$ 15.26$ | $\$ 16.16$ | $\$ 17.95$ |  |



## CLEAR GLASS WITH KNOB

Edges of cover and cup are ground to form a tight seal, keeping dust from entering.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 7 0 5}$ | Movement Cover and Tray | $4^{\prime \prime} \times 2 \frac{1}{4 \prime}$ | $\$ 17.98$ | $\$ 19.04$ | $\$ 21.15$ |



NO-LINT, ANTI-TARNISH TISSUES
Best quality. Made in the USA.

| Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 3 - 5 5 5 0}$ | Anti-Tarnish Tissue (box of 1,000$)$ | $4^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 5.52$ | $\$ 5.72$ | $\$ 6.35$ |



## GLASS ALCOHOL CUP

Plain alcohol cup for benzene or other solutions. Edges of covers and cups are ground to form a tight seal, keeping dust from entering and protecting solutions from evaporation.

| Order\# | Description | Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 1 1 6}$ | Alcohol Cup | $80 z \mathrm{jar}$ | $\$ 21.04$ | $\$ 22.28$ | $\$ 24.75$ |




DELUXE BATTERY TOOL KIT (EVEREADY® TOOL KIT)
Contains the tools you need to change a battery in a convenient, faux-leather pouch. Has a zipper and elastic bands to keep tools securely in place. Shipped with a complete list of tools for easy replacement.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 9 - 2 5 0 0}$ | Battery Tool Kit | $\$ 31.15$ |



WATCH TOOL KIT
This watch kit is specifically designed for watch battery replacement of all brand name watches. The tools included will allow you to open the watch back, remove the old watch battery, safely handle all components, replace your watch batteries, size or replace your watch band, replace or adjust watch band clasp, or remove watch band links. - Pocket case opener

- Yellow case opener $\quad-1.6 \mathrm{~mm}$ screwdriver
- Aluminum spring bar tool
- Case holder
- Watchmakers hammer
- Blue band opener
- 2.0mm screwdriver
- Multi-function watch band remover
- Bracelet holding block
- Plastic tweezers

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $59-2600$ | Watch Tool Kit | $\$ 40.80$ |

CLOCK AND INSTRUMENT CLEANING BRUSHES
Bristles are available in varying degrees of hardness for cleaning and dusting clocks, instruments, and parts. Bristles measure 4½" (114mm) long and $5 / 8^{" \prime}$ ( 16 mm ) deep. Overall length $101 / 4^{\prime \prime}(260 \mathrm{~mm})$.
Half-Hard Cleaning Brushes: For general cleaning
Half-Soft Cleaning Brushes: For more delicate parts
Soft Cleaning Brushes: For removing dust

| Item |  | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 8 - 2 7 0 0}$ | Half-Hard Cleaning Brushes | $\$ 6.29$ | $\$ 6.66$ | $\$ 7.40$ |  |
| B | $\mathbf{5 8 - 2 7 0 1}$ | Half-Soft Cleaning Brushes | $\$ 6.50$ | $\$ 6.89$ | $\$ 7.65$ |  |
| C | $\mathbf{5 8 - 2 7 0 2}$ | Soft Cleaning Brushes | $\$ 7.10$ | $\$ 7.52$ | $\$ 8.35$ |  |


"THE ORIGINAL" FLORIDA PITHWOOD
Box of selected button pith, ideal for holding small parts for


IMPORTED PEGWOOD
Selected orangewood for cleaning pivot holes and various other uses. Approximately 18-24 sticks per bundle.


## SNAP-BACK CASE OPENER

Snap-Back case opener opens watch cases quickly and easily. The blade is reversible for multiple uses.

| Item | Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: |
| D | $\mathbf{5 9 - 0 4 8 2}$ | Snap-Back Case Opener | $\$ 101.40$ |
| E | $\mathbf{5 9 - 0 4 8 3}$ | Replacement Blades (sold in pairs) | $\$ 33.00$ |



## CASE OPENERS

These case openers accept medium and large watches that are found in today's market. It will securely hold watch cases without marring or scratching the watch case.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{6 4 - 4 0 8 0}$ | Large Case Opener | $\$ 14.03$ | $\$ 14.85$ | $\$ 16.50$ |
| G | $\mathbf{6 4 - 4 0 7 7}$ | Medium Case Opener | $\$ 6.46$ | $\$ 6.84$ | $\$ 7.60$ |
| H | $\mathbf{6 4 - 4 0 7 8}$ | Replacement Pins (4) | $\$ 5.61$ | $\$ 5.94$ | $\$ 6.60$ |



BERGEON ROLEX ${ }^{\circledR}$ CASE OPENER SET
For opening Rolex Oyster waterproof watches. Unit comes with six milled rings (18.5, 20.2, 22.5, 26.5, 28.3, and 29.5 mm ). Made in Switzerland.

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| 59-0645 | Watch Case Opener | $\$ 185.00$ |

CASE OPENER
Six-piece ring set with key for opening and closing waterproof watch cases. Includes $18.5 \mathrm{~mm}, 20.2 \mathrm{~mm}, 22.5 \mathrm{~mm}, 26.5 \mathrm{~mm}, 28.5 \mathrm{~mm}$, and 29.5 mm .

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $\mathbf{5 9 - 0 6 4 6}$ | Watch Case Opener | $\$ 69.50$ |

POCKET-SIZED CASE OPENER
Wrench used for opening waterproof cases. Compact and convenient. Tempered pins and adjusting wheel.

| Order \# | Description | $\mathbf{W} \times \mathbf{H} \times \mathbf{D}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 8 7}$ | Case Opener | $25 / 8^{\prime \prime} \times 1^{1 / 2} \times 1 \frac{1188^{\prime \prime}}{}$ | $\$ 3.91$ | $\$ 4.14$ | $\$ 4.60$ |

WATCH CASE OPENER SET
Watch case opener in wooden box, complete with set of pins. (max opening dimensions - 36.5 mm )

| Order \# | Description | $\mathbf{1 +}$ |
| :--- | :--- | ---: |
| $59-0562$ | Watch Case Opener with Pins | $\$ 11.00$ |



WATERPROOF CASE OPENER
Case wrench modeled after the famous Jaxa. This version offers exceptional value while still meeting quality standards. Comes complete with set of pins. (max opening dimensions - 36 mm )

| Item | Order\# | Description | Length | 1+ |
| :---: | :---: | :--- | :---: | :---: |
| A | $\mathbf{5 9 - 0 5 6 0}$ | Watch Case Opener with Pins | 51/2" | $\$ 9.45$ |
|  | $\mathbf{5 9 - 0 5 6 1}$ | 12-Piece Replacement Pins | $\$ 1.75$ |  |

WATCH CASE OPENER
High quality waterproof watch case wrench is a new, larger style of watch case back openers. (max opening dimensions - 54.5 mm )

| Order \# | Description | 1+ |
| :--- | :--- | ---: | ---: |
| $\mathbf{5 9 - 0 5 6 5}$ | Watch Case Opener with Pins | $\$ 27.50$ |

## WATER PROOF TESTER

This tester serves multiple purposes. Its main use is for testing the water resistance of a watchcase. It provides a one to ten bar waterproof test in atmospheric pressure. In addition, it will also help you locate any leaks on a watchcase.

| Order \# | Description | $\mathbf{1 +}$ |
| :---: | :---: | ---: |
| 59-3005 | Pressure Tester | $\$ 575.00$ |



## LG OPENALL WATERPROOF CASE WATCH SET

Specially designed to open Rolex Oyster Cases. The six tempered rings accurately interlock with the edges on genuine Rolex cases. Sturdy cast frame fits any bench vise. Built-in, adjustable case holder fits all size watches. Ring sizes are $18.5,20.5,22.5,26.5,28.3,29.5$ millimeters. Made in the USA.

| Item | Order \# | Description | Gauge Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 59-0650 | Case Wrench Set | $18.5-29.5 \mathrm{~mm}$ | \$65.03 | \$68.85 | \$76.50 |
| REPLACEMENTS |  |  |  |  |  |  |
| B | 59-0651 | LG Openall Base |  | \$13.60 | \$14.40 | \$16.00 |
| C | 59-0652 | Replacement Rings | 18.5 mm | \$8.37 | \$8.87 | \$9.85 |
| D | 59-0659 | Replacement Rings | 20.2 mm | \$8.37 | \$8.87 | \$9.85 |
| E | 59-0653 | Replacement Rings | 22.5 mm | \$8.37 | \$8.87 | \$9.85 |
| F | 59-0654 | Replacement Rings | 26.5 mm | \$8.37 | \$8.87 | \$9.85 |
| G | 59-0655 | Replacement Rings | 28.3 mm | \$8.37 | \$8.87 | \$9.85 |
| H | 59-0656 | Replacement Rings | 29.5 mm | \$8.37 | \$8.87 | \$9.85 |
| J | 59-0657 | Center Pin |  | \$3.83 | \$4.05 | \$4.50 |



## WATCH CASE-CLOSING PLIERS

Provides safe and dependable closing of watch cases. Jaws close parallel with circular, rubber-padded, hinged discs.

| Item | Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: | ---: |
| K | $\mathbf{4 6 - 8 0 5 0}$ | Closing Pliers | $712^{\prime \prime}$ | $\$ 11.22$ | $\$ 11.88$ | $\$ 13.20$ |
| L | $\mathbf{4 6 - 8 0 5 5}$ | Set of Replacement Pads |  | $\$ 1.70$ | $\$ 1.80$ | $\$ 2.00$ |



## STAINLESS STEEL CASE OPENER

This new opener is made for screw-back watch cases. The $41 / 2^{\prime \prime}$ handle provides enough leverage to open those stubborn watch case backs. (max opening dimensions - 57 mm )


| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 5 6 4}$ | Case Opener | $\$ 18.91$ | $\$ 20.02$ | $\$ 22.25$ |

## STAINLESS STEEL CASE OPENER V-STYLE

This universal watch case opener will remove various types of screw-on case backs. (max opening dimensions - 35.5 mm )

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 5 6 3}$ | V-Style Case Opener | $\$ 28.26$ | $\$ 29.93$ | $\$ 33.25$ |



## CASE OPENER



Suction-type case opener. Great for lifting the case back off of screwback and waterproof watches after back has been loosened. Rubber end does not scratch cases or crystals. Made in Switzerland.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 7 2}$ | Case Opener | $\$ 3.83$ | $\$ 4.05$ | $\$ 4.50$ |

## WATCH CASE OPENER

Easy-to-use watch case opener for snap-type case backs.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 1 1}$ | Watch Case Opener | $\$ 4.89$ | $\$ 5.18$ | $\$ 5.75$ |

## SNAPPY CASE OPENER

Designed to make opening watch cases easier. Just position the point between the case back and the case, then slowly push. The blade pops under the back and the watch case easily opens.

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 7 3}$ | Snappy Case Opener | $\$ 9.27$ | $\$ 9.81$ | $\$ 10.90$ |



POCKET-SIZED CASE OPENER
Handy, pocket-sized case opener.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 1 0}$ | Case Opener | $23 / 8^{\prime \prime} \times 5 / 8^{\prime \prime}$ | $\$ 3.87$ | $\$ 4.10$ | $\$ 4.55$ |

CRYSTAL LIFT AND PLATE
Removes and inserts 10 to 45 mm unbreakable crystals without dismantling the watch. Simple turning action opens and closes the brass jaws.
Made in Switzerland.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 1 0 4}$ | Bergeon Crystal Lift/Plate | $\$ 73.31$ | $\$ 77.63$ | $\$ 86.25$ |
| $\mathbf{6 4 - 5 1 0 5}$ | Economy Lift/Plate | $\$ 18.49$ | $\$ 19.58$ | $\$ 21.75$ |

## BERGEON CASE CUSHION

Held together firmly with a sturdy metal ring, this vinyl pad will hold crystals comfortably without scratching. Ideal for supporting watches while opening or closing cases.

| Order \# | Description | Diameter | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 1 0 2}$ | Case Cushion | $2 "$ | $\$ 49.30$ | $\$ 52.20$ | $\$ 58.00$ |

CASE KNIFE
Sturdy German-made case knife with a comfortable red, cushion grip PVC handle. The blade has a single bevel edge for removing case backs. Knife is made from well-tempered tool steel.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 9 - 0 4 7 6}$ | Case Knife | $41 / 2^{11}$ | $\$ 15.34$ | $\$ 16.25$ | $\$ 18.05$ |

BLADE-STYLE WATCHCASE OPENER
Used for opening friction-fit cases. Universally popular shape gives the watchmaker the small handle necessary to obtain the proper grip when trying to open watch case backs. Blade is made of tempered steel set in a hardwood, non-roll handle.


| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 7 0}$ | Watch Case Opener | $4^{1 / 2} 2^{\prime \prime}$ | $\$ 4.55$ | $\$ 4.82$ | $\$ 5.35$ |

## WATCH CASE KNIFE

Easy-to-use watch case opener for snap-type case backs.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 7 5}$ | Watch Case Opener | $31 / 2^{\prime \prime}$ | $\$ 3.74$ | $\$ 3.96$ | $\$ 4.40$ |



## FIBERBOARD BENCH PLATE

This enameled fiberboard will not warp and features grooved edges to prevent parts from rolling off.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 3 - 3 8 0 5}$ | Fiberboard Bench Plate | $9^{\prime \prime} \times 16^{\prime \prime} \times 1 / 4^{\prime \prime}$ | $\$ 8.93$ | $\$ 9.45$ | $\$ 10.50$ |



## SCREW-HOLDING TWEEZERS

Ideal for battery clamps and screws, the $v$-shaped notch makes it possible to hold the smallest screws for assembly.

| Order \# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{5 7 - 7 5 2 5}$ | Screw-Holding Tweezers | $43 / 8^{\prime \prime}$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |



## ANTI-STATIC BENCH MAT

Flexible mat used for organizing tools and projects.

| Order\# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 4 8 8}$ | Light Green Mat | $14 " \times 91 / 2^{\prime \prime}$ | $\$ 11.50$ | $\$ 12.00$ | $\$ 12.50$ |



## BRACELET PIN REMOVING PLIERS

Quickly remove pins from watchband with these easy-to-use pliers. Non-slip handles provide excellent leverage to handle even the most stubborn pins.

| Item | Order \# | Description | Pin Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{6 4 - 5 0 0 0}$ | Economy Pin Pliers |  | $\$ 19.64$ | $\$ 20.79$ | $\$ 23.10$ |
| B | $\mathbf{6 4 - 5 0 0 4}$ | Replacement Pin | .80 mm | $\$ 2.13$ | $\$ 2.25$ | $\$ 2.50$ |
|  | $\mathbf{6 4 - 5 0 0 4}$ | Replacement Pin | 1.0 mm | $\$ 2.13$ | $\$ 2.25$ | $\$ 2.50$ |



WATCHBAND LINK REMOVER
Easily adjust watchbands using this tool. Perfect for removing clip springs in link watchbands.

| Order\# | Description | Length | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 0 0 0}$ | Link Remover | $5 "$ | $\$ 9.35$ | $\$ 9.90$ | $\$ 11.00$ |

## LINK PIN REMOVER

Used to remove pins from metal link bands. Made of Keltec II glass-filled nylon. Includes two extra spacers to accommodate all bracelet sizes. Pusher pin is made of hardened tool steel. Will not scratch or mar gold or silver. Four pins included; two 1.0 mm , one .65 mm , and one .85 mm .

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 9 - 0 8 0 0}$ | Link Pin Remover | $\$ 11.01$ | $\$ 11.66$ | $\$ 12.95$ |
| D | $\mathbf{5 9 - 0 8 1 3}$ | Replacement Pins | $\$ 3.19$ | $\$ 3.38$ | $\$ 3.75$ |


deluxe bracelet pin removing set
Another handy tool to remove these tough watchband pins.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{6 4 - 5 0 0 8}$ | Bracelet Pin Remover | $\$ 18.91$ | $\$ 20.02$ | $\$ 22.25$ |
| F | $\mathbf{6 4 - 5 0 0 9}$ | Replacement Pin | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |



## MULTI-FUNCTION WATCH TOOL

This handy tool is perfect for removing watchband pins. Comes with one .80 mm pin. The .70 mm pin works great for removing links from our Ceramic Couture watches.

| Item |  |  |  |  |  |  | Order \# |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| G | Description | Per Pack | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |  |  |
| G | $\mathbf{5 9 - 0 8 0 7}$ | Multi-Function Watch Tool |  | $\$ 8.93$ | $\$ 9.45$ | $\$ 10.50$ |  |
| H | $\mathbf{5 9 - 0 8 1 5}$ | .70 mm Replacement Pin Set | (3 pack) | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |  |
|  | $\mathbf{5 9 - 0 8 0 8}$ | .80 mm Replacement Pin Set | (3 pack) | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |  |



LINK PIN REMOVER
Essential for removing pins from metal link bands. Made of Keltec II glass-filled nylon, this unit includes two extra spacers to accommodate all bracelet sizes and two extra push pins.

| Item Order \# | Description | Tip Size | 12+ | 6+ | 1+ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| J 59-0810 | Link Pin Remover |  | \$14.41 | \$15.26 | \$16.95 |
| REPLACEMENT PARTS |  |  |  |  |  |
| 59-0811 | Standard Pusher Pin | 4 mm | \$2.51 | \$2.66 | \$2.95 |
| 59-0812 | Medium Pusher Pin | 7 mm | \$2.51 | \$2.66 | \$2.95 |

DELUXE SPRING BAR TOOL
With replaceable stainless steel screw end tips. Used for removal of spring bars from watches.

| Item | Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :--- | ---: | ---: | ---: |
| A | $\mathbf{4 7 - 8 9 0 0}$ | Deluxe Spring Bar Tool | $\$ 4.76$ | $\$ 5.04$ | $\$ 5.60$ |
| B | $\mathbf{4 7 - 8 9 1 0}$ | Pointed Tip | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |
| C | $\mathbf{4 7 - 8 9 1 1}$ | Forked Tip | $\$ 1.91$ | $\$ 2.03$ | $\$ 2.25$ |

## BERGEON GAUGE

Handy gauge used to measure crowns and the lengths of spring bars and also to quickly determine width of watchbands.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| D | $\mathbf{6 4 - 4 0 9 0}$ | Bergeon Gauge | $\$ 38.25$ | $\$ 40.50$ |

## BERGEON SPRING BAR GAUGE

Specially designed tool to gauge the space between case ends in order to select proper size spring bar.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ |
| :---: | :--- | ---: | ---: | ---: |
| E | $\mathbf{6 4 - 4 0 8 5}$ | Spring Bar Gauge | $\$ 9.31$ | $\$ 9.86$ |



## PIN PUSHER

Tempered steel blade.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 3 0 0}$ | Pin Pusher | $\$ 4.55$ | $\$ 4.82$ | $\$ 5.35$ |



SPRING BAR TOOL
Used to change spring bars. Features a millimeter scale on handle with screw-in tips.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | ---: | ---: | ---: |
| F | $\mathbf{4 7 - 8 9 2 0}$ | Spring Bar Tool | $\$ 5.06$ | $\$ 5.36$ | $\$ 5.95$ |
| G | $\mathbf{4 7 - 8 9 2 1}$ | Round Tip | $\$ 0.85$ | $\$ 0.90$ | $\$ 1.00$ |
| H | $\mathbf{4 7 - 8 9 2 2}$ | Forked Tip | $\$ 0.85$ | $\$ 0.90$ | $\$ 1.00$ |



## CASE PRESS WITH METAL DIES

Combination case closer/crystal press features 14 reversible, turned aluminum dies with 28 sizes. Dies screw onto the upper and lower parts so that they can be inverted for case closing or crystal fitting. Cast metal body with angled leverage arm for proper closure.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 7 9 7}$ | Combination Case Press | $\$ 38.34$ | $\$ 40.59$ | $\$ 45.10$ |



## SETTING TOOL FOR WATCH HAND

The professional watchmaker's tool for setting watch hands in face. There are three placers for hour, minute and second hands; works with wrist and pocket watches of all sizes. Also with eight interchangeable hand-holder tips to fit most watch brands and hand styles. The construction of this tool is solid aluminum base and jig, and three spring-loaded chromed-steel placer rods. You will prevent watch damage by using the proper tool for delicate operation. $33 / 4^{\prime \prime} \mathrm{L} \times 2$ " $\mathrm{W} \times 4 \frac{1}{2} 2^{\prime \prime} \mathrm{H}$

| Order\# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 0}$ | Watch Hand Setting Tool | $\$ 28.90$ | $\$ 30.60$ | $\$ 34.00$ |



## WIDELY BEZEL OPENER

This bezel opener tool is made of metal and steel and works for watches up to 60 mm . It has two pairs of mirror polished blades and an anti-skid case holder mounted on a spring. This Bezel opener has sharply tapered edges, precisely controlled by a large knurled knob. Also special grooves on each side for placing watch. This is a high quality crafted superiorly for allowing you to grip the watch bezel precisely and securely with the flanges on your bench, and then the knob gives you complete control over how you open the bezel, preventing scratching or marring. Great for use on gold watch cases and bezels.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 2}$ | Bezel Opener | $\$ 136.51$ | $\$ 144.54$ | $\$ 160.60$ |



## BEZEL OPENER

This bezel opener tool works for watches up to 40 mm . It has two pairs of mirror polished blades and an anti-skid case holder mounted on a spring. Now you can easily remove watch bezels without risk of damaging them. This bezel remover is ideal for use on gold cases and bezels. The four flanges of the bezel remover have sharply tapered edges, and are controlled by a large knurled knob.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 4}$ | Bezel Opener | $\$ 127.16$ | $\$ 134.64$ | $\$ 149.60$ |



## CASE OPENER TOOL

The case opener tool is used for removing snap-on case backs. This case opener allows a precise adjustment with an anti-skid case holder mounted on a spring. It comes with two sets of hardened steel blades in sizes 2 mm and 4 mm , and one delrin die.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 3}$ | Case Opener | $\$ 142.12$ | $\$ 150.48$ | $\$ 167.20$ |

## MULTI-PURPOSE WATCH STRAP PRESS

Complete system for removing screw-type case bars, band pins, and friction link pins. Made in Switzerland.
Includes:

- One screwdriver with blade
- Nylon case protector
- Pin holder
- Band holder with eight slots
$-(2.5 \mathrm{~mm}, 2.75 \mathrm{~mm}, 3.0 \mathrm{~mm}, 3.25 \mathrm{~mm}, 3.5 \mathrm{~mm}, 4.0 \mathrm{~mm}, 4.5 \mathrm{~mm}, 5.0 \mathrm{~mm})$
- Set of seven pins ( $0.4 \mathrm{~mm}, 0.6 \mathrm{~m}, 0.7 \mathrm{~mm}, 0.8 \mathrm{~mm}, 1.0 \mathrm{~mm}, 1.5 \mathrm{~mm}, 2.0 \mathrm{~mm}$ )

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 0 8 0 5}$ | Watch Strap Press | $\$ 22.10$ | $\$ 23.40$ | $\$ 26.00$ |
| B | $\mathbf{5 9 - 0 8 0 6}$ | Replacement Pins (6 sizes) | $\$ 14.88$ | $\$ 15.75$ | $\$ 17.50$ |



LEVERS FOR WATCH HAND
These watch hand removers made of non-magnetic stainless steel. This watch hand remover works as a lever, you put the ends either side and under the hands then just lever off the hands.


| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 1}$ | Watch Hand Lever | $\$ 12.33$ | $\$ 13.05$ | $\$ 14.50$ |

## TRANSPARENT DUST COVER

This transparent dust cover will keep your watch parts free of dust. The blue color tray with 6 storage compartments ( 3 small, 2 large $\&$ center round) for easy separation and division. With a durable plastic cover better than the old time glass one. Compact size 4" x 3".

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 5}$ | Dust Cover | $\$ 6.55$ | $\$ 6.93$ | $\$ 7.70$ |



## SCEWDRIVER SET WITH STAND

Eight piece screwdriver set and aluminum stand. The screwdrivers are color coded for quick selection. The set comes complete with replacement blades.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 9 0 6}$ | 8 -Piece Screwdriver Set | $\$ 101.15$ | $\$ 107.10$ | $\$ 119.00$ |



## DOUBLE SCREW CASE PRESS WITH 24 DIES

This high quality case press will help you with all of your watch repair needs. Reattach the watch backs without worrying about breaking the crystal. Choose from 24 nylon dies to match any watch back.

| Order \# | Description | 1+ |
| :--- | :--- | ---: |
| $\mathbf{5 9 - 0 7 9 3}$ | Watch Case Press | $\$ 279.95$ |



## CASE PRESS WITH PLASTIC DIES

The press features 16 reversible dies that include four square dies. Use this tool to close a case back or install a crystal.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | ---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 0 7 9 6}$ | Combination Case Press with 16 Dies | $\$ 25.46$ | $\$ 26.96$ | $\$ 29.95$ |
| B | $\mathbf{5 9 - 0 7 9 9}$ | Square Dies (set of 4) | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |
| C | $\mathbf{5 9 - 0 7 9 8}$ | Nylon Round Dies (set of 12) | $\$ 9.78$ | $\$ 10.35$ | $\$ 11.50$ |



## WATCH BRACELET SCREW REMOVER

This great new tool is the only way to go when removing double-ended screws. Made of nearly unbreakable, high-impact glass-filled nylon, this tool features one fixed screwdriver blade and one turnable blade. Blades are tempered steel and both are held fast and perfectly aligned to make removing stubborn screws easy.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 5 0 1 0}$ | Screw Remover | $\$ 16.58$ | $\$ 17.55$ | $\$ 19.50$ |

WATCH BAND TOOL KIT
This well-made system is for removing and fitting pins. Constructed with a heavy, plastic band holder and a sturdy wooden base ( $90 \times 80 \mathrm{~mm}$ ) $51 / 8 \times 31 / 4$ ". Includes band holder with eight slots, pin holder with knurled handle ( 5 mm ), a set of six pins $(0.4 \mathrm{~mm}, 0.6 \mathrm{~mm}$, $0.8 \mathrm{~mm}, 1.0 \mathrm{~mm}, 1.5 \mathrm{~mm}, 2.0 \mathrm{~mm}$ ), and a wooden base. Made in Switzerland.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | ---: | ---: | ---: |
| $\mathbf{5 9 - 0 8 0 4}$ | Watch Band Tool Kit | $\$ 27.16$ | $\$ 28.76$ | $\$ 31.95$ |



DELUXE WATCHBAND TOOL SET
Excellent tool for all size watchbands and includes extra pins ( 0.8 mm and 1.0 mm ) with hand tools.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | ---: | ---: | ---: | ---: |
| A | $\mathbf{5 9 - 0 8 0 9}$ | Watch Band Tool | $\$ 23.42$ | $\$ 24.80$ | $\$ 27.55$ |

## PIN REMOVING KIT

Practical and economical kit for removing friction pins from watch bracelets.
Hammer included.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :---: | :---: | ---: | ---: | ---: |
| B | $\mathbf{5 9 - 0 4 0 2}$ | Pin Removing Kit | $\$ 16.15$ | $\$ 17.10$ | $\$ 19.00$ |

## REPLACEMENT PIN PUNCH

Replacement pins for 59-0402 and 59-0809. Can be used with both kits.

| Item | Order \# | Description | Pin Size | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | :--- | ---: | ---: | ---: |
| C | $\mathbf{5 9 - 0 4 0 5}$ | Replacement Pin Punch | .80 mm | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |
| D | $\mathbf{5 9 - 0 4 0 6}$ | Replacement Pin Punch | 1.0 mm | $\$ 4.17$ | $\$ 4.41$ | $\$ 4.90$ |



## WOODEN CASE VISE

Will securely hold, and not mar, any waterproof case while the back is being unscrewed.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{6 4 - 4 0 7 9}$ | Wooden Case Vise | $\$ 5.01$ | $\$ 5.31$ | $\$ 5.90$ |



## SLOT ANVIL

Used as a base for staking, riveting, and drilling small parts. V-Slot is handy for removing pinions and similar items. Case hardened and ground flat and smooth. Has nine graduated holes, with one size for stumps, and five milled slots.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 3 1 1 5}$ | Slot Anvil | $15 / 8^{\prime \prime} \times 134^{13} \times 3 / 4^{\prime \prime}$ | $\$ 12.75$ | $\$ 13.50$ | $\$ 15.00$ |



## HEXAGON ANVIL

Used as a base for staking, riveting, and drilling small parts. Case-hardened and ground flat and smooth. Has 15 holes, graduated from $3 / 64^{\prime \prime}$ to $1 / 4^{\prime \prime}$, and five milled slots.

| Order \# | Description | $\mathbf{W} \times \mathbf{H}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | :--- | :--- | ---: | ---: | ---: |
| $\mathbf{1 2 - 3 1 1 7}$ | Hexagon Anvil | $15 / 8^{\prime \prime} \times{ }^{3 / 4}$ | $\$ 15.90$ | $\$ 16.83$ | $\$ 18.70$ |



## BERGEON PLASTIC BLOWER



Large capacity, tough plastic air reservoir. Ridges on body preventing rolling. Plastic washer in body is treated to prevent drying out.

| Order \# | Description | Length | 12+ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 59-0484 | Plastic Blower | $41 / 2{ }^{\prime \prime}$ | $\$ 25.80$ | $\$ 27.32$ | $\$ 30.35$ |

DUST BLOWER
Rubber blower that is compact, high quality, and handy to use.

| Order \# | Description | $\mathbf{W} \times \mathbf{L}$ | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :--- | :--- | :--- | ---: | ---: | :---: |
| $\mathbf{2 3 - 0 9 0 0}$ | Dust Blower | $13 / 4^{\prime \prime} \times 3^{11 / 2 "}$ | $\$ 4.59$ | $\$ 4.86$ | $\$ 5.40$ |

## L\&R DRYER FOR MOVEMENTS AND PARTS

Place parts or movements directly onto the perforated stainless steel plate, heat will then evaporate the liquid without hurting the mechanism.
Drying area is $51 / 2^{\prime \prime}$ square. 110 V fan motor, and a 300 -watt heater. One-year limited manufacturer's warranty.

| Order \# | Description | $\mathbf{W} \times \mathbf{L} \times \mathbf{H}$ | $\mathbf{1 +}$ |
| :--- | :--- | ---: | ---: |
| $\mathbf{5 8 - 2 6 5 0}$ | L\&R Dryer | $6^{\prime \prime} \times 10^{\prime \prime} \times 4^{\prime \prime}$ | $\$ 360.00$ |

ECONOMY WATCH HAND REMOVER
Removes hands on bracelet watches and small instruments.

| Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{5 8 - 2 7 9 9}$ | Watch Hand Remover | $\$ 6.12$ | $\$ 6.48$ | $\$ 7.20$ |



## BERGEON PRESTO REMOVER

A. Pusher blocks have fiber tips that will not mar the dial. Jaws retract when side springs are passed. Center plunger holds the hands firmly.
B. Remove both small and sweep second hands from watches. Thin, curved dials and narrow jaws reach down into countersunk dials.

| Item | Order \# | Description | $\mathbf{1 2 +}$ | $\mathbf{6 +}$ | $\mathbf{1 +}$ |
| :---: | :--- | :--- | ---: | ---: | ---: |
| A | $\mathbf{5 8 - 2 8 0 0}$ | \#1 Hand Remover | $\$ 58.61$ | $\$ 62.06$ | $\$ 68.95$ |
| B | $\mathbf{5 8 - 2 8 0 1}$ | \#6 Second Hand Remover | $\$ 65.03$ | $\$ 68.85$ | $\$ 76.50$ |

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| U.S. and CANADA | INTERNATIONAL |
| :--- | :--- |
| 24/7-HOUR FAX: $800-444-4741$ | 24/7-HOUR FAX: 337-981-1655 |
| PHONE: 800-877-7777, and press: | PHONE: 337-262-7700, and press: |
| " 1 " for ordering and pricing |  |
| " 2 " to establish an account |  |
| " 3 " for customer services or order tracking |  |
| " 4 " for account information |  |
| " 5 " for diamond specialist |  |
| " 6 " for gemstone specialist |  |
| " 8 " for Spanish speaking customers (oprime " " 8 "para el español) |  |

To ensure accuracy when placing orders for an item, be prepared to give the following information: account number, account name, your name, complete series number, karat, color, size, quantity, conditional sale number (if applicable).

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Most items in this catalog are available for same-day shipping, next-day delivery. Ground delivery and motor freight service is available for items that are too large or too heavy for overnight delivery to be cost effective. Your sales consultant will discuss alternative shipping options with you when you order. Freight and insurance are billed at the time of shipment.

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All carriers are responsible and liable for any damages that occur during transit. If you suspect any damage or shortage caused during transit, do not sign freight bill or receipt without making a notation on the freight bill. Retain all packing material and shipping cartons until the carrier has made an inspection. File a claim directly with the carrier within 15 days. Stuller CANNOT file a claim for you. Additional charges for inside delivery, lift gate and COD.

## - HAZARDOUS MATERIALS SHIPPING

The Department of Transportation (DOT) governs the labeling, packaging, and handling of certain materials. These standards increase costs from shipping companies for handling (currently an additional \$20-\$30 to each separate package or chemical). Some of your packaging amounts may change. We continually update our shipping policies and try to minimize the DOT charges where possible. Material Safety Data Sheets are sent with all required items and contain important, safety recommendations and emergency procedures. Additional copies are available by contacting Tools Customer Service. Keep on file for quick reference. No returns on hazardous. Must be hazmat certified to return.

## CANCELLATIONS AND RETURNS

When ordering online, we encourage you to use the "Schedule Order" feature, which will allow you to make changes to your order prior to it being submitted at your cutoff time.

Once an order has been submitted online, by telephone or fax, you will need to contact a sales associate to determine whether your order can be changed or cancelled.

## WHERE AND HOW TO RETURN

We want you to be happy with everything you purchase from us. If you are not satisfied and need to return merchandise, we will give you full credit, provided you follow these procedures (Excludes special ordered, non-returnable items.).

- Return merchandise in its original condition and packaging; including envelopes, bags and boxes. Merchandise should be securely packaged and insured. Stuller is not responsible for returns that are damaged in transit.
- Send the completed Merchandise Return Form or a copy of the original invoice with the returned items. Please include the REASON for return. Merchandise returned without this form or a copy of the invoice may be charged a service fee of $\$ 10.00$, or we may return the merchandise to you at your expense.

| Product Category | Return Period from Invoice Date |
| :---: | :---: |
| Red Box Diamonds ${ }^{\text {® }}$ | 10 days |
| Black Box Gemstones ${ }^{\text {® }}$ | 10 days |
| Finished jewelry | 10 days |
| Tools, supplies and packaging | 15 days |
| All other product | 30 days |
| Special orders <br> (Change and Create) | Non-returnable |
| Stuller Overstock product | Non-returnable |
| Used tools | Non-returnable |
| Books, CDs and DVDs | Non-returnable |
| Custom Imprint Orders | Non-returnable |

Customers returning merchandise outside of this time frame will be charged a $15 \%$ restocking fee.

Return, insured for full value to:
Stuller, Inc., Attn: Customer Service
302 Rue Louis XIV, Lafayette, LA 70508

All returns must be shipped prepaid (no CODs).
Upon receiving your return, we will exchange, replace or credit. You will receive credit in the same manner as you paid for the merchandise.

Stuller is not responsible for returns that are damaged in transit. Items with manufacturing defects may be returned for exchange. Items that were altered, cut or manufactured to your specifications cannot be accepted for credit or exchange. Please keep this in mind when placing your order. For exchanges, we will do an exchange transaction, along with any exchange fee. Be aware that normal shipping charges do apply to the exchange order.

Except for specific Stuller programs that make provisions for "conditional sale" merchandise (finished jewelry, large diamonds and gemstones), products cannot be ordered for review. Such returns will be charged a 15\% restocking fee. A $15 \%$ restocking fee may also be charged for all returns from accounts that consistently abuse the return privilege.

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Stuller may not be responsible for returned merchandise if these procedures are not properly followed. Thank you for adhering to these policies. If you have any questions concerning the return of merchandise, or credit for the return of merchandise, please contact our Customer Service Department at 800-877-7777, press 3 or info@stuller.com. Or view stuller.com/returns for further assistance and forms.

 Beginning in 2012, the United States and several additional countries around the globe will transition to GHS. Many other regions such as the EU and Japan have already adopted it. What is GHS, and why should you care? To put it simply, GHS is a standardized system of classifying and labeling hazardous chemicals. This ground breaking effort will have major implications on the safety, welfare, and environment for the entire world working with chemicals.
 JUST THE FACTS ABOUT GHS

?Why do we need GHS?
Without GHS, every country has a different system for communicating chemical-hazard information, with little or no consistency among the systems. GHS is needed to:


Make all systems consistent for workers handling hazardous chemicals


Reduce costs to governments and companies complying. with different systems


Enable better communication of chemical information


Protect workers
Increase international trade

What are the end goals of GHS?
The basic goal of GHS is to standardize the classification rules for hazards, as well as safety data sheets (SDS) and chemical labels.


The aim is to create a system that can be utilized as needed by countries using a building-block approach, or a la carte style.

## GIOBAL ADOPTION

Adoption of GHS began back in 1992 when UNICED required a standard practice for labeling chemicals. After 20 years of research, committee meetings, and public hearings, a three year implementation is scheduled to begin in the US in 2012.
 ADOPTION IN THE U.S.


Number of Safety Documents Affected


Number of Companies Affected

$1,000,000$ documents for about $1,000,000$ chemicals


Cost of Adoption



Prevention of 43 fatalities and 585 injuries and illnesses per year.


Money saved from these reductions $=\$ 266$ million per year

Cost Savings
Cost reductions

+ productivity improvements = $\$ 585$ million per year


What does all this mean? It means that implementing this program only costs $12.8 \%$ of the savings per year.

OSHA estimates a net annual savings of $\$ 754$ million per year from proposed revisions.

## WHAT'S CHANGING? <br> 5 <br> Areas Affected <br> by Change

(1)

The new SDS will contain the following 16 sections:


Label ratings are inverted


## (3)

Labels

$$
\begin{aligned}
& \text { There are two signal words in the } \\
& \text { GHS system: danger and warning. } \\
& \text { These signal words are used to } \\
& \text { communicate the level of hazard on } \\
& \text { both the label and the SDS. }
\end{aligned}
$$

 NEED MORE INFO?
Visit SiteHawk to stay up to date on all the current GHS information: www.sitehawk.com



## Name

MSDS
MSDS is now SDS (Safety Data Sheet)

## Classifications

## CAT C Citigorvil

CATEGORY III Acute Toxicity C!TT Skin Corrosion RESPIRATORY CATEGORY II

CATEGORY I

Standardized GHS pictograms developed shown with example hazard-


Flammable


Corrosive


Irritant


Explosive
 Gas under pressure


Oxidizer


Acute toxicity


Environmental toxicity

## (4) Communication! Distribution

(5)

Training



HOW CAN COMPANIES PREPARE FOR A SUCCESSFUL GHS TRANSITION?
vi
Get prepared and be on the lookout for new GHS information.
N 2
Check implementation dates in your country,
plus any you do business with.
$\checkmark 3$
Create a transition plan for your company.
$3 / 4$
Perform a chemical inventory to validate the
chemicals actually present.
M Put together a plan to acquire, update, and manage the
new incoming SDS documents.

- 6 Update workplace labels according to new regulations.

V 7 Schedule employee training on new GHS approaches.

WEIGHTS AND MEASURES

| TO CONVERT | MULTIPLY BY | TO OBTAIN |
| :---: | :---: | :---: |
| Centimeters | 0.3937 | Inches |
| Cubic Centimeters | 0.06102 | Cubic Inches |
| Cubic Inches | 16.39 | Cubic Centimeters |
| Cubic Feet | 28.32 | Cubic Centimeters |
| Feet | 30.48 | Centimeters |
| Feet | 0.3048 | Meters |
| Grams | 0.64301 | Pennyweights (DWT) |
| Grams | 0.03527 | Ounces, Avoir |
| Grams | 0.03215 | Ounces, Troy |
| Inches | 2.54 | Centimeters |
| Inches | 25.4 | Millimeters |
| Kilograms | 35.274 | Ounces, Avoir |
| Kilograms | 32.1507 | Ounces, Troy |
| Kilograms | 643.014 | Pennyweights ((DWT) |
| Kilograms | 2.205 | Pounds, Avoir |
| Liters | 1.057 | Quarts (Liquid) |
| Meters | 3.281 | Feet |
| Meters | 39.37 | Inches |
| Meters | 1.094 | Yards |
| Millimeters | 0.03937 | Inches |
| Ounces, Avoir | 28.35 | Grams |
| Ounces, Avoir | . 9115 | Ounces, Troy |
| Ounces, Avoir | 18.2291 | Pennyweights ((DWT) |
| Ounces, Troy | 20 | Pennyweights ((DWT) |
| Ounces, Troy | 0.0311 | Kilograms |
| Ounces, Troy | 1.0971 | Ounces, Avoir |
| Ounces, Troy | 31.1035 | Grams |
| Pennyweights ((DWT) | 1.5552 | Grams |
| Pennyweights ((DWT) | 0.001555 | Kilograms |
| Pennyweights ((DWT) | 0.05486 | Ounces, Avoir |
| Pennyweights (DWT) | 0.05 | Ounces, Troy |
| Pounds, Avoir | 0.4536 | Kilograms |
| Pounds, Avoir | 16 | Ounces, Avoir |
| Pounds, Avoir | 14.5833 | Ounces, Troy |
| Pounds, Troy | 12 | Ounces, Troy |
| Square Centimeters | 0.155 | Square Inches |
| Square Feet | 144 | Square Inches |
| Square Inches | 6.452 | Square Centimeters |
| Square Inches | 645.2 | Square Millimeters |
| Square Millimeters | 0.00155 | Square Inches |
| Yard | 0.9144 | Meters |

GRAM WEIGHT

| 1 gram | $=15.43$ grains Troy |
| :--- | :--- |
| 1 grain | $=0.0648$ grams |
| 1.555 grams | $=1$ pennyweight (DWT) |
| 1 grain | $=64.80$ milligrams |
| 31.104 grams | $=1$ ounce Troy |
| 1 milligram | $=.015432$ grams |
| 28.35 grams | $=1$ ounce Avoir |
| 1 gram | $=.035274$ Avoir $0 z$ |
| 1 gram | $=.032151$ Troy oz |


| TROY WEIGHT |
| :--- |
| Used in weighing precious metals |
| 24 grains $=1$ pennyweight (DWT) |
| 1 kilogram $=2.68$ pounds |
| 20 DWT $=1$ ounce Troy |
| 1 kilogram |$=32.15$ Troy ozs.

## AVOIRDUPOIS WEIGHT

Used in weighing base metals
16 drams (or drachms) = 1 oz Avoir

| 1 pound Avoir | $=14.5833$ Troy oz |
| :--- | :--- |
| 16 ounces | $=1$ pound Avoir |
| 1 ounce Avoir | $=0.914$ Troy oz |
| 16 ounces | $=7,000$ grains |
| 1 pound Avoir | $=7,000$ grains |
| 28 pounds | $=1$ quarter English |
| 1 ounce Avoir | $=437.5$ grains |
| 4 quarters | $=1$ hundredweight (cwt.) |
| 1 pound Avoir | $=.4359$ kilo |
| 20 hundredweight | $=1$ ton Avoir |

CIRCLES AND SQUARES CIRCUMFERENCES/AREAS
Rules relating to circles and squares
The circumference of a circle is the diameter times 3.1416. The area of a circle is the radius squared times 3.1416.
The area of a square is the length of one side squared.

| SIZE IN INCHES | CIRCUMFERENCE OF CIRCLE (IN) | AREA OF CIRCLE | AREA OF SQUARE |
| :---: | :---: | :---: | :---: |
| 1 | 3.142 | .7854 | 1.000 |
| 2 | 6.283 | 3.142 | 4.000 |
| 3 | 9.425 | 7.069 | 9.000 |
| 4 | 12.57 | 12.57 | 16.00 |
| 5 | 15.71 | 19.64 | 25.00 |
| 6 | 18.85 | 28.27 | 36.00 |
| 7 | 21.99 | 38.48 | 49.00 |
| 8 | 25.13 | 50.27 | 64.00 |
| 10 | 28.28 | 63.62 | 81.00 |
| 11 | 31.42 | 78.54 | 100.00 |

TEMPERATURE CONVERSION
Conversion Formulas ${ }^{\circ} \mathrm{F}=\left(9 / 5 \times{ }^{\circ} \mathrm{C}\right)+32^{\circ}{ }^{\circ} \mathrm{C}=5 / 9\left({ }^{\circ} \mathrm{F}-32^{\circ}\right)$

| ${ }^{\circ} \mathrm{F}$ | C | ${ }^{\circ} \mathrm{F}$ | C | ${ }^{\circ} \mathrm{F}$ | C | ${ }^{\circ} \mathrm{F}$ | C | ${ }^{\circ} \mathrm{F}$ | C | ${ }^{\circ} \mathrm{F}$ | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 600 | 316 | 830 | 443 | 1120 | 604 | 1410 | 766 | 1640 | 893 | 1930 | 1054 |
| 610 | 321 | 840 | 449 | 1130 | 610 | 1420 | 771 | 1650 | 899 | 1940 | 1060 |
| 620 | 327 | 850 | 454 | 1140 | 616 | 1430 | 777 | 1660 | 904 | 1950 | 1066 |
| 630 | 332 | 860 | 460 | 1150 | 621 | 1440 | 782 | 1670 | 910 | 1960 | 1071 |
| 640 | 338 | 870 | 466 | 1160 | 627 | 1450 | 788 | 1680 | 916 | 1970 | 1077 |
| 650 | 343 | 880 | 471 | 1170 | 632 | 1460 | 793 | 1690 | 921 | 1980 | 1082 |
| 660 | 349 | 890 | 477 | 1180 | 638 | 1470 | 799 | 1700 | 927 | 1990 | 1088 |
| 670 | 354 | 900 | 482 | 1190 | 643 | 1480 | 804 | 1710 | 932 | 2000 | 1093 |
| 680 | 360 | 910 | 488 | 1200 | 649 | 1490 | 810 | 1720 | 938 | 2010 | 1099 |
| 690 | 366 | 920 | 493 | 1210 | 654 | 1500 | 816 | 1730 | 943 | 2020 | 1104 |
| 700 | 371 | 930 | 499 | 1220 | 660 | 1510 | 821 | 1800 | 982 | 2030 | 1110 |
| 710 | 377 | 1000 | 538 | 1230 | 666 | 1520 | 827 | 1810 | 988 | 2040 | 1116 |
| 720 | 382 | 1010 | 543 | 1240 | 671 | 1530 | 832 | 1820 | 993 | 2050 | 1121 |
| 730 | 388 | 1020 | 549 | 1250 | 677 | 1540 | 838 | 1830 | 999 | 2060 | 1127 |
| 740 | 393 | 1030 | 554 | 1260 | 682 | 1550 | 843 | 1840 | 1004 | 2070 | 1132 |
| 750 | 399 | 1040 | 560 | 1270 | 688 | 1560 | 849 | 1850 | 1010 | 2080 | 1138 |
| 760 | 404 | 1050 | 566 | 1280 | 693 | 1570 | 854 | 1860 | 1016 | 2090 | 1143 |
| 770 | 410 | 1060 | 571 | 1290 | 699 | 1580 | 860 | 1870 | 1021 | 2100 | 1149 |
| 780 | 416 | 1070 | 577 | 1300 | 704 | 1590 | 866 | 1880 | 1027 | 2110 | 1154 |
| 790 | 421 | 1080 | 582 | 1310 | 710 | 1600 | 871 | 1890 | 1032 | 2120 | 1160 |
| 800 | 427 | 1090 | 588 | 1320 | 716 | 1610 | 877 | 1900 | 1038 | 2130 | 1166 |
| 810 | 432 | 1100 | 593 | 1330 | 721 | 1620 | 882 | 1910 | 1043 |  |  |
| 820 | 438 | 1110 | 599 | 1400 | 760 | 1630 | 888 | 1920 | 10 |  |  |

GAUGES TO INCHES TO MILLIMETERS
$\left.\begin{array}{cccc|}\hline \text { B \& S } \\ \text { GAUGE }\end{array} \quad \begin{array}{cccc}\text { DECIMAL }\end{array} \quad \begin{array}{c}\text { MILLIMETER }\end{array} \begin{array}{c}\text { INCH } \\ \text { FRACTION }\end{array}\right]$

| B \& S GAUGE | $\begin{aligned} & \text { INCH } \\ & \text { DECIMAL } \end{aligned}$ | MILLIMETER | INCH <br> FRACTION |
| :---: | :---: | :---: | :---: |
| 16 | 0.051 | 1.291 | - |
| - | 0.047 | 1.191 | 3/64 |
| 17 | 0.045 | 1.149 | - |
| 18 | 0.040 | 1.024 | - |
| 19 | 0.036 | 0.912 | - |
| 20 | 0.032 | 0.812 | - |
| - | 0.031 | 0.795 | $1 / 32$ |
| 21 | 0.028 | 0.723 | - |
| 22 | 0.025 | 0.644 | - |
| 23 | 0.023 | 0.573 | - |
| 24 | 0.020 | 0.511 | - |
| 25 | 0.018 | 0.455 | - |
| 26 | 0.016 | 0.405 | - |
| - | 0.016 | 0.396 | 1/64 |
| 27 | 0.014 | 0.360 | - |
| 28 | 0.013 | 0.321 | - |
| 29 | 0.011 | 0.286 | - |
| 30 | 0.010 | 0.255 | - |
| 31 | 0.009 | 0.226 | - |
| 32 | 0.008 | 0.200 | - |
| 33 | 0.007 | 0.180 | - |
| 34 | 0.006 | 0.160 | - |
| 35 | 0.006 | 0.142 | - |
| 36 | 0.005 | 0.130 | - |
| 37 | 0.005 | 0.114 | - |
| 38 | 0.004 | 0.100 | - |


| ABRASIVES | Thank you Envelopes | Cutters | Diamond Burs and Discs |
| :---: | :---: | :---: | :---: |
| 4-35 | Watch Forms | Spiral Maker | Flywheels |
| Bands | Jewelry Forms | Counters | Inside Ring Burs |
| Inside Ring Polisher |  | Easy Ear Wire | Cup Burs |
| Grinder | BATTERIES | Lamps | Wax Burs |
| Rolls | 44-52 | Beading Kits |  |
| Shells | Cell | Utility Boxes | CASTING |
| Sticks | Watch | Trays | 134-191 |
| Paper | AA | Bead Boards | Milling Wax |
| Pads | $A A A$ | Mats | Carving Wax |
| Sponges | $C$ | Thread Burner | Forming Wax |
| Unitized Wheels | D | Knotter | Componentry Wax |
| Cut-Off Discs | 9 V |  | Wax Wire |
| Snap-On Discs | Hearing Aid | BENCHES AND BENCH TOOLS | Repair Wax |
| Pinhole Discs | Easy Change | 78-98 | Wax Solvent |
| MOUNTED Abrasive Stones | Rechargeable | Benches | Curing Lamps |
| Diamond Impregnated Stones | $A A$ | Tool Holder | Sprue Wax |
| Ceramic Dressing Stones | $A A A$ | Benchmate Systems | Injection Wax |
| MOUNTED Abrasive Stones | $C$ | Clamps | Matt Wax tools |
| Diamond Impregnated Stones | D | Holders | Wolf Wax Tools |
| Ceramic Dressing Stones | 9 V | Bench Pins | Wax Templates |
| MOUNTED Silicon Wheels | Chargers | Rollers | Wax Files |
| UNMOUNTED Silicon Wheels | Battery | Lifters | Dividers |
| Rubber Polishers | Phone | Pushers | Mandrels |
| Acrylic Polishers | $i P a d$ | Knifes | Wax Pens |
| Air flex Polishers | Battery Kits | Scrapers | Mold Rubber |
| MX Polishers | Flashlights | Burnishers | 2-Part Silicone Kits |
| Flap Wheels | Testers | Bench Blocks | Mold Frames |
| Platinum Polishers | Analyzers | Chasing Tools | Sprue Burnishers \& Formers |
| Gold Polishers | Parts | Beading | Sprue Base |
| Gem Polishers | Pads | Milgrain Tools | Flask and Extenders |
| Titanium Polishers | Checkers | Setting Compounds | Sprue Sleeves |
| Steel Polishers |  | Anvils | Investment |
| Ceramic Polishers | STRINGING SUPPLIES | Vises | Vac-U-Cast |
| Pumice Polishers | 53-77 | BRUSHES | Vacuum Pumps |
| Miniature Mandrels | Bead Cord | 99-107 | Mixing Bowls |
| Sanding Mandrels | Wire | 99-107 | Investment Scales |
| Wheel Arbor Mandrels | Needles | MOUNTED Bristle Brushes | Furnaces |
| Bushing Mandrels | Artistic Wire | UNMOUNTED Bristle Brushes | Controllers |
|  | Artistic Wire | Wire Bristle End Brushes | Electro Melts |
| ADHESIVE | Memory Wire Cable | Wood Metal Hub Brushes | Fume Hood |
| 36-39 | Crimp Beads | Spindle Adaptors | Torches |
| Super Glue | Crimp Tubes | Mandrels | Flashback Arrestors |
| Epoxy | Scrimps | Red Sable | Crucibles |
| Stringing Glue | End Caps | Scratch | String Rods |
| Acetone | Bead Tips | Flux Brushes | Ingot Molds |
| Dissolving Compound | Wire Guardian | Brass | Flux |
|  | Bead Bumpers | Stainless Steel | Safety Glasses |
| BAGS AND ENVELOPES | Silk Cord | Bench | Casting Grain |
| 40-43 | Spools | Multi-Purpose Brushes | Bead Blasters |
| Red-Line Bags | Awls |  | Glass Beads |
| Green-Line Bags | Bead Tweezers | BURS | Glass Beads |
| Write-On Bags | Reamers | 108-133 | CLEANING |
| Corrosion Free Bags and Strips | Shears | Panther Bur Kits and Individuals | 192-209 |
| Repair Envelopes | Pliers | Busch Bur Kits and Individuals | Hand Cleaners |
| Job Envelopes | Scissors | Bur Holders | Jewelry Cleaners |

CLEANING continued
Drain Traps
Steam Tweezers
Racks
Diamond Wash Jar
Steamers
Steamer Additives
Ultrasonics
Solutions
Holders and Baskets
Sinks

DRILLS AND PUNCHES
210-219
Titanium
Tungsten Carbide Twist Drills
Cobalt Twist Drills
Diamond Coated Core Drills
Diamond Drill Press
Diamond Drill Vise
Center Punches
Lubricants
Pen Vises
Preform Kits
Pearl Drills
Pearl Holders
Pearl Drilling Machine

## ENGRAVING

220-251
Laser Engraving
Computerized Engraving
Inside/ Flat Engraving
Dials/Blocks/Script Lettering
Power Gravers
Compressors
Bench Microscopes
Microscope Accessories
Engraving Blocks
Block Accessories
Practice Rings/Sheets
Shellac Holders
Shellac/Cements
Tracers
Scribes
Sharpening Systems
Graver Trays/Holders
Graver Templates
Gravers
High Speed
Quick Change
Carbon-Steel Gravers
Muller High Speed/Straight Line
Square/Flat Gravers
Magna Gravers
Graver Handles
Graver Lube
Bench Stones
Sharpeners

FILES
252-265
Roatary Files
Hand Files
Needle Files
Escapement Files
Single Cut Needle Files
File Cleaner
Wax Files
File Sets
Double-Ended Files
Diamond Files
Utility Files/Broaches
File Handles

## FLEX SHAFTS

266-279
Foredom Motor Kits
Motors Only
Foredom Motor Parts/Hangers
Grobet Motor Kits
Grobet Handpieces/Hangers
Handpieces
Air Scribe
Compressor/Hook-up Kits
Wolf Belt Sander/Sanding Belts
Micromotors
Allset Kits
Brill Presses
Vises

GAUGES AND MANDRELS
280-292
Dial/Digital Stone Gauges
Calipers
Dividers
Sliding Gauges
Rulers
Stone Gauges
Diamond Sieves/Holders
Bracelet Gauges
Ring Finger Gauges
Ring Mandrels
Specialty Mandrels
Bezel Mandrels
Bracelet/Wood Mandrels
Miniature/Expandable Mandrels

## GEMOLOGICAL

INSTRUMENTS
293-303
GIA Microscopes
Dazor SpeakFINDER
Polariscope/Dichroscoppe
Spectroscope
Chelsea Colour Filter Loupe
Gemoro Scopes
LED Lamp
Color CZ Set
Diamond Colorimeter

|  |
| :--- |
| Grading Light |
| Display Rings |
| Sorting Trays |
| Stone Papers/Trays |
| Parcel Containers |
| HAMMERS |
| 304-311 |
| Fretz Hammers and Anvils |
| Planishing |
| Embossing |
| Raising |
| Ball Peen |
| Goldsmith Hammers |
| Brass |
| Nylon |
| Chasing Hammers |
| Mallets |
| Forming Stakes |

LAMPS
312-317
Bench
LED
Desk Lamps
Magnification Lamps
Light Boxes

LOUPES AND MAGNIFIERS
318-329
loupe Cords
Lighted Loupes
Triplet Loupes
Diamond Stone Loupes
Magnifier
Visors
Reading Magnifiers

METALS
330-373
Grain
Casting Alloy
Sheet
Strip
Wire
Flat Sizing Stock
Triangle Sizing Stock
Bezel Stock
Twist Wire
Pattern Wire
Tubing
Solder
Stamping

## METAL DRAWING

AND FORMING
374-386
Rolling Mills
Stands
Draw Tools

Bench
Plates
Jewelry Marking
Stamps
Stamp Anvils
Dapping Tools
Punches
Forming Blocks
Copola Sets
Tap and Die Sets
Bezel Blocks/Punches

## PLATING

387-402
Plating Kits
Hoods
Plating Solutions
Rhodium Solutions
Pen Solutions
Palladium Solutions
Rectifiers
Anodes
Beakers
Test Kits
Carbon Treatment Kit
Hot Plates
Plating Racks
Thermometer
Plating Wire
Electro Cleaner
Activator
Pen Plating Systems
Antiquing Solution
Lacquer Solution
Alcohol
Acid Neutralizer
Gloves
Aprons
Post Protectors
Ceramit
U-Namel

PLIERS, CUTTERS,
AND SHEARS
403-429
Tronix Pliers
Teborg Pliers
Ideal-Tek Pliers
Lindstrom Pliers
Revere Pliers
Slim-Line Pliers
Xuron Pliers
Stuller Pliers
Specialty Pliers
Forming Pliers
Plier Tool kits
Parallel Pliers
Bending
Gem Setting
Opening


| BEZEL | 354 | 2770 | 506 | 23384 | 506 | 10-6090 | 6 | 10-7105 | 18 | 10-8164 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BEZEL | 358 | 3113 | 366 | 23406 | 506 | 10-6091 | 6 | 10-7106 | 18 | 10-8165 | 14 |
| EBAT | 44 | 3125 | 368 | 23701 | 62 | 10-6092 | 6 | 10-7107 | 18 | 10-8166 | 14 |
| EBAT | 46 | 3133 | 370 | 23752 | 64 | 10-6093 | 6 | 10-7108 | 18 | 10-8167 | 14 |
| EBAT1.5V | 48 | 3161 | 370 | 23753 | 64 | 10-6094 | 6 | 10-7120 | 18 | 10-8168 | 14 |
| EBAT101 | 48 | 3164 | 368 | 23754 | 64 | 10-6095 | 6 | 10-7121 | 18 | 10-8173 | 14 |
| EBAT12V | 48 | 3251 | 368 | 23822 | 66 | 10-6100 | 4 | 10-7122 | 18 | 10-8174 | 14 |
| EBAT9V | 48, 50 | 3251 | 370 | 23850 | 66 | 10-6102 | 4 | 10-7125 | 18 | 10-8175 | 14 |
| EBATAA | 48,50 | 3252 | 370 | 23853 | 66 | 10-6103 | 4 | 10-7130 | 276 | 10-8176 | 14 |
| EBATAAA | 48, 50 | 3288 | 368 | 23857 | 66 | 10-6104 | 4 | 10-7140 | 18 | 10-8177 | 14 |
| EBATAAAA | 48 | 3291 | 370 | 23858 | 66 | 10-7000 | 16 | 10-8071 | 264 | 10-8178 | 14 |
| EBATBASIC | 44 | 3297 | 370 | 23860 | 66 | 10-7001 | 16 | 10-8075 | 4 | 10-8181 | 32 |
| EBATC | 48, 50 | 3332 | 368 | 24034 | 62 | 10-7002 | 16 | 10-8076 | 4 | 10-8182 | 32 |
| EBATCHARGER | 50 | 3382 | 370 | 24035 | 62 | 10-7005 | 16 | 10-8077 | 4 | 10-8183 | 32 |
| EBATD | 48,50 | 3385 | 370 | 24036 | 66 | 10-7006 | 16 | 10-8078 | 4 | 10-8188 | 104 |
| EBATHA | 48 | 3388 | 368 | 24038 | 66 | 10-7007 | 16 | 10-8079 | 4 | 10-8190 | 34 |
| EBATPAD | 48 | 3390 | 370 | 24039 | 66 | 10-7010 | 16 | 10-8081 | 4 | 10-8191 | 34 |
| EBATSP | 44 | 3395 | 370 | 24055 | 64 | 10-7011 | 16 | 10-8082 | 4 | 10-8192 | 34 |
| GRAIN | 330,332 | 3396 | 370 | 24056 | 64 | 10-7012 | 16 | 10-8090 | 4 | 10-8193 | 34 |
| LA-499 | 554 | 3397 | 370 | 24057 | 62 | 10-7015 | 16 | 10-8091 | 4 | 10-8208 | 32,442 |
| LA-500 | 554 | 3398 | 370 | 24058 | 62 | 10-7016 | 16 | 10-8092 | 4 | 10-8270 | 34 |
| LA-501 | 554 | 3423 | 366 | 24059 | 62 | 10-7017 | 16 | 10-8093 | 4 | 10-8272 | 34 |
| LA-502 | 554 | 3449 | 366 | 24143 | 62 | 10-7020 | 16 | 10-8094 | 4 | 10-8274 | 34 |
| LA-503 | 554 | 3452 | 366 | 24213 | 64 | 10-7021 | 16 | 10-8100 | 4 | 10-8275 | 34 |
| LA-504 | 554 | 3455 | 366 | 24283 | 64 | 10-7022 | 16 | 10-8101 | 4 | 10-8320 | 14 |
| LA-505 | 554 | 3471 | 366 | 24313 | 64 | 10-7025 | 16 | 10-8102 | 4 | 10-8321 | 34 |
| PATTERN WIRE | 358 | 3479 | 366 | 24314 | 64 | 10-7026 | 16 | 10-8103 | 4 | 10-8322 | 34 |
| RBAT | 46 | 3483 | 366 | 24359 | 62 | 10-7027 | 16 | 10-8104 | 4 | 10-8324 | 212 |
| RBAT101 | 46 | 3487 | 368 | 24360 | 62 | 10-7030 | 18 | 10-8105 | 4 | 10-8325 | 212 |
| RD1 | 66 | 3496 | 368 | 24904 | 64 | 10-7031 | 18 | 10-8106 | 4 | 10-8326 | 212 |
| RD2 | 66 | 3507 | 368 | 24905 | 64 | 10-7032 | 18 | 10-8107 | 4 | 10-8330 | 212 |
| RD3 | 66 | 3521 | 368 | 24908 | 64 | 10-7033 | 18 | 10-8108 | 4 | 10-8331 | 212 |
| RING BLANK | 356 | 3522 | 368 | 24912 | 64 | 10-7034 | 18 | 10-8109 | 4 | 10-8340 | 10 |
| SHEET | 334 | 3526 | 368 | 24913 | 64 | 10-7035 | 18 | 10-8110 | 4 | 10-8342 | 10 |
| SIZING STOCK | 348, 350, | 3527 | 368 | 24914 | 64 | 10-7036 | 18 | 10-8111 | 4 | 10-8343 | 10 |
|  | 352, 354 | 3537 | 368 | 24915 | 64 | 10-7037 | 18 | 10-8112 | 4 | 10-8344 | 10 |
| SLIT COIL | 356, 358 | 3545 | 368 | 28096 | 556 | 10-7038 | 18 | 10-8113 | 4 | 10-8407 | 4 |
| SOLDER | 358, 360 | 3732 | 370 | 28134 | 556 | 10-7039 | 18 | 10-8114 | 4 | 10-8408 | 4 |
|  | 362, 364 | 3733 | 370 | 28145 | 556 | 10-7040 | 18 | 10-8115 | 4 | 10-8409 | 4 |
| SPEEDWIRE | 348 | 3734 | 370 | 28171 | 556 | 10-7041 | 18 | 10-8116 | 4 | 10-8410 | 4 |
| SR5 | 66 | 3736 | 370 | 28293 | 64 | 10-7042 | 18 | 10-8117 | 4 | 10-8415 | 8 |
| SR5.5 | 66 | 3737 | 370 | 28294 | 64 | 10-7043 | 18 | 10-8120 | 34 | 10-8416 | 8 |
| SR6 | 66 | 3739 | 370 | 28506 | 64 | 10-7044 | 18 | 10-8121 | 34 | 10-8417 | 8 |
| SR7 | 66 | 3742 | 370 | 10-1077 | 18 | 10-7050 | 18, 32 | 10-8122 | 6 | 10-8418 | 8 |
| STRIP | 340 | 3787 | 370 | 10-1078 | 18 | 10-7060 | 32 | 10-8123 | 6 | 10-8420 | 4 |
| TUBING | 354, 356 | 3788 | 366 | 10-1079 | 18 | 10-7061 | 32 | 10-8124 | 6 | 10-9098 | 16 |
| WIRE | 342, 344, | 3902 | 370 | 10-4080 | 28 | 10-7062 | 32 | 10-8125 | 6 | 10-9099 | 16 |
|  | 346, 348 | 3903 | 370 | 10-4203 | 240 | 10-7063 | 32 | 10-8126 | 6 | 10-9100 | 16 |
|  | 350, 352, | 3904 | 370 | 10-4204 | 240 | 10-7064 | 32 | 10-8127 | 32 | 10-9101 | 16 |
|  | 358 | 20312 | 62 | 10-4210 | 240 | 10-7065 | 32 | 10-8128 | 32 | 10-9102 | 16 |
| 34 | 276 | 20313 | 62 | 10-4500 | 240 | 10-7070 | 34,458 | 10-8131 | 6 | 10-9103 | 16 |
| 94 | 64 | 20342 | 62 | 10-4510 | 240 | 10-7071 | 34,458 | 10-8132 | 6 | 10-9104 | 14 |
| 101 | 64 | 20999 | 64 | 10-4550 | 10 | 10-7072 | 34,458 | 10-8140 | 14 | 10-9104 | 500 |
| 102 | 64 | 21459 | 506 | 10-4551 | 10 | 10-7073 | 34,458 | 10-8141 | 14 | 10-9105 | 16 |
| 109 | 64 | 21460 | 506 | 10-4552 | 10 | 10-7074 | 34,458 | 10-8142 | 14 | 10-9106 | 16 |
| 262 | 62 | 21461 | 506 | 10-4553 | 10 | 10-7075 | 34,458 | 10-8143 | 14 | 10-9107 | 16 |
| 263 | 62 | 22467 | 66 | 10-4554 | 10 | 10-7076 | 34,458 | 10-8150 | 6 | 10-9108 | 16 |
| 863 | 64 | 22470 | 64 | 10-4555 | 240 | 10-7080 | 452 | 10-8151 | 6 | 10-9109 | 16 |
| 864 | 64 | 22485 | 64 | 10-5510 | 240 | 10-7090 | 452 | 10-8152 | 6 | 10-9110 | 16 |
| 865 | 64 | 22532 | 64 | 10-5520 | 240 | 10-7100 | 18 | 10-8153 | 6 | 10-9111 | 16 |
| 866 | 64 | 22629 | 64 | 10-6000 | 4 | 10-7101 | 18 | 10-8155 | 6 | 10-9112 | 16 |
| 867 | 64 | 22630 | 64 | 10-6008 | 240 | 10-7102 | 18 | 10-8160 | 34 | 10-9113 | 16 |
| 2305 | 506 | 23040 | 2 | 10-6010 | 240 | 10-7103 | 18 | 10-8161 | 34 | 10-9114 | 16 |
| 2306506 |  | 23373 | 64 | -6015 | 240 | 10.7104 | 18 | 10.8162 | 34 | 10.9115 | 14 |


| 10-9116 | 14 | 11-0904 | 130 | 11-3526 | 8 | 11-6026 | 20 | 11-6126 | 24 | 11-6221 | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10-9117 | 14 | 11-0906 | 130 | 11-3527 | 8 | 11-6027 | 20 | 11-6127 | 24 | 11-6222 | 30 |
| 10-9130 | 16 | 11-0907 | 130 | 11-3528 | 8 | 11-6028 | 20 | 11-6128 | 24 | 11-6223 | 30 |
| 10-9131 | 16 | 11-0908 | 130 | 11-3529 | 8 | 11-6029 | 20 | 11-6129 | 24 | 11-6244 | 30 |
| 10-9132 | 16 | 11-0909 | 130 | 11-3540 | 278 | 11-6030 | 20 | 11-6130 | 24 | 11-6245 | 30 |
| 10-9133 | 16 | 11-0910 | 130 | 11-3541 | 278 | 11-6031 | 20 | 11-6131 | 24 | 11-6246 | 30 |
| 10-9134 | 16 | 11-0915 | 130 | 11-4260 | 28 | 11-6032 | 20 | 11-6135 | 24 | 11-6247 | 30 |
| 10-9135 | 16 | 11-0916 | 130 | 11-4261 | 28 | 11-6033 | 20 | 11-6136 | 24 | 11-6248 | 30 |
| 10-9136 | 16 | 11-2203 | 6 | 11-4270 | 28 | 11-6034 | 20 | 11-6137 | 24 | 11-6249 | 30 |
| 10-9140 | 16 | 11-2204 | 6 | 11-4271 | 28 | 11-6040 | 20 | 11-6138 | 24 | 11-6250 | 34 |
| 10-9141 | 16 | 11-2205 | 6 | 11-4280 | 28 | 11-6041 | 20 | 11-6139 | 24 | 11-6251 | 34 |
| 10-9142 | 16 | 11-2660 | 6 | 11-4281 | 28 | 11-6042 | 20 | 11-6140 | 24 | 11-6252 | 34 |
| 10-9143 | 16 | 11-3008 | 32 | 11-4290 | 28 | 11-6043 | 20 | 11-6141 | 24 | 11-6253 | 34 |
| 10-9144 | 16 | 11-3009 | 32 | 11-4291 | 28 | 11-6044 | 20 | 11-6145 | 24 | 11-6255 | 34 |
| 10-9145 | 16 | 11-3010 | 32 | 11-4300 | 28 | 11-6045 | 20 | 11-6146 | 24 | 11-6256 | 34 |
| 10-9146 | 16 | 11-3060 | 6 | 11-4301 | 28 | 11-6046 | 20 | 11-6147 | 24 | 11-6257 | 34 |
| 10-9162 | 16,442 | 11-3100 | 6 | 11-4310 | 28 | 11-6047 | 20 | 11-6148 | 24 | 11-6260 | 28 |
| 10-9163 | 16,442 | 11-3101 | 6 | 11-4311 | 28 | 11-6048 | 20 | 11-6149 | 24 | 11-6261 | 28 |
| 11-0651 | 40 | 11-3102 | 6 | 11-4320 | 28 | 11-6049 | 20 | 11-6150 | 24 | 11-6262 | 30 |
| 11-0652 | 40 | 11-3103 | 6 | 11-4321 | 28 | 11-6052 | 20 | 11-6151 | 24 | 11-6263 | 30 |
| 11-0700 | 10 | 11-3110 | 6 | 11-4330 | 28 | 11-6060 | 22 | 11-6155 | 24 | 11-6264 | 30 |
| 11-0701 | 10 | 11-3200 | 6 | 11-4331 | 28 | 11-6061 | 22 | 11-6156 | 24 | 11-6265 | 30 |
| 11-0702 | 10 | 11-3201 | 6 | 11-4340 | 28 | 11-6062 | 22 | 11-6157 | 24 | 11-6266 | 30 |
| 11-0703 | 10 | 11-3202 | 6 | 11-4341 | 28 | 11-6063 | 22 | 11-6158 | 24 | 11-6267 | 30 |
| 11-0704 | 10 | 11-3203 | 6 | 11-4350 | 28 | 11-6064 | 22 | 11-6159 | 24 | 11-6268 | 30 |
| 11-0705 | 10 | 11-3204 | 6 | 11-4351 | 28 | 11-6065 | 30 | 11-6160 | 24 | 11-6269 | 30 |
| 11-0706 | 10 | 11-3205 | 6 | 11-4360 | 28 | 11-6072 | 30 | 11-6165 | 24 | 11-6270 | 30 |
| 11-0707 | 10 | 11-3206 | 6 | 11-4361 | 28 | 11-6074 | 30 | 11-6166 | 24 | 11-6271 | 30 |
| 11-0708 | 10 | 11-3330 | 6 | 11-4370 | 28 | 11-6080 | 22 | 11-6167 | 24 | 11-6272 | 30 |
| 11-0709 | 10 | 11-3390 | 8 | 11-4371 | 28 | 11-6081 | 22 | 11-6168 | 24 | 11-6273 | 30 |
| 11-0710 | 10 | 11-3391 | 8 | 11-4380 | 28 | 11-6082 | 22 | 11-6169 | 24 | 11-6274 | 30 |
| 11-0711 | 10 | 11-3392 | 8 | 11-4381 | 28 | 11-6083 | 22 | 11-6171 | 24 | 11-6275 | 30 |
| 11-0720 | 12 | 11-3400 | 8 | 11-4390 | 28 | 11-6084 | 22 | 11-6172 | 26 | 11-6276 | 30 |
| 11-0721 | 12 | 11-3401 | 8 | 11-4391 | 28 | 11-6085 | 22 | 11-6175 | 24 | 11-6277 | 30 |
| 11-0722 | 12 | 11-3402 | 8 | 11-4400 | 28 | 11-6086 | 22 | 11-6176 | 24 | 11-6280 | 30 |
| 11-0723 | 12 | 11-3403 | 8 | 11-4401 | 28 | 11-6087 | 22 | 11-6177 | 24 | 11-6281 | 30 |
| 11-0724 | 12 | 11-3404 | 8 | 11-5100 | 18 | 11-6088 | 22 | 11-6178 | 24 | 11-6282 | 30 |
| 11-0725 | 12 | 11-3405 | 8 | 11-5102 | 18 | 11-6090 | 26 | 11-6179 | 24 | 11-6283 | 30 |
| 11-0726 | 12 | 11-3406 | 8 | 11-5103 | 18 | 11-6091 | 26 | 11-6181 | 24 | 11-6290 | 30 |
| 11-0730 | 12 | 11-3408 | 8 | 11-5104 | 18 | 11-6092 | 26 | 11-6185 | 24 | 11-6291 | 30 |
| 11-0731 | 12 | 11-3420 | 10 | 11-5105 | 18 | 11-6093 | 26 | 11-6186 | 24 | 11-6292 | 30 |
| 11-0732 | 12 | 11-3421 | 10 | 11-5106 | 18 | 11-6094 | 26 | 11-6187 | 24 | 11-6293 | 30 |
| 11-0736 | 12 | 11-3422 | 10 | 11-5107 | 18 | 11-6095 | 26 | 11-6188 | 24 | 11-6294 | 30 |
| 11-0737 | 12 | 11-3423 | 10 | 11-6000 | 20 | 11-6096 | 26 | 11-6189 | 24 | 11-6295 | 30 |
| 11-0739 | 12 | 11-3424 | 10 | 11-6001 | 20 | 11-6100 | 20 | 11-6190 | 24 | 11-6296 | 30 |
| 11-0740 | 12 | 11-3425 | 10 | 11-6002 | 20 | 11-6101 | 20 | 11-6191 | 24 | 11-6297 | 30 |
| 11-0741 | 12 | 11-3426 | 10 | 11-6003 | 20 | 11-6102 | 20 | 11-6192 | 24 | 11-6300 | 28 |
| 11-0745 | 12 | 11-3427 | 10 | 11-6004 | 20 | 11-6103 | 20 | 11-6193 | 26 | 11-6301 | 28 |
| 11-0746 | 12 | 11-3428 | 10 | 11-6005 | 20 | 11-6105 | 20 | 11-6194 | 24 | 11-6302 | 28 |
| 11-0747 | 12 | 11-3429 | 10 | 11-6006 | 20 | 11-6106 | 20 | 11-6195 | 26 | 11-6303 | 28 |
| 11-0750 | 12 | 11-3430 | 8 | 11-6007 | 20 | 11-6107 | 20 | 11-6196 | 26 | 11-6304 | 28 |
| 11-0751 | 12 | 11-3431 | 8 | 11-6008 | 20 | 11-6108 | 20 | 11-6197 | 26 | 11-6305 | 28 |
| 11-0752 | 12 | 11-3500 | 8 | 11-6009 | 20 | 11-6110 | 20 | 11-6198 | 26 | 11-6307 | 28 |
| 11-0753 | 12 | 11-3501 | 8 | 11-6012 | 20 | 11-6111 | 20 | 11-6199 | 26 | 11-6308 | 28 |
| 11-0754 | 12 | 11-3502 | 8 | 11-6013 | 20 | 11-6112 | 20 | 11-6200 | 30 | 11-6310 | 28 |
| 11-0755 | 12 | 11-3503 | 8 | 11-6014 | 20 | 11-6113 | 20 | 11-6201 | 30 | 11-6312 | 28 |
| 11-0756 | 12 | 11-3504 | 8 | 11-6015 | 20 | 11-6115 | 20 | 11-6202 | 30 | 11-6313 | 28 |
| 11-0757 | 12 | 11-3505 | 8 | 11-6016 | 20 | 11-6116 | 20 | 11-6203 | 30 | 11-6315 | 28 |
| 11-0758 | 10 | 11-3520 | 8 | 11-6017 | 20 | 11-6117 | 20 | 11-6204 | 30 | 11-6316 | 28 |
| 11-0800 | 12 | 11-3521 | 8 | 11-6018 | 20 | 11-6118 | 20 | 11-6210 | 30 | 11-6317 | 28 |
| 11-0900 | 130 | 11-3522 | 8 | 11-6019 | 20 | 11-6120 | 20 | 11-6211 | 30 | 11-6318 | 28 |
| 11-0901 | 130 | 11-3523 | 8 | 11-6020 | 20 | 11-6121 | 24 | 11-6212 | 30 | 11-6320 | 28 |
| 11-0902 | 130 | 11-3524 | 8 | 11-6021 | 20 | 11-6124 | 24 | 11-6213 | 30 | 11-6322 | 28 |
| 11-0903 | 130 | 11-3525 | 8 | 11-6025 | 20 | 11-6125 | 24 | 11-6220 | 30 | 11-6324 | 22 |

Series Index

| 11-6325 | 22 | 11-8045 | 12 | 12-2053 | 562 | 13-1721 | 314 | 14-0021 | 508 | 14-0769 | 184, 514 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11-6326 | 22 | 11-8098 | 276 | 12-2054 | 560 | 13-1723 | 314 | 14-0022 | 508 | 14-0770 | 184, 514 |
| 11-6327 | 22 | 11-8100 | 20 | 12-2056 | 38 | 13-1792 | 312 | 14-0024 | 508 | 14-0771 | 514 |
| 11-6328 | 22 | $11-8110$ | 20 | 12-2080 | 246 | 13-1798 | 314 | 14-0025 | 508 | 14-0772 | 514 |
| 11-6329 | 22 | 11-8114 | 22 | 12-2100 | 562 | 13-1799 | 312 | 14-0090 | 508, 512 | 14-0777 | 516 |
| 11-6330 | 22 | 11-8116 | 22 | 12-2111 | 36 | 13-1800 | 312 | 14-0092 | 512 | 14-0778 | 516 |
| 11-6331 | 22 | 11-8118 | 22 | 12-2112 | 36 | 13-1801 | 312 | 14-0110 | 500 | 14-0779 | 516 |
| 11-6333 | 22 | 11-8120 | 22 | 12-2113 | 36 | 13-1802 | 312 | 14-0115 | 500 | 14-0780 | 516 |
| 11-6334 | 22 | 11-8122 | 22 | 12-2114 | 36 | 13-1803 | 312 | 14-0116 | 500 | 14-0781 | 516 |
| 11-6335 | 22 | 11-8124 | 22 | 12-2115 | 38 | 13-1805 | 312 | 14-0117 | 500 | 14-0782 | 514, 516 |
| 11-6336 | 22 | 11-8126 | 22 | 12-2117 | 36 | 13-1806 | 312 | 14-0120 | 500 | 14-0806 | 506 |
| 11-6350 | 26 | 11-8134 | 22 | 12-2118 | 36 | 13-1808 | 312 | 14-0121 | 500 | 14-0811 | 502 |
| 11-6351 | 26 | 11-8136 | 22 | 12-2120 | 36 | 13-1810 | 312 | 14-0122 | 500 | 14-1002 | 504 |
| 11-6353 | 26 | 11-8138 | 22 | 12-2121 | 38 | 13-1814 | 312 | 14-0123 | 500 | 14-1015 | 508 |
| 11-6354 | 26 | 11-8140 | 22 | 12-2124 | 70 | 13-1817 | 312 | 14-0124 | 500 | 14-1016 | 508 |
| 11-6356 | 26 | 11-8142 | 22 | 12-2127 | 70 | 13-1818 | 316 | 14-0125 | 500 | 14-1017 | 508 |
| 11-6357 | 26 | 11-8144 | 22 | 12-2131 | 38 | 13-1819 | 316 | 14-0127 | 500 | 14-1024 | 508 |
| 11-6360 | 26 | 11-8146 | 22 | 12-2132 | 38 | 13-1820 | 312 | 14-0128 | 500 | 14-1025 | 508 |
| 11-6361 | 26 | 11-8148 | 22 | 12-2135 | 38 | 13-1821 | 312 | 14-0129 | 500 | 14-1026 | 508 |
| 11-6362 | 26 | 11-8150 | 22 | 12-2136 | 36 | 13-1823 | 78 | 14-0130 | 500 | 14-1220 | 508 |
| 11-6363 | 26 | 11-8152 | 22 | 12-2137 | 36 | 13-1823 | 312 | 14-0132 | 500 | 14-1300 | 508 |
| 11-6364 | 26 | 11-8154 | 22 | 12-2138 | 36 | 13-1824 | 312 | 14-0133 | 500 | 14-1301 | 508 |
| 11-6366 | 26 | 11-8156 | 22 | 12-2270 | 94, 244 | 13-1825 | 312 | 14-0135 | 500 | 14-1302 | 508 |
| 11-6367 | 26 | 11-8158 | 22 | 12-2280 | 94, 246 | 13-1826 | 312 | 14-0136 | 500 | 14-1303 | 508 |
| 11-6368 | 26 | 11-8162 | 22 | 12-2281 | 94 | 13-1828 | 292 | 14-0140 | 502 | 14-1306 | 508 |
| 11-6369 | 26 | 11-8164 | 32 | 12-2288 | 94, 246 | 13-1829 | 312 | 14-0141 | 502 | 14-1307 | 508 |
| 11-6370 | 26 | 11-8166 | 32 | 12-2292 | 94 | 13-1831 | 312 | 14-0143 | 502 | 14-1308 | 508 |
| 11-6371 | 26 | 11-8168 | 32 | 12-2300 | 246 | 13-1832 | 312 | 14-0145 | 502 | 14-1309 | 508 |
| 11-6372 | 26 | 11-8170 | 32 | 12-3010 | 96 | 13-1833 | 312 | 14-0146 | 220 | 14-1402 | 508 |
| 11-6373 | 26 | 11-8172 | 22 | 12-3015 | 96 | 13-1834 | 312 | 14-0147 | 220 | 14-1403 | 508 |
| 11-6374 | 26 | 11-8174 | 22 | 12-3050 | 96 | 13-1840 | 296 | 14-0148 | 220 | 14-1404 | 508 |
| 11-6375 | 26 | 11-8180 | 28 | 12-3107 | 96 | 13-2010 | 314 | 14-0149 | 220 | 14-1500 | 504 |
| 11-6376 | 26 | 11-8182 | 28 | 12-3109 | 96 | 13-2016 | 314 | 14-0150 | 220 | 14-1501 | 504 |
| 11-6520 | 24 | 11-8184 | 28 | 12-3110 | 96 | 13-2030 | 292 | 14-0151 | 220 | 14-1502 | 504 |
| 11-6521 | 24 | 11-8186 | 28 | 12-3115 | 96, 576 | 13-2031 | 292 | 14-0153 | 220 | 14-1503 | 504 |
| 11-6522 | 24 | 11-8190 | 16 | 12-3117 | 96, 576 | 13-2032 | 292 | 14-0154 | 220 | 14-1504 | 504 |
| 11-6523 | 24 | 11-8192 | 16 | 13-0430 | 78 | 13-2033 | 292 | 14-0155 | 220 | 14-1505 | 504 |
| 11-6524 | 24 | 11-8194 | 16 | 13-0434 | 82 | 13-3000 | 86 | 14-0160 | 502 | 14-1506 | 504 |
| 11-6525 | 24 | 11-8196 | 16 | 13-0436 | 82 | 13-3001 | 86 | 14-0200 | 220 | 14-1507 | 504 |
| 11-6530 | 26 | 11-8197 | 16 | 13-0438 | 82 | 13-3002 | 86 | 14-0410 | 516 | 14-1508 | 504 |
| 11-6531 | 26 | 11-8198 | 16 | 13-0441 | 78,566 | 13-3030 | 88 | 14-0420 | 516 | 14-1509 | 504 |
| 11-6532 | 26 | 11-8200 | 128 | 13-0442 | 78 | 13-3200 | 86 | 14-0522 | 516 | 14-1510 | 504 |
| 11-6533 | 26 | 11-8204 | 16 | 13-0445 | 80 | 13-3205 | 86 | 14-0523 | 516 | 14-1511 | 504 |
| 11-6534 | 26 | 11-8205 | 16 | 13-0446 | 80 | 13-3207 | 86 | 14-0524 | 516 | 14-1600 | 512 |
| 11-6535 | 26 | 11-8206 | 14, 16 | 13-0447 | 80 | 13-3760 | 82 | 14-0525 | 516 | 14-1601 | 512 |
| 11-6540 | 26 | 11-8207 | 14 | 13-0448 | 80 | 13-3765 | 82 | 14-0526 | 516 | 14-1602 | 512 |
| 11-6541 | 26 | 11-8210 | 128 | 13-0449 | 80 | 13-3766 | 82 | 14-0527 | 510 | 14-1603 | 512 |
| 11-6542 | 26 | 11-8211 | 128 | 13-0460 | 82 | 13-3771 | 82 | 14-0600 | 508 | 14-1607 | 514 |
| 11-6543 | 26 | 11-8212 | 128 | 13-0510 | 84,86 | 13-3800 | 82 | 14-0601 | 508 | 14-1609 | 514 |
| 11-6544 | 26 | 11-8220 | 128 | 13-0511 | 84 | 13-3805 | 570 | 14-0602 | 508 | 14-1610 | 514 |
| 11-6545 | 26 | 11-8230 | 128 | 13-0512 | 84 | 13-4000 | 314 | 14-0603 | 508 | 14-1620 | 514 |
| 11-6600 | 32 | 11-8235 | 128 | 13-0515 | 86 | 13-4100 | 316 | 14-0604 | 508 | 14-1621 | 514 |
| 11-6601 | 32 | 11-8240 | 16 | 13-0516 | 84 | 13-4200 | 316 | 14-0605 | 508 | 14-1622 | 514 |
| 11-6602 | 32 | 11-8242 | 16 | 13-0517 | 84 | 13-4300 | 316 | 14-0606 | 508 | 14-1623 | 514 |
| 11-6603 | 32 | 11-8244 | 16 | 13-0530 | 78 | 13-8122 | 316 | 14-0607 | 508 | 14-1624 | 514 |
| 11-6620 | 28 | 11-8246 | 16 | 13-1000 | 312 | 13-8123 | 314 | 14-0751 | 510 | 14-1625 | 514 |
| 11-7100 | 34 | 11-8278 | 14, 456 | 13-1698 | 296 | 14-0008 | 506 | 14-0753 | 510 | 14-1626 | 514 |
| 11-7101 | 34 | 11-8279 | 14, 456 | 13-1699 | 296 | 14-0009 | 506 | 14-0755 | 514 | 14-1628 | 502 |
| 11-7102 | 134 | 11-8280 | 14,456 | 13-1699 | 296 | 14-0012 | 508 | 14-0756 | 512 | 14-1630 | 512 |
| 11-8040 | 12 | 11-8281 | 14,456 | 13-1701 | 314 | 14-0013 | 508 | 14-0758 | 512 | 14-1631 | 512 |
| 11-8041 | 12 | 12-0451 | 36 | 13-1708 | 296 | 14-0014 | 508 | 14-0759 | 512 | 14-1632 | 512 |
| 11-8042 | 12 | 12-2030 | 246 | 13-1709 | 314 | 14-0015 | 508 | 14-0760 | 512 | 14-1659 | 510 |
| 11-8043 | 12 | 12-2050 | 36 | 13-1719 | 314 | 14-0016 | 508 | 14-0761 | 512 | 14-1660 | 184,512 |
| 11-8044 | 12 | 12-2051 | 38 | 13-1720 | 314 | 14-0017 | 508 | 14-0765 | 514 | 14-1661 | 184, 512 |

592 | stuller.com

| 14-1662 | 184, 512 | 15-0520 | 192 | 16-2602 | 106 | 16-5992 | 100 | 17-0746 | 402, 478 | 17-3454 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14-1663 | 184, 512 | 15-0521 | 192 | 16-2603 | 106 | 16-5993 | 100 | 17-0747 | 402, 478 | 17-3455 | 8 |
| 14-1664 | 184, 512 | 15-0522 | 192 | 16-2604 | 106 | 16-5994 | 100 | 17-0749 | 454 | 17-3456 | 8 |
| 14-1665 | 184, 512 | 15-0524 | 192 | 16-2605 | 106 | 16-5995 | 100 | 17-0750 | 454 | 17-3458 | 8 |
| 14-1667 | 510 | 15-0525 | 192 | 16-2606 | 106 | 16-5996 | 100 | 17-0751 | 454 | 17-3459 | 8 |
| 14-1790 | 184, 514 | 15-0526 | 146 | 16-2607 | 106 | 16-5997 | 100 | 17-0752 | 454 | 17-3519 | 456 |
| 14-1795 | 184, 514 | 15-0530 | 192 | 16-2701 | 106 | 16-5998 | 100 | 17-0760 | 460 | 17-3520 | 456 |
| 14-1840 | 516 | 15-0531 | 192 | 16-3100 | 106 | 16-5999 | 100 | 17-0762 | 460 | 17-3559 | 456 |
| 14-1845 | 516 | 15-0580 | 200 | 16-3111 | 106 | 16-6000 | 100 | 17-0763 | 460 | 17-3560 | 456 |
| 14-1850 | 516 | 15-1000 | 194 | 16-3112 | 106 | 16-6001 | 100 | 17-0764 | 460 | 17-3599 | 456 |
| 14-1855 | 516 | 15-1005 | 194 | 16-3980 | 104 | 16-6002 | 100 | 17-0765 | 460 | 17-3600 | 456 |
| 14-2010 | 516 | 15-1105 | 194 | 16-3981 | 104 | 16-6003 | 100 | 17-0770 | 460 | 17-3639 | 456 |
| 14-2011 | 516 | 15-1106 | 194 | 16-3982 | 104 | 16-6004 | 100 | 17-0775 | 460 | 17-3640 | 456 |
| 14-2030 | 516 | 15-1109 | 194 | 16-3983 | 104 | 16-6006 | 100 | 17-0776 | 460 | 17-3659 | 456 |
| 14-2032 | 516 | 15-1110 | 194 | 16-3984 | 104 | 16-6007 | 100 | 17-0800 | 460 | 17-3660 | 456 |
| 14-2040 | 516 | 15-1111 | 192 | 16-3985 | 104 | 16-6008 | 100 | 17-0801 | 460 | 17-3679 | 456 |
| 14-2050 | 514, 516 | 15-1112 | 194 | 16-3986 | 104 | 16-6009 | 100 | 17-0802 | 460 | 17-3680 | 456 |
| 14-2055 | 516 | 15-1116 | 194 | 16-3987 | 104 | 16-6010 | 100 | 17-0803 | 460 | 17-3681 | 456 |
| 14-2350 | 514 | 15-2006 | 194 | 16-3988 | 104 | 16-6011 | 98 | 17-0820 | 460 | 17-3711 | 456 |
| 14-2865 | 164 | 15-2008 | 194 | 16-3989 | 104 | 16-6012 | 98 | 17-0846 | 402 | 17-3720 | 456 |
| 14-3120 | 520 | 15-2058 | 70 | 16-3990 | 104 | 16-6013 | 98 | 17-0846 | 478 | 17-3769 | 456 |
| 14-3125 | 520 | 15-2059 | 70 | 16-3991 | 104 | 16-6014 | 98 | 17-0905 | 454 | 17-3770 | 456 |
| 14-4492 | 228, 276 | 15-2060 | 70 | 16-3992 | 104 | 16-6016 | 98 | 17-1000 | 460 | 17-4499 | 456 |
| 14-4493 | 228, 276 | 15-2061 | 70 | 16-4000 | 104 | 16-6017 | 98 | 17-1020 | 454 | 17-4500 | 456 |
| 14-4494 | 228, 276 | 15-2062 | 70 | 16-4001 | 104 | 16-6018 | 98 | 17-1105 | 456 | 17-4501 | 456 |
| 14-4495 | 228, 276 | 15-2064 | 70 | 16-4005 | 104 | 16-6019 | 98 | 17-1106 | 456 | 17-4502 | 456 |
| 14-4496 | 228, 276 | 15-2066 | 70 | 16-4006 | 104 | 16-6021 | 98 | 17-1107 | 456 | 17-4503 | 456 |
| 14-4497 | 228, 276 | 15-2067 | 70 | 16-4007 | 104 | 16-6022 | 98 | 17-1108 | 456 | 17-4505 | 456 |
| 14-4498 | 228 | 15-2068 | 70 | 16-4008 | 104 | 16-6023 | 98 | 17-1109 | 456 | 17-4506 | 456 |
| 14-4999 | 228, 276 | 15-2069 | 70 | 16-4402 | 100 | 16-6024 | 98 | 17-1110 | 454 | 17-4507 | 456 |
| 14-5000 | 228, 276 | 15-2070 | 70 | 16-4412 | 100 | 16-6026 | 98 | 17-1111 | 454 | 17-4508 | 456 |
| 14-5001 | 228, 276 | 15-2071 | 70 | 16-4454 | 100 | 16-6027 | 98 | 17-1201 | 456 | 17-4510 | 456 |
| 14-5002 | 228, 276 | 15-2073 | 564 | 16-4464 | 100 | 16-6028 | 98 | 17-1202 | 456 | 17-4511 | 456 |
| 14-5004 | 228, 276 | 15-2074 | 564 | 16-4562 | 100 | 16-6029 | 98 | 17-1203 | 456 | 17-4512 | 456 |
| 14-5005 | 228, 276 | 15-2075 | 564 | 16-4572 | 100 | 16-6052 | 98 | 17-1204 | 456 | 17-4513 | 456 |
| 14-5010 | 508 | 15-5050 | 264 | 16-4614 | 100 | 16-6053 | 98 | 17-1207 | 456 | 17-4514 | 456 |
| 14-5015 | 508 | 15-5055 | 264 | 16-4624 | 100 | 16-6054 | 98 | 17-1210 | 450 | 17-4516 | 456 |
| 14-5020 | 508 | 15-5060 | 264 | 16-5965 | 100 | 16-6055 | 98 | 17-1250 | 450 | 17-4517 | 456 |
| 14-5030 | 516 | 16-0510 | 106 | 16-5966 | 100 | 16-6056 | 98 | 17-1260 | 450 | 17-4518 | 456 |
| 14-5034 | 516 | 16-0520 | 106 | 16-5967 | 100 | 16-6057 | 98 | 17-1270 | 450 | 17-4839 | 456 |
| 14-5060 | 184, 514 | 16-0530 | 106 | 16-5968 | 100 | 16-6058 | 98 | 17-1383 | 452 | 17-4890 | 456 |
| 14-5062 | 184, 514 | 16-0540 | 106 | 16-5969 | 100 | 16-6059 | 98 | 17-1384 | 452 | 17-4900 | 456 |
| 14-5063 | 184, 514 | 16-0550 | 106 | 16-5970 | 100 | 16-6070 | 98 | 17-1385 | 452 | 17-4902 | 456 |
| 14-5064 | 184, 514 | 16-0551 | 106 | 16-5971 | 100 | 16-6071 | 98 | 17-2005 | 452 | 17-4904 | 456 |
| 14-5065 | 184 | 16-0552 | 106 | 16-5972 | 100 | 16-6072 | 98 | 17-2006 | 452 | 17-4906 | 456 |
| 15-0009 | 192 | 16-0560 | 106 | 16-5973 | 100 | 16-7000 | 100 | 17-2007 | 452 | 17-4908 | 456 |
| 15-0012 | 192 | 16-0565 | 106 | 16-5974 | 100 | 16-7001 | 100 | 17-3150 | 458 | 17-4910 | 456 |
| 15-0501 | 192 | 16-0570 | 106 | 16-5975 | 100 | 16-7002 | 100 | 17-3153 | 458 | 17-4912 | 456 |
| 15-0502 | 192 | 16-0575 | 106 | 16-5976 | 100 | 16-7003 | 100 | 17-3154 | 458 | 17-4914 | 456 |
| 15-0503 | 192 | 16-0580 | 106 | 16-5977 | 100 | 16-7007 | 100 | 17-3155 | 458 | 17-4916 | 456 |
| 15-0504 | 192 | 16-0585 | 106 | 16-5978 | 100 | 16-7008 | 100 | 17-3315 | 458 | 17-4918 | 456 |
| 15-0505 | 192 | 16-0590 | 106 | 16-5979 | 100 | 16-7009 | 100 | 17-3320 | 458 | 17-4920 | 456 |
| 15-0506 | 192 | 16-0595 | 106 | 16-5980 | 100 | 16-7010 | 100 | 17-3325 | 458 | 17-5000 | 436 |
| 15-0509 | 192 | 16-0598 | 106 | 16-5981 | 100 | 16-7050 | 102 | 17-3400 | 458 | 17-5011 | 436 |
| 15-0510 | 192 | 16-0599 | 106 | 16-5982 | 100 | 16-7051 | 102 | 17-3401 | 458 | 17-5013 | 436 |
| 15-0511 | 192 | 16-2250 | 104 | 16-5983 | 100 | 16-7052 | 102 | 17-3410 | 458 | 17-5025 | 436 |
| 15-0512 | 192 | 16-2255 | 104 | 16-5984 | 100 | 16-7053 | 102 | 17-3413 | 458 | 17-5026 | 436 |
| 15-0513 | 192 | 16-2256 | 104 | 16-5985 | 100 | 16-7054 | 102 | 17-3414 | 458 | 17-5027 | 436 |
| 15-0514 | 192 | 16-2257 | 104 | 16-5986 | 100 | 16-7055 | 102 | 17-3448 | 8 | 17-5028 | 436 |
| 15-0515 | 192 | 16-2597 | 104 | 16-5987 | 100 | 16-7056 | 102 | 17-3449 | 8 | 17-5029 | 436 |
| 15-0516 | 192 | 16-2598 | 106 | 16-5988 | 100 | 16-7530 | 100 | 17-3450 | 8 | 17-5030 | 436 |
| 15-0517 | 192 | 16-2599 | 106 | 16-5989 | 100 | 16-7535 | 100 | 17-3451 | 8 | 17-5533 | 450 |
| 15-0518 | 192 | 16-2600 | 106 | 16-5990 | 100 | 16-7540 | 100 | 17-3452 | 8 | 17-5544 | 450 |
| 15-0519 | 192 | 16-2601 | 106 | 16-5991 | 100 | 17-0745 | 402, 478 | 17-3453 | 8 | 17-5545 | 450 |

Series Index

| 17-5546 | 450 | 17-7258 | 450 | 18-1725 | 120 | 18-2078 | 124 | 18-4012 | 124 | 18-5019 | 122, 124 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17-5560 | 450 | 17-7510 | 452 | 18-1730 | 120 | 18-2079 | 124 | 18-4014 | 124 | 18-5020 | 122 |
| 17-5565 | 450 | 17-7513 | 452 | 18-1735 | 120 | 18-2080 | 124 | 18-4015 | 124 | 18-5021 | 122 |
| 17-5566 | 450 | 17-7515 | 452 | 18-1740 | 120 | 18-2160 | 124 | 18-4016 | 124 | 18-5022 | 122, 124 |
| 17-5603 | 450 | 17-7516 | 452 | 18-1750 | 120 | 18-2161 | 124 | 18-4018 | 124 | 18-5023 | 122 |
| 17-5604 | 450 | 17-7517 | 452 | 18-1760 | 120 | 18-2162 | 124 | 18-4021 | 124 | 18-5024 | 122, 124 |
| 17-5605 | 450 | 17-7519 | 452 | 18-1770 | 120 | 18-2163 | 124 | 18-4023 | 124 | 18-5025 | 122 |
| 17-5606 | 450 | 17-7610 | 452 | 18-1780 | 120 | 18-2164 | 124 | 18-4025 | 124 | 18-5026 | 122 |
| 17-5607 | 450 | 17-7719 | 452 | 18-1790 | 120 | 18-2165 | 124 | 18-4027 | 124 | 18-5027 | 122 |
| 17-5608 | 450 | 17-7722 | 452 | 18-1810 | 120 | 18-2166 | 124 | 18-4029 | 124 | 18-5028 | 122 |
| 17-5609 | 450 | 17-7726 | 452 | 18-1811 | 120 | 18-2167 | 124 | 18-4031 | 124 | 18-5029 | 122 |
| 17-5610 | 450 | 17-8700 | 458 | 18-1812 | 120 | 18-2168 | 124 | 18-4050 | 122 | 18-5031 | 122 |
| 17-5611 | 450 | 17-8710 | 458 | 18-1813 | 120 | 18-2169 | 124 | 18-4051 | 122 | 18-5033 | 122 |
| 17-5612 | 450 | 17-8720 | 458 | 18-1814 | 120 | 18-2170 | 124 | 18-4052 | 122 | 18-5035 | 122, 124 |
| 17-5713 | 452 | 17-8732 | 458 | 18-1815 | 120 | 18-2171 | 124 | 18-4053 | 122 | 18-5037 | 122 |
| 17-5714 | 452 | 17-8734 | 458 | 18-1816 | 120 | 18-2172 | 124 | 18-4054 | 122 | 18-5040 | 122, 124 |
| 17-5715 | 452 | 17-9001 | 458 | 18-1817 | 120 | 18-2173 | 124 | 18-4055 | 122 | 18-5042 | 122, 124 |
| 17-6150 | 456 | 17-9002 | 458 | 18-1818 | 120 | 18-2174 | 124 | 18-4056 | 122 | 18-5045 | 122 |
| 17-6151 | 456 | 17-9003 | 458 | 18-1819 | 120 | 18-2174 | 124 | 18-4057 | 122 | 18-5047 | 122, 124 |
| 17-6152 | 456 | 17-9004 | 458 | 18-1821 | 120 | 18-2592 | 122 | 18-4058 | 122 | 18-5050 | 122 |
| 17-6153 | 456 | 17-9460 | 436 | 18-1822 | 120 | 18-2593 | 122 | 18-4059 | 122 | 18-5052 | 122 |
| 17-6154 | 456 | 17-9470 | 436 | 18-1823 | 120 | 18-2594 | 122 | 18-4060 | 122 | 18-5057 | 122 |
| 17-6156 | 456 | 17-9480 | 436 | 18-1824 | 120 | 18-2595 | 122 | 18-4061 | 122 | 18-5089 | 128 |
| 17-6157 | 456 | 17-9490 | 436 | 18-1825 | 120 | 18-2596 | 122 | 18-4062 | 122 | 18-5337 | 122 |
| 17-6235 | 452 | 17-9550 | 458 | 18-1826 | 120 | 18-2597 | 122 | 18-4063 | 122 | 18-5338 | 122, 124 |
| 17-6243 | 452 | 17-9552 | 458 | 18-1827 | 120 | 18-2598 | 122 | 18-4064 | 122 | 18-5339 | 122 |
| 17-6245 | 452 | 17-9560 | 436 | 18-1829 | 120 | 18-2599 | 122 | 18-4065 | 122 | 18-5340 | 122, 124 |
| 17-6255 | 452 | 17-9562 | 436 | 18-1831 | 120 | 18-2600 | 122 | 18-4066 | 122 | 18-5341 | 122 |
| 17-6256 | 452 | 17-9570 | 436 | 18-1833 | 120 | 18-2601 | 122 | 18-4067 | 122 | 18-5342 | 122, 124 |
| 17-6257 | 452 | 17-9580 | 436 | 18-1835 | 120 | 18-2602 | 122 | 18-4068 | 122 | 18-5343 | 122, 124 |
| 17-6265 | 452 | 17-9590 | 436 | 18-1837 | 120 | 18-2603 | 122 | 18-4069 | 122 | 18-5344 | 122 |
| 17-6266 | 452 | 18-0500 | 90 | 18-1840 | 120 | 18-2604 | 122 | 18-4070 | 122 | 18-5345 | 122, 124 |
| 17-6430 | 452 | 18-0502 | 90 | 18-1842 | 120 | 18-2605 | 122 | 18-4075 | 122 | 18-5346 | 122 |
| 17-6431 | 452 | 18-0504 | 132 | 18-1845 | 120 | 18-2606 | 122 | 18-4110 | 120 | 18-5347 | 122 |
| 17-6432 | 452 | 18-0505 | 132 | 18-1847 | 120 | 18-2607 | 122 | 18-4111 | 120 | 18-5348 | 122, 124 |
| 17-6433 | 452 | 18-0506 | 132 | 18-1850 | 120 | 18-2608 | 122 | 18-4112 | 120 | 18-5349 | 122, 124 |
| 17-7100 | 454 | 18-0507 | 132 | 18-1855 | 120 | 18-2609 | 122 | 18-4113 | 120 | 18-5351 | 122, 124 |
| 17-7101 | 454 | 18-0509 | 132 | 18-1860 | 120 | 18-2611 | 122 | 18-4114 | 120 | 19-2311 | 108 |
| 17-7102 | 454 | 18-0510 | 90 | 18-1865 | 120 | 18-3010 | 124 | 18-4115 | 120 | 19-2313 | 108 |
| 17-7103 | 454 | 18-0515 | 90 | 18-1870 | 120 | 18-3012 | 124 | 18-4116 | 120 | 19-2315 | 108 |
| 17-7104 | 454 | 18-0516 | 90 | 18-1875 | 120 | 18-3014 | 124 | 18-4117 | 120 | 19-2317 | 108 |
| 17-7105 | 454 | 18-0517 | 90 | 18-1880 | 120 | 18-3015 | 124 | 18-4118 | 120 | 19-2319 | 108 |
| 17-7106 | 454 | 18-0518 | 90 | 18-1885 | 120 | 18-3016 | 124 | 18-4119 | 120 | 19-2321 | 108 |
| 17-7107 | 454 | 18-0519 | 90 | 18-1886 | 120 | 18-3018 | 124 | 18-4120 | 120 | 19-2323 | 108 |
| 17-7160 | 452 | 18-0520 | 90,246 | 18-1894 | 122, 124 | 18-3021 | 124 | 18-4121 | 120 | 19-2325 | 108 |
| 17-7162 | 452 | 18-0521 | 90,246 | 18-1895 | 122, 124 | 18-3023 | 124 | 18-4122 | 120 | 19-2327 | 108 |
| 17-7163 | 452 | 18-0522 | 90,246 | 18-1896 | 122, 124 | 18-3380 | 122 | 18-4123 | 120 | 19-2329 | 108 |
| 17-7164 | 452 | 18-0525 | 90 | 18-1897 | 122, 124 | 18-3390 | 122 | 18-4124 | 120 | 19-2331 | 108 |
| 17-7165 | 452 | 18-0526 | 90 | 18-1898 | 122, 124 | 18-3400 | 122 | 18-4125 | 120 | 19-2332 | 108 |
| 17-7166 | 452 | 18-0530 | 90 | 18-1899 | 122, 124 | 18-3410 | 122 | 18-4126 | 120 | 19-2335 | 108 |
| 17-7170 | 452 | 18-0531 | 90 | 18-1960 | 122, 124 | 18-3420 | 122 | 18-4127 | 120 | 19-2340 | 108 |
| 17-7175 | 452 | 18-0532 | 90 | 18-1961 | 122, 124 | 18-3430 | 122 | 18-4128 | 120 | 19-2345 | 108 |
| 17-7200 | 450 | 18-0533 | 90 | 18-1962 | 122, 124 | 18-3460 | 122 | 18-5001 | 120 | 19-2350 | 108 |
| 17-7203 | 450 | 18-0535 | 90 | 18-1963 | 122, 124 | 18-3480 | 122 | 18-5005 | 120 | 19-2352 | 108 |
| 17-7224 | 450 | 18-0536 | 90 | 18-1964 | 122, 124 | 18-3500 | 122 | 18-5006 | 120 | 19-2356 | 108 |
| 17-7227 | 450 | 18-0537 | 90 | 18-1965 | 122, 124 | 18-3520 | 122 | 18-5009 | 122, 124 | 19-2363 | 108 |
| 17-7245 | 452 | 18-0538 | 90 | 18-2070 | 124 | 18-3540 | 122 | 18-5010 | 122, 124 | 19-2372 | 108 |
| 17-7250 | 450 | 18-0539 | 90 | 18-2071 | 124 | 18-3560 | 122 | 18-5012 | 122, 124 | 19-2380 | 108 |
| 17-7251 | 450 | 18-0540 | 90 | 18-2072 | 124 | 18-3570 | 122 | 18-5013 | 122 | 19-2396 | 108 |
| 17-7252 | 450 | 18-0541 | 90 | 18-2073 | 124 | 18-3580 | 122 | 18-5014 | 122 | 19-2397 | 108 |
| 17-7253 | 450 | 18-0542 | 90 | 18-2074 | 124 | 18-3610 | 122 | 18-5015 | 122 | 19-2717 | 108 |
| 17-7254 | 450 | 18-0543 | 90 | 18-2075 | 124 | 18-3611 | 122 | 18-5016 | 122 | 19-2723 | 108 |
| 17-7255 | 450 | 18-0545 | 90 | 18-2076 | 124 | 18-4009 | 124 | 18-5017 | 122 | 19-2733 | 108 |
| 17-7257 | 450 | 18-1530 | 124 | 18-2077 | 124 | 18-4010 | 124 | 18-5018 | 122 | 19-2747 | 108 |

594 | stuller.com

| 19-2763 | 108 | 20-1201 | 130 | 21-0231 | 156 | 21-0430 | 156 | 21-0540 | 158 | 21-0896 | 162 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19-2780 | 108 | 20-1202 | 130 | 21-0232 | 156 | 21-0431 | 156 | 21-0541 | 158, 552 | 21-0900 | 162 |
| 19-2863 | 108 | 20-1203 | 130 | 21-0233 | 156 | 21-0432 | 156 | 21-0542 | 158 | 21-0955 | 158 |
| 19-2880 | 108 | 20-1204 | 130 | 21-0234 | 156 | 21-0433 | 156 | 21-0544 | 160 | 21-0956 | 158 |
| 19-2881 | 108 | 20-1205 | 126 | 21-0235 | 156 | 21-0434 | 156 | 21-0545 | 160 | 21-0957 | 158 |
| 19-3152 | 108 | 20-1206 | 126 | 21-0238 | 156 | 21-0435 | 156 | 21-0546 | 160 | 21-0958 | 158 |
| 19-3160 | 108 | 20-1207 | 126 | 21-0239 | 156 | 21-0440 | 152 | 21-0547 | 160 | 21-0960 | 130 |
| 19-3185 | 108 | 20-1208 | 126 | 21-0240 | 176 | 21-0441 | 152 | 21-0548 | 158 | 21-1000 | 160 |
| 19-3220 | 118, 120 | 20-1209 | 126 | 21-0245 | 156 | 21-0442 | 152 | 21-0620 | 150 | 21-1010 | 160 |
| 19-3860 | 108 | 20-1210 | 126 | 21-0246 | 156 | 21-0443 | 152 | 21-0621 | 150 | 21-1100 | 160 |
| 19-5000 | 128 | 20-1211 | 126 | 21-0247 | 156 | 21-0444 | 152 | 21-0622 | 150 | 21-1120 | 160 |
| 19-5001 | 128 | 20-2820 | 126 | 21-0248 | 156 | 21-0445 | 152 | 21-0623 | 150 | 21-1125 | 160 |
| 19-5002 | 128 | 20-2821 | 126 | 21-0249 | 156 | 21-0446 | 152 | 21-0624 | 150 | 21-1127 | 160 |
| 19-5006 | 128 | 20-2822 | 126 | 21-0250 | 160 | 21-0447 | 152 | 21-0625 | 150 | 21-1128 | 162, 284 |
| 19-5008 | 128 | 20-2823 | 126 | 21-0255 | 160 | 21-0448 | 152 | 21-0626 | 150 | 21-1140 | 160 |
| 19-5009 | 128 | 20-2920 | 126 | 21-0256 | 160 | 21-0449 | 152 | 21-0627 | 150 | 21-1150 | 160 |
| 19-5010 | 128 | 20-2922 | 126 | 21-0257 | 156 | 21-0452 | 6 | 21-0628 | 150 | 21-1200 | 28 |
| 19-5014 | 128 | 20-2924 | 126 | 21-0258 | 156 | 21-0453 | 6 | 21-0630 | 150 | 21-1201 | 28 |
| 19-5015 | 128 | 20-2930 | 126 | 21-0260 | 152 | 21-0455 | 154 | 21-0631 | 150 | 21-1202 | 28 |
| 19-5017 | 128 | 20-2932 | 126 | 21-0261 | 152 | 21-0456 | 154 | 21-0632 | 150 | 21-1203 | 28 |
| 19-5020 | 128 | 20-2934 | 126 | 21-0262 | 152 | 21-0460 | 176 | 21-0633 | 150 | 21-1204 | 28 |
| 19-5021 | 128 | 21-0003 | 6 | 21-0263 | 152 | 21-0465 | 278 | 21-0634 | 150 | 21-1205 | 28 |
| 19-5023 | 128 | 21-0011 | 162 | 21-0264 | 152 | 21-0470 | 154 | 21-0640 | 150 | 21-1206 | 28 |
| 19-5026 | 128 | 21-0016 | 174 | 21-0265 | 152 | 21-0474 | 154 | 21-0641 | 150 | 21-1207 | 28 |
| 19-5027 | 128 | 21-0022 | 162 | 21-0266 | 156 | 21-0476 | 154 | 21-0642 | 150 | 21-1208 | 28 |
| 19-5028 | 128 | 21-0025 | 162, 284 | 21-0267 | 156 | 21-0478 | 154 | 21-0643 | 150 | 21-1209 | 28 |
| 19-5029 | 128 | 21-0052 | 162 | 21-0268 | 156 | 21-0480 | 154 | 21-0650 | 150 | 21-1210 | 28 |
| 19-5030 | 128 | 21-0053 | 162 | 21-0269 | 158 | 21-0482 | 154 | 21-0651 | 150 | 21-1211 | 28 |
| 19-5031 | 128 | 21-0080 | 162 | 21-0275 | 158 | 21-0484 | 154 | 21-0652 | 150 | 21-1305 | 176 |
| 19-6000 | 128 | 21-0081 | 162 | 21-0276 | 158, 548 | 21-0486 | 154 | 21-0653 | 150 | 21-1306 | 176 |
| 19-6001 | 128 | 21-0082 | 162 | 21-0277 | 158 | 21-0488 | 154 | 21-0660 | 150 | 21-1307 | 176 |
| 19-6002 | 128 | 21-0083 | 162 | 21-0278 | 158 | 21-0489 | 154 | 21-0661 | 150 | 21-1308 | 176 |
| 19-6003 | 128 | 21-0084 | 162 | 21-0279 | 158 | 21-0490 | 154 | 21-0662 | 150 | 21-1330 | 176 |
| 19-6004 | 128 | 21-0087 | 162 | 21-0308 | 148 | 21-0491 | 278 | 21-0663 | 150 | 21-1331 | 176 |
| 19-6005 | 128 | 21-0160 | 164 | 21-0309 | 148 | 21-0492 | 278 | 21-0664 | 150 | 21-1332 | 176 |
| 19-6010 | 128 | 21-0162 | 164 | 21-0320 | 148 | 21-0493 | 278 | 21-0670 | 150 | 21-1338 | 176 |
| 19-6011 | 128 | 21-0180 | 164 | 21-0321 | 148 | 21-0494 | 278 | 21-0671 | 150 | 21-1339 | 176 |
| 19-6012 | 128 | 21-0181 | 164 | 21-0322 | 148 | 21-0495 | 154 | 21-0672 | 150 | 21-1340 | 148 |
| 19-6013 | 128 | 21-0183 | 164 | 21-0323 | 148 | 21-0496 | 154, 548 | 21-0673 | 150 | 21-1341 | 148 |
| 19-9250 | 130 | 21-0184 | 164 | 21-0324 | 152 | 21-0498 | 6 | 21-0674 | 150 | 21-1342 | 148 |
| 19-9252 | 130 | 21-0186 | 164 | 21-0325 | 152 | 21-0499 | 278 | 21-0680 | 150 | 21-1345 | 148 |
| 19-9260 | 132 | 21-0187 | 164 | 21-0326 | 152 | 21-0501 | 278 | 21-0681 | 150 | 21-1346 | 148 |
| 19-9270 | 130 | 21-0188 | 164 | 21-0327 | 152 | 21-0508 | 154 | 21-0682 | 150 | 21-1347 | 148 |
| 19-9272 | 130 | 21-0189 | 164 | 21-0328 | 152 | 21-0519 | 156 | 21-0683 | 150 | 21-1350 | 148 |
| 19-9273 | 130 | 21-0207 | 148 | 21-0329 | 152 | 21-0520 | 156 | 21-0684 | 150 | 21-1351 | 148 |
| 19-9275 | 132 | 21-0208 | 148 | 21-0382 | 152 | 21-0521 | 156 | 21-0710 | 152 | 21-1352 | 148 |
| 19-9276 | 132 | 21-0209 | 148 | 21-0383 | 152 | 21-0522 | 156 | 21-0711 | 152 | 21-1355 | 148 |
| 19-9277 | 132 | 21-0210 | 164 | 21-0390 | 158 | 21-0523 | 156 | 21-0712 | 152 | 21-1356 | 148 |
| 19-9280 | 132 | 21-0215 | 156 | 21-0392 | 152 | 21-0524 | 156 | 21-0713 | 152 | 21-1357 | 148 |
| 20-1040 | 122, 124 | 21-0216 | 156 | 21-0393 | 152 | 21-0525 | 156 | 21-0714 | 152 | 21-1358 | 148 |
| 20-1041 | 122, 124 | 21-0217 | 156 | 21-0394 | 152 | 21-0526 | 156 | 21-0715 | 152 | 21-1359 | 148 |
| 20-1042 | 122, 124 | 21-0218 | 156 | 21-0395 | 176 | 21-0527 | 156 | 21-0716 | 152 | 21-1360 | 148 |
| 20-1043 | 122, 124 | 21-0219 | 156 | 21-0396 | 176 | 21-0528 | 156 | 21-0717 | 152 | 21-1361 | 148 |
| 20-1044 | 122, 124 | 21-0220 | 156 | 21-0397 | 176 | 21-0529 | 156 | 21-0718 | 152 | 21-1362 | 148 |
| 20-1045 | 122, 124 | 21-0221 | 156 | 21-0400 | 174 | 21-0530 | 156 | 21-0719 | 152 | 21-1363 | 148 |
| 20-1046 | 122, 124 | 21-0222 | 156 | 21-0401 | 174 | 21-0531 | 156 | 21-0720 | 152 | 21-1364 | 148 |
| 20-1047 | 122, 124 | 21-0223 | 156 | 21-0402 | 174 | 21-0532 | 156 | 21-0721 | 152 | 21-1365 | 148 |
| 20-1048 | 122, 124 | 21-0224 | 156 | 21-0403 | 174 | 21-0533 | 156 | 21-0722 | 152 | 21-1366 | 148 |
| 20-1049 | 122, 124 | 21-0225 | 156 | 21-0410 | 174 | 21-0534 | 156 | 21-0723 | 152 | 21-1367 | 148 |
| 20-1050 | 122, 124 | 21-0226 | 156 | 21-0420 | 176 | 21-0535 | 156 | 21-0724 | 152 | 21-1368 | 148 |
| 20-1051 | 122, 124 | 21-0227 | 156 | 21-0421 | 176 | 21-0536 | 156 | 21-0725 | 152 | 21-1369 | 148 |
| 20-1052 | 122, 124 | 21-0228 | 156 | 21-0422 | 176 | 21-0537 | 156 | 21-0726 | 152 | 21-1370 | 148 |
| 20-1053 | 122, 124 | 21-0229 | 156 | 21-0427 | 176 | 21-0538 | 156 | 21-0727 | 152 | 21-1371 | 148 |
| 20-1200 | 126 | 21-0230 | 156 | 21-0429 | 176 | 21-0539 | 156 | 21-0740 | 108 | 21-1372 | 148 |


| 21-1383 | 176 | 21-7005 | 178 | 21-9001 | 150 | 22-1051 | 144 | 22-4727 | 14,178 | 22-5941 | 172 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21-1411 | 154 | 21-7006 | 178 | 21-9010 | 182 | 22-1052 | 144 | 22-4729 | 178 | 22-5950 | 172 |
| 21-1412 | 154 | 21-7007 | 178 | 21-9050 | 146 | 22-1053 | 144 | 22-4731 | 180 | 22-6006 | 170 |
| 21-1413 | 154 | 21-7008 | 178 | 21-9099 | 148 | 22-1055 | 144 | 22-4738 | 180 | 22-6007 | 170 |
| 21-1414 | 154 | 21-7009 | 178 | 21-9101 | 148 | 22-1056 | 144 | 22-4739 | 180 | 22-6008 | 170 |
| 21-1415 | 154 | 21-7010 | 178 | 21-9102 | 148 | 22-1057 | 144 | 22-4740 | 180 | 22-6009 | 170 |
| 21-1416 | 154 | 21-7011 | 178 | 21-9103 | 148 | 22-1060 | 144 | 22-4750 | 180 | 22-7403 | 174 |
| 21-1417 | 154 | 21-7012 | 178 | 21-9104 | 148 | 22-1061 | 144 | 22-4761 | 182 | 22-7424 | 174 |
| 21-1418 | 154 | 21-7013 | 178 | 21-9114 | 148 | 22-1062 | 144 | 22-4771 | 180 | 22-7425 | 174 |
| 21-1419 | 154 | 21-7014 | 178 | 21-9115 | 148 | 22-1070 | 144 | 22-4772 | 180 | 22-7426 | 174 |
| 21-1420 | 154 | 21-7015 | 178 | 21-9116 | 148 | 22-1071 | 144 | 22-4773 | 180 | 22-7427 | 174 |
| 21-1421 | 154 | 21-7040 | 188 | 21-9117 | 148 | 22-1072 | 144 | 22-4776 | 180 | 22-7428 | 174 |
| 21-1422 | 154 | 21-7043 | 188 | 21-9118 | 148 | 22-1100 | 146 | 22-4778 | 180 | 22-7431 | 174 |
| 21-1423 | 154 | 21-7044 | 188 | 21-9120 | 148 | 22-1101 | 144 | 22-5506 | 170 | 22-7432 | 174 |
| 21-1424 | 154 | 21-7045 | 188 | 21-9121 | 148 | 22-1102 | 144 | 22-5507 | 170 | 22-7435 | 168 |
| 21-1425 | 154 | 21-7046 | 188 | 21-9122 | 148 | 22-1110 | 146 | 22-5509 | 170 | 22-7436 | 168 |
| 21-1426 | 154 | 21-7047 | 182 | 21-9137 | 150 | 22-1112 | 146 | 22-5600 | 170 | 22-7437 | 174 |
| 21-1427 | 154 | 21-7048 | 182 | 21-9138 | 150 | 22-1113 | 146 | 22-5620 | 170 | 22-7438 | 174 |
| 21-1778 | 182 | 21-7049 | 182 | 21-9139 | 150 | 22-1123 | 144 | 22-5621 | 170 | 22-7439 | 174 |
| 21-2002 | 162 | 21-7049 | 188 | 21-9140 | 150 | 22-1124 | 144 | 22-5622 | 170 | 22-7440 | 174 |
| 21-2003 | 162 | 21-7050 | 186 | 21-9141 | 150 | 22-1150 | 142 | 22-5700 | 170 | 22-7500 | 478 |
| 21-2510 | 160 | 21-7051 | 186 | 21-9142 | 150 | 22-1152 | 142 | 22-5701 | 170 | 22-7502 | 478 |
| 21-2520 | 160 | 21-7052 | 186 | 21-9143 | 150 | 22-1153 | 142 | 22-5702 | 170 | 22-7503 | 478 |
| 21-2600 | 162 | 21-7053 | 188 | 21-9144 | 150 | 22-1170 | 142 | 22-5703 | 170 | 22-7506 | 478 |
| 21-2601 | 162 | 21-7054 | 188 | 21-9145 | 150 | 22-1180 | 142 | 22-5800 | 170 | 22-7508 | 402, 478 |
| 21-2602 | 162 | 21-7055 | 188 | 21-9146 | 150 | 22-1185 | 142 | 22-5811 | 168 | 22-7511 | 478 |
| 21-2603 | 68 | 21-7056 | 188 | 21-9147 | 150 | 22-1200 | 142 | 22-5811 | 188 | 22-7900 | 178 |
| 21-2604 | 162 | 21-7057 | 182 | 21-9148 | 150 | 22-1201 | 142 | 22-5840 | 168 | 22-7910 | 142, 184 |
| 21-2800 | 160 | 21-7058 | 182 | 21-9149 | 150 | 22-1300 | 140 | 22-5844 | 168 | 22-7911 | 142, 184 |
| 21-2812 | 160 | 21-7059 | 182, 188 | 21-9150 | 150 | 22-1301 | 140 | 22-5845 | 168 | 22-7912 | 142, 184 |
| 21-2817 | 160 | 21-7060 | 182, 188 | 21-9151 | 150 | 22-1302 | 140 | 22-5849 | 168 | 22-7913 | 184 |
| 21-2822 | 160 | 21-7400 | 182 | 21-9152 | 150 | 22-1303 | 140 | 22-5850 | 166 | 22-7913KIT | 184 |
| 21-2835 | 158 | 21-7401 | 182 | 21-9153 | 150 | 22-1304 | 140 | 22-5855 | 166 | 22-7914 | 184 |
| 21-2880 | 160 | 21-7602 | 182 | 21-9154 | 150 | 22-1600 | 146 | 22-5856 | 166 | 22-7914KIT | 184 |
| 21-2895 | 158 | 21-7603 | 182 | 21-9159 | 150 | 22-2110 | 146 | 22-5860 | 166 | 22-7930 | 184 |
| 21-4995 | 142 | 21-7604 | 182 | 21-9160 | 152 | 22-2111 | 146 | 22-5865 | 166 | 22-7931 | 184 |
| 21-4996 | 142 | 21-7605 | 182 | 21-9161 | 150 | 22-2112 | 146 | 22-5869 | 166 | 22-7932 | 184 |
| 21-4999 | 142 | 21-7605 | 188 | 21-9162 | 152 | 22-2160 | 136 | 22-5870 | 168 | 22-7933 | 184 |
| 21-5000 | 142 | 21-7606 | 182 | 21-9163 | 152 | 22-2170 | 138 | 22-5871 | 168 | 22-7937 | 184 |
| 21-5001 | 142 | 21-7607 | 182 | 21-9165 | 152 | 22-2180 | 138 | 22-5880 | 166 | 22-7938 | 184 |
| 21-5002 | 142 | 21-7608 | 182 | 21-9166 | 152 | 22-2190 | 138 | 22-5885 | 166 | 22-7942 | 184 |
| 21-5003 | 142 | 21-7609 | 182 | 21-9167 | 150 | 22-2200 | 136 | 22-5889 | 168 | 22-7943 | 184 |
| 21-5004 | 142 | 21-7700 | 182 | 22-0085 | 164 | 22-3600 | 140 | 22-5896 | 166 | 22-7944 | 184 |
| 21-5005 | 142 | 21-7701 | 182 | 22-0088 | 164 | 22-3602 | 140 | 22-5900 | 166 | 22-7946 | 184 |
| 21-5006 | 142 | 21-7705 | 182 | 22-0089 | 164 | 22-3603 | 140 | 22-5901 | 166 | 22-8000 | 184 |
| 21-5007 | 142 | 21-7710 | 182 | 22-0090 | 164 | 22-3604 | 140 | 22-5902 | 166 | 22-8150 | 184 |
| 21-6550 | 160 | 21-7720 | 182 | 22-0091 | 164 | 22-3700 | 186 | 22-5903 | 166 | 22-8152 | 184 |
| 21-6925 | 178 | 21-7721 | 182 | 22-0092 | 164 | 22-3702 | 186 | 22-5904 | 166 | 22-8700 | 186 |
| 21-6930 | 178 | 21-7827 | 178 | 22-0093 | 164 | 22-3703 | 186 | 22-5905 | 166 | 22-8701 | 186 |
| 21-6935 | 178 | 21-7828 | 178 | 22-0094 | 164 | 22-4610 | 186 | 22-5906 | 166 | 22-8702 | 186 |
| 21-6940 | 178 | 21-7829 | 178 | 22-0095 | 164 | 22-4612 | 186 | 22-5907 | 166 | 22-8710 | 186 |
| 21-6945 | 178 | 21-7830 | 178 | 22-0096 | 164 | 22-4620 | 140,186 | 22-5908 | 166 | 22-8711 | 186 |
| 21-6950 | 178 | 21-7831 | 178 | 22-0097 | 164 | 22-4624 | 186 | 22-5915 | 166 | 22-8712 | 186 |
| 21-6955 | 178 | 21-7832 | 178 | 22-0133 | 164 | 22-4631 | 186 | 22-5916 | 166 | 22-8770 | 186 |
| 21-6960 | 178 | 21-7833 | 178 | 22-0510 | 186 | 22-4634 | 186 | 22-5922 | 170 | 22-8771 | 186 |
| 21-6965 | 178 | 21-7834 | 178 | 22-1000 | 144 | 22-4700 | 186 | 22-5923 | 170 | 22-8772 | 186 |
| 21-6966 | 178 | 21-7835 | 178 | 22-1005 | 144 | 22-4701 | 186 | 22-5924 | 170 | 22-9001 | 146 |
| 21-6967 | 178 | 21-7836 | 178 | 22-1008 | 144 | 22-4702 | 186 | 22-5925 | 170 | 22-9002 | 146 |
| 21-6970 | 178 | 21-7970 | 178 | 22-1028 | 146 | 22-4703 | 186 | 22-5926 | 172 | 23-0039 | 188 |
| 21-7000 | 178 | 21-7975 | 178 | 22-1029 | 146 | 22-4704 | 186 | 22-5927 | 172 | 23-0043 | 188 |
| 21-7001 | 178 | 21-7976 | 178 | 22-1035 | 146 | 22-4719 | 178 | 22-5928 | 172 | 23-0043 | 478 |
| 21-7002 | 178 | 21-7976 | 178 | 22-1038 | 146 | 22-4720 | 178 | 22-5929 | 172 | 23-0044 | 188 |
| 21-7003 | 178 | 21-7980 | 178 | 22-1045 | 144 | 22-4722 | 178 | 22-5930 | 172 | 23-0047 | 188 |
| 21-7005 | 142 | 21-9000 | 150 | 22-1047 | 144 | 22-4725 | 178 | 22-5940 | 172 | 23-0048 | 88 |

596 | stuller.com

| 23-0049 | 190 | 23-6020 | 192, 208 | 26-2010 | 242 | 26-4009 | 226 | 26-4129 | 242 | 28-0540 | 210 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23-0050 | 190 | 23-6021 | 192, 208 | 26-2601 | 302 | 26-4011 | 226 | 26-4130 | 242 | 28-0550 | 210 |
| 23-0051 | 190 | 23-6022 | 208 | 26-2602 | 302 | 26-4013 | 228 | 26-4131 | 242 | 28-0551 | 210 |
| 23-0052 | 190 | 23-6023 | 208 | 26-2603 | 302 | 26-4014 | 248 | 26-4133 | 242 | 28-0552 | 210 |
| 23-0053 | 190 | 23-6200 | 196 | 26-2604 | 302 | 26-4015 | 248 | 26-4134 | 242 | 28-0554 | 210 |
| 23-0054 | 190 | 23-6204 | 204 | 26-3660 | 244 | 26-4016 | 248 | 26-4135 | 238, 250 | 28-0555 | 210 |
| 23-0055 | 188 | 23-6205 | 204 | 26-3750 | 224 | 26-4017 | 248 | 26-4136 | 238 | 28-0557 | 210 |
| 23-0057 | 190 | 23-6206 | 204 | 26-3760 | 224 | 26-4018 | 248 | 26-4137 | 238, 250 | 28-0558 | 210 |
| 23-0058 | 190 | 23-6208 | 200 | 26-3762 | 224 | 26-4019 | 248 | 26-4138 | 250 | 28-0559 | 210 |
| 23-0059 | 190 | 23-6209 | 196 | 26-3770 | 224 | 26-4026 | 226 | 26-4139 | 242 | 28-0560 | 210 |
| 23-0061 | 188 | 23-6210 | 196 | 26-3780 | 224 | 26-4030 | 228 | 26-4140 | 238 | 28-0561 | 210 |
| 23-0062 | 188 | 23-6500 | 200 | 26-3781 | 224 | 26-4035 | 228 | 26-4144 | 98 | 28-0562 | 210 |
| 23-0065 | 206 | 23-6501 | 198, 200 | 26-3840 | 220 | 26-4036 | 226 | 26-4145 | 518 | 28-0563 | 210 |
| 23-0073 | 190 | 23-6502 | 198, 200 | 26-3850 | 224 | 26-4036 | 226 | 26-4146 | 518 | 28-0564 | 210 |
| 23-0074 | 190 | 23-6610 | 200 | 26-3854 | 224 | 26-4037 | 226 | 26-4147 | 244 | 28-0565 | 210 |
| 23-0075 | 190 | 23-6611 | 200 | 26-3855 | 224 | 26-4038 | 226 | 26-4148 | 86 | 28-0566 | 210 |
| 23-0076 | 190 | 23-6612 | 200 | 26-3856 | 224 | 26-4039 | 218 | 26-4149 | 244 | 28-0567 | 210 |
| 23-0077 | 190 | 24-1006 | 134 | 26-3857 | 224 | 26-4040 | 248 | 26-4150 | 472 | 28-0568 | 210 |
| 23-0078 | 190 | 24-1008 | 134 | 26-3858 | 224 | 26-4041 | 248 | 26-4151 | 244 | 28-0569 | 210 |
| 23-0080 | 190 | 25-0440 | 380 | 26-3859 | 224 | 26-4042 | 248 | 26-4152 | 244 | 28-0570 | 210 |
| 23-0900 | 578 | 25-0444 | 380 | 26-3870 | 220 | 26-4043 | 248 | 26-4154 | 244 | 28-0571 | 210 |
| 23-1000 | 196 | 25-0445 | 380 | 26-3871 | 220 | 26-4050 | 228 | 26-4155 | 98 | 28-0572 | 210 |
| 23-1010 | 196 | 25-0446 | 428 | 26-3872 | 220 | 26-4055 | 276 | 26-4156 | 242 | 28-0573 | 210 |
| 23-1012 | 196 | 25-0449 | 386 | 26-3873 | 220 | 26-4056 | 276 | 26-4157 | 242 | 28-0574 | 210 |
| 23-1015 | 196 | 25-0550 | 380 | 26-3874 | 220 | 26-4057 | 276 | 26-4158 | 86 | 28-0575 | 210 |
| 23-1020 | 196 | 25-0565 | 384 | 26-3875 | 220 | 26-4059 | 230 | 26-4159 | 86 | 28-0576 | 210 |
| 23-1030 | 204 | 25-0566 | 384 | 26-3879 | 216 | 26-4073 | 228 | 26-4160 | 248 | 28-0577 | 210 |
| 23-1032 | 204 | 25-0570 | 380 | 26-3881 | 220 | 26-4076 | 230 | 26-4161 | 248 | 28-0578 | 210 |
| 23-1034 | 204 | 25-0571 | 380 | 26-3883 | 220 | 26-4079 | 230 | 26-4162 | 242 | 28-0579 | 210 |
| 23-2000 | 204 | 25-0572 | 96 | 26-3884 | 220 | 26-4080 | 228 | 26-4163 | 242 | 28-0580 | 210 |
| 23-2400 | 460 | 25-0573 | 386 | 26-3885 | 220 | 26-4081 | 230 | 26-4165 | 244 | 28-0601 | 210 |
| 23-2401 | 460 | 25-0574 | 378 | 26-3887 | 220 | 26-4082 | 228 | 26-4166 | 244 | 28-0602 | 210 |
| 23-2402 | 460 | 25-0575 | 384 | 26-3894 | 220 | 26-4083 | 228 | 26-4167 | 242,500 | 28-0603 | 210 |
| 23-2403 | 460 | 25-0580 | 380 | 26-3900 | 224 | 26-4084 | 230 | 26-4168 | 94, 246 | 28-0604 | 210 |
| 23-2404 | 460 | 25-0581 | 380 | 26-3909 | 224 | 26-4085 | 230 | 26-4169 | 94, 246 | 28-0605 | 210 |
| 23-2500 | 460, 500 | 25-0600 | 386 | 26-3910 | 224 | 26-4086 | 230 | 26-4180 | 250 | 28-0606 | 210 |
| 23-2501 | 460 | 25-0602 | 386 | 26-3911 | 224 | 26-4089 | 228 | 26-4181 | 250 | 28-0607 | 210 |
| 23-5550 | 564 | 25-1228 | 384 | 26-3912 | 224 | 26-4094 | 230 | 26-4182 | 86 | 28-0608 | 210 |
| 23-5710 | 198 | 25-1229 | 384 | 26-3914 | 224 | 26-4098 | 230 | 26-4185 | 230 | 28-0609 | 210 |
| 23-5712 | 198 | 25-1230 | 384 | 26-3915 | 224 | 26-4099 | 86 | 26-4194 | 230 | 28-0610 | 210 |
| 23-5850 | 198 | 25-1233 | 384 | 26-3917 | 224 | 26-4100 | 86 | 26-4196 | 228 | 28-0611 | 210 |
| 23-5851 | 198 | 25-1234 | 384 | 26-3919 | 222 | 26-4101 | 86 | 26-4197 | 86, 484 | 28-0612 | 210 |
| 23-5854 | 198 | 25-1235 | 384 | 26-3919S | 222 | 26-4102 | 86 | 26-4205 | 94, 244 | 28-0613 | 210 |
| 23-5858 | 198 | 25-1236 | 384 | 26-3920 | 222 | 26-4103 | 86 | 26-4215 | 94, 244 | 28-0614 | 210 |
| 23-5859 | 198 | 25-1237 | 384 | 26-3921 | 222 | 26-4105 | 242 | 26-4216 | 94, 244 | 28-0615 | 210 |
| 23-5872 | 200 | 25-1240 | 386 | 26-3922 | 222 | 26-4106 | 242 | 26-5000 | 244 | 28-0616 | 210 |
| 23-5874 | 200 | 25-1241 | 386 | 26-3923 | 222 | 26-4107 | 86,242 | 26-5001 | 244 | 28-0617 | 210 |
| 23-5900 | 204 | 25-1341 | 386 | 26-3924 | 222 | 26-4108 | 242 | 26-5118 | 518 | 28-0618 | 210 |
| 23-5901 | 200 | 25-1347 | 90 | 26-3930 | 226 | 26-4112 | 246 | 26-5119 | 518 | 28-0619 | 210 |
| 23-5904 | 200 | 25-1350 | 380 | 26-3985 | 236 | 26-4113 | 244 | 26-5400 | 244 | 28-0620 | 210 |
| 23-5905 | 204 | 25-1352 | 380 | 26-3986 | 240 | 26-4114 | 86 | 26-6000 | 92 | 28-0621 | 210 |
| 23-5915 | 196 | 25-1353 | 380 | 26-3989 | 248 | 26-4115 | 518 | 26-6001 | 92 | 28-0622 | 210 |
| 23-5920 | 196 | 25-1354 | 380 | 26-3990 | 248 | 26-4116 | 518 | 26-6002 | 92 | 28-0623 | 210 |
| 23-5928 | 196 | 25-1370 | 484 | 26-3991 | 248 | 26-4117 | 518 | 26-6003 | 92 | 28-0624 | 210 |
| 23-5929 | 196 | 25-2001 | 380 | 26-3992 | 248 | 26-4118 | 518 | 26-6006 | 94 | 28-0625 | 210 |
| 23-5931 | 196 | 25-2002 | 378 | 26-3993 | 248 | 26-4119 | 518 | 26-6008 | 298 | 28-0626 | 210 |
| 23-5936 | 196 | 25-2003 | 378 | 26-3994 | 248 | 26-4120 | 86 | 26-6009 | 38 | 28-0627 | 210 |
| 23-5938 | 196 | 26-1000 | 108, 244 | 26-3995 | 248 | 26-4121 | 88 | 26-6010 | 38 | 28-0628 | 210 |
| 23-5940 | 196 | 26-1002 | 244 | 26-3996 | 248 | 26-4122 | 518 | 28-0422 | 376 | 28-0629 | 210 |
| 23-5942 | 196 | 26-1003 | 216 | 26-3997 | 248 | 26-4123 | 518 | 28-0423 | 376 | 28-0630 | 210 |
| 23-5950 | 196 | 26-1600 | 244 | 26-3999 | 248 | 26-4124 | 518 | 28-0425 | 376 | 28-0631 | 210 |
| 23-6011 | 208 | 26-1700 | 230 | 26-4000 | 248 | 26-4125 | 86 | 28-0440 | 376 | 28-0681 | 210, 212 |
| 23-6012 | 208 | 26-2000 | 242 | 26-4001 | 248 | 26-4126 | 86 | 28-0460 | 376 | 28-0682 | 210 |
| 23-6015 | 192, 208 | 26-2004 | 242 | 26-4002 | 248 | 26-4128 | 242 | 28-0472 | 376 | 28-0683 | 212 |


| 28-0684 | 212 | 28-3010 | 214 | 29-0101 | 480 | 29-4708 | 322 | 29-6010 | 318 | 29-7503 | 326 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28-0686 | 216 | 28-3011 | 214 | 29-0102 | 480 | 29-4709 | 322 | 29-6012 | 318 | 29-7504 | 326 |
| 28-0688 | 210, 212 | 28-3012 | 214 | 29-0103 | 480 | 29-4710 | 322 | 29-6013 | 318 | 29-7505 | 326 |
| 28-0700 | 218 | 28-3013 | 214 | 29-0200 | 302 | 29-4711 | 322 | 29-6014 | 318 | 29-7600 | 328 |
| 28-0705 | 218 | 28-3014 | 214 | 29-1300 | 320 | 29-4714 | 322 | 29-6015 | 318 | 29-7601 | 328 |
| 28-0710 | 218 | 28-3015 | 214 | 29-1301 | 320 | 29-4715 | 322 | 29-6016 | 322 | 29-7602 | 328 |
| 28-0711 | 218 | 28-4000 | 210, 212 | 29-1302 | 320 | 29-4720 | 322 | 29-6017 | 322 | 29-7603 | 328 |
| 28-0712 | 218 | 28-5040 | 210 | 29-1303 | 320 | 29-4721 | 322 | 29-6018 | 322 | 29-7605 | 328 |
| 28-0713 | 218 | 28-5870 | 214 | 29-1304 | 320 | 29-4725 | 328 | 29-6020 | 318 | 29-7700 | 328 |
| 28-0714 | 218 | 28-5871 | 214 | 29-1310 | 324 | 29-4726 | 328 | 29-6021 | 318 | 29-7701 | 328 |
| 28-0715 | 218 | 28-5872 | 214 | 29-1311 | 324 | 29-4727 | 328 | 29-6022 | 318 | 29-7702 | 328 |
| 28-0716 | 218 | 28-5873 | 214 | 29-1312 | 324 | 29-4728 | 328 | 29-6023 | 318 | 29-7703 | 328 |
| 28-0717 | 218 | 28-5874 | 214 | 29-1313 | 324 | 29-4730 | 324 | 29-6024 | 318 | 29-7704 | 328 |
| 28-0718 | 218 | 28-5875 | 214 | 29-1400 | 326 | 29-4731 | 322 | 29-6025 | 322 | 29-7705 | 328 |
| 28-0719 | 218 | 28-5876 | 214 | 29-1401 | 326 | 29-4732 | 322 | 29-6026 | 322 | 31-0271 | 252 |
| 28-0720 | 218 | 28-5877 | 214 | 29-1402 | 326 | 29-4738 | 324 | 29-6027 | 322 | 31-0280 | 252 |
| 28-0721 | 218 | 28-5878 | 214 | 29-1403 | 326 | 29-4739 | 324 | 29-6028 | 322 | 31-0291 | 252 |
| 28-0722 | 218 | 28-5879 | 214 | 29-1404 | 326 | 29-4740 | 294 | 29-6030 | 318 | 31-0302 | 252 |
| 28-0723 | 218 | 28-5880 | 214 | 29-1405 | 326 | 29-4741 | 294 | 29-6031 | 318 | 31-0314 | 252 |
| 28-0724 | 218 | 28-5881 | 214 | 29-1406 | 326 | 29-4742 | 296 | 29-6032 | 318 | 31-0590 | 254 |
| 28-0725 | 218 | 28-5882 | 214 | 29-1407 | 326 | 29-4743 | 296 | 29-6035 | 318 | 31-0602 | 254 |
| 28-0730 | 218 | 28-6001 | 18 | 29-1408 | 326 | 29-4744 | 294 | 29-6036 | 318 | 31-0614 | 254 |
| 28-0731 | 218 | 28-6005 | 18 | 29-1499 | 302 | 29-4745 | 296 | 29-6037 | 318 | 31-0680 | 254 |
| 28-0732 | 218 | 28-6006 | 18 | 29-1501 | 292 | 29-4746 | 296 | 29-6040 | 320 | 31-0690 | 254 |
| 28-0733 | 218 | 29-0003 | 476 | 29-1502 | 292 | 29-4749 | 294 | 29-6041 | 320 | 31-0702 | 254 |
| 28-0734 | 218 | 29-0004 | 476 | 29-1503 | 292 | 29-4755 | 294 | 29-6042 | 320 | 31-0714 | 254 |
| 28-0736 | 218 | 29-0005 | 476 | 29-1504 | 292 | 29-4758 | 302 | 29-6043 | 320 | 31-1110 | 252 |
| 28-0737 | 218 | 29-0006 | 476 | 29-1505 | 292 | 29-4759 | 302 | 29-6044 | 320 | 31-1120 | 252 |
| 28-0738 | 218 | 29-0007 | 476 | 29-1506 | 292 | 29-4763 | 328 | 29-6045 | 320 | 31-1131 | 252 |
| 28-0739 | 218 | 29-0008 | 476 | 29-1510 | 292 | 29-4764 | 328 | 29-6047 | 318 | 31-1142 | 252 |
| 28-0740 | 218 | 29-0009 | 474 | 29-1511 | 292 | 29-4769 | 322 | 29-6048 | 318 | 31-1153 | 252 |
| 28-0741 | 218 | 29-0010 | 474 | 29-1512 | 292 | 29-4776 | 312 | 29-6049 | 318 | 31-1164 | 252 |
| 28-0751 | 218 | 29-0012 | 474 | 29-1602 | 294 | 29-4777 | 312 | 29-6050 | 320 | 31-1176 | 252 |
| 28-0752 | 218 | 29-0013 | 474 | 29-1605 | 296 | 29-4778 | 312 | 29-6051 | 320 | 31-1271 | 252 |
| 28-0753 | 218 | 29-0014 | 474 | 29-1652 | 294 | 29-4779 | 326 | 29-6052 | 320 | 31-1280 | 252 |
| 28-0754 | 218 | 29-0015 | 474 | 29-1805 | 326 | 29-4780 | 296 | 29-6060 | 318 | 31-1291 | 252 |
| 28-0755 | 218 | 29-0016 | 474 | 29-1806 | 326 | 29-4781 | 324 | 29-6070 | 318 | 31-1302 | 252 |
| 28-0757 | 218 | 29-0017 | 476 | 29-1807 | 326 | 29-4782 | 296 | 29-6071 | 318 | 31-1313 | 252 |
| 28-0758 | 218 | 29-0019 | 476 | 29-1809 | 326 | 29-4783 | 296 | 29-6072 | 318 | 31-1324 | 252 |
| 28-0759 | 218 | 29-0021 | 476 | 29-1810 | 326 | 29-4787 | 320 | 29-6073 | 318 | 31-1431 | 254 |
| 28-1000 | 214 | 29-0022 | 476 | 29-2500 | 298 | 29-4788 | 320 | 29-6074 | 318 | 31-1440 | 254 |
| 28-1991 | 376 | 29-0026 | 476 | 29-2501 | 314 | 29-4790 | 316 | 29-6075 | 318 | 31-1451 | 254 |
| 28-1992 | 374 | 29-0027 | 476 | 29-2502 | 314 | 29-4791 | 326 | 29-6080 | 314 | 31-1462 | 254 |
| 28-1993 | 374 | 29-0028 | 476 | 29-2503 | 316 | 29-4792 | 326 | 29-6081 | 314 | 31-1473 | 254 |
| 28-1994 | 376 | 29-0029 | 476 | 29-2601 | 320 | 29-4793 | 328 | 29-6082 | 314 | 31-1484 | 254 |
| 28-1996 | 374 | 29-0030 | 474 | 29-2602 | 320 | 29-4797 | 328 | 29-6083 | 314 | 31-1496 | 254 |
| 28-1997 | 374 | 29-0031 | 476 | 29-2603 | 320 | 29-4798 | 328 | 29-6084 | 314 | 31-2117 | 254 |
| 28-1998 | 374 | 29-0032 | 474 | 29-2605 | 318 | 29-4799 | 328 | 29-6100 | 322 | 31-2118 | 254 |
| 28-2002 | 374 | 29-0035 | 478 | 29-2606 | 318 | 29-4800 | 328 | 29-6105 | 324 | 31-2120 | 254 |
| 28-2003 | 374 | 29-0040 | 474 | 29-2710 | 298 | 29-4801 | 328 | 29-6110 | 324 | 31-2121 | 254 |
| 28-2004 | 374 | 29-0045 | 476 | 29-2711 | 298 | 29-4802 | 328 | 29-6111 | 324 | 31-2122 | 254 |
| 28-2005 | 374 | 29-0046 | 476 | 29-2712 | 298 | 29-4803 | 328 | 29-6112 | 324 | 31-2123 | 254 |
| 28-2006 | 376 | 29-0047 | 476 | 29-2713 | 298 | 29-4811 | 328 | 29-6113 | 324 | 31-2124 | 254 |
| 28-2007 | 374 | 29-0048 | 476 | 29-2714 | 298 | 29-4812 | 328 | 29-6115 | 324 | 31-2125 | 254 |
| 28-2008 | 374 | 29-0049 | 476 | 29-3002 | 296 | 29-4840 | 294 | 29-6500 | 322 | 31-2126 | 254 |
| 28-2009 | 376 | 29-0050 | 474 | 29-3005 | 296 | 29-4841 | 294 | 29-6505 | 298, 320 | 31-2128 | 254 |
| 28-2040 | 76 | 29-0058 | 474 | 29-4600 | 326 | 29-4842 | 294 | 29-6509 | 322 | 31-2129 | 254 |
| 28-2041 | 428 | 29-0059 | 474 | 29-4700 | 322 | 29-4848 | 294 | 29-6770 | 318 | 31-2131 | 256 |
| 28-2042 | 388 | 29-0063 | 474 | 29-4702 | 322 | 29-4855 | 294 | 29-6775 | 318 | 31-2132 | 252 |
| 28-2043 | 76 | 29-0065 | 474 | 29-4703 | 322 | 29-5610 | 324 | 29-7000 | 320 | 31-2133 | 256 |
| 28-2114 | 270, 272 | 29-0067 | 474 | 29-4704 | 322 | 29-6000 | 320 | 29-7201 | 322 | 31-2135 | 256 |
| 28-2115 | 218 | 29-0068 | 474 | 29-4705 | 322 | 29-6002 | 318 | 29-7202 | 322 | 31-2136 | 256 |
| 28-2116 | 218 | 29-0069 | 474 | 29-4706 | 322 | 29-6003 | 318 | 29-7500 | 326 | 31-2137 | 254 |
| 28-2118 |  | 010 | 480 | 470 | 322 | 60 | 318 | 29-7502 | 326 | 31-2138 | 254 |

598 | stuller.com

| 31-2139 | 254 | 31-5642 | 258 | 31-8004 | 256 | 34-1012 | 276 | 34-2267 | 268 | 34-6114 | 278 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-2140 | 254 | 31-5654 | 258 | 31-8006 | 256 | 34-2000 | 440 | 34-2268 | 270 | 34-6115 | 278 |
| 31-2141 | 258 | 31-5901 | 260 | 31-8008 | 256 | 34-2001 | 440 | 34-2270 | 268 | 34-6116 | 278 |
| 31-2142 | 258 | 31-5910 | 260 | 31-8010 | 256 | 34-2002 | 440 | 34-2271 | 268 | 34-6300 | 216 |
| 31-2143 | 258 | 31-5932 | 260 | 31-8012 | 256 | 34-2008 | 440 | 34-2273 | 268 | 34-6301 | 96 |
| 31-2430 | 252 | 31-5954 | 260 | 31-8014 | 256 | 34-2010 | 440 | 34-2274 | 268 | 34-6301 | 216 |
| 31-2440 | 252 | 31-5966 | 260 | 31-8016 | 256 | 34-2012 | 440 | 34-2275 | 268 | 34-6302 | 216 |
| 31-2451 | 252 | 31-5970 | 258 | 31-8018 | 256 | 34-2013 | 34, 104, 440 | 34-2276 | 268 | 35-0140 | 284 |
| 31-2462 | 252 | 31-5982 | 258 | 31-8020 | 256 | 34-2014 | 34, 104, 440 | 34-2277 | 268 | 35-0200 | 284 |
| 31-2473 | 252 | 31-5994 | 258 | 31-8022 | 256 | 34-2015 | 440 | 34-2279 | 266, 268 | 35-0300 | 284 |
| 31-2484 | 252 | 31-6191 | 260 | 31-8024 | 256 | 34-2016 | 440 | 34-2280 | 268 | 35-0425 | 286 |
| 31-2496 | 252 | 31-6200 | 260 | 31-8026 | 256 | 34-2100 | 270 | 34-2281 | 268 | 35-0705 | 282 |
| 31-2870 | 254 | 31-6222 | 260 | 31-8028 | 256 | 34-2100 | 272 | 34-2283 | 268 | 35-0800 | 162, 28 |
| 31-2880 | 254 | 31-6244 | 260 | 31-8030 | 256 | 34-2103 | 270 | 34-2286 | 266, 268 | 35-0802 | 162, 28 |
| 31-2891 | 254 | 31-6256 | 260 | 31-8032 | 256 | 34-2110 | 272 | 34-2289 | 268 | 35-0805 | 162, 28 |
| 31-2902 | 254 | 31-6371 | 260 | 31-8034 | 256 | 34-2113 | 272 | 34-2293 | 266 | 35-0806 | 162, 28 |
| 31-2913 | 254 | 31-6380 | 260 | 31-8036 | 256 | 34-2114 | 272 | 34-2294 | 266 | 35-1094 | 290 |
| 31-2924 | 254 | 31-6402 | 260 | 31-8038 | 256 | 34-2115 | 272 | 34-2295 | 268 | 35-1200 | 280 |
| 31-3710 | 254 | 31-6424 | 260 | 31-8040 | 256 | 34-2130 | 266, 272 | 34-2297 | 268 | 35-1202 | 280 |
| 31-3720 | 254 | 31-6436 | 260 | 31-8042 | 256 | 34-2131 | 266, 272 | 34-2298 | 272 | 35-1203 | 280 |
| 31-3731 | 254 | 31-6450 | 258 | 31-8044 | 256 | 34-2132 | 272 | 34-2299 | 270 | 35-1234 | 278 |
| 31-3742 | 254 | 31-6472 | 258 | 31-8046 | 256 | 34-2135 | 130, 272 | 34-2303 | 270 | 35-1235 | 278 |
| 31-3754 | 254 | 31-6494 | 258 | 31-8048 | 256 | 34-2138 | 130, 272 | 34-2304 | 270 | 35-1520 | 282 |
| 31-3802 | 254 | 31-6506 | 258 | 31-8050 | 256 | 34-2139 | 130, 272 | 34-2305 | 440 | 35-1522 | 282 |
| 31-3803 | 254 | 31-6790 | 262 | 31-8052 | 256 | 34-2156 | 266, 268 | 34-2307 | 266, 268 | 35-1524 | 282 |
| 31-3804 | 254 | 31-6802 | 262 | 31-8054 | 256 | 34-2157 | 266, 268 | 34-2308 | 268 | 35-1526 | 282 |
| 31-3840 | 252 | 31-6814 | 262 | 31-8056 | 254 | 34-2158 | 266, 268 | 34-2309 | 268 | 35-1528 | 282 |
| 31-3850 | 252 | 31-6828 | 262 | 31-8058 | 254 | 34-2159 | 268 | 34-2310 | 270 | 35-1529 | 282 |
| 31-4581 | 260 | 31-6840 | 264 | 31-8060 | 254 | 34-2190 | 276 | 34-2319 | 268 | 35-1796 | 282 |
| 31-4590 | 260 | 31-6852 | 264 | 31-8062 | 254 | 34-2207 | 270 | 34-2325 | 268 | 35-1797 | 282 |
| 31-4612 | 260 | 31-7000 | 260 | 31-8064 | 254 | 34-2208 | 270 | 34-2327 | 268 | 35-1798 | 282 |
| 31-4634 | 260 | 31-7012 | 260 | 31-8066 | 254 | 34-2209 | 270 | 34-2346 | 268 | 35-1812 | 280 |
| 31-4646 | 260 | 31-7034 | 260 | 31-8068 | 254 | 34-2210 | 270 | 34-2347 | 268 | 35-1813 | 280 |
| 31-4660 | 258 | 31-7046 | 260 | 31-8070 | 254 | 34-2211 | 272 | 34-2351 | 268, 272 | 35-1814 | 280 |
| 31-4682 | 258 | 31-7050 | 260 | 31-8072 | 254 | 34-2212 | 272 | 34-2352 | 272 | 35-1815 | 280 |
| 31-4704 | 258 | 31-7142 | 260 | 31-8074 | 254 | 34-2213 | 266, 270 | 34-2353 | 272 | 35-1817 | 280 |
| 31-4900 | 260 | 31-7154 | 260 | 31-8076 | 254 | 34-2214 | 270 | 34-2354 | 270 | 35-1818 | 280 |
| 31-4912 | 260 | 31-7166 | 260 | 31-8078 | 254 | 34-2215 | 266, 272 | 34-2355 | 270 | 35-1830 | 282 |
| 31-4924 | 260 | 31-7202 | 260 | 31-9910 | 264 | 34-2216 | 130, 272 | 34-2356 | 270 | 35-2301 | 280 |
| 31-4936 | 260 | 31-7214 | 260 | 33-6029 | 126 | 34-2217 | 272 | 34-2360 | 270 | 35-2605 | 286 |
| 31-4940 | 258 | $31-7240$ | 260 | 33-6032 | 126 | 34-2218 | 272 | 34-2361 | 270 | 35-2606 | 286 |
| 31-4952 | 258 | 31-7252 | 260 | 33-6350 | 126 | 34-2219 | 270 | 34-2370 | 272 | 35-2607 | 286 |
| 31-4964 | 258 | 31-7274 | 260 | 33-6355 | 126 | 34-2220 | 272 | 34-2375 | 266, 270 | 35-2610 | 286 |
| 31-5051 | 258 | 31-7286 | 260 | 33-8301 | 262 | 34-2224 | 226 | 34-2376 | 270 | 35-2611 | 288 |
| 31-5060 | 258 | 31-7290 | 260 | 33-8302 | 262 | 34-2229 | 250 | 34-2377 | 270 | 35-2612 | 286 |
| 31-5082 | 258 | 31-7336 | 262 | 33-8305 | 262 | 34-2231 | 250 | 34-2380 | 274 | 35-2613 | 288 |
| 31-5104 | 258 | 31-7420 | 260 | 33-9220 | 252 | 34-2232 | 250 | 34-2381 | 274 | 35-2614 | 286 |
| $31-5116$ | 258 | 31-7432 | 260 | 33-9221 | 252 | 34-2233 | 226, 250 | 34-2382 | 274 | 35-2615 | 288 |
| 31-5120 | 258 | 31-7454 | 260 | 33-9222 | 252 | 34-2234 | 226, 250 | 34-2383 | 274 | 35-2618 | 288 |
| 31-5132 | 258 | 31-7466 | 260 | 33-9223 | 252 | 34-2240 | 266 | 34-2384 | 274 | 35-2620 | 288 |
| 31-5144 | 258 | 31-7470 | 260 | 33-9224 | 252 | 34-2241 | 266 | 34-2385 | 274 | 35-2621 | 288 |
| 31-5241 | 258 | 31-7526 | 260 | 33-9225 | 252 | 34-2242 | 266 | 34-2386 | 274 | 35-2622 | 288 |
| 31-5250 | 258 | 31-7576 | 262 | 33-9226 | 252 | 34-2243 | 266 | 34-2387 | 274 | 35-2625 | 286 |
| 31-5272 | 258 | 31-7600 | 262 | 33-9235 | 264 | 34-2250 | 272 | 34-2396 | 274 | 35-2626 | 286 |
| 31-5294 | 258 | 31-7612 | 262 | 33-9240 | 252 | 34-2251 | 268 | 34-2397 | 274 | 35-2650 | 286 |
| 31-5306 | 258 | 31-7624 | 262 | 33-9500 | 264 | 34-2254 | 268 | 34-2398 | 274 | 35-2800 | 288 |
| 31-5310 | 258 | 31-7625 | 262 | 33-9501 | 264 | 34-2255 | 266 | 34-2399 | 274 | 35-2801 | 288 |
| 31-5332 | 258 | 31-7626 | 262 | 33-9502 | 264 | 34-2257 | 266 | 34-2402 | 270 | 35-2802 | 288 |
| 31-5354 | 258 | 31-7627 | 262 | 33-9503 | 264 | 34-2259 | 268 | 34-2403 | 276 | 35-2803 | 288 |
| 31-5580 | 260 | 31-7629 | 262 | 33-9504 | 264 | 34-2260 | 266, 268 | 34-3000 | 278 | 35-2810 | 292 |
| 31-5592 | 260 | 31-7636 | 262 | 33-9505 | 264 | 34-2261 | 268 | 34-3002 | 278 | 35-2820 | 288 |
| 31-5614 | 260 | 31-7637 | 262 | 33-9810 | 254 | 34-2262 | 268 | 34-6110 | 268 | 35-2840 | 288 |
| 31-5626 | 260 | 31-8000 | 256 | 34-1000 | 440 | 34-2263 | 268 | 34-6112 | 268 | 35-2860 | 288 |
| 31-5630 | 258 | 31-8002 | 256 | 34-1010 | 276 | 34-2266 | 270 | 34-6113 | 278 | 35-2880 | 288 |

Series Index

| 35-2900 | 290 | 36-1556 | 244 | 36-2635 | 234 | 36-3513 | 234 | 36-3607 | 234 | 37-1553 | 304 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35-2902 | 288 | 36-2540 | 236 | 36-2636 | 234 | 36-3514 | 234 | 36-3608 | 234 | 37-1554 | 304 |
| 35-2903 | 288 | 36-2541 | 236 | 36-2640 | 236 | 36-3515 | 234 | 36-3609 | 234 | 37-1555 | 304 |
| 35-2904 | 290 | 36-2542 | 236 | 36-2641 | 236 | 36-3516 | 234 | 36-3610 | 234 | 37-1556 | 274, 306 |
| 35-2905 | 290 | 36-2543 | 236 | 36-2642 | 236 | 36-3517 | 234 | 36-3611 | 234 | 37-1557 | 274, 306 |
| 35-2907 | 290 | 36-2545 | 236 | 36-2643 | 236 | 36-3518 | 234 | 36-3612 | 234 | 37-1558 | 274, 306 |
| 35-2908 | 290 | 36-2546 | 236 | 36-2644 | 236 | 36-3519 | 234 | 36-3613 | 234 | 37-1559 | 304 |
| 35-2909 | 290 | 36-2547 | 236 | 36-2645 | 236 | 36-3523 | 234 | 36-3614 | 234 | 37-1560 | 274, 304 |
| 35-2910 | 290 | 36-2548 | 236 | 36-2646 | 236 | 36-3524 | 234 | 36-3615 | 234 | 37-1561 | 274, 304 |
| 35-2912 | 288 | 36-2549 | 236 | 36-2647 | 236 | 36-3525 | 234 | 36-3619 | 234 | 37-2150 | 310 |
| 35-2914 | 288 | 36-2550 | 232 | 36-2648 | 236 | 36-3526 | 234 | 36-3620 | 234 | 37-2160 | 310 |
| 35-2915 | 288 | 36-2551 | 232 | 36-2649 | 236 | 36-3527 | 234 | 36-3621 | 234 | 37-2169 | 308 |
| 35-2916 | 290 | 36-2552 | 232 | 36-2650 | 236 | 36-3528 | 234 | 36-3622 | 234 | 37-2170 | 308 |
| 35-2918 | 290 | 36-2553 | 232 | 36-2700 | 232 | 36-3529 | 234 | 36-6500 | 234 | 37-2171 | 308 |
| 35-2920 | 290 | 36-2554 | 232 | 36-2701 | 232 | 36-3530 | 234 | 36-6501 | 234 | 37-2172 | 308 |
| 35-2921 | 290 | 36-2555 | 232 | 36-2702 | 232 | 36-3531 | 234 | 36-6502 | 234 | 37-2180 | 310 |
| 35-2922 | 290 | 36-2556 | 232 | 36-2703 | 232 | 36-3532 | 234 | 36-6510 | 234 | 37-3030 | 310 |
| 35-2923 | 290 | 36-2557 | 232 | 36-2704 | 232 | 36-3535 | 234 | 36-6511 | 234 | 37-5300 | 308 |
| 35-2924 | 290 | 36-2558 | 232 | 36-2705 | 232 | 36-3536 | 234 | 36-6512 | 234 | 37-5310 | 308 |
| 35-2925 | 292 | 36-2559 | 232 | 36-2706 | 232 | 36-3537 | 234 | 36-6513 | 234 | 37-5315 | 308 |
| 35-2926 | 292 | 36-2560 | 232 | 36-2707 | 232 | 36-3538 | 234 | 36-6514 | 234 | 37-5320 | 310 |
| 35-2927 | 292 | 36-2561 | 232 | 36-2708 | 232 | 36-3542 | 234 | 36-6520 | 234 | 37-5321 | 310 |
| 35-2928 | 292 | 36-2562 | 232 | 36-2709 | 232 | 36-3543 | 234 | 36-6521 | 234 | 37-5360 | 308 |
| 35-2929 | 290 | 36-2563 | 232 | 36-2710 | 232 | 36-3544 | 234 | 36-6522 | 234 | 37-5400 | 308 |
| 35-2930 | 290 | 36-2564 | 232 | 36-2711 | 232 | 36-3548 | 234 | 36-6530 | 234 | 37-5401 | 308 |
| 35-2940 | 292 | 36-2565 | 232 | 36-2712 | 232 | 36-3549 | 234 | 36-6531 | 234 | 37-5402 | 304, 306, 308 |
| 35-2941 | 292 | 36-2566 | 232 | 36-2713 | 232 | 36-3550 | 234 | 36-6532 | 234 | 37-5403 | 306, 308 |
| 35-2942 | 292 | 36-2567 | 232 | 36-2714 | 232 | 36-3551 | 234 | 36-6533 | 234 | 37-5404 | 306, 308 |
| 35-2945 | 288 | 36-2570 | 232 | 36-2715 | 232 | 36-3552 | 234 | 36-6534 | 234 | 37-5500 | 308 |
| 35-2947 | 288 | 36-2571 | 232 | 36-2716 | 232 | 36-3553 | 234 | 36-6540 | 234 | 37-5502 | 308 |
| 35-2964 | 292 | 36-2572 | 232 | 36-2717 | 232 | 36-3554 | 234 | 36-6541 | 234 | 37-5840 | 308 |
| 35-2980 | 290 | 36-2573 | 232 | 36-2718 | 232 | 36-3555 | 234 | 36-6542 | 234 | 37-5900 | 308 |
| 35-2981 | 290 | 36-2574 | 232 | 36-2719 | 232 | 36-3556 | 234 | 36-6550 | 234 | 37-5902 | 308 |
| 35-2982 | 290 | 36-2580 | 232 | 36-2720 | 232 | 36-3557 | 234 | 36-6551 | 234 | 37-7000 | 310 |
| 35-2983 | 290 | 36-2581 | 232 | 36-2721 | 232 | 36-3558 | 234 | 36-6560 | 234 | 37-7001 | 310 |
| 35-2998 | 288 | 36-2582 | 232 | 36-2722 | 232 | 36-3559 | 234 | 36-6570 | 234 | 37-7002 | 310 |
| 35-2999 | 288 | 36-2585 | 232 | 36-2723 | 232 | 36-3560 | 234 | 36-8000 | 240 | 37-7003 | 310 |
| 35-5100 | 282 | 36-2590 | 232 | 36-2724 | 232 | 36-3561 | 234 | 36-8630 | 240 | 37-7004 | 310 |
| 35-5104 | 282 | 36-2591 | 232 | 36-2725 | 232 | 36-3565 | 234 | 36-8800 | 238 | 37-7070 | 310 |
| 35-5106 | 282 | 36-2592 | 232 | 36-2726 | 232 | 36-3566 | 234 | 36-8800 | 238 | 37-7071 | 310 |
| 35-5115 | 282 | 36-2595 | 238 | 36-2727 | 232 | 36-3567 | 234 | 36-8801 | 238 | 37-7072 | 310 |
| 35-5117 | 286 | 36-2596 | 238 | 36-2728 | 232 | 36-3568 | 234 | 36-8840 | 238 | 37-7073 | 310 |
| 35-5510 | 284 | 36-2597 | 238 | 36-2729 | 232 | 36-3569 | 234 | 36-8840 | 238 | 37-7600 | 442 |
| 35-5515 | 286 | 36-2600 | 232 | 36-2730 | 232 | 36-3570 | 234 | 37-0363 | 310 | 37-7601 | 442 |
| 35-5550 | 286 | 36-2601 | 232 | 36-2731 | 232 | 36-3571 | 234 | 37-0364 | 310 | $37-7640$ | 92 |
| 35-5600 | 286 | 36-2602 | 232 | 36-2732 | 232 | 36-3572 | 234 | 37-0365 | 310 | 37-7846 | 264 |
| 35-5602 | 286 | 36-2603 | 232 | 36-2733 | 232 | 36-3573 | 234 | 37-0366 | 310 | 37-7850 | 264 |
| 35-5609 | 282 | 36-2604 | 232 | 36-2734 | 232 | 36-3574 | 234 | 37-0367 | 310 | 37-7851 | 264 |
| 35-5610 | 286 | 36-2605 | 232 | 36-2735 | 232 | 36-3575 | 234 | 37-0409 | 308 | 37-7852 | 264 |
| 35-5615 | 284 | 36-2606 | 232 | 36-2736 | 232 | 36-3579 | 234 | 37-0410 | 310 | 37-7856 | 264 |
| 35-5617 | 284 | 36-2607 | 232 | 36-2737 | 232 | 36-3580 | 234 | 37-0411 | 310 | 37-8330 | 264 |
| 35-5628 | 280 | 36-2609 | 238 | 36-2738 | 232 | 36-3581 | 234 | 37-0412 | 310 | 37-8336 | 264 |
| 35-5629 | 280 | 36-2610 | 234 | 36-2739 | 232 | 36-3582 | 234 | 37-1202 | 308 | 37-8500 | 238 |
| 35-5630 | 280 | 36-2611 | 234 | 36-2740 | 232 | 36-3583 | 234 | 37-1220 | 308 | 37-8501 | 238 |
| 35-5635 | 282 | 36-2612 | 234 | 36-2741 | 232 | 36-3584 | 234 | 37-1230 | 306 | 37-8502 | 238 |
| 35-5700 | 158 | 36-2613 | 234 | 36-3500 | 234 | 36-3585 | 234 | 37-1231 | 306 | 37-8503 | 238 |
| 36-1200 | 234 | 36-2614 | 234 | 36-3501 | 234 | 36-3586 | 234 | 37-1240 | 306 | 37-8504 | 238 |
| 36-1201 | 234 | 36-2620 | 234 | 36-3502 | 234 | 36-3590 | 234 | 37-1241 | 306 | 37-8505 | 238 |
| 36-1202 | 234 | 36-2621 | 234 | 36-3503 | 234 | 36-3591 | 234 | 37-1250 | 306 | 37-8506 | 238 |
| 36-1203 | 234 | 36-2622 | 234 | 36-3504 | 234 | 36-3592 | 234 | 37-1255 | 306 | 37-8507 | 238 |
| 36-1204 | 234 | 36-2623 | 234 | 36-3505 | 234 | 36-3593 | 234 | 37-1256 | 306 | 37-8508 | 238 |
| 36-1205 | 234 | 36-2624 | 234 | 36-3506 | 234 | 36-3594 | 234 | 37-1550 | 304 | 37-8509 | 238 |
| 36-1206 | 234 | 36-2630 | 234 | 36-3511 | 234 | 36-3605 | 234 | 37-1551 | 304 | 37-8510 | 238 |
| 36-1207 | 234 | 36-2631 | 234 | 36-3512 | 234 | 36-3606 | 234 | 37-1552 | 304 | 37-8600 | 238 |

600 | stuller.com

| 37-8601 | 238 | 38-4003 | 52 | 38-4069 | 52 | 38-5051 | 52 | 38-7006 | 56 | 38-7164 | 62 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37-8602 | 238 | 38-4004 | 52 | 38-4070 | 52 | 38-5052 | 52 | 38-7007 | 56 | 38-7165 | 62 |
| 37-8603 | 238 | 38-4005 | 52 | 38-4071 | 52 | 38-5053 | 52 | 38-7010 | 62 | 38-7166 | 62 |
| 37-8790 | 264 | 38-4006 | 52 | 38-4072 | 52 | 38-5054 | 52 | 38-7011 | 62 | 38-7167 | 62 |
| 37-8792 | 264 | 38-4007 | 52 | 38-4073 | 52 | 38-5055 | 52 | 38-7012 | 62 | 38-7170 | 62 |
| 37-8794 | 264 | 38-4008 | 52 | 38-4074 | 52 | 38-5056 | 52 | 38-7013 | 62 | 38-7171 | 62 |
| 37-9000 | 218 | 38-4009 | 52 | 38-4076 | 52 | 38-5057 | 52 | 38-7014 | 62 | 38-7172 | 62 |
| 38-0000 | 60 | 38-4010 | 52 | 38-4078 | 52 | 38-5058 | 52 | 38-7015 | 62 | 38-7184 | 60 |
| 38-0001 | 60 | 38-4011 | 52 | 38-4082 | 52 | 38-5059 | 52 | 38-7016 | 62 | 38-7185 | 60 |
| 38-0003 | 60 | 38-4012 | 52 | 38-4084 | 52 | 38-5060 | 52 | 38-7017 | 62 | 38-7186 | 60 |
| 38-0004 | 60 | 38-4013 | 52 | 38-4086 | 52 | 38-5061 | 52 | 38-7050 | 56 | 38-7187 | 60 |
| 38-0005 | 58 | 38-4014 | 52 | 38-4088 | 52 | 38-5062 | 52 | 38-7052 | 56 | 38-7188 | 54 |
| 38-0006 | 58 | 38-4015 | 52 | 38-4092 | 52 | 38-5063 | 52 | 38-7060 | 56 | 38-7189 | 54 |
| 38-0007 | 58 | 38-4016 | 52 | 38-4093 | 52 | 38-5064 | 52 | 38-7062 | 56 | 38-7190 | 58 |
| 38-0008 | 58 | 38-4017 | 52 | 38-4094 | 52 | 38-5065 | 52 | 38-7070 | 56 | 38-7191 | 54 |
| 38-0009 | 60 | 38-4018 | 52 | 38-4096 | 52 | 38-5066 | 52 | 38-7071 | 56 | 38-7192 | 54 |
| 38-0010 | 60 | 38-4019 | 52 | 38-4098 | 52 | 38-5067 | 52 | 38-7085 | 58 | 38-7193 | 54 |
| 38-0011 | 60 | 38-4020 | 52 | 38-4099 | 54 | 38-5068 | 52 | 38-7086 | 58 | 38-7194 | 54 |
| 38-0012 | 60 | 38-4021 | 52 | 38-5001 | 52 | 38-5069 | 52 | 38-7087 | 58 | 38-7195 | 54 |
| 38-0100 | 56 | 38-4022 | 52 | 38-5002 | 52 | 38-5070 | 52 | 38-7088 | 58 | 38-7196 | 54 |
| 38-0101 | 56 | 38-4023 | 52 | 38-5003 | 52 | 38-5071 | 52 | 38-7090 | 56 | 38-7197 | 54 |
| 38-0102 | 56 | 38-4024 | 52 | 38-5004 | 52 | 38-5072 | 52 | 38-7091 | 56 | 38-7198 | 54 |
| 38-0106 | 56 | 38-4025 | 52 | 38-5005 | 52 | 38-5073 | 52 | 38-7092 | 56 | 38-7200 | 64 |
| 38-0107 | 56 | 38-4026 | 52 | 38-5006 | 52 | 38-5074 | 52 | 38-7093 | 56 | 38-7201 | 64 |
| 38-0108 | 56 | 38-4027 | 52 | 38-5008 | 52 | 38-5075 | 52 | 38-7096 | 58 | 38-7202 | 64 |
| 38-0115 | 56 | 38-4028 | 52 | 38-5009 | 52 | 38-5076 | 52 | 38-7097 | 58 | 38-7203 | 64 |
| 38-0116 | 56 | 38-4029 | 52 | 38-5012 | 52 | 38-5077 | 52 | 38-7098 | 58 | 38-7204 | 64 |
| 38-0117 | 56 | 38-4030 | 52 | 38-5013 | 52 | 38-5078 | 52 | 38-7099 | 58 | 38-7205 | 64 |
| 38-0118 | 56 | 38-4031 | 52 | 38-5014 | 52 | 38-5079 | 52 | 38-7100 | 58 | 38-7206 | 64 |
| 38-0119 | 56 | 38-4032 | 52 | 38-5015 | 52 | 38-5080 | 52 | 38-7101 | 58 | 38-7207 | 64 |
| 38-0180 | 68 | 38-4033 | 52 | 38-5016 | 52 | 38-5082 | 52 | 38-7104 | 58 | 38-7208 | 64 |
| 38-0188 | 58 | 38-4034 | 52 | 38-5018 | 52 | 38-5084 | 52 | 38-7105 | 58 | 38-7209 | 64 |
| 38-0189 | 58 | 38-4035 | 52 | 38-5019 | 52 | 38-5086 | 52 | 38-7108 | 58 | 38-7210 | 64 |
| 38-0190 | 68 | 38-4036 | 52 | 38-5020 | 52 | 38-5088 | 52 | 38-7109 | 58 | 38-7211 | 64 |
| 38-0192 | 68 | 38-4038 | 52 | 38-5021 | 52 | 38-5092 | 52 | 38-7110 | 58 | 38-7212 | 64 |
| 38-0193 | 68 | 38-4039 | 52 | 38-5022 | 52 | 38-5093 | 52 | 38-7111 | 58 | 38-7213 | 64 |
| 38-0194 | 68 | 38-4040 | 52 | 38-5023 | 52 | 38-5094 | 52 | 38-7112 | 58 | 38-7214 | 64 |
| 38-0907 | 56 | 38-4041 | 52 | 38-5024 | 52 | 38-5096 | 52 | 38-7113 | 58 | 38-8010 | 60 |
| 38-0908 | 56 | 38-4042 | 52 | 38-5025 | 52 | 38-5098 | 52 | 38-7114 | 56 | 38-8012 | 60 |
| 38-0909 | 56 | 38-4043 | 52 | 38-5026 | 52 | 38-6030 | 54 | 38-7116 | 58 | 38-9006 | 70 |
| 38-1000 | 298 | 38-4044 | 52 | 38-5027 | 52 | 38-6031 | 54 | 38-7117 | 58 | 38-9008 | 70 |
| 38-1001 | 68 | 38-4045 | 52 | 38-5028 | 52 | 38-6032 | 54 | 38-7118 | 58 | 38-9019 | 72 |
| 38-1002 | 298 | 38-4046 | 52 | 38-5029 | 52 | 38-6033 | 54 | 38-7120 | 54 | 38-9020 | 68 |
| 38-1003 | 298 | 38-4048 | 52 | 38-5030 | 52 | 38-6034 | 54 | 38-7121 | 58 | 38-9022 | 66 |
| 38-1005 | 66 | 38-4049 | 52 | 38-5031 | 52 | 38-6035 | 54 | 38-7122 | 58 | 38-9023 | 62 |
| 38-1006 | 68 | 38-4050 | 52 | 38-5032 | 52 | 38-6036 | 54 | 38-7125 | 58 | 38-9024 | 58, 60 |
| 38-1007 | 66 | 38-4051 | 52 | 38-5033 | 52 | 38-6037 | 54 | 38-7126 | 58 | 38-9025 | 58, 60 |
| 38-1008 | 66 | 38-4052 | 52 | 38-5034 | 52 | 38-6038 | 54 | 38-7130 | 54 | 39-0626 | 90 |
| 38-1009 | 66 | 38-4053 | 52 | 38-5035 | 52 | 38-6050 | 60 | 38-7131 | 54 | 39-1800 | 90 |
| 38-1010 | 66 | 38-4054 | 52 | 38-5036 | 52 | 38-6051 | 60 | 38-7133 | 54 | 39-1820 | 160 |
| 38-1011 | 66 | 38-4055 | 52 | 38-5037 | 52 | 38-6052 | 60 | 38-7134 | 54 | 39-1830 | 126, 130 |
| 38-1012 | 66 | 38-4056 | 52 | 38-5038 | 52 | 38-6053 | 60 | 38-7140 | 60 | 39-1831 | 126 |
| 38-1014 | 66 | 38-4057 | 52 | 38-5039 | 52 | 38-6054 | 60 | 38-7141 | 60 | 39-1832 | 126 |
| 38-1015 | 66 | 38-4058 | 52 | 38-5040 | 52 | 38-6060 | 60 | 38-7142 | 60 | 39-1833 | 126 |
| 38-1016 | 66 | 38-4059 | 52 | 38-5041 | 52 | 38-6061 | 60 | 38-7143 | 60 | 39-2500 | 170 |
| 38-1017 | 68 | 38-4060 | 52 | 38-5042 | 52 | 38-6062 | 60 | 38-7144 | 60 | 39-2560 | 170 |
| 38-1018 | 68 | 38-4061 | 52 | 38-5043 | 52 | 38-6063 | 60 | 38-7154 | 60 | 39-2561 | 170 |
| 38-3100 | 72 | 38-4062 | 52 | 38-5044 | 52 | 38-6064 | 60 | 38-7155 | 62 | 39-2565 | 170 |
| 38-3101 | 72 | 38-4063 | 52 | 38-5045 | 52 | 38-7000 | 62 | 38-7156 | 62 | 39-2570 | 170 |
| 38-3102 | 72 | 38-4064 | 52 | 38-5046 | 52 | 38-7001 | 62 | 38-7157 | 62 | 39-2575 | 170 |
| 38-3250 | 38 | 38-4065 | 52 | 38-5047 | 52 | 38-7002 | 62 | 38-7160 | 62 | 39-2580 | 170 |
| 38-3300 | 72 | 38-4066 | 52 | 38-5048 | 52 | 38-7003 | 62 | 38-7161 | 62 | 39-2585 | 170 |
| 38-4001 | 52 | 38-4067 | 52 | 38-5049 | 52 | 38-7004 | 62 | 38-7162 | 62 | 39-2590 | 170 |
| 38-4002 | 52 | 38-4068 | 52 | 38-5050 | 52 | 38-7005 | 62 | 38-7163 | 62 | 39-2595 | 170 |

Series Index - $\quad$ _

| 41-4150 | 398,438 | 45-0327 | 386 | 45-4058 | 386, 390, | 45-8048 | 394 | 46-0047 | 404 | 46-0549 | 416 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41-4155 | 398 | 45-0330 | 390 |  | 392 | 45-8050 | 394 | 46-0048 | 404 | 46-0550 | 410 |
| 41-4160 | 398 | 45-0332 | 390 | 45-4061 | 392 | 45-8051 | 394 | 46-0049 | 404 | 46-0551 | 410 |
| 41-4165 | 398 | 45-0334 | 390 | 45-4063 | 392 | 45-8052 | 394 | 46-0050 | 404 | 46-0552 | 410 |
| 43-0500 | 292 | 45-0400 | 392 | 45-4067 | 392 | 45-8060 | 394 | 46-0051 | 404 | 46-0553 | 410 |
| 43-0501 | 292 | 45-0402 | 392 | 45-4068 | 392 | 45-8061 | 394 | 46-0052 | 404 | 46-0554 | 410 |
| 43-0502 | 292 | 45-0403 | 392 | 45-4069 | 392 | 45-8062 | 394 | 46-0053 | 404 | 46-0555 | 410 |
| 43-0540 | 292 | 45-0500 | 390 | 45-4070 | 392 | 45-8063 | 394 | 46-0054 | 404 | 46-1000 | 410 |
| 43-0600 | 92 | 45-0501 | 390 | 45-4100 | 390 | 45-8064 | 394 | 46-0055 | 404 | 46-1020 | 410 |
| 43-0606 | 454 | 45-1207 | 528 | 45-4140 | 396 | 45-8065 | 394 | 46-0056 | 404 | 46-1040 | 410 |
| 43-0610 | 454 | 45-1208 | 528 | 45-4141 | 396 | 45-8066 | 394 | 46-0057 | 420 | 46-1060 | 410 |
| 43-1260 | 4 | 45-2010 | 398 | 45-4142 | 396 | 45-8067 | 394 | 46-0058 | 418 | 46-1080 | 410 |
| 43-1261 | 4 | 45-2020 | 398 | 45-4143 | 396 | 45-8068 | 394 | 46-0059 | 420 | 46-1100 | 410 |
| 43-1262 | 4 | 45-2030 | 398 | 45-4145 | 396 | 45-8800 | 394 | 46-0062 | 416 | 46-1140 | 410 |
| 43-1264 | 4 | 45-2040 | 398 | 45-4146 | 396 | 45-8801 | 394 | 46-0063 | 416 | 46-1200 | 410 |
| 43-1265 | 4 | 45-2060 | 396 | 45-4147 | 396 | 45-8802 | 394 | 46-0064 | 414 | 46-1260 | 410 |
| 43-1266 | 4 | 45-2080 | 396 | 45-4148 | 396 | 45-8804 | 394 | 46-0066 | 416 | 46-1500 | 408 |
| 43-1267 | 4 | 45-2100 | 396 | 45-4149 | 396 | 46-0000 | 422 | 46-0067 | 416 | 46-1503 | 408 |
| 43-1272 | 4 | 45-2120 | 396 | 45-4150 | 396 | 46-0001 | 402 | 46-0068 | 416 | 46-1520 | 410 |
| 43-1273 | 4 | 45-2140 | 396 | 45-4152 | 396 | 46-0002 | 402 | 46-0070 | 424 | 46-1521 | 410 |
| 43-1274 | 4 | 45-2160 | 396 | 45-4153 | 396 | 46-0003 | 402 | 46-0071 | 424 | 46-1522 | 410 |
| 43-1275 | 4 | 45-2180 | 398 | 45-4154 | 396 | 46-0004 | 402 | 46-0170 | 410 | 46-1523 | 410 |
| 43-1276 | 4 | 45-2200 | 396 | 45-4155 | 398 | 46-0005 | 402 | 46-0175 | 410 | 46-1524 | 410 |
| 43-1277 | 4 | 45-2230 | 400 | 45-4160 | 392 | 46-0006 | 402 | 46-0180 | 410 | 46-1525 | 410 |
| 43-1278 | 4 | 45-2231 | 400 | 45-4161 | 392 | 46-0007 | 402 | 46-0380 | 420 | 46-1526 | 410 |
| 43-1279 | 4 | 45-2232 | 400 | 45-4162 | 392 | 46-0008 | 402 | 46-0399 | 408 | 46-2080 | 416 |
| 43-1280 | 18, 28, 32, | 45-2233 | 400 | 45-4163 | 392 | 46-0009 | 402 | 46-0400 | 408 | 46-2081 | 416 |
|  | 98,100 | 45-2234 | 400 | 45-4179 | 398 | 46-0010 | 402 | 46-0401 | 408 | 46-2082 | 416 |
| 43-1281 | 32 | 45-2235 | 400 | 45-4190 | 396 | 46-0011 | 402 | 46-0402 | 408 | 46-2083 | 416 |
| 43-1282 | 16, 32, 98 | 45-2236 | 400 | 45-4191 | 396 | 46-0012 | 402 | 46-0403 | 408 | 46-2084 | 416 |
| 43-1283 | 14, 28, 32 | 45-2240 | 396 | 45-4194 | 396 | 46-0013 | 402 | 46-0404 | 422 | 46-2085 | 416 |
| 43-1284 | 32 | 45-2260 | 396 | 45-4195 | 396 | 46-0014 | 402 | 46-0405 | 422 | 46-2086 | 416 |
| 43-1286 | 32 | 45-2500 | 396 | 45-4997 | 398 | 46-0015 | 402 | 46-0406 | 414 | 46-2087 | 416 |
| 43-1288 | 28, 32 | 45-2510 | 396 | 45-4998 | 398 | 46-0016 | 402 | 46-0500 | 424 | 46-2088 | 416 |
| 43-1289 | 28,32 | 45-2520 | 396 | 45-5000 | 398 | 46-0017 | 402 | 46-0501 | 424 | 46-2089 | 416 |
| 43-1300 | 24,32 | 45-2530 | 396 | 45-5002 | 398 | 46-0018 | 402 | 46-0502 | 424 | 46-2090 | 416 |
| 43-1301 | 24,32 | 45-3003 | 528 | 45-5004 | 398 | 46-0019 | 404 | 46-0503 | 424 | 46-2091 | 416 |
| 43-1302 | 16, 32 | 45-3006 | 528 | 45-6400 | 390 | 46-0020 | 404 | 46-0504 | 76,424 | 46-2092 | 416 |
| 43-1303 | 32 | 45-3007 | 528 | 45-6401 | 390 | 46-0021 | 404 | 46-0507 | 424 | 46-2093 | 416 |
| 43-1304 | 32 | 45-3015 | 528 | 45-6402 | 390 | 46-0022 | 404 | 46-0508 | 76,424 | 46-2400 | 378 |
| 43-1305 | 32 | 45-4000 | 390 | 45-6404 | 390 | 46-0023 | 404 | 46-0509 | 424 | 46-2410 | 378 |
| 43-1306 | 32 | 45-4001 | 390 | 45-6405 | 390 | 46-0024 | 404 | 46-0513 | 76, 424 | 46-2430 | 420 |
| 43-5120 | 392 | 45-4002 | 390 | 45-6409 | 386 | 46-0025 | 404 | 46-0515 | 74,412 | 46-2600 | 408 |
| 43-5121 | 392 | 45-4005 | 390 | 45-6410 | 390 | 46-0026 | 404 | 46-0516 | 74,412 | 46-2610 | 408 |
| 43-5122 | 392 | 45-4006 | 390 | 45-6411 | 390 | 46-0027 | 404 | 46-0520 | 410 | 46-2620 | 408 |
| 43-6380 | 522 | 45-4007 | 390 | 45-6412 | 390 | 46-0028 | 404 | 46-0522 | 410 | 46-2630 | 408 |
| 43-6400 | 522 | 45-4019 | 386, 394 | 45-6420 | 402 | 46-0029 | 404 | 46-0524 | 410 | 46-2640 | 408 |
| 43-6410 | 522 | 45-4020 | 386 | 45-7119 | 388 | 46-0030 | 404 | 46-0526 | 410 | 46-2650 | 408 |
| 43-6420 | 522 | 45-4021 | 386, 394 | 45-7120 | 388 | 46-0031 | 404 | 46-0528 | 410 | 46-2690 | 408 |
| 43-6421 | 392 | 45-4023 | 386 | 45-7990 | 398 | 46-0032 | 404 | 46-0530 | 410 | 46-2700 | 408 |
| 43-6422 | 392 | 45-4027 | 388 | 45-7995 | 398 | 46-0033 | 404 | 46-0535 | 408 | 46-2710 | 408 |
| 43-6423 | 392 | 45-4028 | 388 | 45-8000 | 394 | 46-0034 | 404 | 46-0536 | 408 | 46-2720 | 408 |
| 43-6424 | 392 | 45-4030 | 388 | 45-8001 | 394 | 46-0035 | 404 | 46-0537 | 408 | 46-2730 | 408 |
| 45-0130 | 398 | 45-4037 | 388 | 45-8003 | 394 | 46-0036 | 404 | 46-0538 | 408 | 46-2740 | 408 |
| 45-0132 | 398 | 45-4040 | 390 | 45-8009 | 394 | 46-0037 | 404 | 46-0539 | 412 | 46-2750 | 408 |
| 45-0135 | 398 | 45-4044 | 388 | 45-8013 | 394 | 46-0038 | 404 | 46-0540 | 412 | 46-2790 | 408 |
| 45-0150 | 388 | 45-4050 | 392 | 45-8016 | 394 | 46-0039 | 404 | 46-0541 | 412 | 46-2850 | 414 |
| 45-0312 | 398 | 45-4052 | 392 | 45-8019 | 394 | 46-0040 | 404 | 46-0542 | 416 | 46-2900 | 416 |
| 45-0320 | 390 | 45-4053 | 392 | 45-8024 | 394 | 46-0041 | 404 | 46-0543 | 416 | 46-2905 | 416 |
| 45-0321 | 390 | 45-4054 | 392 | 45-8041 | 394 | 46-0042 | 404 | 46-0544 | 416 | 46-3000 | 416, 428 |
| 45-0322 | 390 | 45-4055 | 392 | 45-8043 | 394 | 46-0043 | 404 | 46-0545 | 416 | 46-3002 | 416 |
| 45-0323 | 390 | 45-4056 | 392 | 45-8045 | 394 | 46-0044 | 404 | 46-0546 | 416 | 46-3004 | 416 |
| 45-0324 | 390 | 45-4057 | 386, 390, | 45-8046 | 394 | 46-0045 | 404 | 46-0547 | 416 | 46-3006 | 416 |
| 45-0326 | 390 |  | 392 | 45-8047 | 394 | 46-0046 | 404 | 46-0548 | 416 | 46-3030 | 420 |

602 | stuller.com

| 46-3050 | 422 | 46-6011 | 406 | 46-9006 | 414 | 47-3235 | 444 | 47-4069 | 388 | 47-4217 | 430,434 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46-3057 | 422 | 46-6012 | 406 | 46-9010 | 414 | 47-3236 | 444 | 47-4085 | 182 | 47-4218 | 432 |
| 46-3060 | 420 | 46-6013 | 406 | 47-2304 | 440 | 47-3241 | 448 | 47-4086 | 388 | 47-4220 | 434 |
| 46-3070 | 66, 412 | 46-6014 | 406 | 47-2305 | 440 | 47-3242 | 448 | 47-4087 | 182, 388 | 47-4221 | 430 |
| 46-3080 | 414 | 46-6015 | 406 | 47-2308 | 440 | 47-3243 | 448 | 47-4088 | 182 | 47-4222 | 430 |
| 46-3085 | 412 | 46-6016 | 406 | 47-2309 | 440 | 47-3244 | 448 | 47-4089 | 506 | 47-4223 | 430 |
| 46-3480 | 420 | 46-7000 | 406 | 47-2560 | 34, 104 | 47-3245 | 448 | 47-4090 | 388 | 47-4240 | 434 |
| 46-3482 | 418 | 46-7001 | 406 | 47-2580 | 104,442 | 47-3246 | 444 | 47-4091 | 388, 506 | 47-4245 | 432 |
| 46-3483 | 418 | 46-7002 | 406 | 47-2590 | 104,442 | 47-3247 | 444 | 47-4092 | 388 | 47-4250 | 432 |
| 46-3990 | 420 | 46-7003 | 406 | 47-2600 | 104,442 | 47-3250 | 442 | 47-4093 | 388, 506 | 47-4251 | 432 |
| 46-3995 | 74 | 46-7004 | 406 | 47-2605 | 442 | 47-3255 | 442 | 47-4094 | 432, 506 | 47-4252 | 432 |
| 46-3998 | 74 | 46-7005 | 406 | 47-2608 | 104,442 | 47-3257 | 442 | 47-4095 | 432 | 47-4253 | 432 |
| 46-3999 | 74 | 46-7006 | 406 | 47-2610 | 104,442 | 47-3260 | 448 | 47-4096 | 432 | 47-4254 | 432 |
| 46-4000 | 420 | 46-7007 | 406 | 47-2700 | 438 | 47-3261 | 448 | 47-4098 | 506 | 47-4255 | 432 |
| 46-4002 | 426 | 46-7008 | 406 | 47-2701 | 438 | 47-3262 | 448 | 47-4099 | 506 | 47-4256 | 432 |
| 46-4004 | 420 | 46-7009 | 406 | 47-2708 | 440 | 47-3263 | 448 | 47-4101 | 182, 388 | 47-4399 | 434 |
| 46-4005 | 74 | 46-7010 | 406 | 47-2710 | 440 | 47-3264 | 448 | 47-4104 | 432 | 47-4400 | 434 |
| 46-4006 | 76 | 46-7011 | 406 | 47-2712 | 440 | 47-3265 | 448 | 47-4106 | 430 | 47-4401 | 434 |
| 46-4006 | 412 | 46-7012 | 406 | 47-2713 | 440 | 47-3266 | 444 | 47-4108 | 430 | 47-4402 | 434 |
| 46-4007 | 74 | 46-7013 | 406 | 47-2714 | 440 | 47-3267 | 448 | 47-4109 | 432 | 47-4403 | 434 |
| 46-4008 | 74 | 46-7014 | 406 | 47-2715 | 440 | 47-3270 | 444 | 47-4111 | 430 | 47-4404 | 434 |
| 46-4009 | 418 | 46-7015 | 406 | 47-2716 | 440 | 47-3271 | 444 | 47-4122 | 86 | 47-4405 | 434 |
| 46-4010 | 424 | 46-7016 | 406 | 47-2717 | 440 | 47-3274 | 444 | 47-4127 | 436 | 47-4406 | 434 |
| 46-4011 | 418 | 46-7017 | 406 | 47-2718 | 440 | 47-3275 | 444 | 47-4128 | 436 | 47-4407 | 434 |
| 46-4013 | 76,426 | 46-7018 | 406 | 47-2719 | 440 | 47-3276 | 444 | 47-4129 | 436 | 47-4408 | 434 |
| 46-4014 | 76,426 | 46-7019 | 406 | 47-2720 | 440 | 47-3280 | 442 | 47-4130 | 434 | 47-4409 | 434 |
| 46-4015 | 414 | 46-7020 | 406 | 47-2721 | 440 | 47-3281 | 442 | 47-4131 | 434 | 47-4752 | 430, 432 |
| 46-4016 | 414 | 46-7021 | 406 | 47-2722 | 430,440 | 47-3282 | 442 | 47-4132 | 434 | 47-4753 | 432 |
| 46-4017 | 76 | 46-7190 | 408 | 47-2723 | 430,440 | 47-3285 | 442 | 47-4133 | 434 | 47-4764 | 164 |
| 46-4018 | 74 | 46-7291 | 408 | 47-2725 | 440 | 47-3290 | 442 | 47-4140 | 436 | 47-4769 | 436 |
| 46-4020 | 426 | 46-7490 | 408 | 47-3060 | 480 | 47-3291 | 442 | 47-4141 | 436, 440 | 47-4780 | 434 |
| 46-4025 | 426 | 46-7590 | 408 | 47-3065 | 480 | 47-3297 | 442 | 47-4142 | 436, 440 | 47-4790 | 434 |
| 46-4026 | 428 | 46-7892 | 408, 500 | 47-3066 | 480 | 47-3299 | 444 | 47-4143 | 434,440 | 47-4993 | 436 |
| 46-4028 | 426 | 46-7893 | 408 | 47-3067 | 480 | 47-3300 | 444 | 47-4144 | 434,440 | 47-4994 | 436 |
| 46-4029 | 426 | 46-7894 | 408 | 47-3068 | 402,480 | 47-3301 | 444 | 47-4145 | 436 | 47-4995 | 436 |
| 46-4030 | 428 | 46-7895 | 404 | 47-3085 | 388 | 47-3302 | 444 | 47-4146 | 436 | 47-4996 | 434 |
| 46-4035 | 416 | 46-7896 | 404 | 47-3087 | 388 | 47-3380 | 444 | 47-4147 | 436, 438 | 47-4997 | 434 |
| 46-4040 | 58 | 46-7897 | 404 | 47-3088 | 388 | 47-3385 | 444 | 47-4148 | 436, 438 | 47-4999 | 430 |
| 46-4545 | 204,546 | 46-7898 | 404 | 47-3100 | 562 | 47-3970 | 432 | 47-4149 | 438 | 47-5000 | 430 |
| 46-4550 | 204,546 | 46-7900 | 1,408 | 47-3120 | 448 | 47-3971 | 432 | 47-4150 | 434, 438 | 47-5002 | 432 |
| 46-4555 | 204,546 | 46-7901 | 408 | 47-3130 | 448 | 47-3972 | 432 | 47-4160 | 164 | 47-5003 | 464 |
| 46-5000 | 426 | 46-8000 | 410 | 47-3140 | 448 | 47-3973 | 432 | 47-4161 | 164 | 47-5004 | 464 |
| 46-5005 | 424,426 | 46-8001 | 410 | 47-3150 | 448 | 47-3974 | 432 | 47-4162 | 164 | 47-5007 | 462 |
| 46-5015 | 426 | 46-8002 | 410 | 47-3151 | 448 | 47-3975 | 432 | 47-4163 | 164 | 47-5008 | 462 |
| 46-5016 | 426 | 46-8003 | 410 | 47-3152 | 448 | 47-3990 | 434 | 47-4164 | 164 | 47-5009 | 462 |
| 46-5017 | 426 | 46-8004 | 410 | 47-3153 | 448 | 47-4008 | 438 | 47-4165 | 164 | 47-5012 | 462 |
| 46-5018 | 426 | 46-8005 | 410 | 47-3154 | 448 | 47-4019 | 438 | 47-4166 | 164 | 47-5013 | 462 |
| 46-5020 | 426 | 46-8006 | 410 | 47-3155 | 448 | 47-4020 | 438 | 47-4172 | 434 | 47-5014 | 462 |
| 46-5060 | 414 | 46-8007 | 410 | 47-3156 | 448 | 47-4021 | 438 | 47-4176 | 434 | 47-5015 | 462 |
| 46-5100 | 414 | 46-8050 | 568 | 47-3200 | 444 | 47-4023 | 438 | 47-4182 | 432 | 47-5020 | 448 |
| 46-5120 | 414 | 46-8055 | 568 | 47-3205 | 444 | 47-4024 | 438 | 47-4183 | 432 | 47-5021 | 462 |
| 46-5140 | 414 | 46-8100 | 420 | 47-3210 | 444 | 47-4025 | 438 | 47-4195 | 434 | 47-5022 | 462 |
| 46-5160 | 414 | 46-8140 | 408 | 47-3211 | 444 | 47-4027 | 438 | 47-4196 | 434 | 47-5023 | 462 |
| 46-5200 | 414 | 46-8142 | 408 | 47-3215 | 444 | 47-4033 | 430,432 | 47-4197 | 434 | 47-5024 | 462 |
| 46-5320 | 428 | 46-8150 | 408 | 47-3221 | 446 | 47-4039 | 432 | 47-4198 | 434 | 47-5028 | 462 |
| 46-6001 | 406 | 46-8152 | 408 | 47-3222 | 444 | 47-4040 | 432 | 47-4201 | 432 | 47-5029 | 462 |
| 46-6002 | 406 | 46-8160 | 408 | 47-3223 | 446 | 47-4043 | 432 | 47-4208 | 434 | 47-5030 | 448 |
| 46-6003 | 406 | 46-8160 | 500 | 47-3224 | 446 | 47-4044 | 434 | 47-4209 | 432 | 47-5032 | 466 |
| 46-6004 | 406 | 46-8162 | 408 | 47-3225 | 446 | 47-4046 | 432 | 47-4210 | 430 | 47-5033 | 466 |
| 46-6005 | 406 | 46-8163 | 426 | 47-3226 | 446 | 47-4048 | 432 | 47-4213 | 430 | 47-5034 | 466 |
| 46-6006 | 406 | 46-8164 | 428 | 47-3227 | 446 | 47-4049 | 432,434 | 47-4214 | 430 | 47-5036 | 130 |
| 46-6007 | 406 | 46-8170 | 408 | 47-3228 | 446 | 47-4057 | 506 | 47-4215 | 430 | 47-5037 | 468 |
| 46-6008 | 406 | 46-9003 | 76,412 | 47-3229 | 446 | 47-4063 | 432 | 47-4216 | 388, 430, | 47-5038 | 468 |
| 46-6010 | 406 | 46-9005 | 414 | 47-3230 | 444 | 47-4064 | 432 |  | 506 | 47-5039 | 468 |

Series Index ——_

| 47-5041 | 462 | 47-5324 | 438 | 49-1005 | 482 | 49-6008 | 484 | 50-4202 | 482 | 51-4073 | 486, 488 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47-5042 | 462 | 47-5325 | 438 | 49-1006 | 482 | 49-6010 | 484 | 50-4203 | 482 | 51-4074 | 486, 488 |
| 47-5043 | 462 | 47-6010 | 386, 388 | 49-1007 | 482 | 49-6011 | 484 | 50-4204 | 482 | 51-4075 | 486, 488 |
| 47-5044 | 462 | 47-6011 | 388 | 49-1008 | 482 | 49-6012 | 484 | 50-4205 | 482 | 51-4076 | 486, 488 |
| 47-5045 | 462 | 47-7000 | 436 | 49-1010 | 482 | 49-6013 | 484 | 50-4206 | 482 | 51-4080 | 486, 488 |
| 47-5046 | 462 | 47-7001 | 436 | 49-1011 | 482 | 49-6014 | 484 | 50-4207 | 482 | 51-4081 | 488 |
| 47-5047 | 466 | 47-7006 | 436 | 49-1012 | 482 | 49-6016 | 484 | 50-4208 | 482 | 51-4082 | 486, 488 |
| 47-5048 | 466 | 47-8002 | 216 | 49-1013 | 482 | 49-6018 | 484 | 50-4209 | 482 | 51-4083KIT | 488 |
| 47-5049 | 468 | 47-8014 | 216 | 49-1014 | 482 | 49-7200 | 486 | 50-4220 | 482 | 51-4084 | 486, 488 |
| 47-5051 | 468 | 47-8900 | 572 | 49-1015 | 482 | 49-7210 | 486 | 50-4221 | 482 | 51-4085 | 536 |
| 47-5052 | 468 | 47-8910 | 572 | 49-1016 | 482 | 49-7211 | 486 | 50-4222 | 482 | 51-4090 | 486, 488 |
| 47-5053 | 466 | 47-8911 | 572 | 49-1018 | 482 | 49-7212 | 486 | 50-4223 | 482 | 52-0902 | 498 |
| 47-5054 | 466 | 47-8920 | 572 | 49-1020 | 482 | 49-7213 | 486 | 50-4224 | 482 | 52-0903 | 498 |
| 47-5055 | 462 | 47-8921 | 572 | 49-1022 | 482 | 49-7220 | 486 | 50-4225 | 482 | 52-0904 | 498 |
| 47-5057 | 468 | 47-8922 | 572 | 49-3002 | 484 | 49-7221 | 486 | 50-4226 | 482 | 52-0905 | 498 |
| 47-5058 | 462 | 48-0502 | 472 | 49-3003 | 484 | 49-7230 | 486 | 50-4227 | 482 | 52-0906 | 498 |
| 47-5061 | 468 | 48-0515 | 472 | 49-3004 | 484 | 49-7235 | 486 | 51-0000 | 494 | 52-0907 | 498 |
| 47-5070 | 464 | 48-0516 | 472 | 49-3006 | 484 | 49-7240 | 486 | 51-0001 | 494 | 52-0908 | 498 |
| 47-5075 | 464 | 48-1000 | 88 | 49-3008 | 484 | 49-7245 | 486 | 51-0560 | 284 | 52-0909 | 498 |
| 47-5100 | 464 | 48-1010 | 88 | 49-4001 | 482 | 49-7246 | 486 | 51-0565 | 284 | 52-0910 | 498 |
| 47-5105 | 464 | 48-1020 | 88 | 49-4002 | 482 | 49-7247 | 486 | 51-0569 | 284 | 52-1011 | 498 |
| 47-5115 | 464 | 48-1032 | 88 | 49-4003 | 482 | 49-7248 | 486 | 51-0570 | 284 | 52-1012 | 160, 498 |
| 47-5160 | 464 | 48-1034 | 88 | 49-4004 | 482 | 49-7249 | 486 | 51-0950 | 298 | 52-1025 | 498 |
| 47-5164 | 464 | 48-1035 | 88 | 49-4005 | 482 | 49-7250 | 486 | 51-0951 | 298 | 52-1026 | 498 |
| 47-5215 | 470 | 48-1036 | 218 | 49-4006 | 482 | 49-7251 | 486 | 51-0952 | 298 | 52-1027 | 498 |
| 47-5216 | 470 | 48-1041 | 88 | 49-4008 | 482 | 50-1000 | 482 | 51-0957 | 298 | 52-1028 | 498 |
| 47-5219 | 470 | 48-1043 | 218 | 49-4010 | 482 | 50-1001 | 482 | 51-1000 | 192, 208 | 52-1029 | 498 |
| 47-5220 | 470 | 48-1044 | 218 | 49-4020 | 482 | 50-1002 | 482 | 51-2005 | 486, 494 | 52-1030 | 498 |
| 47-5222 | 470 | 48-1045 | 218 | 49-4030 | 482 | 50-1003 | 482 | 51-2012 | 486, 490 | 52-1031 | 498 |
| 47-5223 | 470 | 48-1046 | 218 | 49-4040 | 482 | 50-1004 | 482 | 51-2034 | 492 | 52-1032 | 498 |
| 47-5224 | 470 | 48-1047 | 218 | 49-4050 | 482 | 50-1005 | 482 | 51-2036 | 492 | 52-1033 | 498 |
| 47-5229 | 470 | 48-1048 | 218 | 49-4060 | 482 | 50-1006 | 482 | 51-2037 | 492 | 52-1034 | 498 |
| 47-5230 | 470 | 48-1050 | 88 | 49-4070 | 482 | 50-1007 | 482 | 51-2040 | 486, 490 | 52-1035 | 498 |
| 47-5231 | 470 | 48-1060 | 88 | 49-4080 | 482 | 50-1008 | 482 | 51-2041 | 486, 490 | 52-1036 | 498 |
| 47-5235 | 470 | 48-1065 | 88 | 49-4100 | 482 | 50-1010 | 482 | 51-2042 | 486, 490 | 52-1037 | 496 |
| 47-5236 | 470 | 48-1067 | 88 | 49-4120 | 482 | 50-1011 | 482 | 51-2043 | 486, 490 | 52-1038 | 496 |
| 47-5237 | 470 | 48-1350 | 86 | 49-4140 | 482 | 50-1012 | 482 | 51-2060 | 486, 490 | 52-1039 | 496 |
| 47-5240 | 470 | 48-1800 | 422 | 49-4200 | 482 | 50-1013 | 482 | 51-2062 | 486, 490 | 52-1040 | 496 |
| 47-5241 | 470 | 48-1801 | 422 | 49-4201 | 482 | 50-1014 | 482 | 51-2064 | 486, 490 | 52-1041 | 496 |
| 47-5260 | 460 | 48-1802 | 422 | 49-4202 | 482 | 50-1015 | 482 | 51-2075 | 486, 494 | 52-1042 | 496 |
| 47-5261 | 460 | 48-1803 | 422 | 49-4203 | 482 | 50-1016 | 482 | 51-2076 | 486, 494 | 52-1043 | 496 |
| 47-5262 | 460 | 48-1804 | 422 | 49-4204 | 482 | 50-1018 | 482 | 51-2077 | 486, 490 | 52-1045 | 496 |
| 47-5263 | 460 | 48-1806 | 422 | 49-4205 | 482 | 50-1020 | 482 | 51-2089 | 486, 490 | 52-1046 | 496 |
| 47-5264 | 460 | 48-2300 | 544 | 49-4206 | 482 | 50-1022 | 482 | 51-2094 | 486, 492 | 52-1054 | 496 |
| 47-5265 | 460 | 48-3000 | 510 | 49-4207 | 482 | 50-4001 | 482 | 51-2095 | 486, 492 | 52-1055 | 496 |
| 47-5266 | 460 | 48-4000 | 88 | 49-4208 | 482 | 50-4002 | 482 | 51-2096 | 486, 492 | 52-1056 | 496 |
| 47-5267 | 460 | 48-7510 | 472 | 49-4209 | 482 | 50-4003 | 482 | 51-2097 | 486, 492 | 52-1057 | 496 |
| 47-5268 | 460 | 48-7512 | 472 | 49-4220 | 482 | 50-4004 | 482 | 51-2098 | 486, 492, 494 | 52-1058 | 496 |
| 47-5269 | 460 | 48-7520 | 472 | 49-4221 | 482 | 50-4005 | 482 | 51-2102 | 486, 492 | 52-1059 | 496 |
| 47-5296 | 438 | 48-7525 | 288 | 49-4222 | 482 | 50-4006 | 482 | 51-2105 | 486, 490 | 52-1060 | 496 |
| 47-5299 | 438 | 48-7526 | 288 | 49-4223 | 482 | 50-4008 | 482 | 51-2106 | 486, 490 | 52-1065 | 496 |
| 47-5300 | 438 | 48-7530 | 472 | 49-4224 | 482 | 50-4010 | 482 | 51-2108 | 486, 490 | 52-1066 | 496, 498 |
| 47-5301 | 438 | 48-7535 | 472 | 49-4225 | 482 | 50-4020 | 482 | 51-2109 | 486, 490 | 52-1070 | 496 |
| 47-5304 | 438 | 48-7540 | 472 | 49-4226 | 482 | 50-4030 | 482 | 51-2110 | 486, 490 | 52-5140 | 498 |
| 47-5305 | 438 | 48-7550 | 472 | 49-4227 | 482 | 50-4040 | 482 | 51-2111 | 486, 490 | 52-5400 | 496 |
| 47-5306 | 438 | 49-0995 | 484 | 49-4300 | 484 | 50-4050 | 482 | 51-2112 | 490 | 52-5401 | 496 |
| 47-5307 | 438 | 49-0996 | 484 | 49-6000 | 484 | 50-4060 | 482 | 51-2300 | 492 | 52-5406 | 496 |
| 47-5308 | 438 | 49-0997 | 484 | 49-6001 | 484 | 50-4070 | 482 | 51-4060 | 486, 494 | 52-5408 | 496 |
| 47-5309 | 438 | 49-0998 | 484 | 49-6002 | 484 | 50-4080 | 482 | 51-4061 | 486, 494 | 52-5410 | 496 |
| 47-5310 | 438 | 49-1000 | 482 | 49-6003 | 484 | 50-4100 | 482 | 51-4062 | 486, 494 | 52-5412 | 496 |
| 47-5311 | 438 | 49-1001 | 482 | 49-6004 | 484 | 50-4120 | 482 | 51-4068 | 486, 488 | 52-5414 | 496 |
| 47-5312 | 438 | 49-1002 | 482 | 49-6005 | 484 | 50-4140 | 482 | 51-4069 | 486, 488 | 52-5416 | 496 |
| 47-5313 | 438 | 49-1003 | 482 | 49-6006 | 484 | 50-4200 | 482 | 51-4070 | 486, 488 | 52-5420 | 496 |
| 47-5319 | 438 | 49-1004 | 482 | 49-6007 | 484 | 50-4201 | 482 | 51-4072 | 486, 488 | 52-5425 | 496 |

604 | stuller.com

| 52-5430 | 496 | 53-1203 | 218 | 54-1818 | 522 | 54-4413 | 188, 524 | 54-8000 | 38 | 55-2559 | 378 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52-5440 | 498 | 53-1206 | 218 | 54-1819 | 522 | 54-4414 | 188, 524 | 54-8020 | 524 | 55-2560 | 378 |
| 52-5445 | 498 | 53-1207 | 218 | 54-1880 | 518 | 54-4415 | 526 | 54-8021 | 524 | 55-2561 | 378 |
| 52-5450 | 498 | 53-1208 | 218 | 54-1881 | 518 | 54-4416 | 524 | 54-8025 | 164 | 55-2562 | 378 |
| 52-5470 | 496 | 53-1209 | 218 | 54-1882 | 518 | 54-4417 | 524 | 54-8026 | 164 | 55-2622 | 378 |
| 52-5500 | 496 | 53-1210 | 218 | 54-1888 | 520 | 54-4418 | 524 | 54-8027 | 164 | 55-2623 | 378 |
| 52-5501 | 496 | 53-1211 | 218 | 54-1890 | 518 | 54-4419 | 182 | 54-8030 | 524 | 55-2722 | 378 |
| 52-5502 | 496 | 53-1212 | 218 | 54-1891 | 518 | 54-4425 | 194 | 54-8031 | 524 | 55-2723 | 378 |
| 52-5503 | 496 | 53-1213 | 218 | 54-1892 | 518 | 54-4427 | 164 | 54-8035 | 524 | 55-2922 | 378 |
| 52-5504 | 496 | 53-1216 | 218 | 54-1894 | 520 | 54-4430 | 194 | 54-8036 | 524 | 55-2923 | 378 |
| 52-5505 | 496 | 53-1400 | 88 | 54-1895 | 520 | 54-4431 | 528 | 54-8040 | 164,398 | 55-3022 | 378 |
| 52-5506 | 496 | 53-1402 | 88 | 54-1896 | 520 | 54-4432 | 188 | 54-8041 | 164,398 | 55-3023 | 378 |
| 52-5507 | 496 | 53-1406 | 88 | 54-1900 | 518 | 54-4432 | 524 | 54-8042 | 164,398 | 55-3122 | 378 |
| 52-5508 | 496 | 53-1409 | 94 | 54-1901 | 518 | 54-4433 | 188, 524 | 54-8043 | 164,398 | 55-3123 | 378 |
| 52-9500 | 162, 246 | 53-1412 | 94 | 54-1902 | 518 | 54-4435 | 528 | 54-8070 | 524 | 55-3222 | 378 |
| 52-9501 | 246 | 53-1425 | 94 | 54-1904 | 518 | 54-4439 | 202 | 54-8071 | 524 | 55-3223 | 378 |
| 52-9502 | 246 | 53-1425 | 94 | 54-1905 | 518 | 54-4444 | 206 | 54-8072 | 524 | 55-3230 | 378 |
| 52-9504 | 246 | 53-1440 | 88 | 54-1906 | 518 | 54-4445 | 164 | 54-8075 | 526 | 55-3322 | 378 |
| 52-9505 | 246 | 53-1442 | 88 | 54-1910 | 518 | 54-4447 | 202 | 54-8076 | 526 | 55-3335 | 378 |
| 52-9506 | 246 | 53-1725 | 92 | 54-1911 | 518 | 54-4450 | 200 | 54-8077 | 526 | 55-3336 | 378 |
| 52-9507 | 246 | 53-1726 | 92 | 54-1912 | 518 | 54-4451 | 200 | 54-8078 | 526 | 55-3340 | 378 |
| 52-9660 | 162, 246 | 53-1901 | 94 | 54-2520 | 188 | 54-4452 | 200 | 54-8080 | 526 | 56-0805 | 536 |
| 53-0200 | 72 | 53-1905 | 272 | 54-4000 | 526 | 54-4453 | 470 | 54-8081 | 526 | 56-0806 | 536 |
| 53-0201 | 72 | 53-1905 | 272 | 54-4002 | 526 | 54-4455 | 200 | 54-8082 | 526 | 56-0807 | 536 |
| 53-0202 | 72 | 53-2800 | 76,422 | 54-4004 | 526 | 54-4458 | 202 | 54-8083 | 526 | 56-0809 | 536 |
| 53-0203 | 72 | 53-2801 | 76 | 54-4006 | 526 | 54-4462 | 206, 478 | 54-8089 | 526 | 56-7006 | 536 |
| 53-0215 | 72 | 53-6200 | 76, 422 | 54-4008 | 526 | 54-4463 | 470 | 54-8090 | 526 | 56-7007 | 536 |
| 53-0601 | 84 | 53-6201 | 424 | 54-4010 | 364, 526 | 54-4468 | 206 | 54-8100 | 342 | 56-7100 | 536 |
| 53-0603 | 84 | 53-8000 | 426 | 54-4011 | 526 | 54-4470 | 206 | 54-8102 | 342 | 56-7101 | 536 |
| 53-0700 | 238 | 53-8030 | 426 | 54-4015 | 522 | 54-4474 | 518 | 54-8104 | 342 | 56-7102 | 536 |
| 53-1000 | 92 | 53-8060 | 424 | 54-4020 | 524 | 54-4476 | 202 | 54-8106 | 342 | 56-7130 | 536 |
| 53-1001 | 92 | 53-8070 | 422 | 54-4022 | 524 | 54-4478 | 206 | 54-8108 | 342 | 56-7131 | 536 |
| 53-1002 | 92 | 53-9309 | 428 | 54-4024 | 524 | 54-4479 | 206 | 54-9000 | 142 | 56-7140 | 536 |
| 53-1003 | 92 | 53-9310 | 428 | 54-4026 | 526 | 54-4490 | 206 | 54-9002 | 142 | 56-7600 | 534 |
| 53-1004 | 92 | 53-9326 | 428 | 54-4030 | 526 | 54-4491 | 206 | 54-9010 | 164 | 56-7601 | 534 |
| 53-1005 | 92 | 54-0500 | 506 | 54-4031 | 526 | 54-4492 | 206 | 54-9012 | 164 | 56-7602 | 532 |
| 53-1006 | 92 | 54-0801 | 518 | 54-4034 | 526 | 54-4493 | 206 | 54-9029 | 206 | 56-7603 | 534 |
| 53-1007 | 92 | 54-0802 | 520 | 54-4035 | 522 | 54-4520 | 206 | 54-9030 | 206 | 56-7605 | 534 |
| 53-1008 | 92 | 54-1100 | 520 | 54-4036 | 164, 522 | 54-4535 | 184, 512 | 54-9031 | 206 | 56-7606 | 534 |
| 53-1009 | 92 | 54-1101 | 520 | 54-4037 | 164, 522 | 54-4536 | 184, 512 | 54-9032 | 206 | 56-7607 | 392 |
| 53-1010 | 92 | 54-1104 | 522 | 54-4038 | 164, 522 | 54-4537 | 184, 512 | 54-9033 | 206 | 56-7608 | 532 |
| 53-1011 | 92 | 54-1105 | 522 | 54-4039 | 392, 528 | 54-4538 | 184, 512 | 54-9034 | 206 | 56-7609 | 532 |
| 53-1012 | 92 | 54-1108 | 520 | 54-4050 | 524 | 54-4545 | 528 | 54-9035 | 206 | 56-7610 | 532 |
| 53-1013 | 92 | 54-1109 | 520 | 54-4055 | 528 | 54-4560 | 518 | 54-9036 | 206 | 56-7611 | 534 |
| 53-1014 | 92 | 54-1112 | 520 | 54-4060 | 528 | 54-4567 | 506 | 54-9037 | 206 | 56-7612 | 534 |
| 53-1015 | 92 | 54-1113 | 520 | 54-4102 | 478 | 54-4568 | 506 | 55-2401 | 378 | 56-7613 | 532 |
| 53-1021 | 92 | 54-1115 | 506 | 54-4200 | 292 | 54-4569 | 506 | 55-2402 | 378 | 56-7618 | 532 |
| 53-1022 | 92 | 54-1116 | 506 | 54-4391 | 202 | 54-4571 | 506 | 55-2403 | 378 | 56-7620 | 534 |
| 53-1023 | 92 | 54-1117 | 506 | 54-4392 | 202 | 54-4580 | 510 | 55-2407 | 378 | 56-7621 | 534 |
| 53-1024 | 92 | 54-1118 | 506 | 54-4393 | 202 | 54-4581 | 510 | 55-2522 | 378 | 56-7622 | 534 |
| 53-1025 | 92 | 54-1119 | 506 | 54-4394 | 202 | 54-4600 | 510 | 55-2523 | 378 | 56-7630 | 534 |
| 53-1026 | 92 | 54-1120 | 522 | 54-4395 | 202 | 54-5005 | 398 | 55-2540 | 378 | 56-7635 | 534 |
| 53-1027 | 92 | 54-1121 | 506 | 54-4396 | 200 | 54-5020 | 528 | 55-2541 | 378 | 56-7640 | 534 |
| 53-1028 | 92 | 54-1122 | 506 | 54-4397 | 202 | 54-5022 | 528 | 55-2542 | 378 | 56-7647 | 534 |
| 53-1029 | 92 | 54-1200 | 510,522 | 54-4400 | 202 | 54-5030 | 398 | 55-2543 | 378 | 56-7648 | 534 |
| 53-1030 | 92 | 54-1201 | 510,522 | 54-4401 | 202 | 54-5031 | 398 | 55-2550 | 378 | 56-7649 | 534 |
| 53-1031 | 92 | 54-1784 | 520 | 54-4402 | 202 | 54-5033 | 398 | 55-2551 | 378 | 56-7650 | 534 |
| 53-1032 | 92 | 54-1785 | 520 | 54-4403 | 202 | 54-5500 | 526 | 55-2552 | 378 | 56-7711 | 530 |
| 53-1033 | 92 | 54-1791 | 520 | 54-4404 | 202 | 54-5602 | 168 | 55-2553 | 378 | 56-7712 | 530 |
| 53-1034 | 92 | 54-1800 | 520 | 54-4405 | 202 | 54-5605 | 168 | 55-2554 | 378 | 56-7713 | 530 |
| 53-1035 | 92 | 54-1805 | 522 | 54-4407 | 202 | 54-5801 | 172 | 55-2555 | 378 | 56-7800 | 532 |
| 53-1040 | 92 | 54-1810 | 522 | 54-4408 | 202 | 54-5802 | 172 | 55-2556 | 378 | 56-7804 | 532 |
| 53-1200 | 218 | 54-1815 | 522 | 54-4409 | 342 | 54-5803 | 172 | 55-2557 | 378 | 56-7805 | 532 |
| 53-1201 | 218 | 54-1817 | 522 | 54-4411 | 188 | 54-7000 | 522 | 55-2558 | 378 | 56-7806 | 532 |

Series Index

| 56-7807 | 532 | 57-6033 | 538 | 57-6350 | 544 | 58-2462 | 484 | 59-0653 | 568 | 59-1320 | 558 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56-7820 | 532 | 57-6037 | 546 | 57-7300 | 548 | 58-2465 | 484 | 59-0654 | 568 | 59-1321 | 558 |
| 56-7830 | 530 | 57-6038 | 546 | 57-7301 | 548 | 58-2470 | 484 | 59-0655 | 568 | 59-1322 | 558 |
| 56-7831 | 530 | 57-6039 | 548 | 57-7302 | 548 | 58-2500 | 560 | 59-0656 | 568 | 59-1323 | 558 |
| 56-7832 | 530 | 57-6040 | 540 | 57-7303 | 548 | 58-2501 | 560 | 59-0657 | 568 | 59-1344 | 558 |
| 56-7833 | 530 | 57-6041 | 540 | 57-7304 | 548 | 58-2502 | 560 | 59-0659 | 568 | 59-1345 | 558 |
| 56-7835 | 530 | 57-6042 | 540 | 57-7305 | 548 | 58-2503 | 558 | 59-0790 | 576 | 59-1346 | 558 |
| 56-7836 | 530 | 57-6043 | 540 | 57-7306 | 548 | 58-2505 | 558 | 59-0793 | 576 | 59-1347 | 558 |
| 56-7837 | 530 | 57-6050 | 538 | 57-7307 | 548 | 58-2540 | 562 | 59-0794 | 576 | 59-1348 | 558 |
| 56-7840 | 534 | 57-6052 | 540 | 57-7310 | 548 | 58-2541 | 562 | 59-0795 | 576 | 59-1349 | 558 |
| 56-8000 | 536 | 57-6060 | 538 | 57-7401 | 544 | 58-2542 | 562 | 59-0796 | 576 | 59-1350 | 558 |
| 56-8001 | 536 | 57-6062 | 540 | 57-7402 | 544 | 58-2550 | 562 | 59-0797 | 572 | 59-1351 | 558 |
| 56-8010 | 536 | 57-6070 | 538 | 57-7403 | 544 | 58-2551 | 562 | 59-0798 | 576 | 59-1352 | 558 |
| 56-8014 | 536 | 57-6072 | 540 | 57-7404 | 544 | 58-2552 | 562 | 59-0799 | 576 | 59-1353 | 558 |
| 56-8018 | 536 | 57-6080 | 538 | 57-7500 | 548 | 58-2553 | 562 | 59-0800 | 572 | 59-1354 | 558 |
| 56-8022 | 536 | 57-6082 | 540 | 57-7505 | 544 | 58-2554 | 198 | 59-0804 | 576 | 59-1355 | 558 |
| 56-8030 | 536 | 57-6085 | 540 | 57-7510 | 204,546 | 58-2555 | 562 | 59-0805 | 574 | 59-1356 | 558 |
| 56-9000 | 536 | 57-6086 | 540 | 57-7515 | 204,546 | 58-2556 | 562 | 59-0806 | 574 | 59-1357 | 558 |
| 56-9001 | 536 | 57-6087 | 540 | 57-7516 | 204,546 | 58-2557 | 562 | 59-0807 | 572 | 59-1358 | 558 |
| 57-0400 | 542 | 57-6088 | 540 | 57-7517 | 204,546 | 58-2558 | 562 | 59-0808 | 572 | 59-1359 | 558 |
| 57-0410 | 540 | 57-6130 | 540 | 57-7518 | 204,546 | 58-2559 | 182 | 59-0809 | 576 | 59-1360 | 558 |
| 57-0411 | 540 | 57-6140 | 540 | 57-7519 | 204,546 | 58-2603 | 578 | 59-0810 | 572 | 59-1361 | 558 |
| 57-0420 | 74,542 | 57-6150 | 540 | 57-7520 | 546 | 58-2650 | 578 | 59-0811 | 572 | 59-1362 | 558 |
| 57-0430 | 542 | 57-6151 | 540 | 57-7521 | 546 | 58-2700 | 566 | 59-0812 | 572 | 59-1363 | 558 |
| 57-0440 | 542 | 57-6152 | 540 | 57-7522 | 546 | 58-2701 | 566 | 59-0813 | 572 | 59-1500 | 558 |
| 57-0450 | 548 | 57-6160 | 540 | 57-7525 | 548, 570 | 58-2702 | 566 | 59-0815 | 572 | 59-2000 | 558 |
| 57-0451 | 548 | 57-6161 | 540 | 57-7530 | 544 | 58-2703 | 566 | 59-0900 | 574 | 59-2010 | 558 |
| 57-0455 | 538 | 57-6162 | 540 | 57-7600 | 518, 546 | 58-2704 | 566 | 59-0901 | 574 | 59-2020 | 558 |
| 57-0560 | 376 | 57-6163 | 540 | 57-7610 | 546 | 58-2705 | 564 | 59-0902 | 574 | 59-2030 | 558 |
| 57-0570 | 542 | 57-6164 | 540 | 57-7615 | 518, 546 | 58-2799 | 578 | 59-0903 | 574 | 59-2050 | 556 |
| 57-0571 | 542 | 57-6165 | 540 | 57-7620 | 546 | 58-2800 | 578 | 59-0904 | 574 | 59-2051 | 556 |
| 57-0572 | 542 | 57-6170 | 542 | 57-7625 | 438, 546 | 58-2801 | 578 | 59-0905 | 574 | 59-2051 | 556 |
| 57-0573 | 542 | 57-6171 | 542 | 57-7630 | 546 | 58-2805 | 562 | 59-0906 | 574 | 59-2100 | 70,564 |
| 57-0574 | 542 | 57-6172 | 542 | 57-7635 | 542 | 59-0280 | 52 | 59-1000 | 52 | 59-2105 | 70,564 |
| 57-0580 | 376 | 57-6173 | 542 | 57-7636 | 542 | 59-0300 | 572 | 59-1039 | 30 | 59-2110 | 70,564 |
| 57-0581 | 376,428 | 57-6174 | 542 | 57-7640 | 66,548 | 59-0402 | 576 | 59-1050 | 560 | 59-2115 | 70,564 |
| 57-0680 | 178 | 57-6178 | 542 | 57-7657 | 544 | 59-0405 | 576 | 59-1052 | 560 | 59-2500 | 50,566 |
| 57-0690 | 528, 544 | 57-6179 | 542 | 57-7658 | 544 | 59-0406 | 576 | 59-1054 | 560 | 59-2600 | 50,566 |
| 57-0691 | 528, 544 | 57-6180 | 540 | 57-7660 | 74,540 | 59-0410 | 570 | 59-1056 | 560 | 59-3000 | 52 |
| 57-5010 | 542 | 57-6181 | 540 | 57-7770 | 506 | 59-0411 | 570 | 59-1060 | 560 | 59-3002 | 52 |
| 57-5015 | 542 | 57-6182 | 538 | 57-9200 | 204,546 | 59-0470 | 570 | 59-1061 | 560 | 59-3005 | 568 |
| 57-5020 | 548 | 57-6183 | 538 | 58-1030 | 98 | 59-0472 | 570 | 59-1062 | 560 | 60-7073 | 564 |
| 57-5025 | 542 | 57-6184 | 538 | 58-1400 | 216 | 59-0473 | 570 | 59-1064 | 560 | 60-7074 | 564 |
| 57-5030 | 74,542 | 57-6185 | 538 | 58-1412 | 376 | 59-0475 | 570 | 59-1065 | 560 | 60-7075 | 564 |
| 57-5035 | 542 | 57-6186 | 538 | 58-2200 | 216 | 59-0476 | 570 | 59-1300 | 558 | 60-7076 | 564 |
| 57-5042 | 542 | 57-6187 | 538 | 58-2400 | 216 | 59-0477 | 570 | 59-1301 | 558 | 61-0281 | 132 |
| 57-5046 | 542 | 57-6188 | 538 | 58-2410 | 216 | 59-0482 | 566 | 59-1302 | 558 | 61-0283 | 132 |
| 57-6000 | 544 | 57-6189 | 538 | 58-2422 | 98 | 59-0483 | 566 | 59-1303 | 558 | 61-0299 | 132 |
| 57-6001 | 538 | 57-6190 | 538 | 58-2423 | 98 | 59-0484 | 578 | 59-1304 | 558 | 61-0517 | 300 |
| 57-6002 | 538 | 57-6191 | 538 | 58-2424 | 98 | 59-0487 | 568 | 59-1305 | 558 | 61-0518 | 300 |
| 57-6013 | 74,542 | 57-6192 | 538 | 58-2430 | 96 | 59-0488 | 52,570 | 59-1306 | 558 | 61-0519 | 300 |
| 57-6015 | 544 | 57-6193 | 538 | 58-2432 | 96 | 59-0550 | 568 | 59-1307 | 558 | 61-0535 | 300 |
| 57-6016 | 544 | 57-6194 | 540 | 58-2434 | 96 | 59-0555 | 568 | 59-1308 | 558 | 61-0536 | 300 |
| 57-6017 | 544 | 57-6195 | 540 | 58-2434 | 216 | 59-0560 | 568 | 59-1309 | 558 | 61-0537 | 300 |
| 57-6018 | 74,542 | 57-6196 | 540 | 58-2436 | 78 | 59-0561 | 568 | 59-1310 | 558 | 61-0538 | 300 |
| 57-6021 | 544 | 57-6197 | 540 | 58-2436 | 96 | 59-0562 | 568 | 59-1311 | 558 | 61-0540 | 300 |
| 57-6025 | 538 | 57-6198 | 540 | 58-2437 | 96 | 59-0563 | 568 | 59-1312 | 558 | 61-0544 | 300 |
| 57-6026 | 538 | 57-6200 | 544 | 58-2438 | 98 | 59-0564 | 568 | 59-1313 | 558 | 61-0546 | 300 |
| 57-6027 | 538 | 57-6201 | 544 | 58-2439 | 244 | 59-0565 | 568 | 59-1314 | 558 | 61-0547 | 298 |
| 57-6028 | 538 | 57-6250 | 538 | 58-2440 | 422, 474 | 59-0645 | 568 | 59-1315 | 558 | 61-0548 | 298 |
| 57-6029 | 538 | 57-6260 | 538 | 58-2450 | 216 | 59-0646 | 568 | 59-1316 | 558 | 61-0552 | 300 |
| 57-6030 | 538 | 57-6270 | 538 | 58-2452 | 216 | 59-0650 | 568 | 59-1317 | 558 | 61-0554 | 300 |
| 57-6031 | 538 | 57-6280 | 546 | 58-2454 | 216 | 59-0651 | 568 | 59-1318 | 558 | 61-1331 | 40 |
| 57-6032 | 538 | 57-6281 | 546 | 58-2456 | 216 | 59-0652 | 568 | 59-1319 | 558 | 61-1332 | 40 |

606 | stuller.com

| 61-1333 | 40 | 62-1246 | 300 | 62-4542 | 550 | 77-1019 | 110 | 77-1145 | 110 | 77-1414 | 112 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61-1334 | 40 | 62-1247 | 300 | 62-4543 | 550 | 77-1020 | 110 | 77-1147 | 110 | 77-1415 | 112 |
| 61-1335 | 40 | 62-1248 | 300 | 62-4544 | 550 | 77-1021 | 110 | 77-1150 | 110 | 77-1416 | 112 |
| 61-1336 | 40 | 62-4385 | 550 | 62-4545 | 550 | 77-1022 | 110 | 77-1197 | 110 | 77-1417 | 112 |
| 61-1510 | 42,564 | 62-4388 | 550 | 62-4546 | 550 | 77-1023 | 110 | 77-1198 | 110 | 77-1418 | 112 |
| 61-1520 | 42,564 | 62-4389 | 550 | 62-4550 | 550 | 77-1024 | 110 | 77-1199 | 110 | 77-1419 | 112 |
| 61-1530 | 42,564 | 62-4391 | 552 | 62-4590 | 550 | 77-1025 | 110 | 77-1209 | 110 | 77-1420 | 112 |
| 61-1540 | 42,564 | 62-4393 | 552 | 62-4591 | 550 | 77-1026 | 110 | 77-1210 | 110 | 77-1421 | 112 |
| 61-1550 | 42,564 | 62-4395 | 552 | 62-4592 | 550 | 77-1027 | 110 | 77-1211 | 110 | 77-1422 | 112 |
| 61-1555 | 42,564 | 62-4396 | 550 | 62-4600 | 552 | 77-1028 | 110 | 77-1212 | 110 | 77-1423 | 112 |
| 61-1556 | 42,564 | 62-4397 | 552 | 62-4601 | 552 | 77-1029 | 110 | 77-1213 | 110 | 77-1424 | 112 |
| 61-1557 | 42,564 | 62-4399 | 552 | 62-4602 | 550 | 77-1030 | 110 | 77-1214 | 110 | 77-1425 | 112 |
| 61-1558 | 42,564 | 62-4401 | 552 | 62-4603 | 550 | 77-1031 | 110 | 77-1215 | 110 | 77-1427 | 112 |
| 61-1559 | 42,564 | 62-4403 | 68 | 62-4621 | 550 | 77-1033 | 110 | 77-1216 | 110 | 77-1429 | 112 |
| 61-1560 | 42 | 62-4403 | 550 | 62-5100 | 504 | 77-1035 | 110 | 77-1217 | 110 | 77-1430 | 112 |
| 61-1595 | 42 | 62-4409 | 550 | 62-5502 | 548 | 77-1037 | 110 | 77-1218 | 110 | 77-1431 | 112 |
| 61-1596 | 42 | 62-4413 | 552 | 64-4010 | 204 | 77-1040 | 110 | 77-1219 | 110 | 77-1433 | 112 |
| 61-1597 | 42 | 62-4421 | 552 | 64-4077 | 566 | 77-1042 | 110 | 77-1220 | 110 | 77-1435 | 112 |
| 61-1598 | 42 | 62-4422 | 552 | 64-4078 | 566 | 77-1045 | 110 | 77-1221 | 110 | 77-1437 | 112 |
| 61-1599 | 42 | 62-4423 | 552 | 64-4079 | 576 | 77-1047 | 110 | 77-1222 | 110 | 77-1440 | 112 |
| 61-1600 | 42 | 62-4427 | 552 | 64-4080 | 566 | 77-1050 | 110 | 77-1223 | 110 | 77-1442 | 112 |
| 61-1601 | 42 | 62-4428 | 550 | 64-4085 | 572 | 77-1055 | 110 | 77-1225 | 110 | 77-1445 | 112 |
| 61-1602 | 42 | 62-4430 | 550 | 64-4090 | 572 | 77-1060 | 110 | 77-1227 | 110 | 77-1447 | 112 |
| 61-1603 | 42 | 62-4432 | 548 | 64-5000 | 572 | 77-1065 | 110 | 77-1229 | 110 | 77-1450 | 112 |
| 61-1604 | 42 | 62-4433 | 552 | 64-5003 | 572 | 77-1070 | 110 | 77-1231 | 110 | 77-1460 | 112 |
| 61-1630 | 42 | 62-4434 | 550 | 64-5004 | 572 | 77-1075 | 110 | 77-1233 | 110 | 77-1470 | 112 |
| 61-1635 | 42 | 62-4435 | 552 | 64-5008 | 572 | 77-1080 | 110 | 77-1235 | 110 | 77-1480 | 112 |
| 61-1640 | 42 | 62-4436 | 550 | 64-5009 | 572 | 77-1085 | 110 | 77-1237 | 110 | 77-1497 | 112 |
| 61-1645 | 42 | 62-4437 | 548 | 64-5010 | 576 | 77-1090 | 110 | 77-1245 | 110 | 77-1498 | 112 |
| 61-1646 | 42 | 62-4440 | 548 | 64-5100 | 562 | 77-1095 | 110 | 77-1247 | 110 | 77-1499 | 112 |
| 61-1647 | 42 | 62-4442 | 150 | 64-5102 | 570 | 77-1096 | 110 | 77-1299 | 110 | 77-1506 | 108 |
| 61-1648 | 42 | 62-4445 | 550 | 64-5104 | 570 | 77-1097 | 110 | 77-1309 | 112 | 77-1507 | 108 |
| 61-1649 | 300 | 62-4446 | 550 | 64-5105 | 570 | 77-1098 | 110 | 77-1310 | 112 | 77-1508 | 108 |
| 61-1655 | 42,300 | 62-4447 | 552 | 64-5106 | 52 | 77-1099 | 110 | 77-1311 | 112 | 77-1509 | 108 |
| 61-1660 | 42 | 62-4449 | 552 | 64-5107 | 52 | 77-1105 | 110 | 77-1312 | 112 | 77-1510 | 108 |
| 61-1700 | 42 | 62-4453 | 552 | 64-5112 | 562 | 77-1106 | 110 | 77-1313 | 112 | 77-1512 | 108 |
| 61-1710 | 300 | 62-4454 | 548 | 64-5116 | 564 | 77-1107 | 110 | 77-1314 | 112 | 77-1514 | 108 |
| 61-1740 | 294 | 62-4455 | 552 | 64-6496 | 428 | 77-1108 | 110 | 77-1315 | 112 | 77-1515 | 108 |
| 61-1741 | 294 | 62-4459 | 548 | 69-1101 | 460 | 77-1109 | 110 | 77-1316 | 112 | 77-1516 | 108 |
| 61-1742 | 294 | 62-4460 | 550 | 69-1102 | 460 | 77-1110 | 110 | 77-1317 | 112 | 77-1518 | 108 |
| 61-1743 | 294 | 62-4463 | 550 | 69-1103 | 460 | 77-1111 | 110 | 77-1318 | 112 | 77-1521 | 108 |
| 61-3000 | 298 | 62-4464 | 550 | 69-1104 | 460 | 77-1112 | 110 | 77-1319 | 112 | 77-1523 | 108 |
| 61-3010 | 298 | 62-4465 | 550 | 77-1001S | 118 | 77-1113 | 110 | 77-1320 | 112 | 77-1525 | 108 |
| 61-3020 | 298 | 62-4466 | 552 | 77-1002S | 118 | 77-1114 | 110 | 77-1322 | 112 | 77-1527 | 108 |
| 61-3030 | 298 | 62-4467 | 550 | 77-1003 | 110 | 77-1115 | 110 | 77-1323 | 112 | 77-1529 | 108 |
| 61-5403 | 554 | 62-4471 | 552 | 77-1003S | 118 | 77-1116 | 110 | 77-1325 | 112 | 77-1531 | 108 |
| 61-5407 | 554 | 62-4475 | 550 | 77-1004 | 110 | 77-1117 | 110 | 77-1327 | 112 | 77-1533 | 108 |
| 61-5408 | 554 | 62-4476 | 552 | 77-1005 | 110 | 77-1118 | 110 | 77-1330 | 112 | 77-1535 | 108 |
| 61-5411 | 554 | 62-4478 | 552 | 77-1005S | 118 | 77-1119 | 110 | 77-1331 | 112 | 77-1537 | 108 |
| 61-5412 | 554 | 62-4479 | 548 | 77-1006 | 110 | 77-1120 | 110 | 77-1333 | 112 | 77-1540 | 108 |
| 61-5413 | 554 | 62-4482 | 550 | 77-1006S | 118 | 77-1121 | 110 | 77-1335 | 112 | 77-1542 | 108 |
| 61-5415 | 554 | 62-4486 | 550 | 77-1007 | 110 | 77-1122 | 110 | 77-1337 | 112 | 77-1545 | 108 |
| 61-6491 | 554 | 62-4488 | 552 | 77-1007S | 118 | 77-1123 | 110 | 77-1340 | 112 | 77-1547 | 108 |
| 61-6493 | 554 | 62-4497 | 550 | 77-1008 | 110 | 77-1124 | 110 | 77-1345 | 112 | 77-1550 | 108 |
| 61-6494 | 554 | 62-4498 | 550 | 77-1009 | 110 | 77-1125 | 110 | 77-1350 | 112 | 77-1560 | 108 |
| 61-9424 | 460 | 62-4499 | 550 | 77-1010 | 110 | 77-1127 | 110 | 77-1370 | 112 | 77-1608 | 108 |
| 62-0040 | 300 | 62-4500 | 550 | 77-1011 | 110 | 77-1129 | 110 | 77-1380 | 112 | 77-1609 | 108 |
| 62-0044 | 300 | 62-4503 | 550 | 77-1012 | 110 | 77-1130 | 110 | 77-1390 | 112 | 77-1610 | 108 |
| 62-1240 | 300 | 62-4507 | 550 | 77-1013 | 110 | 77-1131 | 110 | 77-1396 | 112 | 77-1612 | 108 |
| 62-1241 | 300 | 62-4511 | 548 | 77-1014 | 110 | 77-1133 | 110 | 77-1398 | 112 | 77-1614 | 108 |
| 62-1242 | 300 | 62-4513 | 548 | 77-1015 | 110 | 77-1135 | 110 | 77-1409 | 112 | 77-1616 | 108 |
| 62-1243 | 300 | 62-4514 | 548 | 77-1016 | 110 | 77-1137 | 110 | 77-1410 | 112 | 77-1618 | 108 |
| 62-1244 | 300 | 62-4540 | 550 | 77-1017 | 110 | 77-1140 | 110 | 77-1412 | 112 | 77-1620 | 108 |
| 62-1245 | 300 | 62-4541 | 550 | 77-1018 | 110 | 77-1142 | 110 | 77-1413 | 112 | 77-1621 | 108 |

Series Index

| 77-1622 | 108 | 77-2212 | 114 | 77-2901 | 92 | 77-5113 | 114 | 77-6223 | 214 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77-1623 | 108 | 77-2213 | 114 | 77-2902 | 92 | 77-5114 | 114 | 77-6306 | 116 |
| 77-1625 | 108 | 77-2214 | 114 | 77-2903 | 92 | 77-5115 | 114 | 77-6308 | 116 |
| 77-1627 | 108 | 77-2215 | 114 | 77-2904 | 92 | 77-5116 | 114 | 77-6309 | 116 |
| 77-1629 | 108 | 77-2216 | 114 | 77-2905 | 92 | 77-5117 | 114 | 77-6310 | 116 |
| 77-1630 | 108 | 77-2218 | 114 | 77-2906 | 92 | 77-5118 | 114 | 77-6312 | 116 |
| 77-1631 | 108 | 77-2221 | 114 | 77-2907 | 92 | 77-5119 | 114 | 77-6314 | 116 |
| 77-1640 | 108 | 77-2223 | 114 | 77-2908 | 92 | 77-5120 | 114 | 77-6316 | 116 |
| 77-1706 | 112 | 77-2225 | 114 | 77-2909 | 92 | 77-5121 | 114 | 77-6408 | 114, 116 |
| 77-1707 | 112 | 77-2240 | 114 | 77-2910 | 92 | 77-5122 | 114 | 77-6409 | 114, 116 |
| 77-1708 | 112 | 77-2310 | 110 | 77-2911 | 92 | 77-5123 | 114 | 77-6412 | 114, 116 |
| 77-1709 | 112 | 77-2312 | 110 | 77-2912 | 92 | 77-5212 | 114 | 77-6509 | 116 |
| 77-1710 | 112 | 77-2506 | 212 | 77-2913 | 92 | 77-5214 | 114 | 77-6510 | 116 |
| 77-1712 | 112 | 77-2507 | 212 | 77-2914 | 92 | 77-5216 | 114 | 77-6512 | 116 |
| 77-1714 | 112 | 77-2508 | 214 | 77-2915 | 92 | 77-5308 | 114 | 77-6516 | 116 |
| 77-1716 | 112 | 77-2509 | 214 | 77-2916 | 92 | 77-5309 | 114 | 77-6521 | 116 |
| 77-1718 | 112 | 77-2510 | 214 | 77-2917 | 92 | 77-5310 | 114 | 77-6709 | 114 |
| 77-1721 | 112 | 77-2512 | 214 | 77-2918 | 92 | 77-5409 | 114, 116 | 77-6710 | 114 |
| 77-1723 | 112 | 77-2514 | 214 | 77-2919 | 92 | 77-5410 | 114, 116 | 77-6712 | 114 |
| 77-1725 | 112 | 77-2605 | 214 | 77-2920 | 92 | 77-5412 | 114, 116 | 77-6714 | 114 |
| 77-1727 | 112 | 77-2606 | 214 | 77-2921 | 92 | 77-5414 | 114, 116 | 77-6810 | 114 |
| 77-1728 | 112 | 77-2607 | 214 | 77-2922 | 92 | 77-5416 | 114, 116 | 77-6812 | 114 |
| 77-1740 | 112 | 77-2608 | 214 | 77-2930 | 92 | 77-5421 | 114, 116 | 77-6816 | 114 |
| 77-1806 | 112 | 77-2609 | 214 | 77-2931 | 92 | 77-5509 | 114, 116 | 77-6909 | 116 |
| 77-1807 | 112 | 77-2610 | 214 | 77-2940 | 92 | 77-5510 | 114, 116 | 77-6910 | 116 |
| 77-1808 | 112 | 77-2611 | 214 | 77-3008 | 118 | 77-5512 | 114, 116 | 80-0000 | 50 |
| 77-1809 | 112 | 77-2612 | 214 | 77-3010 | 118 | 77-5516 | 114, 116 | 80-0001 | 50 |
| 77-1810 | 112 | 77-2613 | 214 | 77-3012 | 124 | 77-5709 | 114, 116 | 80-0002 | 50 |
| 77-1812 | 112 | 77-2614 | 214 | 77-3014 | 124 | 77-5710 | 114, 116 | 80-0003 | 50 |
| 77-1814 | 112 | 77-2615 | 214 | 77-3016 | 118 | 77-5810 | 114, 116 | 90-0000 | 40 |
| 77-1816 | 112 | 77-2616 | 214 | 77-3018 | 118 | 77-5812 | 114, 116 | 90-0100 | 40 |
| 77-1818 | 112 | 77-2617 | 214 | 77-3108 | 118 | 77-5816 | 114, 116 | 90-0200 | 40 |
| 77-1821 | 112 | 77-2618 | 214 | 77-3109 | 118 | 77-5908 | 116 | 90-0300 | 40 |
| 77-1823 | 112 | 77-2620 | 214 | 77-3110 | 118 | 77-5909 | 116 | 90-1000 | 40 |
| 77-1825 | 112 | 77-2621 | 214 | 77-3111 | 118 | 77-5910 | 116 |  |  |
| 77-1827 | 112 | 77-2622 | 214 | 77-3112 | 118 | 77-5912 | 116 |  |  |
| 77-1829 | 112 | 77-2623 | 214 | 77-3113 | 118 | 77-5914 | 116 |  |  |
| 77-1840 | 112 | 77-2699 | 214 | 77-3114 | 118 | 77-5916 | 116 |  |  |
| 77-1915 | 112 | 77-2808 | 118 | 77-3115 | 118 | 77-5918 | 116 |  |  |
| 77-1920 | 112 | 77-2809 | 118 | 77-3116 | 118 | 77-6108 | 116 |  |  |
| 77-2023 | 112 | 77-2810 | 118 | 77-3117 | 118 | 77-6109 | 116 |  |  |
| 77-2029 | 112 | 77-2811 | 118 | 77-3118 | 118 | 77-6110 | 116 |  |  |
| 77-2035 | 112 | 77-2812 | 118 | 77-3121 | 118 | 77-6112 | 116 |  |  |
| 77-2040 | 112 | 77-2813 | 118 | 77-3123 | 118 | 77-6114 | 116 |  |  |
| 77-2106 | 114 | 77-2814 | 118 | 77-3240 | 114 | 77-6116 | 116 |  |  |
| 77-2107 | 114 | 77-2815 | 118 | 77-3250 | 114 | 77-6118 | 116 |  |  |
| 77-2108 | 114 | 77-2816 | 118 | 77-3260 | 114 | 77-6205 | 214 |  |  |
| 77-2109 | 114 | 77-2817 | 118 | 77-3270 | 114 | 77-6206 | 214 |  |  |
| 77-2110 | 114 | 77-2818 | 118 | 77-3280 | 114 | 77-6207 | 214 |  |  |
| 77-2112 | 114 | 77-2819 | 118 | 77-3340 | 114 | 77-6208 | 214 |  |  |
| 77-2114 | 114 | 77-2820 | 118 | 77-3350 | 114 | 77-6209 | 214 |  |  |
| 77-2116 | 114 | 77-2821 | 118 | 77-4123 | 126 | 77-6210 | 214 |  |  |
| 77-2118 | 114 | 77-2823 | 118 | 77-4131 | 126 | 77-6211 | 214 |  |  |
| 77-2121 | 114 | 77-2825 | 118 | 77-4151 | 126 | 77-6212 | 214 |  |  |
| 77-2123 | 114 | 77-2827 | 118 | 77-5103 | 114 | 77-6213 | 214 |  |  |
| 77-2125 | 114 | 77-2829 | 118 | 77-5104 | 114 | 77-6214 | 214 |  |  |
| 77-2127 | 114 | 77-2830 | 118 | 77-5105 | 114 | 77-6215 | 214 |  |  |
| 77-2140 | 114 | 77-2835 | 118 | 77-5106 | 114 | 77-6216 | 214 |  |  |
| 77-2206 | 114 | 77-2840 | 118 | 77-5107 | 114 | 77-6217 | 214 |  |  |
| 77-2207 | 114 | 77-2845 | 118 | 77-5108 | 114 | 77-6218 | 214 |  |  |
| 77-2208 | 114 | 77-2850 | 118 | 77-5109 | 114 | 77-6219 | 214 |  |  |
| 77-2209 | 114 | 77-2898 | 118 | 77-5110 | 114 | 77-6220 | 214 |  |  |
| 77-2210 | 114 | 77-2899 | 118 | 77-5111 | 114 | 77-6221 | 214 |  |  |
| 77-2211 | 114 | $77-290$ | 92 | 77-5112 114 |  | 77-622 | 214 |  |  |

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