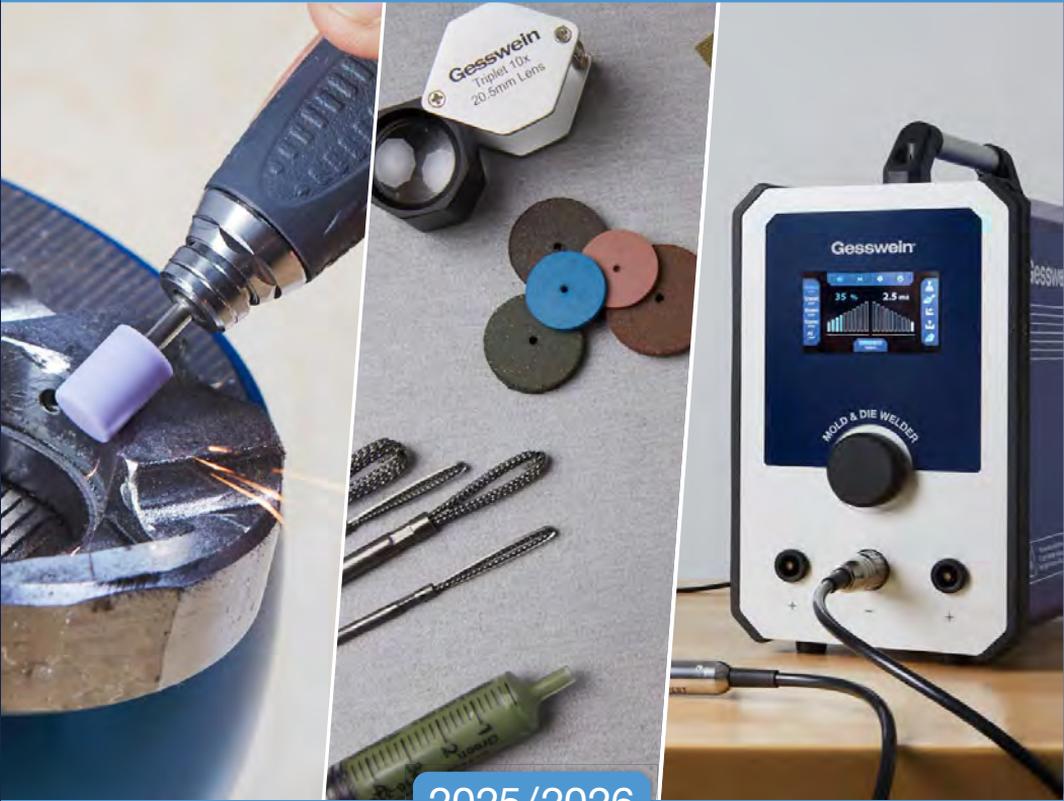


Gesswein®

Since 1914



2025/2026

Precision Tools & Equipment for Metalworking Industries

Welcome to Catalog 111

Celebrating 111 years in business

Since 1914, our company has been dedicated to providing high-quality precision metalworking tools and equipment to support the needs of manufacturers and metalworkers alike. This catalog, our 111th edition, is a special one for us, as it represents the number of years we've been in business.

Our journey began over a century ago with a commitment to sourcing quality products and delivering customer satisfaction. Over the years, we have expanded our product line and deepened our expertise, always working to bring you reliable tools that meet the evolving demands of modern manufacturing.

Your success is what drives us, and we remain dedicated to helping you find the right solutions for your needs. Thank you for choosing Gesswein.



Gesswein® is a proud member of



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Icons Usage



Although no hazardous shipping surcharge applies, these items can only ship via UPS® Ground, no air, FedEx® or US Mail possible.



Shipment by truck is required



Pricing notes



UPS® hazardous shipping surcharge applies.

Mold Polishing Class

Enhance your Mold Polishing Skills



"The class was very informative. Our instructor Donald was awesome. The techniques I learned here will most definitely benefit me throughout my career."

Cody Youngeis | Tessy Plastics

Class Overview

- Two days of intensive mold polishing training at Gesswein Headquarters in Bridgeport
- Work with a Master Mold Polishing Instructor with over 40 years of experience
- Hands-on training with the latest products and technology for mold polishing
- Learn how to polish a rough EDM surface to a mirror A-2 finish
- Open forum to ask questions about specific problems

Location

Gesswein Headquarters in
Bridgeport, Connecticut



Scan to
Learn More

Student Benefits

- Learn the standard methods of mold polishing along with new techniques
- Beneficial for beginner, intermediate, and expert mold polishers
- Option to bring your own parts to class for tailored practice with Instructor guidance
- Improve polishing efficiency and quality of surface finish
- Develop a better understanding of polishing concepts

On-Site Training

We'll come to you!

On-Site Overview

- Two days of intensive hands-on mold polishing training at your shop led by one of our Master Mold Polishers
- Work with the latest products and technology for mold polishing
- Option to work with our demo block, or have a tailored session with your own part
- Equipment and tools provided by Gesswein



Meet the Instructors

Our instructors are seasoned professionals in the art of mold polishing with extensive expertise. They specialize in achieving consistent top-notch finishes and have trained over 700 working professionals.



Steve Smith

Over 50 years experience in mold polishing and coaching, Steve developed his skills working as a Supervisor at Caco Pacific for the majority of his career. He's now retired and we're lucky that he's become our consultant and instructor.



Donald Gonzalez

Over 40 years experience in mold polishing, Donald started his apprenticeship in 1979 at Caco Pacific moving onto The Kipp Group for a total of 11 years. He then started his own mold polishing business at DG Mold Polishing, which he currently runs today with his family.

Gesswein® Polishing Stones

We specialize in producing the finest polishing stones for mold and die polishers worldwide. Our commitment to excellence has made us a trusted name in the industry.

Our stones are made locally in Old Saybrook, nearby our main headquarters in Bridgeport, Connecticut, USA. The close proximity to our manufacturing facility allows us to execute a higher degree of quality control and raise our overall standards.

By choosing Gesswein® Polishing Stones, you join us in promoting American manufacturing and contributing to the growth of skilled artisans and craftsmen in our community.



Achieve Exceptional Uniform Finishes

Unrivaled Performance

Experience the unmatched polishing power of our stones, designed to meet the exacting demands of mold and die professionals.

Exceptional Durability

Our stones are engineered to withstand the toughest polishing applications, ensuring long-lasting performance and consistent results.

Precision Engineering

Each stone is meticulously crafted to deliver precise and uniform polishing, enabling you to achieve flawless finishes.

Wide Range of Options

Discover our comprehensive selection of stones, available in various grits, shapes, and sizes, tailored to meet your specific polishing needs.

Made in the USA

Support local manufacturing and enjoy the peace of mind that comes with choosing stones crafted with unrivaled attention to detail and quality control.



Which Gesswein® Stone is Right for You?

The following chart contains helpful information to guide you in selecting the appropriate polishing stone based on your application and surface type. Need more tailored advice? Our technical team can assist you in finding the optimal stone for your needs.



Stone	Page	Abrasive Grain	Bond	Hardness	Breakdown Ratio	Wet or Dry	Recommended Metals
Ultra-Soft	14	White Aluminum Oxide	Vitrified	Very Soft	Very Fast	Wet & Dry	Mold and tool steels including P20, 420SS, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
Rough Out	18	Aluminum Oxide	Vitrified	Very Soft	Fast	Wet & Dry	Hard and soft tool steels as low as Rockwell C 25. Soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
General Purpose	13	White Aluminum Oxide	Vitrified	Medium	Moderate	Wet	All tool steels of all hardness such as A2, D2, M2 S7, and H13.
Moldmaker	10	Black Silicon Carbide	Vitrified	Medium Soft	Fast	Wet	Hard and soft tool steels as low as Rockwell C 25. Soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
Diemaker	4-5	Brown Aluminum Oxide	Vitrified	Medium	Moderate	Wet & Limited Dry	All mold and tool steels of all hardness such as A2, D2, S7, H13, P20, 420SS, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
Ruby Rough Out	17	Ruby Aluminum Oxide	Vitrified	Medium	Moderate	Wet & Dry	All tool steels of all hardness such as A2, D2, M2, S7, and H13. Soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
Super Fine	14	Aluminum Oxide	Vitrified	Medium	Moderate Fast	Wet & Dry	All tool steels of all hardness such as A2, D2, M2, S7, and H13.
G2	16	Brown Aluminum Oxide	Vitrified	Medium	Slow	Wet	Ideal for Steels such as P20, H13, and 420SS
Oil-Treated	9	White Aluminum Oxide	Vitrified	Medium Hard	Moderate	Wet & Limited Dry	All tool steels of all hardness such as A2, D2, M2, S7, and H13.
Moldmaker PLUS	11	Green Silicon Carbide	Vitrified	Medium Hard	Moderate Fast	Wet	All mold and tool steels of all hardness such as A2, D2, S7, H13, P20, 420SS, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite.
Premium White	12	White Aluminum Oxide	Vitrified	Medium Hard	Slow	Wet	All tool steels of all hardness such as A2, D2, M2, S7, and H13.
EDM	6-7	White Aluminum Oxide	Vitrified	Hard	Slow	Wet	Medium and Hard tool steels as high as Rockwell C 62
EDM Blue	8	White Aluminum Oxide	Vitrified	Very Hard	Slow	Wet	Medium and Hard tool steels as high as Rockwell C 62
RA	15	Aluminum Oxide	Resin	Very Hard	Slow	Wet	All tool steels of all hardness such as A2, D2, M2, S7, and H13.

Gesswein® Diemaker Stones

- A great general-purpose polishing stone
- Contains brown aluminum oxide which is tough, blocky and a faceted abrasive grit
- Generally used wet but can be used dry for roughing applications
- Recommended use on mold and tool steels of all hardness such as A2, D2, S7, H13, P20, 420SS, and soft non-ferrous metals such as Aluminum and Beryllium



Diemaker Attributes

Hardness: Medium
 Breakdown: Moderate
 Wet or Dry: Wet & Limited Dry
 Abrasive Grain: Brown Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"

Grit	SKU	Pkg. of 12
100	415-0001	
150	415-0010	
180	415-0180	
220	415-0020	
280	415-0280	
320	415-0030	
400	415-0040	
600	415-0060	
800	415-0080	
900	415-0090	
1200	415-4080	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	405-1802	
150	405-2102	
180	405-5802	
220	405-2202	
280	405-6802	
320	405-2302	
400	405-2402	
600	405-2602	
800	405-2802	
900	405-2902	
1200	405-4002	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	405-1803	
150	405-2103	
180	405-5803	
220	405-2203	
280	405-6803	
320	405-2303	
400	405-2403	
600	405-2603	
800	405-2803	
900	405-2903	
1200	405-4003	

1/4" x 1/16" x 4"

Grit	SKU	Pkg. of 12
100	405-1810	
150	405-2110	
180	405-5810	
220	405-2210	
280	405-6810	
320	405-2310	
400	405-2410	
600	405-2610	
900	405-2910	
1200	405-4010	

3/8" x 3/8" x 6"

Grit	SKU	Pkg. of 12
100	405-1808	
150	405-2108	
180	405-5808	
220	405-2208	
280	405-6808	
320	405-2308	
400	405-2408	
600	405-2608	
800	405-2808	
900	405-2908	
1200	405-4008	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	405-1804	
150	405-2104	
180	405-5804	
220	405-2204	
280	405-6804	
320	405-2304	
400	405-2404	
600	405-2604	
800	405-2804	
900	405-2904	
1200	405-4004	

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	405-1801	
150	405-2101	
180	405-5801	
220	405-2201	
280	405-6801	
320	405-2301	
400	405-2401	
600	405-2601	
800	405-2801	
900	405-2901	
1200	405-4001	

1/2" x 1/16" x 6"

Grit	SKU	Pkg. of 12
100	405-1800	
150	405-2100	
180	405-5800	
220	405-2200	
280	405-6800	
320	405-2300	
400	405-2400	
600	405-2600	
900	405-2900	
1200	405-4000	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	405-1805	
150	405-2105	
180	405-5805	
220	405-2205	
280	405-6805	
320	405-2305	
400	405-2405	
600	405-2605	
800	405-2805	
900	405-2905	
1200	405-4005	

3/4" x 1/4" x 6"

Grit	SKU	Pkg. of 6
100	405-1809	
150	405-2109	
180	405-5809	
220	405-2209	
280	405-6809	
320	405-2309	
400	405-2409	
600	405-2609	
900	405-2909	

1" x 1" x 6"

Grit	SKU	Pkg. of 6
100	405-1806	
150	405-2106	
180	405-5806	
220	405-2206	
280	405-6806	
320	405-2306	
400	405-2406	
600	405-2606	
900	405-2906	

Triangular 1/4" x 6"

Grit	SKU	Pkg. of 12
100	405-1892	
150	405-2192	
180	405-5092	
220	405-2292	
280	405-6092	
320	405-2392	
400	405-2492	
600	405-2692	
900	405-2992	

1" x 1/8" x 6"

Grit	SKU	Pkg. of 6
100	405-1811	
150	405-2111	
180	405-5811	
220	405-2211	
280	405-6811	
320	405-2311	
400	405-2411	
600	405-2611	
900	405-2911	

Round 1/4" x 6"

Grit	SKU	Pkg. of 6
100	405-3802	
150	405-3102	
180	405-3502	
220	405-3202	
280	405-602	
320	405-3302	
400	405-3402	
600	405-3602	
900	405-3902	

Triangular 3/8" x 6"

Grit	SKU	Pkg. of 12
100	405-1898	
150	405-2198	
180	405-5098	
220	405-2298	
280	405-6098	
320	405-2398	
400	405-2498	
600	405-2698	
900	405-2998	

1" x 1/4" x 6"

Grit	SKU	Pkg. of 6
100	405-1812	
150	405-2112	
180	405-5812	
220	405-2212	
280	405-6812	
320	405-2312	
400	405-2412	
600	405-2612	
900	405-2912	

Round 3/8" x 6"

Grit	SKU	Pkg. of 6
100	405-3808	
150	405-3108	
180	405-3508	
220	405-3208	
280	405-608	
320	405-3308	
400	405-3408	
600	405-3608	
900	405-3908	

Hybrid 1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	405-1823	
150	405-2123	
180	405-5023	
220	405-2223	
280	405-6023	
320	405-2323	
400	405-2423	
600	405-2623	
800	405-2823	
900	405-2923	
1200	405-4023	

1" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	405-1807	
150	405-2107	
180	405-5807	
220	405-2207	
280	405-6807	
320	405-2307	
400	405-2407	
600	405-2607	
900	405-2907	

Round 1/2" x 6"

Grit	SKU	Pkg. of 6
100	405-3805	
150	405-3105	
180	405-3505	
220	405-3205	
280	405-0605	
320	405-3305	
400	405-3405	
600	405-3605	
900	405-3905	



Gesswein® EDM Stones

- This stone removes the tough, hard scale left by the Electric Discharge Machining (EDM) process much faster than any of our other polishing stones
- Contains premium-grade white aluminum oxide abrasive that fractures into sharp pieces (friable) during finishing, to extend the life of the abrasive grit
- Recommended use on Medium and Hard tool steels as high as Rockwell C 62



EDM Attributes

Hardness: Hard
 Breakdown: Slow
 Wet or Dry: Wet
 Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"

Grit	SKU	Pkg. of 12
100	415-0600	
120	415-0610	
150	415-0650	
180	415-0620	
220	415-0622	
320	415-0630	
400	415-0640	
600	415-0660	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	425-6002	
120	425-6122	
150	425-6502	
180	425-6182	
220	425-6202	
320	425-6302	
400	425-6402	
600	425-6602	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	425-6003	
120	425-6123	
150	425-6503	
180	425-6183	
220	425-6203	
320	425-6303	
400	425-6403	
600	425-6603	

1/4" x 1/16" x 4"

Grit	SKU	Pkg. of 12
100	425-6010	
120	425-6020	
150	425-6510	
180	425-6110	
220	425-6210	
320	425-6310	
400	425-6410	
600	425-6610	

3/8" x 3/8" x 6"

Grit	SKU	Pkg. of 12
100	425-6008	
120	425-6128	
150	425-6508	
180	425-6188	
220	425-6208	
320	425-6308	
400	425-6408	
600	425-6608	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	425-6004	
120	425-6124	
150	425-6504	
180	425-6184	
220	425-6204	
320	425-6304	
400	425-6404	
600	425-6604	

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	425-6001	
120	425-6121	
150	425-6501	
180	425-6181	
220	425-6201	
320	425-6301	
400	425-6401	
600	425-6601	

1/2" x 1/16" x 6"

Grit	SKU	Pkg. of 12
100	425-6000	
120	425-6120	
150	425-6500	
180	425-6180	
220	425-6200	
320	425-6300	
400	425-6400	
600	425-6600	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	425-6005	
120	425-6125	
150	425-6505	
180	425-6185	
220	425-6205	
320	425-6305	
400	425-6405	
600	425-6605	

3/4" x 1/4" x 6"

Grit	SKU	Pkg. of 6
100	425-6009	
120	425-6129	
150	425-6509	
180	425-6189	
220	425-6209	
320	425-6309	
400	425-6409	
600	425-6609	

1" x 1/4" x 6"

Grit	SKU	Pkg. of 6
100	425-0112	
120	425-6012	
150	425-5012	
180	425-6112	
220	425-6212	
320	425-6312	
400	425-6412	
600	425-6612	

1" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	425-6007	
120	425-6127	
150	425-6507	
180	425-6187	
220	425-6207	
320	425-6307	
400	425-6407	
600	425-6607	

1" x 1" x 6"

Grit	SKU	Pkg. of 6
100	425-6006	
120	425-6126	
150	425-6506	
180	425-6186	
220	425-6206	
320	425-6306	
400	425-6406	
600	425-6606	



Round 1/4" x 6"

Grit	SKU	Pkg. of 6
100	425-3602	
120	425-0122	
150	425-3502	
180	425-0182	
220	425-0222	
320	425-0302	
400	425-0402	
600	425-0602	

Triangular 3/8" x 6"

Grit	SKU	Pkg. of 6
100	425-6098	
120	425-6198	
150	425-5098	
180	425-6298	
220	425-5298	
320	425-6398	
400	425-6498	
600	425-6698	

Triangular 1/4" x 6"

Grit	SKU	Pkg. of 6
100	425-6092	
120	425-6192	
150	425-5092	
180	425-6292	
220	425-5292	
320	425-6392	
400	425-6492	
600	425-6692	

Hybrid 1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	425-6023	
120	425-0123	
150	425-6523	
180	425-0183	
220	425-0223	
320	425-0323	
400	425-0423	
600	425-0623	

Gesswein® EDM Blue Stones

- Harder than our regular EDM Stones and designed to remove the tough, hard scale left by the EDM process.
- Breaks down slowly and cuts fast.
- Maintains shape, saving you time.
- Contains extra-sharp premium-grade aluminum oxide for fast cutting action plus a small amount of cobalt blue for added hardness.
- Resists breakage and specifically designed for use in reciprocating profilers.



EDM Blue Attributes

Hardness: Very Hard
Breakdown Ratio: Slow
Wet or Dry: Wet
Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
6-11: 10% Off
12+: 20% Off

5/32" x 5/32" x 4"			
Grit	SKU	Pkg. of 12	
120	415-6010		
180	415-6020		
220	415-6022		
320	415-6030		
400	415-6040		
600	415-6060		

1/2" x 1/8" x 6"			
Grit	SKU	Pkg. of 12	
120	424-6123		
180	424-6183		
220	424-6203		
320	424-6303		
400	424-6403		
600	424-6603		

1" x 1/2" x 6"			
Grit	SKU	Pkg. of 6	
120	424-6127		
180	424-6187		
220	424-6207		
320	424-6307		

1/4" x 1/8" x 6"			
Grit	SKU	Pkg. of 12	
120	424-6121		
180	424-6181		
220	424-6201		
320	424-6301		
400	424-6401		
600	424-6601		

1/2" x 1/4" x 6"			
Grit	SKU	Pkg. of 12	
120	424-6124		
180	424-6184		
220	424-6204		
320	424-6304		
400	424-6404		
600	424-6604		

Round, 1/4" x 6"			
Grit	SKU	Pkg. of 6	
120	424-0122		
180	424-0182		
220	424-0222		
320	424-0302		
400	424-0402		
600	424-0602		

1/4" x 1/4" x 6"			
Grit	SKU	Pkg. of 12	
120	424-6122		
180	424-6182		
220	424-6202		
320	424-6302		
400	424-6402		
600	424-6602		

1/2" x 1/2" x 6"			
Grit	SKU	Pkg. of 6	
120	424-6125		
180	424-6185		
220	424-6205		
320	424-6305		
400	424-6405		
600	424-6605		

1/2" x 1/16" x 6"			
Grit	SKU	Pkg. of 12	
120	424-6120		
180	424-6180		
220	424-6200		
320	424-6300		
400	424-6400		
600	424-6600		



Gesswein

Gesswein® Oil-Treated Stones

- Saturated in an oil solution to minimize loading
- Contains sharp white aluminum oxide abrasive that fractures into sharp pieces during polishing, to extend the life of the abrasive grit
- Popular general-purpose polishing stone often used for light EDM scale removal and machined surfaces
- Recommended use on all tool steels of all hardness such as A2, D2, M2, S7, and H13



Oil-Treated Attributes

Hardness: Medium Hard
Breakdown Ratio: Moderate
Wet or Dry: Wet & Limited Dry
Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
6-11: 10% Off
12+: 20% Off

Pencil stones (9/32" x 5/32" x 4") also available.

1/4" x 1/8" x 6"			
Grit	SKU	Pkg. of 12	
120	435-5101		
150	435-5501		
180	435-5001		
220	435-5201		
320	435-5301		
400	435-5401		
600	435-5601		
800	435-5801		
1200	435-5901		

1/4" x 1/4" x 6"			
Grit	SKU	Pkg. of 12	
120	435-5102		
150	435-5502		
180	435-5002		
220	435-5202		
320	435-5302		
400	435-5402		
600	435-5602		
800	435-5802		
1200	435-5902		

1/2" x 1/16" x 6"			
Grit	SKU	Pkg. of 12	
120	435-5103		
150	435-5503		
180	435-5003		
220	435-5203		
320	435-5303		
400	435-5403		
600	435-5603		
800	435-5803		
1200	435-5903		

1/2" x 1/4" x 6"			
Grit	SKU	Pkg. of 12	
120	435-5104		
150	435-5504		
180	435-5004		
220	435-5204		
320	435-5304		
400	435-5404		
600	435-5604		
800	435-5804		
1200	435-5904		

1/2" x 1/2" x 6"			
Grit	SKU	Pkg. of 6	
120	435-5105		
150	435-5505		
180	435-5005		
220	435-5205		
320	435-5305		
400	435-5405		
600	435-5605		
800	435-5805		
1200	435-5905		

1" x 1/2" x 6"			
Grit	SKU	Pkg. of 6	
120	435-5107		
150	435-5507		
180	435-5007		
220	435-5207		
320	435-5307		
400	435-5407		
600	435-5607		
800	435-5807		
1200	435-5907		

1" x 1" x 6"			
Grit	SKU	Pkg. of 6	
120	435-5106		
150	435-5506		
180	435-5006		
220	435-5206		
320	435-5306		
400	435-5406		
600	435-5606		
800	435-5806		
1200	435-5906		

Hybrid 1/4" x 1/4" x 6"			
Grit	SKU	Pkg. of 12	
120	435-5123		
150	435-5523		
180	435-5023		
220	435-5223		
320	435-5323		
400	435-5423		
600	435-5623		
800	435-5823		
1200	435-5923		

Round 1/4" x 6"			
Grit	SKU	Pkg. of 6	
120	435-0122		
150	435-3502		
180	435-0182		
220	435-0222		
320	435-0302		
400	435-0402		
600	435-0602		
800	435-0802		
1200	435-0902		

Gesswein® Moldmaker Stones

- Moldmaker stones consists of a harder black silicon carbide abrasive that breaks down faster than aluminum oxide
- Cuts faster due to the sharpness, hardness, and friability of the abrasive grain
- This stone is used for ductile metals; ideal for softer tool steels and soft non-ferrous metals
- Recommended use on Hard and Soft tool steels as low as Rockwell C 25, and soft non-ferrous metals such as Aluminum and Beryllium

Moldmaker Attributes

Hardness: Medium Soft
 Breakdown Ratio: Fast
 Wet or Dry: Wet
 Abrasive Grain: Black Silicon Carbide

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

 Quantity discount breaks per SKU, not assorted.

Gesswein



Gesswein® Moldmaker PLUS Stones

- A premium complement to the Moldmaker Series; this green silicon carbide abrasive is the hardest of our abrasive grits
- Produces a silky matte finish on all pre-hardened tool steels
- Recommended use on all mold and tool steels of all hardness such as A2, D2, S7, H13, P20, 420SS, and soft non-ferrous metals such as Aluminum and Beryllium

Moldmaker PLUS Attributes

Hardness: Medium Hard
 Breakdown Ratio: Moderate-Fast
 Wet or Dry: Wet
 Abrasive Grain: Green Silicon Carbide

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

 Quantity discount breaks per SKU, not assorted.

Gesswein



Pencil stones (9/32" x 5/32" x 4") also available.

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	412-1101	
120	412-5201	
150	412-1151	
220	412-1201	
320	412-1301	
400	412-1401	
600	412-1601	
800	412-1801	
1200	412-2001	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	412-1102	
120	412-5202	
150	412-1152	
220	412-1202	
320	412-1302	
400	412-1402	
600	412-1602	
800	412-1802	
1200	412-2002	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	412-1103	
120	412-5203	
150	412-1153	
220	412-1203	
320	412-1303	
400	412-1403	
600	412-1603	
800	412-1803	
1200	412-2003	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	412-1104	
120	412-5204	
150	412-1154	
220	412-1204	
320	412-1304	
400	412-1404	
600	412-1604	
800	412-1804	
1200	412-2004	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	412-1105	
120	412-5205	
150	412-1155	
220	412-1205	
320	412-1305	
400	412-1405	
600	412-1605	
800	412-1805	
1200	412-2005	

1" x 1/8" x 6"

Grit	SKU	Pkg. of 6
100	412-1011	
120	412-5211	
150	412-1111	
220	412-1211	
320	412-1311	
400	412-1411	
600	412-1611	
800	412-1811	
1200	412-2011	

1" x 1/4" x 6"

Grit	SKU	Pkg. of 6
100	412-1012	
120	412-5212	
150	412-1112	
220	412-1212	
320	412-1312	
400	412-1412	
600	412-1612	
800	412-1812	
1200	412-2012	

1" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	412-1007	
120	412-5207	
150	412-1107	
220	412-1207	
320	412-1307	
400	412-1407	
600	412-1607	
800	412-1807	
1200	412-2007	

1" x 1" x 6"

Grit	SKU	Pkg. of 6
100	412-1106	
120	412-5206	
150	412-1156	
220	412-1206	
320	412-1306	
400	412-1406	
600	412-1606	
800	412-1806	
1200	412-2006	

9/32" x 5/32" x 4"

Grit	SKU	Pkg. of 12
100	415-1000	
150	415-1001	
180	415-0181	
220	415-1002	
320	415-1003	
400	415-1004	
600	415-1006	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	410-1103	
150	410-1153	
180	410-1803	
220	410-1203	
320	410-1303	
400	410-1403	
600	410-1603	

1" x 1" x 6"

Grit	SKU	Pkg. of 6
100	410-1106	
150	410-1156	
180	410-1806	
220	410-1206	
320	410-1306	
400	410-1406	
600	410-1606	

1/4" x 1/16" x 4"

Grit	SKU	Pkg. of 12
100	410-0100	
150	410-0150	
180	410-1810	
220	410-0200	
320	410-0300	
400	410-0400	
600	410-0600	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	410-1104	
150	410-1154	
180	410-1804	
220	410-1204	
320	410-1304	
400	410-1404	
600	410-1604	

Round 1/4" x 6"

Grit	SKU	Pkg. of 6
100	410-0102	
150	410-0152	
180	410-3802	
220	410-0222	
320	410-0322	
400	410-0422	
600	410-0622	

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	410-1101	
150	410-1151	
180	410-1801	
220	410-1201	
320	410-1301	
400	410-1401	
600	410-1601	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	410-1105	
150	410-1155	
180	410-1805	
220	410-1205	
320	410-1305	
400	410-1405	
600	410-1605	

Hybrid 1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	410-0023	
150	410-0123	
180	410-1823	
220	410-0223	
320	410-0323	
400	410-0423	
600	410-0623	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	410-1102	
150	410-1152	
180	410-1802	
220	410-1202	
320	410-1302	
400	410-1402	
600	410-1602	

Gesswein® Premium White Stones

- A special treatment provides load resistance and a lubricating effect
- Produces a glossier finish and holds its shape well
- Recommended use on all tool steels of all hardness such as A2, D2, M2, S7, and H13



Premium White Attributes

Hardness: Medium Hard
 Breakdown Ratio: Slow
 Wet or Dry: Wet
 Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"

Grit	SKU	Pkg. of 12
100	415-5000	
150	415-5001	
220	415-5002	
320	415-5003	
400	415-5004	
600	415-5006	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	407-5102	
150	407-5152	
220	407-5202	
320	407-5302	
400	407-5402	
600	407-5602	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
100	407-5104	
150	407-5154	
220	407-5204	
320	407-5304	
400	407-5404	
600	407-5604	

1/4" x 1/8" x 4"

Grit	SKU	Pkg. of 12
100	407-5110	
150	407-5151	
220	407-5210	
320	407-5310	
400	407-5410	
600	407-5610	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	407-5103	
150	407-5153	
220	407-5203	
320	407-5303	
400	407-5403	
600	407-5603	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
100	407-5105	
150	407-5155	
220	407-5205	
320	407-5305	
400	407-5405	
600	407-5605	

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
100	407-5101	
150	407-5151	
220	407-5201	
320	407-5301	
400	407-5401	
600	407-5601	



Enhance Your Mold Polishing Skills

Whether you're a full-time polisher, maintenance tech, engineer, or president, our classes will advance your skills and knowledge of mold polishing.

Scan to Learn More



Gesswein® General Purpose Stones

- A great all-around stone. When used with oil, this stone will cut fast and hold its shape well
- This softer stone acts harder due to its proprietary treatment
- Suitable for use on both EDM and machined surfaces
- Recommended use on all tool steels of all hardness such as A2, D2, M2, S7, and H13



General Purpose Attributes

Hardness: Medium
 Breakdown Ratio: Moderate
 Wet or Dry: Wet
 Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"

Grit	SKU	Pkg. of 12
150	415-0315	
180	415-0318	
220	415-0320	
320	415-0330	
400	415-0340	
600	415-0360	
800	415-0380	
1200	415-0390	

1/2" x 1/4" x 6"

Grit	SKU	Pkg. of 12
150	406-6154	
180	406-6184	
220	406-6204	
320	406-6304	
400	406-6404	
600	406-6604	
800	406-6804	
1200	406-6904	

1" x 1/2" x 6"

Grit	SKU	Pkg. of 6
150	406-6157	
180	406-6187	
220	406-6207	
320	406-6307	
400	406-6407	
600	406-6607	
800	406-6807	
1200	406-6907	

1/4" x 1/8" x 6"

Grit	SKU	Pkg. of 12
150	406-6155	
180	406-6181	
220	406-6201	
320	406-6301	
400	406-6401	
600	406-6601	
800	406-6801	
1200	406-6901	

1/2" x 1/2" x 6"

Grit	SKU	Pkg. of 6
150	406-6155	
180	406-6185	
220	406-6205	
320	406-6305	
400	406-6405	
600	406-6605	
800	406-6805	
1200	406-6905	

1" x 1" x 6"

Grit	SKU	Pkg. of 6
150	406-6156	
180	406-6186	
220	406-6206	
320	406-6306	
400	406-6406	
600	406-6606	

1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
150	406-6152	
180	406-6182	
220	406-6202	
320	406-6302	
400	406-6402	
600	406-6602	
800	406-6802	
1200	406-6902	

1" x 1/8" x 6"

Grit	SKU	Pkg. of 6
150	406-6011	
180	406-6111	
220	406-6211	
320	406-6311	
400	406-6411	
600	406-6611	
800	406-6811	
1200	406-6911	

Round 1/4" x 6"

Grit	SKU	Pkg. of 6
150	406-0152	
180	406-0182	
220	406-0222	
320	406-0322	
400	406-0402	
600	406-0602	
800	406-0802	
1200	406-0902	

1/2" x 1/8" x 6"

Grit	SKU	Pkg. of 12
150	406-6153	
180	406-6183	
220	406-6203	
320	406-6303	
400	406-6403	
600	406-6603	
800	406-6803	
1200	406-6903	

1" x 1/4" x 6"

Grit	SKU	Pkg. of 6
150	406-6012	
180	406-6112	
220	406-6212	
320	406-6312	
400	406-6412	
600	406-6612	
800	406-6812	
1200	406-6912	

Hybrid 1/4" x 1/4" x 6"

Grit	SKU	Pkg. of 12
150	406-1523	
180	406-1823	
220	406-1223	
320	406-1323	
400	406-1423	
600	406-1623	

Gesswein® Ultra-Soft Stones

- Rapid breakdown prevents loading of metal particles and also exposes fresh abrasive grains while cutting
- Formulated for soft metals, mold steel, soft non-ferrous metals
- Ultra-Soft polishing stones are the most suitable stones for working with aluminum
- Recommended use on mold and tool steels including P20, 420SS, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite
- Can be easily shaped for finishing contours



Ultra-Soft Attributes

Hardness: Very Soft
 Breakdown Ratio: Very Fast
 Wet or Dry: Wet & Dry
 Abrasive Grain: White Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

1/4" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
120	450-7102	
220	450-7202	
320	450-7302	
400	450-7402	
600	450-7602	
1200	450-7002	

1/2" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
120	450-7104	
220	450-7204	
320	450-7304	
400	450-7404	
600	450-7604	
1200	450-7004	

1" x 1" x 6"		
Grit	SKU	Pkg. of 6
120	450-7106	
220	450-7206	
320	450-7306	
400	450-7406	
600	450-7606	
1200	450-7006	

1/2" x 3/8" x 6"		
Grit	SKU	Pkg. of 12
120	450-7103	
220	450-7203	
320	450-7303	
400	450-7403	
600	450-7603	
1200	450-7003	

1" x 1/2" x 6"		
Grit	SKU	Pkg. of 6
120	450-7107	
220	450-7207	
320	450-7307	
400	450-7407	
600	450-7607	
1200	450-7007	

Gesswein® Super Fine Stones

- Produces a final finish or prepares surfaces for polishing with diamond compound
- Contains calcined alumina
- One of our softest and finest polishing stones for steel surfaces
- Breaks down fast, does not scratch and is non-loading
- Recommended use on All tool steels of all hardness such as A2, D2, M2, S7, and H13



Super Fine Attributes

Hardness: Medium
 Breakdown Ratio: Moderate-Fast
 Wet or Dry: Wet & Dry
 Abrasive Grain: Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"		
Grit	SKU	Pkg. of 12
1200	415-0120	

1/4" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
1200	440-9002	

1/2" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
1200	440-9004	

1/4" x 3/8" x 6"		
Grit	SKU	Pkg. of 12
1200	440-9001	

1/2" x 3/8" x 6"		
Grit	SKU	Pkg. of 12
1200	440-9003	

1/2" x 1/2" x 6"		
Grit	SKU	Pkg. of 6
1200	440-9005	

Gesswein® RA Stones

- Contains Aluminum oxide abrasive bonded with a unique organic resin bond for great resiliency
- Ideal for finishing slots, deep ribs and other hard-to-reach mold areas
- Retains their shape well and are resistant to breakage even during heavy use
- Leaves a finer finish, with less stock removal than other polishing stones of the same grit
- Recommended use on all tool steels of all hardness such as A2, D2, M2, S7, and H13



RA Attributes

Hardness: Very Hard
 Breakdown Ratio: Slow
 Wet or Dry: Wet
 Abrasive Grain: Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

5/32" x 5/32" x 4"		
Grit	SKU	Pkg. of 12
90	415-0406	
120	415-0408	
180	415-0410	
220	415-0420	
320	415-0430	
400	415-0440	
600	415-0460	

1/2" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
90	420-4090	
120	420-4120	
180	420-4180	
220	420-4200	
320	420-4300	
400	420-4400	
600	420-4600	

1/2" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
90	420-4094	
120	420-4124	
180	420-4184	
220	420-4204	
320	420-4304	
400	420-4404	
600	420-4604	

1/4" x 3/8" x 6"		
Grit	SKU	Pkg. of 12
90	420-4091	
120	420-4121	
180	420-4181	
220	420-4201	
320	420-4301	
400	420-4401	
600	420-4601	

1/2" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
90	420-4093	
120	420-4123	
180	420-4183	
220	420-4203	
320	420-4303	
400	420-4403	
600	420-4603	

Round 5/32" x 4"		
Grit	SKU	Pkg. of 12
90	420-0009	
120	420-0012	
180	420-0018	
220	420-0022	
320	420-0033	
400	420-0040	
600	420-0060	

1/4" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
90	420-4092	
120	420-4122	
180	420-4182	
220	420-4202	
320	420-4302	
400	420-4402	
600	420-4602	

A 7-Piece RA Polishing Stone All-Grit Set Sampler Set

Set consists of one stone of all seven grits in the popular 1/2" x 3/8" x 6" size.

Grit	SKU	Set
90, 120, 180, 220, 320, 400, 600	405-2001	



Gesswein® G2 Stones

- Made with a special treatment that reduces breakdown and produces a smooth, silky finish
- Maintains consistent cutting actions on hard and soft metals
- Recommended use on steels such as P20, H13, 420SS, A2, D2 and S7.
- Use by hand or with reciprocating profilers



G2 Attributes

Hardness: Medium
Breakdown Ratio: Slow
Wet or Dry: Wet
Abrasive Grain: Brown Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
6-11: 10% Off
12+: 20% Off

5/32" x 5/32" x 4"		
Grit	SKU	Pkg. of 12
150	415-0701	
220	415-0702	
320	415-0703	
400	415-0704	
600	415-0706	
800	415-0708	
1200	415-0712	

3/8" x 3/8" x 6"		
Grit	SKU	Pkg. of 12
150	422-0108	
220	422-0208	
320	422-0308	
400	422-0408	
600	422-0608	
800	422-0808	
1200	422-1208	

1" x 1/4" x 6"		
Grit	SKU	Pkg. of 6
150	422-0112	
220	422-0212	
320	422-0312	
400	422-0412	
600	422-0612	
800	422-0812	
1200	422-1212	

1/4" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
150	422-0101	
220	422-0201	
320	422-0301	
400	422-0401	
600	422-0601	
800	422-0801	
1200	422-1201	

1/2" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
150	422-0103	
220	422-0203	
320	422-0303	
400	422-0403	
600	422-0603	
800	422-0803	
1200	422-1203	

1" x 1/2" x 6"		
Grit	SKU	Pkg. of 6
150	422-0107	
220	422-0207	
320	422-0307	
400	422-0407	
600	422-0607	
800	422-0807	
1200	422-1207	

1/4" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
150	422-0102	
220	422-0202	
320	422-0302	
400	422-0402	
600	422-0602	
800	422-0802	
1200	422-1202	

1/2" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
150	422-0104	
220	422-0204	
320	422-0304	
400	422-0404	
600	422-0604	
800	422-0804	
1200	422-1204	

1" x 1" x 6"		
Grit	SKU	Pkg. of 6
150	422-0106	
220	422-0206	
320	422-0306	
400	422-0406	
600	422-0606	
800	422-0806	
1200	422-1206	



A 7-piece G2 All Grit Set Sampler Set

Set consists of one stone of all seven grits in the popular 1/2" x 1/8" x 6" size.

Grit	SKU	Set
150, 220, 320, 400, 600, 800, 1200	405-1990	

Gesswein® Ruby Rough Out Stones

- Made of a coarse "High Chromium" Ruby Aluminum Oxide
- This extra friable grain with its sharp edges is perfect for rapid cutting and metal removal
- A good choice for roughing surfaces of larger molds and dies
- Recommended use on all tool steels of all hardness such as A2, D2, M2, S7, H13, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite



Ruby Rough Out Attributes

Hardness: Medium
Breakdown Ratio: Moderate
Wet or Dry: Wet & Dry
Abrasive Grain: Ruby Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
6-11: 10% Off
12+: 20% Off

1/4" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
60	433-8061	
80	433-8081	
100	433-8101	
150	433-8151	
220	433-8221	

1/2" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
60	433-8064	
80	433-8084	
100	433-8104	
150	433-8154	
220	433-8224	

1" x 1/4" x 6"		
Grit	SKU	Pkg. of 6
60	433-8069	
80	433-8089	
100	433-8109	
150	433-8159	
220	433-8229	

1/4" x 1/4" x 6"		
Grit	SKU	Pkg. of 12
60	433-8062	
80	433-8082	
100	433-8102	
150	433-8152	
220	433-8222	

1/2" x 1/2" x 6"		
Grit	SKU	Pkg. of 6
60	433-8065	
80	433-8085	
100	433-8105	
150	433-8155	
220	433-8225	

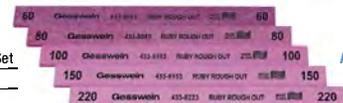
1" x 1/2" x 6"		
Grit	SKU	Pkg. of 6
60	433-8067	
80	433-8087	
100	433-8107	
150	433-8157	
220	433-8227	

1/2" x 1/8" x 6"		
Grit	SKU	Pkg. of 12
60	433-8063	
80	433-8083	
100	433-8103	
150	433-8153	
220	433-8223	

A 5-Piece Ruby Rough Out All Grit Set Sampler Set

Set consists of one stone of all five grits in the popular 1/2" x 1/8" x 6" size.

Grit	SKU	Set
60, 80, 100, 150, 220	405-2004	



Gesswein® Rough Out Stones

- For deeper machining marks; ideal for removing larger surface area of material prior to finishing
- Contains larger coarse aluminum oxide grit
- Recommended use on Hard and Soft tool steels as low as Rockwell C 25, and soft non-ferrous metals such as Aluminum, Beryllium and Kirksite



Rough Out Attributes

Hardness: Very Soft
 Breakdown Ratio: Fast
 Wet or Dry: Wet & Dry
 Abrasive Grain: Aluminum Oxide

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

1/4" x 1/4" x 8"		
Grit	SKU	Pkg. of 12
80	430-8083	
100	430-8103	
150	430-8153	
220	430-8203	

1/2" x 1/2" x 8"		
Grit	SKU	Pkg. of 12
80	430-8085	
100	430-8105	
150	430-8155	
220	430-8205	

1" x 1/2" x 8"		
Grit	SKU	Pkg. of 6
80	430-8081	
100	430-8101	
150	430-8151	
220	430-8201	

1/2" x 1/4" x 8"		
Grit	SKU	Pkg. of 12
80	430-8084	
100	430-8104	
150	430-8154	
220	430-8204	

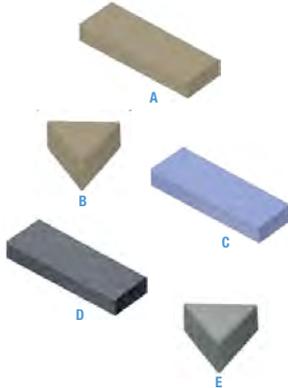
1" x 1/4" x 8"		
Grit	SKU	Pkg. of 12
80	430-8080	
100	430-8100	
150	430-8150	
220	430-8200	

1-1/2" x 3/4" x 8"		
Grit	SKU	Pkg. of 6
80	430-8082	
100	430-8102	
150	430-8152	
220	430-8202	

Polishing Stone Laps

Polish small surfaces with these small laps. Use our diamond mounted point with 1/8" shank (2261263) to form a small depression on the top center surface. Use our lapping rod with angle (4031060) to drive the Polishing Stone Lap with a profiler. Use with stoning oil.

Description	Grit	Height	Size	Item	Pkg. of 10
A Diemaker Rectangle	400	1/8"	1/4" x 3/4"	404-1430	
Diemaker Rectangle	600	1/8"	1/4" x 1/2"	404-1620	
Diemaker Rectangle	900	1/8"	1/4" x 3/4"	404-1930	
B Diemaker Triangle	400	3/16"	1/2"	404-0421	
Diemaker Triangle	600	3/16"	1/2"	404-0621	
Diemaker Triangle	900	3/16"	1/2"	404-0921	
C EDM Blue Rectangle	320	1/8"	1/4" x 3/4"	404-5330	
D Moldmaker PLUS Rectangle	400	1/8"	1/4" x 3/4"	404-1440	
Moldmaker PLUS Rectangle	600	1/8"	1/4" x 3/4"	404-1640	
Moldmaker PLUS Rectangle	800	1/8"	1/4" x 3/4"	404-1940	
E Moldmaker PLUS Triangle	400	3/16"	1/2"	404-0430	
Moldmaker PLUS Triangle	600	3/16"	1/2"	404-0630	
Moldmaker PLUS Triangle	800	3/16"	1/2"	404-0830	



Gesswein® Pencil Stones

5/32" x 5/32" x 4"

- A selection of our most popular polishing stones in a 4" long x 5/32" square, making them convenient for stoning small or intricate areas. Shorter length helps prevent wasteful breakage. For handheld work, use with any of our double-ender stone holders.

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
 6-11: 10% Off
 12+: 20% Off

Diemaker			
A	Grit	SKU	Pkg. of 12
	100	415-0001	
	150	415-0010	
	180	415-0180	
	220	415-0020	
	280	415-0280	
	320	415-0030	
	400	415-0040	
	600	415-0060	
	800	415-0080	
	900	415-0090	
	1200	415-4080	

EDM			
B	Grit	SKU	Pkg. of 12
	100	415-0600	
	120	415-0610	
	150	415-0650	
	180	415-0620	
	220	415-0622	
	320	415-0630	
	400	415-0640	
	600	415-0660	

EDM Blue			
C	Grit	SKU	Pkg. of 12
	120	415-6010	
	180	415-6020	
	220	415-6022	
	320	415-6030	
	400	415-6040	
	600	415-6060	

Oil-Treated			
D	Grit	SKU	Pkg. of 12
	150	415-0515	
	180	415-0518	
	120	415-0510	
	220	415-0520	
	320	415-0530	
	400	415-0540	
	600	415-0560	
	800	415-0580	
	1200	415-0590	

Moldmaker			
E	Grit	SKU	Pkg. of 12
	100	415-1000	
	150	415-1001	
	180	415-0181	
	220	415-1002	
	320	415-1003	
	400	415-1004	
	600	415-1006	

Moldmaker PLUS			
F	Grit	SKU	Pkg. of 12
	100	415-1010	
	120	415-1012	
	150	415-1015	
	220	415-1020	
	320	415-1030	
	400	415-1040	
	600	415-1060	
	800	415-1080	
	1200	415-1200	

Premium White			
G	Grit	SKU	Pkg. of 12
	100	415-5000	
	150	415-5001	
	220	415-5002	
	320	415-5003	
	400	415-5004	
	600	415-5006	

General Purpose			
H	Grit	SKU	Pkg. of 12
	150	415-0315	
	180	415-0318	
	220	415-0320	
	320	415-0330	
	400	415-0340	
	600	415-0360	
	800	415-0380	
	1200	415-0390	

Super Fine			
I	Grit	SKU	Pkg. of 12
	1200	415-0120	

RA			
J	Grit	SKU	Pkg. of 12
	90	415-0406	
	120	415-0408	
	180	415-0410	
	220	415-0420	
	320	415-0430	
	400	415-0440	
	600	415-0460	

G2			
K	Grit	SKU	Pkg. of 12
	150	415-0701	
	220	415-0702	
	320	415-0703	
	400	415-0704	
	600	415-0706	
	800	415-0708	
	1200	415-0712	

Medium India			
L	Grit	SKU	Pkg. of 12
	240	415-0100	

M Gesswein® Pencil Stone Set VII

Includes one each of every pencil stone we make, in every grit, for a total of 73 stones, including RA, EDM, EDM Blue, General Purpose, Premium White, Oil-Treated, Diemaker, Moldmaker PLUS, Moldmaker, Super Fine and Medium India. Complete with a Stone Holder and a free sample of Gesswein Stoning Oil.

Description	SKU	Each
M Pencil Stone Set VII	415-1033	



Gesswein® Hybrid Stones

1/4" x 1/4" x 6"

- Our Hybrid shape (half-round and half-square) combines all the advantages of round and flat stones without the higher costs normally associated with round stones. Use the round side on curved surfaces, the flat side on even surfaces and in 90° corners and slots.
- Measures 1/4" x 1/4" x 6" long and are available in our most popular stones: Diemaker, EDM, General Purpose, Moldmaker and Oil-Treated.



Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
6-11: 10% Off
12+: 20% Off

Hybrid Shape Stones (half-round/half-square)

A Diemaker

Grit	SKU	Pkg. of 12
100	405-1823	
150	405-2123	
180	405-5023	
220	405-2223	
280	405-6023	
320	405-2323	
400	405-2423	
600	405-2623	
800	405-2823	
900	405-2923	
1200	405-4023	

C Oil-Treated

Grit	SKU	Pkg. of 12
120	435-5123	
150	435-5523	
180	435-5023	
220	435-5223	
320	435-5323	
400	435-5423	
600	435-5623	
800	435-5823	
1200	435-5923	

E General Purpose

Grit	SKU	Pkg. of 12
150	406-1523	
180	406-1823	
220	406-1223	
320	406-1323	
400	406-1423	
600	406-1623	

B EDM

Grit	SKU	Pkg. of 12
100	425-6023	
120	425-0123	
150	425-6523	
180	425-0183	
220	425-0223	
320	425-0323	
400	425-0423	
600	425-0623	

D Moldmaker

Grit	SKU	Pkg. of 12
100	410-0023	
150	410-0123	
180	410-1823	
220	410-0223	
320	410-0323	
400	410-0423	
600	410-0623	

F 20-Piece Hybrid Stone Set **Sampler Set**

Our Hybrid shape (half-round and half-square) combines all the advantages of round and flat stones without the higher costs normally associated with round stones. Set contains 20 Hybrid stones.

- Diemaker
- EDM
- General Purpose
- Moldmaker
- Oil-Treated

Grit	SKU	Set
220, 320, 400, 600	405-2086	



Gesswein® Polishing Stone All-Grit Sets

Try our most popular Gesswein stone types. Sets cover all the grits available in the most popular 1/2" x 1/8" x 6" size. Choose from Diemaker, EDM, EDM Blue, General Purpose, Moldmaker, Moldmaker PLUS, Oil-Treated, Premium White Stone, Ultra-Soft and RA Sets. Or, select our 78-Piece Polishing Stone Set below.

1/2" x 1/8" x 6"

Diemaker – 11 pcs.

Grit	SKU	Set
A 100, 150, 180, 220, 280, 320, 400, 600, 800, 900, 1200	405-2063	

EDM – 8 pcs.

Grit	SKU	Set
B 100, 120, 150, 180, 220, 320, 400, 600	405-2032	

EDM Blue – 6 pcs.

Grit	SKU	Set
C 120, 180, 220, 320, 400, 600	405-2041	

Oil-Treated – 9 pcs.

Grit	SKU	Set
D 120, 150, 180, 220, 320, 400, 600, 800, 1200	405-2092	

Moldmaker – 7 pcs.

Grit	SKU	Set
E 100, 150, 180, 220, 320, 400, 600	405-2067	

Moldmaker PLUS – 9 pcs.

Grit	SKU	Set
F 100, 120, 150, 220, 320, 400, 600, 800, 1200	405-2022	

RA – 7 pcs.

Grit	SKU	Set
G 90, 120, 180, 220, 320, 400, 600	405-2001	

General Purpose – 8 pcs.

Grit	SKU	Set
H 150, 180, 220, 320, 400, 600, 800, 1200	405-2097	

Premium White – 6 pcs.

Grit	SKU	Set
I 100, 150, 220, 320, 400, 600	405-2011	

Ultra-Soft – 6 pcs.

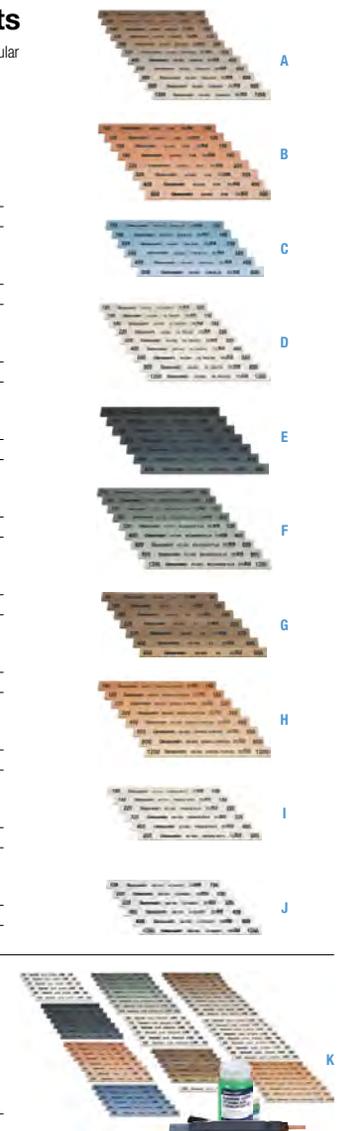
Grit	SKU	Set
J 120, 220, 320, 400, 600, 1200	405-2006	

K 78-Piece Polishing Stone Set **Savings Bundle**

Set includes:

- All 10 stones (shown above) plus 1 Super Fine stone, all measuring 1/2" wide x 1/8" thick x 6" long.
- 2 oz. bottle of Gesswein Supreme Green Stoning Oil.
- Double-ended LT Stone Holder.

Description	SKU	Set
78-Piece Polishing Stone Set	405-2057	



Gesswein® 12-Piece Polishing Stone Sampler Sets

We offer eight 12-piece stone sets of our most popular stones. Choose from Diemaker, EDM, EDM Blue, General Purpose, Moldmaker, Moldmaker PLUS, Oil-Treated and Premium White Stone Sets. Or, select our Discovery Stone Set below, which includes all eight sets.

3 sizes included in each set:  1/4" x 1/8" x 6"  1/2" x 1/8" x 6"  3/4" x 1/4" x 6"

A		Diemaker Stone Set		
		Grit	SKU	Set
		A 220, 320, 400, 600	405-2060	
B		EDM Stone Set		
		Grit	SKU	Set
		B 120, 180, 320, 400	405-2030	
C		EDM Blue Stone Set		
		Grit	SKU	Set
		C 120, 180, 320, 400	405-2040	
D		Oil-Treated Stone Set		
		Grit	SKU	Set
		D 220, 320, 400, 600	405-2090	
E		Moldmaker Stone Set		
		Grit	SKU	Set
		E 220, 320, 400, 600	405-2065	
F		Moldmaker PLUS Stone Set		
		Grit	SKU	Set
		F 220, 400, 800, 1200	405-2020	
G		General Purpose Stone Set		
		Grit	SKU	Set
		G 220, 320, 400, 600	405-2095	
H		Premium White Stone Set		
		Grit	SKU	Set
		H 220, 320, 400, 600	405-2010	



I 96-Piece Discovery Stone Set Savings Bundle

This is our most comprehensive set with a total of 96 of our popular stones. By purchasing all these sets at once, you save over the combined price of buying all the sets individually.

- Set Includes:
- All 8 of our 12-Piece Sets
 - Sample of Gesswein Stoning Oil

Description	SKU	Set
96-Piece Discovery Stone Set	405-2027	



J Rub-and-Rinse Stone Cleaner

Gesswein Rub-and-Rinse Stone Cleaner is a semiliquid material that sheds tiny metal particles from hard stones to keep them at their peak efficiency. Recommended for use on hard stones such as our Ruby, India and Hard Arkansas Stones. Contains 1/2 fl. oz.

Description	SKU	Each
Rub-and-Rinse Stone Cleaner	813-1700	

Stone not included

A 20-Piece Polishing Stone Sets Sampler Set

Four 20-piece stone sets offered in four of our most popular stone sizes. Each set includes five different types of stones in four grits. Select the size best suited for your need. All stones measure 6" long.

Stone Set Size	SKU	Set
1/4" x 1/8" x 6"	405-2035	
1/4" x 1/4" x 6"	405-2045	
1/2" x 1/8" x 6"	405-2055	
1/2" x 1/4" x 6"	405-2075	

Each different size set contains one each of the following grits and types of stones:

Stone	120 Grit	150 Grit	180 Grit	220 Grit	320 Grit	400 Grit
EDM			•	•	•	•
Oil-Treated	•			•	•	•
Diemaker		•		•	•	•
General Purpose		•		•	•	•
Moldmaker PLUS		•		•	•	•

B 20-Piece Soft & Fine Set Sampler Set

Includes 4 different types of stones in various sizes ideal for final finishing and for preparation prior to diamond polishing. Use Diemaker (800 and 900 grit) and Super Fine (1200 grit) for polishing steel surfaces, Moldmaker PLUS (800 grit) for radius-polishing stainless steel surfaces and Ultra-Soft (600 grit) for polishing aluminum and other soft metal surfaces. All stones measure 6" long except 9/32" x 5/32" Super Fine, which measures 4" long.

Description	SKU	Set
20-Piece Soft & Fine Set	405-2085	

Set contains one each of the following stones:

Stone	Grit	9/32" x 9/32"	1/4" x 1/8"	1/4" x 1/4"	1/2" x 1/8"	1/2" x 1/4"
Ultra-Soft	600	•	•	•	•	•
Diemaker	800		•	•	•	•
Diemaker	900		•	•	•	•
Moldmaker PLUS	800		•	•	•	•
Super Fine	1200	•	•	•	•	•

C-D Gesswein® Supreme Green Stoning & Lubricating Oil

- Use with polishing stones to prevent loading and keep the work surface clean. Stones cut better and more freely so they produce a bright, smooth surface.
- Eliminates the need for hazardous kerosene and other lubricating agents, which could be harmful to your health.

Description	SKU	Each
C 1 Pint (wide-mouth glass container)	800-0152	
D 1 Gallon	800-0151	

E Plastic Spray-Pump Bottle

Use to dispense stoning oil, cleaning solution and more. Spray gets into hard-to-reach areas. Capacity: 4 fl. oz.

Description	SKU	Each	
Plastic Spray-Pump Bottle	811-2460	1-2	3+



Stone Holders & Accessories



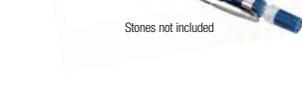
Stones not included



Stone not included



Stones not included



Stones not included

A LT Stone Holder

A lightweight, double-ended stone holder made of durable plastic with a black non-glare finish. One end holds $\frac{1}{8}$ " x $\frac{1}{4}$ " stones, and the other holds $\frac{1}{8}$ " x $\frac{1}{2}$ " and $\frac{1}{4}$ " x $\frac{1}{4}$ " stones. Measures 5- $\frac{1}{2}$ " long.

Description	SKU	Each
LT Stone Holder	403-1020	

B Screw-Lock Stone Holder

Screw-type lock holds the stone securely. Designed for comfortable use. Holds $\frac{1}{2}$ " x $\frac{1}{4}$ " stones. Measures 5- $\frac{1}{8}$ " long.

Description	SKU	Each
Screw-Lock Stone Holder	403-0200	

C-E Double Enders

- Accommodates pencil ($\frac{5}{32}$ " x $\frac{5}{32}$ ") stones as well as other small round and square stones up to $\frac{1}{4}$ " x $\frac{1}{4}$ ".
- Available in three colors (blue, black and red) that may be used to distinguish one grit or grade of stone from another.
- Set of three (4030120) contains one of each color. Measure 5- $\frac{7}{8}$ " length.

Description	SKU	Each
C Blue	403-0101	
D Black	403-0102	
E Red	403-0103	
Set of 3	403-0120	

F-M Ceramic Stone Holders – For Offhand Work

For handheld work with ceramic stones. Available in 1, 2, 4, 6 and 10mm flat sizes, 3mm round or 0.5mm and 0.9mm square sizes. Measures approximately 5- $\frac{3}{4}$ " long. Replacement collars available in a set of 2 (one small and one larger) for each corresponding size.

Description	SKU	Each
F Flat Holder, 1mm	351-0291	
Set of 2 Replacement Collars, 1mm	351-0360	
G Flat Holder, 2mm	351-0292	
Set of 2 Replacement Collars, 2mm	351-0361	
H Flat Holder, 4mm	351-0270	
Set of 2 Replacement Collars, 4mm	351-0362	
I Flat Holder, 6mm	351-0271	
Set of 2 Replacement Collars, 6mm	351-0363	
J Flat Holder, 10mm	351-0272	
Set of 2 Replacement Collars, 10mm	351-0364	
K Round Holder, 3mm	403-0011	
L Square Holder, 0.5mm	351-0345	
M Square Holder, 0.9mm	351-0350	

A Adjustable Stone Holder – 3mm Shank

Our finest quality. Made of nonmagnetic stainless steel with a 3mm shank. The surface has been tumble-polished to create a nonreflecting satin finish. Accommodates stones up to $\frac{1}{4}$ " in thickness.

Description	SKU	Each
Adjustable Stone Holder	403-1000	



Stone not included

B Economy Adjustable Stone Holder – 3mm Shank

The Economy Adjustable Stone Holder accommodates stones up to $\frac{3}{16}$ " thick. Plastic serrated jaw holds stones securely. Surface is black and nonreflecting. Made of steel (except serrated jaw and shank housing) with a 3mm shank.

Description	SKU	Each
Economy Adjustable Stone Holder	403-1015	



Stone not included

C ST-38 Stone Holder – 3mm Shank

Allows you to secure square, round, and rectangular stones in reciprocating handpieces, including our Power Hand reciprocating handpieces, DI-Profilers and Super Hand Air Filers. Adjustable hinge lets you change the angle of the stone to fit your application. Made of durable plastic with serrated jaws and set screw for tightening stone into place. Accepts round stones up to $\frac{1}{2}$ " in diameter, rectangular stones up to $\frac{3}{8}$ "H x $\frac{1}{2}$ "W and square stones up to $\frac{3}{8}$ ". 3mm steel shank. Complete with allen wrench. Color may vary.

Description	SKU	Each
ST-38 Stone Holder	403-1010	



Stone not included

D-E LT Recipro Stone Holder – $\frac{1}{8}$ " Shank

Economically priced holder for reciprocating handpieces. Made of durable plastic with black nonglare finish. Shank measures $\frac{1}{8}$ " dia. x $\frac{1}{2}$ "L

Description	SKU	Each	
		1-2	3+
D Small, for $\frac{1}{8}$ " x $\frac{1}{4}$ " stones	403-1025		
E Large, for $\frac{1}{8}$ " x $\frac{1}{2}$ " and $\frac{1}{4}$ " x $\frac{1}{4}$ " stones	403-1030		



Stone not included

F DiProfiling Stone Holder – 3mm Shank

Expands the use of your mini-filer or other profilers. Accommodates both flat and round stones or tools up to 6mm (0.236") Shank length 1- $\frac{3}{8}$ ", overall 2- $\frac{5}{8}$ ". Use for fine, more precise profiling jobs.

Description	SKU	Each
Universal Tool Holder	403-1050	



Stone not included

G Ceramic Stone Holder – 3mm Shank

Holds stones up to 1mm thick and up to 8mm wide. Slim size helps reduce vibrations. Shank length $\frac{3}{4}$ ", overall length 1- $\frac{1}{4}$ ".

Description	SKU	Each
Ceramic Stone Holder	403-1045	



Stone not included

NEW Super Stone® Ceramic Stones

Strong Yet Incredibly Flexible!

NEW Super Stone (NSS) offers an improved cutting ability, increased heat resistance, and longer life. Made of long ceramic fibers that will not break even under the most strenuous conditions, the NSS can be used in ultrasonic polishers, reciprocating profilers, or by hand). These strong yet flexible stones are ideal for polishing small intricate areas on all types of metals producing consistent and uniform surface finishes. NSS is non-loading and can be shaped. Available in 9 easy to identify color coded grits from 80 to 1200. Finer, 1500, 2000 and 3000, grits are available only in limited sizes. Made in Japan.



Flat Stones

Dimensions (mm)	Violet 80 Grit SKU	Emerald 120 Grit SKU	Gold 180 Grit SKU	Lt. Brown 300 Grit SKU	Orange 400 Grit SKU	Gray 600 Grit SKU	Blue 800 Grit SKU	White 1000 Grit SKU	Red 1200 Grit SKU	Each
0.5 x 0.5 x 50	355-0041	355-0141	355-0241	355-0441	355-0541	355-0641	355-0741	355-0841	355-0941	1-4 5+*
0.5 x 1 x 100	355-0001	355-0101	355-0201	355-0401	355-0501	355-0601	355-0701	355-0801	355-0901	1-4 5+*
0.5 x 2 x 100	355-0002	355-0102	355-0202	355-0402	355-0502	355-0602	355-0702	355-0802	355-0902	1-4 5+*
0.5 x 4 x 100	355-0003	355-0103	355-0203	355-0403	355-0503	355-0603	355-0703	355-0803	355-0903	1-4 5+*
0.5 x 6 x 100	355-0004	355-0104	355-0204	355-0404	355-0504	355-0604	355-0704	355-0804	355-0904	1-4 5+*
0.5 x 10 x 100	355-0005	355-0105	355-0205	355-0405	355-0505	355-0605	355-0705	355-0805	355-0905	1-4 5+*
0.8 x 4 x 100	355-0008	355-0108	355-0208	355-0408	355-0508	355-0608	355-0708	355-0808	355-0908	1-4 5+*
0.8 x 6 x 100	355-0009	355-0109	355-0209	355-0409	355-0509	355-0609	355-0709	355-0809	355-0909	1-4 5+*
0.8 x 10 x 100	355-0010	355-0110	355-0210	355-0410	355-0510	355-0610	355-0710	355-0810	355-0910	1-4 5+*
0.9 x 0.9 x 50	355-0043	355-0143	355-0243	355-0443	355-0543	355-0643	355-0743	355-0843	355-0943	1-4 5+*
1 x 1 x 100	355-0011	355-0111	355-0211	355-0411	355-0511	355-0611	355-0711	355-0811	355-0911	1-4 5+*
1 x 2 x 100	355-0012	355-0112	355-0212	355-0412	355-0512	355-0612	355-0712	355-0812	355-0912	1-4 5+*
1 x 4 x 100	355-0013	355-0113	355-0213	355-0413	355-0513	355-0613	355-0713	355-0813	355-0913	1-4 5+*
1 x 6 x 100	355-0014	355-0114	355-0214	355-0414	355-0514	355-0614	355-0714	355-0814	355-0914	1-4 5+*
1 x 10 x 100	355-0015	355-0115	355-0215	355-0415	355-0515	355-0615	355-0715	355-0815	355-0915	1-4 5+*
1.5 x 4 x 100	355-0018	355-0118	355-0218	355-0418	355-0518	355-0618	355-0718	355-0818	355-0918	1-4 5+*
1.5 x 6 x 100	355-0019	355-0119	355-0219	355-0419	355-0519	355-0619	355-0719	355-0819	355-0919	1-4 5+*
1.5 x 10 x 100	355-0020	355-0120	355-0220	355-0420	355-0520	355-0620	355-0720	355-0820	355-0920	1-4 5+*
2 x 4 x 100	355-0023	355-0123	355-0223	355-0423	355-0523	355-0623	355-0723	355-0823	355-0923	1-4 5+*
2 x 6 x 100	355-0024	355-0124	355-0224	355-0424	355-0524	355-0624	355-0724	355-0824	355-0924	1-4 5+*
2 x 10 x 100	355-0025	355-0125	355-0225	355-0425	355-0525	355-0625	355-0725	355-0825	355-0925	1-4 5+*

*Quantity discount for orders of one item number only; not assorted.

Features include:

- Non-clogging – beautiful polishing results on all metals
- Available in many dimensions in flat/round profiles
- Incredible strength and flexibility
- Color coded – easy to identify
- Improved heat resistance
- Great cutting power
- Very long life



Round Stones

Dimensions (mm)	Violet 80 Grit SKU	Emerald 120 Grit SKU	Gold 180 Grit SKU	Lt. Brown 300 Grit SKU	Orange 400 Grit SKU	Gray 600 Grit SKU	Blue 800 Grit SKU	White 1000 Grit SKU	Red 1200 Grit SKU	Each
2.35 x 50	355-0031	355-0131	355-0231	355-0431	355-0531	355-0631	355-0731	355-0831	355-0931	1-4 5+*
2.35 x 100	355-0032	355-0132	355-0232	355-0432	355-0532	355-0632	355-0732	355-0832	355-0932	1-4 5+*
3 x 50	355-0034	355-0134	355-0234	355-0434	355-0534	355-0634	355-0734	355-0834	355-0934	1-4 5+*
3 x 100	355-0035	355-0135	355-0235	355-0435	355-0535	355-0635	355-0735	355-0835	355-0935	1-4 5+*
3.175 x 50	355-0037	355-0137	355-0237	355-0437	355-0537	355-0637	355-0737	355-0837	355-0937	1-4 5+*
3.175 x 100	355-0038	355-0138	355-0238	355-0438	355-0538	355-0638	355-0738	355-0838	355-0938	1-4 5+*

*Quantity discount for orders of one item number only; not assorted.

Precut Stones – For Ultrasonic Handpieces

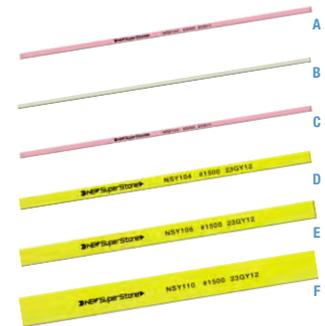
Dimensions (mm)	Violet 80 Grit SKU	Emerald 120 Grit SKU	Gold 180 Grit SKU	Lt. Brown 300 Grit SKU	Orange 400 Grit SKU	Gray 600 Grit SKU	Blue 800 Grit SKU	White 1000 Grit SKU	Red 1200 Grit SKU	Each
0.8 x 4 x 40	355-0060	355-0160	355-0260	355-0460	355-0560	355-0660	355-0760	355-0860	355-0960	1-4 5+*
0.8 x 6 x 40	355-0061	355-0161	355-0261	355-0461	355-0561	355-0661	355-0761	355-0861	355-0961	1-4 5+*
1 x 4 x 40	355-0065	355-0165	355-0265	355-0465	355-0565	355-0665	355-0765	355-0865	355-0965	1-4 5+*
1 x 6 x 40	355-0066	355-0166	355-0266	355-0466	355-0566	355-0666	355-0766	355-0866	355-0966	1-4 5+*

*Quantity discount for orders of one item number only; not assorted.

Finest Grit Stones

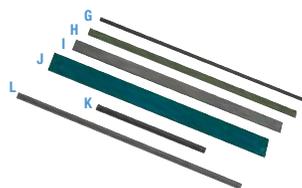
Dimensions (mm)	Yellow 1500 Grit SKU	Cream 2000 Grit SKU	Pink 3000 Grit SKU	Each
A 0.5 x 2 x 100	355-2102	355-2202	355-2302	1-4 5+*
B 1 x 1 x 100	355-2111	355-2211	355-2311	1-4 5+*
C 1 x 2 x 100	355-2112	355-2212	355-2312	1-4 5+*
D 1 x 4 x 100	355-2113	–	–	1-4 5+*
E 1 x 6 x 100	355-2114	–	–	1-4 5+*
F 1 x 10 x 100	355-2115	–	–	1-4 5+*

*Quantity discount for orders of one item number only; not assorted.



NEW Super Stone® Ceramic Stone Sets

Set	Contents	SKU	Set
A	Flat set, 100mm 10 stones + 2 holders: 1 x 4 x 100 (120, 180, 300, 800, 1200 grit) 1 x 6 x 100 (300, 400, 600, 800, 1000 grit)		355-1100
B	Round set, 3mm 5 stones + holder: 3 x 50mm (180, 300, 600, 800, 1200 grit)		355-1103
C	Round set, 2.35mm 5 stones: 2.35mm (3/32") round (180, 400, 600, 800, 1200 grit)		355-1101
D	Square set, .5mm 4 stones + holder: 0.5 x 0.5 x 50mm (180, 400, 800, 1200 grit)		355-1105
E	Square set, .9mm 4 stones + holder: 0.9 x 0.9 x 50mm (180, 400, 800, 1200 grit)		355-1109
F	Square set, 40mm 9 stones: 1 x 4 x 40mm (80, 120, 180, 300, 400, 600, 800, 1000, 1200 grit)		355-0099



G-L Super Ceramic Diamond Stones

Ceramic fibers combined with multiple layers of evenly distributed diamond particles ensure continuous cutting action. Perfect for finishing hardened steel and carbide tools, polishing ribs, hard-to-reach slots, and sidewalls. Can cut and polish flat to a surface for fast, accurate polishing on mill or EDM flat surfaces. More efficient than diamond compounds, easily shaped and don't load like a plated diamond file will. For use in ultrasonic polishers and mechanical profilers or by hand.

Shape	Size (mm)	Each				1-4	5+*
		Black 200 Grit	Gray 400 Grit	Green 600 Grit	Aqua 800 Grit		
G	Flat 1 x 2 x 100	351-0797	351-0798	351-0799	351-0815		
H	Flat 1 x 4 x 100	351-0800	351-0801	351-0802	351-0816		
I	Flat 1 x 6 x 100	351-0803	351-0804	351-0805	351-0817		
J	Flat 1 x 10 x 100	351-0806	351-0807	351-0808	351-0818		
K	Round 3 x 50	351-0809	351-0810	351-0811	351-0819		
L	Round 3 x 100	351-0812	351-0813	351-0814	351-0820		

*Quantity discount for orders of one item number only; not assorted.

M-T Ceramic Stone Holders – For Offhand Work

For handheld work with ceramic stones. All are approximately 5-3/4" long. Replacement collars for the flat holders available in a set of 2 (one small and one larger) for each corresponding size.

Description	SKU	Each
M Flat Holder, 1mm	351-0291	
Set of 2 Replacement Collars, 1mm	351-0360	
N Flat Holder, 2mm	351-0292	
Set of 2 Replacement Collars, 2mm	351-0361	
O Flat Holder, 4mm	351-0270	
Set of 2 Replacement Collars, 4mm	351-0362	
P Flat Holder, 6mm	351-0271	
Set of 2 Replacement Collars, 6mm	351-0363	
Q Flat Holder, 10mm	351-0272	
Set of 2 Replacement Collars, 10mm	351-0364	
R Round Holder, 3mm	403-0011	
S Square Holder, 0.5mm	351-0345	
T Square Holder, 0.9mm	351-0350	

Stones not included

Cristone® Ceramic Stones

Cristone ceramic stones are made with a unique crystal fiber and work best for fine polishing. The crystal fibers are round in shape and uniform in direction, thus allowing for an even and uniform surface finish free from deep scratches. Performs great on hardened and heat treated metals due to its strong fiber and resin bond. Use by hand or with any Ultramax Ultrasonic Polisher for powered finishing. Has 180 Celsius heatproof temperature.



Shape	Size (mm)	Light Green 150 Grit	Light Red 200 Grit	Light Purple 400 Grit	Light Orange 600 Grit	Light Blue 800 Grit	White 1000 Grit	Each
		SKU	SKU	SKU	SKU	SKU	SKU	
A Flat	1 x 2 x 100	355-1301	355-1302	355-1303	355-1304	355-1305	355-1306	
	1 x 4 x 100	355-1311	355-1312	355-1313	355-1314	355-1315	355-1316	
	1 x 6 x 100	355-1321	355-1322	355-1323	355-1324	355-1325	355-1326	
	1 x 10 x 100	355-1331	355-1332	355-1333	355-1334	355-1335	355-1336	
B Round	2.35 x 50	355-1341	355-1342	355-1343	355-1344	355-1345	355-1346	
	2.35 x 100	355-1351	355-1352	355-1353	355-1354	355-1355	355-1356	
	3 x 50	355-1361	355-1362	355-1363	355-1364	355-1365	355-1366	
	3 x 100	355-1371	355-1372	355-1373	355-1374	355-1375	355-1376	

Cristone® Matrix Ceramic End Bristle Brushes – 3mm Shank

These brushes are a versatile tool for many finishing applications including: surface polishing, deburring, removing tool marks and EDM scale. The ceramic fiber bristles produce a uniform finish and are color coded for easy grit identification from 150 up to 1200 grit. Easily dress shapes and angles into the brushes by using a diamond abrasive file. For example, you can dress a 45 degree angle to match the form of your working surface. Can be used wet or dry. Use in a micromotor handpiece or in a CNC machine. 18,000 Max RPM. 3mm shank. Length: 11-3/16" Width: 3/16" (50mm x 5mm). Made in Japan.

Description	Size (mm)	Light Green 150 Grit	Light Red 200 Grit	Light Purple 400 Grit	Light Orange 600 Grit	Light Blue 800 Grit	White 1000 Grit	Red 1200 Grit	Each
		SKU	SKU	SKU	SKU	SKU	SKU	SKU	
Matrix Ceramic End Bristle Brush – 3mm	5 x 50	355-1510	355-1512	355-1514	355-1516	355-1518	355-1520	355-1522	

C Cristone Matrix Ceramic End Brush Set – 3mm Shank

Set includes all 7 Cristone Matrix Ceramic End Brushes. Measuring 5mm (3/16") in diameter by 50mm (11-3/16") in length. Mounted on 3mm shanks.

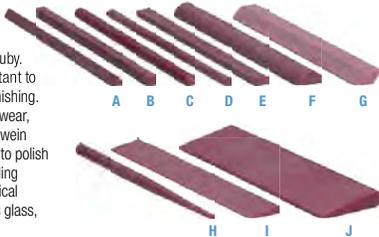
Description	SKU	Set
7 of our Cristone Matrix Ceramic End Brushes	355-1526	



DEGUSSIT® Ruby® Stones & Files

For Use on Hardened Steel & Carbide

Degussit Ruby Stones and Files are made from pure, sintered crystals of synthetic ruby. No bonding material is used, so these stones and files are extremely hard and resistant to changes in shape. This is particularly important for quality precision grinding and finishing. In addition, since Degussit Ruby Stones and Files feature outstanding resistance to wear, they are more economical to use than other comparable tools. Use dry or with Gesswein Stoning Oil to grind, touch up or debur steel and carbide parts. Dress to a fine point to polish highly detailed areas on dies. Excellent for deburring ejector pin holes. Ideal for blending a surface where a straight edge meets a radius. Often used for fine polishing of surgical stainless steel medical instruments. Also recommended for use on materials such as glass, quartz and porcelain. Made in Germany.



A-J DEGUSSIT® Ruby® Stones

For general purpose work. Available in coarse, medium and fine grits.

Shape	Dimensions* (mm)	Approx.	Coarse		Medium		Fine	
			SKU	Each	SKU	Each	SKU	Each
A Triangular ▲	100 x 4	4" x 3/32"	-	-	350-2002	-	350-2003	-
	100 x 6	4" x 1/4"	350-2011	-	350-2012	-	350-2013	-
	100 x 8	4" x 3/16"	350-2021	-	350-2022	-	350-2023	-
	100 x 10	4" x 3/8"	-	-	350-2032	-	350-2033	-
B Square ■	100 x 4	4" x 3/32"	-	-	350-2102	-	350-2103	-
	100 x 6	4" x 1/4"	350-2111	-	350-2112	-	350-2113	-
	100 x 8	4" x 3/16"	350-2121	-	350-2122	-	350-2123	-
	100 x 10	4" x 3/8"	350-2131	-	350-2132	-	350-2133	-
	120 x 13	4-3/4" x 1/2"	-	-	350-2142	-	350-2143	-
C Round, Pointed ●	100 x 5	4" x 3/16"	-	-	-	-	350-2613	-
D Round ●	100 x 4	4" x 3/32"	-	-	350-2702	-	350-2703	-
	100 x 6	4" x 1/4"	350-2711	-	350-2712	-	350-2713	-
	100 x 8	4" x 3/16"	350-2721	-	350-2722	-	350-2723	-
	100 x 10	4" x 3/8"	350-2731	-	350-2732	-	350-2733	-
E Flat ■	100 x 6 x 3	4" x 1/4" x 1/8"	-	-	350-2202	-	350-2203	-
	100 x 8 x 6	4" x 3/16" x 1/4"	350-2211	-	350-2212	-	350-2213	-
F Half-Round ◐	100 x 10	4" x 3/8"	350-2311	-	350-2312	-	-	-
G Rhomboid ▱	100 x 13 x 5	4" x 1/2" x 3/16"	350-2401	-	-	-	-	-
H Round, One Tapered End ●	100 x 5 x 2	4" x 3/16" x 3/64"	350-2551	-	-	-	350-2553	-
I Knife Edge ◄	100 x 15 x 3-05	4" x 3/16" x 1/8"-1/32"	-	-	350-2912	-	350-2913	-
J Tapered, Rounded Edge ◄	100 x 30 x 7-2	4" x 3/8" x 3/32"-3/64"	-	-	350-1052	-	-	-

*All dimensions have tolerance of ±0.1mm.

K DEGUSSIT® Ruby® Stone Set #700

This handy set contains one each of the Ruby Stones indicated. Save over \$150.00 off the combined price of buying the stones individually.

Description	SKU	Set
Ruby Stone Set #700	350-3000	

Shape	Dimensions* (mm)	Grit
Round ●	100 x 6	Medium
Triangular ▲	100 x 10	Medium
Flat ■	100 x 8 x 6	Fine
Half-Round ◐	100 x 10	Coarse
Square ■	100 x 10	Medium

*All dimensions have tolerance of ±0.1mm.



K

A-K DEGUSSIT® Ruby® Midget Files

Ruby Midget Files are invaluable for high detail and ultra-precision work. They may be broken off and cemented onto a holder or used with a pin vise. Available in fine grit. Made in Germany.

Shape	Dimensions* (mm)	SKU	Each	
			1-19	20+
A Square ■	50 x 1	350-4000		
B Round ●	50 x 1	350-4010		
C Triangular ▲	50 x 2	350-4020		
D Flat ■	50 x 3 x 0.3	350-4060		
E Square ■	100 x 2	350-4030		
F Round ●	100 x 2	350-4040		
G Round ●	100 x 3	350-4050		
H Half-Round ◐	100 x 4 x 2	350-4070		
I Barrette ▲	100 x 5 x 1.5	350-4090		
J Crossing ●	100 x 4 x 1.5	350-4110		
K Triangular ▲	100 x 3	350-4130		

*All dimensions have tolerance of ±0.1mm



L DEGUSSIT® Ruby® Midget File Set #420

This money-saving kit contains all 11 of our Ruby Midget Files (see above) plus one double-ended holder with two with two additional stones affixed. (Holder is available only with this kit and not separately.) Screw machine operators will find this set particularly helpful for dressing cutters without removing them from the machine. Made in Germany.

Description	SKU	Each
Ruby Set #420	350-4200	



ABRASIVES - STONES

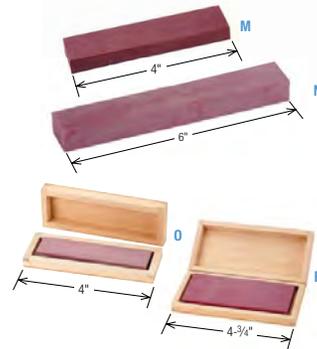
M-P DEGUSSIT® Ruby® Bench Stones

Ideal for sharpening and for flattening steel and carbide parts as well as sharpening tools and gravers - even carbide. The pure sintered crystals of synthetic ruby have an outstanding resistance to wear, which makes them more economical than other stones. They will not groove, even after years of use. May be used dry or with Gesswein Stoning Oil. Either finished on both sides or finished on one side only and mounted in a wooden box. Made in Germany.

Dimensions (inches)	Medium		Fine	
	SKU	Each	SKU	Each
M 4 x 1 x 3/8"	350-1002		350-1003	
N 6 x 1 x 3/8"	350-1012		350-1013	
O 4 x 1 x 3/8**	350-1102		350-1103	
P 4-3/4 x 2 x 3/8**	350-1112		350-1113	

*Finished on both sides

**Finished on one side & mounted in wooden box



Q DEGUSSIT® Ruby® Combination Bench Stone

Finished on two sides and neatly packaged in a wooden box. One side of the stone is medium to cut fast while shaping tools and the other is fine which will impart a brilliant finish. Ideal for sharpening knives and gravers made of high speed steel or carbide. Measures 4-3/4"L x 2"W x 3/8"H. Made in Germany.

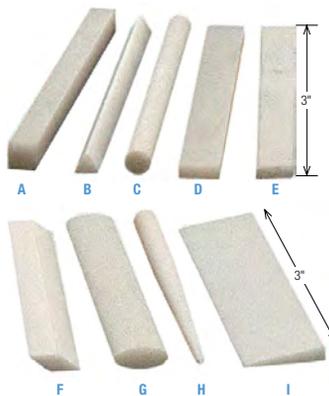
Description	SKU	Each
Ruby Combination Bench Stone	350-1114	



ABRASIVES - STONES

Norton® Arkansas Stones

Natural Arkansas Stones have gained a reputation over the years as the finest all-purpose stones for deburring and polishing operations as well as for sharpening precision tools. Hard Arkansas Stones are dense and fine-grained for final honing where the sharpest precision edges possible are needed. Soft Arkansas, with its less dense and more open structure, is ideal for imparting a fine, smooth surface. Arkansas Stones are not oil-filled and should be used with Gesswein Stoning Oil. Made in Mexico.



A-I Norton® Hard Arkansas Files – Ultra-Fine Grit

Dense, translucent stones in various shades of gray. All have precision edges.

Shape	Dimensions	Style	SKU	Each	
				1-9	10+
A Square	3" x 1/4"	HF13	370-0130		
	3" x 3/8"	HF33	370-0330		
	3" x 1/2"	HF43	370-0430		
B Triangular	3" x 1/4"	HF113	370-1130		
	3" x 3/8"	HF133	370-1330		
	3" x 1/2"	HF143	370-1430		
C Round	3" x 1/4"	HF813	370-8130		
D Flat	3" x 3/8" x 1/8"	HF823	370-8230		
E Bevel	3" x 3/8" x 1/8"	HF833	370-8330		
F Diamond	3" x 1/2" x 3/16"	HF843	370-8430		
G Oval	3" x 1/2" x 3/16"	HF853	370-8530		
H Point	3" x 1/4" base	HF863	370-8630		
I Knife Blade	3" x 3/4" x 1/8"	HF873	370-8730		

J Norton® Soft Arkansas Engraver's Point AT11 – Extra-Fine Grit

Small size for stoning and cleaning in recesses, corners and other tight areas. Can be held in one of our double-enders.



Type	Dimensions	Style	SKU	Each	
				1-19	20+
Point	1" x 1/8" dia.	AT11	372-5110		

K Norton® Hard Arkansas Bench Stones – Ultra-Fine Grit

Extremely hard and fine unmounted stones for the final finish on gravers and cutting tools. Can be used on both sides.



Dimensions	Style	SKU	Each	
			1-4	5+
4" x 2" x 3/8"	HB24	371-1045		
4" x 2" x 3/4"	HB4	371-1040		

L Norton® Arkansas Penknife Stones

Can be used on both sides. Hard are ultra-fine grit, soft is extra-fine grit.



Type	Dimensions	Style	SKU	Each	
				1-9	10+
Hard	3" x 1" x 3/8"	HB13	371-1130		
Hard	4" x 1" x 3/8"	HB14	371-1140		
Soft	4" x 1" x 3/8"	SB14	371-4140		

M Norton® Crystolon Combo Bench Stone

This silicon carbide bench stone provides both a coarse and a fine cutting surface. Allows fast cutting for general sharpening of cutting tools. Ideal for carbide-heavy tool steel, such as M2 or the CPMS. Dark gray in color. Stone measures 6"L x 2"W x 1"H. Made in Mexico.

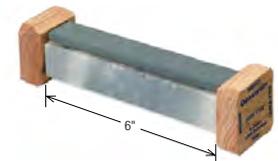


Dimensions	SKU	Each
6" L x 2" W x 1" H	371-2004	

A Quad-Hone Stone

Four different stones mounted on a rectangular block for a wide range of sharpening chores from rough shaping to producing a sharp final edge. Quad-Hone includes one each of coarse, medium, fine and ultra-fine Arkansas stones. Each stone measures approximately 6"L x 1"W x 1/4"H. Use with Gesswein Stoning Oil. Made in USA.

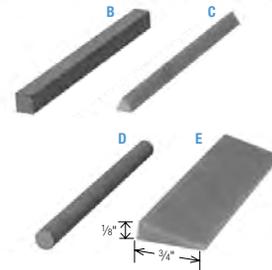
Description	SKU	Each
Quad-Hone Stone	380-1102	



B-E Hard Black Arkansas Files – Fine Grit

For the machinist, woodworker or gunsmith who requires a smooth polished edge. These dense black stones are more aggressive than other Hard Arkansas Stones. The various shapes and sizes are ideal for deburring and polishing intricate tools and metal parts. All approximately 3" in length. Made in USA.

Shape	Size	SKU	Each	
			1-9	10+
B Square	1/4"	375-0131		
	3/8"	375-0331		
	1/2"	375-0431		
C Triangular	1/4"	375-1131		
	3/8"	375-1331		
	1/2"	375-1431		
D Round	1/4"	375-8131		
E Knife Edge	3/4" x 1/8" (tapers to a knife edge)	375-8731		



F Gesswein® Hard Black Arkansas Bench Stone – Fine Grit

For precision sharpening or for finishing a very sharp edge. Measures 6"L x 2"W x 1/2"H Complete with wooden storage box. Made in USA.

Description	SKU	Each
Fine Grit	374-2000	



G Gesswein® Soft Arkansas Bench Stone – Medium Grit

A natural medium-grit bench stone. Recommended for relatively fast cutting. Excellent for shaping gravers, knives and precision tools prior to final finish with our Ruby or Hard Arkansas stones. Use with Stoning Oil (800-0151). Complete with wooden storage box. Measures 6"L x 2"W x 1/2"H. Finished on both sides. Made in USA.

Description	SKU	Each
Medium Grit	374-1001	



H-I Gesswein® Hard Arkansas Stones – Very Fine Grit

Our Genuine Hard Arkansas stones are translucent. These very-fine grit stones have both sides finished. Made in USA.

Dimensions	SKU	Each
4" x 2" x 1/2"	374-0905	
6" x 2" x 1/2"	374-0915	

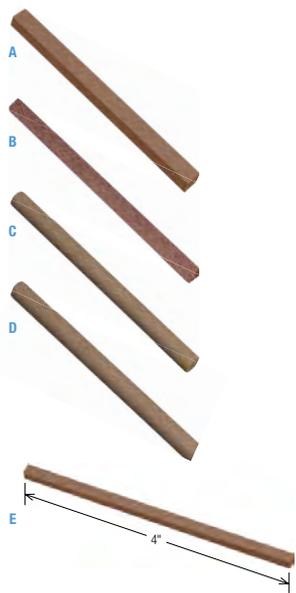


Norton India® Stones

These sharpening stones are made of synthetic aluminum oxide abrasive graded to a consistent particle size, blended with select bonding agents, molded to shape and finished to exacting surface configurations.

Preferred for imparting durable, smooth cutting edges and finishing to close tolerances.

Orange-brown in color. Prefilled with oil to make cutting easier and more effective, retard loading and eliminate the need for presoaking prior to first use. Note: Although prefilling minimizes the amount of oil needed, it does not eliminate the need for oil on the stone surface.



Apply Gesswein Stoning and Lubricating Oil on the stone's sharpening surface prior to each use. This will prevent the pores of the stone from filling with material removed from the object being stoned.

India Stones are available in coarse, medium and fine grits. Use coarse grit for restoring badly worn cutting edges and for all sharpening not requiring a keen edge; use medium grit for producing an average edge on a broad range of tools, such as carving tools, milling cutters, lathe tools and die chasers; and use fine grit for producing sharper-than-average edges on gouges, reamers, taps and twist drills. Made in Mexico.

A-D India® Abrasive Files

Hold their shape while producing a fine, uniform finish. Use to debur, chamfer, radius and fit delicate parts. Choose from square, triangular, round and half-round to match different surface contours. Triangular files are excellent for reaching tight corners without disturbing other surfaces.

Shape	Style	Size	Coarse 100 Grit			Medium 240 Grit			Fine 320 Grit			Each	
			SKU	SKU	SKU	SKU	SKU	SKU	1-19	20+			
A Square	14	¼" x 4"	360-0141	360-0142	360-0143								
	34	¾" x 4"	360-0341	360-0342	360-0343								
	44	½" x 4"	360-0441	360-0442	360-0443								
	76	1" x 6"	360-0761	360-0762	360-0763								
B Triangular	114	¼" x 4"	360-1141	360-1142	360-1143								
	134	¾" x 4"	360-1341	360-1342	360-1343								
	144	½" x 4"	360-1441	360-1442	360-1443								
C Round	214	¼" x 4"	360-2141	360-2142	360-2143								
	234	¾" x 4"	360-2341	360-2342	360-2343								
	244	½" x 4"	360-2441	360-2442	360-2443								
D Half-Round	314	¼" x 4"	—	360-3142	360-3143								
	334	¾" x 4"	—	360-3342	360-3343								
	344	½" x 4"	360-3441	360-3442	360-3443								

Stones are made to an approximate ±1/8" length tolerance.

E Medium India® Pencil Stone

Style	Grit	Size	SKU	Pkg. of 12	
				1-5	6-11 12+
10	240	5/32" x 4"	415-0100		

F Norton® India® Engraver's Point

For stoning and cleaning tight corners and recesses of dies where close tolerances and accuracy are important. Measures 1" L x 1/8" dia. and tapers to a point. Fine (320 grit). Fits in a double-ender, see below.

Style	Size	SKU	Each	
			1-49	50+
FT-11	1/8" x 1"	362-5113		

G-I Double Enders

- Accommodates small round and square stones up to ¼" x ¼".
- Use a different color to distinguish one grit or grade of stone from another.
- Set of three (4030120) contains one of each color. Measure 5-7/8" length.

Description	SKU	Each
G Blue	403-0101	
H Black	403-0102	
I Red	403-0103	
Set of 3	403-0120	



A-G Norton® India® Silversmith Stones

A variety of precision-shaped tapered stones used by silversmiths and mechanics for touching up instruments, lapping for close tolerances and cleaning tools and dies. Use round-edged stones to speed up the sharpening of curved tool steels and carbide tools. Use sharp-angled stones to get into hard-to-reach corners. Available only in aluminum oxide in coarse, medium and fine grits.

Style	L x W x H	W x H	Tapered to			Each	
			Coarse 100 Grit	Medium 240 Grit	Fine 320 Grit	1-19	20+
A	F-414	4" x 5/16" x 3/16"	5/16" x 1/16"	—	360-4142	360-4143	
B	F-424	4" x 3/8" x 3/16"	1/8" x 1/16"	—	360-4242	—	
C	F-444	4" x 1/2" x 1/16"	—	360-4441	360-4442	360-4443	
D	F-474	4" x 1/2" x 1/4"	5/16" x 1/8"	—	360-4742	—	
E	F-644	4" x 1/2" x 1/4"	—	—	360-6442	360-6443	
F	F-723	3" x 5/16" base	—	360-7231	360-7232	360-7233	
G	F-724	4" x 1" x 1/8" base	—	360-7241	360-7242	360-7243	

*Quantity discount for orders of one item number only; not assorted.

H-J Norton® India® Reamer Stones

Durable fast-cutting stones designed for imparting a professional edge on reamers, taps and rough rounders on shoe machine tools. Available in aluminum oxide in medium and fine grits.

Style	L x W x H	Medium Grit		Fine Grit		Each	
		SKU	SKU	1-19	20+		
H	T124	4 1/2" x 1" x 5/16"	360-1242	—			
I	T125	5" x 1" x 3/16"	360-1252	360-1253			
J	T126	6" x 1" x 1/4"	360-1262	—			

K Norton® India® Bench Stones

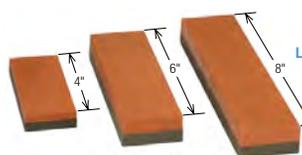
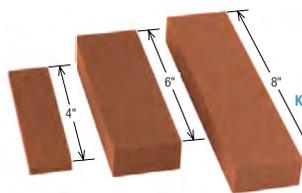
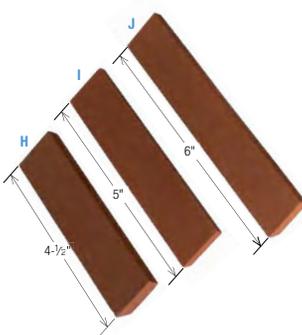
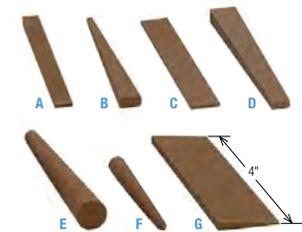
Manufactured with the same aluminum oxide as our other India stones, Bench Stones are most popular for producing a strong, keen, long-lasting edge on high-quality tools. The frequent choice of craftsmen and mechanics. Use India Bench Stones to quickly restore the cutting edge on all straight edge tools, including chisels, plane blades, wood lathe cutters, draw knives, spoke shaves, precision tools and delicate instruments. Prefilled with oil to make cutting easier and more effective, eliminating the need to presoak prior to first use. Oil still should be supplied to the surface before each use.

Grit	L x W x H	Style	SKU	Each	
				1-9	10+
Coarse	4" x 1" x 1/4"	14	361-0141		
	4" x 1" x 1/2"	24	361-0241		
	6" x 2" x 1"	6	361-0061		
	8" x 2" x 1"	8	361-0081		
Medium	4" x 1" x 1/4"	14	361-0142		
	4" x 1" x 1/2"	24	361-0242		
	6" x 2" x 1"	6	361-0062		
	8" x 2" x 1"	8	361-0082		
Fine	4" x 1" x 1/4"	14	361-0143		
	4" x 1" x 1/2"	24	361-0243		
	6" x 2" x 1"	6	361-0063		
	8" x 2" x 1"	8	361-0083		

L Norton® India® Combination Bench Stones

Fast cutting, man-made stones of tough aluminum oxide abrasive. Each Combination India Bench Stone has fine and coarse grit surfaces (one grit to each side), providing complete, economical sharpening.

Style	L x W x H	SKU	Each	
			1-9	10+
IB-134	4" x 1-3/4" x 5/8"	361-1344		
IB-6	6" x 2" x 1"	361-0064		
IB-8	8" x 2" x 1"	361-0084		



ABRASIVES - STONES

ABRASIVES - STONES



A Mold Repair Kit

Can be carried directly to the mold for instant repair in the press. Helps you quickly put your molds back into production.

Includes:

- Diemaker, EDM, Moldmaker and RA Stones
- Supreme Green Stoning Oil
- Mounted Brushes
- Blue and Red Mounted Stones
- Holders for Stones and Felts
- Carbide burs
- G-Flex and GMX Abrasives
- Abrasive Belt Stick
- Lapping Sticks
- Felt Bobs, Sticks and Hand Brush
- Gesswein Diamond Compounds
- Simichrome Polish
- Cera Mounted Cylinders

Description	SKU	Set
Mold Repair Kit	382-1000	



B Diamond Polishing Kit

Whether you carry it to the mold or have it under your workstation, our Diamond Polishing Kit keeps all the products you need, right at your fingertips! A convenient time saver and a money saver as well!

Includes:

- Diamond Compounds
- Lube Thinner
- Felt Bobs & Felt Sticks
- Poli-Felts
- Wood Sticks
- End Brushes
- Cup Brushes
- Wheel Brushes

Description	SKU	Set
Diamond Polishing Kit	216-0001	



C TIG Weld Removal Consumable Set

Contains a curated collection of consumables to aid in the removal of a TIG weld. Covers aggressive polishing/grinding up to a diamond mirror finish. Supplied in a convenient carrying case so you can easily bring it where you need to use it and you'll stay organized as well.

Includes:

- Gesswein Diemaker Stones
- Mounted Stones
- Diamond Compounds
- Diamond Mounted Point
- Ceramic Stones
- Holder for Ceramic Stones
- End Brushes
- Cup Brushes

Description	SKU	Set
TIG Weld Removal Consumable Set	830-1635	



D 3-in-1 Consumable Set for the Ultramax MF

This set contains 98 polishing consumables specifically selected for the Ultramax MF Polisher 3-in-1 Complete Package. Provides the full range of abrasive consumables from aggressive polishing and grinding, up to diamond and mirror polishing. Keep your tools in the convenient carrying case or store in the MF metal cabinet.

Contents include:

- Diemaker, EDM Polishing Stones
- Mounted Stones
- New Super Stones
- Diamond Compounds
- Felt Bobs
- GMX Cylinders
- Mounted Brushes
- Diamond Files
- Wood Sticks
- Stoning Oil and Stone Holder

Description	SKU	Set
3-in-1 Consumable Set	500-0234	

A Gesswein® Rub-and-Rinse Stone Cleaner

Gesswein Rub-and-Rinse Stone Cleaner is a semiliquid material that sheds tiny metal particles from hard stones to keep them at their peak efficiency. Recommended for use on hard stones such as our Ruby, India and Hard Arkansas Stones. Contains 1/2 fl. oz.

Description	SKU	Each
Rub-and-Rinse Stone Cleaner	813-1700	



Stone not included

B-C Gesswein® Supreme Green Stoning & Lubricating Oil

This stoning oil was developed for mold and die polishing. It is economical, practically odorless, and it's ecologically safer to use than alternative stoning oils. Use with polishing stones to prevent loading and keep the work surface clean. Lets stones cut better and more freely so they produce a bright, smooth surface. Eliminates the need for hazardous kerosene and other lubricating agents, which could be harmful to your health. Can also use with diamond tools where lubrication is suggested. Viscosity: 38/45.

Description	SKU	Each
B 1 Pint (wide-mouth glass container)	800-0152	
C 1 Gallon	800-0151	



D Norton® India Stone Oil

Specifically formulated for use with sharpening stones. Will not load or gum up. Meets U.S. pharmaceutical standards for mineral oil purity and can be used around food preparation operations.

Description	SKU	Each
4.5 oz.	800-0121	



E Dispenser Bottle with Pump

Plastic bottle holds stoning oil, flux, solvents or other liquids. Special stainless steel lid allows pumping of solution into shallow well on top of bottle. One-way valve keeps solution in well, prevents contamination and eliminates odors. Ideal for dispensing solutions that would otherwise evaporate. 4 oz. capacity.

Description	SKU	Each
Dispenser Bottle with Pump	830-4525	

F-G Syringe Dispensers

Plastic syringes with 18-gauge stainless steel needles for pinpoint delivery of stoning oil to the exact place you want. Plunger works smoothly and slides evenly to prevent accidental flooding and sputtering. Constructed of polyethylene and polypropylene. Available in two sizes: 5 and 10cc. Each includes tip sheath and cover. Sold in packages of six.

Description	SKU	Pkg. of 6	
		1-3	4+
F 5cc Syringe	811-2450		
G 10cc Syringe	811-2451		



H Plastic Spray-Pump Bottle

Use to dispense stoning oil, cleaning solution and more. Spray gets into hard-to-reach areas. Capacity: 4 fl. oz.

Description	SKU	Each	
		1-2	3+
Plastic Spray-Pump Bottle	811-2460		



Gesswein® Mounted Points

We have assembled an assortment of vitrified bonded mounted abrasives for most metal working applications. From general purpose grinding to specialty deburring, for fast cutting to smooth finishing – there is a point for most every need. All are manufactured in the USA and only the finest materials and workmanship are employed.

Color	Hardness	Grit	Bond	Abrasive	Recommended Metals	Benefit
Blue	Hard	120	Porcelain	Semi-Friable Aluminum Oxide	Hardened Steels	Holds its shape extremely well
Purple	Hard-Sharp Cut	80/100/120	Vitrified	Sol-Gel Ceramic Grain + Pink Aluminum Oxide	High Nickel and Exotic Alloys	Fast cutting, cool running even on high nickel and other alloys
Light Blue	Medium-Sharp Cut	120	Vitrified	Sol-Gel Ceramic Grain + White Aluminum Oxide	High-Carbon, Stainless Steel, Non-Ferrous Alloys	Long lasting and cuts well
Red	Medium	60/80/120	Clay	Friable Aluminum Oxide	Medium and Hardened Steels	Fast cutting and non-loading properties
Pink	Medium	80/100/120	Fused Vitrified	Pink Aluminum Oxide Alloyed with Chrome	Tool Steel and High Speed Steels	Sharp, cool cutting action for harder steels
White	Soft	400	Vitrified	Fine White Aluminum Oxide	Glass, Porcelain, Metal or Stone	Produces a fine finish



A Gesswein® Mounted Point Sample Set

Order our sample set of points to see which type best fits your application. Set consists of B52 and W163 shapes in Red, Purple, Pink, Blue and Light Blue.

Description	Shank	SKU	Each
A 10-Piece Intro Mounted Point Set	1/8"	300-0010	
	3mm	300-0015	

Gesswein® Red Mounted Points

Superior quality points made of aluminum oxide bonded with porcelain-type clays, which provide the greatest strength and rigidity required for fast stock removal and longer life. The ceramic bond controls the release of the aluminum oxide abrasive grains. As each particle begins to dull, the bond discharges it, allowing new abrasive grain to surface with fresh, sharp cutting edges. Points are securely bonded to their shanks and are guaranteed to run true.

These fast-cutting, nonloading points are easily identified by their reddish-brown color. The grit varies between 60, 80 (medium), and 120 (fine). For fast grinding of medium and hard materials. Ideal for internal grinding of tools, dies and gauges. All have 1-1/2" long plated steel shanks. Can be dressed with our Tru-Stone 380-1030. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels.

Quantity discount breaks per SKU, not assorted. **Price Breaks**
3+: 15% Off

Style	B41	B43	B44	B45	B52	B53
Grit	80	80	80	80	80	80
1/8" SKU	310-0410	310-0430	310-0440	310-0450	310-0520	310-0530
3mm SKU	-	310-0433	310-0443	310-0453	310-0523	-
Pkg. of 24						

Style	B55	B72	B73	B81	B82	B91
Grit	120	80	80	120	80	80
1/8" SKU	310-0550	310-0720	310-0730	310-0810	310-0820	310-0910
3mm SKU	310-0553	310-0723	310-0733	-	-	-
Pkg. of 24						

Style	B96	B97	B98	B104	B105
Grit	120	120	120	80	80
1/8" SKU	310-0960	310-0970	310-0980	310-1040	310-1050
3mm SKU	-	310-0973	-	-	-
Pkg. of 24					

Style	B121	B122	B123	B124	B125	B132
Grit	80	80	120	120	80	80
1/8" SKU	310-1210	310-1220	310-1230	310-1240	310-1250	310-1320
3mm SKU	-	-	310-1233	310-1243	310-1253	310-1323
Pkg. of 24						

Style	B133	B135	W140	W141	W142	W144
Grit	80	80	120	120	120	120
1/8" SKU	310-1330	310-1350	310-1400	310-1410	310-1420	310-1440
3mm SKU	310-1333	-	310-1403	-	310-1423	310-1443
Pkg. of 24						

Style	W145	W146	W148	W149	W152	W153
Grit	120	120	120	120	120	120
1/8" SKU	310-1450	310-1460	310-1480	310-1490	310-1520	310-1530
3mm SKU	-	-	310-1483	310-1493	310-1523	310-1533
Pkg. of 24						

Shape dimensions shown in inches

Style	W154	W158	W161	W162	W163	W164
Grit	120	120	80	80	80	80
1/8" SKU	310-1540	310-1580	310-1610	310-1620	310-1630	310-1640
3mm SKU	310-1543	-	-	310-1623	310-1633	-
Pkg. of 24						

Shape dimensions shown in inches

Style	W170	W175	W176	W178	W182	W183
Grit	80	80	80	60	80	80
1/8" SKU	310-1700	310-1750	310-1760	310-1780	310-1820	310-1830
3mm SKU	-	310-1753	310-1763	-	310-1823	310-1833
Pkg. of 24						

Shape dimensions shown in inches

Style	W185	W186	W187	W190	W200	W202
Grit	80	80	80	80	80	60
1/8" SKU	310-1850	310-1860	310-1870	310-1900	310-2000	310-2020
3mm SKU	310-1853	-	310-1873	310-1903	-	-
Pkg. of 24						

Shape dimensions shown in inches

Style	W204	W210	W211	W215	W216
Grit	60	80	80	60	60
1/8" SKU	310-2040	310-2100	310-2110	310-2150	310-2160
3mm SKU	-	-	-	-	-
Pkg. of 24					

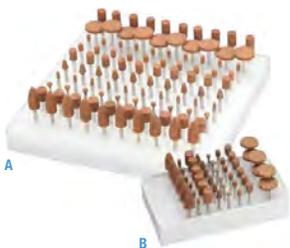
A-B Gesswein® Red Mounted Point Sets

These sets include our most popular shapes and offer a point for almost every application.

The 100-Piece Set includes ten each of our ten most popular shapes, conveniently packaged in a box to hold all 100 points. Ten each of the following shapes: B44, B52, B96, B123, W144, W152, W162, W170, W175, W200.

The 48-Piece Set is available on either a 1/8" shank or a 3mm shank and includes six each of eight popular shapes, conveniently packaged in a box to hold all 48 points. Six each of the following shapes: B44, B52, B123, W144, W152, W162, W176, W200.

Description	Shank	SKU	Each
A 100-Piece Red Mounted Point Set	1/8"	310-3000	
B 48-Piece Red Mounted Point Set	1/8"	310-3010	
	3mm	310-3015	



Gesswein® Red Mounted Points

3/32" Shank

Very fast-cutting, nonloading aluminum oxide points, easily identified by their reddish-brown color. For fast grinding of medium and hard materials. Ideal for internal grinding of tools, dies and gauges. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels. Mounted on 3/32" dia. x 1-1/2" long plated steel shanks. Can be dressed with our Tru-Stone 380-1030.

Quantity discount breaks per SKU, not assorted. **Pkg. Price Breaks**
 3+: 15% Off

Shape dimensions shown in inches

Style	1	2	6	7
Grit	80	120	120	120
3/32" SKU	320-0010	320-0020	320-0060	320-0070
Pkg. of 24				

Shape dimensions shown in inches

Style	9	10	12	13	14
Grit	120	120	120	120	120
3/32" SKU	320-0090	320-0100	320-0120	320-0130	320-0140
Pkg. of 24					

Shape dimensions shown in inches

Style	15	16	20	21
Grit	120	120	120	120
3/32" SKU	320-0150	320-0160	320-0200	320-0210
Pkg. of 24				

A-B Rotating Bur Holders – Choose Between Two Styles

Rotating Bur and Tool Holder accepts up to 112 burs or tools. Features ball bearings for smooth action. Includes 92 holes for tools with 3/32" or 1/8" shanks, 13 holes for tools with 1/4" shanks, 7 holes for 1/16" to 3/32" drill bits and 2-3/4" dia. x 3"H center cup for hand tools such as files, screwdrivers and more. Measures 7" dia. x 4"H.

Rotating Bur Holder Universal has 45 holes for tools with 1/16" shanks, 69 two-step holes for tools with 3/32" or 1/8" shanks and 12 holes for tools with 1/4" shanks. Measure 7" dia. x 4"H.

Description	SKU	Each
A Rotating Bur and Tool Holder	850-0006	
B Rotating Bur Holder, Universal	850-0004	



Gesswein® Pink Mounted Points

These highly popular, high-quality mounted points are made with a pure, fused aluminum oxide alloyed with chrome, with a medium vitrified bonding agent. This combination gives it a distinctive pink color. These points have been popular in Europe for many years because of their versatility, on a variety of steels and alloys where a sharp cutting action is required. The attributes of using pink abrasive grain is that besides being friable and cool cutting, the points exhibit markedly better form holding characteristics, making them exceptionally durable, while giving the sharp cut that is needed. All are mounted on 1-1/2" long plated steel shanks.

Pink points can be dressed with our Tru-Stone 380-1030. For recommended speeds, consult the American National Standards Institute for full information on vitrified mounted wheels. Other shapes also available. Please call to special order.

Quantity discount breaks per SKU, not assorted. **Pkg. Price Breaks**
3+ 15% Off

Shape dimensions shown in inches	B42	B44	B45	B52	B53
Style	B42	B44	B45	B52	B53
Grit	80	100	120	80	80
1/8" SKU	340-0420	340-0440	340-0450	340-0520	340-0530
3mm SKU	340-0423	340-0443	340-0453	340-0523	340-0533
Pkg. of 24					

Shape dimensions shown in inches	B54	B55	B96	B97	B98
Style	B54	B55	B96	B97	B98
Grit	80	80	120	120	120
1/8" SKU	340-0540	340-0550	340-0960	340-0970	340-0980
3mm SKU	340-0543	340-0553	340-0963	340-0973	340-0983
Pkg. of 24					

Shape dimensions shown in inches	B121	B122	B123	B131	B132
Style	B121	B122	B123	B131	B132
Grit	80	80	120	80	80
1/8" SKU	340-1210	340-1220	340-1230	340-1310	340-1320
3mm SKU	340-1213	340-1223	340-1233	340-1313	340-1323
Pkg. of 24					

Shape dimensions shown in inches	B135	W142	W144	W145	W146
Style	B135	W142	W144	W145	W146
Grit	80	120	120	120	120
1/8" SKU	340-1350	340-1420	340-1440	340-1450	340-1460
3mm SKU	340-1353	340-1423	340-1443	340-1453	340-1463
Pkg. of 24					

Shape dimensions shown in inches	W153	W154	W163	W164
Style	W153	W154	W163	W164
Grit	100	100	80	80
1/8" SKU	340-1530	340-1540	340-1630	340-1640
3mm SKU	340-1533	340-1543	340-1633	340-1643
Pkg. of 24				

Shape dimensions shown in inches	W170	W171	W176	W182	W185
Style	W170	W171	W176	W182	W185
Grit	80	80	80	80	80
1/8" SKU	340-1700	340-1710	340-1760	340-1820	340-1850
3mm SKU	340-1703	340-1713	340-1763	340-1823	340-1853
Pkg. of 24					

A Gesswein® Pink Mounted Point Set

Gesswein Pink Mounted Points are available in a money-saving set of 48 pieces. This assortment is made from our most popular shapes and offers a point for almost every application. Includes six each of eight popular shapes, conveniently packaged in a box to hold all 48 points. Six each of the following shapes: B44, B52, B53, B122, B123, W145, W163, W176.

Description	Shank	SKU	Each
A 48-Piece Pink Mounted Point Set	1/8"	331-0010	
	3mm	331-0015	



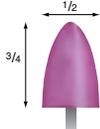
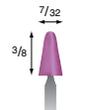
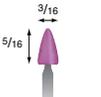
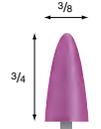
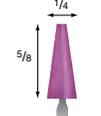
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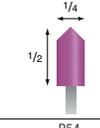
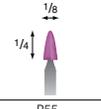
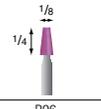
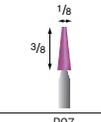
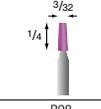
Gesswein® Purple Mounted Points

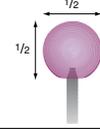
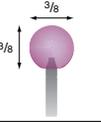
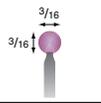
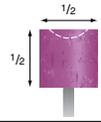
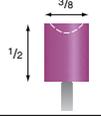
These "top of the line" mounted points are made with a unique combination of Sol Gel ceramic grain and our high quality Pink fused aluminum oxide to produce the sharpest cut, and most durable of the friable grain vitrified bond points. This combination gives it a distinctive purple color. Ceramic grain is the most friable grain produced. Due to the sharp cutting action, this mixture is used on high nickel alloys for the aerospace industry, as well as many common varieties of steels and alloys. All are mounted on 1-1/2" long plated steel shanks.

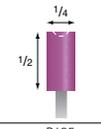
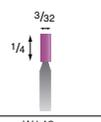
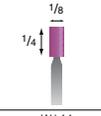
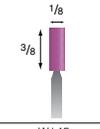
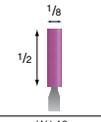
Purple points can be dressed with our Tru-Stone 380-1030). For recommended speeds, consult the American National Standards Institute for full information on vitrified mounted wheels. Other shapes also available. Please call to special order.

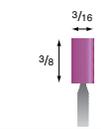
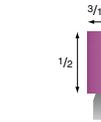
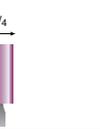
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3+ 15% Off

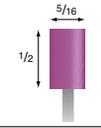
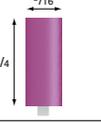
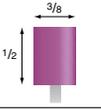
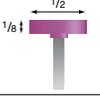
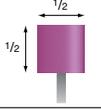
Shape dimensions shown in inches					
Style	B42	B44	B45	B52	B53
Grit	80	100	100	80	120
1/8" SKU	345-0420	345-0440	345-0450	345-0520	345-0530
3mm SKU	345-0423	345-0443	345-0453	345-0523	345-0533
Pkg. of 24					

Shape dimensions shown in inches					
Style	B54	B55	B96	B97	B98
Grit	80	120	120	120	120
1/8" SKU	345-0540	345-0550	345-0960	345-0970	345-0980
3mm SKU	345-0543	345-0553	345-0963	345-0973	345-0983
Pkg. of 24					

Shape dimensions shown in inches					
Style	B121	B122	B123	B131	B132
Grit	80	80	120	80	80
1/8" SKU	345-1210	345-1220	345-1230	345-1310	345-1320
3mm SKU	345-1213	345-1223	345-1233	345-1313	345-1323
Pkg. of 24					

Shape dimensions shown in inches					
Style	B135	W142	W144	W145	W146
Grit	80	120	120	120	120
1/8" SKU	345-1350	345-1420	345-1440	345-1450	345-1460
3mm SKU	345-1353	345-1423	345-1443	345-1453	345-1463
Pkg. of 24					

Shape dimensions shown in inches				
Style	W153	W154	W163	W164
Grit	80	80	80	100
1/8" SKU	345-1530	345-1540	345-1630	345-1640
3mm SKU	345-1533	345-1543	345-1633	345-1643
Pkg. of 24				

Shape dimensions shown in inches					
Style	W170	W171	W176	W182	W185
Grit	100	100	80	100	80
1/8" SKU	345-1700	345-1710	345-1760	345-1820	345-1850
3mm SKU	345-1703	345-1713	345-1763	345-1823	345-1853
Pkg. of 24					

A Gesswein® Purple Mounted Point Set

Gesswein Purple Mounted Points are available in a money-saving set of 48 pieces. This assortment is made from our most popular shapes and offers a point for almost every application. Includes six each of eight popular shapes, conveniently packaged in a box to hold all 48 points. Six each of the following shapes: B44, B52, B53, B122, B123, W145, W163, W176.

Description	Shank	SKU	Each
A 48-Piece Purple Mounted Point Set	1/8"	333-0010	
	3mm	333-0015	



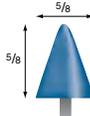
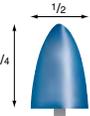
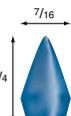
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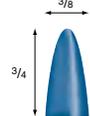
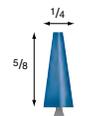
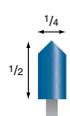
Gesswein® Blue Mounted Points

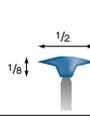
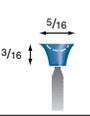
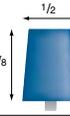
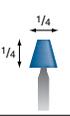
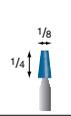
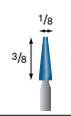
These superior quality points are made of aluminum oxide bonded with porcelain-type bonds, which provide the greatest strength and rigidity required for fast stock removal and long life. The ceramic bond controls the release of the aluminum oxide abrasive grains. As each particle begins to dull, the bond discharges it, allowing new abrasive grain to surface with fresh, sharp cutting edges. Points are securely bonded to their shanks and are guaranteed to run true.

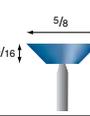
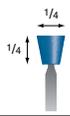
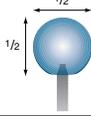
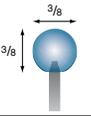
These hard points hold their shapes exceptionally well. Recommended for use on hardened steel. All are 120 (fine) grit aluminum oxide. They cut well and leave a smooth surface. All have 1-1/2" long plated steel shanks. Blue mounted points can be dressed with our Tru-Stone 380-1030. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels.

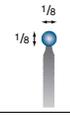
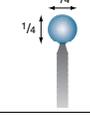
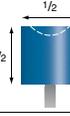
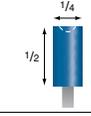
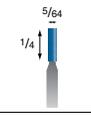
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 3+: 15% Off

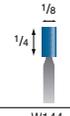
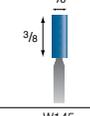
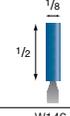
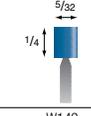
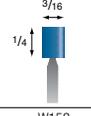
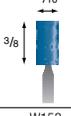
Shape dimensions shown in inches						
	5/8" x 3/4"	1/2" x 3/4"	1/4" x 5/16"	7/32" x 3/8"	3/16" x 5/16"	7/16" x 3/4"
Style	B41	B42	B43	B44	B45	B51
Grit	120	120	120	120	120	120
1/8" SKU	305-0410	305-0420	305-0430	305-0440	305-0450	305-0510
3mm SKU	305-0413	305-0423	305-0433	305-0443	305-0453	305-0513
Pkg. of 24						

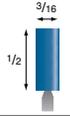
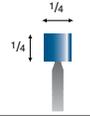
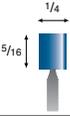
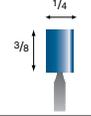
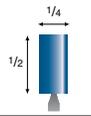
Shape dimensions shown in inches						
	3/4" x 3/8"	1/4" x 5/8"	1/4" x 1/2"	1/8" x 1/4"	5/8" x 1/8"	1/2" x 1/8"
Style	B52	B53	B54	B55	B71	B72
Grit	120	120	120	120	120	120
1/8" SKU	305-0520	305-0530	305-0540	305-0550	305-0710	305-0720
3mm SKU	305-0523	305-0533	-	305-0553	305-0713	305-0723
Pkg. of 24						

Shape dimensions shown in inches						
	1/2" x 1/8"	5/16" x 3/16"	1/2" x 5/8"	1/4" x 1/4"	1/8" x 1/4"	3/8" x 1/8"
Style	B73	B84	B91	B92	B96	B97
Grit	120	120	120	120	120	120
1/8" SKU	305-0730	305-0840	305-0910	305-0920	305-0960	305-0970
3mm SKU	305-0733	305-0843	305-0913	305-0923	305-0963	305-0973
Pkg. of 24						

Shape dimensions shown in inches						
	3/16" x 1/4"	5/8" x 3/16"	1/4" x 1/4"	1/2" x 1/2"	3/8" x 3/8"	3/16" x 3/16"
Style	B98	B103	B105	B121	B122	B123
Grit	120	120	120	120	120	120
1/8" SKU	305-0980	305-1030	305-1050	305-1210	305-1220	305-1230
3mm SKU	305-0983	305-1033	305-1053	305-1213	305-1223	305-1233
Pkg. of 24						

Shape dimensions shown in inches						
	1/8" x 1/8"	1/4" x 1/4"	1/2" x 1/2"	1/4" x 1/2"	5/64" x 1/4"	3/32" x 1/4"
Style	B124	B125	B131	B135	W140	W142
Grit	120	120	120	120	120	120
1/8" SKU	305-1240	305-1250	305-1310	305-1350	305-1400	305-1420
3mm SKU	305-1243	305-1253	305-1313	305-1353	305-1403	305-1423
Pkg. of 24						

Shape dimensions shown in inches						
	1/4" x 1/8"	3/8" x 1/8"	1/2" x 1/8"	1/4" x 5/32"	1/4" x 3/16"	3/8" x 3/16"
Style	W144	W145	W146	W149	W152	W153
Grit	120	120	120	120	120	120
1/8" SKU	305-1440	305-1450	305-1460	305-1490	305-1520	305-1530
3mm SKU	305-1443	305-1453	305-1463	305-1493	305-1523	305-1533
Pkg. of 24						

Shape dimensions shown in inches						
	1/2" x 3/16"	1/4" x 1/4"	5/16" x 1/4"	3/8" x 1/4"	1/2" x 1/4"	1/16" x 5/16"
Style	W154	W160	W161	W162	W163	W165
Grit	120	120	120	120	120	120
1/8" SKU	305-1540	305-1600	305-1610	305-1620	305-1630	305-1650
3mm SKU	305-1543	305-1603	305-1613	305-1623	305-1633	305-1653
Pkg. of 24						

Gesswein® Blue Mounted Points

3/32" Shank

Hard blue aluminum oxide points which hold their shapes, cut well and leave a smooth surface. Recommended for use on hardened steel. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels. Mounted on 3/32" dia. x 1-1/2" long plated steel shanks. Can be dressed with our Tru-Stone 380-1030.

Style	W168	W169	W170	W171	W175	W176	W178
Grit	120	120	120	120	120	120	120
1/8" SKU	305-1680	305-1690	305-1700	305-1710	305-1750	305-1760	305-1780
3mm SKU	305-1683	305-1693	305-1703	305-1713	305-1753	305-1763	305-1783
Pkg. of 24							

Style	W181	W182	W183	W185	W186	W187
Grit	120	120	120	120	120	120
1/8" SKU	305-1810	305-1820	305-1830	305-1850	305-1860	305-1870
3mm SKU	305-1813	305-1823	305-1833	305-1853	305-1863	305-1873
Pkg. of 24						

Style	W190	W200	W201	W210	W211	W215
Grit	120	120	120	120	120	120
1/8" SKU	305-1900	305-2000	305-2010	305-2100	305-2110	305-2150
3mm SKU	305-1903	305-2003	305-2013	-	305-2113	305-2153
Pkg. of 24						

Quantity discount breaks per SKU, not assorted. **Pkg. Price Breaks**
 3+: 15% Off

Style	1	2	6	9	10
Grit	120	120	120	120	120
3/32" SKU	315-0010	315-0020	315-0060	315-0090	315-0100
Pkg. of 24					

Style	12	13	14	15	16
Grit	120	120	120	120	120
3/32" SKU	315-0120	315-0130	315-0140	315-0150	315-0160
Pkg. of 24					

Style	20	21	22	32	34
Grit	120	120	120	120	120
3/32" SKU	315-0200	315-0210	315-0220	315-0320	315-0340
Pkg. of 24					

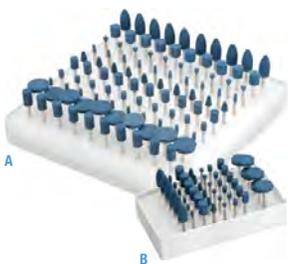
A-B Gesswein® Blue Mounted Point Sets

Gesswein Blue Mounted Points are available in money-saving sets of 48 and 100 pieces. These assortments are made from our most popular shapes and offer a point for almost every application. These sets offer big savings from the one-piece prices.

The 100-Piece Set includes ten each of our ten most popular shapes, conveniently packaged in a box to hold all 100 points. Ten each of the following shapes: B44, B52, B96, B123, W144, W152, W162, W170, W175, W200.

The 48-Piece Set is available on 1/8" or 3mm shanks and includes six each of eight popular shapes, conveniently packaged in a box to hold all 48 points. Six each of the following shapes: B44, B52, B123, W144, W152, W162, W176, W200.

Description	Shank	SKU	Each
A 100-Piece Blue Mounted Point Set	3/32"	305-3000	
B 48-Piece Blue Mounted Point Set	1/8"	305-3010	
	3mm	305-3015	



A Plastic Bur Holder – For 3/32" Shanks

Accepts up to 100 burs or tools with 3/32" shanks. Supplied with tilt stand. Measures 5" x 3". Color may vary.

Description	SKU	Each
Plastic Bur Holder	840-0007	1-2 3+

Gesswein® Light Blue Mounted Points

These ceramic mix mounted points incorporate a unique Sol Gel ceramic abrasive. The Sol Gel abrasive, produced by Sol Gel processing, is both hard and tough. It provides exceptional durability and cut rates in grinding mild, high-carbon and stainless steel as well as many nonferrous alloys. Under normal use, cut rate and wheel life are two to three times that of Red and Blue Mounted Points. Particularly suited for precision grinding. Form and radius holding are greatly increased due to Sol Gel's durability. Light Blue Mounted Points are extremely tough in all grades, chemically pure and of uniform quality. Can be dressed with our Tru-Stone 380-1030. All have 1-1/2" long plated steel shanks. For recommended speeds, consult the American National Standard Institute for full information.

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
3+: 15% Off

Style	B44	B52	B53	B55	B96	B97
Grit	120	120	120	120	120	120
1/8" SKU	322-0440	322-0520	322-0530	322-0550	322-0960	322-0970
3mm SKU	322-0443	322-0523	322-0533	322-0553	322-0963	322-0973
Pkg. of 24						

Style	B123	B124	B125	W144	W145	W163
Grit	120	120	120	120	120	120
1/8" SKU	322-1230	322-1240	322-1250	322-1440	322-1450	322-1630
3mm SKU	322-1233	322-1243	322-1253	322-1443	322-1453	322-1633
Pkg. of 24						

A Light Blue Mounted Point Set

Buy the 12-piece assortment of these points and have one for every application. Includes one each of above shapes. Conveniently packaged in a durable plastic box. Select between 1/8" or 3mm shanks.

Description	Shank	SKU	Each
A Light Blue Mounted Point Set	1/8"	312-3000	
Light Blue Mounted Point Set	3mm	312-3031	

B Handy Block – For 1/8", 3mm or 3/32" Shanks

Slight hardwood block with 88 holes each measuring 7/8" in diameter. Organize and see your tools at a glance. Stay-put rubber backing keeps block from sliding. Measures 4-1/2" x 6".

Description	SKU	Each
Handy Block	814-1215	



Gesswein® White Polishing Points

3/32" Shank

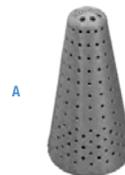
Formulated from 400 grit (extremely fine) white aluminum oxide in a soft vitrified bond, these points can be used on glass, porcelain, metal or stone. Produce a high finish. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels. Mounted on 3/32" dia. x 1-1/2"L plated steel shanks. Can be dressed with our Tru-Stone 380-1030.

Quantity discount breaks per SKU, not assorted.

Pkg. Price Breaks
3+: 15% Off

Style	3P	12P	14P	18P	19P	22P
Grit	400	400	400	400	400	400
3/32" SKU	325-0030	325-0120	325-0140	325-0180	325-0190	325-0220
Pkg. of 24						

Style	26P	32P	34P	41P	44P	46P
Grit	400	400	400	400	400	400
3/32" SKU	325-0260	325-0320	325-0340	325-0410	325-0440	325-0460
Pkg. of 24						



All accessories sold separately

A KONOS® Bench Tool Organizer

Keep everything you need at your fingertips with this lazy-susan style organizer. The KONOS is cone-shaped (9" tall with a depth and width of 5" x 5") and has 192 holes for 3/32" tools and 48 holes for 1/8" tools. Made in USA.

Description	SKU	Each	
		1-2	3+
KONOS Organizer	816-4060		

B Bur & Tool Caddy

Our solid wood 6-sided Bur & Tool Caddy rotates like a lazy-susan and holds an amazing amount of tools. Holes on sides measure: 3mm (quantity 288 for 3/32" and 3mm tools), 4mm (quantity 48 for 1/8" and 4mm tools) and 7.5mm (quantity 42 for 1/4" and 7.5mm tools).

Top is a removable lid for more storage and has 19 holes in the center which allow storage of items over 8" in length. Magnetic strips run across two of the sides to hold files and other metal tools. Stands 9-1/2" high and requires a minimum of 7-1/2" x 7-1/2" clearance to rotate, without tools.

Description	SKU	Each
Wooden Tool Holder	816-4058	

Busch® Pink Polishing Points

3/32" Shank

Made of genuine corundum, these points are recommended for use on harder metals. For recommended speeds, consult the American National Standard Institute for full information on vitrified mounted wheels. Mounted on 3/32" dia. x 1-1/2"L plated steel shanks. All are medium grit. Can be dressed with our Tru-Stone 380-1030 (see below). Made in Germany.

Quantity discount breaks per SKU, not assorted. **Pkg. Price Breaks**
 3+: 15% Off

Shape dimensions shown in inches	601	602	603	621	624	632
Style	601	602	603	621	624	632
Grit	Medium	Medium	Medium	Medium	Medium	Medium
3/32" SKU	330-1324	330-1325	330-1330	330-1340	330-1342	330-1345
Pkg. of 24						

Shape dimensions shown in inches	633	637	639	640	648
Style	633	637	639	640	648
Grit	Medium	Medium	Medium	Medium	Medium
3/32" SKU	330-1346	330-1350	330-1355	330-1360	330-1364
Pkg. of 24					

Shape dimensions shown in inches	649	652	661	662	665	716
Style	649	652	661	662	665	716
Grit	Medium	Medium	Medium	Medium	Medium	Medium
3/32" SKU	330-1365	330-1370	330-1375	330-1380	330-1382	330-1395
Pkg. of 24						

A Tru-Stone – For Dressing and Shaping Mounted Stones and Abrasive Wheels

A very hard and coarse grit silicon carbide stone with four different sized half-round grooves measuring 1/16", 1/8", 3/16" and 1/4" on one side. Quickly reshapes and resurfaces abrasive stones to like-new condition. Measures 3-1/2"L x 1-3/8"W x 9/16"H.

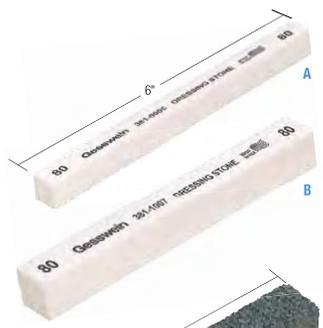
Description	SKU	Each	
		1-9	10+
Tru-Stone	380-1030		



A-B Type vs. Dressing Stones for Diamond Wheels

Made of premium quality white aluminum oxide. Very soft stones used for cleaning diamond wheels. Stones are evenly bonded and have precise grits.

Dimensions	Grit	SKU	Pkg. of 6	
			1-3	4+
A 6" x 1/2" x 1/2"	80	381-0005		
6" x 1/2" x 1/2"	120	381-0105		
6" x 1/2" x 1/2"	150	381-0115		
6" x 1/2" x 1/2"	220	381-0205		
6" x 1/2" x 1/2"	320	381-0305		
B 6" x 3/4" x 3/4"	80	381-1007		
6" x 3/4" x 3/4"	120	381-1107		
6" x 3/4" x 3/4"	150	381-1117		
6" x 3/4" x 3/4"	220	381-1207		
6" x 3/4" x 3/4"	320	381-1307		



C Dressing Stone – Coarse Grit

A very hard, 20 grit stone that will quickly smooth out and take off irregular edges from almost any grinding wheel or MX Lap. Also excellent for shaping Bear-Tex Wheels. Measures 6" x 1" square.

Description	Grit	SKU	Each
Coarse Dressing Stone	20	380-1010	



D Dressing Stone – Medium Grit

A very hard, 150 grit stone in a convenient shape for dressing grinding wheels, G-Flex and GMX wheels. Measures 2-1/2"L x 1-1/2"W x 1/2"H.

Description	Grit	SKU	Each
Medium Dressing Stone	150	380-1020	



E Wet Stick Diamond Dresser – Fine Grit

Use this 320 grit, white aluminum oxide dressing stone with water for cleaning diamond points. Measures 2"L x 3/4"W x 1/2" thick.

Description	SKU	Each
Wet Stick	380-1022	



F Norton® Norbide® Dressing Stick – Super Fine Grit

The Norbide Dressing Stick is used to economically dress, shape and true vitrified grinding wheels. Consists of a super fine grit boron carbide abrasive providing high quality dressing. This hard stick offers long-lasting durability. Measures 3"L x 1/2"W x 1/4"H.

Description	SKU	Each
Norbide Dressing Stick	380-1035	



G Diamond Impregnated Dressing Stone

Has a concave center hole for forming a point on polishing rods. Measures 3/4" dia. x 1/8" thick.

Description	SKU	Each	
		1-4	5+
Dressing Stone	145-1240		





A Norton® White Aluminum Oxide Grinding Wheels – For Light Grinding

For light grinding of all kinds. Particularly good on hard, heat-sensitive materials such as high-speed steel and cast-alloy tools. Cannot be used on a tapered spindle, must use an arbor.

Dia. x Thick x AH	Grit Hardness	SKU	Each	
			1-9	10+
A 4" x 1/2" x 1/2"	60 Hard	845-0054		
4" x 1/2" x 1/2"	100 Hard	845-0100		

B-C Norton® Bear-TeX® Wheels

For quick removal of marks, scratches and surface imperfections. Also great for producing a consistent satin finish. Made of a cushion-type nylon web impregnated with silicon carbide abrasive. Bear-TeX does not load or heat up. The 220 grit fine wheel is our most popular; the other grits are for faster finishing.



Dia. x Thick x AH	Grit	Max. RPM	SKU	Each	
				1-19	20+
B 3" x 3/4" x 1/4"	150	8,000	845-0240		
3" x 3/4" x 1/4"	220	8,000	845-0250		
C 6" x 1" x 1"	180	6,000	845-0259		

*Comes with 1/2" bushing.

D-E 3M Scrubber™ Light Deburring Wheel

Clean, safe and economical wheel for removing sprues, parting lines, firescale and oxidation. Produces a satin finish on copper, brass and stainless steel. Silicon carbide.



Description	Dia. x Thick x AH	Max. RPM	SKU	Each
D Fine	6" x 1" x 1"	6,000	845-1089	
E Tapered Spindle Adapter for 6" Discs		6,000	145-1931	

F 3M Scotch-Brite™ EXL Wheel

Excellent choice for deburring and finishing. Medium grade aluminum oxide. Mount on an arbor for use on polishing motor.



Description	Dia. x Thick x AH	Max. RPM	SKU	Each	
				1-3	4+
Medium	6" x 1/2" x 1/2"	4,500	845-0305		

G Rub-Out Stick and Holder

For touch-ups and removal of light scratches on polished surfaces. Made of flexible rubber with silicon carbide abrasive. Holder gives support and gripping power. Stick can be exposed or withdrawn as desired and is easily dressed to the best shape for the job. Also removes rust, heat marks and stains while leaving a polished surface. Measures 6"L x 3/8" dia.



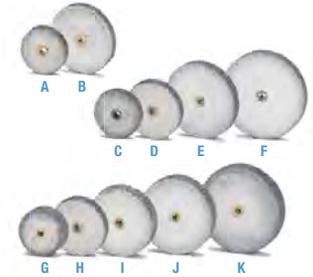
Description	Fine Grit		Extra-Fine Grit		Each
	SKU	SKU	1-4	5+*	
Stick and Holder	145-1300	145-1302			
Refill Stick	145-1306	145-1308			

*Quantity discount for orders of one item number only, not assorted.

HeatFREE Wheels

Useful in preparing contrast finishes and texturing – much coarser than a brushed satin finish. Often used for fast grinding and metal removal such as cleaning up casting sprues, because these very hard wheels are made of silicon carbide in a resinoid bond. HeatFREE Wheels break down steadily so they are constantly exposing new grit which allows them to produce a uniform, coarse, brushed-look finish with tiny highlights. Easily shaped with a file if desired. 1/16" metal arbor hole. Max. operating speed: 25,000 RPM. Sold in packages of 10. Made in Mexico.

Dia. x Thick	SKU	Pkg. of 10	
		10-40	50+
A 1/2" x 3/32"	845-0030		
B 3/4" x 3/32"	845-0024		
C 1/2" x 1/8"	845-0029		
D 5/8" x 1/8"	845-0026		
E 7/8" x 1/8"	845-0020		
F 1" x 1/8"	845-0017		
G 1/2" x 3/16"	845-0028		
H 5/8" x 3/16"	845-0025		
I 3/4" x 3/16"	845-0022		
J 7/8" x 3/16"	845-0019		
K 1" x 3/16"	845-0016		



L-Q Unitized Mounted Points – 1/8" Shank

Ideal for a variety of deburring, blending, finishing and polishing applications. Consist of durable unitized material embedded with either silicon carbide for a fine finish or aluminum oxide for a medium or coarse finish. Mounted on 1/8" shanks. Conform to workpieces for consistent, uniform finishing without undercutting or gouging.

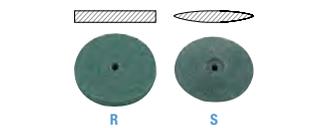
Style	Dia. x H	Max. RPM	Coarse	Medium	Fine	Each
L B42	1/2" x 3/4"	33,750	845-0120	845-0110	845-0080	
M B52	3/8" x 3/4"	45,300	845-0121	845-0111	845-0081	
N B90	1/2" x 1/2"	34,500	845-0122	845-0112	845-0082	
O W160	1/4" x 1/4"	81,300	845-0123	845-0113	845-0083	
P W183	1/2" x 1/4"	51,700	845-0124	845-0114	845-0084	
Q W185	1/2" x 1/2"	34,500	845-0125	845-0115	845-0085	



R-S EVE® Prepolishing Green Silicone Wheels

You will find these 220 grit, silicon carbide EVE Prepolishing wheels ideal for working on intricate surfaces. They are extremely flexible and will follow contours exceptionally well. They leave a smooth finish, ready for final polishing. Maximum operating speed: 10,000rpm. 1/16" arbor hole.

Shape	Dia. x Thick	SKU	Pkg. of 10	SKU	Pkg. of 100
R SE Wheel	7/8" x 7/8"	145-1371		145-1370	
S KE Wheel	7/8"	145-1373		145-1372	



T-Z Screw Mandrels

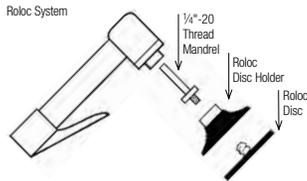
Use in handpieces and hand grinders for wheels with a 1/16" or 1/8" arbor hole.

Shank	For AH	SKU	Pkg. of 3		Shank	For AH	SKU	Pkg. of 3	
			1-3	4+				1-3	4+
T 3/32"	1/16"	840-3170			X 1/8"	1/16"	840-3150		
U 3/32"	1/16"	840-3160			Y 1/8"	1/8"	840-3100		
V 3/32"	1/16"	840-3175			Z 1/8"	1/8"	840-3110		
W 3/32"	1/8"	840-3060							



3M Roloc™ Discs

3M Roloc discs allow fast and efficient deburring, blending, polishing and finishing on all types of metal surfaces. They resist loading even under severe operating conditions. The Roloc design makes changing discs easy: the threaded male button on the back of each disc allows firm mounting to Roloc Disc Holder. Lock securely in place with a half-twist, or remove with half-twist in opposite direction. Discs are color-coded or have color-coded button for easy grit identification. Use with right-angle grinders.



A



A 3M Roloc™ Discs

Made of 3M Cubitron and premium aluminum oxide grains resin-bonded onto heavy cloth backing. Mount on Roloc Disc Holders (see below).

Dia.	Max. RPM	Pkg. of 50		
		60 Grit Orange	80 Grit Yellow	120 Grit White
A 2"	25,000**	105-3030	105-3035	105-3040

*Quantity discount for orders of one item number only; not assorted.
**Max. operating speed of 20,000rpm when used with the soft Roloc Disc Holder.

B



B 3M Roloc™ Scotch-Brite™ Discs

These discs remove burs with ease, leaving metal surfaces ready for final finishing. Can also be used to remove light rust, oxides and coatings. Mount on Roloc Disc Holders (see below).

Dia.	Max. RPM	Pkg. of 10		
		Coarse Grit Brown	Medium Grit Maroon	Very Fine Grit Blue
1"	30,000	845-1152	845-1151	845-1150
1-1/2"	30,000	845-1155	845-1154	845-1153
2"	25,000**	845-1158	845-1157	845-1156

*Quantity discount for orders of one item number only; not assorted.
**Max. operating speed of 20,000rpm when used with the soft Roloc Disc Holder.

C-F 3M Roloc™ Disc Holders

Rubber holders available in corresponding diameters and varying degrees of hardness for a variety of grinding and surface finishing applications. Harder holders cause discs to act more aggressively. Use soft pads for contour work. Holders are female threaded to receive any standard 1/4" 20 thread mandrel or our 105-3110. For use with Roloc discs (see above).



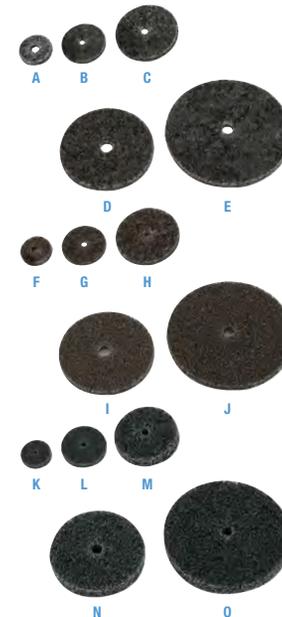
Dia.	Hardness	Max. RPM	SKU	Each	
				1-4	5+
C 1"	Medium	30,000	105-3070		
	Hard	30,000	105-3085		
	Medium	30,000	105-3080		
E 2"	Soft	30,000	105-3075		
	X-Hard	25,000	105-3105		
	Hard	25,000	105-3100		
F Disc Holder Mandrel, 1/4" shank	Medium	25,000	105-3095		
	Soft	20,000	105-3090		
			105-3110		

A-0 3M Scotch-Brite™ Small EXL Unitized Wheels

For deburring, blending parting lines, removing flash, cleaning and finishing on all metal alloys, as well as many plastics and composites. Great for cleanup prior to and after soldering and welding. Produce fine finishes on tooled pieces, aerospace, automotive and electronic components as well as medical instruments. Long-lasting to help reduce finishing operation costs. Synthetic fiber and resin construction makes a semi-resilient wheel that follows contours well and eliminates undercutting and gouging. All wheels are cool-running and resist heat buildup. Available in three color-coded grits listed on the back of each wheel (orange), medium (red) and fine (purple).

Dia. x Thickness x AH	Max. RPM	SKU	Each	
			1-9	10-49
Coarse Grit (hard density AlO) Orange EXL				
A 1/2" x 1/8" x 1/8"	40,100	845-1056		
B 3/4" x 1/8" x 1/8"	40,100	845-1057		
C 1" x 1/8" x 1/8"	35,100	845-1060		
D 1-1/2" x 1/8" x 3/16"	30,100	845-1069		
E 2" x 1/8" x 3/16"	22,100	845-1073		
Medium Grit (medium density AlO) Red EXL				
F 1/2" x 1/8" x 1/8"	40,100	845-1055		
G 3/4" x 1/8" x 1/8"	40,100	845-1058		
H 1" x 1/8" x 1/8"	35,100	845-1059		
I 1-1/2" x 1/8" x 3/16"	30,100	845-1068		
J 2" x 1/8" x 3/16"	22,100	845-1072		
Fine (soft density SiC) Purple EXL				
K 1/2" x 1/4" x 1/8"	35,100	845-1062		
L 3/4" x 1/4" x 1/8"	35,100	845-1063		
M 1" x 1/4" x 1/8"	30,100	845-1061*		
N 1-1/2" x 1/4" x 3/16"	20,100	845-1070		
O 2" x 1/4" x 3/16"	16,100	845-1074		

*Most popular.



P-S Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels up to 1/4" thick. Threads are right-hand.

Shank	For AH	SKU	Pkg. of 3	
			1-3	4+
P 3/32"	1/8"	840-3060		
Q 1/8"	1/8"	840-3100		
R 1/8"	1/8"	840-3110		
Each				
S 1/4"	3/16"	840-3300		



T 3M Scotch-Brite™ EXL Unitized Wheel Set

This 30-piece set includes 26 wheels from 1/2" to 2" in diameter (eight 1/2", six 1", six 1-1/2" and six 2" wheels), two 3/8" and two 1/4" shank mandrels.

Description	SKU	Each
30-Piece Set	845-1054	





A Fiber Flap Wheel – 1/4" Shank

Made of resilient aluminum oxide material. These wheels replace hand pads and reduce the need for finishing operations. For light deburring, polishing and satin finishing steel, nonferrous metal and wood. Ideal for surface contaminant removal. Max. operating speed: 20,000rpm. Mounted on 1/4" shanks. Made in USA.

Dia. x Thickness	Coarse	Medium	Fine	Very Fine	Each	
	SKU	SKU	SKU	SKU	1-2	3+
A 2" x 1"	108-0040	108-0050	108-0060	108-0070		
3" x 1"	108-0140	108-0150	108-0160	108-0170		

*Quantity discount for orders of one item number only, not assorted.



B Mounted Hard FR Fiber Wheel – 3/32" Shank

Ideal for stock removal, this wheel has only slight resilience and cuts fast. Made of silicon carbide. Measures 1" dia. x 1/4" thick. 3/32" stainless steel shank. Imported.

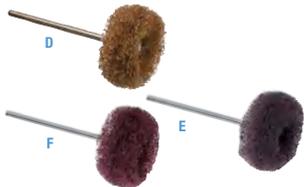
Description	Dia. x Thickness	SKU	Each	
			1-11	12+
FR Fiber Wheel	1" x 1/4"	288-2272		



C Mounted Flexible SLP Fiber Wheel – 3/32" Shank

A flexible yet firm unitized abrasive mounted wheel made of 180 grit pure alumina. Produces a fine, smooth finish. Measures 7/8" dia. x 1/8" thick. 3/32" stainless steel shank. Imported.

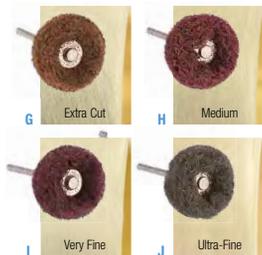
Description	Dia. x Thickness	SKU	Each	
			1-11	12+
SLP Fiber Wheel	7/8" x 1/8"	288-2276		



D-F 3M Scotch-Brite™ Wheels – 2-PLY, 3/32" Shank

Soft double PLY Scotch-Brite easily conforms to surface contours. Removes a small amount of metal while producing a satin finish. Measure approximately 7/8" dia. on 3/32" stainless steel shank. Max. operating speed: 10,000rpm. Made in Germany.

Description	Abrasive	Color	SKU	Each	
				1-11	12+
D Coarse	AlO	Brown	288-2280		
E Medium/Fine	AlO	Red	288-2282		
F Fine	AlO	Violet	288-2284		



G-J Mounted Satin Finish Wheels – 3-PLY, 3/32" Shank

Use these extra-thick wheels to create the exact degree of satin finish you want, from the soft and subtle texture of Extra Cut to the lustrous glow of Ultra-Fine. Made of dense-weave fiber for a uniform, nondirectional finish. Last much longer than conventional satin finish buffs. Measure approx. 7/8" dia. x 3/8" thick with 3/32" shank. To try all four grits, purchase our money-saving eight-piece intro pack. Imported.

Description	Abrasive	Color	SKU	Each	
				1-11	12+
G Extra Cut	AlO	Brown	288-2260		
H Medium	AlO	Red	288-2262		
I Very Fine	AlO	Dark Red	288-2264		
J Ultra-Fine	SiC	Gray	288-2266		
8-Piece Pack (two of each grit)			288-2270		



K Compressed Fiber Wheel – 3/32" Shank

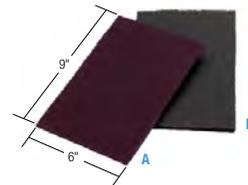
Fibers are compressed and bonded with aluminum oxide to make a firm, dense long lasting wheel with some flexibility. Creates a beautiful distinct scratch finish that contrasts well with highly polished areas. Recommended working speed: 5,000rpm. Made in Germany.

Description	Dia. x Thickness	SKU	Each	
			1-11	12+
Coarse	7/8" x 3/8"	288-2250		

A-B Norton® Bear-Tex™ Hand Pads

Made of loose nonwoven fiber with abrasive grain mixed throughout. Can be easily cut to desired size. For cleaning, scuffing, deburring or finishing surfaces by hand. Available in two grades. Measure approximately 6"L x 9"W x 3/8"H.

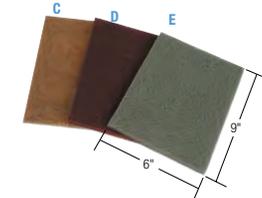
Color	Grit	Abrasive	Application	SKU	Pkg. of 20	
					1-2	3+
A Maroon	Very Fine	AlO	General-purpose, deburring	108-7447		
B Gray	Ultra-Fine	SiC	Light cleaning and finishing	108-7448		



C-E 3M Scotch-Brite™ Hand Pads

On surfaces that require cleaning, scuffing, deburring or finishing by hand, Scotch-Brite hand pads outperform steel wool, wire brushes and other nonwoven hand pads. They cut faster and leave a more consistent finish. And Scotch-Brite pads will never rust, so they can be used with water or solvents. Available in three color-coded grades for a variety of cleaning and finishing jobs. Measure 6" x 9". Can be used with Mini Mandrel 108-7463 (see below).

Color	Grit	Abrasive	Application	SKU	Pkg. of 20	
					1-2	4+
C Tan	Coarse	AlO	Heavy-duty cleaning	108-7464		
D Maroon	Fine	AlO	Cleaning and finishing	108-7457		
E Light Gray	Extra-Fine	SiC	Fine cleaning and finishing	108-7453		



F 3M Scotch-Brite™ Mini Mandrel – 1/4" Shank

For use with 1" x 1-1/2" pieces of Scotch-Brite hand pads (see above). Use on contours or to reach tight areas. Acts like a flap wheel. Measures 2-7/8" long. Has 1/4" shank.

Description	Max. RPM	SKU	Each
Mini Mandrel	14,000	108-7463	



G Scotch-Brite™ – 3" Dia.

Two-Ply of 3M Scotch-Brite are supported by two rows of stiff white Chung King bristle secured onto a plastic hub. The bristles give support to the application of more pressure for faster results. Additionally, both brush and Scotch-Brite accept compounds and pastes making this a versatile finishing tool. May be use on tapered spindle. Max operating speed 2,800rpm.

Hub Dia.	Arbor Hole	Trim Length	SKU	Each
1-1/2"	1/4"	3/4"	114-5199	



H Satin Finish Buffs

Made of a stiff, nonwoven material, Satin Finish Buffs have abrasive embedded in a red synthetic fiber. They produce a beautiful satin finish and conform to a wide variety of surface contours. Available in either 2-PLY or 3-PLY with leather center. All measure 4" dia. x 3/16" AH. Made in USA.

Grit	2-Ply		3-Ply	
	SKU	Each	SKU	Each
H Coarse	142-3030	1-11 12+	142-3050	1-11 12+
Medium	142-3020		142-3045	
Fine	142-3010		142-3040	
Extra-Fine	142-3005		142-3035	



I-J Satin Flap Wheels

Densest satin flap wheels on the market. Made of aluminum oxide. As each is used, fiber on the surface softens to create a beautiful finish with no cross-hatching or overlap marks. Medium produces a subtle line effect similar to a brush finish. Very Fine produces a glowing, bright satin finish. Measures 4" dia. x 1" thick x 3/8" AH. Imported.

Dia. x Thickness x AH	Grit	SKU	Each
I 4" x 1" x 3/8"	Medium	142-3075	
J 4" x 1" x 3/8"	Very Fine	142-3070	





A

A Sintered Diamond Cut-Off Discs

Easily cut carbon fiber, carbide, steels, acrylics and other hard-to-cut materials. The 1-1/4" disc is sintered diamond on outer edge (approx. 1/8"). Has 1/16" arbor hole with a max. operating speed of 20,000rpm.

	Dia. x Thickness*	SKU	Each
A	1-1/4" x 0.040"	845-1085	

*Thickness of each disc may vary slightly.

B-G Resin Bond Cut-Off Discs

Both sides and edges of these thin discs can be used for slitting and finishing steel, brass, porcelain, and acrylics. Available in either Silicon Carbide (SiC) or aluminum oxide (AlO). Max. operating speed: 25,000 rpm for discs up to 1"; 21,000 for discs over 1".



B

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	Dia. x Thick	Arbor Hole	Abrasive	SKU	Pkg. of 50
					1-4 5+
B	1-1/4" x 0.025"	1/8"	AlO	845-0412	
C	1-1/2" x 0.050"	1/8"	AlO	845-0414	
					Pkg. of 100
					1-4 5+
D	7/8" x 0.023"	1/16"	SiC	845-0404*	
E	7/8" x 0.023"	1/16"	SiC	845-0406	
F	1" x 0.023"	1/16"	SiC	845-0408	
G	1" x 0.025"	1/16"	AlO	845-0410	

*One side safe; abrasive on one side only.

H-I Thin Cut-Off Discs

These thin silicon carbide discs will cut gates and sprues in a second, while leaving very thin spaces. Recommended operating speed: 12,000 to 14,000rpm for Ultra-Thin, 25,000rpm for Very-Thin.



H

I

	Description	Dia. x Thick	Arbor Hole	SKU	Pkg. of 25
					1-4 5+
H	Ultra-Thin Disc	7/8" x 0.009"	1/16"	845-0400	
					Pkg. of 50
					1-4 5+
I	Very-Thin Disc	7/8" x 0.015"	1/16"	845-0402	

J-L Dedeco® Thin Separating Discs

Extremely thin discs coated with silicon carbide abrasive on both sides. Great for precision work allowing for fast and clean cutting. Available in three thicknesses: Ultra-Thin (UT), super-thin (ST) and Very-Thin (VT). Max. operating speed: 21,000rpm.



J

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	Description	Dia. x Thick	Arbor Hole	SKU	Pkg. of 25
					1-4 5+
J	UT Discs, box of 25	7/8" x 0.005"	1/16"	845-1051	
K	ST Discs, box of 25	7/8" x 0.009"	1/16"	845-1052	
L	VT Discs, box of 50	7/8" x 0.015"	1/16"	845-1032	

M-S Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels with a 1/16" and 1/8" arbor hole.



M

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	Shank	For AH	SKU	1-3	4+	Pkg. of 3	For AH	SKU	1-3	4+	Pkg. of 3
M	3/32"	1/16"	840-3170				Q	1/8"	1/16"	840-3150	
N	3/32"	1/16"	840-3160				R	1/8"	1/8"	840-3100	
O	3/32"	1/16"	840-3175				S	1/8"	1/8"	840-3110	
P	3/32"	1/8"	840-3060								

A Fast Cut Discs

Truly unique and versatile discs made from cotton fiber, aluminum oxide grain and resin bonded. They are long lasting and very durable and produce a relatively smooth surface finish. The 1-1/2" disc is reinforced with Fiberglass for extra strength. Thickness dimension will vary due to nature of materials. Both have 1/8" arbor holes and cut on the edge. Made in the USA.

	Dia. x Thick	Grit	Max. RPM	SKU	Each
					1-11 12+
A	1-1/2" x 0.0625"	80	36,000	845-3800	
	1" x 0.040"	180	45,000	845-3700	

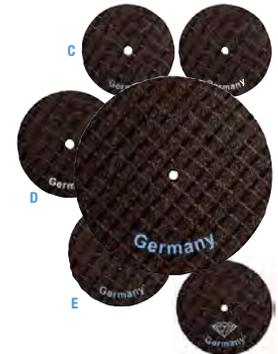


A

B-G Fiber Discs

Fast cutting cut-off discs reinforced for strength and durability. They are available in various sizes, thicknesses and abrasives. Aluminum Oxide for metals, Silicon Carbide for ceramics and Diamond for special applications. All have 1/16" arbor holes. Made in Germany.

	Dia. x Thickness	Abrasive	Max. RPM	SKU	Pkg. of 10
					Each
	7/8" x 0.009" (22mm x 0.2mm)	AlO	15,000	845-1037	
B	7/8" x 0.009" (22mm x 0.2mm)	SiC	15,000	845-1053	
C	7/8" x 0.012" (22mm x 0.3mm)	AlO	15,000	845-1038	
D	1" x 0.012" (25mm x 0.3mm)	AlO	10,000	845-1016	
E	1" x 0.012" (25mm x 0.3mm)	SiC	10,000	845-1039	
F	1-1/8" x 0.039" (40mm x 1.0mm)	AlO	5,000	845-1049	
					Each
G	3/4" x 0.009" (20mm x 0.2mm)	Diamond	15,000	845-1082	



B

C

D

E

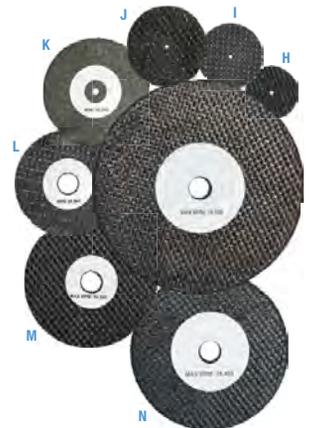
F

G

H Nylon Cut-Off Discs

These resin-bonded discs are reinforced with interwoven nylon fibers to provide extra strength and durability for cut off operations. Two types are offered: One with durable Semi-Frangible Aluminum Oxide (AlO), and the other with a combination of Aluminum Oxide and Premium Ceramic Abrasive (Cera) which produces the sharpest cut. All 80 grit. Made in USA.

	Dia. x Thick	Arbor Hole	Abrasive	Max. RPM	SKU	Each
						1-9 10+
H	1" x 0.045"	1/16"	AlO	60,000	845-1011	
	1" x 0.045"	1/16"	AlO+CERA	60,000	845-1040	
I	1-1/4" x 0.045"	1/16"	AlO	50,000	845-1012	
	1-1/4" x 0.045"	1/16"	AlO+CERA	50,000	845-1041	
J	1-1/2" x 0.045"	1/16"	AlO	30,000	845-1028	
	1-1/2" x 0.045"	1/16"	AlO+CERA	30,000	845-1042	
K	2" x 0.045"	1/8"	AlO	30,000	845-1013	
	2" x 0.045"	1/8"	AlO+CERA	30,000	845-1043	
	2" x 0.0625"	1/8"	AlO	30,000	845-1014	
	2" x 0.0625"	1/8"	AlO+CERA	30,000	845-1044	
L	2" x 0.045"	3/8"	AlO	30,000	845-1206	
	2" x 0.0625"	3/8"	AlO	30,000	845-1208	
	2" x 0.094"	3/8"	AlO	30,000	845-1210	
M	2-1/2" x 0.045"	3/8"	AlO	30,000	845-1212	
	2-1/2" x 0.045"	3/8"	AlO	30,000	845-1214	
	2-1/2" x 0.094"	3/8"	AlO	30,000	845-1216	
N	3" x 0.045"	3/8"	AlO	25,000	845-1218	
	3" x 0.0625"	3/8"	AlO	25,000	845-1220	
	3" x 0.094"	3/8"	AlO	25,000	845-1222	
O	4" x 0.045"	3/8"	AlO	19,000	845-1224	
	4" x 0.0625"	3/8"	AlO	19,000	845-1226	
	4" x 0.094"	3/8"	AlO	19,000	845-1228	



H

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A-F Silicon Carbide and Felt PSA Discs

Precut to fit our disc holders, these discs have pressure-sensitive adhesive backing. Use silicon carbide discs for rough through intermediate finish; use felt discs for final finish of metal surfaces.

	80 Grit				120 Grit				180 Grit				320 Grit			
	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	SKU	
Silicon Carbide Discs																
A	11mm round	510-0600	510-0605	510-0610	510-0615											
B	21mm round	510-0620	510-0625	510-0630	510-0635											
C	31mm round	510-0640	510-0645	510-0650	510-0655											
Felt Discs																
D	11mm round	510-0245														
E	21mm round	510-0250														
F	31mm round	510-0255														

G-H Aluminum Oxide PSA Discs – 20mm

Our 20mm PSA Discs have pressure sensitive adhesive backing to allow them to affix to any 20mm holder. If your surface grinder has a 6mm shaft, you can use our 840-0140 holder.

Description	Dia.	Grit	SKU	Pkg. of 150
G PSA Disc	20mm	60	105-0402	
		100	105-0404	
		150	105-0406	
		240	105-0408	
		320	105-0410	
		400	105-0412	
		600	105-0414	
Description				
H PSA Disc Holder for 6mm Surface Air Grinders	20mm		840-0140	Each

I-J Aluminum Oxide PSA Discs – 30mm

Our 30mm PSA Discs have pressure sensitive adhesive backing to allow them to affix to any 30mm holder. If your surface grinder has a 7mm shaft, you can use our 850-2241 holder.

Description	Dia.	Grit	SKU	Pkg. of 150
I PSA Disc	30mm	60	850-2229	
		100	850-2231	
		150	850-2232	
		240	850-2233	
		320	850-2234	
		400	850-2239	
		600	850-2249	
Description				
J PSA Disc Holder for 7mm Surface Air Grinders	30mm		850-2241	Each

K-M Disc Holders – 3mm Shank

Made of soft rubber to work well on flat or contoured surfaces. Holders allow a small overlap of material when used with our pre-cut abrasive and felt discs. Cut other abrasives (such as gem cloth, diamond foil or diamond sheet) to size and customize for the specific job.

Size	SKU	Each
K 10mm round	510-0260	
L 20mm round	510-0265	
M 30mm round	510-0270	



A-E PSA Discs

These flexible discs are made of aluminum oxide resin-bonded on a cloth backing for greater durability. Pressure-sensitive adhesive backing withstands the high frictional heat generated when a disc is in use. Each disc has a peel-off backing to ensure adhesive freshness.

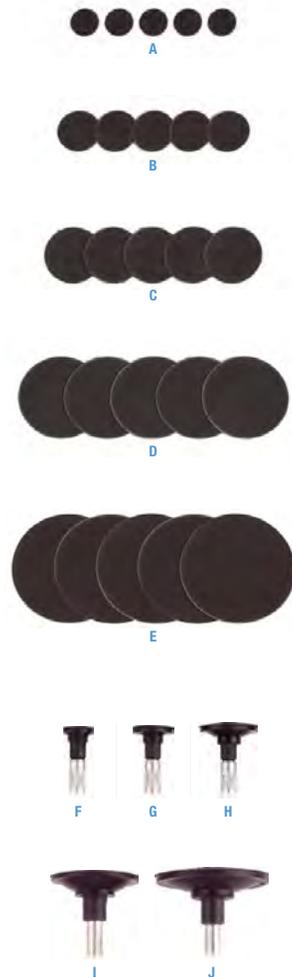
Grit	Dia.	SKU	Pkg. of 100
A	80	105-0508	
	120	105-0512	
	180	105-0518	
	240	105-0524	
	320	105-0532	
B	80	105-0708	
	120	105-0712	
	180	105-0718	
	240	105-0724	
	320	105-0732	
C	60	105-1006	
	80	105-1008	
	120	105-1012	
	180	105-1018	
	240	105-1024	
D	320	105-1032	
	80	105-1508	
	120	105-1512	
	180	105-1518	
	240	105-1524	
E	320	105-1532	
	60	105-2006	
	80	105-2008	
	120	105-2012	
	180	105-2018	
	240	105-2024	
	320	105-2032	
	400	105-2040	

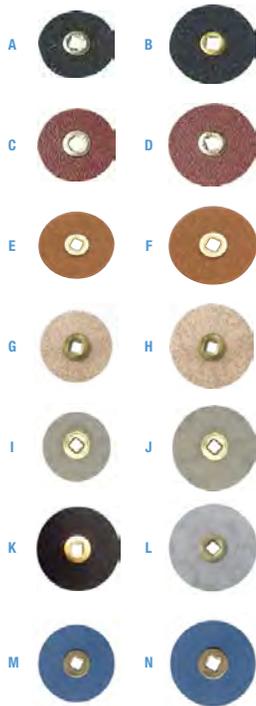
F-J PSA Disc Holders – 1/8" and 1/4" Shanks

Flexible rubber pads mounted on shanks to hold any PSA (Pressure Sensitive Adhesive) Discs. Rubber pads also provide cushioning for uniform finish. Actual pad diameters are slightly smaller than specified to ensure easy removal of discs and to prevent material from marring the work surface. Max. operating speed: 22,000 rpm.

Head Dia.	1/8" Shank	1/4" Shank	Each	
	SKU	SKU	1-2	3+*
F 1/2"	840-0010	840-0020		
G 3/4"	840-0030	840-0040		
H 1"	840-0050	840-0060		
I 1-1/2"	840-0070	840-0080		
J 2"	-	840-0090		

*Quantity discount for orders of one item number only; not assorted.





A-L Moore's Snap-on Discs

Snap-on Discs feature quick-change, sure-lock brass centers with one cutting face on paper or plastic backing. **Emery** contains black silicon carbide, a fast cutting abrasive; **Adalox** and **AIO** contain aluminum oxide, less aggressive than Emery. **Garnet**, a natural mineral and is slightly less aggressive than Garnet than Adalox. **Sand** contains long-lasting white aluminum oxide, slightly less aggressive than Garnet. Water Proof **Silicon Carbide** is less aggressive than Sand. Max. operating speed: 30,000rpm. Use with Snap-on Mandrel (840-3200). Made in USA.

Type/Backing	Dia.	Grit					Pkg. of 200
		Coarse	Medium	Fine	Extra Fine	Coarse	
A	Emery/Paper 3/4"	845-3113	845-3115	845-3117	-	-	-
B	Emery/Paper 7/8"	845-3112	845-3114	845-3116	-	-	-
C	Adalox/Paper 3/4"	845-3103	845-3105	845-3107	-	-	-
D	Adalox/Paper 7/8"	845-3102	845-3104	845-3106	-	-	-
E	Garnet/Paper 3/4"	845-3121	845-3123	845-3125	-	-	-
F	Garnet/Paper 7/8"	845-3120	845-3122	845-3124	-	-	-
G	Garnet/Plastic 3/4"	-	-	845-3127	845-3129	-	-
H	Garnet/Plastic 7/8"	-	-	845-3126	845-3128	-	-
I	Sand/Plastic 3/4"	845-3133	845-3135	845-3137	845-3139	-	-
J	Sand/Plastic 7/8"	845-3132	845-3134	845-3136	845-3138	-	-
K	WP SiC/Plastic 7/8"	845-3142	845-3144	845-3146	-	-	-
Type/Backing	Dia.	SKU	SKU	SKU	SKU	SKU	Pkg. of 100
L	AIO/Plastic 7/8"	845-2900	845-2902	845-2899	-	-	-

M Snap-on Blue Zirconia Discs

These resin-backed discs are ideal for use with titanium, platinum and other hard metals. Use with Snap-on Mandrel (840-3200). Made in USA.

Description	Dia.	Grit				Pkg. of 50
		Coarse	Medium	Fine	Coarse	
M	Blue Zirconia 3/4"	845-2740	845-2745	845-2750	-	-
N	Blue Zirconia 7/8"	845-2725	845-2730	845-2735	-	-

*Quantity discount for orders of one item number only; not assorted.

O Snap-on Mandrel - 3/32" Shank

One-piece construction from high quality steel. Fits Snap-on Discs. Made in Germany.

Description	SKU	Pkg.	
		Each	12+
O Snap-on Mandrel, 3/32" shank	840-3200	1-11	12+

P-Q EVE® Pop-on Discs

Unique, aluminum oxide, single sided polishing discs. These thin, flexible, plastic backed pop-on discs can get into tight areas and will conform to surface contours. Available in 1/8" size, in packages of 100 or in a set of 25 of each grit in a smaller, 5/8" size, with one 3/32" shank holder.

Description	Dia.	Grit				Pkg. of 100
		Coarse	Medium	Fine	Extra Fine	
EVE Pop-on Discs	1/8"	845-2401	845-2402	845-2403	845-2404	1-4 5+*

*Quantity discount for orders of one item number only; not assorted.

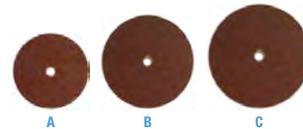
Description	SKU	Set
P EVE 5/8" Pop-on Disc Set of 101	845-2405	-

Description	SKU	Pkg.	
		1-4	5+
Q EVE Pop-on Discs Holder, 3/32" Shank	840-3208	1-4	5+

A-C Moore's Pin Hole Adalox Discs

Pin hole discs with Adalox (aluminum oxide) abrasive on paper backing. Sold in packages of 300 discs.

Type/Backing	Dia.	Grit			Pkg. of 300
		Coarse	Medium	Fine	
A	Adalox/Paper 5/8"	845-0960	845-0961	845-0962	-
B	Adalox/Paper 3/4"	845-0963	845-0964	845-0965	-
C	Adalox/Paper 7/8"	845-0966	845-0967	845-0968	-

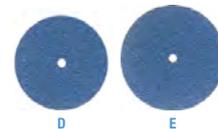


D-E Pin Hole Blue Zirconia Discs

Blue Zirconia Alumina Sanding Discs are ideal for use with platinum, but will work well on gold and silver. Resin-backed for superior durability. Aggressively cut and grind metals with a uniform file-like finish. Last up to three times longer than conventional abrasives. Made in USA.

Description	Dia.	Grit				Pkg. of 100			
		Coarse	Medium	Fine	Coarse	1-2	3-5*	6-11*	12+*
D	Blue Zirconia 3/4"	845-2770	845-2775	845-2780	-	-	-	-	-
E	Blue Zirconia 7/8"	845-2755	845-2760	845-2765	-	-	-	-	-

*Quantity discount for orders of one item number only; not assorted.



F Paper Discs - Aluminum Oxide

Paper discs are coated with Aluminum Oxide abrasive on one side. All have 1/16" arbor hole.

Grit	Dia.	SKU	Pkg. of 100	
			1-9	10+
80	1-1/2"	845-1006	-	-
150	1-1/2"	845-1007	-	-
220	1-1/2"	845-1008	-	-



G-H PSA Sandpaper and Felt Pads - Silicon Carbide

Precut waterproof SiC sandpaper pads, 10 x 20mm, with pressure-sensitive adhesive backing. Precut PSA felt pads can be charged with diamond compound. Excellent for use on flat surfaces. For use with Z-2X, Z-6X and SZX handpiece holders (see below).

Description	Grit	SKU	Pkg. of 10
G Silicon Carbide Pad	180	510-0200	-
	240	510-0210	-
	320	510-0220	-
	400	510-0230	-
	600	510-0240	-
H Felt Pad	-	510-0300	-



I-K Power Hand® Tool Holders for PSA Pads

These 3mm shank holders are designed to hold precut PSA felt and sandpaper pads to make your reciprocating handpieces more versatile. You can also cut your own abrasives, such as diamond foil and diamond film, to fit the holder pads.

Style	Dimensions (mm)	SKU	Each
I Fixed Holder	10 x 20 x 40	510-0560	-
J Fixed Holder	10 x 20 x 65	510-0410	-
K Free Holder with 180° swivel	10 x 20 x 80	510-0420	-





A-F Seamless Abrasive Caps and Holders – 1/8" and 1/4" Shanks

Use for deburring and finishing hard-to-reach, recessed areas. Designed for easy mounting and removal. Caps fit holders easily yet are held firmly by centrifugal force while working. Holders have 1/8" or 1/4" shanks (3mm and 6mm shanks available by special order).

	Dia. x H	Max. RPM	Grit	Cap SKU	Pkg. of 50	Shank	Holder SKU	Each
A	Flat 3/16" x 3/8"	40,000	80	104-1000		B 1/8"	104-1200	
			150	104-1005			104-1200	
			280	104-1010			104-1200	
	3/32" x 1/2"	30,000	60	104-1015		1/8"	104-1205	
			150	104-1020			104-1205	
			280	104-1025			104-1205	
	3/8" x 5/8"	20,000	60	104-1030		1/8"	104-1210	
			150	104-1035			104-1210	
			280	104-1040			104-1210	
	1/2" x 1-1/16"	16,000	60	104-1260		1/4"	104-1350	
			150	104-1265			104-1350	
			280	104-1270			104-1350	
	5/8" x 1"	12,000	60	104-1275		1/4"	104-1355	
			150	104-1280			104-1355	
			280	104-1285			104-1355	
C	Rd. 3/16" x 7/16"	40,000	80	104-1045		D 1/8"	104-1215	
			150	104-1050			104-1215	
			280	104-1055			104-1215	
	3/32" x 1/2"	30,000	60	104-1060		1/8"	104-1220	
			150	104-1065			104-1220	
			280	104-1070			104-1220	
	3/8" x 5/8"	20,000	60	104-1075		1/8"	104-1225	
			150	104-1080			104-1225	
			280	104-1085			104-1225	
	1/2" x 1-1/16"	16,000	60	104-1290		1/4"	104-1360	
			150	104-1295			104-1360	
			280	104-1300			104-1360	
	5/8" x 1"	12,000	60	104-1305		1/4"	104-1365	
			150	104-1310			104-1365	
			280	104-1315			104-1365	
E	Cone 3/16" x 7/16"	40,000	80	104-1090		F 1/8"	104-1231	
			150	104-1095			104-1231	
			280	104-1100			104-1231	
	3/32" x 1/2"	30,000	60	104-1105		1/8"	104-1235	
			150	104-1110			104-1235	
			280	104-1115			104-1235	
	3/8" x 5/8"	20,000	60	104-1120		1/8"	104-1240	
			150	104-1125			104-1240	
			280	104-1130			104-1240	
	1/2" x 1-1/16"	16,000	60	104-1320		1/4"	104-1370	
			150	104-1325			104-1370	
			280	104-1330			104-1370	
	5/8" x 1"	12,000	60	104-1335		1/4"	104-1375	
			150	104-1340			104-1375	
			280	104-1345			104-1375	



A Seamless Abrasive Cap Set

This money-saving set includes 270 caps (six of each SKU listed in chart on facing page) and 15 corresponding holders (1/8" and 1/4" shanks). Supplied in a convenient plastic storage tray with lid.

Description	SKU	Each
Seamless Abrasive Cap Set	104-1245	

B-D Abrasive Bands – Aluminum Oxide

Long-lasting resin-bonded aluminum oxide bands with cloth backing. Provide chatter-free operation for grinding, blending, deburring, smoothing, finishing and polishing flat and contoured metal surfaces, including the insides of holes. Use on hard metals, class rings, etc. Use with Drum Arbors (see below). Max. operating speed: 30,000rpm. Made in USA.

	Dia. x H	Grit	SKU	Pkg. of 100
B	1/4" x 1/2"	80	101-0208	
		120	101-0212	
		180	101-0218	
		240	101-0224	
C	3/8" x 1/2"	60	101-0306	
		80	101-0308	
		120	101-0312	
		240	101-0324	
		320	101-0332	
D	1/2" x 1/2"	60	101-0406	
		80	101-0408	
		120	101-0412	
		240	101-0424	
		320	101-0432	



A



B



C



D



How to

E-G Abrasive Band Drum Arbors

Made of steel with a solid rubber drum which expands when screw or nut is tightened to hold Abrasive Bands snugly. The rubber drum provides a cushioned backing so that Abrasive Bands cut smoothly and leave a uniform finish. Balanced for maximum performance at high speeds.

Dia. x H	Shank	SKU	Each		
			1-2	3-11	12+
E 1/4" x 1/2"	3/32"	840-1045			
F 1/4" x 1/2"	1/8"	840-1050			
G 3/8" x 1/2"	3/32"	840-1035			
H 3/8" x 1/2"	1/8"	840-1040			
I 1/2" x 1/2"	3/32"	840-1055			
J 1/2" x 1/2"	1/8"	840-1060			
K 1/2" x 1/2"	1/4"	840-1170			





A

A BananaSandpaper Rolls

A total of 450mm (17") of aluminum oxide abrasive paper is wound into each roll. As the abrasive begins to wear, use the unique, micro-perforation lines to simply and easily peel and tear that layer off, exposing fresh abrasive on the roll. Starting head dimensions of each roll are 12mm (1/2") wide by 28mm (1") long. Overall dimensions are 56mm (2.2") x 12mm (0.5"). Max. operating speed: 10,000rpm. Mounted on 3/32" shanks. Made in South Korea.

Pkg. of 10			Pkg. of 10						
Grit	SKU	1-2	3-5	6+	Grit	SKU	1-2	3-5	6+
120	103-7131				1000	103-7137			
240	103-7132				1500	103-7138			
320	103-7133				2000	103-7139			
400	103-7134				2500	103-7140			
600	103-7135				3000	103-7141			
800	103-7136				5000	103-7142			
					7000	103-7143			

B Premounted Abrasive Rolls – 3/32" Shank

Each roll consists of aluminum oxide abrasive paper wrapped around a 3/32" shank mandrel, creating many layers. Since paper is secured only at the bottom, user can easily tear off worn portion to expose fresh cutting surface. Unlike regular unmounted rolls, these long-lasting rolls require no truing. Recommended operating speed 16,000–22,000rpm. Abrasive measures 1/2" diameter x 1-1/2" long.

Pkg. of 10			Pkg. of 10				
Grit	SKU	1-4	5+	Grit	SKU	1-4	5+
240	103-7111			800	103-7119		
320	103-7113			1000	103-7121		
400	103-7115			2000	103-7123		
600	103-7117						



B

C-D Abrasive Tapered Cartridge Rolls – Aluminum Oxide Cloth

Made of resin-bonded aluminum oxide cloth. Particularly useful on jobs with channels, fillets and irregular concave contours. Hold at a 45° angle to workpiece for reaching into angles and corners, or hold at a lower angle to apply greater abrasive surface for faster cutting action. Self-renewing; wearing through one layer uncovers fresh layer. Balanced to eliminate wobble. Use with cartridge roll mandrels (see below). Max. operating speed: 16,000–22,000rpm.

Pkg. of 100					
Dia. x L x AH	Use Mandrel	Grit	SKU	1-2	3+
C 3/8" x 1-1/2" x 1/8"	A6 or A10	80	103-7001		
		120	103-7002		
		180	103-7003		
		240	103-7004		
D 1/2" x 1-1/2" x 1/8"	A6 or A10	80	103-7007		
		120	103-7008		



C

D

E-K Cartridge Roll Mandrels – 1/8" and 1/4" Shanks

Hardened steel mandrels firmly secure straight or tapered abrasive cartridge rolls. Match pilot size of mandrel to arbor hole on cartridge roll. More flexibility may be obtained if pilot length is slightly shorter than the cartridge rolls. If necessary, mandrels may be ground down to needed length.

Pilot Size	1/8" Shank		1/4" Shank		Each*
	Mandrel	SKU	Mandrel	SKU	
E 5/64" x 1"	A1	840-2040	–	–	1-2
F 3/32" x 1"	A2	840-2050	–	–	1-2
G 1/8" x 1/2"	A3	840-2060	A7	840-2120	3-11
H 1/8" x 3/4"	A4	840-2070	A8	840-2130	3-11
I 1/8" x 1"	A5	840-2080	A9	840-2140	3-11
J 1/8" x 1-1/2"	A6	840-2090	A10	840-2150	3-11
K 1/8" x 2"	–	–	A11	840-2160	3-11

Quantity discounts for orders of one item number only; not asserted.



E

F

G

H

I

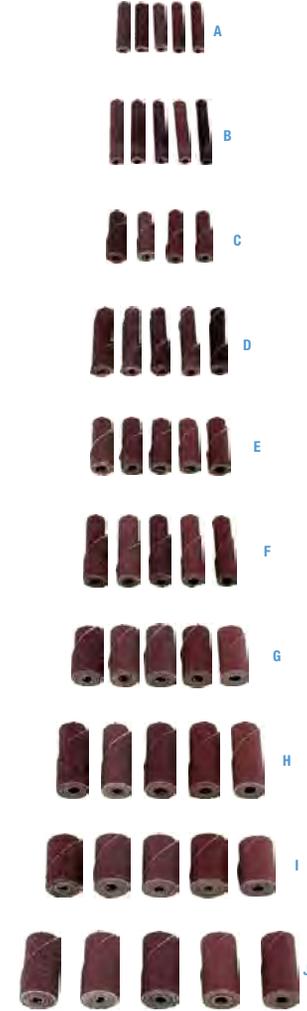
J

K

A-J Straight Abrasive Cartridge Rolls Aluminum Oxide Cloth

Resin-bonded aluminum oxide cloth rolls for both lapping surfaces and finishing inside diameters of dead end holes, tubes and rings. Self-renewing; wearing through one layer uncovers fresh layer of abrasive cloth making them an excellent tool for blending. Balanced to eliminate wobble. Use with cartridge roll mandrels. Max. operating speed: 16,000–22,000rpm.

Pkg. of 100					
Dia. x L x AH	Use Mandrel	Grit	SKU	1-2	3+
A 1/8" x 3/4" x 5/64"	A1	80	103-1208		
		120	103-1212		
		180	103-1218		
		240	103-1224		
		320	103-1232		
B 1/8" x 1" x 5/64"	A1	80	103-1308		
		120	103-1312		
		180	103-1318		
		240	103-1324		
		320	103-1332		
C 3/16" x 3/4" x 3/32"	A2	120	103-2212		
		180	103-2218		
		240	103-2224		
		320	103-2232		
D 3/16" x 1" x 3/32"	A2	80	103-2308		
		120	103-2312		
		180	103-2318		
		240	103-2324		
		320	103-2332		
E 1/4" x 3/4" x 1/8"	A4 or A8	80	103-3208		
		120	103-3212		
		180	103-3218		
		240	103-3224		
		320	103-3232		
F 1/4" x 1" x 1/8"	A5 or A9	80	103-3308		
		120	103-3312		
		180	103-3318		
		240	103-3324		
		320	103-3332		
G 3/8" x 3/4" x 1/8"	A4 or A8	80	103-5208		
		120	103-5212		
		180	103-5218		
		240	103-5224		
		320	103-5232		
H 3/8" x 1" x 1/8"	A5 or A9	80	103-5308		
		120	103-5312		
		180	103-5318		
		240	103-5324		
		320	103-5332		
I 1/2" x 3/4" x 1/8"	A4 or A8	80	103-6208		
		120	103-6212		
		180	103-6218		
		240	103-6224		
		320	103-6232		
J 1/2" x 1" x 1/8"	A5 or A9	80	103-6308		
		120	103-6312		
		180	103-6318		
		240	103-6324		
		320	103-6332		



A

B

C

D

E

F

G

H

I

J

Color may vary slightly



A-C Tapered Cone Points – Aluminum Oxide Cloth

Glue-bonded aluminum oxide points for finishing, deburring and polishing applications. All slightly longer than specified. Use with tapered cone point mandrels (below). Max. operating speed: 25,000rpm.

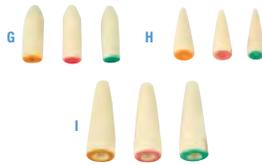
Style	Dia. x L	Grit	SKU	Pkg. of 100
A K11 (2-1/2° Taper)	3/16" x 1"	60	107-1100	
		80	107-1150	
		100	107-1200	
		120	107-1250	
		180	107-1350	
		240	107-1400	
B B2 (5° Taper)	5/16" x 1-1/2"	60	107-0100	
		80	107-0150	
		100	107-0200	
		120	107-0250	
		180	107-0350	
		240	107-0400	
C C3 (5° Taper)	3/8" x 2"	80	107-0650	
		120	107-0750	
		320	107-0950	

D-F Tapered Cone Point Mandrels – 1/8" and 1/4" Shanks

For Point Style	Shank	SKU	Each
D K11	1/8"	840-2030	
E B2	1/4"	840-2010	
F C3	1/4"	840-2020	

G-J Paper Bullets and Cones

Used for sanding, blending and fine finishing in hard-to-reach areas. Cones expose new grit as they wear. Recommended for use at low speeds for better control and longer life. Designed for fast, easy changing. Use bullets and small cones with threaded mandrel, large cones with split mandrel. See below. Cones are also available in a set of 60 (10 each grit, large and small) plus corresponding mandrels.



Shape	Dia. x L	Color	Grit	SKU	Pkg. of 10
G Bullet	1/4" x 9/16"	Yellow	Coarse	107-1058	
		Red	Medium	107-1057	
		Green	Fine	107-1056	
H Small Cone	1/4" x 9/16"	Yellow	Coarse	107-1055	
		Red	Medium	107-1054	
		Green	Fine	107-1053	
I Large Cone	9/8" x 1-5/16"	Yellow	Coarse	107-1052	
		Red	Medium	107-1051	
		Green	Fine	107-1050	

Description	SKU	Each
J Paper Cone Set	107-1060	

K-L Paper Bullet and Cone Mandrels – 3/32" Shanks

Description	Shank	SKU	Pkg. of 3	
			1-3	4+
K Threaded Mandrel for Bullets and Small Cones	3/32"	840-3040		
Description	Shank	SKU	Each	
			1-11	12+
L Split Mandrel for Large Cones	3/32"	840-3407		



A-C Micro-Mesh® Abrasives – Silicon Carbide

Micro-Mesh features a unique cushion design that allows its abrasive crystals to recede into its resilient backing and "float" to an even cutting plane. Follows the contours of your work evenly – Perfect for refinishing steel tools and removing light scratches. Restores rolling mill rollers to brand-new condition.

Effective on gold, silver, platinum, even steel! Leaves a smoother, finer finish than expected: 400 grit Micro-Mesh cuts like a 400 grit but leaves an 800–1000 grit finish. Can be used dry or wet. Used dry, it lasts 5–7 times longer than common abrasives. Used with oil or water, it lasts 7–15 times longer.

Description	Grit	SKU	Each	
			1-11	12+
A File (1/2" x 5-3/4", two-sided)	100/150	107-3114		
B File (1/2" x 5-3/4", two-sided)	180/240	107-3115		
C	400/600	107-3116		



D Micro-Mesh® Ultra-Flex Pad Set

Micro-Mesh Soft Touch pads are handy for doing small jobs and for spot repair projects. The 2" x 2" foam core provides additional flexibility and conformity, while being easy to hold and operate.

Each pad has the same Micro-Mesh grade on both sides. This material is made to be used wet or dry and is made with a flexible cotton backing with polymer emulsion cushioning layer and large micron graded silicon carbide or aluminum oxide crystals suspended in a flexible resin bond. The MX bond is less flexible than other Micro-Mesh products so you can achieve a higher finish on metals. Stated grit size, due to this unique material, produces a finer than expected finish, i.e., 60MX = 240 grit. Each pad is printed with its corresponding grade. The complete set includes the following 13 grades:

SIC Abrasive: 60MX, 80MX, 100MX, 120MX, 150MX, 180MX, 240MX, 320MX, 360MX, 400MX, 600MX

AIO Abrasive: 800MX, 1200MX

Description	SKU	Pkg. of 13
Ultra-Flex Pad Set	107-3120	



E 3M Sponge Sanding Pads – Aluminium Oxide

Flexible, palm-sized Sponge Sanding Pads from 3M conform to almost any surface contour. Made of long-lasting, closed-cell rubber with micron-graded aluminum oxide abrasive grains, these pads will not gouge the work surface. 3M Sponge Sanding Pads can be used wet or dry for a variety of applications as well as folded or trimmed to fit into detailed areas.

Each pad measures 4-1/2" x 5-1/2". Available in Medium, Fine, Super-Fine, Ultra-Fine and Micro-Fine as well as a Set of all 5.

Description	SKU	Each		
		1-4	5-19	20+
Medium Pad	108-7020			
Fine Pad	108-7015			
Super-Fine Pad	108-7010			
Ultra-Fine Pad	108-7005			
Micro-Fine Pad	108-7000			
		Set of 5		
5-Piece Set	108-7025			



A Sanding Belts for BZX – Aluminum Oxide

Sanding belts specially made for use with our Power Hand BZX Belt Sander. Belts fit on either straight or 45 degree angle arms.

Size	80 Grit	120 Grit	180 Grit	320 Grit	Pkg. of 10*	
	SKU	SKU	SKU	SKU	1-2	3+
A 4mm	510-0501	510-0506	510-0511	510-0517		
6mm	510-0521	510-0526	510-0528	510-0532		
8mm	510-0536	510-0541	510-0546	510-0552		

*Quantity discount for orders of one item number only; not assorted.

B-D Sanding Belts for BZX – Ceramic, Zirconia, and Diamond

All belts are 8mm and will fit on either 8mm straight or 45° angle arms. Ceramic and Zirconia belts can be used on both hard and soft materials, such as aluminum and brass. Diamond belts are suitable for grinding and polishing brittle materials such as stone, glass and hard metals.

Abrasive	40 Grit	60 Grit	80 Grit	100 Grit	120 Grit	180 Grit	240 Grit	Pkg. of 10
	SKU							
B Ceramic	510-0565	510-0567	510-0569	510-0571	510-0573	-	-	
C Zirconia	-	-	510-0575	-	510-0577	510-0579	-	
D Diamond	-	-	-	-	510-0581	510-0583	-	Each

E-N Sanding Detailer™ – Multi-Functional Sanding Tool

The Sanding Detailer with 3M Micro Finishing Film Belt, is an ergonomic shaped tool ideal for metal finishing, welding cleanup, auto body finishing, mold finishing, gun repair and so much more. The belts consist of aluminum oxide resin-bonded to a polyester film backing. This tool is unique because you can use the tapered side, the flat side as well as the rounded end. Simply contract the tool to rotate the belt and completely use all the abrasive or change belts when completely worn. Spring-loaded to maintain proper belt tension. Overall dimensions are 6.25" (159mm) x 0.5" (12mm).

Color	Grit/Micron	Detailer	Each	Belt	Pkg. of 10
		SKU		SKU	
E Black	220/60	107-3740		107-3770	
F Gray	270/50	107-3742		107-3772	
G Red	320/40	107-3744		107-3774	
H Green	400/30	107-3746		107-3776	
I Orange	600/15	107-3748		107-3778	
J Yellow	800/14	107-3750		107-3780	
K White	1000/12	107-3752		107-3782	
L Blue	1200/9	107-3754		107-3784	

Coarse or Fine: Each set has 4 detailers (each with a belt installed) and 16 extra belts, 4 of each of the 4 grits. All Grit Set has all 8 detailers with one belt installed – no extra belts.

Sets	Grit	SKU	Each
M Coarse Grit Set	220, 270, 320, 400	107-3795	
N Fine Grit Set	600, 800, 1000, 1200	107-3797	
All Grit Set	All (8 grits)	107-3799	



Belt Sticks & Sets

Aluminum Oxide

Economical, versatile tools that accommodate 1/4", 1/2" or 3/4" wide abrasive belts, for sanding and smoothing hard-to-reach areas. Made of impact-resistant polypropylene. The tip can be easily reshaped to meet your exact needs. A spring-loaded tensioning device allows the abrasive belt to be rotated so that all areas of the belt can be used and permits quick belt changing. Belt Sticks may be used dry or with water, oil, or solvents. Sticks are supplied in 5 colors to help you quickly distinguish one grit from another. Abrasive belts are resin-bonded, cloth-backed aluminum oxide. Made in USA.

A Belt Sticks

Size	Color	Grit	Belt Stick w/ Belt		Extra Belts	Pkg. of 10	
			SKU	Each	SKU	1-9	10+
1/4" x 6"	Red	120	107-3610		107-3621		
	Blue	240	107-3612		107-3625		
	Green	320	107-3614		107-3627		
	Yellow	400	107-3616		107-3628		
	Black	600	107-3618		107-3629		
1/2" x 8"	Red	120	107-3640		107-3651		
	Blue	240	107-3642		107-3655		
	Green	320	107-3644		107-3657		
	Yellow	400	107-3646		107-3658		
	Black	600	107-3648		107-3659		
3/4" x 10"	Red	120	107-3670		107-3681		
	Blue	240	107-3672		107-3685		
	Green	320	107-3674		107-3687		
	Yellow	400	107-3676		107-3688		
	Black	600	107-3678		107-3689		

B 10-Piece Belt Stick Set – 1/4"

Supplied with 5 Belt Sticks: red, blue, green, yellow and black (each with one abrasive belt of each grit: 120, 240, 320, 400 and 600).

Description	Size	SKU	Each
B 10-Piece Set	1/4"	107-3602	

C 36-Piece Belt Stick Set – 1/4"

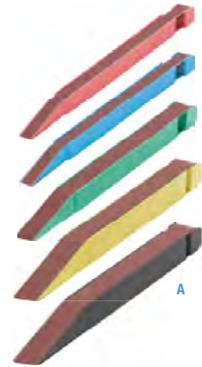
Supplied with 3 Belt Sticks: red, blue and green (each with one abrasive belt). 30 additional abrasive belts included (10 of each grit: 120, 240 and 320).

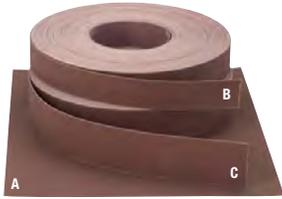
Description	Size	SKU	Each
36-Piece Set	1/4"	107-3605	

D 60-Piece Belt Stick Sets

Supplied with 5 Belt Sticks: red, blue, green, yellow and black (each with one abrasive belt). 50 additional abrasive belts included (10 of each grit: 120, 240, 320, 400 and 600).

Description	Size	SKU	Each
D 60-Piece Set	1/4"	107-3606	
60-Piece Set	1/2"	107-3636	
60-Piece Set	3/4"	107-3666	





A-C Norton® Lightning Metalite Cloth

A long-lasting abrasive cloth used to clean or polish metal surfaces for a high-quality finish. Glue-bonded aluminum oxide on lightweight, flexible cloth backing. The 1" rolls can be used with our Polishing Stick 813-1950 or the Wolf Sanding Mandrel Set 840-2305. Both the 1" and the 1-1/2" can be used on our split ring arbors, and our split mandrels – see below.

Description	Pkg. of 5			
	180 Grit	240 Grit	320 Grit	400 Grit
A 9" x 11" Sheet	SKU 109-3650	SKU 109-3750	SKU 109-3850	SKU 109-3950

Description	Each						
	80 Grit	120 Grit	180 Grit	240 Grit	320 Grit	400 Grit	600 Grit
B 1" x 50-yd Roll	SKU 109-5149	SKU 109-5200	SKU 109-5300	SKU 109-5350	SKU 109-5400	SKU 109-5450	SKU 109-5510
C 1-1/2" x 50-yd Roll	SKU 109-5525	SKU 109-5545	SKU 109-5550	SKU 109-5600	SKU 109-5650	-	-

*Quantity discount for orders of one item number only; not assorted.



D-F Split Mandrels – 3/32" Shank

For holding strips of abrasive paper and cloth. All 3/32" shank and measure approximately 2-1/4" long.

Head	Diameter	SKU	Each	
			1-11	12+
D Straight	1 1/64"	840-3405		
E Straight	9/64"	840-3406		
F Tapered	3/32" to 3/16"	840-3407		



G Wolf® Sanding Mandrel Set – 1/8" Shank

Large-diameter mandrels for sanding inside cavities: 1/4" dia. x 1-3/4"L with 1/8" shank (holds 3/4" wide paper); 3/16" dia. x 1-7/8"L with 1/8" shank (holds 1" wide paper); 1/2" dia. x 1-7/8"L with 3/32" shank (holds 1" wide paper). Short, heavy shanks help prevent wobble.

Description	SKU	Set of 3
Wolf Sanding Mandrel Set	840-2305	



H-I Split Ring Arbors – For Tapered Spindles

Wood arbors available with parallel or tapered shafts. Has slot to hold paper or cloth so it can be wound around to desired thickness. Both measure 4" long.

Description	SKU	Pkg. of 3	
		1-3	4+
H Parallel Split Ring Arbor	840-4650		
I Tapered Split Ring Arbor	840-4655		



J Polishing Stick

Use this tool as you would a file to smooth, debur and polish metal. Holds abrasive cloth and paper in 11" strips. Strips are easy to insert and remove and are held securely. Sanding surfaces measure 5" long, tapering from 3/8" thick to 1/16" at the tip. Made of high-impact, solvent-resistant plastic.

Style	Width x Length	SKU	Each
Polishing Stick	1" x 10"	813-1950	

Abrasive strips not included.

A BananaSandpaper Sticks

BananaSandpaper sticks are made with five sheets of high-quality, aluminum oxide abrasive paper on each side. Sanding surface measures approx. 5"L x 3/4"W. Each stick is color-coded to help identify the grit quickly and accurately. As the abrasive begins to wear, simply peel the paper back and tear it off to expose fresh abrasive on the stick. Overall dimensions of each stick are 250mm (9.8")L x 20mm (0.78")W x 9mm (0.35") Thick. Made in South Korea.

Grit	Each					Each				
	SKU	1-2	3-5	6+		SKU	1-2	3-5	6+	
120	107-9500					1500	107-9507			
240	107-9501					2000	107-9508			
320	107-9502					2500	107-9509			
400	107-9503					3000	107-9510			
600	107-9504					5000	107-9511			
800	107-9505					7000	107-9512			
1000	107-9506									

B Emery Hand Buffs

For removing scratches and file marks and for polishing. Fine-grade emery paper carefully mounted on seasoned wood. Corners are sharp and paper will not unravel. Measure 10"L x 3/4"W x 1/4" thick. Listed in order from coarsest (3 grit) to finest (40 grit).

Grit	SKU	Pkg. of 3	
		1-3	4+
3	107-9850		
2	107-9800		
1	107-9750		
0	107-9700		
2/0	107-9650		
3/0	107-9600		
4/0	107-9550		

C PSA Strips

These pressure-sensitive strips are made of aluminum oxide, glue-bonded on a cloth backing. Just press them onto a flat surface such as a wood stick. Strips measure 1" x 11".

Grit	SKU	Pkg. of 100	Pkg. of 100		
			Grit	SKU	Pkg. of 100
80	107-2550		240	107-2250	
120	107-2050		320	107-2300	
180	107-2150		400	107-2350	

D Grit Stick Sleeves

Sleeves made of aluminum oxide, glue-bonded on durable cloth. Slide over Grit Stick Sleeve Holder (see below) and work right up to corners. Measure 7-1/4"L x 7/8"W.

Grit	SKU	Pkg. of 10	
		1-9	10+
120	107-3150		
180	107-3350		
240	107-3450		
320	107-3550		

E Grit Stick Sleeve Holder

Wooden stick for holding Grit Stick Sleeves (see above). Measures approximately 8"L x 7/8"W x 1/4" thick.

Description	SKU	Pkg. of 3	
		1-3	4+
Grit Stick Sleeve Holder	840-4400		

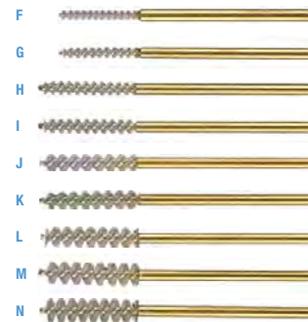




A-E Mitchell's Abrasive Cords and Tapes – USA

Flexible cords and tapes fully covered in abrasives for grinding, polishing and finishing small holes, narrow slots, curved surfaces and other areas, which are otherwise inaccessible to points and wheels. Aluminum oxide and silicon carbide are for cutting, and crocus (ultra-fine iron oxide) is for especially fine polishing. Can be used by hand and in saw frames and other tools on hard and soft metals, ceramic, plastic and wood. Won't tear or fray. Supplied in 50' spools.

	Cord	Shape	Style	Dia.	Grit	SKU	50' Spool		
A	AIO	●	48	0.092"	150	102-0999			
			49	0.082"	120	102-1000			
			50	0.070"	180	102-1005			
			51	0.055"	120	102-1010			
			53	0.040"	180	102-1020			
			54	0.030"	180	102-1025			
B	SiC	•	53-S	0.040"	180	102-1021			
			54-H	0.025"	200	102-1030			
			55	0.018"	200	102-1035			
			60	0.015"	200	102-1040			
			66	0.012"	280	102-1045			
C	Crocus	●	52-C	0.055"	Ultra-fine	102-1060			
			53-C	0.040"	Ultra-fine	102-1065			
			54-C	0.030"	Ultra-fine	102-1070			
			54-HC	0.025"	Ultra-fine	102-1075			
			55-C	0.018"	Ultra-fine	102-1080			
			60-C	0.015"	Ultra-fine	102-1085			
D	Crocus	■	56-C	0.093" x 0.030"	Ultra-fine	102-1115			
			AIO	56	0.093" x 0.037"	180	102-1095	50' Spool	
			AIO	57	0.125" x 0.037"	180	102-1100		



F-N Micro Spiral Nylon Bristle Brushes – Aluminum Oxide Bristles

The perfect tool for cleaning or light bur removal in through holes or on hole edges. The 0.3mm diameter nylon bristle contains 500 grit AIO abrasive grain. Use by hand or can be carefully used in a rotary handpiece if run no faster than 1,500rpm*. Each brush's wire mandrel top (except MSB 2.2 and MSB 2.7) is coated with epoxy resin to help protect the work surface from damage.

	Brush Size (Dia. x L)	Overall Length	Shank Dia.	SKU	Each
F	2.2 x 20mm	65	3mm	115-2288	
G	2.7 x 20mm	65	3mm	115-2289	
H	3.3 x 25mm	70	3mm	115-2290	
I	3.8 x 25mm	70	3mm	115-2291	
J	4.3 x 25mm	70	3mm	115-2292	
K	4.8 x 25mm	70	3mm	115-2293	
L	5.3 x 25mm	70	3mm	115-2294	
M	5.8 x 25mm	70	3mm	115-2295	
N	6.3 x 25mm	70	3mm	115-2296	

*1,500rpm max when used in a rotary handpiece. Do not operate until fully inserted into the hole to be processed.

O Slurry Coated Polishing Strips

Made of Rayon and a unique proprietary backing material. A blend of various types of micron particle minerals (including silicon carbide) is applied to each strip in a slurry coating process. Perfect for hard-to-reach areas and for wet or dry applications. The strips measure 3/32" wide by 7" in length and 12 pre-cut strips are connected on a sheet. Use by hand or in a saw frame. Two sheets of each of the 9 color coded grits (see below) are in the set for a total of 216 strips. Made in China.

Description	SKU	Set
Strips (216): 360 Grey, 400 Orange, 600 Brown, 800 White, 1000 Red, 1200 Green, 1500 Purple, 2000 Yellow, 4000 Blue	109-8510	1-2 3+

Flap Wheels

1/8" and 1/4" Shank

Flap Wheels are made of aluminum oxide resin-bonded to cloth and permanently attached to the hub. They are resilient and can be used on flat or contoured surfaces. Particularly useful in flexible shaft handpieces and other rotary tools. Excellent for blending on metal surfaces, deburring and removing flash from machined parts and edge blending dies, molds and channels. Cutting action is slightly finer than normally expected from identical grit. Flap Wheels perform best when only slight pressure is applied.

A-G Wheels – 1/8" Shank

	60 Grit	80 Grit	120 Grit	180 Grit	240 Grit	320 Grit	Each*
Diag. x Thickness	SKU	SKU	SKU	SKU	SKU	SKU	1-2 3+
A 3/4" x 3/16"	107-5899	107-5900	107-5905	107-5908	107-5912	107-5915	
B 1-3/16" x 3/16"	107-5939	107-5940	107-5945	107-5948	107-5951	107-5955	
C 3/8" x 3/8"	107-6001	107-6002	107-6003	107-6004	107-6005	107-6006	
D 3/4" x 3/8"	107-5919	107-5920	107-5925	107-5928	107-5932	107-5935	
E 1" x 3/8"	107-5964	107-5965	107-5970	107-5976	107-5978	107-5980	
F 5/8" x 3/8"	107-6011	107-6012	107-6013	107-6014	107-6015	107-6016	
G 3/4" x 3/4"	107-6020	107-6021	107-6022	107-6023	107-6024	107-6025	

Quantity discounts for orders of one item number only; not assorted.

H-I Wheels – 1/4" Shank

	40 Grit	60 Grit	80 Grit	120 Grit	180 Grit	240 Grit	Each*
Diag. x Thickness	SKU	SKU	SKU	SKU	SKU	SKU	1-2 3+
H 1-1/2" x 1/2"	107-7880	107-7885	107-7890	107-7895	107-7900	107-7905	
I 2" x 3/4"	-	107-6850	107-6900	107-6500	-	107-6650	

Quantity discounts for orders of one item number only; not assorted.

J Mini Mounted Abrasive Buffs – 3/32" Shank

Mini Mounted Abrasive Buffs are perfect for deburring and polishing internal port and cross hole areas in metal molds. Magic buffs are almost grit free, the others are a unique blend of abrasive cloth flaps and a unitized fiber core, both aluminum oxide.

Simply run at a slow speed (5,000 RPM or less) and the distinctive 45-degree angle of the cloth flaps begin the process of cutting and smoothing all in one step. Add a little pressure and the sponge-like unitized fiber material moves around the contours, leaving a consistently smooth finish.

Measure 14mm (approx. 1/2") in diameter, overall length 48mm (approx. 2"), 3/32" shank is 18mm (approx. 3/4") in length. Made in Thailand.

80 Grit	150 Grit	220 Grit	320 Grit	400 Grit	600 Grit	800 Grit	1000 Grit	Pkg. of 3*
SKU	1-3 4-7 8+							
107-5991	107-5992	107-5993	107-5994	107-5995	107-5996	107-5997	107-5998	

Description	SKU	Pkg. of 3*
Mini Mounted Magic Buff	107-6008	1-3 4-7 8+

Description	SKU	Each
J 9-Piece All Grit Set (one of each)	107-5987	

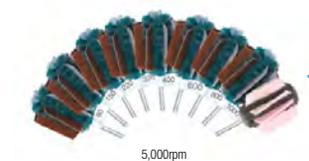
Quantity discounts for orders of one item number only; not assorted.

K Cloth 4" Flap Wheels

Abrasive wheels with closely spaced cloth flaps for fast cutting action with a smooth uniform finish. For use on tapered spindles. Made in Thailand.

80 Grit	120 Grit	240 Grit	320 Grit	400 Grit	Each*
SKU	SKU	SKU	SKU	SKU	1-2 3+
108-0173	108-0174	108-0175	108-0176	108-0177	

Quantity discounts for orders of one item number only; not assorted.





A 3M Imperial™ Micro-Finishing Film – Aluminum Oxide

Precision micron-graded aluminum oxide resin-bonded to a polyester film backing. For close tolerance finishing on metals and plastic surfaces. Nonloading for longer life and greater efficiency. Measures 8-1/2" x 11".

Grit/Micron	SKU	Pkg. of 5		
		1-4	5-19	20+
180/80	109-8100			
220/60	109-8105			
320/40	109-8110			
400/30	109-8115			
500/20	109-8125			
600/15	109-8120			
1200/9	109-8130			

B 3M Lapping Films – Aluminum Oxide

Popular prefinishing films for platinum. Feature precision micron-graded premium abrasive resin-bonded to film backing for reliable, repeatable performance. Impart fine, consistent finishes on both soft and hard metals. Resist water, oil and most solvents. Can be used wet or dry alone or cut and wrapped around a stick or file for fine work. Measure 8-1/2" x 11". Use from 12 micron (coarse) to 3 micron (fine) before compounds.

Micron/Grade	Color	SKU	Pkg. of 5		
			1-4	5-9	10+
12/C	Yellow	109-8353			
5/M	Brown	109-8352			
3/F	Pink	109-8351			

C Norton® Durite Abrasive Paper – Silicon Carbide

Fast-cutting silicon carbide. Excellent wear, nonloading. For intermediate and final dry sanding. Lightweight paper backing easily conforms to all shapes and angles. Sheets measure 9" x 11".

Grit	Type	SKU	Pkg. of 5	
			1-19	20+
120	Paper	109-6051		
180	Paper	109-6101		
220	Paper	109-6151		
320	Paper	109-6301		

D Norton® Lightning Metalite Cloth – Aluminum Oxide

A long-lasting abrasive cloth used to clean or polish metal surfaces for a high-quality finish. Glue-bonded aluminum oxide on lightweight, flexible cloth backing. Measure 9" x 11".

Grit	Type	SKU	Pkg. of 5	
			1-9	10+
180	Cloth	109-3650		
240	Cloth	109-3750		
320	Cloth	109-3850		
400	Cloth	109-3950		

E Slurry Coated Polishing Cloths

Made of Rayon and a unique proprietary backing material. A blend of various types of micron particle minerals (including silicon carbide) is applied to each strip in a slurry coating process. Perfect for hard-to-reach areas and for wet or dry applications. The cloths measure 4" wide by 7" in length. Two cloths of each of the 9 color coded grits (see below) are in the set for a total of 18 cloths. Made in China.

Description	SKU	Set	
		1-2	3+
Cloths (18): 360 Grey, 400 Orange, 600 Brown, 800 White, 1000 Red, 1200 Green, 1500 Purple, 2000 Yellow, 4000 Blue	109-8511		

A Norton, A275 Champagne Sandpaper – Great for Aluminum!

This load resistant paper is an excellent choice for aluminum polishing. The paper utilizes a No-Fil coating, which is a water-based stearate that provides maximum load resistance and extended life. Features a premium P-graded, heat-treated aluminum oxide abrasive yielding fast cut rates. Made with a fiber-reinforced latex-saturated backing, giving the paper exceptional flexibility and high tear strength. Sold in 9" x 11" sheets.

Grit	SKU	Pkg. of 5		Grit	SKU	Pkg. of 5	
		1-19	20+			1-19	20+
120	109-2001			800	109-2008		
220	109-2002			1000	109-2010		
320	109-2003			1200	109-2012		
400	109-2004			1500	109-2015		
600	109-2006						

B-C 3M Wetordry™ Paper – Silicon Carbide

Provide finer finishes than traditional emery papers. Backing and coating offer enhanced cut rates, improved finishes and better durability. Coarser grits come on heavyweight paper and finer grits come on lightweight and flexible papers. All silicon carbide. Measure 9" x 11".

Grit	Paper Type	SKU	Pkg. of 5		
			1-4	5-19	20+
B 80	431Q	109-8185			
120	431Q	109-8187			
180	431Q	109-8189			
220	413Q	109-8190			
320	413Q	109-8193			
400	413Q	109-8195			
600	413Q	109-8196			
C 1000	401Q	109-8200			
1500	401Q	109-8202			
2000	401Q	109-8203			
2500	401Q	109-8204			

D Norton® Waterproof Paper Blue-Bak – Silicon Carbide

Silicon carbide abrasive with improved resin bond for exceptional finishes in both wet and dry applications and improved waterproof paper backing for better flexibility and wet-curl resistance. 120 grit comes on heavy weight paper, 220 to 600 on light weight paper and 1200P on slightly lighter weight. Yield long life in rough, wet applications. Measure 9" x 11".

Grit	Paper Type	SKU	Pkg. of 5		Grit	Paper Type	SKU	Pkg. of 5	
			1-9	10+				1-9	10+
120	T461	109-7010			400	T414	109-7035		
220	T414	109-7015			600	T414	109-7045		
320	T414	109-7025			1200*	T401	109-7055		

*slightly finer than 600

E 3M Wetordry™ Polishing Paper – Silicon Carbide + Aluminum Oxide

Super-flexible fibrous paper non-woven backing allows easy polishing of flat and contoured surfaces of softer materials. Precision micron-graded silicon carbide (481Q) and aluminum oxide (281Q) papers provide a uniform finish. Use wet or dry on precious metals, aluminum, plastic, polyurethane, solid surface composites, fiberglass and wood. Measure 8-1/2" x 11".

Color	Grit/Micron	Paper Type	SKU	Pkg. of 5		
				1-4	5-19	20+
Green	400/30	481Q	109-8001			
Gray	600/15	481Q	109-8005			
Blue	1200/9	281Q	109-8010			
Pink	4000/3	281Q	109-8015			
Lt. Blue	6000/2	281Q	109-8020			
Mint	8000/1	281Q	109-8025			

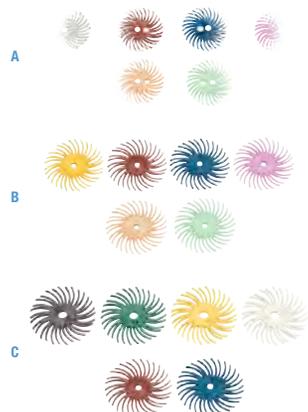


3M Scotch-Brite™ Radial Bristle Discs

For Fast and Easy Cleaning and Polishing without Compound!

Use to clean, prepolish, blend and remove scratches and firescale. Require no compounds. Work fast and take the mess out of cleaning up small areas. Long-lasting and nonloading. Color-coded for easy grit identification. Use a single one for reaching tight areas, or stack several of them for covering large surface areas.

Color/Application
Brown: Removal of heaviest scratches
Green: Removal of light scratches
Yellow: Removal of scratches and firescale
White: Texturing, light cleaning
Red: Removal of light scratches and oxides
Blue: Blending, prepolishing
Pink: Very light cleaning, prepolishing
Peach: Polishing
Lt. Green: Final polishing



A-D Small Discs – For Use with Rotary Handpieces

The 3/16" and 3/4" discs are sold in packages of 12 or in packages of 48 which includes one 3/32" mandrel. Max. operating speed 30,000 rpm (although recommended for most applications will be 15,000 rpm).

Di. x AH	Color	Grit	SKU	Pkg. of 12	SKU	Pkg. of 48
A 3/16" x 1/16"	White	120	145-1520		145-1620	
	Red	220	145-1525		145-1625	
	Blue	400	145-1530		145-1630	
	Pink Pumice		145-1535		145-1635	
	Peach	6 Micron	145-1545		145-1645	
	Lt. Green	1 Micron	145-1540		145-1640	
B 3/4" x 1/16"	Yellow	80	145-1500		145-1600	
	Red	220	145-1505		145-1605	
	Blue	400	145-1510		145-1610	
	Pink Pumice		145-1515		145-1615	
	Peach	6 Micron	145-1492		145-1590	
	Lt. Green	1 Micron	145-1495		145-1595	

Pkg. of 12
1-3 4+

C 1" x 1/8"	Color	Grit	SKU
Brown	36	145-1550	
Green	50	145-1555	
Yellow	80	145-1560	
White	120	145-1565	
Red	220	145-1570	
Blue	400	145-1575	

Description	SKU	Each
D 45-Piece Small Disc Set includes three of each disc listed above (except for #145-1492, #145-1495, #145-1570 and #145-1575), one 3/32" shank mandrel and two 1/8" shank mandrels.	145-1670	
73-Piece 3/16" Set (includes 12 of each 3/16" disc listed above and one 3/32" shank mandrel in a plastic case)	145-1672	
73-Piece 3/4" Set (includes 12 of each 3/4" disc listed above and one 3/32" shank mandrel in a plastic case)	145-1673	

E-J Screw Mandrels

Use in handpieces and hand grinders for holding wheels with a 1/16" or 1/8" arbor hole.

Pkg. of 3				Pkg. of 3					
Shank	For AH	SKU	1-3	4+	Shank	For AH	SKU	1-3	4+
E	3/32"	1/16"	840-3170		H	1/8"	1/16"	840-3150	
F	3/32"	1/16"	840-3160		I	1/8"	1/8"	840-3100	
G	3/32"	1/16"	840-3175		J	1/8"	1/8"	840-3110	



A-D 2-3" Discs – For Use with Polishing Motors & Mini Max Combo

The 2" and 3" discs are sold with right hand (RH) tapered spindle adapters in packages of 10 or 40 discs and in sets of 4 of each disc and an adapter. Optional left hand (LH) adapter is also available. See below. Both have 1/4" arbor holes. Max. operating speed: 30,000rpm for 2" and 20,000rpm for 3".

Di. x AH	Color	Grit	SKU	Pkg. of 10	SKU	Pkg. of 40 with Hub
2" x 3/8"	Yellow	80	145-1745		145-1675	
	White	120	145-1750		145-1680	
	Red	220	145-1755		145-1685	
	Blue	400	145-1760		145-1690	
	Pink Pumice		145-1765		145-1695	
	Peach	6 Micron	145-1770		145-1700	
Lt. Green	1 Micron	145-1775		145-1705		
3" x 3/8"	Yellow	80	145-1780		145-1710	
	White	120	145-1785		145-1715	
	Red	220	145-1790		145-1720	
	Blue	400	145-1795		145-1725	
	Pink Pumice		145-1800		145-1730	
	Peach	6 Micron	145-1805		145-1735	
Lt. Green	1 Micron	145-1810		145-1740		

Description	SKU	Each
A 29-Piece 2" Disc Set	145-1813	
B 29-Piece 3" Disc Set	145-1816	
C RH Tapered Spindle Adapter Hub for 2" and 3" discs	145-1921	
D LH Tapered Spindle Adapter for 2" and 3" discs	145-1922	



E 6" Discs – For Use with Polishing Motors

Each 6" disc consists of eight stacked discs mounted on a plastic hub. Includes adapters for 1/2", 5/8", 3/4" and 7/8" arbors. Approx. Thickness is 1/2" with a 1" arbor hole*. Tapered spindle adapters sold separately. Max. operating speed 6,000rpm.

Di. x Approx. Thickness x AH	Color	Grit	SKU	Each	
				1-2	3+
E 6" dia. x 1/2" T x 1" AH*	Yellow	80	145-1925		
	White	120	145-1926		
	Red	220	145-1927		
	Blue	400	145-1928		
	Peach	6 Micron	145-1929		
	Lt. Green	1 Micron	145-1930		

*Complete with adapters for 1/2", 5/8", 3/4", and 7/8" arbors.



F Tapered Spindle Adapter for 6" Discs

Description	SKU	Each
Tapered Spindle Adapter for 6" discs	145-1931	



Sunburst® Points & Radial Discs

Treated ceramic abrasive grain embedded throughout eliminates the need for polishing compound and produces minimal dust and heat. Ideal for finishing, smoothing and high-luster polishing of all metals, acrylics and ceramics. Made in USA.



A-D Points Shape – 3/32" Shank

Description	Color	Grit	Pkg. of 12		Pkg. of 72	
			SKU	1-4	SKU	1-4
A Shape 12	Yellow	80	145-0210		145-0211	
	White	120	145-0212		145-0213	
	Red	220	145-0214		145-0215	
	Blue	400	145-0216		145-0217	
	Peach	6 Micron	145-0218		145-0219	
	Light Green	1 Micron	145-0220		145-0221	
B Shape 14	Yellow	80	145-0222		145-0223	
	White	120	145-0224		145-0225	
	Red	220	145-0226		145-0227	
	Blue	400	145-0228		145-0229	
	Peach	6 Micron	145-0230		145-0231	
	Light Green	1 Micron	145-0232		145-0233	
C Shape 15	Yellow	80	145-0234		145-0235	
	White	120	145-0236		145-0237	
	Red	220	145-0238		145-0239	
	Blue	400	145-0240		145-0241	
	Peach	6 Micron	145-0242		145-0243	
	Light Green	1 Micron	145-0244		145-0245	
Description				SKU	Each	
18 Piece All-In-One Assortment						
D	3 each of all 6 grits in all 3 shapes. 3/32" shanks			145-0250		

E 1/2" Snap-On Radial Discs

Description	Color	Grit	SKU	Pkg. of 30		
				1-5	6-9	10+
1/2" Snap-On	Yellow	80	145-5003			
	White	120	145-5004			
	Red	220	145-5005			
	Blue	400	145-5006			
	Pink	Pumice	145-5007			
	Peach	6 Micron	145-5008			
	Light Green	1 Micron	145-5009			
Description				SKU	Each	
E	6 each of all 7 grits plus one mandrel			145-5000		

F 5/8" Radial Discs – 1/16" Center Hole

Description	Color	Grit	SKU	Pkg. of 12		Pkg. of 48	
				1-5	SKU	1-5	SKU
F 5/8"	Yellow	80	145-5023		145-5043		
	White	120	145-5024		145-5044		
	Red	220	145-5025		145-5045		
	Blue	400	145-5026		145-5046		
	Pink	Pumice	145-5027		145-5047		
	Peach	6 Micron	145-5028		145-5048		
	Light Green	1 Micron	145-5029		145-5049		
Description				SKU	Each		
86 Piece All-In-One Assortment							
F	12 each of all 7 grits plus 2 mandrels (3/32" and 1/8")			145-5020			

A 7/8" Knife Edge Radial Discs – 1/16" Center Hole

Description	Color	Grit	SKU	Pkg. of 12		Pkg. of 48	
				1-5	SKU	1-5	SKU
A 7/8"	Yellow	80	145-5306		145-5314		
	White	120	145-5307		145-5315		
	Red	220	145-5308		145-5316		
	Blue	400	145-5309		145-5317		
	Pink	Pumice	145-5310		145-5318		
	Peach	6 Micron	145-5311		145-5319		
	Light Green	1 Micron	145-5312		145-5320		
Assortment				SKU	Each		
A	6 each of all 7 grits plus one mandrel			145-5321			

B 7/8" Dual Radial Discs – 1/16" Center Hole

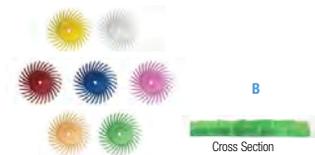
Description	Color	Grit	SKU	Pkg. of 12		Pkg. of 48	
				1-5	SKU	1-5	SKU
B 7/8"	Yellow	80	145-5290		145-5298		
	White	120	145-5291		145-5299		
	Red	220	145-5292		145-5300		
	Blue	400	145-5293		145-5301		
	Pink	Pumice	145-5294		145-5302		
	Peach	6 Micron	145-5295		145-5303		
	Light Green	1 Micron	145-5296		145-5304		
Assortment				SKU	Each		
B	6 each of all 7 grits plus one mandrel			145-5305			

C 7/8" Radial Discs – 1/16" Center Hole

Description	Color	Grit	SKU	Pkg. of 12		Pkg. of 48	
				1-5	SKU	1-5	SKU
C 7/8"	Yellow	80	145-5063		145-5083		
	White	120	145-5064		145-5084		
	Red	220	145-5065		145-5085		
	Blue	400	145-5066		145-5086		
	Pink	Pumice	145-5067		145-5087		
	Peach	6 Micron	145-5068		145-5088		
	Light Green	1 Micron	145-5069		145-5089		
Description				SKU	Each		
86 Piece All-In-One Assortment							
C	12 each of all 7 grits of 7/8" radial discs, plus 2 mandrels (3/32" and 1/8" shanks)			145-5060			

D 7/8" 4-PLY Discs – 3/32" Shanks

Description	Color	Grit	SKU	Pkg. of 6		
				1-5	6-9	10+
D 7/8"	Yellow	80	145-5103			
	White	120	145-5104			
	Red	220	145-5105			
	Blue	400	145-5106			
	Pink	Pumice	145-5107			
	Peach	6 Micron	145-5108			
	Light Green	1 Micron	145-5109			
Description				SKU	Each	
7 Piece All-in-One Assortment						
D	One each of all 7 grits of 4-PLY discs on 3/32" shanks			145-5100		




A-B 1" Radial Discs – 1/8" Center Hole

Description	Color	Grit	Pkg. of 12		Pkg. of 48	
			SKU	1-5	SKU	1-5
A 1"	Brown	36	145-5121		145-5141	
	Green	50	145-5122		145-5142	
	Yellow	80	145-5123		145-5143	
	White	120	145-5124		145-5144	
	Red	220	145-5125		145-5145	
	Blue	400	145-5126		145-5146	
Description				SKU	Each	
B 50 piece All-In-One-Assortment					145-5120	
8 each of all 6 grits of 1" radial discs, plus 2 mandrels (1/8" shanks)						


C 83 Piece All-In-One Assortment

Description	SKU	Each
C 4 each of all grits in sizes 5/8", 7/8", and 1", plus 3 mandrels.	145-5270	

D 2" Radial Discs 3-PLY or 6-PLY – 1/4" Center Hole

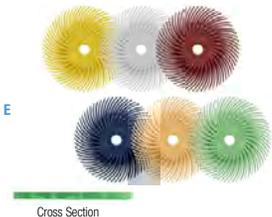
Description	Color	Grit	3-PLY		6-PLY	
			Each	SKU	1-5	SKU
D 2"	Yellow	80		145-5183		145-5203
	White	120		145-5184		145-5204
	Red	220		145-5185		145-5205
	Blue	400		145-5186		145-5206
	Peach	6 Micron		145-5188		145-5208
	Light Green	1 Micron		145-5189		145-5209

E 2" Radial Discs Refills – 3/8" Center Hole

Description	Color	Grit	SKU	Pkg. of 12		
				1-5	6-9	10+
E 2"	Yellow	80	145-5163			
	White	120	145-5164			
	Red	220	145-5165			
	Blue	400	145-5166			
	Peach	6 Micron		145-5168		
	Light Green	1 Micron		145-5169		

F-G Bristle Discs Hubs – For Use on Tapered Spindles

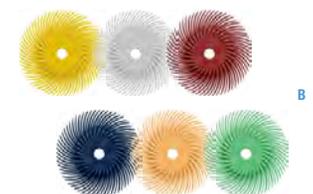
Description	SKU	Each
F Hub for 2" & 3" Radial Bristle Discs – Right	145-1921	
G Hub for 2" & 3" Radial Bristle Discs – Left	145-1922	
H Tapered Spindle Adapter for 6" Discs	145-1931	


A 3" Radial Discs 3-PLY or 6-PLY – 1/4" Center Hole

Description	Color	Grit	3-PLY		6-PLY	
			Each	SKU	1-5	SKU
A 3"	Yellow	80		145-5243		145-5263
	White	120		145-5244		145-5264
	Red	220		145-5245		145-5265
	Blue	400		145-5246		145-5266
	Peach	6 Micron		145-5248		145-5268
	Light Green	1 Micron		145-5249		145-5269


B 3" Radial Discs Refills – 3/8" Center Hole

Description	Color	Grit	SKU	Pkg. of 12		
				1-5	6-9	10+
B 3"	Yellow	80	145-5223			
	White	120	145-5224			
	Red	220	145-5225			
	Blue	400	145-5226			
	Peach	6 Micron		145-5228		
	Light Green	1 Micron		145-5229		


C 6" Radial Discs 8-PLY – Adjustable Center Hole

Description	Color	Grit	SKU	Each		
				1-5	6-9	10+
C 8-PLY	Yellow	80	145-5272			
	White	120	145-5273			
	Red	220	145-5274			
	Blue	400	145-5275			
	Peach	6 Micron		145-5276		
	Light Green	1 Micron		145-5277		


D 6" Radial Discs Refill Pack – 2" Center Hole

Description	Color	Grit	SKU	Pkg. of 40		
				1-5	6-9	10+
D Refill Pack	Yellow	80	145-5278			
	White	120	145-5279			
	Red	220	145-5280			
	Blue	400	145-5281			
	Peach	6 Micron		145-5282		
	Light Green	1 Micron		145-5283		





A Gesswein® Polishing Set

A complete, compact set for every job from fast grinding to final finish. The set features a selection of our most popular rubberized abrasives in both straight- and knife-edged wheels, as well as rods which can be dressed to reach into the tiniest settings. Dressing stone included. The complete set includes:

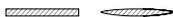
- 5 Assorted Heatless Wheels: for fast grinding and brush finishing
- 10 Premium GK-10 Rubber Pumice Wheels: industry standard for scratch removal and shaping
- 10 Black Silicon Polishing Wheels: for light scratch and bur removal
- 10 Pink Silicone Polishing Wheels: for ultra-high polishing
- 5 Brown Prepolisher Rods: for scratch removal in recessed areas
- 5 Green High Shine Rods: for fine polishing of recessed areas
- Dressing Stone for Rods: shapes rods to fine point
- 1 Mandrel: 3/32" Shank
- 1 Mandrel: 1/8" Shank
- Plastic Storage Box

Description	SKU	Each
Gesswein 50-Piece Polishing Set	145-0092	



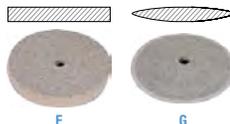
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J

B-C Dedeco® White Universal – 100 Grit, Flexible

White (silicon carbide) with a neoprene bond. Takes out scratches, parting lines and burs while leaving a very smooth finish with no flats or dusty residue. 1/16" arbor hole. Max RPM 7,000. Made in USA.

Shape	Style	Dimensions	SKU	Pkg. of 10
B	SE Wheel	7104	7/8" x 1/8"	145-0115
C	KE Wheel	7110	7/8"	145-0117

D-G Dedeco® White Flexies – 400 Grit, Flexible

White (aluminum oxide) with a neoprene bond. For ultra-fine polishing of gold and other precious metals. 1/16" arbor hole. Max RPM 21,000.

Shape	Style	Dimensions	SKU	Pkg. of 10
D	SE Wheel	5029	3/8" x 1/16"	145-0064
E	KE Wheel	4981	3/8"	145-0083
F	SE Wheel	5009	1/8" x 1/16"	145-0065
G	KE Wheel	4980	1/8"	145-0084

H Tru-Stone for Mounted Points & Wheels

For dressing and shaping mounted stones and other abrasive wheels. Also used to remove "load" build up from mounted stones. A very hard and coarse silicon carbide stone with 4 half-round grooves measuring 1/8", 1/4", 3/16" and 1/4" on one side. Quickly reshapes and resurfaces abrasive stones to like-new condition. Measures 3-1/2" L x 1-3/8" W x 3/8" H overall.

Description	SKU	Each
Tru-Stone for Mounted Stones & Wheels	380-1030	

I Diamond-Coated Dressing Block

Solid steel block with diamond coating for fast dressing and shaping of any of our rubberized abrasives. One side is grooved for shaping rods, points and knife-edged wheels. The other side is flat for dressing square-edged wheels. Measures 3-1/2" overall length (including handle). Made in Germany.

Description	SKU	Each
Diamond-Coated Dressing Block	145-1316	

J Deluxe Diamond Dresser

Save time and money dressing and shaping your mounted points and rubberized abrasives with this versatile solid steel block coated with diamond. Generous flat surface area is paired with both a V-shape and a rounded groove. Made in Germany.

Description	SKU	Each
Deluxe Diamond Dresser	145-1318	

A-C Rubber Pumice Wheels

Soft, flexible rubber wheels compounded with pumice abrasive. The light action produces a smooth finish on soft metals. All with 1/16" arbor hole. Max. operating speed: 25,000 RPM.

Style	Dia. x Thick	SKU	Pkg. of 10	SKU	Pkg. of 100
A	822	5/8" x 3/32"	—	845-2102	
B	888	7/8" x 1/8"	845-2151	845-2152	
C	999	5/8" tapered	845-2001	845-2002	

D Silipum Rubber Pumice Wheels

A combination of silicone and pumice make this an excellent product for removing scratches. Max. operating speed: 20,000 RPM.

Style	Dia.	SKU	Pkg. of 10	SKU	Pkg. of 100
KE Wheel	5/8"	845-2059		845-2058	

E-I EVE® Pumice Wheels

EVE pumice polishing wheels are the ideal rubber abrasive for working on metals and best of all, will not scratch stones! The fine pumice abrasive is safe to use around most stones and gives a final mirror-like finish to the metal surfaces. For optimal results, use at 7,000–10,000 RPM with very little exertion of pressure.

Description	SKU	Each				
EVE Pumice Wheel Intro Set						
E Introductory set of 23 consists of five of each grit/shape of pumice wheel plus three 3/32" shank mandrels.	845-2110					
Grit	Shape	Dia.	SKU	Pkg. of 10	SKU	Pkg. of 100
F Fine	Square-Edge Wheel	7/8"	845-2115		845-2114	
G Medium	Square-Edge Wheel	7/8"	845-2131		845-2130	
H Fine	Knife-Edge Wheel	7/8"	845-2117		845-2116	
I Medium	Knife-Edge Wheel	7/8"	845-2133		845-2132	

J-K Cratex® Pumice Wheels

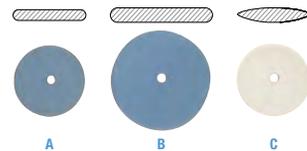
These knife-edge wheels are made from an oil-resistant chemical rubber for a unique cushioned action. This allows the pumice abrasive grains to cut freely, smoothly and softly for the finest effect, without smearing or clogging. 1/16" arbor hole. Max. 25,000 RPM.

Description	Shape	Style	Dia	Thickness	SKU	Pkg. of 100
J Cratex 2P	Knife-Edge Wheel	2P	5/8"	3/32"	845-4002	
K Cratex 5P	Knife-Edge Wheel	5P	1"	1/8"	845-4005	

L-O Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels with 1/16" or 1/8" arbor hole.

Shank	For AH	SKU	Pkg. of 3		Shank	For AH	SKU	Pkg. of 3	
			1-3	4+				1-3	4+
L	3/32"	1/16"	840-3170		0	1/8"	1/16"	840-3150	
M	3/32"	1/16"	840-3160						
N	3/32"	1/16"	840-3175						



A

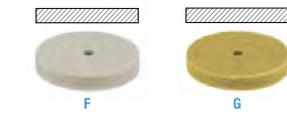
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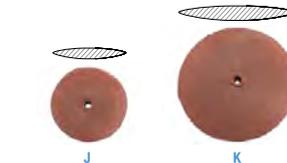
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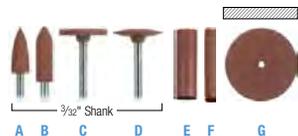
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Edenta Polishers

Natural Rubber – Silicon Carbide

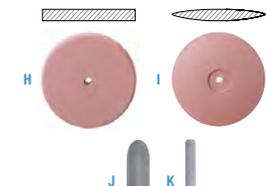
This Swiss company is world famous for making the best quality and longest lasting Rubberized abrasive products, all manufactured under the stringent ISO 9001 guidelines. The abrasive is precision graded and then uniformly distributed throughout the rubber. This Natural Rubber bond is a far superior product as the wheels last over TWICE as long as Silicone and can operate at higher, more efficient speeds. Higher speeds create a brighter, shinier surface and require less pressure.

Brown TopStar Polishers remove light scratches and prepare surfaces for final polishing, max. operating speed: 20,000 RPM. Pink Platinum Polishers work well as a prepolisher, max. operating speeds: 10,000 RPM. The Gray Titanium Polisher is for removing scratches and flaws, max. operating speed: 20,000 RPM, while Blue Titanium Polishers impart a final finish, max. operating speeds: 10,000 RPM. Green TopStar Polishers impart a bright high shine, max. operating speed: 10,000 RPM. Mounted shapes have 3/32" shanks, and unmounted shapes, except for rods, have 1/16" arbor holes. Made in Switzerland.



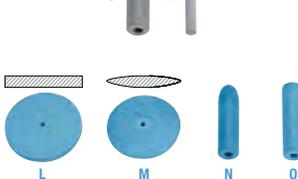
A-G Brown TopStar Polishers – Prepolish, Flexible

Shape	Dia. x L (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
A Mtd. Point	5.5 x 15.5	145-1427		145-1426	
B Mtd. Bullet	5 x 16	145-1429		145-1428	
C SE Mtd. Wheel	14.5 x 2	145-1433		145-1432	
D KE Mtd. Wheel	15	145-1431		145-1430	
E Cylinder	6 x 22	145-1423		145-1422	
F Rod	3 x 22	145-1425		145-1424	
G SE Wheel	22 x 3	145-1421		145-1420	



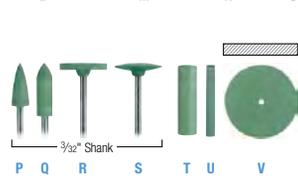
H-I Pink Platinum Polishers – Prepolish, Moderate Flex

Shape	Dia. x L (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
H SE Wheel	22 x 3	145-1487		145-1486	
I KE Wheel	22	145-1485		145-1484	



J-K Gray Titanium Polisher – Medium, Flexible

Shape	Dia. x L (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
J Bullet	6 x 23	145-3205		145-3204	
K Rod	3 x 22	145-3201		145-3200	



L-O Blue Titanium Polishers – Fine, Flexible

Shape	Dia. x L (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
L SE Wheel	22 x 3	145-3219		145-3218	
M KE Wheel	22 x 3	145-3217		145-3216	
N Bullet	6 x 23	145-3215		145-3214	
O Cylinder	6 x 22	145-3213		145-3212	



P-V Green TopStar Polishers – High Shine, Flexible

Shape	Dia. x L (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
P Mtd. Point	5.5 x 15.5	145-1447		145-1446	
Q Mtd. Bullet	5 x 16	145-1449		145-1448	
R SE Mtd. Wheel	14.5 x 2	145-1453		145-1452	
S KE Mtd. Wheel	15	145-1451		145-1450	
T Cylinder	6 x 22	145-1443		145-1442	
U Rod	3 x 22	145-1445		145-1444	
V SE Wheel	22 x 3	145-1441		145-1440	

W-X Polishing Rod Mandrels – 3/32" Shank

Description	SKU	Each	
		1-2	3+
W Mandrel for 2mm rod	145-1418		
X Mandrel for 3mm rod	145-1419		

EVE® Universal

EVE® Universal abrasives utilize fast-cutting silicon carbide abrasive uniformly dispersed throughout a silicone rubber bond for smooth finish.

Flexible nature allows them to follow contours. Can be easily dressed to a fine point for accessing recessed and detailed areas.

The mounted shapes are on 3/32" shanks. Use a reducing collet if your handpiece accommodates 1/16" or 3mm shanks. Unmounted have 1/16" arbor hole for use with a screw mandrel. All have a maximum operating speed of 10,000rpm and are made in Romania.



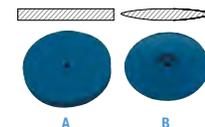
Shape	Dimensions (mm)	Size	White Coarse Grit	Black Medium Grit	Light Blue Fine Grit	Pink Extra Fine Grit	Pkg. of 10
			SKU	SKU	SKU	SKU	
Square Edge	22 x 3	7/8"	145-0940	145-0974	145-0028	145-0954	
Knife Edge	22 x 4	7/8"	145-0942	145-0976	145-0030	145-0956	
Cylinder	7 x 20	1/4"	145-0944	145-0977	145-0032	145-0958	
Mounted Point	5.5 x 15	1/4"	145-0946	145-0960	145-0034	145-0932	
Mounted Bullet	5 x 16	1/4"	145-0948	145-0962	145-0036	145-0934	
Mounted Square Edge	14.5 x 2.5	5/8"	145-0950	145-0964	145-0038	145-0936	
Mounted Knife Edge	14.5 x 2.5	5/8"	145-0952	145-0966	145-0040	145-0938	

Shape	Dimensions (mm)	Size	White Coarse Grit	Black Medium Grit	Light Blue Fine Grit	Pink Extra Fine Grit	Pkg. of 100
			SKU	SKU	SKU	SKU	
Square Edge	22 x 3	7/8"	145-0941	145-0973	145-0029	145-0955	
Knife Edge	22 x 4	7/8"	145-0943	145-0975	145-0031	145-0957	
Cylinder	7 x 20	1/4"	145-0945	145-0978	145-0033	145-0931	
Mounted Point	5.5 x 15	1/4"	145-0947	145-0961	145-0035	145-0933	
Mounted Bullet	5 x 16	1/4"	145-0949	145-0963	145-0037	145-0935	
Mounted Square Edge	14.5 x 2.5	5/8"	145-0951	145-0965	145-0039	145-0937	
Mounted Knife Edge	14.5 x 2.5	5/8"	145-0953	145-0967	145-0041	145-0939	

A-C EVE® Blue Silicone SIC – 280 Grit, Flexible

EVE Blue Universal abrasives are specially made to impart a satin finish on non-ferrous metals. Consists of a medium silicon carbide in silicone bond. Max operating speed: 10,000 RPM. Made in Romania.

Shape	Dia. x Thick (mm)	SKU	Pkg. of 10	SKU	Pkg. of 100
A SE Wheel	22 x 3	145-0980		145-0999	
B KE Wheel	22 x 4	145-0982		145-0998	
C Cylinder	20 x 7	145-0981		145-0997	



D-E Reducing Collets

Use the proper reducing collet to convert your standard 1/16" or 3mm collet to hold a 3/32" tool shank. Simply slip reducing collet into your handpiece, and make sure both the reducing collet and the tool shank are fully inserted into the collet. Stainless steel.

Size	SKU	Each
D 1/16" to 3/32"	816-1501	
E 3mm to 3/32"	816-1504	



F-I Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels with a 1/16" and 1/8" arbor hole.

Shank	For AH	SKU	Pkg. of 3		Shank	For AH	SKU	Pkg. of 3	
			1-3	4+				1-3	4+
F 3/32"	1/16"	840-3170			H 3/32"	1/16"	840-3175		
G 3/32"	1/16"	840-3160			I 1/8"	1/16"	840-3150		



EVE® Poly Polishers EVEFLEX

EVEFLEX Poly Polishers incorporate silicon carbide in a synthetic bond, making them more durable than a silicone rubber bond. They come in many shapes and sizes, both mounted and unmounted. Operate between 7,000–12,000 rpm (Max 15,000 rpm) for optimal results. Made in Romania.



Shape	Dimensions (mm)	Distinguisher	Blue	Gray	Reddish Brown	Green	Pkg. of 10
			Coarse Grit	Coarse Grit	Medium Grit	Fine Grit	
			SKU	SKU	SKU	SKU	
Small Cylinder	7 x 20	unmounted	145-1113	145-1127	145-1141	145-1155	
Large Cylinder	14 x 12	3/32" shank	145-1123	145-1137	145-1151	145-1165	
Floppy Disc	19 x 0.5	3/32" shank	145-1383	145-1385	145-1387	145-1389	
Flame	5.5 x 1.8	3/32" shank	145-1117	145-1131	145-1145	145-1159	
5/8" Knife-Edge Wheel	14.5 x 2.5	3/32" shank	145-1119	145-1133	145-1147	145-1161	
7/8" Knife Edge Wheel	22 x 4	unmounted	145-1103	145-1130	145-1173	145-1175	
Small Point	3.3 x 7.5	3/32" shank	145-1401	145-1403	145-1405	145-1407	
Large Point	4 x 12	3/32" shank	145-1115	145-1129	145-1143	145-1157	
5/8" Square-Edge Wheel	14.5 x 2	3/32" shank	145-1409	145-1411	145-1413	145-1415	
7/8" Square Edge Wheel	22 x 3	unmounted	145-1111	145-1125	145-1139	145-1153	

Shape	Dimensions (mm)	Distinguisher	Blue	Gray	Reddish Brown	Green	Pkg. of 100
			Extra Course Grit	Coarse Grit	Medium Grit	Fine Grit	
			SKU	SKU	SKU	SKU	
Small Cylinder	7 x 20	unmounted	145-1112	145-1126	145-1140	145-1154	
Large Cylinder	14 x 12	3/32" shank	145-1122	145-1136	145-1150	145-1164	
Floppy Disc	19 x 0.5	3/32" shank	145-1382	145-1384	145-1386	145-1388	
Flame	5.5 x 1.8	3/32" shank	145-1116	145-1130	145-1144	145-1158	
5/8" Knife-Edge Wheel	14.5 x 2.5	3/32" shank	145-1118	145-1132	145-1146	145-1160	
7/8" Knife Edge Wheel	22 x 4	unmounted	145-1102	145-1170	145-1172	145-1174	
Small Point	3.3 x 7.5	3/32" shank	145-1400	145-1402	145-1404	145-1406	
Large Point	4 x 12	3/32" shank	145-1114	145-1128	145-1142	145-1156	
5/8" Square-Edge Wheel	14.5 x 2	3/32" shank	145-1408	145-1410	145-1412	145-1414	
7/8" Square Edge Wheel	22 x 3	unmounted	145-1110	145-1124	145-1138	145-1152	



A-C EVEFLEX Poly Polisher Sets

Mounted sets include 24 pieces (3 each of 4 wheel/point types in 2 grits). The unmounted set has 52 pieces: 5 each of 2 wheel shapes in 4 grits, plus 5 cylinders (7x20) in Reddish Brown and Green grits, with 2 mandrels.

Description	SKU	Each
A Reddish Brown and Green Poly Polisher Set	145-1100	
B Blue and Gray Poly Polisher Set	145-1099	
C Unmounted Poly Polishers Set	145-1101	

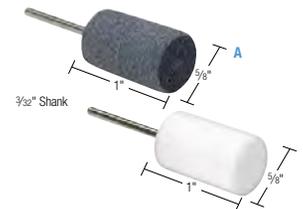


SX Mounted Polishers

3/32" Shank

Features large foam cell size constructed of resilient PVA (polyvinyl acetate) foam, for cool operation and long life. Firm enough to lap flat surfaces yet flexible enough to allow polishing of curved surfaces without gouging. Ideal for hard and soft metals such as stainless steel, aluminum and brass. Gray polishers contain silicon carbide while the white polishers have aluminum oxide abrasive. Measure 15mm (5/8") dia. x 25mm (1") long with 3/32" shank. Max. operating speed: 15,000 RPM. Made in Japan.

Description	Dimensions (mm)	Grit	SKU	Each	
				1-11	12+
A Gray Polisher – SiC	15 x 25	220	145-3280		
	15 x 25	320	145-3281		
	15 x 25	400	145-3282		
	15 x 25	600	145-3283		
	15 x 25	800	145-3284		
B White Polisher – AlO	15 x 25	1000	145-3285		
	15 x 25	1500	145-3288		
7-Piece Intro Pack (one each of above)			145-3279		

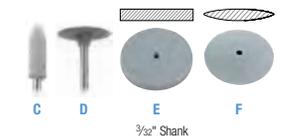


PT Platinum/Titanium Polishers

These polishers are moderately hard silicone rubber impregnated with aluminum oxide which conforms slightly to the surface. All shapes hold their edges due to slow breakdown rate. Applications include removing tool marks and smoothing parting lines. Choose from a variety of unmounted and mounted 3/32" shank shapes. Available in two color-coded grits: medium (gray) and fine (ilac). Max. operating speed: 10,000 RPM. Made in Germany.

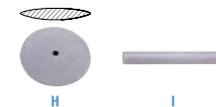
C-G Gray PT Polishers – Medium for Breakdown

Shape	Dimensions	SKU	Pkg. of 10	SKU	Pkg. of 100
C Mtd. Point	3/16" x 9/8"	145-1347		145-1346	
D KE Mtd. Wheel	5/8"	145-1353		145-1352	
E SE Wheel	7/8" x 1/8"	145-1341		145-1340	
F KE Wheel	7/8"	145-1343		145-1342	
			Pkg. of 25	Pkg. of 100	
G Rod	3mm x 1"	145-1345		145-1344	



H-I Lilac PT Polisher – Fine for Prepolish

Shape	Dimensions	SKU	Pkg. of 10	SKU	Pkg. of 100
H KE Wheel	7/8"	145-1359		145-1358	
			Pkg. of 25	Pkg. of 100	
I Rod	3mm x 1"	145-1361		145-1360	



J Diamond-Coated Dressing Block

Solid steel block with diamond coating for fast dressing and shaping of any of our rubberized abrasives. One side is grooved for shaping rods, points and knife-edged wheels. The other side is flat for dressing square-edged wheels. Measures 3-1/2" overall length (including handle).

Description	SKU	Each
Diamond-Coated Dressing Block	145-1316	



K-L Rod Mandrels – 3/32" Shank

Precision-machined mandrels for smooth-as-silk opening and closing. Holds 3mm rods securely with a twist-tightening grip. Nickel-plated tool steel.

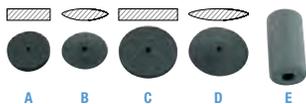
Description	SKU	Each	
		1-2	3+
K Edenta TopStar Mandrel for 3mm rod	145-1419		
L Polishing Mandrel for 3mm rod	145-1218		



Gesswein® Elite

Silicon Carbide

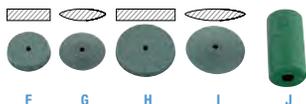
These popular wheels and cylinders contain silicon carbide grit for the most efficient cutting of nonferrous metals. Feature a more flexible silicone rubber bond that allows them to cut aggressively yet leave a smooth enough finish to go right to final polishing. 1/16" arbor holes.



A-E Gray Elite Silicone – 180 Grit, Very Flexible

Use Gray Silicone to remove deep scratches and burs quickly, max. operating speed: 10,000 RPM.

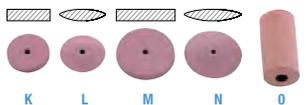
Shape	Dimensions	SKU	Pkg. of 10	SKU	Pkg. of 100
A Square Edge	5/8" x 1/8"	145-0016		145-0017	
B Knife Edge	5/8"	145-0018		145-0019	
C Square Edge	7/8" x 1/8"	145-0020		145-0021	
D Knife Edge	7/8"	145-0022		145-0023	
E Cylinder	1/2" x 1"	145-0141		-	



F-J Green Elite Silicone – 220 Grit, Very Flexible

Use Green Silicone for removing light scratches, max. operating speed: 10,000 RPM.

Shape	Dimensions	SKU	Pkg. of 10	SKU	Pkg. of 100
F Square Edge	5/8" x 1/8"	145-0108		145-0109	
G Knife Edge	5/8"	145-0010		145-0011	
H Square Edge	7/8" x 1/8"	145-0012		145-0013	
I Knife Edge	7/8"	145-0014		145-0015	
J Cylinder	1/2" x 1"	145-0142		-	



K-O Pink Elite Silicone – 1000 Grit, Very Flexible

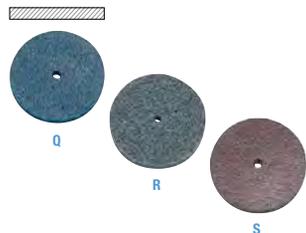
Use Pink Silicone to produce a high shine, max. operating speed: 10,000 RPM.

Shape	Dimensions	SKU	Pkg. of 10	SKU	Pkg. of 100
K Square Edge	5/8" x 1/8"	145-0988		145-0989	
L Knife Edge	5/8"	145-0990		145-0991	
M Square Edge	7/8" x 1/8"	145-0984		145-0985	
N Knife Edge	7/8"	145-0986		145-0987	
O Cylinder	1/2" x 1"	145-0143		-	

P Elite Inside Ring Cylinder Set

Includes one each of all three Elite 1/2" x 1" Cylinders listed above and Mandrel 145-0146. Mandrel also sold separately.

Description	SKU	Each
P Cylinder Set with Mandrel – 1/8" Shank	145-0150	
Mandrel Only	145-0146	



Q-S AirFlex Silicone Wheels – Silicone Carbide

Tiny pockets of air are uniformly interspersed throughout our AirFlex wheels, so they grind and polish quickly without overheating the workpiece. AirFlex Blue (coarse) quickly removes rough surfaces, burs and tool marks. AirFlex Gray (medium) removes medium-grit file marks and leaves a matte finish. AirFlex Brown (fine) removes light scratches and leaves a bright surface. AirFlex wheels work equally well on all precious alloys, including stainless steel and titanium. Flexible AirFlex follows contours and leaves a smooth, uniform finish. Made of silicon carbide abrasive in a silicone rubber bond. The 7/8" square-edge wheels are 1/8" thick with 1/16" arbor hole. Max. operating speed: 10,000 RPM.

AirFlex	Dia. x Thick	Grit	SKU	Pkg. of 10	SKU	Pkg. of 100
Q Blue (coarse)	7/8" x 1/8"	80	145-1106		145-1107	
R Gray (medium)	7/8" x 1/8"	240	145-1108		145-1109	
S Brown (fine)	7/8" x 1/8"	800	145-1104		145-1105	

A-I EVE® Polyurethane Polishing Rods – SIC

Very popular, long lasting rods, also known as pins, are designed for cleaning and polishing intricately detailed metal parts. All are silicone carbide in a polyurethane carrier and can be shaped using our Dressing Stone 145-1240 shown below. Available in three sizes and various grits for all applications. Packaged in a convenient reusable plastic storage box with cover. Choose between Brown and Green or Blue and Gray sets. Max. operating speed: 21,000 RPM. Made in Romania.

Color	Grit	Dia. x L	SKU	Pkg. of 25	SKU	Pkg. of 100
A Dk. Brown*	Extra-Coarse	2 x 20mm	145-1270		145-1241	
		3 x 23mm	145-1271		145-1242	
	Extra-Coarse	4 x 25mm	145-1272		145-1243	
B Blue	Extra-Coarse	2 x 20mm	145-1273		145-1244	
		3 x 23mm	145-1274		145-1245	
	Extra-Coarse	4 x 25mm	145-1275		145-1246	
C Dk. Gray	Coarse	2 x 20mm	145-1276		145-1247	
		3 x 23mm	145-1277		145-1248	
	Coarse	4 x 25mm	145-1278		145-1249	
D Gray	Medium	3mm x 1"	145-1345		145-1344	
E Lilac	Fine	3mm x 1"	145-1361		145-1360	
F Brown	Fine	2 x 20mm	145-1279		145-1250	
		3 x 23mm	145-1280		145-1251	
G Green	Extra-Fine	2 x 20mm	145-1282		145-1253	
		3 x 23mm	145-1283		145-1254	



Description	SKU	Each
H 83-Piece Set (20 of each 2 and 3mm Brown and Green rods, two 3/32" mandrels and a dressing stone)	145-1201	
I 83-Piece Set (20 of each 2 and 3mm Blue and Dark Gray rods, two 3/32" mandrels and a dressing stone)	145-1202	



* Dark Brown is Extra hard so it acts like an extra-coarse grit.

J-K Edenta TopStar Rod Mandrels – 3/32" Shank

Precision-machined for smooth-as-silk opening and closing. 2mm or 3mm rods. Swiss made.

Description	SKU	Each	
		1-2	3+
J Mandrel for 2mm rod	145-1418		
K Mandrel for 3mm rod	145-1419		



L-N Polishing Rod Mandrels – 3/32" Shank

For use with rods. Holds securely with a twist-tightening grip. Nickel-plated tool steel. Made in Germany.

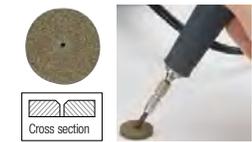
Description	SKU	Each	
		1-2	3+
L Mandrel for 2mm rod	145-1217		
M Mandrel for 3mm rod	145-1218		
N Mandrel for 4mm rod	145-1219		



O Diamond Impregnated Dressing Stone

Has a concave center hole for forming a point on polishing rods. Measures 3/4" dia. x 1/8" thick.

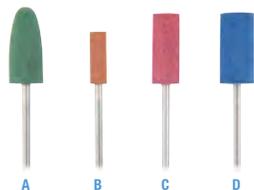
Description	SKU	Each	
		1-4	5+
Dressing Stone	145-1240		



Cera Wheels & Points

Ceramic Abrasive and Synthetic Rubber for a Mirror-Like Shine

This revolutionary abrasive consists of ceramic particles mixed in a long-lasting synthetic rubber carrier. Its fast breakdown rate ensures ceramic particles are always exposed to the polishing surface. Resists clogging for high efficiency. Great for cleaning, deburring, precision grinding, polishing and super finishing of molds, dies, small electrical components, sensitive equipment and more. Use dry or wet on steels, alloys and stainless steel. Work with light pressures. Made in Japan.



A-D Cera Points – 3/32" Shank

Points mounted on 3/32" stainless steel shanks. Max. operating speed: 24,000 RPM on the 10mm diameter sizes; 30,000 RPM on the smaller sizes.

Dimensions	Color					Each
	Red 80	Blue 120	Green 220	Purple 320	Orange 500	
A 10 x 22mm	351-0624	351-0625	351-0626	351-0627	351-0628	1-9 10+*
B 5 x 15mm	351-0600	351-0601	351-0603	351-0604	351-0605	
C 8 x 20mm	351-0606	351-0607	351-0609	351-0610	351-0611	
D 10 x 20mm	351-0612	351-0613	351-0615	351-0616	351-0617	

*Quantity discount for orders of one item number only; not assorted.

Try our money-saving set of the most popular 5 x 15 shape. One of each grit (red 80, blue 120, green 220, purple 320 and orange 500).

Description	SKU	Each
Cera Point 5-Piece Starter Set – 3/32" Shank	351-0629	

E-G Cera Points – 3mm Shank

Dimensions	Color					Pkg. of 50
	Red 80	Blue 120	Green 220	Purple 320	Orange 500	
E 5 x 15mm	351-0650	351-0651	351-0652	351-0653	351-0654	
F 8 x 20mm	351-0655	351-0656	351-0657	351-0658	351-0659	
G 10 x 20mm	351-0660	351-0661	351-0662	351-0663	351-0664	

H-J Cera Wheels

Unmounted wheels with 1/16" arbor holes. Max. operating speed: 18,000 RPM.

Dimensions	Color				Pkg. of 10
	Red 80	Blue 120	Green 220	Orange 500	
H 18 x 3mm	352-0101	352-0102	352-0103	352-0104	1-4 5+*
I 18 x 2mm	–	352-0108	352-0109	352-0111	
J 18 x 1mm	–	352-0114	352-0115	352-0117	

*Quantity discount for orders of one item number only; not assorted.

K Cera Sticks

Each stick consists of a block of Cera abrasive mounted on a plastic holder. Material and holder are both flexible, so they conform well to irregular surfaces and hard-to-reach areas. Three slots on back of holder serve as convenient hacksaw guides for removing tip of Cera material once worn. Blocks measure 2-3/4"L x 3/8"W x 1/4"H. Sticks measure 7" overall length.

Dimensions	Color					Each
	Gray 46	Red 80	Blue 120	Yellow 220	Purple 320	
	352-0150	352-0151	352-0152	352-0153	352-0154	1-4 5+*

Description	SKU	Each
Cera Sticks 5-Piece Set	352-0155	

L Screw Mandrel

Shank	For AH	SKU	Pkg. of 3	Each
1/16"	1/16"	840-3150	1-3	4+

Brightboy® – Aluminum Oxide

Brightboy is made of aluminum oxide with a resilient rubber bond, making it long-lasting. Its uniform cutting action makes it ideal for deburring and scratch removal on nonferrous metals. Also for light grinding of carbon steel. Permits cushioned action on flat and contoured surfaces. The texture and cutting action are always uniform. Brightboy is approximately 70 grit and requires no additives such as cutting compounds.

A Brightboy® Stick and Holder

Excellent for touch-ups and removal of light scratches. Used for cleaning otherwise unreachable deep cavities. Made of flexible rubber. Reusable clear plastic holder has screw-on collet that gives support and gripping power. Stick can be exposed or withdrawn as desired and is easily dressed to the best shape for the job. Also removes rust, heat marks and stains from soft and hard metals. Sticks measure 6"L x 5/16" diameter.

Description	SKU	Each
A Brightboy Stick and Holder	277-0065	
Brightboy Coarse Refill 5/16" dia.	277-0063	

B Brightboy® Tablet

Used for removing scratches or rust and for general surface cleaning and finishing.

Description	Dimensions	SKU	Each
Tablet	2-1/4"L x 1-1/8"W x 3/8"H	277-0066	

C Gem Shine Polishing Wheels – Polishing Just Got Easier!

The Gem Shine Polishing Wheels are unique polishing wheels designed for removing light surface scratches. Impregnated with a polishing paste to provide scratch removal and a final polish. Simply apply a little pressure to these wheels to allow the paste to flow out onto the work surface and then return to a light polishing application with the same wheel. The results are amazing! Comes supplied in a box with (5) Gem Shine Polishing Wheels and a reinforced 3/32" mandrel.

Description	SKU	Set
Gem Shine Polishing Wheels	845-1105	

D Diamond-Coated Dressing Block

Solid steel block with diamond coating for fast dressing and shaping of any of our rubberized abrasives. One side is grooved for shaping rods, points and knife-edged wheels. The other side is flat for dressing square-edged wheels. Measures 3-1/2" overall length (including handle).

Description	SKU	Each
Diamond-Coated Dressing Block	145-1316	

E Deluxe Diamond Dresser

Save time and money dressing and shaping your mounted points and rubberized abrasives with this versatile solid steel block coated with diamond. Generous flat surface area is paired with both a V-shape and a rounded groove. Made in Germany.

Description	SKU	Each
Deluxe Diamond Dresser	145-1318	

F-G Reducing Collets

Instantly converts your 1/8" or 3mm collet to hold a 3/32" tool shank. Simply slip reducing collet into collet on your rotary handpiece to use 3/32" shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the handpiece collet. Stainless steel.

Size	SKU	Each
F 1/8" to 3/32"	816-1501	
G 3mm to 3/32"	816-1504	



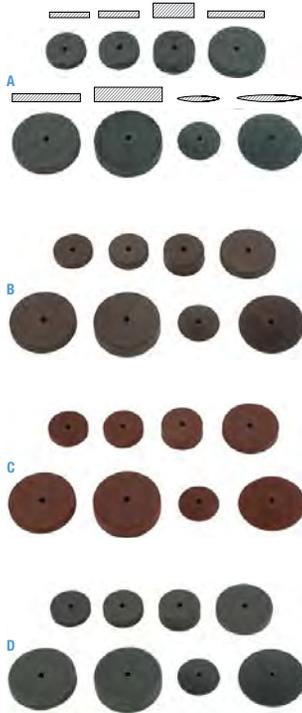
Cratex® Small Wheels

Tough, Resilient, Rubberized Silicon Carbide Abrasive

Utilizes silicon carbide as the abrasive grain in a standard bond of premium grade, oil-resistant chemical rubber. Its unique cushioned action allows the abrasive grains to cut freely, smoothly and softly without gouging or digging into the work surface.

Some typical applications:

- Cleaning and polishing to remove surface deposits.
- Polishing and smoothing to improve performance, appearance, and cleanliness.



A-D Cratex® Small Wheels – Square- and Knife-Edge

All have 1/8" arbor hole. Max. operating speed: 25,000 RPM. Use with Cratex mandrels.

Grit	Shape	Dia. x Thick.	Style	SKU	Pkg. of 100
A Coarse, 40	SE	5/8" x 3/32"	53C	149-0053	
	SE	5/8" x 1/8"	54C	149-0054	
	SE	5/8" x 1/4"	59C	149-0059	
	SE	7/8" x 1/8"	74C	149-0074	
	SE	1" x 1/8"	80C	149-0080	
	SE	1" x 1/4"	88C	149-0088	
	KE	5/8" x 3/32"	2C	149-0002	
	KE	1" x 1/8"	5C	149-0005	
B Medium, 90	SE	5/8" x 3/32"	53M	148-0053	
	SE	5/8" x 1/8"	54M	148-0054	
	SE	5/8" x 1/4"	59M	148-0059	
	SE	7/8" x 1/8"	74M	148-0074	
	SE	1" x 1/8"	80M	148-0080	
	SE	1" x 1/4"	88M	148-0088	
	KE	5/8" x 3/32"	2M	148-0002	
	KE	1" x 1/8"	5M	148-0005	
C Fine, 120	SE	5/8" x 3/32"	53F	147-0053	
	SE	5/8" x 1/8"	54F	147-0054	
	SE	5/8" x 1/4"	59F	147-0059	
	SE	7/8" x 1/8"	74F	147-0074	
	SE	1" x 1/8"	80F	147-0080	
	SE	1" x 1/4"	88F	147-0088	
	KE	5/8" x 3/32"	2F	147-0002	
	KE	1" x 1/8"	5F	147-0005	
D Extra-Fine, 240	SE	5/8" x 3/32"	53XF	146-0053	
	SE	5/8" x 1/8"	54XF	146-0054	
	SE	5/8" x 1/4"	59XF	146-0059	
	SE	7/8" x 1/8"	74XF	146-0074	
	SE	1" x 1/8"	80XF	146-0080	
	SE	1" x 1/4"	88XF	146-0088	
	KE	5/8" x 3/32"	2XF	146-0002	
	KE	1" x 1/8"	5XF	146-0005	

E Cratex® Set #777

Contains 80 small wheels and points in popular sizes including coarse, medium, fine and extra-fine grits. Four mandrels with 1/8" shanks are in the set. Packaged in a clear divided box for easy selection.

Description	SKU	Each
Cratex Set #777	146-7770	



Cratex® Large Wheels

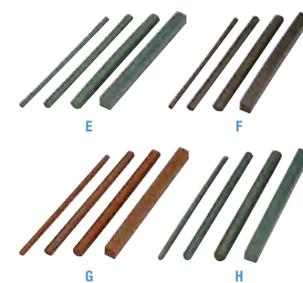
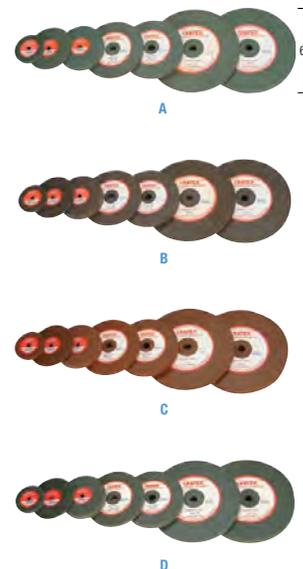
Silicon Carbide

Feature the same tough, resilient, rubberized silicon carbide abrasive in a standard bond of oil-resistant chemical rubber as the small wheels. Unique cushioned action allows the abrasive grains to cut freely, smoothly and softly without gouging or digging into the work surface.

A-D Cratex® Large Wheels – Square-Edge

Grit	Shape	Dia. x Thick x AH	Style	SKU	Each
A Coarse, 40	SE Wheel	2" x 1/4" x 1/4"	204C	149-0204	
	SE Wheel	3" x 1/2" x 1/4"	302C	149-0302	
	SE Wheel	3" x 1/2" x 1/4"	308C	149-0308	
	SE Wheel	4" x 1/2" x 1/2"	404C	149-0404	
	SE Wheel	4" x 1/2" x 1/2"	408C	149-0408	
	SE Wheel	6" x 1/2" x 1/2"	604C	149-0604	
B Medium, 90	SE Wheel	6" x 1/2" x 1/2"	608C	148-0608	
	SE Wheel	6" x 1/2" x 1/2"	608C	149-0608	
	SE Wheel	2" x 1/4" x 1/4"	204M	148-0204	
	SE Wheel	3" x 1/2" x 1/4"	302M	148-0302	
	SE Wheel	3" x 1/2" x 1/4"	308M	148-0308	
	SE Wheel	4" x 1/4" x 1/2"	404M	148-0404	
C Fine, 120	SE Wheel	4" x 1/2" x 1/2"	408M	148-0408	
	SE Wheel	6" x 1/4" x 1/2"	604M	148-0604	
	SE Wheel	6" x 1/2" x 1/2"	608M	148-0608	
	SE Wheel	6" x 3/4" x 1/2"	612M	148-0612	
	SE Wheel	2" x 1/4" x 1/4"	204F	147-0204	
	SE Wheel	3" x 1/2" x 1/4"	302F	147-0302	
D Extra-Fine, 240	SE Wheel	3" x 1/2" x 1/4"	308F	147-0308	
	SE Wheel	4" x 1/4" x 1/2"	404F	147-0404	
	SE Wheel	4" x 1/2" x 1/2"	408F	147-0408	
	SE Wheel	6" x 1/4" x 1/2"	604F	147-0604	
	SE Wheel	6" x 1/2" x 1/2"	608F	147-0608	
	SE Wheel	6" x 3/4" x 1/2"	612F	147-0612	
E-H Cratex® Blocks and Sticks	SE Wheel	2" x 1/4" x 1/4"	204XF	146-0204	
	SE Wheel	3" x 1/2" x 1/4"	302XF	146-0302	
	SE Wheel	3" x 1/2" x 1/4"	308XF	146-0308	
	SE Wheel	4" x 1/4" x 1/2"	404XF	146-0404	
	SE Wheel	4" x 3/8" x 1/2"	406XF	146-0406	
	SE Wheel	4" x 1/2" x 1/2"	408XF	146-0408	
G Fine, 120	SE Wheel	6" x 1/4" x 1/2"	604XF	146-0604	
	SE Wheel	6" x 1/2" x 1/2"	608XF	146-0608	
	SE Wheel	1/4" x 6"	046C	149-0046	
	SE Wheel	3/8" x 6"	066C	149-0066	
	SE Wheel	1/2" x 6"	086C	149-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
F Medium, 90	SE Wheel	1/2" x 6"	086M	148-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
	SE Wheel	1/2" x 6"	086M	148-0086	
G Fine, 120	SE Wheel	1/2" x 6"	6404M	148-6404	
	SE Wheel	1/4" x 6"	046F	147-0046	
	SE Wheel	3/8" x 6"	066F	147-0066	
	SE Wheel	1/2" x 6"	086F	147-0086	
	SE Wheel	1/2" x 6"	086F	147-0086	
	SE Wheel	1/2" x 6"	086F	147-0086	
H Extra-Fine, 240	SE Wheel	1/2" x 6"	6404F	147-6404	
	SE Wheel	1/4" x 6"	046XF	146-0046	
	SE Wheel	3/8" x 6"	066XF	146-0066	
	SE Wheel	1/2" x 6"	086XF	146-0086	
	SE Wheel	1/2" x 6"	086XF	146-0086	
	SE Wheel	1/2" x 6"	086XF	146-0086	

Diameter	Max. Operating Speed
2" with 1/4" AH	10,500 RPM
2-1/2" with 1/4" AH	8,300 RPM
3" with 1/4" AH	5,250 RPM
4" with 1/2" AH	7,000 RPM
5" with 1/2" AH	4,200 RPM
6" with 1/2" AH	3,500 RPM



Cratex® Bullets, Cylinders & Points

Silicon Carbide

Utilizes silicon carbide as the abrasive grain in a standard bond of premium grade, oil-resistant chemical rubber. Its unique cushioned action allows the abrasive grains to cut freely, smoothly and softly without gouging or digging into the work surface.

Some typical applications:

- Cleaning and polishing to remove surface deposits.
- Polishing and smoothing to improve performance, appearance, and cleanliness.



Cratex® Bullet Threaded Insert



Color	Approximate Grit
Dark Green	Coarse 40
Brown	Medium 90
Red	Fine 120
Light Green	Extra-Fine 240

A-D Cratex® Bullets

All have 1/4" arbor hole and threaded insert. See below for Cratex mandrels. Max. operating speed: 20,000 RPM.

Grit	Shape	Dia. x Length	Style	SKU	Each
A Coarse, 40	Bullet	7/8" x 1-3/4"	4707C	149-4707	
B Medium, 90	Bullet	7/8" x 1-3/4"	4707M	148-4707	
C Fine, 120	Bullet	7/8" x 1-3/4"	4707F	147-4707	
D Extra-Fine, 240	Bullet	7/8" x 1-3/4"	4707XF	146-4707	

E-H Cratex® Cylinders and Points

All have 1/8" arbor hole. See below for Cratex mandrels. Max. operating speed: 25,000 RPM.

Grit	Shape	Dia. x Length	Style	SKU	Pkg. of 100
E Coarse, 40	Cylinder	1/4" x 1/2"	4C	149-0004	
	Cylinder	1/4" x 1/8"	6C	149-0006	
	Point	9/32" x 1"	8C	149-0008	
F Medium, 90	Point	3/8" x 3/8"	10C	149-0010	
	Cylinder	1/4" x 1/2"	4M	148-0004	
	Cylinder	1/4" x 1/8"	6M	148-0006	
G Fine, 120	Point	9/32" x 1"	8F	147-0008	
	Point	3/8" x 3/8"	10F	147-0010	
	Cylinder	1/4" x 1/2"	4F	147-0004	
H Extra-Fine, 240	Cylinder	1/4" x 1/8"	6F	147-0006	
	Point	9/32" x 1"	8F	147-0008	
	Point	3/8" x 3/8"	10F	147-0010	
H Extra-Fine, 240	Cylinder	1/4" x 1/2"	4XF	146-0004	
	Cylinder	1/4" x 1/8"	6XF	146-0006	
	Point	9/32" x 1"	8XF	146-0008	
Point	3/8" x 3/8"	10XF	146-0010		

I Cratex® Set #778

Contains 64 points in 4 different grits plus 4 mandrels with 1/8" shanks.

Description	SKU	Set
Cratex Set #778	146-7780	

J-Q Cratex® Mandrels

Fit Cratex small wheels, cylinders points and bullets. Use light working pressure.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
J #2	3/32"	1/16"	840-3183		
K #3	1/8"	1/16"	840-3186		
L #5	1/8"	1/8"	840-3187		
M #1	3/32"	3/32"	840-3182		
N #4	3/32"	1/8"	840-3185		
O #6	1/8"	1/8"	840-3085		
P 1341	1/4"	1/4"	840-3180		
Q 1342	1/4"	1/4"	840-3184		

GRX

Innovative AIO Abrasive Material for Fast Grinding and Superb Surface Finishing

GRX consists of aluminum oxide dispersed in a unique elastic bond. Cuts a bit slower than silicon carbide yet imparts a very smooth surface finish – each grit yields a much higher finish than expected. Grinds steel and aluminum without clogging. Prevents metal surfaces from becoming scorched during processing. Very long-lasting. Made in Japan.

A GRX Wheels

For grinding sprues or burs and removing surface roughness. Use on a polishing motor with arbor. Not for use on tapered spindles.

Dia. x Thick X AH	Grit	Max RPM	SKU	Each	
				1-9	10+
A 4" x 1/2" x 1/2"	80	4,800	277-0100		
	150	4,800	277-0105		



B GRX Disc

This innovative, 150 grit, GRX disc is made of aluminum oxide in a unique elastic bond. Can be easily dressed to become knife edge if that is beneficial for your operation.

Dia. x Thick X AH	Grit	Max RPM	SKU	Each	
				1-9	10+
1" x 1/8" x 1/16"	150	12,000	277-0125		



C GRX Mounted Bullet – 3/32" Shank

This 150 grit, GRX bullet can be easily shaped to meet your specific requirements. Consists of aluminum oxide in an elastic bond. Mounts on a 3/32" shank.

Dia. x L	Shank	Grit	Max RPM	SKU	Each	
					1-9	10+
1/2" x 1"	3/32"	150	8,000	277-0116		



D GRX Stick

Dimensions	Grit	SKU	Each	
			1-9	10+
6" L x 1/2" square	120	277-0165		



E-F Reducing Collets

Instantly converts your 1/8" or 3mm collet to hold a 3/32" tool shank. Simply slip reducing collet into collet on your rotary handpiece to use 3/32" shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the handpiece collet. Stainless steel.

Size	SKU	Each
E 1/8" to 3/32"	816-1501	
F 3mm to 3/32"	816-1504	



GMX/G-FLEX Cotton Fiber & Abrasive Mounted Points

GMX: Soft Latex Bond

GMX cotton fiber products utilize a unique flexible bond with laminations of non-woven, aluminum oxide abrasive impregnated fabric, with laminations that run parallel to the shank to prevent the ends from chipping. The construction continually exposes new abrasive grain for cooler running, and the flexible bond allows for reduced vibration and chattering. Unlike bonded or coated abrasives, these do not load up when working on softer metals or alloys, such as aluminum. Cylinders and other shapes can be dressed to conform to unique contours. Excellent for breaking edges, deburring, and blending on aluminum, stainless steel, and exotic alloys. GMX is also ideal for polishing mold runners and mold & die components. Available on 1/4", 3mm and 6mm shanks via special order.

G-Flex: Firm Resin Bond

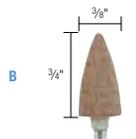
G-Flex cotton fiber products are similar to the GMX, but use a firm resin bond. It is also non-loading and can grind and finish in one operation. A special formulation keeps it from being too aggressive, and works well on aluminum, stainless steel, and exotic alloys. Another favorite for cleaning and polishing mold runners, as well as deburring and edge breaking on all metals. Also work great for deflashing of die castings, as well as deburring and finishing of turbine blade roots. 3mm shanks are in stock on some cylinders, others are available by special order.

Use 80 grit for deburring and sprue removal, 120 grit to remove parting lines and small burs, 180 and 320 grit for removing light scratches.



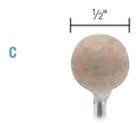
A B41 Cone – 5/8"L x 5/8" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
A 80	1/8"	205-1812	135-1812				
120	1/8"	205-1814	135-1814				
180	1/8"	205-1816	135-1816				
320	1/8"	205-1818	135-1818				



B B52 Bullet – 3/4"L x 3/8" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
B 80	1/8"	205-1722	135-1722				
120	1/8"	205-1724	135-1724				
180	1/8"	205-1726	135-1726				
320	1/8"	205-1728	135-1728				



C B121 Ball – 1/2" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
C 80	1/8"	205-1832	135-1832				
120	1/8"	205-1834	135-1834				
180	1/8"	205-1836	135-1836				
320	1/8"	205-1838	135-1838				

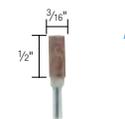


D B122 Ball – 3/8" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
D 80	1/8"	205-1732	135-1732				
120	1/8"	205-1734	135-1734				
180	1/8"	205-1736	135-1736				
320	1/8"	205-1738	135-1738				

A W154 Cylinder – 1/2"L x 3/16" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
A 80	1/8"	205-1542	135-1542				
120	1/8"	205-1544	135-1544				
120	3mm	–	136-1544				
180	1/8"	205-1546	135-1546				
320	1/8"	205-1548	135-1548				



B W163 Cylinder – 1/2"L x 1/4" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
B 80	1/8"	205-1632	135-1632				
80	3mm	204-1632	136-1632				
120	1/8"	205-1634	135-1634				
120	3mm	204-1634	136-1634				
180	1/8"	205-1636	135-1636				
180	3mm	204-1636	136-1636				
320	1/8"	205-1638	135-1638				
320	3mm	204-1638	136-1638				



C W176 Cylinder – 1/2"L x 3/8" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
C 80	1/8"	205-1762	135-1762				
120	1/8"	205-1764	135-1764				
120	3mm	–	136-1764				
180	1/8"	205-1766	135-1766				
320	1/8"	205-1768	135-1768				



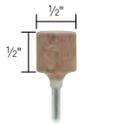
D W177 Cylinder – 3/4"L x 3/8" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
D 80	1/8"	205-1772	135-1772				
120	1/8"	205-1774	135-1774				
180	1/8"	205-1776	135-1776				
320	1/8"	205-1778	135-1778				



E W185 Cylinder – 1/2"L x 1/2" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
E 80	1/8"	205-1852	135-1852				
120	1/8"	205-1854	135-1854				
180	1/8"	205-1856	135-1856				
320	1/8"	205-1858	135-1858				



F W186 Cylinder – 3/4"L x 1/2" dia.

Grit	Shank	Soft GMX		Hard G-Flex		Each	
		SKU	SKU	1-11	12-71	72+	
F 80	1/8"	205-1862	–				
120	1/8"	205-1864	–				
180	1/8"	205-1866	–				
320	1/8"	205-1868	–				



A-C GMX & G-Flex Application-Specific Sets – 1/8" Shank

All 3 Gesswein cotton fiber sets offer an assortment of 12 points: 6 GMX and 6 G-Flex points in various shapes and grits targeted to working in specific applications: General purpose deburring and edge finishing, aluminum and non-ferrous finishing and deburring, stainless and exotic alloy finishing and deburring. All are mounted on 1/8" shanks. Each set includes 12 pieces: 6 shapes in both GMX (gray, soft latex bond) and G-Flex (brown, firmer resin bond).

Description	SKU	Pkg. of 12
A General Purpose	135-1510	
B Aluminum/Non-Ferrous	135-1520	
C Stainless & Exotic Metals	135-1530	

General Purpose Shapes Grit Deburring and Edge Finishing – SKU 135-1510

Shapes	Grit	Set of 12: One each GMX and G-FLEX					
B52 Bullet	80						
B122 Ball	80						
W154 Cyl.	320						
W163 Cyl.	80						
W177 Cyl.	180						
W185 Cyl.	120						

Aluminum/Non-Ferrous Shapes Grit Finishing and Deburring – SKU 135-1520

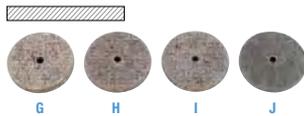
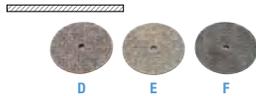
Shapes	Grit	Set of 12: One each GMX and G-FLEX					
B41 Cone	320						
B52 Bullet	120						
B122 Ball	80						
W163 Cyl.	120						
W176 Cyl.	180						
W185 Cyl.	80						

Stainless Steel & Exotic Metals Shapes Grit Finishing and Deburring – SKU 135-1530

Shapes	Grit	Set of 12: One each GMX and G-FLEX					
B52 Bullet	80						
B122 Ball	80						
W154 Cyl.	120						
W163 Cyl.	80						
W177 Cyl.	120						
W185 Cyl.	80						

D-J GMX Discs

A long-lasting aluminum oxide abrasive in a unique composite of laminated cotton fiber in a rubber bond. The cotton base also creates a cushioned feel and helps reduce chatter and loading. GMX cuts and smooths in one operation, leaving a smooth, even finish. Discs can be dressed to conform to shape of workpiece. Use 80 grit for deburring, 120 grit to remove parting lines and small burrs, 180 and 320 grit for removing light scratches. Made in USA.



	Dia. x Thick x AH	Grit	Max. RPM	SKU	Each	
					1-11	12+
D	1" x 1/16" x 1/8"	120	36,290	205-5204		
E		180	36,290	205-5206		
F		320	36,290	205-5208		
G	1" x 1/8" x 1/8"	80	36,290	205-5252		
H		120	36,290	205-5254		
I		180	36,290	205-5256		
J		320	36,290	205-5258		

GMX

Long-Lasting Aluminum Oxide Abrasive

A unique composite of laminated cotton fiber in a rubber bond, GMX cuts and smooths in one operation, leaving a smooth, even finish. Can be dressed to conform to shape of workpiece. Use 80 grit for deburring and sprue removal, 120 grit to remove parting lines and small burrs, 180 and 320 grit for removing light scratches. Made in USA.

A-E GMX Sticks and Rods

Used for polishing and touching up molds, dies and metal parts. Less aggressive than polishing stones, GMX sticks produce a surprisingly smooth surface.

Dimensions	Grit	SKU	Each	
			1-11	12+
A 4" L x 1/4" square	80	206-9250		
	120	206-9260		
	180	206-9270		
	320	206-9280		
B 4" L x 1/4" round	80	206-9320		
	120	206-9325		
	180	206-9330		
	320	206-9335		
C 4" L x 1/2" round	80	206-9340		
	120	206-9345		
	180	206-9350		
	320	206-9355		
D 6" L x 1/4" round	80	206-9360		
	120	206-9365		
	180	206-9370		
	320	206-9375		
E 6" L x 1/2" round	80	206-9380		
	120	206-9385		
	180	206-9390		
	320	206-9395		

F-G GMX Wheels

Dia. x Thick x AH	Grit	Max. RPM	SKU	Each		
				1-24	25+	
F 4" x 1/4" x 1/4"	80	9,075	206-1050			
	120	9,075	206-1060			
	180	9,075	206-1070			
	320	9,075	206-1080			
					Each	
					1-9	10+
G 6" x 1/8" x 1/2"	120	6,050	206-1360			
	180	6,050	206-1660			
	320	6,050	206-1670			
	80	6,050	206-1750			



Polishing Compounds & Rouges

Gesswein offers the finest products for all aspects of polishing. From removing deep scratches to cutting, to final finishing to a very high luster finish, we have what you need to work on brass, stainless steel, gold (yellow and white), silver, platinum, rhodium, chrome, nickel steel, aluminum, copper, and zinc. Almost any metal you use we can help you polish as well as acrylics, epoxies and hard plastics.



A-J Polishing Compounds

All bar weights are approximate and may vary slightly from bar to bar.

Type	Description and Application	Approx. Weight	SKU	Each	
				1-9	10+
A	White 800 Platinum	400 g	215-0048		
B	Manhattan Bobbing*	1 lb.	215-0426		
C	Tripoli*	1 lb.	215-0476		
D	Premium Green Rouge	¼ lb.	215-0800		
E	Graystar	1 lb. 2.2 lb.	215-0912 215-0914		
F	Premium Red Rouge	¼ lb. 1 lb.	215-1050 215-1150		
G	White 4X Diamond*	1 lb.	215-1711		
H	White Blizzard	1 lb.	215-1753		
I	Gray 500	⅞ lb.	215-0045		
J	ZAM	¼ lb. 1 lb.	215-1603 215-1602		

A-L Polishing Compounds, continued

Type	Description and Application	Approx. Weight	SKU	Each	
				1-9	10+
A	White 1500 Medium cutting compound for platinum. Removes light scratches and prepares surface for final polishing.	⅞ lb.	215-0049		
B	White 4000 Fine cutting compound for platinum. Removes light haze and scratches.	½ lb.	215-0042		
C	White 6000 Fine cut-and-color compound for platinum. Removes faint scratches and leaves a soft, bright finish.	½ lb.	215-0043		
D	White Rouge High luster on platinum, white gold, chrome and stainless steel.	¼ lb.	215-0250		
E	White 8000 Polishing compound for ultra-white high shine on platinum.	½ lb.	215-0046		
F	Orange Luster Formulated with low oil content to increase polishing power. Works fast and delivers the whitest, brightest shine on platinum.	5 oz.	215-0037		
G	Lustre Bar Produces very high luster finish on all metals as well as plastics. Will remove light scratches, yet leaves a bright mirror finish. Comes in peel-away tube.	1 lb.	215-1600		
H	Platinum Blue This specially formulated compound imparts the highest possible finish on platinum and other precious metals.	5 oz.	215-1784		
I	Two-Step Platinum Reduce the polishing steps associated with platinum. Adhere very well to buffs. Yellow bar (Step 1) removes scratches. Green bar (Step 2) imparts mirror finish.	13.4 oz. 13.4 oz.	215-0038 215-0039		
J	Platinum Pink Imparts a highly reflective surface on platinum as well as white gold, titanium and other hard metals.	5 oz.	215-1786		
K	C-Clear Watch Crystal Restores plastic by removing scuffs and scratches. Used by jewelers to make old plastic watch crystals look new again.	¼ lb.	215-0041		
L	Platinum Sample Set Four different compounds for platinum: Gray 500, White 1500, White 8000 and Orange Luster.	¾ lb.	215-0036		



***CAUTION:** This compound contains silica. Normal use may generate fine dust, which can irritate eyes, skin and nasal passages. Use ventilation and safety protection, and wash after use. Long term exposure to silica-containing compounds may cause silicosis, lung damage or lung cancer which may be prevented by use of appropriately rated respirator and air exhaust.



A-C HRLINE Animal Fat Free Polishing Compounds

HRLINE polishing compounds by Merard are animal fat free compounds that satisfy the regulations present in medical device manufacturing for the production of orthopedic, surgical, and dental implants. The HRLINE uses the highest quality aluminum oxide abrasive and animal fat free binders to allow for faster cutting and reduced cleaning time. All weigh 500g (1.1lb), 40 x 225mm (1-1/2" x 8-7/8"). Made in France.

	Color	Description and Application	Micron Grit	SKU	Each
A	Pink	For medium and dry preparation on all metals. Hard cutting, easy to clean	6-12	215-0014	
B	White	For polishing on all metals. Fine cutting, easy to clean.	3-8	215-0016	
C	Orange	For super finishing on titanium, precious metals, cuprous metals, lacquers, resins. Easy to clean.	3-8	215-0018	



D-J Luxor® Compound by Merard

Luxor compound is manufactured to the highest precise specifications, using the highest quality of aluminum oxide and best of all: silica-free! The aluminum oxide significantly reduces your work time and helps you efficiently and effectively prepare all metal surfaces for finishing. Luxor compounds are non-greasy and can easily be cleaned from your work piece after final polishing. All compounds are color coded for easy visibility and identification. All weigh 110g (4oz.) and measure 80mm x 30mm (3-1/8" x 1-1/8").

	Color	Description and Application	Micron Grit	SKU	Each
D	Pink	For all metals. Removing deep scratches and imperfections.	6.5	215-1812	
E	Green	For gold, silver. Removing moderate scratches and blending	3	215-1813	
F	Gray	For gold, platinum, and silver. Removing light scratches.	1	215-1814	
G	Blue	For non-ferrous metals. Dry preparation, removing scratches and imperfections.	1	215-1815	
H	White	For all metals and fine polishing. Creates smooth finish and shine.	0.3	215-1816	
I	Yellow	For gold, copper alloys, brass. Super finishing and creates lustrous shine.	0.5	215-1817	
J	Orange	For all metals. Extreme mirror finish.	0.1	215-1818	
	Starter Set of 7			215-1819	



K SUPRA Pumice Paste

For smoothing rapid prototype models as it produces a mild cutting action on acrylic and soft metals. Use with a Scotch Brush (114-5199) for best results. 80 gram bar.

Description	SKU	Each
SUPRA Pumice Paste	218-2045	



L SUPRA Polishing Crème

For ultra high finishing of Rapid Prototype models as well as precious metals. Works best with a soft white muslin buff. 50 gram tube.

Description	SKU	Each
SUPRA Polishing Crème	218-2240	

A-H Dialux Polishing Compounds

Premium polishing compounds imported from Europe. Made from select abrasive grades, uniformly blended and manufactured under the strictest quality controls. Adhere exceptionally well to buffs, brushes and felts, so very little is needed, which helps reduce cleanup and save time. Individually packaged in cardboard boxes for cleaner handling. Each bar measures 3-3/8" L x 1-1/8" W x 1" H and weighs approx. 4 oz.

Type	Description and Application	Approx. Weight	SKU	Each	
				1-9	10+
A Dialux Bleu (Blue)	All-purpose compound for all types of metal.	4 oz.	215-1771		
B Dialux Jaune (Yellow)*	For bright high polish of soft metals such as brass, bronze and copper.	4 oz.	215-1772*		
C Dialux Blanc (White)	For bright polishing of silver.	4 oz.	215-1773		
D Dialux Gris (Gray)	Recommended for fine polishing of stainless steel.	4 oz.	215-1774		
E Dialux Rouge (Red)	The brightest shine for yellow gold. Also produces a brilliant shine on silver.	4 oz.	215-1775		
F Dialux Vert (Green)	Recommended for bright polishing of hard alloys such as platinum, white gold, chrome, chrome cobalt and stainless steel.	4 oz.	215-1776		
G Dialux Noir (Black)	For final polishing of silver.	4 oz.	215-1777		
H Vormex (Orange)	Pre-polish cutting compound for all ferrous metals.	4 oz.	215-1778		



I-N Water Soluble Compounds

Water Soluble Compounds are identical to standard polishing compounds but with an added ingredient that allows compound residue to wash off easily in water.

Type	Description and Application	Approx. Weight	SKU	Each
I Turquoise Rouge II	Final finish on precious metals and semi-precious stones	1 lb	215-0154	
J Premium Red Rouge	Premium grade finish on all precious metals	1.5 lb	215-1721	
K Green Rouge	High luster on chrome, stainless steel and silver	1 lb	215-1733	
L Graystar	Aggressive dry compound for removing deep scratches	1 lb	215-1743	
M Tripoli II*	Removes scratches, leaves surface ready for final finish	1 lb	215-1748	
N Set of 5*	One of each bar above		215-1761	



***CAUTION:** This compound contains silica. Normal use may generate fine dust, which can irritate eyes, skin and nasal passages. Use ventilation and safety protection, and wash after use. Long term exposure to silica-containing compounds may cause silicosis, lung damage or lung cancer which may be prevented by use of appropriately rated respirator and air exhaust.

Gesswein® Standard Diamond Compounds

Feature evenly distributed 100% virgin synthetic diamond, more consistent in shape than natural diamond, for fast, consistent cutting action. We stock in medium and low concentrations. Standard Oil-Soluble Compounds hold together very well, even under high-speed conditions. Specifically formulated for the mold and die industry. Use Oil Lubricant/Thinner with Oil-Soluble Compounds, and Water Lubricant/Thinner with Water Soluble Compounds. Consider Budget Oil-Soluble Compounds when affordability is a factor (lower prices are due to variations in particle size and friability). Packaged in 1-gram, 6-gram and 18-gram disposable syringes.



Standard Oil-Soluble Water-Soluble

Budget Oil-Soluble

Grit (Microns)	Color	Syringe Size (g)	Standard Oil-Soluble		Concentration	Each	Budget Oil-Soluble		Concentration	Each
			SKU	SKU			SKU	Concentration		
A	1/2	White	1	216-0045	216-9051	Medium	-	-	-	-
			6	216-2045	216-9069	Medium	-	-	-	
			18	216-7005	216-9055	Medium	-	-	-	
B	1	Ivory	1	216-0050	216-9053	Medium	-	-	-	-
			6	216-2050	216-9071	Medium	216-9100	Low	-	
			18	216-7055	216-9095	Medium	216-9112	Low	-	
C	3	Yellow	1	216-0100	216-9057	Medium	-	-	-	-
			6	216-2100	216-9075	Medium	216-9102	Low	-	
			18	216-7105	216-9083	Medium	216-9114	Low	-	
D	6	Orange	1	216-0150	216-9059	Medium	-	-	-	-
			6	216-2150	216-9077	Medium	216-9104	Low	-	
			18	216-7155	216-9085	Medium	216-9115	Low	-	
E	9	Green	1	216-0200	216-9061	Medium	-	-	-	-
			6	216-2200	216-9079	Medium	216-9106	Low	-	
			18	216-7205	216-9087	Medium	216-9116	Low	-	
F	15	Blue	1	216-0250	216-9063	Medium	-	-	-	-
			6	216-2250	216-9073	Medium	216-9108	Low	-	
			18	216-7255	216-9089	Medium	216-9118	Low	-	
G	30	Red	1	216-0300	216-9067	Medium	-	-	-	-
			6	216-2300	216-9081	Medium	216-9110	Low	-	
			18	216-7305	216-9091	Medium	216-9120	Low	-	
H	45	Brown	1	216-0350	-	Medium	-	-	-	-
			6	216-2350	-	Medium	-	-	-	
			18	216-7355	-	Medium	-	-	-	
I	60	Purple	1	216-0400	-	Medium	-	-	-	-
			6	216-2400	-	Medium	-	-	-	
			18	216-7405	-	Medium	-	-	-	
J	90	Gray	1	216-0450	-	Medium	-	-	-	-
			6	216-2450	-	Medium	-	-	-	
			18	216-7455	-	Medium	-	-	-	
K	120	Black	1	216-0500	-	Medium	-	-	-	-
			6	216-2500	-	Medium	-	-	-	
			18	216-7505	-	Medium	-	-	-	

Gesswein® Hybrid Diamond Compounds

Soluble in Both Oil and Water

Gesswein Hybrid Diamond Compound is an enhanced compound which is both oil and water soluble. Choose your concentration! Available in medium, standard, or strong concentrations. Higher concentrations cut faster, thereby reducing polishing time. Additionally, a high concentration performs better on harder metals. Uniform synthetic diamond particles allow for consistent surface finishes thanks to strict diamond tolerances. Hybrid Diamond Compound superbly adheres to mold and die surfaces aiding the polisher in achieving a precision finish. Available in two size syringes, 5g and 18g. Use with our Lubricant/Thinner either oil or water soluble. All have a heat stability up to 122°F (50°C).



Medium

Standard

Strong

Grit (Microns)	Color	Syringe Size (g)	Medium		Standard		Strong	
			SKU	Each	SKU	Each	SKU	Each
A	0.5	White	5	216-3000	216-3100	216-3200	-	-
			18	216-3022	216-3122	216-3222	-	-
B	1	Ivory	5	216-3002	216-3102	216-3202	-	-
			18	216-3024	216-3124	216-3224	-	-
C	3	Yellow	5	216-3004	216-3104	216-3204	-	-
			18	216-3026	216-3126	216-3226	-	-
D	6	Orange	5	216-3006	216-3106	216-3206	-	-
			18	216-3028	216-3128	216-3228	-	-
E	9	Green	5	216-3008	216-3108	216-3208	-	-
			18	216-3030	216-3130	216-3230	-	-
F	15	Blue	5	216-3010	216-3110	216-3210	-	-
			18	216-3032	216-3132	216-3232	-	-
G	30	Red	5	216-3012	216-3112	216-3212	-	-
			18	216-3034	216-3134	216-3234	-	-
H	45	Brown	5	216-3014	216-3114	216-3214	-	-
			18	216-3036	216-3136	216-3236	-	-
I	60	Purple	5	216-3016	216-3116	216-3216	-	-
			18	216-3038	216-3138	216-3238	-	-

J Gesswein® Hybrid Diamond Compound Sets

This introductory set consists of just 1 gram each of 1, 3, 6, 9, & 15 Micron Gesswein Hybrid Diamond Compound in each concentration. The hybrid is an enhanced compound which is both oil and water soluble. Uniform synthetic diamond particles allow for consistent results. Polishing time is reduced, and surface finish is even thanks to strict diamond tolerances. Polishing under heat and pressure is achieved due to the compound heat stability.

Description	SKU	Each
Hybrid Medium Concentration, 5 Piece Set	216-3250	-
Hybrid Standard Concentration, 5 Piece Set	216-3252	-
Hybrid Strong Concentration, 5 Piece Set	216-3254	-



ABRASIVES - DIAMOND COMPOUNDS

ABRASIVES - DIAMOND COMPOUNDS



A-F SUPRA® Diamond Compounds

Oil-soluble compounds with very heavy concentration of 100% virgin synthetic diamond for sharp, even cutting action. Graded to closer tolerances than those dictated by nationally recognized standards. Provide much faster stock removal than traditional diamond compounds. Sold in 5-gram Precision Applicators, which afford finer control than ordinary syringes.

	Grit (Microns)	Color	SKU	Each
A	1	Ivory	217-0010	
B	3	Yellow	217-0015	
C	6	Orange	217-0020	
D	9	Green	217-0025	
E	15	Blue	217-0030	
F	30	Red	217-0035	



G-K Gesswein® High Temp Diamond Compounds

The New High Temp diamond compound has been specifically formulated for polishing on hot surfaces. This compound holds a high vaporization point, so it can withstand the high temperatures of a hot mold surface. Save time – no need to wait for the mold to cool down! Polish your molds while still in the press!

Made with sharp, 100% virgin synthetic diamond particles. This oil-soluble compound has superior lubricant qualities allowing for better adhesion to the felt, brush, or wood carrier. Use with Gesswein oil-soluble lubricant thinner as needed. Available in 10g and 20g syringes.

Grit (Microns)	Color	10 Gram		20 Gram	
		SKU	Each	SKU	Each
G	1	Ivory	217-0404		217-0405
H	3	Yellow	217-0409		217-0410
I	6	Orange	217-0414		217-0415
J	9	Green	217-0419		217-0420
K	20	Blue	217-0424		217-0425

L-P Lubricant/Thinner and Spray Bottle

To use all brands of compounds most efficiently, we recommend adding a lubricant to allow the compound to cut at its peak performance and to prevent the felt bob from gumming up or chattering. When added to diamond compound on the workpiece, lubricant thins out the mixture, creating a slurry and extending the compound. Available in two formulations: Oil-soluble and water-soluble, and in spray or squeeze bottle for moistening felts prior to diamond compound application.

Fill empty 4 oz. spray bottle with cleaning solution, lubricants and more for easy dispensing. Spray gets into hard-to-reach areas.



Description	Oil Lubricant/Thinner		Water Lubricant/Thinner		Each
	SKU	SKU	SKU	SKU	
L	3/4 oz.	825-1295		825-1290	
M	4 oz.	825-1303		825-1310	
N	8 oz.	825-1300		825-1315	
O	32 oz.	825-1305		825-1320	

Description	SKU	Each	
		1-2	3+
P	Empty 4 oz. Spray Bottle	811-2460	

A Diamond Polishing Kit – Everything You Need for Diamond Polishing

Whether you carry it to the mold or have it under your workstation, our Diamond Polishing Kit has all the products you need, right at your fingertips! A convenient time saver and a money saver as well!

Includes:

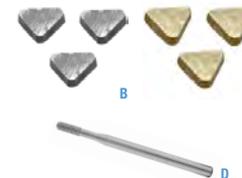
- 1 pc - Diamond Compound 6gm syringe Red
- 1 pc - Diamond Compound 6gm syringe Blue
- 1 pc - Diamond Compound 6gm syringe Green
- 1 pc - Diamond Compound 6gm syringe Orange
- 1 pc - Diamond Compound 6gm syringe Yellow
- 1 pc - Diamond Compound 6gm syringe Ivory
- 1 pc - Lube/thinner for oil diamond compound
- 6 pcs - 1/4" x 1/4" Hard Cylinder felt Bobs
- 6 pcs - 1/4" x 1/4" Soft Cylinder felt Bobs
- 6 pcs - 1/2" x 3/8" Hard Cylinder felt Bobs
- 6 pcs - 1/2" x 3/8" Soft Cylinder felt Bobs
- 6 pcs - 1/2" x 1/2" Hard Cylinder felt Bobs
- 6 pcs - 1/2" x 1/2" Soft Cylinder felt Bobs
- 6 pcs - 3/4" x 1/2" Hard Cylinder felt Bobs
- 6 pcs - 3/4" x 1/2" Soft Cylinder felt Bobs
- 6 pcs - MM752 Supra Soft cup brushes
- 6 pcs - MM762 Supra Hard cup brushes
- 6 pcs - ME859 Supra Hard end brushes
- 6 pcs - ME849 Supra Soft end brushes
- 6 pcs - ME852 Supra Soft end brushes
- 6 pcs - ME862 Supra Hard end brushes
- 6 pcs - 1/4" Soft square felt sticks
- 6 pcs - 1/4" Medium Square felt sticks
- 6 pcs - 1/4" Hard Square felt sticks
- 6 pcs - MM713 Supra Wheel brushes
- 6 pcs - MM703 Supra Wheel brushes
- 3 pcs - 1/8" x 1/4" Rockwood sticks
- 1 pkg - 1/8" x 1/4" Soft wood sticks (5)
- 3 pcs - 3/8" x 1-1/2" Hard Mounted Poli-felt



Description	SKU	Each
Diamond Polishing Kit	216-0001	

B-D Cast Iron and Brass Laps

Polish small surfaces with these small Cast Iron and Brass Triangular Laps. Triangle laps are best suited for polishing flat surfaces. Use our diamond mounted point (2261263) to form a small depression on the top center surface of the lap. Then, use the lapping rod with angle (4031060) to drive the lap with a profiler, such as the Power Hand Reciprocating Profiler Z-2X or Z-6X. Use stoning oil with these laps. All items are sold separately.



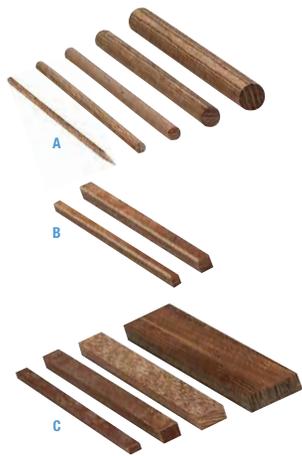
Description	SKU	Each
B	Cast Iron 3/8" x 1/8"	404-1000
C	Brass 3/8" x 1/8"	404-1010
D	Diamond Mounted Point, 1/8" Shank	226-1263

E Lapping Rod with Angle

Use the lapping rod with angle to drive the cast iron and brass laps with a profiler, such as the Power Hand Reciprocating Profiler Z-2X or Z-6X.



Description	SKU	Each
Lapping Rod with Angle	403-1060	



A-C Rockwood Sticks

Very hard, laminated sticks that retain their shape well. Use by hand, with reciprocating or rotary tools for initial finishing with diamond and other compounds. Can be dressed with a knife or file. Measure 6" long with blunt ends (except 825-0005, which has one pointed end, and 825-0045, which has one beveled end). Dark brown in color.

Shape	Size	SKU	Each	
			1-11	12+
A Round Pointed	1/8"	825-0005		
	Round	3/16"	825-0010*	
		1/4"	825-0020*	
		3/8"	825-0030	
		1/2"	825-0040*	
B Square Beveled	1/8" x 1/8"	825-0045		
	Square	1/4" x 1/4"	825-0060	
C Rectangular	1/8" x 1/4"	825-0050*		
	1/4" x 3/8"	825-0070*		
	1/4" x 1/2"	825-0080*		
	3/16" x 1"	825-0110		
			Set	
	*Set 1R, 18 pieces (three of each asterisked number)	825-0300		
	Set 2R, 27 pieces (three of each size except 1/8" square and round)	825-0400		

D Very Soft Sticks – Select Balsa Wood with One Shaped End

Use by hand, with reciprocating or rotary tools for final finishing with diamond and other compounds. Can be dressed with a knife or file. Measure 6" long. Since, balsa wood is a natural product, stiffness and other characteristics will vary so we cannot guarantee any consistency in regard to any characteristic such as size and hardness/softness.

Shape	Size	SKU	Pkg. of 5	
			1-9	10+
Square	1/8" x 1/8"	825-0530		
Square	3/16" x 3/16"	825-0532		
Rectangular	1/8" x 1/4"	825-0534		
Square	1/4" x 1/4"	825-0536		

E-G Soft Sticks – Either White Birch or Poplar with One Shaped End

Use by hand, with reciprocating or rotary tools for intermediate to final finishing with diamond and other compounds. Measure 6" long. Unfortunately, natural wood products cannot guarantee to be consistent in all characteristics such as size and hardness/softness.

Shape	Diameter	SKU	Pkg. of 25	
			1-9	10+
E Round, pointed	1/8"	825-0551		
	1/4"	825-0557		
F Round, double-beveled	1/8"	825-0541		
	1/4"	825-0547		

Shape	Diameter	SKU	Pkg. of 5	
			1-9	10+
G Rectangular, beveled	1/8" x 1/8"	825-0501		
	3/16" x 3/16"	825-0503		
	1/8" x 1/4"	825-0505		
	1/4" x 1/4"	825-0507		

H Pegwood Sticks

Flexible multipurpose sticks that maintain a fine point and resist breaking when pushed into a hole. Dress with a knife or file. Measure 6" long.

Shape	Diameter	SKU	Pkg. of 20	
			1-9	10+
H Round	3mm	825-1207		
	4mm	825-1208		

Simichrome Polish®

One of the finest all-metal paste polishes in the world! Simply rub on with a soft cloth and rub off to obtain a brilliant luster. Will not harm uncoated metal surfaces. Unlike chemical polishes, it will not remove a layer of the metal surface being cleaned. Removes tarnish, dirt and oils, and generally renews polished metal surfaces. Leaves a protective film, which retards oxidation but does not prevent tarnishing. Works well on virtually any ferrous or non-ferrous metal surface such as brass, copper,

silver, gold, pewter, magnesium, bronze, chromium, stainless steel, platinum, aluminum and countless other similar uncoated metals. Do not use on painted or lacquered surfaces. The California Air Resources Board deems Simichrome Polish to be in violation of California's Volatile Organic Compound "VOC" regulation. Therefore, sales to California are restricted. Made in Germany.

A-C Simichrome Polish®

Description	SKU	Each
A 50g Tube	218-2050	
50g Tube, Box of 24	218-2100	
B 250g Tin	218-2150	
C 1,000g Tin	218-2200	



D Clover® Lapping Compound

Grease-based silicon carbide compound. Great for refining surface finishes and cutting without heat buildup. Most economical for light areas where compound loss is excessive. Best for use on 50HRC and softer steels. Packaged in 1 lb. cans.

Grit	SKU	Each
D 220	218-3220	
	218-3320	
	218-3400	
	218-3600	
1200	218-3620	



E Brilliant Luster Cream – For a High Polish without the Harsh Odor

Produces a lustrous mirror sheen on mold and die surfaces. Quickly removes stains and oxidation, as well as the haze created by diamond polishing. Can be used on all steels, aluminum, chrome, brass and bronze. Goes on and comes off easily with a felt bob, soft cloth or tissue paper. Emits no harsh odors, unlike other brands. Nonhazardous and noncorrosive.

Description	SKU	Each
E 50g Jar	218-2220	
50g Jars, box of 24	218-2225	
250g Jar	218-2230	
1,000g Jar	218-2235	



F Wood Bobs – 1/8" Shank

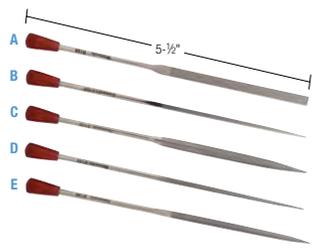
Natural wood bobs for intermediate finishing with rotary tools. Can be shaped for contours. Use dark-colored hard bobs with 15 micron or coarser diamond compounds, light-colored soft bobs with 15 micron or finer.

Description	Dia. x L (mm)	Approx.	Hard		Pkg. of 10
			SKU	SKU	
F Ball	10	3/8"	825-0618	825-0638	
G Cylinder	6 x 15	1/4" x 3/8"	825-0605	825-0625	
H	10 x 20	3/8" x 3/4"	825-0607	825-0627	
J Flame	9 x 15	3/8" x 3/8"	825-0610	825-0630	
J	10 x 30	3/8" x 1-1/4"	825-0612	825-0632	
K	13 x 20	1/2" x 3/4"	825-0614	825-0634	



Spectra Diamond Files

High-quality diamond files at economical prices. Feature a combination of natural and synthetic diamonds firmly plated onto durable steel blanks. Cushioned color-coded ends. Made in Germany.



A-E Spectra Medium Diamond Needle Files

Diamond needle files with 3mm round handles. Measure 5-1/2" (14cm) long. Plated ends measure 2-3/4" long. Medium grit (D126, or U.S. standard 120/140).

Style	Shape	SKU	Each		
			1-4	5-9	10+
A	Equalling	241-0010			
B	Flat-Pointed	241-0020			
C	Half-Round	241-0030			
D	Round	241-0040			
E	Knife	241-0050			
Set of All Five			241-0250		

F-J Spectra Fine Diamond Needle Files

Diamond needle files with 3mm round handles. Measure 5-1/2" (14cm) long. Plated ends measure 2-3/4" long. Fine grit (D91, or U.S. standard 170/200).

Style	Shape	SKU	Each		
			1-4	5-9	10+
F	Equalling	241-0012			
G	Flat-Pointed	241-0022			
H	Half-Round	241-0032			
I	Round	241-0042			
J	Knife	241-0052			
Set of All Five			241-0245		

K Spectra Very Fine Diamond Escapement File

Diamond escapement file with 3/32" square handle. Measures 5-1/2" (14cm) long. Plated end measures 1-3/4" long with 1/16"-1/32" taper. Very fine grit (D64, or U.S. standard 230/270).

Style	Shape	SKU	Each		
			1-4	5-9	10+
Round (tapered)	○	241-0150			

L-P Spectra Very Fine Diamond Micro Files

Mini diamond files with 3/32" wide handles. Measure approx. 4" long except round, which measures approx. 3-3/4" long. Plated ends measure approx. 2" long with 1/16"-1/32" taper for round only. Very fine grit (D64, or U.S. standard 230/270).

Style	Shape	SKU	Each		
			1-4	5-9	10+
L	Round (tapered)	241-0500			
M	Half-Round	241-0505			
N	Square	241-0510			
O	Three-Square	241-0515			
P	Flat Hand	241-0520			
Set of All Five			241-0525		

Spectra Grit Chart

Medium	D126	120/140
Fine	D91	170/200
Very Fine	D64	230/270

A-E Spectra Diamond Riffles – Medium and Fine

Curved, double-ended diamond files with square handles. Measure 6" long. Plated ends measure 1" long. Medium grit (D126, or U.S. standard 120/140) and fine grit (D91, or U.S. standard 170/200).

Style	Shape	Medium		Fine			Each
		SKU	SKU	1-4	5-9*	10+*	
A	Flat	241-0195	241-0170				
B	Three-Square	241-0200	241-0175				
C	Square	241-0205	241-0180				
D	Round	241-0210	241-0185				
E	Oval	241-0215	241-0190				
Set of All Five		241-0310	241-0305				

*Quantity discount for orders of one item number only; not assorted.

F-N Spectra Diamond Poli Files – Medium – 3mm Shanks

Parallel diamond machine files for use in reciprocating handpieces. Plated ends measure 15mm long and files measure 2" in length, except where noted. Medium grit (D126, or U.S. standard 120/140).

Style	Shape	Plated Size	SKU	Each		
				1-4	5-9	10+
F	Flat	2 x 1mm	241-0400			
G		3 x 1mm	241-0405			
H		4 x 1mm	241-0410			
I		5 x 2mm	241-0415			
J		5 x 2mm*	241-0420			
K	Flat	2 x 1mm	241-0425			
L		3 x 1mm	241-0430			
M		5 x 2mm*	241-0435			
N	Round	3mm*	241-0440			
Set of All Nine			241-0445			

O-Q 3M Diamond Hand Files

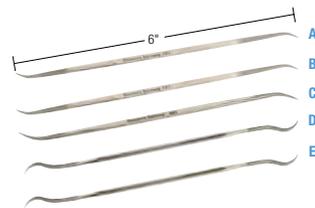
For filing tough materials, finishing delicate surfaces, beveling edges, removing burrs, and sharpening tools. Usable wet or dry, with color-coded grit identification. Approx. 6-1/4" long.

Cutting Face (L x W)	Color	Grit/Micron	SKU	Each	
				1-9	10+
O 1-1/2" x 3/4"	Black	120/M125	240-3010		
	Red	200/M74	240-3011		
	Yellow	400/M40	240-3012		
	White	800/M20	240-3013		
P 1-3/4" x 1/2"	Black	120/M125	240-3014		
	Red	200/M74	240-3015		
	Yellow	400/M40	240-3016		
Q 1-3/4" x 1/2" half-round	Black	120/M125	240-3018		
	Red	200/M74	240-3019		

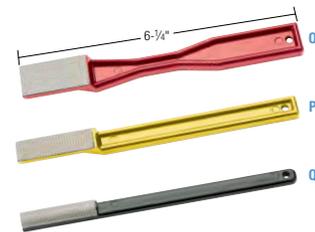
R-S Spire Diamond Files

Spire diamond files are made of steel, which is thinly electro-plated with diamond. Because of their flexibility, these files are very durable making them extremely effective when polishing very narrow and deep ridges. Both ends are beveled at a 20 degree angle. Made in Japan.

Dimensions	Shape	Length	400 Grit		600 Grit		Each
			SKU	SKU	SKU	SKU	
R 0.020" Round	○	2"	241-0550	241-0555			
S 0.020" Square	□	2.4"	241-0560	241-0565			



*Plated length 25mm, overall length 2-1/2"



Gesswein® Diamond Files

Premium diamond files for use on steels, carbides, plastics and more. Features 100% synthetic diamonds – more consistent in shape than natural diamonds – plated onto high-strength steel blanks for consistent cutting and long life.



A-D Gesswein® Tapered Diamond Poli Files – 200, 400 or 600 Grits

Tapered diamond machine files for use in reciprocating handpieces. All have 3mm shanks. Plated ends measure 15mm (1-9/32") long with 1.4–0.3mm taper.

Style	Shape	W x L	Grit			Each
			200 Grit	400 Grit	600 Grit	
A	Flat	3 x 56mm	241-0814	241-0815	241-0816	12-Piece Set (one of each)
B	Flat	6 x 56mm	241-0817	241-0818	241-0819	
C	Flat	3 x 72mm	241-0820	241-0821	241-0822	
D	Flat	6 x 72mm	241-0823	241-0824	241-0825	



E-O Gesswein® Diamond Poli Files – 150 Grit

Diamond parallel machine files for use in reciprocating handpieces. All have 3mm shanks. Measure approx. 2" long. Plated ends measure 9/16" long.

Style	Shape	W x Thick	Grit	SKU	Each		
					1-4	5-9	10+
E	Flat	2 x 1mm	150	240-1120*	Each		
F		3 x 1mm	150	240-1130			
G		4 x 1mm	150	240-1140			
H		5 x 2mm	150	240-1150			
I	Three-Square	2mm	150	240-1520*			
J		3mm	150	240-1535			
K		4.5mm	150	240-1545			
L	Crossing	2 x 1mm	150	240-1410*			
M	Round	1mm	150	240-1310			
N		2mm	150	240-1320*			
O		3mm	150	240-1330			
P	Flat	4 x 1mm	150	240-1230*			
Q	Knife	4 x 1mm	150	240-1610*			

*6-Piece Set (one of each asterisked item) 240-1706
12-Piece Set (one of each except 240-1150) 240-1712

R-AA Gesswein® Diamond Riffler Poli Files – 150 Grit

Parallel diamond machine files for use in reciprocating handpieces. All have 3mm shanks. Measure approx. 2.5" long. Plated ends measure 9/16" long. Diamond coating measures approximately 7/8".

Style	Shape	W x Thick	Grit	SKU	Each
S	Equalling	3.2 x 1.4mm	150	240-1002	
T	Half-Round Bent	5 x 2mm	150	240-1003	
U	Equalling Bent	3.2 x 1.4mm	150	240-1004	
V	Round Hook	3mm	150	240-1005	
W	Round Curved	3mm	150	240-1006	
X	Three-Square	2.5mm	150	240-1007	
Y	Equalling Angle	3.2 x 1.4mm	150	240-1008	
Z	Equalling Curved	3.2 x 1.4mm	150	240-1009	
AA	Crossing Oval	3.5 x 2mm	150	240-1010	

10-Piece Set (one of each) 240-1000

A-F Gesswein® Diamond Needle Files – 5-1/2" 150 Grit

Diamond needle files with 3mm round handles. Plated ends measure 2-3/4" long (70mm). Can be used alone or with needle file handles.

Style	Shape	Grit	Length	SKU	Each		
					1-4	5-9	10+
A	Round	150	5-1/2"	240-2162	Each		
B	Half-Round	150	5-1/2"	240-2152			
C	Square	150	5-1/2"	240-2142			
D	Three-Square	150	5-1/2"	240-2132			
E	Equalling	150	5-1/2"	240-2112			
F	Barrette	150	5-1/2"	240-2102			

6-Piece Set (one of each) 240-2200

G-K Gesswein® Diamond Needle Files – 7-3/4" 120 Grit

Diamond needle files with 3mm round handles. Plated ends measure 2-3/4" long (70mm). Can be used alone or with needle file handles.

Style	Shape	Grit	Length	SKU	Each		
					1-4	5-9	10+
G	Equalling	120	7-3/4"	240-2211	Each		
H	Half-Round	120	7-3/4"	240-2212			
I	Round	120	7-3/4"	240-2213			
J	Square	120	7-3/4"	240-2214			
K	Three-Square	120	7-3/4"	240-2215			

5-Piece Set (one of each) 240-2210

L-O Gesswein® Tapered Diamond Hand Files – 150, 200 or 400 Grits

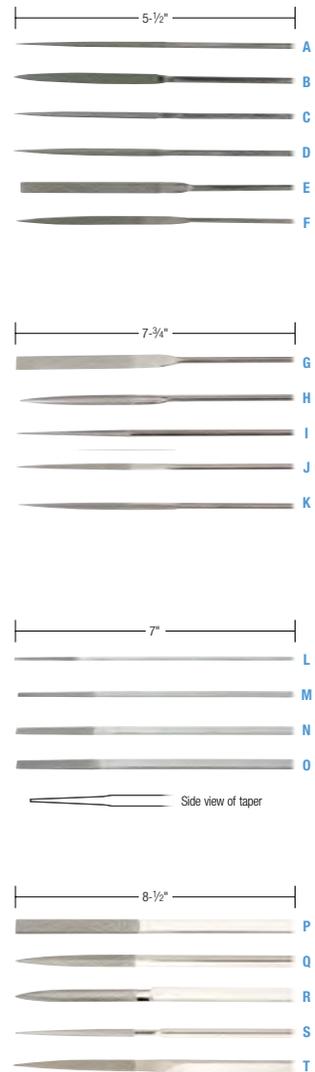
Tapered diamond hand files with slim handles for sure grip. Measure 180mm (7") long. Plated ends measure 40mm long on 2mm wide files, 50mm long on all others.

Style	Shape	W x Thick	Grit			Each
			150 Grit	200 Grit	400 Grit	
L	Flat	2 x 1.5–0.4mm	241-0801	241-0802	241-0803	12-Piece Set (one of each) 241-0800
M	Flat	4 x 2.0–0.5mm	241-0804	241-0805	241-0806	
N	Flat	6 x 2.0–0.5mm	241-0807	241-0808	241-0809	
O	Flat	8 x 2.5–0.5mm	241-0810	241-0811	241-0812	

P-T Gesswein® Diamond Hand Files – 100, 200 or 400 Grits

Heavy-duty diamond hand files with square shanks for use by hand or with handles. Measure 215mm (8-7/16") long. Plated ends measure a generous 80mm (3-1/8") long.

Style	Shape	W x Thick	Grit			Each
			100 Grit	200 Grit	400 Grit	
P	Equalling	11.0 x 3.5mm	241-0746	241-0747	241-0748	5-Piece Set (one of each style) 241-0741 241-0742 241-0743
Q	Square	6.3 x 6.3mm	241-0735	241-0736	241-0737	
R	Half-Round	10.5 x 4.4mm	241-0749	241-0730	241-0731	
S	Round	5.0mm	241-0732	241-0733	241-0734	
T	Three-Square	7.7mm	241-0738	241-0739	241-0740	





A-E Gesswein® Diamond Riffers – Double Ended, 150 Grit

Curved, double-ended diamond files with square handles. Measure 6" long. Plated ends measure 1" long.

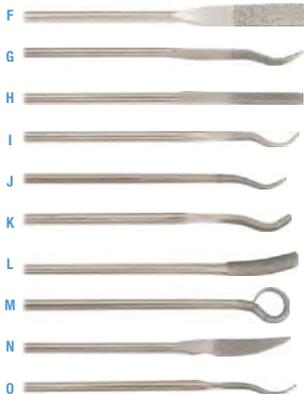
Style	Shape	Grit	SKU	Each		
				1-4	5-9	10+
A 16R		150	240-3165			
B 18R		150	240-3180			
C 22R		150	240-3222			
D 24R		150	240-3225			
E 26R		150	240-3230			
5-Piece Set (one of each)			240-3250			Each

F-O Gesswein® Diamond Riffers – 150 Grit

Gesswein Diamond Riffers use 100% man-made diamonds. These synthetic diamonds are more consistent in shape than natural diamonds. This guarantees sharp and even cutting action, durability and long life. All blanks are precision-made of high-strength steel. High-density wear-resistant plating enables total usage of the full concentration of diamond.

Available individually or in a money saving set of all 10 shapes.

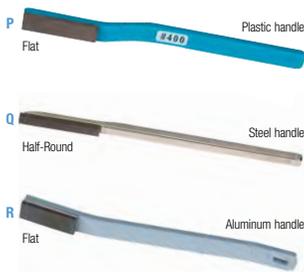
- Overall Length: 5-1/2" (140mm)
- Diamond Coated Length: 3/4" (20mm)
- Handle Diameter: 3.0mm



Style	Grit	SKU	Each		
			1-4	5-9	10+
F Flat, 6 x 1.3mm	150	240-3301			
G Tapered Square	150	240-3302			
H Flat, 3.5 x 1.5mm	150	240-3303			
I 3-Square	150	240-3304			
J Half Round	150	240-3305			
K Square	150	240-3306			
L Oval	150	240-3307			
M Round Hook	150	240-3308			
N Knife Edge	150	240-3309			
O Round	150	240-3310			
10-Piece Set (one of each)			240-3300		

P-R Resinoid Diamond Lappers

For touching up and sharpening cutting tools, carbide and high-speed steels. The diamond stone will remove scratches and other surface imperfections. Leaves a good finish due to its resin bonding. Diamond is embedded throughout the stone ensuring consistent cutting action as the stone wears.



Style	Shape	Length x Width	Grit	SKU	Each
		40 x 10mm	800	240-3033	
		40 x 10mm	1200	240-3035	
Q Half-Round stone		40 x 5mm	400	240-3041	
		40 x 5mm	800	240-3043	
		40 x 5mm	1200	240-3045	
R Flat stone		30 x 10mm	400	240-3051	
		30 x 10mm	800	240-3053	
		30 x 10mm	1200	240-3055	

A-K Turbo Lap Diamond Files

Designed for use with Turbo Air Lappers and UHT Ushio Turbolaps. These diamond files are perfect for finishing in tight areas. The U-shape feature locks the file into the tool holder for our Turbo Air Lappers. The high quality diamond abrasive performs well in high speed and short stroke applications. Can also be used by hand with the Diamond File Holder (see 241-0684 below). Each diamond file has maximum thickness of 1mm and tapers down to 0.5mm thick.

Description	Each			
	1-4	5-9*	10+*	
Turbo Lap Diamond Files				
OAL x Dia. (mm)	Width**	120 Grit	200 Grit	400 Grit
A 60 x 25	3-2**	241-0640	241-0641	241-0642
B 70 x 40	3-2**	241-0644	241-0645	241-0646
C 60 x 25	4-2**	241-0648	241-0649	241-0650
D 60 x 25	4-3**	241-0652	241-0653	241-0654
E 70 x 40	4-3**	241-0656	241-0657	241-0658
F 60 x 25	4	241-0660	241-0661	241-0662
G 70 x 40	6	241-0664	241-0665	241-0666
H 70 x 40	8	241-0668	241-0669	241-0670
I 90 x 60	8	241-0672	241-0673	241-0674
J 70 x 40	10	241-0676	241-0677	241-0678
K 90 x 60	10	241-0680	241-0681	241-0682
Description	SKU	Each		
11-Piece Set (A-K) 120 Grit	241-0637			
11-Piece Set (A-K) 200 Grit	241-0638			
11-Piece Set (A-K) 400 Grit	241-0639			

*Quantity discount for orders of one item number only; not assorted.
**Indicates width taper.

L Turbo Holder for Turbo Lap Diamond Files

The perfect choice for holding our Turbo Lap diamond files for hand use.

Description	SKU	Each
Turbo Holder for Turbo Lap Diamond Files	241-0684	

M-N EZE-LAP® Diamond Hand Sharpeners

Ideally suited for honing edges of carbide cutting tools. Excellent abrasion resistance for superior finishing. Silver is flat with a medium grit side and a fine grit side. Red is tapered round in a fine grit. Diamond surface measures 4"L x 3/4"W. When open the overall measurement is 9"L x 1"W. When the butterfly handles are folded closed, they measure 5"L x 1"W. Made in USA.

Description	SKU	Each
M Silver Butterfly Style (Medium, Fine)	349-6020	
N Red Butterfly Style (Fine)	349-6022	

O-S EZE-LAP® Diamond Hand Lappers

These lappers are ideally suited for honing edges of carbide cutting tools. They offer excellent abrasion resistance for superior finishing. Available in assorted grits to match your finishing requirements. Comfort-fit handgrips are designed for accurate control and color-coded for easy grit identification. Measure 6"L x 3/4"W (diamond face measures 2"L x 3/4"W). Made in USA.

Hand Lappers	Color	SKU	Each
O Extra-Coarse (150)	Green	349-6009	
P Coarse (250)	Black	349-6010	
Q Medium (400)	Purple	349-6012	
R Fine (600)	Red	349-6014	
S Super-Fine (1200)	Blue	349-6018	





A Diamond PSA Cloth

Features precisely graded diamond grit on a flexible cloth backed by pressure-sensitive adhesive. The diamond grit is positioned on raised "islands" covering the cloth, thus allowing greater flexibility and more aggressive cutting action. Can be easily cut with scissors, shaped, punched and bent to almost any configuration. Use wet or dry for applications on steel, carbide, ceramic, glass, etc. All diamond cloths are color coded for easy identification of grit. Measures 50 x 100mm (2" x 4").

Color	Grit	Size	SKU	Each
Brown	120	50 x 100mm	107-4951	
Red	200	50 x 100mm	107-4952	
Yellow	400	50 x 100mm	107-4953	
White	600	50 x 100mm	107-4954	
Blue	1000	50 x 100mm	107-4955	



B Diamond PSA Foil

Consists of diamond abrasive particles electroplated onto very thin and flexible metal foil. Backed by pressure-sensitive adhesive. Can cut to any size and shape with scissors. Simply remove the paper backing and stick foil on to your own tools, creating a new "self-made" tool. Wide range of grit selection for fast aggressive cutting or fine polishing on steels and carbides. Measures 50 x 100mm (2" x 4").

Grit	Size	SKU	Each
120	50 x 100mm	107-5790	
200	50 x 100mm	107-5792	
400	50 x 100mm	107-5794	
600	50 x 100mm	107-5795	
1200	50 x 100mm	107-5797	



C Diamond PSA Poly Film

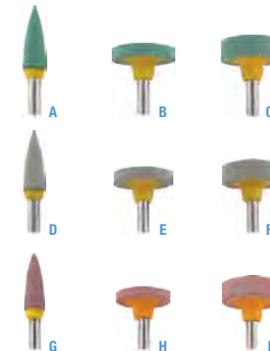
These highly flexible films are made of precisely graded diamond particles bonded to high strength polyester backing and provide a uniform, consistent finish. The films are waterproof, have good heat resistance and have a PSA (Pressure Sensitive Adhesive) backing. Can be used on a variety of materials including hardened steels, tungsten carbide, ceramic, glass, precious stones and epoxy. Measures 25 x 150mm (1" x 6").

Micron	Size	SKU	Each
60	25 x 150mm	107-5786	
45	25 x 150mm	107-5785	
30	25 x 150mm	107-5784	
15	25 x 150mm	107-5783	
9	25 x 150mm	107-5782	
6	25 x 150mm	107-5781	

A-I EVE® Diapol® Diamond Wheels and Points – 3/32" Shank

Diamond and rubber combined to give you fast finishes on precious alloys, titanium and stainless steel. Long-lasting, made in 3 versatile shapes to access the tightest areas. Color-coded for grit identification. Available in three color-coded grits: medium (green), fine (gray) and extra-fine (pink). All 3/32" shanks. Max. operating speeds: 10,000rpm. Made in Germany.

Green – Medium (25-36µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
A	Mtd. Point	4 x 13mm	145-1322			145-1332
B	SE Mtd. Wheel	11 x 2mm	145-1321			145-1331
C	SE Mtd. Wheel	11 x 4mm	145-1323			145-1333
Gray – Fine (3-6µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
D	Mtd. Point	4 x 13mm	145-1325			145-1335
E	SE Mtd. Wheel	11 x 2mm	145-1324			145-1334
F	SE Mtd. Wheel	11 x 4mm	145-1326			145-1336
Pink – Extra-Fine (1-2µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
G	Mtd. Point	4 x 13mm	145-1328			145-1338
H	SE Mtd. Wheel	11 x 2mm	145-1327			145-1337
I	SE Mtd. Wheel	11 x 4mm	145-1329			145-1339



J-O EVE® Diapol® Diamond Wheels – 1/16" Arbor Hole

These unmounted, long-lasting, diamond and rubber wheels work well on titanium, stainless steel and precious alloys. Color-coded for grit identification. Available in three color-coded grits: medium (green), fine (gray) and extra-fine (pink). Made in Germany.

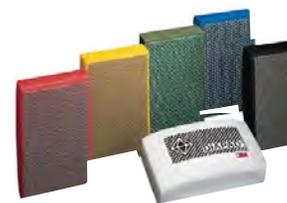
Green – Medium (25-36µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
J	Unmounted Knife Edge	15 x 2.5mm	145-1365			145-1375
K	Unmounted Square Edge	17 x 2.5mm	145-1364			145-1374
Gray – Fine (3-6µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
L	Unmounted Knife Edge	15 x 2.5mm	145-1367			145-1377
M	Unmounted Square Edge	17 x 2.5mm	145-1366			145-1376
Pink – Extra-Fine (1-2µ)		Dimensions	SKU	Each	SKU	Pkg. of 10
N	Unmounted Knife Edge	15 x 2.5mm	145-1369			145-1379
O	Unmounted Square Edge	17 x 2.5mm	145-1368			145-1378



P 3M Diamond Hand Pads

Use for precision sharpening of all your blades and tools. Each pad has one cutting face that contains micron-graded diamonds. Open dot pattern provides aggressive cutting action and reduces loading. Flexible backing conforms to irregular surfaces. Pads are color-coded for easy grit identification. Cutting face measures 3-3/4"L x 2-1/4"W. Available individually or in a set of six.

Color	Grit	Micron	SKU	Each
Green	60	250	240-3060	
Black	120	125	240-3061	
Red	200	74	240-3062	
Yellow	400	40	240-3063	
White	800	20	240-3064	
Blue	1800	10	240-3065	
P	6-Piece Set		240-3085	



Diamond and CBN Pins

Diamond and CBN (cubic boron nitride) are superior abrasives with material removal rates beyond those of conventional abrasives such as aluminum oxide or silicon carbide. Our diamond pins are ideal for use on carbides and extremely hard steels and ceramics. Our CBN pins are recommended for use on high-carbon, high-chrome, high-speed steels such as M2, M3, M7 and T15; die steels such as D2, D3, HB and A&O; alloy steels harder than 50 HRC; and nickel- and cobalt-based super alloys such as titanium and stainless steel. The cutting edges last longer, resist breakdown better, produce more ground parts per hour and improve the quality of the finished product, helping reduce overall costs. When heat distortion is an important factor, CBN is the wise choice because it runs cooler than diamond.

Diameter Maximum RPM

.020"–.200"	60,000–120,000
.200"–.500"	45,000–60,000
.500"–1.00"	30,000–45,000

Maximum 1/2" overhang.

A BX and GX Series (BX = CBN, GX = Diamond) – 1/4" Shank

BX are all 80/100 grit. GX are as follows: coarse is 100/120 grit, fine is 140/170 grit. Measure 3" long.

Dimensions		CBN 80/100 BX Series		Diamond 100/120 GX Series		Diamond 40/170 GX Series		Each
A	B	Coarse	SKU	Coarse	SKU	Fine	SKU	
9/64"	1/4"	BX-141	247-1410	GX-141C	235-3601	GX-141F	235-3600	
5/32"	1/4"	BX-156	247-1560	GX-156C	235-3651	GX-156F	235-3650	
3/16"	1/4"	BX-188	247-1880	GX-188C	235-3701	GX-188F	235-3700	
7/32"	1/4"	BX-218	247-2180	GX-218C	235-3751	GX-218F	235-3750	
1/4"	1/8"	BX-250/2	247-2502	GX-250/2C	235-3801	GX-250/2F	235-3800	
1/4"	1/4"	BX-250/4	247-2504	GX-250/4C	235-3851	GX-250/4F	235-3850	
5/16"	1/4"	BX-312/4	247-3124			GX-312/4F	235-3950	
5/16"	3/8"	BX-312/6	247-3126	GX-312/6C	235-4001	GX-312/6F	235-4000	
3/8"	1/8"	BX-375/2	247-3752	GX-375/2C	235-4051	GX-375/2F	235-4050	
3/8"	1/4"	BX-375/4	247-3754	GX-375/4C	235-4101	GX-375/4F	235-4100	
3/8"	3/8"	BX-375/6	247-3756	GX-375/6C	235-4151	GX-375/6F	235-4150	
1/2"	1/4"	BX-500/4	247-5004					
1/2"	3/8"	BX-500/6	247-5006	GX-500/6C	235-4251	GX-500/6F	235-4250	
1/2"	1/2"	BX-500/8	247-5008	GX-500/8C	235-4301	GX-500/8F	235-4300	
3/4"	1/4"	BX-750/4	247-7504	GX-750/4C	235-4351	GX-750/4F	235-4350	
3/4"	1/2"	BX-750/8	247-7508	GX-750/8C	235-4401	GX-750/8F	235-4400	

B B and G Series (B = CBN, G = Diamond) – 1/8" Shank

Coarse is 140/170 grit, fine is 200/230 grit. Measure 1-3/8" long.

Dimensions		CBN 140/170 B Series		Each	Diamond 140/170		Diamond 200/230		Each
A	B	C	Coarse	SKU	Coarse	SKU	Fine	SKU	
0.02"	1/16"	1/8"	B-20	246-0200	G-20C	235-1451	G-20F	235-1450	
0.025"	3/32"	1/4"	B-25	246-0250	G-25C	235-1501	G-25F	235-1500	
0.03"	3/32"	1/4"	B-30	246-0300	G-30C	235-1551	G-30F	235-1550	
0.035"	3/32"	1/4"	B-35	246-0350	G-35C	235-1601	G-35F	235-1600	

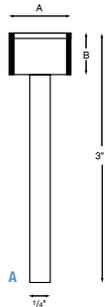
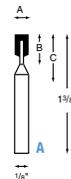
Coarse is 100/120 grit, fine is 200/230 grit. Measure 1-3/8" long.

Dimensions			Diamond 100/120		Diamond 200/230		Each
A	B	C	Coarse	SKU	Fine	SKU	
0.04"	1/8"	3/8"	G-40C	235-1651	G-40F	235-1650	
0.045"	1/8"	3/8"	G-45C	235-1701	G-45F		
0.05"	1/8"	3/8"	G-50C	235-1751	G-50F	235-1750	
0.055"	1/8"	3/8"	G-55C	235-1801	G-55F		
0.06"	1/8"	3/8"	G-60C	235-1851	G-60F	235-1850	
0.07"	5/32"	1/2"	G-70C	235-1901	G-70F	235-1900	
0.08"	5/32"	1/2"	G-80C	235-1951	G-80F	235-1950	
0.09"	5/32"	1/2"	G-90C	235-2001	G-90F	235-2000	
0.1"	5/32"	1/2"	G-100C	235-2051	G-100F	235-2050	
0.11"	5/32"	1/2"	G-110C	235-2101	G-110F	235-2100	
0.125"	5/32"	1/2"	G-125C	235-2151	G-125F	235-2150	

A BL and GL Series (BL = CBN, GL = Diamond) – 1/8" Shank

BL are all 80/100 grit. GL are as follows: coarse is 100/120 grit, fine is 200/230 grit. Measure 2-1/2" long.

Dimensions			CBN 80/100 BL Series		Diamond 100/120 GL Series		Diamond 200/230 GL Series		Each
A	B	C	Coarse	SKU	Coarse	SKU	Fine	SKU	
0.04"	1/8"	3/8"	BL-40	246-0400	GL-40C	235-2351	GL-40F	235-2350	
0.045"	1/8"	3/8"	BL-45	246-0450					
0.05"	1/8"	1"	BL-50/1	246-0501	GL-50/1C	235-2501			
0.05"	1/8"	3/8"	BL-50	246-0500	GL-50C	235-2451	GL-50F	235-2450	
0.055"	1/8"	3/8"	BL-55	246-0550					
0.06"	1/8"	3/8"	BL-60	246-0600	GL-60C	235-2601	GL-60F	235-2600	
0.06"	1/8"	1"	BL-60/1	246-0601					
0.07"	5/32"	1/2"	BL-70	246-0700	GL-70C	235-2701	GL-70F	235-2700	
0.07"	5/32"	1"	BL-70/1	246-0701	GL-70/1C	235-2751	GL-70/1F	235-2750	
0.08"	5/32"	1/2"	BL-80	246-0800	GL-80C	235-2801	GL-80F	235-2800	
0.09"	5/32"	1/2"	BL-90	246-0900	GL-90C	235-2901	GL-90F	235-2900	
0.09"	5/32"	1"	BL-90/1	246-0901					
0.1"	5/32"	1/2"	BL-100	246-1000	GL-100C	235-3001	GL-100F	235-3000	
0.1"	5/32"	1"	BL 100/1	246-1001					
0.11"	5/32"	1/2"	BL-110	246-1100					
0.11"	5/32"	1"	BL-110/1	246-1101					
0.125"	5/32"	1/2"	BL-125	246-1250	GL-125C	235-3201	GL-125F	235-3200	
0.125"	5/32"	1"	BL-125/1	246-1251					
0.141"	1/4"		BL-141	246-1410	GL-141C	235-3301	GL-141F	235-3300	
0.156"	1/4"		BL-156	246-1561	GL-156C	235-3351	GL-156F	235-3350	
0.188"	1/4"		BL-188	246-1880	GL-188C	235-3401	GL-188F	235-3400	
0.218"	1/4"		BL-218	246-2180	GL-218C	235-3451	GL-218F	235-3450	
0.25"	1/4"		BL-250/2	246-2502	GL-250/2C	235-3501	GL-250/2F	235-3500	
0.25"	1/4"		BL-250/4	246-2504	GL-250/4C	235-3551	GL-250/4F	235-3550	



B Wet Stick Diamond Dresser

Use this dressing stone with water for cleaning diamond points. Measures 2"L x 3/4"W x 1/2"H thick.

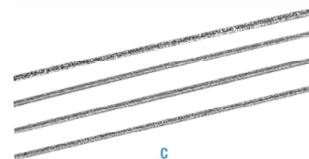
Description	SKU	Each
Wet Stick	380-1022	



C Diamond Saw Blades

Consist of piano wire electroplated with diamond particles. Make quick work of sawing glass, ceramic and stones. Available in four grits. Fit standard sawframes. Measure 5-3/8" long. Plated portion measures approx. 3" long. Sold individually.

Description	Approx. Diameter	SKU	Dozen Prices	
			1-2	3+
60 Coarse	0.058"	226-1500		
100 Medium-Coarse	0.048"	226-1505		
120 Medium	0.045"	226-1510		
140 Medium-Fine	0.043"	226-1515		



Diamond Burs

1/8" and 3mm Shank

Inexpensive yet durable cutting tools with diamond particles nickel-electroplated onto medium carbon steel. Use these mounted diamond burs on carbide, steel, ceramic and wood surfaces. Measure 1-3/4" long with 1/8" shanks. Sold individually and in three sets (see below). Always use with water or Lubricant/Thinner. All 1-1.5mm diameter points are fine (150 grit); all 2-5mm diameter points are medium (120 grit). Max. operating speeds: 80,000rpm for 1-3mm dia; 60,000rpm for 3.5-4mm dia; 50,000rpm for 5mm dia.



Style	10A	15A	20A	25A	30A	35A	40A	50A
Dia. x L (mm)	1 x 8	1.5 x 8	2 x 8	2.5 x 8	3 x 10	3.5 x 10	4 x 10	5 x 10
Grit	150	150	120	120	120	120	120	120
Max. RPM	80,000	80,000	80,000	80,000	80,000	60,000	60,000	50,000
1/8" SKU	226-1250	226-1251	226-1252	226-1253	226-1254	226-1255	226-1256	226-1257
3mm SKU	226-0250	226-0251	226-0252	226-0253	226-0254	226-0255	226-0256	226-0257



Style	20B	30B	50B	15C	20C	25C	30C	35C
Dia. x L (mm)	2	3	5	1.5 x 8	2 x 8	2.5 x 10	3 x 10	3.5 x 10
Grit	120	120	120	150	120	120	120	120
Max. RPM	80,000	80,000	50,000	80,000	80,000	80,000	80,000	60,000
1/8" SKU	226-1258	226-1259	226-1260	226-1261	226-1262	226-1263	226-1264	226-1265
3mm SKU	226-0258	226-0259	226-0260	226-0261	226-0262	226-0263	226-0264	226-0265



Style	40C	50C	20F	30F	50F	20P	30P
Dia. x L (mm)	4 x 10	5 x 10	2 x 10	3 x 10	5 x 10	2 x 12	3 x 15
Grit	120	120	120	120	120	120	120
Max. RPM	60,000	50,000	80,000	80,000	50,000	80,000	80,000
1/8" SKU	226-1266	226-1267	226-1275	226-1276	226-1277	226-1268	226-1269
3mm SKU	226-0266	226-0267	226-0275	226-0276	226-0277	226-0268	226-0269



Style	15R	20R	30R	30S	20T	30T	30V
Dia. x L (mm)	1.5 x 10	2 x 12	3 x 14	3 x 6	2 x 10	3 x 10	3 x 10
Grit	150	120	120	120	120	120	120
Max. RPM	80,000	80,000	80,000	80,000	80,000	80,000	80,000
1/8" SKU	226-1270	226-1272	226-1273	226-1274	226-1278	226-1279	226-1280
3mm SKU	226-0270	226-0272	226-0273	226-0274	226-0278	226-0279	226-0280

A Diamond Bur Sets - 1/8" Shank

Description	SKU	Each
A 10-Piece Set (styles 10A, 20A, 30A, 30B, 15C, 25C, 20F, 20P, 30P, 20R)	226-1281	
20-Piece Set (styles 10A, 15A, 20A, 25A, 30A, 35A, 20B, 30B, 15C, 20C, 25C, 30C, 20F, 30F, 20P, 30P, 15R, 20R, 30R, 20T)	226-1282	
30-Piece Set (one of each style)	226-1283	

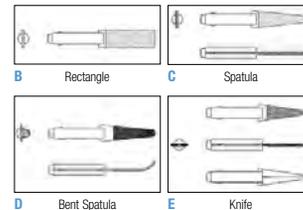


B-F Mini-Filer Diamond Tips - 2mm Shank

Mini-filer tips coated on one side with synthetic diamonds, precisely bonded to obtain the best physical properties for added strength and wear. These tips can be used in our Mini-Filers and other light-duty profiling handpieces. All measure .5mm thick x approx. 23mm long. 40mm long mini-filer tip holder also available.

Shape/Grit	Coated Length	Coated Length					
		D181	D151	D107	D64	30 µm	15 µm
B Rectangle	9.5mm	-	241-0603	-	-	241-0601	-
C Spatula	9.5mm	-	-	-	241-0606	-	-
D Bent Spatula	9mm	-	-	-	241-0609	-	-
E Knife	8mm	241-0620	241-0621	241-0622	241-0623	241-0624	241-0625

Description	SKU	Each
F Mini-Filer Tip Holder - 40mm	241-0612	



G Gesswein® Lube-Stik

Use on any grinding, cutting, drilling, piercing or similar tool to speed up production and increase tool life. Lube-Stik reduces friction and heat buildup so that tools stay sharper, work faster and cut smoother. Easy to use - just run your tool into the soft lubricant every so often. Lube-Stik may also be used to reduce the effort needed for drawing operations. Supplied in a handy "push-up" dispenser tube.

When the surface being worked on needs to be completely covered, consider our Kool Lube Paste. While it is a different formula, it will do the same job and comes supplied in a 2oz jar which could be easier for your specific application.

Description	SKU	Each
Gesswein Lube-Stik	816-2461	



H Gesswein® Kool Lube

Protect your cutting tools with Gesswein's Kool Lube Paste. Our environmentally friendly lubricant keeps your cutting tools from overheating, prolonging their life. Your burs, files, saw blades, etc. will create less friction. Leaves no residue when heated and washes off in seconds. Comes supplied in a 2oz jar. Consider original Lube-Stik (816-2461) in the handy push-up dispenser tube for smaller surfaces. Made in USA.

Description	SKU	Each
Gesswein Kool Lube Paste.	816-2462	



Diamond Burs

3/32" Shank

A wide variety of shapes and sizes convenient for cutting hard metals, ceramics, stones and more. A single layer of diamond is nickel-electroplated to each bur, ensuring long life when used with only slight pressure. The diamonds are in an exposed position for fast cutting action. All are 140/170 grit with 3/32" shanks. Made in Sweden.

Diameter	Maximum RPM
.020"–.200"	60,000–120,000
.200"–.500"	45,000–60,000
.500"–1.00"	30,000–45,000

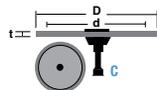
Maximum 1/2" overhang.



Style	Dimensions (inches)		SKU	Each
	D	t		
A DT-109	0.366	0.051	230-2050	



Style	Dimensions (inches)		SKU	Each
	D	t		
B DT-129P	0.248	0.02	230-2850	



Style	Dimensions (inches)			SKU	Each
	D	d	t		
C DT-124P	0.602	0.512	0.018	230-2600	



Style	Dimensions (inches)			SKU	Each
	D	d	t		
D DT-56P	0.342	0.276	0.05	230-0350	
DT-128P	0.354	0.276	0.02	230-2800	



Style	Dimensions (inches)		SKU	Each
	D	t		
E DB-902A	0.051	0.158	230-4050	
DB-95	0.063	0.295	230-1450	
DT-117	0.094	0.295	230-2450	
DT-510	0.094	0.394	230-3100	



Style	Dimensions (inches)			SKU	Each
	D	Taper	t		
F DT-236	0.287	60°	0.236	230-3000	



Style	Dimensions (inches)		SKU	Each
	D	t		
G DB-2/0	0.032	0.051	230-3250	
DB-102	0.051	0.051	230-3300	
DB-104	0.067	0.071	230-3350	
DB-105	0.071	0.071	230-3400	
DB-108	0.098	0.118	230-3450	
DT-101	0.118	0.158	230-1650	
DT-119	0.158	0.158	230-2550	



Style	Dimensions (inches)		SKU	Each
	D	t		
H DT-86	0.055	0.276	230-1200	
DT-100	0.098	0.276	230-1600	

Diamond Burs

3/32" Shank

Feature medium/fine grit diamond particles electroplated onto stainless steel for unmatched quality and durability. Great for stone carving and cleanup work on glass, ceramics and metals. Measure 1-3/4" long with 3/32" stainless steel shanks. Sold individually and in three sets (see below). Always use with water or Lubricant/Thinner. Max. operating speed: 30,000rpm.

								
Dia. x L (mm)	2 x 1.5	2.7 x 1.5	4 x 1.5	6 x 2	1.5 x 4	2 x 8	3 x 4	7 x 12
Shape	Inverted Cone	Inverted Cone	Inverted Cone	Inverted Cone	Rounded Point	Rounded Point	Cylinder	Rounded Cylinder
SKU	226-1161*	226-1162*	226-1163*	226-1164*	226-1165	226-1166*	226-1167*	226-1168*
Each								

*Items available in 20-Piece Master Set below.

								
Dia. x L (mm)	6 x 7	1.5 x 10	2 x 12	3 x 12	3.5 x 6	1.5 x 10	0.9 x 4	2 x 5
Shape	Cylinder	Point	Rounded Cylinder	Rounded Cylinder	Point	Point	Point	Inverted Cone
SKU	226-1169*	226-1170*	226-1171*	226-1172*	226-1181*	226-1182	226-1183*	226-1184*
Each								

*Items available in 20-Piece Master Set below.

								
Dia. x L (mm)	6 x 10	2.5 x 7	2 x 7	1 x 1	2 x 2	3 x 3	4 x 4	4 x 0.8
Shape	Cylinder	Cylinder	Cylinder	Round	Round	Round	Round	Wheel
SKU	226-1185*	226-1186*	226-1187	226-1188*	226-1189*	226-1190*	226-1191	226-1192*
Each								

*Items available in 20-Piece Master Set below.

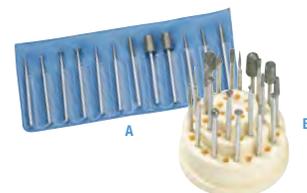
A-B Diamond Bur Sets – 3/32" Shank

Description	SKU	Each
A 12-Piece Set #1 (one each of 226-1161 through 226-1172)	226-1160	
12-Piece Set #2 (one each of 226-1181 through 226-1192)	226-1180	
B 20-Piece Master Set (one each of asterisked above)	226-1159	

C Diamond Bur Sets

These economical and functional medium/fine diamond bit sets are a good value for the novice or hobbyist. Can be used on ceramic, glass, metal or stone. Include 20 bits in different shapes and sizes and a handy plastic organizer. Bits measure 1-3/4" (44.5mm) long. Available with 3/32" or 1/8" shanks. Max. operating speed: 30,000rpm. Sold only in the set. Always use with water or Lubricant/thinner.

Description	Shank	SKU	Each
C 20-Piece Set	3/32"	226-1220	
	1/8"	226-1221	



High-Speed Mini Diamond Burs

1/16" Shank

For use in high-speed, air-driven turbo handpieces. Feature diamond particles electroplated onto surgical-grade steel. Shown at actual size, although entire shank is not displayed in the chart. Measure an average of 3/4" (20mm) long with 1/16" shanks. Always use with water or Lubricant/Thinner. Choose from coarse (80 grit) and fine (120/140 grit). Mount in collet-type handpieces with one of our reducing collets (see below). Max. operating speed: 80,000rpm.



A	Grit	SKU	SKU	SKU	SKU	SKU	SKU
80		226-1602*	226-1603	226-1604*	226-1605*	226-1606*	226-1607
120/140		226-1632*	226-1633	226-1634*	226-1635*	226-1636*	226-1637
Pkg. of 6							

*Items available in 12-Piece Set below.

B	Grit	SKU	SKU	SKU	SKU	SKU	SKU
80		226-1608*	226-1609	226-1610*	226-1611	226-1612	226-1613
120/140		226-1638*	226-1639	226-1640*	226-1641	226-1642	226-1643
Pkg. of 6							

*Items available in 12-Piece Set below.

C	Grit	SKU	SKU	SKU	SKU	SKU	SKU
80		226-1614	226-1615	226-1616*	226-1617	226-1618*	226-1619
120/140		226-1644	226-1645	226-1646*	226-1647	226-1648*	226-1649
Pkg. of 6							

*Items available in 12-Piece Set below.

D	Grit	SKU	SKU	SKU	SKU	SKU	SKU
80		226-1620*	226-1621	226-1622*	226-1623*	226-1624	226-1625*
120/140		226-1650*	226-1651	226-1652*	226-1653*	226-1654	226-1655*
Pkg. of 6							

*Items available in 12-Piece Set below.

E-F High-Speed Mini Diamond Bur Sets – 1/16" Shank

Description	Coarse 80 Grit		Fine 120/140 Grit		Each
	SKU	SKU	SKU	SKU	
E 12-Piece Set (asterisked above)	226-1601	226-1631			
F 24-Piece Set (one each of above)	226-1600	226-1630			

G-I Reducing Collets

Instantly converts your 1/8", 3mm or 3/32" collet to hold a 1/16" tool shank. Simply slip reducing collet into collet on your rotary handpiece to use 1/16" shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the handpiece collet. Stainless steel.

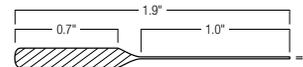


Size	SKU	Each
G 1/8" to 1/16"	816-1502	
H 3mm to 1/16"	816-1505	
I 3/32" to 1/16"	816-1503	

Micro Diamond Grinding Pins

1/8" Shank

These micro diamond pins are designed for super precision applications, such as deep hole deburring and ID grinding. Diamond particles are electroplated on heat treated steel and the thin pin is slightly flexible. All have an overall length of 1.9" with a diamond coated length of 1.0". All on 1/8" shanks. Recommended speed is approximately 5,000rpm.



D	Grit	SKU	Pkg. of 10	D	Grit	SKU	Pkg. of 10
A 0.016"	400	226-2016		0.049"	150	226-2049	
0.017"	400	226-2017		0.050"	150	226-2050	
0.018"	300	226-2018		0.051"	150	226-2051	
0.019"	300	226-2219		0.052"	150	226-2052	
0.020"	200	226-2220		0.053"	150	226-2053	
0.021"	200	226-2221		0.054"	150	226-2054	
0.022"	200	226-2222		0.055"	150	226-2055	
0.023"	200	226-2223		0.056"	150	226-2056	
0.024"	200	226-2224		0.057"	150	226-2057	
0.025"	200	226-2225		0.058"	150	226-2058	
0.026"	200	226-2226		0.059"	150	226-2259	
0.027"	200	226-2027		0.060"	150	226-2260	
0.028"	200	226-2028		0.061"	150	226-2261	
0.029"	200	226-2029		0.062"	150	226-2262	
0.030"	150	226-2030		0.063"	150	226-2263	
0.031"	150	226-2031		0.064"	150	226-2264	
0.032"	150	226-2032		0.065"	150	226-2265	
0.033"	150	226-2033		0.066"	150	226-2266	
0.034"	150	226-2234		0.067"	150	226-2267	
0.035"	150	226-2235		0.068"	150	226-2268	
0.036"	150	226-2036		0.069"	150	226-2269	
0.037"	150	226-2037		0.070"	150	226-2270	
0.038"	150	226-2238		0.071"	150	226-2271	
0.039"	150	226-2239		0.072"	150	226-2272	
0.040"	150	226-2040		0.073"	150	226-2273	
0.041"	150	226-2041		0.074"	150	226-2274	
0.042"	150	226-2042		0.075"	150	226-2275	
0.042"	150	226-2043		0.076"	150	226-2276	
0.044"	150	226-2044		0.077"	150	226-2277	
0.045"	150	226-2045		0.078"	150	226-2278	
0.046"	150	226-2046		0.079"	150	226-2279	
0.047"	150	226-2047		0.080"	150	226-2280	
0.048"	150	226-2048					



B Diamond Disc Set – 1/8" Shank

Electroplated diamond discs, all medium grit for cutting or sanding stones and glass. Discs measure 1 3/16" (20.25mm) dia. x 0.033" (.84mm) thick x 1/8" AH and have diamond electroplated on both sides. Sold individually or in a 6-piece kit, five discs and a 1/8" mandrel. Max. operating speed: 30,000rpm.

Description	SKU	Each
B Diamond Disc 6-Piece Set	226-1225	
Diamond Disc	226-1226	



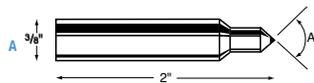
Single Point Diamond Tools

For truing and dressing abrasive wheels where precision, close-tolerance, high-finish grinding is required. Straight face, radius and form wheel dressing operations can be performed with accuracy and economy. All natural diamond.



A Diamond Cone Points

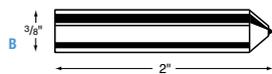
Used for accurate wheel forming.



	Style	Angle (A)	Dia. x L	Carat Size	SKU	Each
A	CP1	60°	3/8" x 2"	0.25	220-2160	
	CP1	75°	3/8" x 2"	0.25	220-2175	
	CP1	90°	3/8" x 2"	0.25	220-2190	
	CP2	60°	3/8" x 2"	0.3	220-2260	
	CP2	75°	3/8" x 2"	0.3	220-2275	
	CP2	90°	3/8" x 2"	0.3	220-2290	
	CP3	60°	3/8" x 2"	0.5	220-2360	

B Regular and Select Point Diamond Dressers

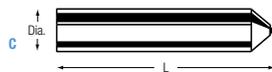
Two qualities of diamonds are offered: the select-style stones have four to six usable points, and the regular-style stones have two to three usable points. Both styles can be reset. REG = regular diamond, SEL = select diamond.



	Style	Dia. x L	Carat Size	SKU	Each
B	1REG	3/8" x 2"	0.25	220-1100	
	1SEL	3/8" x 2"	0.25	220-1150	
	2REG	3/8" x 2"	0.35	220-1200	
	2SEL	3/8" x 2"	0.35	220-1250	
	3REG	3/8" x 2"	0.5	220-1300	
	3SEL	3/8" x 2"	0.5	220-1350	
	4REG	3/8" x 2"	0.6	220-1400	
	4SEL	3/8" x 2"	0.6	220-1450	

C Expendable Diamond Dressers

Throwaway economical dressing tools. Each has a natural diamond securely mounted so its sharpest point is exposed.

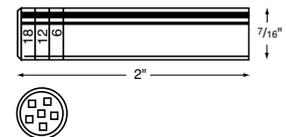


Style	Dia. x L	Carat Size	SKU	Each	
				1-11	12+
C E41	1/4" x 1/8"	0.25	220-0050		
E62	3/8" x 1-1/8"	0.25	220-0100		
66	3/8" x 6"	0.25	220-1860		
E72	1/16" x 1-1/8"	0.25	220-0150		
E82	1/2" x 1-1/8"	0.25	220-0200		

A Cluster Diamond Dresser CL-18

A universal cluster tool for small surface and cylindrical grinders. Contains 18 diamonds. Six are exposed for immediate use; others appear as dresser wears down.

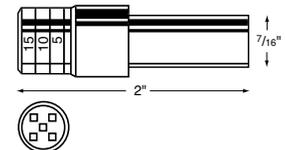
Style	Dia. x L	SKU	Each
CL-18	7/16" x 2"	220-4150	



B Heavy-Duty Cluster Diamond Dresser HD-15

For roughing out or for commercial finish. Nib is loaded with 15 diamonds. Five are exposed for immediate use; others appear as dresser wears down.

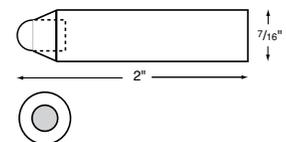
Style	Dia. x L	SKU	Each
HD-15	7/16" x 2"	220-4200	



C Cluster Diamond Dresser CB-24

A bullet-nose carbide bond impregnated dresser randomly set throughout with 24 small diamonds for rough dressing operations on 36 to 60 grit abrasive wheels.

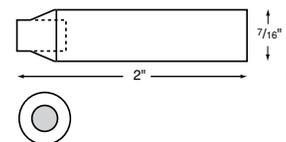
Style	Dia. x L	SKU	Each
CB-24	7/16" x 2"	220-4100	



D Cluster Diamond Dresser PG-4R

A flat-faced nickel alloy matrix dresser containing many particles of diamond sand spaced precisely for dressing operations on 80 grit or finer abrasive wheels.

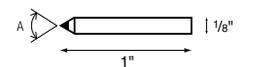
Style	Dia. x L	SKU	Each
PG-4R	7/16" x 2"	220-4250	



E Diamond Phono Points

High-quality miniature points with full-size, long-lasting diamonds for accurate wheel forming and intricate, small radius dressing.

Size	Angle (A)	Dia. x L	SKU	Each
Large	60°	3/8" x 1"	220-0550	
Large	75°	1/8" x 1"	220-0600	
Large	90°	1/8" x 1"	220-0650	



F Offhand Wheel Dresser

Has 35 to 40 exposed diamond points set in a carbide matrix. Sturdy construction with comfortable, sure-grip plastic handle. Measures 9-3/4" long.

Description	SKU	Each
Wheel Dresser	220-4050	



Supra® “MM” and “MKM” Brushes

Gesswein miniature mandrel-mounted wheel and cup brushes are made with solid steel ring construction for durability. Brush filaments are permanently anchored in the solid steel ring and uniformly distributed for even wear. Great for flat, curved, small and hard-to-reach surfaces.

Hard and soft bristle types are made of animal hair. Wire brushes constructed of .003" crimped brass, .003" or .005" crimped steel or .005" crimped stainless steel. Max. operating speed: 15,000rpm.



A SUPRA® “MM” Bristle Wheel Brushes

Styles 701D, 711D, 702D and 712D each contain two rows of upright bristles. D = Double.



Style, Bristle Type	710, Hard	700, Soft	704, Soft	711, Hard/Gray	711, Hard/Black	711D, Hard
Shank	3/32"	3/32"	1/8"	3/32"	3/32"	3/32"
Dia. (Trim Length)	9/16" (1/8")	9/16" (1/8")	5/8" (1/8")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")
SKU	112-7100	112-7000	112-7040	112-7110	112-7109	112-7111

Pkg. of 12	1-11
	12+



Style, Bristle Type	701, Soft	701D, Soft	712D, Hard	702D, Soft	713, Hard	703, Soft
Shank	3/32"	3/32"	1/8"	1/8"	1/8"	1/8"
Dia. (Trim Length)	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")
SKU	112-7010	112-7011	112-7120	112-7020	112-7130	112-7030

Pkg. of 12	1-11
	12+

B SUPRA® “MKM” Mounted Wheel Brushes – 1/8" Shank

Feature hard, evenly distributed, converging animal hair bristles mounted on 1/8" shanks. Available in two styles: 1" diameter standard thickness and heavy-duty 1-1/4" diameter double thickness.



Style, Bristle Type	Hard	Hard, Double Thick
Shank	1/8"	1/8"
Dia. (Trim Length)	1" (1/4")	1-1/4" (3/8")
SKU	112-5100	112-5200

Pkg. of 12	1-11
	12+

A SUPRA® “MM” Wire Wheel Brushes

All made of crimped wire. Style 722D contains two rows of upright wire. D = Double.



Style, Bristle Type	731, Steel .003"	731, Stainless .005"	722D, Brass .003"	723, Brass .003"
Shank	3/32"	1/8"	1/8"	1/8"
Dia. (Trim Length)	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")
SKU	112-7310	112-7315	112-7220	112-7230

Pkg. of 12	1-11
	12+



Style, Bristle Type	733, Steel .003"	733, Steel .005"	724, Brass .005"	735, Steel .003"	734, Steel .005"	734, Stainless .005"
Shank	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
Dia. (Trim Length)	3/4" (3/16")	3/4" (3/16")	1" (3/16")	1" (3/16")	1" (3/8")	1" (3/8")
SKU	112-7330	112-7335	112-7245	112-7350	112-7340	112-5115

Pkg. of 12	1-11
	12+

B SUPRA® “MM” Wheel Brushes – 3mm Shank



Style, Bristle Type	703, Soft	713, Hard	733, Steel .003"	723, Brass .003"	734, Stainless Steel .005"	734, Steel .005"
Shank	3mm	3mm	3mm	3mm	3mm	3mm
Dia. (Trim Length)	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	3/4" (3/16")	1" (3/8")	1" (3/8")
SKU	112-7035	112-7132	112-7331	112-7231	112-7344	112-7342

Pkg. of 12	1-11
	12+

Supra® “ME” Brushes

One-piece ferrule construction ensures that the stem and ferrule will not become separated during use. Brushes with an R have rubber ferrules to prevent scratching when used for interior polishing work. All other ferrules are metal. Hard and soft bristle types are made of animal hair. Our .003" wire end brushes are straight white .005" diameter wire end brushes are crimped. Max. operating speed: 15,000rpm.



A SUPRA® “ME” Bristle and Nylon End Brushes



Style, Bristle Type	864, Hard	860, Hard	860-3/8, Hard	860-1/2, Hard	850, Soft	861, Hard	851, Soft	859, Hard	859R, Hard	859R, Hard	849, Soft
Shank	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	1/8"	1/8"	1/8"	1/8"
Trim Length	1/4"	1/4"	3/8"	1/2"	1/4"	3/8"	3/8"	1/4"	3/16"	1/4"	1/4"
Ferrule Dia.	3/32"	3/16"	3/16"	3/16"	3/16"	1/4"	1/4"	3/16"	3/16"	3/16"	3/16"
SKU	110-8640	110-8600	110-8603	110-8605	110-8500	110-8610	110-8510	110-8590	111-8598	111-8595	110-8490
Pkg. of 12	1-11 12+										



Style, Bristle Type	849R, Soft	862SC, Hard	862R, Hard	862, Hard	862R, Hard	862-1/2, Hard	862-3/4, Hard	852R, Soft	962SC, Hard	962, Hard
Shank	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
Trim Length	1/4"	3/16"	3/16"	3/8"	3/8"	1/2"	3/4"	3/8"	3/16"	3/16"
Ferrule Dia.	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	5/16"	3/16"
SKU	111-8495	110-8622	111-8627	110-8620	111-8625	110-8625	110-8627	111-8525	110-9623	110-9620
Pkg. of 12	1-11 12+									

B SUPRA® “ME” Wire End Brushes



Style, Bristle Type	870, Brass .003"	880, Steel .003"	869, Brass .003"	879, Steel .003"	879, Stainless .003"	872, Brass .005"	882, Steel .005"	882, Stainless .005"	972, Brass .005"	982, Steel .005"
Shank	3/32"	3/32"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
Trim Length	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"
Ferrule Dia.	3/16"	3/16"	3/16"	3/16"	3/16"	1/4"	1/4"	1/4"	5/16"	3/16"
SKU	110-8700	110-8800	110-8690	110-8790	110-8795	110-8720	110-8820	110-8823	110-9720	110-9820
Pkg. of 12	1-11 12+									

A SUPRA® “ME” End Brushes – 3mm Shank



Style, Bristle Type	849M, Soft	859M, Hard	862M, Hard	962, Hard
Shank	3mm	3mm	3mm	3mm
Dia. (Trim Length)	3/16" (1/4")	3/16" (1/4")	3/16" (3/8")	3/16" (3/8")
SKU	110-8492	110-8592	110-8623	110-9622
Pkg. of 12	1-11 12+			



Style, Bristle Type	869M, Brass .003"	879M, Steel .003"	872M, Brass .005"
Shank	3mm	3mm	3mm
Dia. (Trim Length)	3/16" (1/4")	3/16" (1/4")	1/4" (3/8")
SKU	110-8691	110-8791	110-8721
Pkg. of 12	1-11 12+		

B Tampico End Brushes, 1/4" Shank

Heavy duty 1/4" shank end brushes for high diamond polishing on larger jobs. 1" diameter helps the polishing get done faster. Brush length is trimmed to the perfect length of 0.75", which eliminates the need for self trimming and provides excellent stability. Plastic rings also provide additional support when applying pressure. Max. operating speed: 10,000rpm. Made in USA.



Description	SKU	Each
Tampico	114-5400	

C Crimped Brass and Carbon Steel Brushes – 1/4" Shank

Brass end brushes and carbon steel end brush with 0.3mm diameter crimped wire, allow for fast surface cleaning. Use for a variety of applications such as mold and die cleaning, tool polishing, carbon cleaning, I.D. pipe cleaning, as well as rust and paint removal.

Crimped brass brushes made with one-piece ferrule construction ensures that the stem and ferrule will not become separated during use. 1/4" shank diameter for use on die grinders, drills, and drill press.



Bristle Type	Crimped Brass	Crimped Brass	Crimped Brass	Crimped Carbon Steel
Shank	1/4"	1/4"	1/4"	1/4"
Wire Dia.	0.3mm	0.3mm	0.3mm	0.3mm
Wire Length	1.0"	1.125"	1.125"	0.875"
Brush Dia.	1/2"	3/4"	1"	2.5"
SKU	114-5450	114-5453	114-5456	114-5460
Each				

Supra® “MM” Brushes

Gesswein miniature mandrel-mounted cup brushes are made with solid steel ring construction for durability. Brush filaments are permanently anchored in the solid steel ring and uniformly distributed for even wear.

Hard and soft bristle types are made of animal hair. Wire brushes constructed of .003" crimped brass, .003" or .005" crimped steel or .005" crimped stainless steel. Max. operating speed: 15,000rpm.

A SUPRA® “MM” Bristle Cup Brushes

Hollow center cups will hold compounds when polishing vertically. This construction allows better control of brush movement.



Style, Bristle Type	760, Hard	761, Hard	751, Soft	762, Hard	752, Soft	764, Hard	754, Soft
Shank	3/32"	3/32"	3/32"	1/8"	1/8"	1/8"	1/8"
Dia. (Trim Length)	1/2" (5/32")	9/16" (1/4")	9/16" (1/4")	9/16" (1/4")	9/16" (1/4")	1" (7/16")	1" (7/16")
SKU	112-7600	112-7610	112-7510	112-7620	112-7520	112-7640	112-7540

Pkg. of 12	1-11
	12+

B SUPRA® “MM” Wire Cup Brushes

All made of .003" diameter crimped wire except 112-7825 which is made of .005" diameter crimped wire.



Style, Bristle Type	782, Steel .003"	782, Stainless .005"	772, Brass .003"	772, Brass 0.005"	782, Steel 0.005"
Shank	1/8"	1/8"	1/8"	1/8"	1/8"
Dia. (Trim Length)	5/8" (1/4")	5/8" (1/4")	9/16" (1/4")	9/16" (1/4")	9/16" (1/4")
SKU	112-7820	112-7825	112-7720	112-7725	112-7827

Pkg. of 12	1-11
	12+

C SUPRA® “MM” Cup Brushes – 3mm Shank



Style, Bristle Type	752, Soft	762, Hard	772, Brass	782, Steel	764, Hard
Shank	3mm	3mm	3mm	3mm	3mm
Dia. (Trim Length)	9/16" (1/4")	9/16" (1/4")	9/16" (1/4")	9/16" (1/4")	1" (7/16")
SKU	112-7522	112-7622	112-7721	112-7826	112-7642

Pkg. of 12	1-11
	12+

A-H SUPRA® Brush Sets – All 1/8" Shank

	Description	SKU	Each
A	"MM" Bristle Wheel Brush – 10-Piece Set	112-8013	
B	"MM" Wire Wheel Brush – 9-Piece Set	112-8011	
C	"ME" Metal Ferrule End Brush – 18-Piece Set	112-8019	
D	"ME" Rubber Ferrule End Brush – 18-Piece Set	112-8022	
E	"ME" Crimped Wire End Brush – 10-Piece Set	112-8024	
F	"ME" Straight Wire End Brush – 8-Piece Set	112-8023	
G	"MM" Bristle Cup Brush – 8-Piece Set	112-8009	
H	"MM" Wire Cup Brush – 10-Piece Set	112-8007	
I-J	SUPRA® Brush Sets Twelve of our most popular Supra brushes.		
I	Set #1	3/32"	112-8000
J	Set #2	1/8"	112-8003

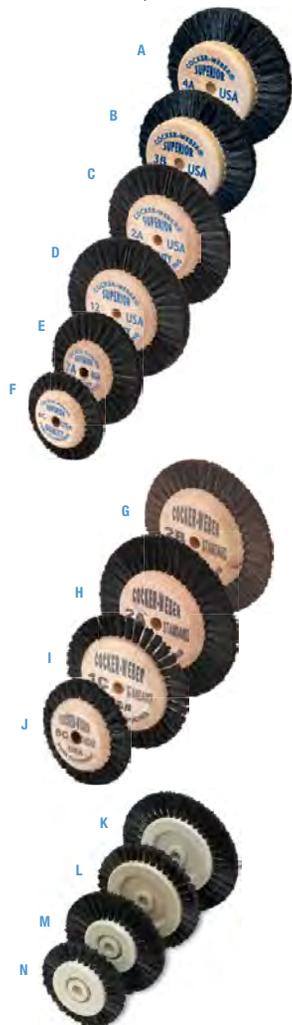


Cup, End, and Wheel Brushes.
Both bristle and metal
filaments, on 3/32" shanks

Cup and End bristle brushes
on 1/8" shanks

Cocker-Weber Brushes

The Cocker-Weber company has been manufacturing brushes in the United States for over 100 years. They are the world's leader in quality and value, unmatched! The hard wood hubs are cured and resist breaking resulting in long life and strong bristle retention. The plastic unbreakable hubs are more narrow and impervious to water or other liquids.



A-F Superior Quality Wood Hub Wheel Brushes

Our premium, highest quality wood hub brushes are clearly superior to all others. They are made with the very best hard Chungking (animal hair) bristles securely mounted in hardwood hubs. Those with two or more rows of bristles are the converging type for faster action. All have 1/4" arbor holes. Recommended for use on tapered spindles. Max. operating speed: 10,000rpm. Made in USA.

Hub	Type	Trim Length	Rows of Bristles	Overall Dia.	SKU	Each			
						1-11	12-71	72-143	144+
A	1-7/8" 4A	9/8"	4	3-3/8"	115-1751				
	1-7/8" 4C	3/8"	4	2-5/8"	115-1753				
	1-7/8" 3B	1/2"	3	2-7/8"	115-1742				
B	1-7/8" 4	3/4"	3	3-1/2"	115-1750				
	1-7/8" 2A	9/8"	2	3-3/8"	115-1730				
C	1-7/8" 3	3/4"	3	3-1/2"	115-1740				
	1-1/2" 12	3/4"	4	3"	115-1640				
D	1-7/8" 2C	3/8"	2	2-3/8"	115-1720				
	1-1/4" 7A	9/8"	3	2-1/2"	115-1560				
E	1-1/4" 8A	5/8"	4	2-1/2"	115-1570				
	1-1/4" 6C	3/8"	2	2"	115-1540				
F	1-1/4" 6A	3/8"	2	2-1/2"	115-1550				

G-J Standard Quality Wood Hub Wheel Brushes

The Economy version of Cocker-Weber brushes are marked with a black imprint. They are made with very good quality Chungking bristles, securely mounted in the same high quality wood hubs and are almost as stiff as our Premium type. Those with two rows of bristles are the converging type for faster action. All have 1/4" arbor holes and are recommended for tapered spindles. Max. operating speed: 10,000rpm. Made in USA.

Hub	Type	Trim Length	Rows of Bristles	Overall Dia.	SKU	Pkg. of 12		
						1-5	6-11	12+
G	1-7/8" 2B	1/2"	2	3"	115-1820			
H	1-7/8" 2A	5/8"	2	3-3/8"	115-1815			
	1-7/8" 2C	3/8"	2	2-3/8"	115-1810			
I	1-7/8" 1C	3/8"	1	2-3/8"	115-1805			
J	1-1/4" 6C	3/8"	2	2"	115-1800			

K-N Plastic Hub Superior Quality Wheel Brushes

Consist of extra-hard, premium quality Chungking bristles and are made by Cocker-Weber. Mounted on narrow, unbreakable plastic hubs. Bristles converge especially well eliminating the need for burn-in. All have 1/2" thick hubs with 1/4" arbor holes and recommended for use with tapered spindles. Max. operating speed: 10,000rpm.

Hub	Type	Trim Length	Rows of Bristles	Overall Dia.	SKU	Each			
						1-11	12-71	72-143	144+
N	2"	2PA	5/8"	2	3-3/8"	115-1731			
M	2"	2PC	3/8"	2	2-3/8"	115-1721			
L	1-1/4"	6PA	5/8"	2	2-1/2"	115-1551			
K	1-1/4"	6PC	3/8"	2	2"	115-1541			

SUPRA® "MK"™ Bristle Wheel Brushes

The World's Best Polishing Brushes!

Our most popular unmounted wheel brushes. Feature solid-ring construction for great durability. Contain soft white goat hair bristles, double thick, ideal for applying rouge and compounds. Designed to run true. Mount on our unbreakable SUPRA "MK" Plastic Spindles in seconds, helping speed up production. Have brass hubs with 1/8" arbor holes. Max. operating speed: 15,000rpm.



A-C SUPRA® "MK"™ Bristle Wheel Brushes – 1/8" Arbor Hole

Bristle Type	Trim Length	Wheel Dia.	SKU	Pkg. of 12			
				1-11	12-35	36-71	72+
A	Hard	1/8"	5/8"	113-0100			
	Medium	1/8"	5/8"	113-0150			
	Soft	1/8"	5/8"	113-0250			
B	Hard	3/16"	3/4"	113-0400			
	Medium	3/16"	3/4"	113-0500			
	Soft	3/16"	3/4"	113-0600			
C	Hard	1/4"	1"	113-0800			
	Medium	1/4"	1"	113-0850			
	Soft	1/4"	1"	113-0950			



D-E Plastic Spindles for SUPRA® "MK"™ Wheel Brushes

Threaded steel mandrels mounted in hard plastic spindle bases. Accommodate all SUPRA "MK" Brushes. Fit on tapered spindles. Allow easy mounting of brushes – require only slight pressure and a quarter-turn. Choose for right or left motor shaft.

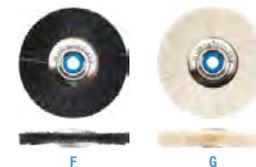
Description	SKU	Each
D White Spindle for Right Shaft	840-4950	
E Black Spindle for Left Shaft	840-4900	



F-G Wheel Brushes – Plastic Center, 1-7/8" Dia.

The black chungking bristle version is very stiff and converges to a 1/8" face. The white goat hair brush is very soft with a polishing face of 1/4". Max. operating speed: 3,450rpm. Made in Germany.

Style	Bristle Type	Trim Length	Wheel Dia.	Arbor	SKU	Each		
						1-11	12-143	144+
F	48CK	Hard	1/2"	1-7/8"	1/4" Plastic	114-5195		
G	48SG	Soft Hair	1/2"	1-7/8"	1/4" Plastic	114-5197		





A

A Wire Scratch Wheel Brushes – .003" Dia. Crimped Wire

This superior construction packs much more wire into each brush, which gives faster action, and longer life when compared to wood hub "tufted" brushes. Synthetic polymer centers (2203B has an aluminum center), ensure secure retention on tapered spindles. Ideal for cleaning, has 1/4" arbor hole. Max. operating speed: 6,000rpm (4,000rpm for 4403B).

Style	.003" Wire Type	Trim Length	Wheel Dia.	Rows	SKU	Each	
A	2203B	Brass	3/4"	2"	2	116-2203	



B

B Scotch-Brush – 3" Dia.

Two ply of 3M Scotch-Brite™ are supported by two rows of stiff white Chung King bristle secured onto a plastic hub. The bristles give support to the application of more pressure for faster results. Additionally, both brush and Scotch-Brite™ accept compounds and pastes making this a versatile finishing tool. May be used on tapered spindle. Max. operating speed: 2,800rpm.

Hub Dia.	Arbor Hole	Trim Length	SKU	Each
1-1/2"	1/4"	3/4"	114-5199	



C

C-D Mounted Wire Wheel Brushes – 3/32" Shank

Made of .003" diameter crimped wire. For cleaning and brush finishing with flex shafts. Use brass for yellow metals, steel for white metals. Both have 3/32" shanks. Max. operating speed: 22,000rpm (recommended 17,000rpm). Imported.

Wire Type	Trim Length	Wheel Dia.	SKU	Pkg. of 12	12+
C	Steel	3/16"	3/4"	113-1000	
D	Brass	3/16"	3/4"	113-1050	



D



E

E-F Double Row Mounted Wheel Brushes – 3/32" Shank

Both are made of white goat hair bristles, double thick, ideal for applying rouge and compounds. Measure approximately 7/8" diameter x 1/4" thick, with 3/32" shanks. Available with very soft bristles converging to approximately 3/32" for concentrated action or soft straight bristles creating a wider contact area. Max. operating speed: 8,000rpm. Made in Germany.

Bristle Type	Trim Length	Wheel Dia.	SKU	Each	6+
E	Very Soft, Converging	1/4"	7/8"	113-1515	
F	Soft, Straight	1/4"	3/4"	113-1520	



F



G

G Single Row Mounted Wheel Brush – 3/32" Shank

Features a single row of natural soft bristles mounted securely in a copperplated steel hub. Great for cleaning and polishing tight areas. Measures 1" dia. with 3/32" shank. Max. operating speed: 25,000rpm. Imported.

Bristle Type	Trim Length	Wheel Dia.	SKU	Pkg. of 12	1-11	12+
G	Soft	1/4"	1"	113-1526		
	Medium	1/4"	1"	113-1525		

A Bench Duster – Wooden Handle

Contains four rows of 1-1/2" long medium natural bristles. Ideal for cleaning dust from surfaces. Measures 9-3/4" long.

Description	Face Size (L x W)	SKU	Each		
			1-2	3-11	12+
Bench Duster	4" x 3/4"	115-2260			



A

B-C Washout Brushes – Wooden Handles

Have four rows of 3/4" long natural bristles. Short-Face has extra-stiff bristles, and Regular has stiff bristles. Measure 8-1/4" long.

Description	Face Size (L x W)	SKU	Each		
			1-2	3-11	12+
B Short-Face	2" x 1/2"	115-2100			
C Regular	3-1/2" x 3/4"	115-2200			



B



C

D-E Washout Brushes – Durable Plastic Handles

Have extra-stiff natural bristles in durable plastic handles. The 3-Row Brush has 5/8" long bristles, and the 4-Row Brush has 3/4" long bristles. Measure 7-1/4" long.

Description	Face Size (L x W)	SKU	Each		
			1-2	3-11	12+
D 3-Row	3-1/2" x 1/2"	115-2060			
E 4-Row	3-1/4" x 3/4"	115-2070			



D



E

F Small Washout Brush – Plastic Handle

Has four rows of 1/2" long extra-stiff nylon bristles in an angled handle. Ideal for cleaning small areas. Fits inside most rings. Measures 6-3/8" long.

Description	Face Size (L x W)	SKU	Each		
			1-2	3-11	12+
F Small Washout	1-3/4" x 1/2"	115-2250			



F

G-J Watchmaker's Brush – Wooden Handle

Four uniform rows of 5/8" long white natural bristles locked in a wood handle are great for cleaning fine jewelry, PC boards, cleaning dusting and other general purpose work. Measure 10" overall length. Made in Germany.

Description	Face Size (L x W)	SKU	Each		
			1-2	3-11	12+
G Hard	4-1/2" x 1/2"	115-2336			
H Medium	4-1/2" x 1/2"	115-2338			
I Soft	4-1/2" x 1/2"	115-2340			
J Extra Soft	4-1/2" x 1/2"	115-2342			



G



H



I



J

K Hand Brush with Handle

Features stiff nylon bristles set in a durable block which is ideal for general cleaning. Measures 3-1/4" long x 1-1/4" wide.

Description	SKU	Each	
		1-2	3+
Hand Brush with Handle	115-2255		



K



A Double-Ended Brush – Stainless Steel Wire

Great for removing EDM carbon buildup. One end has .005" dia. Straight stainless steel bristles, 1/4" trim, 3/16" dia. The other end has .003" dia. crimped stainless steel bristles, 7/16" trim, 1/4" dia. Wooden handle has finger grip at both ends. Measures 6" overall length.

Handle				Each	
Material	Length	Style	SKU	1-11	12+
Wood	6"	7982	114-5310		



B-C Wire Brushes – Plastic Handles

Use on metals for intermediate finishing, surface preparation or final finishing. Ideal for cleaning burr teeth and for scrubbing and removing carbon buildup found in EDM cavities. Can also be used for texturing. Available with .006" dia. x 7/16" L stainless steel or .004" dia. x 7/16" L brass wire bristles. Both have plastic handles. Measure 7-3/4" long.

Description			Face Size (L x W)		SKU		Each	
B	Stainless Steel	1-3/8" x 1/4"	114-5300					
C	Brass	1-3/8" x 1/4"	114-5305					



D-E Hand-Laced Scratch Brushes – Wooden Handles

Feature three rows of soft, flexible 7/16" L x .003" dia. bristles. Ideal for producing a satin finish. Hand-laced with stainless steel wire to retain maximum bristles and allow handle expansion and contraction when exposed to wetness. Measure 7-3/4" long.

Description			Face Size (L x W)		SKU		Each	
D	Stainless Steel	1-3/8" x 1/4"	114-5320					
E	Brass	1-3/8" x 1/4"	114-5315					



F Brass Scratch Brush – Wooden Handle

Four rows of 3/4" L x approximately .0035" diameter anchored brass wire. Produces a fine satin finish on soft yellow metals. Measures approximately 8" long.

Description			Face Size (L x W)		SKU		Each	
	Brass	3-1/4" x 5/8"	118-3400					

G-J Scratch Brush Pens

Excellent for removing rust or corrosion and for reaching into narrow areas. Handy and comfortable to hold. Available in four color-coded types with metal ferrules for durability: steel, nylon, fiberglass and brass. Measure 4-1/2" overall length. Made in Germany.

Description			Color		SKU		Each	
G	Stainless Steel Pen		Orange		115-2310			
H	Nylon Pen		Blue		115-2312			
I	Fiberglass Pen		Green		115-2314			
J	Brass Pen		Red		115-2316			

Description			Length		SKU		Pkg. of 6	
	Stainless Steel Refills		1-1/4"		115-2311			
	Nylon Refills		1-1/4"		115-2313			
	Fiberglass Refills		1-1/4"		115-2315			
	Brass Refills		1-1/4"		115-2317			



A-I Micro Spiral Brushes – Abrasive Bristle

Nylon bristle with aluminum oxide abrasive. This new brush concept is a perfect tool for cleaning or light burr removal in through holes or on hole edges. The 0.3mm diameter nylon bristle contains 500 grit AlO abrasive grain. Easy to hold and use by hand or can be carefully used in a rotary handpiece if run no faster than 1,500rpm* (3mm shank diameter). Each brush's wire mandrel top (except MSB 2.2 and MSB 2.7) is coated with epoxy resin to protect the work surface from damage.

	Brush Size (Dia. x L)	Overall Length	Shank Dia.	SKU	Each
A	2.2 x 20mm	65	3mm	115-2288	
B	2.7 x 20mm	65	3mm	115-2289	
C	3.3 x 25mm	70	3mm	115-2290	
D	3.8 x 25mm	70	3mm	115-2291	
E	4.3 x 25mm	70	3mm	115-2292	
F	4.8 x 25mm	70	3mm	115-2293	
G	5.3 x 25mm	70	3mm	115-2294	
H	5.8 x 25mm	70	3mm	115-2295	
I	6.3 x 25mm	70	3mm	115-2296	

*1,500rpm max when used in a rotary handpiece.
Do not operate until fully inserted into the hole to be processed.

J-M Nylon Tube Brushes

Single-stem, single-spiral nylon tube brushes for cleaning inside rings and grooves. Each has loop handle for sure grip.

Brush Size (Dia. x L)			Overall Length		SKU		Each		
J	1" x 4"		12-1/4"		115-2285				
K	3/4" x 3"		8-1/2"		115-2280				
L	1/2" x 3"		8-1/2"		115-2275				
M	1/4" x 2"		6-1/4"		115-2270				

N Econo Flux Brush

Disposable brush with tin ferrule. Use for fluxes and other liquids.

Description			Overall Length		SKU		Pkg. of 3	
	Econo Flux Brush		1-3/4"		115-0100			

O-T Quill Flux Brushes/Borax Brushes

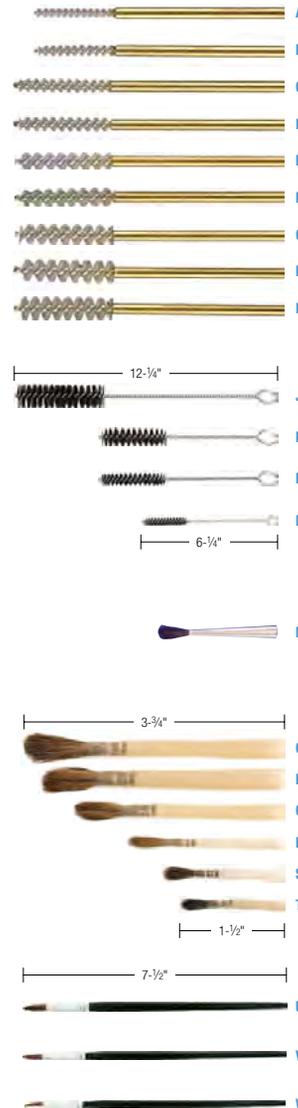
Inexpensive disposable brushes made of camel hair mounted in hollow quill handles. Use for applying fluxes and other liquids.

Description			Overall Length		SKU		Pkg. of 3	
O	1		3-3/4"		115-0010			
P	2		3-1/2"		115-0020			
Q	3		3"		115-0030			
R	5		2-1/4"		115-0050			
S	7		1-3/4"		115-0070			
T	9		1-1/2"		115-0090			

U-W Wood Flux Brushes

Well-constructed, durable camel hair brushes with wooden handles.

Description			Overall Length		SKU		Each	
U	Large Brush		7-1/2"		115-0400			
V	Medium Brush		7-1/2"		115-0500			
W	Small Brush		7-1/2"		115-0600			



Gesswein® Buff Selection Guide

Muslin, felt, and cotton materials create buffs with different polishing characteristics. Used with compounds, buffs can handle everything from removing deep scratches to imparting a high luster. Reserve just one buff for each compound to avoid mixtures, which can produce unpredictable finishes. Made in USA except where indicated. When selecting buffs, please consider the following information:

- **Stitched Buffs:** Joined by several rows of stitching for firmer action. Use with cutting or polishing compounds.
- **Loose Buffs:** Joined only at arbor hole for softer action and following contours. Use with rouge for final polishing.
- **Razor-Edge Buffs:** Perfect for reaching into tight areas.
- **Chemical Treatments:** Improve stiffness and provide better compound retention. Use with cutting compounds for fast action.
- **Combed Edges:** Hold compounds well. Require no break-in period.
- **Centers:** Choose from leather reinforced or shellac-hardened pinhole and lead for use on tapered spindles. Also available; $\frac{3}{8}$ " arbor holes for use on $\frac{3}{8}$ " arbor shafts.

A Stitched White Muslin Buffs – Leather Pinhole Center

Made of fine-weave muslin with combed edges and leather centers. For cutting compounds such as Grey Star and Tripoli. For polishing of hard metals such as platinum. Made in USA.

Dia. x Ply	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
3" x 40	3	80/80	140-2300				
4" x 30	3	80/80	140-2350				
4" x 40	3	80/80	140-2400				
4" x 50	3	80/80	140-2450				
4" x 60	3	80/80	140-2455				
5" x 30	3	80/80	140-2480				
5" x 45	3	80/80	140-2500				
5" x 50	3	80/80	140-2550				
6" x 50	4	80/80	140-2650				
6" x 60	4	80/80	140-2660				
7" x 50	4	80/80	140-2700				
8" x 55	4	80/80	140-2800				

B Stitched Coarse White Muslin Buffs – Shellac Pinhole Center

Made of coarse-weave muslin with uncombed edges and shellac-hardened centers. For cutting compounds such as Grey Star and Tripoli. For polishing of hard metals such as platinum. Made in USA.

Dia. x Ply	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
5" x 45	3	60/60	140-2010				
6" x 50	4	60/60	140-2020				

C Loose White Muslin Buffs – Leather Pinhole Center

Made of fine-weave muslin with combed edges and leather centers. For polishing compounds such as rouge. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
3" x 40	80/80	140-4300				
4" x 40	80/80	140-4400				
4" x 50	80/80	140-4350				
5" x 45	80/80	140-4500				
6" x 50	80/80	140-4650				
6" x 60	80/80	140-4660				
7" x 50	80/80	140-4700				
8" x 55	80/80	140-4800				

Why Choose Gesswein® Buffs?

What makes our Made in USA buffs better than many competitors can be summarized as follows:

- Premium quality 100% cotton carded cloth with 80/80 and 86/80 thread counts (the number of threads per square inch in each direction). The yarn size is 30/30. These consistent thread counts and tight weaves make our buffs more wear-resistant and longer lasting.
- Our polymer plastic treated buffs give superior performance to starch treatments used by some others.
- When processing we take extra care to relieve the folds and wrinkles inherent in a bolt of cloth and use a die cutter that prevents nicks and ensures cuts are not made from the salvage edge of the cloth. We turn every other ply so that it is offset by at least 45 degrees which prevents premature thread fraying, ensures even and circular wear and improves compound retention. Well turned buffs will outlast unturned buffs by up to 50%.
- We regulate tension, stitching, and sewing pattern parameters. Tension is such that when stitches are pulled up, they snap back to the buff. Stitching is kept to 4-6 stitches per inch on the buff, 9-16 on the leather center, and the sewing needle is lifted between each row of stitching to create a truly concentric sewing pattern. All these factors add up to longer lasting buffs.
- We inject shellac into the center of each buff making the entire center hard which allows the buffs to be repeatedly taken on and off the spindle without becoming wobbly. Some manufacturers simply dab or stamp shellac onto the center.

For longer life, better cutting and polishing and superior value – use Gesswein Buffs.

A Loose White Muslin Buffs – Lead Center

Made of fine-weave muslin with combed edges and lead centers. A tapered spindle will create threads in the lead, providing a positive seat. For polishing compounds such as rouge. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
4" x 54	80/80	140-6450				
5" x 54	80/80	140-6500				
6" x 54	80/80	140-6650				
6" x 63	80/80	140-6560				

B Loose White Muslin Buffs – $\frac{3}{8}$ " Arbor Hole

Made of fine-weave muslin with combed edges. Have $\frac{3}{8}$ " diameter arbor holes for use on $\frac{3}{8}$ " arbor shafts. Not for use on tapered spindles. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
3" x 20	80/80	140-4315				
4" x 20	80/80	140-4320				
5" x 20	80/80	140-4420				
6" x 20	80/80	140-4520				

C Razor-Edge White Muslin Buffs – Leather Pinhole Center

Made of fine-weave muslin except for 140-8650, which is made of coarse-weave muslin. Can reach into areas where conventional buffs cannot, such as corners, channels and slots. Stitching provides firm edge and maintains buff shape. Buffs with 86/80 thread count are a bit stiffer and more aggressive than buffs with 80/80 thread count. Made in USA.

Dia.	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
2- $\frac{1}{2}$ "	3	86/80	140-8250				
3"	4	86/80	140-8300				
4"	6	86/80	140-8400				
5"	8	80/80	140-8500				
6"	10	80/80	140-8600				
6"	10	86/80	140-8650				





A Stitched Yellow Muslin Buffs – Leather Pinhole Center

Made of chemically treated fine-weave muslin with combed edges and leather centers. Feature a degree of stiffness that serves particularly well for cutting with Tripoli. Last two to three times longer than white muslin buffs. Made in USA.

Dia. x Ply	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
4" x 30	3	86/80	141-2350				
4" x 40	3	86/80	141-2400				
4" x 50	3	86/80	141-8700				
5" x 30	3	86/80	141-2480				
5" x 45	3	86/80	141-2500				
5" x 50	3	86/80	141-8710				
6" x 30	4	86/80	141-8720				
6" x 50	4	86/80	141-2600				
6" x 60	4	86/80	141-2650				
7" x 50	4	86/80	141-8730				

B Loose Yellow Muslin Buffs – Leather Pinhole Center

Made of the same treated fine-weave muslin with combed edges and leather centers as our stitched yellow muslin buffs, without the stitching. Can be used with rouge. Works very well with cut-and-color compounds. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
4" x 50	86/80	141-1000				
5" x 50	86/80	141-1005				
6" x 50	86/80	141-1010				

C Loose Yellow Muslin Buffs – 3/8" Arbor Hole

Made of the same treated fine-weave muslin with combed edges as our other yellow buffs. Have 3/8" diameter arbor holes for use on 3/8" arbor shafts. Not for use on tapered spindles. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
4" x 20	86/80	141-0995				
5" x 20	86/80	141-1002				
6" x 20	86/80	141-1007				

D Spiral Creso Sewed Buff

Unique in look, this "Spiral" buff or also known as the Creso Sewed Buff is a unidirectional buff. Run against the stitching as a cutting buff and run with for polishing action. The stitching creates pockets which increase compound retention. Color may vary. 86/80 thread count, combed edge. Made in USA. Measure 6" diameter by 20 ply with a 1/2" arbor hole. Also available in white, see our 140-0005.

Dia. x Ply	SKU	Each			
		1-11	12-35	36-143	144+
6" x 20	142-0005				

E Razor-Edge Yellow Muslin Buffs – Leather Pinhole Center

Made of the same treated fine-weave muslin with leather centers as our other yellow buffs. Can reach into areas where conventional buffs cannot, such as corners, channels and slots. Stitching provides firm edge and maintains buff shape. Made in USA.

Dia.	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
4"	6	86/80	141-8495				
5"	8	86/80	141-8500				
6"	11	86/80	141-8600				

A Stitched Plum Muslin Buffs – Leather Pinhole Center

Made of chemically treated fine-weave muslin with combed edges and leather centers. Outlast yellow and white buffs by a wide margin. Cut fast and provide ultra-high polish when used with yellow glow or rouge. Retain compound extremely well, producing a brighter finish than other buffs. Impart an amazing finish on soft metals. Color variations are normal for this product. Made in USA.

Dia. x Ply	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
4" x 40	3	86/80	140-6660				
5" x 45	3	86/80	140-6661				
6" x 50	4	86/80	140-6662				

B Loose Plum Muslin Buffs – Leather Pinhole Center

Made of the same treated fine-weave muslin with combed edges and leather centers as our stitched plum muslin buffs, without the stitching. Color variations are normal for this product. Made in USA.

Dia. x Ply	Thread Count	SKU	Each			
			1-11	12-35	36-143	144+
4" x 40	86/80	141-1020				
5" x 45	86/80	141-1021				
6" x 50	86/80	141-1022				

C Razor-Edge Plum Muslin Buff – Leather Pinhole Center

Made of the same treated fine-weave muslin with a leather center as our other plum buffs. Can reach into areas where conventional buffs cannot, such as corners, channels and slots. Stitching provides firm edge and maintains buff shape. Color variations are normal for this product. Made in USA.

Dia.	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
6"	10	86/80	140-6670				

D Stitched Blue Platinum Muslin Buffs – Leather Pinhole Center

Made of chemically treated premium-weave muslin with combed edges and leather centers. More aggressive and durable than yellow and plum buffs. Optimize the effectiveness of all platinum compounds, providing a higher polish on platinum in less time than other buffs. Made in USA.

Dia. x Ply	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
4" x 30	3	86/80	140-6698				
4" x 40	3	86/80	140-6699				
4" x 50	3	86/80	140-6701				
5" x 50	3	86/80	140-6702				
6" x 50	4	86/80	140-6703				

E Razor-Edge Blue Platinum Muslin Buff – Leather Pinhole Center

Made of the same treated fine-weave muslin with a leather center as our other blue buffs. Can reach into areas where conventional buffs cannot, such as corners, channels and slots. Stitching provides firm edge and maintains buff shape. Made in USA.

Dia.	Rows of Stitching	Thread Count	SKU	Each			
				1-11	12-35	36-143	144+
6"	10	86/80	140-6704				



A-C Cylinder, Goblet & Tapered Buffs – Made in USA

Three different buffs for specialized jobs. Cylinder buffs polish inside tubular shapes. Tapered buffs polish inside tapered shapes. Goblet buffs polish inside goblets, chalices and other irregular shapes. Made of stitched fine-weave muslin. For use on tapered spindles.

Each	
1-11	12+

Description	Size	SKU
A Cylinder Buff	2" x 2"	143-5200
	3" x 3"	143-5300
B Goblet Buff	2"	143-3200
	3"	143-3300
	4"	143-3400
C Tapered Buff	2"	143-1200

D Canton Flannel Buffs – Shellac Pinhole Center

Made of soft, thick fabric with combed edges and shellac-hardened centers. Use with rouge to impart a high finish on precious metals. Excellent for high-karat gold and silver.

Each	
1-11	12+

Dia. x Ply	Rows of Stitching	SKU
4" x 30	3	142-8400
5" x 30	3	142-8500
6" x 30	4	142-8600

E Brilliant Buff – No Rouge, No Mess!

Made of soft, long-strand pure Egyptian cotton treated with an environmentally friendly polishing chemical that creates no mess. Yields a bright shine on platinum, gold and silver without additional compound. After using Tripoli, polish with this buff for a brilliant finish. Leaves behind an undetectable residue that inhibits tarnish. For use on tapered spindles.

Dia. x Thick	SKU	Each
4-1/2" x 3/4" (30 ply)	142-0010	

F Spiral Creso Sewed Buff

Unique in look, this "Spiral" buff or also known as the Creso Sewed Buff is a unidirectional buff. Run against the stitching as a cutting buff and run with for polishing action. The stitching creates pockets which increase compound retention. 86/80 thread count, combed edge. Measure 6" diameter by 20 ply with a 1/2" arbor hole and has 13 rows of stitches to create the pockets. Also available in yellow, see our 142-0005. Made in USA.

Each			
1-11	12-35	36-143	144+

Description	SKU
White Spiral Creso Sewed Buff	140-0005

G Air Flow Buff 6"

A unique 6" diameter by 15 ply buff that is open-faced and made up of wrapped/rippled style cloth for softness and flexibility. Due to its construction, the Air Flow Buff is able to hold compound better and longer thus making for better cutting and polishing action. Has a 1/2" diameter Arbor Hole to be used on an arbor shaft. Not for use on tapered spindles.

Each			
1-11	12-35	36-143	144+

Dia. x Ply	SKU
6" x 15	140-5005

H Cotton String Buff

This ultra-soft buff imparts a superb finish on gold, especially when used with our Premium Red Rouge. Made of soft cotton string tufts firmly anchored in hub for durability. Can be used with any polishing compound. Made in Italy.

Each	
1-11	12+

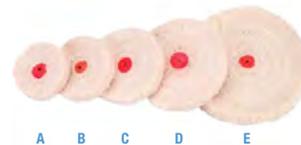
Dia. x Thick	Max. Operating Speed	Recommended Speed	SKU
4" x 2"	3,000rpm	2,800rpm	142-0001

A-E Mandrel Buffs

Small unmounted stitched buffs for use with flex shaft handpieces. Made of fine-weave muslin with shellac pinhole centers. Mandrels not included. Made in USA.

Pkg. of 3		
1-3	4-47	48+

Dia. x Ply	Rows of Stitching	Thread Count	SKU
A 7/8" x 16	1	80/80	142-0090
B 1" x 16	2	80/80	142-0100
C 1-1/4" x 16	2	80/80	142-0125
D 1-1/2" x 16	3	80/80	142-0150
E 2" x 16	4	80/80	142-0200

**F-G Cotton String Buff – 3/32" Shank**

Our ultra-soft buff imparts a superb finish on gold, especially when used with our Premium Red Rouge. Made of soft cotton string tufts firmly anchored in hub for durability. Ideal for accessing tight or recessed areas. Can be used with any polishing compound. Made in Italy.

Max. Operating Speed		Recommended Speed		Each		
Dia	Speed	Speed	SKU	1-11	12-143	144+
F 7/8"	22,000rpm	17,000rpm	142-0301			
G 1"	22,000rpm	17,000rpm	142-0300			

**H-K Mounted Muslin Buffs – 3/32" Shank**

Available in firm yellow for cutting and soft white for polishing, both loose or stitched, mounted on 3/32" shanks. Recommended operating speed 5,000 rpm. Made in Germany.

Each			
1-11	12+		

Description	Dia.	SKU
H Yellow Stitched	1"	142-0340
I Yellow Loose	1"	142-0342
J White Stitched	1"	142-0345
K White Loose	1"	142-0347

**L Mounted Muslin Buff – 3/32" Shank**

Miniature muslin buff for use with flex shaft handpieces. Mounted on a 3/32" shank. Made in Germany.

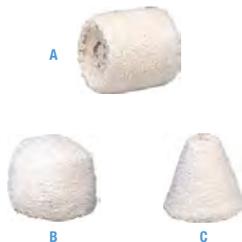
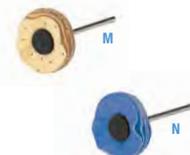
Recommended Speed		Each		
Dia. x Thick	Speed	SKU	1-11	12+
7/8" x 1/4"	5,000rpm	142-0325		

**M-N Faux Chamois Buffs – 3/32" Stainless Steel Shank**

Durable artificial one inch diameter chamois buffs that hold compound very well. Choose from perforated yellow and blue styles. Perforated yellow work with tripoli and other aggressive compounds; blue produce a wonderful luster with rouge. Made in India.

Each	
1-11	12+

Dia. x Thick	Material	Use With	SKU
M 1" x 3/8"	Perforated Yellow	Tripoli	142-0020
N 1" x 3/8"	Blue	Rouge	142-0024





A-B Felt Flap Wheels – 1/8" Shank

Uniquely constructed soft pure felt wheels for use with polishing compounds. Made in Germany.

	Dia. x H	SKU	Each	
A	3/4" x 3/8"	288-2213	1-2	3+
B	1-1/4" x 3/4"	288-2214		



C-D Mounted Felt Wheels – 3/32" Shank

3 ply wheels ideal for cutting and polishing larger surfaces. Mounted on 3/32" shanks.

	Dia. x Thick	Recommended		SKU	Each	
		Speed	Type		1-11	12+
C	7/8" x 1/2"	5,000rpm	Very Soft	288-2210		
D	7/8" x 3/16"	5,000rpm	Soft	288-2211		



E-F Mounted Felt Wheels – 3/32" or 1/8" Shanks

Both hard and soft in either 3/32" or 1/8" shank sizes. Hard provides a more aggressive cutting action while soft produces a higher finish. Made in Germany.

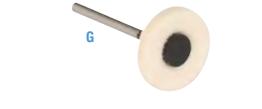
	Dia. x Thick	Shank Size	Recommended		SKU	Each	
			Speed	Type		1-11	12+
E	7/8" x 3/16" (5mm)	3/32"	5,000rpm	Hard	288-2221		
	7/8" x 3/16" (5mm)	1/8"	5,000rpm	Hard	288-2222		
F	7/8" x 3/16" (5mm)	3/32"	5,000rpm	Soft	288-2223		
	7/8" x 3/16" (5mm)	1/8"	5,000rpm	Soft	288-2224		



G Mounted Felt Wheel with Plastic Hub – 3/32" Shank

Soft felt wheel mounted on a non-scratching plastic hub with 3/32" stainless steel shank. Works so well that it's patented. Use with compound for cutting and polishing. Made in India.

	Dia. x Thick	Type	SKU	Each	
	1" x 3/16"	Soft	288-2209	1-11	12+



H Compressed Fiber Wheel – 3/32" Shank

Fibers are compressed and bonded with aluminum oxide to make a firm, dense long lasting wheel with some flexibility. Creates a beautiful scratch finish that contrasts well with highly polished areas. Recommended working speed: 5,000rpm. Made in Germany.

	Dia. x Thick	Type	SKU	Each	
	7/8" x 3/8"	Coarse	288-2250	1-11	12+

A Mounted Impregnated Felt Bobs – 1/8" Shank

Felt bobs evenly impregnated with 8000 grit silicon carbide abrasive for uniform removal of light scratches and brightening. Help shorten the final finishing process. Reduce messy compound cleanup. Suitable for all metals, including soft metals such as brass. Available in hard and medium grades. Mounted on 1/8" shanks. Max. operating speed: 10,000rpm. Made in USA.

Dia. x H	3/8" x 1/2"	1/4" x 1/4"	1/4" x 3/8"	3/8" x 3/8"	3/8" x 1/2"	
SKU	Medium	284-2000	284-2002	–	284-2004	284-2006
	Hard	284-1030	284-1100	284-1101	284-1102	284-1103
Each	1-35					
	36-71*					
	72+					

*Quantity discount for orders of one item number only; not assorted.

Dia. x H	1/2" x 1/2"	1/2" x 3/4"	1/2" x 1"	3/4" x 3/4"	1" x 1"	
SKU	Medium	284-2008	284-2010	–	284-2012	284-2014
	Hard	284-1104	284-1105	284-1106	284-1110	284-1114
Each	1-35					
	36-71*					
	72+					

*Quantity discount for orders of one item number only; not assorted.

B Unitized Mounted Points – 1/8" Shank

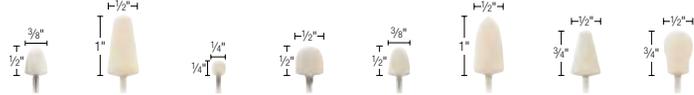
Ideal for a variety of deburring, blending, finishing and polishing applications. Consist of durable unitized material embedded with either silicon carbide for a fine finish or aluminum oxide for a medium or coarse finish. Mounted on 1/8" shanks. Conform to workpieces for consistent, uniform finishing without undercutting or gouging.

Style	B42	B52	B90	W160	W183	W185	
Dia. x H	1/2" x 3/4"	3/8" x 3/4"	1/2" x 1/2"	1/4" x 1/4"	1/2" x 1/4"	1/2" x 1/2"	
Max. RPM	33,750	45,300	34,500	81,300	51,700	34,500	
SKU	Coarse	845-0120	845-0121	845-0122	845-0123	845-0124	845-0115
	Medium	845-0110	845-0111	845-0112	845-0113	845-0114	845-0115
	Fine	845-0080	845-0081	845-0082	845-0083	845-0084	845-0085
Each							

Felt Bobs

Made from the finest 100% wool for long life. Available mandrel-mounted or unmounted. May be used with various polishing compounds or rouges to produce a clean, high finish on molds, dies and models. Hard, medium and soft grades available in most shapes. All measurements in inches. Made in USA.

A Felt Bobs – 1/8" Shank



1/8" Shank									
SKU	Hard	286-1010	286-1011	286-1020	286-1022	286-1030	286-1031	286-1040	286-1051
	Medium	290-1010	290-1011	290-1020	290-1022	290-1030	290-1031	290-1040	290-1051
	Soft	289-1010	289-1011	289-1020	289-1022	289-1030	289-1031	289-1040	289-1051
Pkg. of 12	1-2								
	3-5								
	6+								

*Quantity discount for orders of one item number only; not assorted.



1/8" Shank									
SKU	Rock Hard	–	291-1100	–	291-1102	291-1103	291-1104	291-1105	291-1106
	Hard	286-1060	286-1100	286-1101	286-1102	286-1103	286-1104	286-1105	286-1106
	Medium	290-1060	290-1100	290-1101	290-1102	290-1103	290-1104	290-1105	290-1106
	Soft	289-1060	289-1100	289-1101	289-1102	289-1103	289-1104	289-1105	289-1106
Pkg. of 12	1-2								
	3-5								
	6+								

*Quantity discount for orders of one item number only; not assorted.



1/8" Shank									
SKU	Rock Hard	–	–	291-1110	–	–	–	–	–
	Hard	286-1107	286-1108	286-1110	286-1111	286-1113	286-1114	–	–
	Medium	290-1107	290-1108	290-1110	290-1111	290-1113	290-1114	–	–
	Soft	289-1107	289-1108	289-1110	289-1111	289-1113	289-1114	–	–
Pkg. of 12	1-2								
	3-5								
	6+								

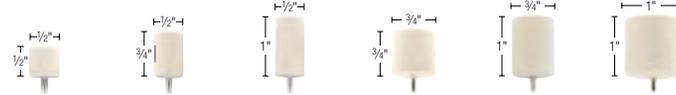
*Quantity discount for orders of one item number only; not assorted.

A. Felt Bobs – 3mm Shank



3mm Shank							
SKU	Hard	287-1010	287-1020	287-1100	287-1101	287-1102	287-1103
	Medium	–	–	296-1100	296-1101	296-1102	296-1103
	Soft	–	–	297-1100	297-1101	297-1102	297-1103
Pkg. of 12	1-2						
	3-5						
	6+						

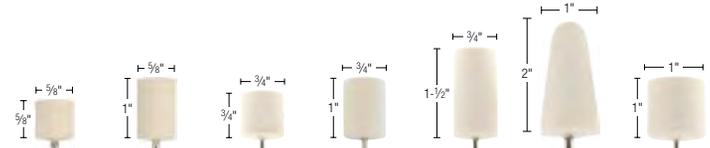
*Quantity discount for orders of one item number only; not assorted.



3mm Shank							
SKU	Hard	287-1104	287-1105	287-1106	287-1110	287-1111	287-1114
	Medium	296-1104	296-1105	–	296-1110	296-1111	296-1114
	Soft	297-1104	297-1105	296-1106	297-1110	297-1111	297-1114
Pkg. of 12	1-2						
	3-5						
	6+						

*Quantity discount for orders of one item number only; not assorted.

B Felt Bobs – 1/4" Shank



1/4" Shank							
SKU	Rock Hard	–	–	–	–	–	291-1115
	Hard	286-1097	286-1098	286-1099	286-1109	286-1112	286-1115
	Medium	–	–	–	–	–	290-1116
Pkg. of 12	1-2						
	3-5						
	6+						

*Quantity discount for orders of one item number only; not assorted.

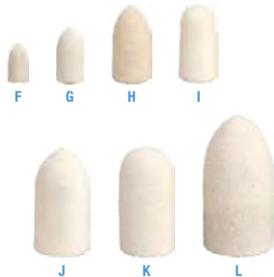
**A-E Unmounted Hard Felt Cylinder Bobs**

Made of pure wool. Pinhole centers. Made in USA.

Dia. x H	SKU	Pkg. of 12	
		1-11	12+
A 1/4" x 3/8"	288-0010		
B 3/8" x 1/2"	288-0020		
C 1/2" x 1/2"	288-0030		
D 3/4" x 3/4"	288-0040		
E 1" x 1"	288-0050		

F-L Unmounted Hard Felt Cones

Made of the finest pure wool for long life. Great for polishing objects with rounded or curved surfaces. Pinhole centers. Made in USA.



Dia. x H	Shape	SKU	Pkg. of 12		
			1-11	12-143	144+
F 1/4" x 1/2"	Pointed	282-0480			
G 3/8" x 3/4"	Pointed	282-0490			
H 1/2" x 1"	Pointed	282-0500			
I 1/2" x 1"	Blunt	282-0501			
			Each		
J 3/4" x 1-1/2"	Pointed	282-0510			
K 3/4" x 1-1/2"	Blunt	282-0511			
L 1" x 2"	Pointed	282-0520			

M-O Poli-Felts - 1/8" Shank

Feature end cut at 45° angle for comfort. For use with reciprocating handpieces such as Power Hand PH3 SZX, Di-Profilor and others. Made in USA.



Dimensions	Style	Type	SKU	Each		
				1-11	12-143	144+
M 1/4" sq. x 1-1/2"L	61	Hard	288-4610			
N 3/8" sq. x 1-1/2"L	62	Hard	288-4620			
O 1/2" sq. x 1-1/2"L	63	Hard	288-4630			
				Each		

P-Q Soft Pure Wool Felt Hand Buffs

For high finish when used with rouge. Have wooden handles. 12" overall length. Made in India.



Felt Size (W x L)	Type	SKU	Each		
			1-11	12-143	144+
P 3/8" x 6"	Soft	288-1015			
Q 7/8" x 6"	Soft	288-1010			

A 7-Piece Cylinder Sets - 1/8" Shanks

Sets contains one each of the following shapes: 1100, 1101, 1102, 1103, 1104, 1105, 1106.

Description	SKU	Each
A 7-Piece Soft Set	289-1119	
7-Piece Medium Set	290-1120	
7-Piece Hard Set	286-1121	

**B 7-Piece Fancy Set - 1/8" Shanks**

Set contains one of each item: 2861010, 2861020, 2861030, 2861040, 2861051, 2861060.

Description	SKU	Each
7-Piece Hard Set	286-1118	

C 4-Piece Fancy Sets - 1/8" Shanks

Set contains one each of the following shapes: 1010, 1020, 1022, 1030.

Description	SKU	Each
C 4-Piece Soft Set	289-1116	
4-Piece Medium Set	290-1117	

D Felt Bobs - 3/32" Shank

Made of pure wool. Sold in packages of 12 and in a set of five shapes. Mounted on 3/32" shanks. Max. operating speed: 15,000rpm. Made in USA.



Dia. x H	1/4" x 3/4"	3/8" x 3/4"	5/16" x 3/8"	3/16" x 3/8"	3/16" x 3/8"	3/8" x 3/8"	
Shape	Point	Flame	Ball	Bullet	Cylinder	Cylinder	
SKU	Hard	288-2320	288-2321	288-2322	288-2323	288-2324	288-2325
	Medium	288-2330	288-2331	288-2332	288-2333	-	288-2335
Pkg. of 12	1-2						
	3-5*						

Description	Each	
	Hard SKU	Medium SKU
5-Piece Set	288-2207	288-2307

*Quantity discount for orders of one item number only; not assorted.

Felt Wheels

Manufactured from carefully selected wool without synthetic fibers or fillers, ensuring product reliability. Feature uniform density throughout for longer life. Yield high-quality finishes every time. Can be shaped.



A

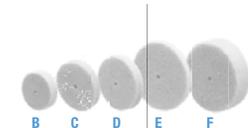
A Soft Felt Wheels – For High Finish

Can be used on irregular surfaces where fast metal removal is unnecessary. Very flexible. Pinhole centers. Mandrel not included. Made in USA.

		Pkg. of 12	
Dia. x Thick	SKU	1-11	12+
A 1" x 1/8"	280-0005		
1" x 1/4"	280-0007		
1-1/4" x 1/4"	280-0006		

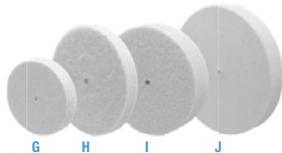
B-J Hard Felt Wheels

Felts in this series have been cut from sheet stock, hardened to appropriate finishing requirements and dressed to size. Pinhole centers. Mandrel not included. Use 2" diameter and larger on tapered spindle. Made in USA.



B C D E F

		Pkg. of 12	
Dia. x Thick	SKU	1-11	12+
B 1/2" x 1/8"	280-0020		
C 5/8" x 1/8"	280-0041		
D 3/4" x 1/8"	280-0060		
E 1" x 1/8"	280-0101		
F 1" x 1/4"	280-0110		

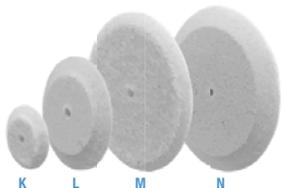


G H I J

		Each		
Dia. x Thick	SKU	1-11	12-143	144+
G 1-1/4" x 1/4"	280-0120			
1-3/4" x 3/8"	280-0130			
H 2" x 1/4"	280-0200			
I 2" x 1/2"	280-0220			
J 2-1/2" x 3/8"	280-0260			

K-P Knife-Edge Felt Wheels

These felt wheels have tapered edges for polishing joints and crevices. Pinhole centers. Mandrel not included. Use 2" diameter and larger on tapered spindle. Made in USA.



K L M N

		Pkg. of 12	
Dia.	Type	SKU	1-11
K 1/2"	Hard	281-0021	
L 5/8"	Hard	281-0041	
3/4"	Hard	281-0060	
M 1"	Hard	281-0100	
1"	Rock-Hard	281-0101	
N 1-1/4"	Hard	281-0201	
1-1/2"	Hard	281-0300	



O P Q R

		Each		
Dia.	Type	SKU	1-11	12-143
O 1-3/4"	Hard	281-0400		
P 2"	Hard	281-0501		
2-1/2"	Hard	281-0700		
Q 3"	Hard	281-0801		
3"	Flint-Hard	281-1030		
R 4"	Flint-Hard	281-1040		

Paramount® Laps

Lapping maintains integrity of flat surfaces and keeps angles and corners from being rounded off during polishing. Unlike buffs, which are soft, laps are very firm and have a wider area to cover much more of the work surface. Can even be shaped to knife or beveled edges.

A Paramount® Felt Laps

Pure wool felt laps uniquely made to ensure proper hardness and performance. All have pinhole centers. Max. operating speed: 3,450rpm. Made in USA.

		Each		
Dia. x Thick x AH	Type	SKU	1-5	6-11
4" x 1/4"	Hard	284-4145		
	Rock-Hard	284-4147		
4" x 1/2"	Soft	284-4121		
	Medium	284-4123		
	Hard	284-4125		
	Rock-Hard	284-4127		
4" x 3/4"	Medium	284-4343		
	Hard	284-4345		
6" x 1/4"	Hard	284-6145		
	Flint-Hard	284-6148		
6" x 1/2"	Soft	284-6121		
	Medium	284-6123		
	Hard	284-6125		
	Rock-Hard	284-6127		
	Flint-Hard	284-6128		
6" x 1"	Soft	284-6101		
	Medium	284-6103		
	Hard	284-6105		

B Diamond-Hard Felt Laps

Pure wool felt laps treated and pressed for exceptional durability. Face of lap can be dressed to a knife edge. Max. operating speed: 3,600rpm. Made in USA.

		Each		
Dia. x Thick x AH	Type	SKU	1-5	6-11
4" x 1/4" x 1/4"	Diamond-Hard	284-4149		
4" x 1/2" x 1/4"	Diamond-Hard	284-4129		
6" x 1/4" x 1/4"	Diamond-Hard	284-6149		
6" x 1/4" x 1/2"	Diamond-Hard	284-6249		

C Felt Sticks

Beveled ends of these solid felt sticks can be used with cutting or polishing compounds. Including diamond compounds.

		Pkg. of 12	
Size	Type	SKU	1-5
C 4"L x 1/4" sq.	Soft	288-3020	
	Medium	288-3015	
	Hard	288-3010	

		Each	
Size	Type	SKU	1-11
D 4"L x 1/2" sq.	Soft	288-3035	
	Medium	288-3030	
	Hard	288-3025	

When selecting laps, please consider the following information:

Felt Laps	Pure wool felt laps hardened by a process of steaming and pounding. Free of artificial hardeners.
Diamond-Hard Laps	Pure wool felt laps excellent for lapping due to a treatment that results in extreme density.



A



B



C



D

Tumblers

From finishing castings or small parts to removing burrs and sharp edges on a few pieces or on thousands, Gesswein carries a tumbler to suit any application. Choose from:

Magnetic Finishing – Newer technology featuring fast centrifugal action to finish non-ferrous parts only. Small stainless steel pins (0.3 to 0.5mm in diameter) will polish the tiniest intricate details without lodging. Magnetic tumblers provide a uniform finish in a fraction of the time compared to vibratory or rotary tumblers. Cycle times are generally 30-45 minutes long.

Vibratory Finishing – Debur and finish small or large, detailed or plain parts to a uniform finish. Media moves from the edge of the bowl to the center in an ellipse, abrading and finishing in and around parts. More versatile than a rotary tumbler, Vibratory Tumblers can utilize both abrasive and polishing medias.



A



B



C



D

A Stainless Steel Shot Pins

Rods in two diameters for reaching into and polishing the tiniest details and settings without lodging. All 5mm long. Blunt ends. 0.5mm is supplied with most magnetic tumblers, 0.3 mm is available for finely detailed parts.

Diameter	SKU	Each
0.5mm Shot, 0.5 lb.	852-1094	
0.5mm Shot, 2.2 lbs.	852-1097	
A 0.3mm Shot, 0.5 lbs.	852-1096	
0.3mm Shot, 2.2 lbs.	852-1099	

B Cutting/Burnishing Soap Liquid B – For Cutting Media

Excellent viscous soap for all of our cutting media. Resists formation of insoluble soap scum. Contains a rust preventative and can be used with Carbon Steel Shot. Recommended for Flow-Through Systems, in which powders are not suitable. Supplied with all Metal Finishing Sets. Not recommended for use with Stainless Steel Shot.

Qty.	SKU	Each
1 pint	852-0875	
B 1 gallon	852-0880	

C Burnishing Compound #44S – For Stainless Steel Shot

Specially formulated chemistry for use with stainless steel shot. Use just 1/2 tsp. per 6" diameter bowl in Magnetic Tumbler. Nontoxic, nonhazardous—can be disposed directly to sewer system.

Description	SKU	Each
Burnishing Compound #44S - 4oz.	852-1029	
C Burnishing Compound #44S - 1 Quart	852-1038	

D Soap Powder for Magnetic Tumblers – For Stainless Steel Shot

Mild acid-based soap powder is specifically formulated for magnetic tumblers. It keeps stainless steel shot clean.

Description	SKU	Each
3 lbs. Soap Powder	852-1037	
D 1 lb. Soap Powder	852-1039	

Magnetic Tumblers

Feature compact, reliable construction, direct-drive, fan-cooled AC motors, 2-hour timers and auto-shutoff function. All units offer programmable controls for variable-speed and forward/reverse operation. Run ultra-quiet with fast cycle times. Each includes heavy-

duty plastic bowl, cover and complete instructions. CMF-610 also come complete with stainless steel shot and small sample of burnishing soap. Made in Taiwan. Backed by a one-year manufacturer's warranty.



CMF-610



CMF-900



CMF-1200

Dimensions (WxDxH)	10" x 10" x 14"	13" x 13" x 18"	16" x 16" x 20"
Bowl Size	6" dia.	9" dia.	12" dia.
Ring Capacity	30 ring	100 ring	225 ring
Speed	0-2,000rpm	0-2,200rpm	0-2,200rpm
Pin Capacity	8 oz. (included)	14 oz. (not included)	28 oz. (not included)
Ship. Wt.	25 lbs.	55 lbs.	85 lbs.
Replacement Bowl	852-0318	852-0344	852-0346
Each			
110V SKU	852-0301	852-0342	852-0347
Each			

Arbe Magnetic Tumblers

Equipped with heavy duty motors and faceted bowls, which maximize rotational action, these machines incorporate a magnetic head design which provides vertical pin action. All come with the appropriate

amount of 0.5mm stainless steel pins. All have a 0-60 minute timer and are variable speed (0-3,450rpm). See website for available single speed versions. 110V, 60Hz, 1Ph. Made in South Korea.



	8 Ring*	30 Ring*	50 Ring*	100 Ring*	300 Ring*
Speed	Variable	Variable	Variable	Variable	Variable
Bowl Size (D X H)	4" x 3-1/2"	5" x 4"	6-5/8" x 4-1/4"	9" x 4-1/2"	11 x 4-1/2"
Ring* Capacity	8	30	50	100	300
Pin Capacity	65g	125g	225g	500g	850g
Repl. Barrel SKU	852-0382	852-0390	852-0391	852-0392	852-0393
Each					
Tumbler SKU	852-0381	852-0384	852-0385	852-0386	852-0387
Each					

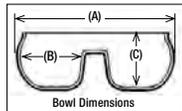
*Ring = 3/4" diameter object

Vibratory Tumblers

Vibratory finishing reduces or eliminates hand-finishing by mass finishing a large number of relatively small workpieces. You can use this batch-type operation to deburr, radius, descale, burnish, clean, and brighten even complex part configurations.

The unique bowl shape uses the center shaft assembly, needed to hold the bowl in place, to create a rhythmic, swirling, cascading effect for the parts and media. This action is what produces and even, identical finish on each piece.

Part size is not a problem: if it fits in the channel and it rotates; it will be nicely finished. All the Raytech tumblers on this page are heavy-duty and come equipped with a drain or discharge port as well as a bowl and lid. All are 115V, 50/60Hz (220V 50Hz, also available – ask us for details) and are made in the USA



	#10	#18	#25SS	#40
Working Capacity* (cu.ft / gals)	0.10 / 0.75	0.15 / 0.9	0.25 / 1.875	0.35 / 2.3
Approx. # of parts**	50	90	125	200
Media Capacities in pounds:				
Light Ceramic	7	9	17	30
Blue Plastic	5	8	12	22
Green Plastic	4	8	10	18
Light Green Plastic	5	8	12	22
Steel Shot	N/A	25	50	100
Vibrations per Minute	2,900	2,000	1,500	1,725
Bowl Dimensions:				
Overall Diameter (A)	10"	12"	14"	17"
Width to Center Shaft Assembly (B)	3-1/2"	6"	3-1/2"	4-1/4"
Height to Lid (C)	5"	5-1/4"	5-3/4"	7"
Repl. Bowl & Cover SKU	852-0915	852-0917	852-0919	852-0922
Each				
Tumbler Dimensions WxDxH	10"W x 10"D x 15.5"H	12"W x 12"D x 16"H	14"W x 14"D x 16"H	17"W x 17"D x 24"H
Tumbler SKU	852-0720	852-0751	852-0723	852-0726
Each				

* Media plus parts (a proper 70 to 30 ratio of media to parts ensures sufficient media movement and contact with the parts for effective deburring, polishing, or finishing).

** approx. 3/4" diameter (average ladies ring size)



A

A Soap Detergent for Rotary Tumbling

Gesswein Soap Detergent Powder acts as a lubricant as well as a cleaner. Supplied in a 3 lb. jar. Recommended for use with Carbon Steel Shot. Not for use with Stainless Steel Shot nor in Flow-Through systems.

Description	SKU	Each
3 lbs. Soap Detergent for Rotary Tumbling	852-1251	

Auto Reverse Rotary Tumbler

These clear auto-reverse rotary "barrel" tumblers allow you to see the tumbling process without opening the barrel lid. The bowls are constructed of heavy-duty acrylic with a water tight sealed lid to avoid any leakage during the tumbling process. Tumblers (Available in 3 sizes) feature auto-reverse function for thorough processing along with separate controls for cycle speed and duration of the tumbling process. Simply fill your tumbler to 50% with your choice of media

(steel, stainless steel, ceramic, plastic) and then add water until tumbler reaches 75% capacity and finally, add your parts and you are ready to tumble! It is also recommended to add compound (depending on the media used) for a cleaner tumbling process. Replacement barrels are also available for each model. Dual voltage 110/220. Made in Taiwan.



	Small	Medium	Large
Barrel Dimensions (W X H)	5-1/2" X 4" (140 x 102mm)	7-1/2" X 5-1/2" (184.2 x 140mm)	11-1/2" X 4-1/2" (292 x 114mm)
Capacity	1 Liter (1 qt.)	2 Liter (2 qts.)	7 Liter (7 qts.)
Ring* Capacity	40-50	65-75	100-125
Auto-Reverse	Yes	Yes	Yes
Digital	Yes	Yes	Yes
Ship Weight	17 lbs. (7.8kg)	20 lbs. (9kg)	28 lbs. (12.7kg)
Repl. Barrel SKU	852-0126	852-0127	852-0128
Each			
SKU	852-0116	852-0117	852-0118
Each			

*Ring = 3/4" diameter object

A Foredom® RT101 Rotary Tumbler - Direct-Drive

The Foredom® RT101 compact direct-drive rotary tumbler is ideal for burnishing gold, silver and other metals. Built with efficiency, the RT101 rotary tumbler was designed with programmable controls which make repeatable processes easy to select. Best of all, the control panel is above the tumbler making it less likely to be damaged by water.

Set the timer, choose the direction of rotation, and select from 20 levels of speed control ranging from 5 to 100rpm. Work cycle duration is 180 minutes long. Your work in progress is visible through the clear, leak-proof, hexagonal barrel (3.625" diameter at widest, 6" between rollers, 3.25" diameter opening).

Direct drive means that there are never any belts to replace, thus smooth operation over continuous hours. Steel or stainless steel shot tumbling media is required to operate the tumbler, along with a non-foaming soap/solution. Made in Taiwan..

Description	SKU	Each
A Foredom® RT101 Rotary Tumbler	852-0132	
Replacement Barrel	852-0133	
Replacement O-Ring Barrel	852-0134	



A



A Ceramic Media for Light Bur Removal

Efficient, long-life aluminum oxide in a hard ceramic bond for light bur removal and smoothing of rough castings. Deburs both soft and hard metals such as aluminum and steel. 30° ends reach into grooves, corners and openings. Density: 100 lbs. per cu. ft. Shape: 30° cylinders, 5/16" x 3/16".

Qty.	SKU	Pkg.
5 lbs.	852-0432	
10 lbs.	852-0433	



B Blue Plastic Pyramids

Aluminum oxide (approx. 220 grit) in a plastic bond. Aggressive cutting media with good but minimum stock removal. Excellent as a first cut-down step for rough castings, stampings, etc. More aggressive than Green Media. Density: 62 lbs. per cu. ft. Shape: pyramid, 1/4".

Qty.	SKU	Pkg.
5 lbs.	852-0435	
10 lbs.	852-0436	
50 lbs.	852-0437	



C Green Plastic Pyramids

Plastic bond impregnated with fine silica (approx. 320 grit). Provides a light cutting action. Often used as a first cut-down step for delicate and intricate parts, for castings, and for removing sharp edges on stampings. Leaves a smooth, matte finish. Included in all Metal Finish Sets. Density: 56 lbs. per cu. ft. Shape: pyramid, 1/4".

Qty.	SKU	Pkg.
5 lbs.	852-0438	
10 lbs.	852-0439	
50 lbs.	852-0440	



D Light Green Plastic Pyramids

Plastic bond with super fine silica (approx. 400 grit). Provides an extra-fine cutting action for smoothing surfaces. A prepolish media that leaves a very smooth, matte finish ready for the final polish. Included in all Metal Finish Sets. Density: 62 lbs. per cu. ft. Shape: pyramid, 1/4".

Qty.	SKU	Pkg.
5 lbs.	852-0441	
10 lbs.	852-0442	
50 lbs.	852-0443	



E Dri-Shine III

Crushed corncob with stain-free rouge. Our most versatile formula for obtaining final finish on gold and other metals. A clean media which leaves no residue. Polishes only—does not remove metal. Run dry for 16 to 48 hours to achieve a bright luster that is close to a hand-buffed finish. Made in USA.

Qty.	SKU	Pkg.
10 lbs.	852-0448	

A-G Stainless Steel Shot – Small shapes for intricate burnishing.

Media for rotary (barrel) and vibratory tumblers. Burnishes your parts to a bright high luster without scratching. Corrosion-resistant stainless steel shot requires no special rust inhibitors or cleaners. Available in packages of individual shapes and two mixtures: rotary and vibratory. Rotary mixture works in rotary tumblers. Contains 20% round balls, 40% diagonals, 20% ball cones and 20% pins. Vibratory mixture works in vibratory tumblers. Contains 40% diagonals, 30% ball cones, 20% round balls and 10% oval balls. Note: 2 lb. packages have 1/2 lb. of each shape. Density: 330 lbs. per cu. ft.

Description	Pkg. Size	SKU	Each
A Round Balls, 1/8"	2 lbs.	852-1071	
	10 lbs.	852-1080	
B Diagonals, 1/8"	2 lbs.	852-1072	
	10 lbs.	852-1079	
C Ball Cones, 1/8"	2 lbs.	852-1073	
	10 lbs.	852-1078	
D Pins, 1/16" x 1/2"	2 lbs.	852-1074	
	10 lbs.	852-1077	
E Oval Balls, 5/32"	2 lbs.	852-1075	
	10 lbs.	852-1076	
Pre-Mix For:	Pkg. Size	SKU	Each
F Rotary	2 lbs.	852-1086	
	10 lbs.	852-1085	
G Vibratory	2 lbs.	852-1087	
	10 lbs.	852-1090	



C Metal Finishing Sets for Vibratory Tumbling

Our Metal Finishing Sets include a complete supply of our three most popular medias—Green and Light Green Plastic Pyramids and Dri-Shine III—plus a supply of Burnishing Soap B. Use Green Pyramids for first cut, Light Green Pyramids for second cut, and Dri-Shine III for a bright, high finish on gold and yellow metals. A complete tumbling cycle takes an average of 24 hours—5 hours with Green Pyramids, 3 hours with Light Green Pyramids, and 16 hours with Dri-Shine III.

For Tumbler	SKU	Each
Vibratory Tumbler #5	852-0830	
Vibratory Tumbler #10	852-0835	



**A-B SELVYT® SR Cloth**

Our 5" square SELVYT® SR cloth is made of pure unbleached cotton. Features no-lint texture that polishes without scratching. Retains its suppleness even after repeated washings. Made in UK. Available in three sizes: 5" x 5", 10" x 10", and 14" x 14".

Size	SKU	Each
A 5" x 5"	820-0100	
B 10" x 10"	820-0155	
C 14" x 14"	820-0205	

**D-E SELVYT® Professional Cloth**

Features low nap and tight weave, same as Original Selvty. Lifts off dust particles, smudges, dirt and fingerprints. Designed for the finest polishing applications, including optical use on plastic and glass lenses. Made of woven unbleached cotton velvet. Stitched edges prevent fraying. Machine washable and stays lint-free after repeated washing. Made in UK.

Size	SKU	Each
D 10" x 10"	820-0270	
E 14" x 14"	820-0275	

**F SELVYT® Microfiber Cloth**

Made of ultra-soft brushed heavyweight micro-fiber. Machine washable and retains softness after repeated washing. Stitched edges prevent fraying. Made in UK.

Size	SKU	Each
F 10" x 10"	820-0260	

**G SELVYT® SC Cloth for Silver**

Impregnated with an anti-tarnish agent, SELVYT® SC cleans light tarnish from silverware and silver. Leaves an invisible coating that inhibits oxidation. Stitched edges prevent fraying. Measures 10" x 10". Made in UK.

Size	SKU	Each
G 10" x 10"	820-0280	

**H SELVYT® JC Polishing Cloth for All Metals**

The Selvty JC cloth is ideal for cleaning metals such as brass, copper, platinum and silver. Manufactured in a chemically impregnated red cotton fabric, Selvty JC is a professional's cloth that can be used at home too. Non-scratching. Edges are bound to keep them soft. Measures 10" square. Made in UK

Size	SKU	Each
H 10" x 10"	820-0287	

A Luster Cloth

Polishes to an amazing high shine! Luster Cloth is a soft, felt-like material with special additives and non-scratching micro-abrasives that remove tarnish and dirt. Polishes to a like-new high shine.

Size	SKU	Each
A 5" x 7-1/2"	820-0360	

**B Ultra Polishing Pads**

Fast and easy, these convenient sized Ultra Polishing Pads are great for removing tarnish. Leaves no residue. They are made of thin, tight-bond foam with permanently bonded microabrasives.

Size	SKU	Pkg. of 20
B 2" x 2"	820-0380	

**C Gesswein® Royal Gem Cloth**

Comes completely free of abrasives and chemicals, so it's safe for use on all types of metals. Leaves no residue behind-eliminates messy cleanup.

Features long-lasting design with finely stitched edges that resist fraying even after repeated washing. Measures 10" x 10. Made in Hong Kong.

Size	Color	SKU	Each
C 10" x 10"	Light Blue	820-0419	
	Ivory	820-0415	

**D 3M™ High Performance Cloth**

This amazing cloth has oil- and water-absorbing fibers that lift and trap liquids, grease and dirt particles. May be used dry or damp and can even remove grease and silicone, solvents, abrasive residue, polish, waxes and fingerprints. Leaves no smears or streaks and is resistant to common cleaning chemicals. May be machine-washed in temperatures up to 200°F. Each cloth measures 12-3/4" x 14". Made in Vietnam.

Size	Color	SKU	Each
D 12-3/4" x 14"	Blue	820-0505	
	White	820-0500	

**E KIMTECH® Mold Polish Wipes**

Use for cleaning the most extreme high polished surfaces. Can be used with diamond compound for the ultimate finishing touch. Engineered for excellent absorbency and low-lint wiping, these disposable wipes are solvent resistant and contain no binders or surfactants. Rayon/polyester spunlace material for cloth-like softness. Applications include mold polishing, aerospace and clean manufacturing areas. 1 roll = 225 sheets. Each sheet measures 7" x 7".

Description	SKU	Each
E Kimtech Mold Polish Wipes	820-0515	



Busch® High Tech Carbide Tools

3/32" Shank

Carbide burs and drills are known for their particular hardness and the resultant tool life, as well as their cutting capacity. These advantageous properties now also make it possible to economically process materials, which are very hard and difficult to cut (such as titanium, and steel).

Busch AU style carbide burs cut more aggressively than standard carbides. Edges are more precise (making setting easier) and they produce a brighter finish. Round burs are sold in packages of six.

All other burs are sold in packages of two. Shanks are marked with a gold band for easy identification.

Numerous perfect drill holes can be replicated with the same tool when using a coolant such as our Lube-Stik 816-2461.

Please consult ANSI (American National Standards Institute) for speed recommendations. Made in Germany.

A Busch® Round Carbide Burs – Fig. 1AU



Dia. (mm)	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	
SKU	125-5403	125-5404	125-5405	125-5406	125-5407	125-5408	125-5409	125-5410	125-5411	125-5412	125-5413	125-5414	125-5415	125-5416	125-5417	125-5418	125-5419	125-5420	125-5421	125-5422	125-5423	
Pkg. of 6																						

B Busch® 90° Hart Carbide Burs – Fig. 414A



Dia. (mm)	0.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30
SKU	125-5439	125-5440	125-5441	125-5442	125-5443	125-5444	125-5445	125-5446	125-5447	125-5448	125-5449	125-5450	125-5451	125-5452	125-5453
Pkg. of 2															

C Busch® 70° Hart Carbide Burs – Fig. 446AU



Dia. (mm)	0.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30
SKU	125-5459	125-5460	125-5461	125-5462	125-5463	125-5464	125-5465	125-5466	125-5467	125-5468	125-5469	125-5470	125-5471	125-5472	125-5473
Pkg. of 2															

D Busch® Cone Carbide Burs – Fig. 38AU



Dia. (mm)	0.60	0.70	0.80	0.90	1.00
SKU	125-5476	125-5477	125-5478	125-5479	125-5480
Pkg. of 2					

E Busch® Krause Flame Carbide Burs – Fig. 194AU



Dia. (mm)	1.00	1.20
SKU	125-5401	125-5402
Pkg. of 2		

Busch® Super Carbide Burs

3/32" Shank

Made of the finest tungsten carbide, accurately fluted and honed to sharp cutting edges, end cut. Consist of heads brazed onto 3/32" steel Shanks. Have coarse tooth structure. Designed to operate at very high speeds. Cannot be resharpened. Please consult ANSI (American National Standards Institute) for speed recommendations. Made in Germany.

A Busch® Round Burs – Fig. 1



Dia. (mm)	0.30	0.40	0.50	0.60	0.70	0.80	1.00	1.20	1.40	1.60	1.80	2.30
SKU	126-0001	126-0002	126-0003	126-0004	126-0005	126-0010	126-0020	126-0030	126-0040	126-0050	126-0060	126-0080
Each	1-9											
	10+											

B Busch® Square Cylinder Burs – Fig. 15



Dia. (mm)	1.00	1.20
SKU	126-0570	126-0580
Each	1-9	
	10+	

G Busch® Square Cone Cross-Cut Burs – Fig. 23



Dia. (mm)	1.00	1.40	1.60	1.80
SKU	126-7000	126-7010	126-7020	126-7030
Each	1-9			
	10+			

C Busch® Square Cylinder Cross-Cut Burs – Fig. 21



Dia. (mm)	1.00	1.20	1.40	1.60	1.80
SKU	126-5570	126-5580	126-5590	126-5600	126-5610
Each	1-9				
	10+				

H Busch® Universal Cone Burs – Fig. 17U



Dia. (mm)	1.00	1.40
SKU	126-1705	126-1715
Each	1-9	
	10+	

D Busch® Universal Cylinder Burs – Fig. 15U



Dia. (mm)	1.00	1.20
SKU	126-0575	126-0585
Each	1-9	
	10+	

I Busch® Universal Cone Cross-Cut Burs – Fig. 23U



Dia. (mm)	1.00	1.20	1.40	1.60	1.80	2.10
SKU	126-7005	126-7007	126-7015	126-7025	126-7035	126-7045
Each	1-9					
	10+					

E Busch® Universal Cylinder Cross-Cut Burs – Fig. 21U



Dia. (mm)	1.00	1.20	1.40	1.60	1.80
SKU	126-5575	126-5585	126-5595	126-5605	126-5615
Each	1-9				
	10+				

J Busch® Inverted Cone Burs – Fig. 3



Dia. (mm)	0.80	1.00	1.20	1.40	1.60	1.80
SKU	126-0340	126-0350	126-0360	126-0370	126-0380	126-0390
Each	1-9					
	10+					

F Busch® Square Cone Burs – Fig. 17



Dia. (mm)	0.80	0.90	1.00	1.40
SKU	126-7037	126-7038	126-1700	126-1710
Each	1-9			
	10+			

K Busch® Wheel Bur – Fig. 2



Dia. (mm)	1.20
SKU	126-0140
Each	1-9
	10+

SS White® Carbide Burs

3/32" Shank

High-quality tungsten carbide burs securely brazed on heat-treated 3/32" steel shanks and approximately 1-3/4" in length. Bur teeth are reinforced with extra carbide for elimination of premature chipping. Superior fluting improves cutting edges for pinpoint accuracy. All are end cut. Cannot be resharpened. Please consult ANSI (American National Standards Institute) for speed recommendations. Available only in packs of five. Made in USA.

A Round Burs

	•	•	•	•	•	•	•	•
Style	W1	W2	W3	W4	W5	W6	W7	W8
Dia. (mm)	0.79	0.99	1.19	1.40	1.60	1.80	2.10	2.31
SKU	128-0010	128-0020	128-0030	128-0040	128-0050	128-0060	128-0070	128-0080
Pkg. of 5	1-3	4+						

B Square Cylinder Cross-Cut Burs

	•	•	•	•
Style	W557	W558	W559	W560
Dia. (mm)	0.99	1.19	1.40	1.60
SKU	128-5570	128-5580	128-5590	128-5600
Pkg. of 5	1-3	4+		

D Square Cylinder Burs

	•	•
Style	W57	W59
Dia. (mm)	0.99	1.40
SKU	128-0570	128-0590
Pkg. of 5	1-3	4+

C Square Cone Cross-Cut Burs

	•	•	•	•
Style	W700	W701	W702	W703
Dia. (mm)	0.56	0.76	1.11	1.55
SKU	128-7000	128-7010	128-7020	128-7030
Pkg. of 5	1-3	4+		

E End Bur – Cut on Top Only

	•
Style	W957
Dia. (mm)	0.99
SKU	128-9570
Pkg. of 5	1-3
	4+

F Inverted Cone Burs

	•	•	•	•	•
Style	W34	W35	W36	W37	W38
Dia. (mm)	0.79	0.99	1.19	1.40	1.60
SKU	128-0340	128-0350	128-0360	128-0370	128-0380
Pkg. of 5	1-3	4+			

SS White® Friction Grip Carbide Burs

1/16" Shank

Made from super-hard carbide securely brazed onto 1/16" steel shanks. They withstand extremely high speeds up to 350,000rpm but please consult ANSI (American National Standards Institute) for speed recommendations. Designed to get into small spaces. Made in USA.

A Round

	•	•	•	•	•	•	•	•	•	•
Dia. (mm)	0.51	0.61	0.79	0.99	1.19	1.40	1.60	1.80	2.11	2.31
Dia. (in.)	.020	.024	.031	.039	.047	.055	.063	.071	.083	.091
SKU	128-9700	128-9705	128-9710	128-9715	128-9720	128-9725	128-9730	128-9735	128-9740	128-9745
Each	1-4	5+								

B Inverted Cone

	•	•	•	•	•
Dia. (mm)	0.79	0.99	1.19	1.40	1.60
Dia. (in.)	.031	.039	.047	.055	.063
SKU	128-9755	128-9760	128-9765	128-9770	128-9775
Each	1-4	5+			

C Cylinder Square

	•	•	•
Dia. (mm)	0.79	0.99	1.19
Dia. (in.)	.031	.039	.047
SKU	128-9810	128-9815	128-9820
Each	1-4	5+	

F Cone Square

	•	•	•
Dia. (mm)	0.46	0.56	0.76
Dia. (in.)	.018	.022	.030
SKU	128-9840	128-9845	128-9850
Each	1-4	5+	

D Cylinder Square Cross Cut

	•	•	•
Dia. (mm)	0.79	0.99	1.19
Dia. (in.)	.031	.039	.047
SKU	128-9825	128-9830	128-9835
Each	1-4	5+	

G Cone Square Cross Cut

	•	•	•	•	•
Dia. (mm)	0.46	0.56	0.76	1.12	1.55
Dia. (in.)	.018	.022	.030	.044	.061
SKU	128-9785	128-9790	128-9795	128-9800	128-9805
Each	1-4	5+			

E Cylinder Dome Cross Cut

	•	•	•
Dia. (mm)	0.79	0.99	1.19
Dia. (in.)	.031	.039	.047
SKU	128-9870	128-9875	128-9880
Each	1-4	5+	

H Pear

	•	•	•
Dia. (mm)	0.79	0.99	1.19
Dia. (in.)	.031	.039	.047
SKU	128-9855	128-9860	128-9865
Each	1-4	5+	

I-K Reducing Collets

Instantly converts your 1/8", 3mm or 3/32" collet to hold a 1/16" tool shank. Simply slip reducing collet into collet on your rotary handpiece to use 1/16" shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the handpiece collet. Stainless steel.

	Size	SKU	Each
I	1/8" to 1/16"	816-1502	
J	3mm to 1/16"	816-1505	
K	3/32" to 1/16"	816-1503	



G Reducing Collets

Convert your 1/8" or 3mm handpiece collets to hold 3/32" shank tools. Easy to use: slip the reducing collet into your handpiece collet, then slip the tool into the reducing collet. Make sure the reducing collet and the tool are fully inserted before operating.

Description	SKU	Each
G 1/8" – 3/32" Collet	816-1501	
3mm – 3/32" Collet	816-1504	



H Gesswein® Lube-Stik

Use on grinding, cutting, drilling, piercing or similar tools to speed up production and increase tool life. Reduces both friction and heat buildup so that tools stay sharper, work faster and cut smoother. Can also be used to reduce the effort needed for drawing operations. Supplied in handy push-up dispenser tube.

Description	SKU	Each
H Lube-Stik	816-2461	1-9 10+

Gesswein® Solid Carbide Burs

Gesswein Solid Carbide Burs are made from laboratory-certified raw material. Most are machine-ground by CNC, producing geometric uniformity in shape and depth of flute. Controlled material selection and CNC manufacturing ensure high product consistency from order to order for dependable cutting action and much longer bur life. Supplied in two fluting styles: plain cut, which provides aggressive cutting action for fast stock removal, leaving a slightly rough finish; and double cut, which cuts small chips for efficient stock removal, leaving a better finish than plain cut. Made in USA.



Maximum Speed Recommendations (rpm):

Bur Cutting Diameter	1/16"	3/32"	1/8"	3/16"	1/4"
Stainless Steel	75,000	65,000	55,000	40,000	35,000
Other Common Materials	50,000	45,000	35,000	27,500	25,000

Please consult ANSI (American National Standards Institute) for speed recommendations.

A Gesswein® Solid Carbide Burs – 1/4" Shank; 2" Overall

One-piece construction. 1/4" and 3/16" cutting diameters on 1/4" shanks. Can be resharpened. 6mm shanks and double cut available on special order.

Cutting Diameter	1/4"	1/4"	1/4"	1/4"	3/16"	1/4"
Head Length	3/4"	1/2"	9/8"	5/8"	5/8"	5/8"
Included Angle	14°	22°	—	—	—	—
Plain Cut SKU	129-2840	129-2140	129-2740	129-2640	129-2230	129-2240
Each	1-4	5+				

Cutting Diameter	1/4"	3/16"	1/4"	3/16"	1/4"	1/4"
Head Length	3/8"	1/8"	3/16"	5/8"	5/8"	3/16"
Included Angle	—	—	—	—	—	10°
Plain Cut SKU	129-2440	129-2330	129-2340	129-2030	129-2040	129-2940
Each	1-4	5+				

B Gesswein® Solid Carbide Bur Set – 1/4" Shank; 2" Overall

Includes one each of the twelve burs listed above. Packaged in a sturdy hardwood box.

Description	SKU	Each
Plain Cut Set	129-2000	

C Gesswein® Lube-Stik

Use on any grinding, cutting, drilling, piercing or similar tool to speed up production and increase tool life. Lube-Stik reduces friction and heat buildup so that tools stay sharper, work faster and cut smoother. Easy to use – just run your tool in the soft lubricant. Supplied in a handy push-up dispenser tube.

Description	SKU	Each
Lube-Stik	816-2461	1-9 10+

A Gesswein® Solid Carbide Burs – 1/8" Shank; 1-1/2" Overall

One-piece construction. 3/16" and 3/32" cutting diameters on 1/8" shanks. Available in plain and double cut. Can be resharpened. 3mm shanks available on special order. Made in USA.

Cutting Diameter	3/32"	3/16"	5/32"	3/16"	3/16"	3/16"
Head Length	1/2"	1/2"	1/2"	1/2"	3/32"	3/32"
Plain Cut SKU	129-1630	129-1640	129-1650	129-1660	129-1670	129-1680
Each	1-4	5+				
Double Cut SKU	129-1635	129-1645	129-1655	129-1665	129-1675	129-1685
Each	1-4	5+				

Cutting Diameter	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"
Head Length	1/2"	1/2"	3/8"	1/2"	1/2"	1/4"
Included Angle	—	—	—	4°	16°	10°
Plain Cut SKU	129-1690	129-1706	129-1710	129-1720	129-1730	129-1740
Each	1-4	5+				
Double Cut SKU	129-1695	129-1707	129-1715	129-1725	129-1735	129-1745
Each	1-4	5+				

B Gesswein® Solid Carbide Bur Sets – 1/8" Shank; 1-1/2" Overall

Each set includes one each of the 12 respective burs listed above. Packaged in a sturdy hardwood box.

Description	SKU	Each
B Plain Cut Set	129-0960	
Double Cut Set	129-0965	



C Gesswein® Solid Carbide Burs – 1/8" Shank; 3" Overall

One-piece construction. 1/8" cutting diameter on 1/8" shanks. Available in plain and double cut. Can be resharpened. Made in USA.

Cutting Diameter	1/8"	1/8"	1/8"	1/8"	1/8"
Head Length	9/16"	1/8"	1/2"	1/2"	7/16"
Plain Cut SKU	129-1210	129-1220	129-1230	129-1240	129-1250
Each	1-4	5+			
Double Cut SKU	129-1215	129-1225	129-1235	129-1245	129-1255
Each	1-4	5+			



A Gesswein® Solid Carbide Burs – 1/8" Shank; 1-1/2" Overall

Each features one-piece construction – head and shank are fashioned from a single piece of carbide. Available in two fluting styles: plain cut and double cut. Plain cut provides aggressive cutting action for fast stock removal, leaving a slightly rough finish. Double cut makes small chips for efficient stock removal, leaving a better finish than plain cut. Can be resharpened. Measure 1-1/2" long. Made in USA.

Cutting Diameter	1/16"	3/32"	1/8"	3/32"	1/8"	3/32"	1/8"
Head Length	1/4"	7/16"	9/16"	7/16"	9/16"	3/32"	1/8"
Plain Cut SKU	129-1010	129-1020*	129-1030*	129-1040	129-1050*	129-1060	129-1070*
Each	1-4	5+					
Double Cut SKU	129-1015	129-1025*	129-1035*	129-1045	129-1055*	129-1065	129-1075*
Each	1-4	5+					

*Items available in 12-Piece Set below.

Cutting Diameter	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
Head Length	7/32"	1/2"	1/4"	1/8"	1/4"	3/16"	3/8"
Plain Cut SKU	129-1080*	129-1090*	129-1100*	129-1110*	129-1120*	129-1130	129-1140
Each	1-4	5+					
Double Cut SKU	129-1085*	129-1095*	129-1105*	129-1115*	129-1125*	129-1135	129-1145
Each	1-4	5+					

*Items available in 12-Piece Set below.

Cutting Diameter	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
Head Length	1/16"	1/32"	3/16"	1/2"	1/8"	3/16"
Included Angle	14°	12°	7°	8°	10°	10°
Plain Cut SKU	129-1150	129-1160	129-1170*	129-1180*	129-1190	129-1200*
Each	1-4	5+				
Double Cut SKU	129-1155	129-1165	129-1175*	129-1185*	129-1195	129-1205*
Each	1-4	5+				

*Items available in 12-Piece Set below.



B-C Gesswein® Solid Carbide Bur Sets – 1/8" Shank; 1-1/2" Overall

Each set includes one each of the 12 respective burs marked with asterisks above. Packaged in a sturdy hardwood box.

Description	SKU	Each
B Plain Cut Set	129-1000	
C Double Cut Set	129-1005	

A Gesswein® Solid Carbide Burs – 3/32" Shank; 1-1/4" Overall

One-piece construction available in plain or double cut. 1/16" and 3/32" cutting diameters on 3/32" shanks. Can be resharpened. Made in USA.

Cutting Diameter	1/16"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"	3/32"
Head Length	1/4"	3/8"	3/8"	3/32"	1/8"	1/4"	1/4"	1/4"	1/8"
Plain Cut SKU	129-1400	129-1410	129-1420	129-1430	129-1440	129-1450	129-1460	129-1470	129-1480
Each	1-4	5+							
Double Cut SKU	129-1405	129-1415	129-1425	129-1435	129-1445	129-1455	129-1465	129-1475	129-1485
Each	1-4	5+							

B Gesswein® Solid Carbide Bur Sets – 3/32" Shank; 1-1/4" Overall

Each set includes one each of the nine respective burs above. Packaged in a sturdy hardwood box.

Description	SKU	Each
B Plain Cut Set	129-0940	
Double Cut Set	129-0945	



C Gesswein® Carbide Burs – 1/8" Shank; 1-1/2" Overall

Carbide heads with 1/4" cutting diameter securely brazed on heat-treated 1/8" steel shanks. Can be resharpened. 3mm shanks available on special order. Available in plain or double cut. Made in USA.

Cutting Diameter	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Head Length	1/2"	3/16"	1/2"	1/2"	3/8"	1/4"	3/16"	1/2"	1/4"
Included Angle	22°	–	–	–	–	–	–	–	10°
Plain Cut SKU	129-1820	129-1810	129-1800	129-1770	129-1790	129-1780	129-1750	129-1761	129-1830
Each	1-4	5+							
Double Cut SKU	129-1825	129-1815	129-1805	129-1775	129-1795	129-1785	129-1755	129-1766	129-1835
Each	1-4	5+							

D Gesswein® Carbide Bur Sets – 1/8" Shank; 1-1/2" Overall

Each set includes one each of the nine respective burs above. Packaged in a sturdy hardwood box.

Description	SKU	Each
D Plain Cut Set	129-1700	
Double Cut Set	129-1705	



E Reducing Collets

Instantly converts your 1/8" or 3mm collet to hold a 3/32" tool shank. Simply slip reducing collet into collet on your rotary handpiece to use 3/32" shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the handpiece collet. Stainless steel.

Size	SKU	Each
E 1/8" to 3/32"	816-1501	
3mm to 3/32"	816-1504	



Gesswein® Inox Carbide Burs

1/8" or 1/4" Shanks

Gesswein Inox carbide burs are designed with a special geometry to suit growing market demands for stainless steel applications. This is a cost effective alternative to standard solutions due to the greater rate of Stainless Steel stock removal as well as on Ferritic, Austenitic & Martensitic based materials. Made in USA.

Features & Benefits

- Specifically developed cutting geometry – Generating high stock removal on Stainless Steel components
- High performance grinding – Ensuring production savings
- Specifically engineered Stainless Steel cutting geometry – Reduces heat build up at the cutting edge and workpiece
- Manufactured from high quality sintered tungsten carbide – Guaranteed high performance and durability
- CNC Machined – High consistent quality
- Manufactured to strict quality control standards – Incorporates 100% inspection of brazed joints on the 1/4" diameter cutting burs.

Inox Bur Head Ø	Maximum Operating Speed	Recommended Speed Range
1/8"	100,000	60,000–80,000
3/4"	65,000	30,000–45,000
3/8"	55,000	19,000–30,000
1/2"	35,000	15,000–22,000

Style	SA-43	SA-51	SC-42	SC-51	SD-42	SD-51	SF-42	SF-51
Cutting Dia. (D1)	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"
Length of Cut (L2)	9/16"	1/2"	9/16"	1/2"	1/8"	7/32"	1/2"	1/2"
Overall Length (L1)	1 1/2"	2"	1 1/2"	2"	1 1/2"	2"	1 1/2"	2"
SKU	129-3001	129-3002	129-3003	129-3004	129-3005	129-3006	129-3007	129-3008
Each								

Style	SA-1	SC-1	SD-1	SF-1	SG-1
Cutting Dia. (D1)	1/4"	1/4"	1/8"	1/4"	1/4"
Length of Cut (L2)	5/8"	5/8"	1/32"	5/8"	5/8"
Overall Length (L1)	2"	2"	2"	2"	2"
SKU	129-3011	129-3012	129-3013	129-3014	129-3015
Each					



A-B Inox Carbide Bur Sets

1/8" set contains 2 of SC-42, 2 of SF-42 and 1 of all other 1/8" shank Inox burs. 1/4" set contains one of each of the above respective 1/4" Inox burs.

Description	Shank	SKU	Each
A Inox Carbide Bur 10 Piece Set	1/8"	129-3000	
B Inox Carbide Bur 5 Piece Set	1/4"	129-3010	

A Cross Hole Deburring Tool – 3mm Shanks

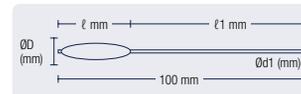
These specialty rods are designed to remove the hard to reach burrs created by cross-drilled holes. Available in 4 shapes: Oval, Cross, Ring, and Thin, and a variety of diameters for different cross hole sizes and shapes.

The cutting wires are made from a slightly flexible, twisted piano wire and measure approx. 0.027" in wire diameter. The wires are more aggressive than brushes, yet less aggressive than traditional cutting burs. These deburring tools work best on harder metals such as steel. Recommended for use in a rotary power tool or CNC machine. 1,000 Max RPM. All rods measure 4" in OAL. 3mm shank diameter. Two kits are available. Cross Hole Small Kit * consists of one each of the smallest of the 4 shapes. Cross Hole 6mm Kit † consists of one each of the three 6mm size tools. Made in Japan.

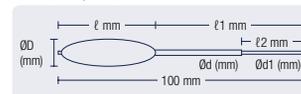
Type/Shape	ℓ	ℓ1	ℓ2	Ød	Ød1	SKU	Each
Oval 3mm*	30	70	–	3	–	846-0103	
Oval 4mm	30	70	–	3	–	846-0104	
Oval 5mm	30	50	20	4	3	846-0105	
Oval 6mm†	30	50	20	5	3	846-0106	
Oval 7mm	40	40	20	5	3	846-0107	
Oval 8mm	40	40	20	5	3	846-0108	
Oval 9mm	45	35	20	6	3	846-0109	
Oval 10mm	45	35	20	6	3	846-0110	
Oval 11mm	50	30	20	6	3	846-0111	
Oval 12mm	50	30	20	6	3	846-0112	
Cross 5mm*	30	70	20	4	3	846-0125	
Cross 6mm†	30	70	20	4	3	846-0126	
Cross 7mm	30	50	20	5	3	846-0127	
Cross 8mm	30	50	20	5	3	846-0128	
Cross 9mm	30	50	20	6	3	846-0129	
Cross 10mm	30	50	20	6	3	846-0130	
Cross 11mm	30	50	20	6	3	846-0131	
Cross 12mm	30	50	20	6	3	846-0132	
Ring 3mm*	30	70	–	3	–	846-0143	
Ring 4mm	30	70	–	3	–	846-0144	
Ring 5mm	30	50	20	4	3	846-0145	
Ring 6mm†	30	50	20	4	3	846-0146	
Ring 7mm	30	50	20	5	3	846-0147	
Ring 8mm	35	45	20	5	3	846-0148	
Thin Hole 2mm*	25	75	–	3	–	846-0152	
Cross Hole Small Kit*						846-0095	
Cross Hole 6mm Kit†						846-0096	



3 mm and 4 mm sizes



5 mm and larger sizes



B Precision Deburring Tools

Double-ended tools with revolving hardened steel discs for deburring a variety of delicate parts. Feature knurled handles for secure grip. Sold individually and in a set with one of each with storage pouch. Made in Switzerland. Measure approx. 3-3/8" in length.

Tool #	Disc Diameter	SKU	Each
1	0.060" and 0.070"	846-2039	
2	0.082" and 0.092"	846-2040	
3	0.106" and 0.116"	846-2041	
4	0.134" and 0.150"	846-2042	
5	0.160" and 0.185"	846-2043	
6	0.198" and 0.208"	846-2044	
B 6-Piece Set		846-2045	





A

A Diamond Bur Sets – 1/8" Shank

These high-quality, durable cutting tools feature diamond particles nickel-electroplated onto medium carbon steel. Use on carbide, steel, ceramic and wood surfaces. Measure 1-3/4" long with 1/8" shanks

Description	SKU	Each
A 10-Piece Set (styles 10A, 20A, 30A, 30B, 15C, 25C, 20F, 20P, 30P, 20R)	226-1281	
20-Piece Set (styles 10A, 15A, 20A, 25A, 30A, 35A, 20B, 30B, 15C, 20C, 25C, 30C, 20F, 30F, 20P, 30P, 15R, 20R, 30R, 20T)	226-1282	
30-Piece Set (one of each style)	226-1283	



B

B Economy Diamond Bur Sets – 3/32" Shank

These 20 piece sets of fine/medium grit diamond points are economical and functional. Diamond points can be used on ceramic, glass, metal or stone. Includes 20 diamond-coated points in different shapes and sizes in a handy plastic organizer. Points measure 1-3/4" (44.5mm) overall length. Max operating speed: 30,000rpm. Always use with a lubricant such as water, or Lube-stik or another thinner.

Description	Shank	SKU	Each
B 20-Piece Set	3/32"	226-1220	
	1/8"	226-1221	



C

C-D Diamond Bur Sets – 3/32" Shank

Diamond particles are electroplated onto stainless steel for unsurpassed quality and durability. Medium diamond grit is excellent for stone carving, cleanup work, glass, ceramics and metals. Always use water or our Lubricant/Thinner when using diamond burs.

Description	SKU	Each
C 12-Piece Set #1 (one each of 226-1161 through 226-1172)	226-1160	
12-Piece Set #2 (one each of 226-1181 through 226-1192)	226-1180	
D 20-Piece Master Set (one each of asterisked above)	226-1159	



E

E-F High-Speed Mini Diamond Bur Sets – 1/16" Shank

These mini diamond points are for use in high-speed, air-driven turbo handpieces with a maximum operating speed of up to 80,000rpm. Shanks measure 1/16" (1.6mm) in diameter with an average length of 3/4" (20mm). Excellent quality with diamond particles in fine and coarse grits electroplated onto surgical grade steel.

Description	Grit		Each
	Coarse 80 Grit	Fine 120/140 Grit	
E 12-Piece Set (asterisked above)	226-1601	226-1631	
F 24-Piece Set (one each of above)	226-1600	226-1630	



F

A Wooden Bur Boxes – For 3/32" Shanks

Sturdy, attractive wooden boxes for holding burs or tools with 3/32" shanks.

Description	SKU	Each
A 200-Hole Box	814-1200	
100-Hole Box	814-1205	
36-Hole Box	814-1210	



A



B

B Handy Block – For 3/32" or 1/8" Shanks

Cured hardwood block with 88 holes for burs or tools with 3/32" or 1/8" shanks. Slanted design lets you see all items at a glance. Stay-put rubber pads prevent sliding. Measures 6" x 4-1/2".

Description	Holes	SKU	Each
Handy Block	3/32", 1/8"	814-1215	

C-D Rotating Bur Holders – For Burs and Tools

Tiered plastic stands rotate on ball bearings for smooth action. Measure 7" dia. x 4"H.

Style 126

- 45 holes for burs with 1/16" shanks
- 69 two-step holes for burs with 3/32" or 1/8" shanks
- 12 holes for burs with 1/4" shanks

Style 112

- 92 holes for burs with 3/32" or 1/8" shanks
- 13 holes for burs with 1/4" shanks
- 7 holes for 1/16" to 5/32" drills
- 2-3/4" dia. x 3"H center cup for hand tools

Description	Shank Size	SKU	Each
C Style 126	1/16", 3/32" or 1/8", 1/4"	850-0004	
D Style 112	1/16" to 5/32", 3/32" or 1/8", 1/4"	850-0006	



C

D

E Bur & Tool Caddy – Large

The 6-sided Bur & Tool Caddy is made of solid durable wood and rotates like a lazy susan. It's ideal for safe keeping of your various bench tools such as gravers, files, burs and mounted abrasives. Stands 9-1/2" high overall and requires a minimum 7-1/2" x 7-1/2" in order to rotate, more with tools in it.

Sides have a total of:

- (42) 7.5mm holes
- (48) 4mm holes (which will hold 1/8" and 4mm shank tools)
- (288) 3mm holes (which will hold 3/32" and 3mm shank tools)

Top has (37) 12mm holes: 18 shallow holes for graver handles and small tools, and 19 holes in the center that perforate the top and extend 8" down into the caddy so you can store long files, gravers, etc.

Description	SKU	Each
Wooden Tool Holder	816-4058	



E

All accessories sold separately

F Mini Bur Stand with Cover – For 3/32" or 1/8" Shanks

A compact tiered plastic stand for holding up to 24 tools with 3/32" shanks and 24 tools with 1/8" shanks. Clear plastic cover keeps all items dust-free without hiding them from view. Measures 2-1/8" dia. x 2-1/2"H.

Description	Holes	SKU	Each
Mini Bur Stand with Cover	3/32", 1/8"	850-0007	



F

G Plastic Bur Holder – For 3/32" Shanks

Accepts up to 100 burs or tools with 3/32" shanks. Supplied with tilt stand. Measures 5" x 3". Color may vary.

Description	Holes	SKU	Each	
			1-2	3+
Plastic Bur Holder	3/32"	840-0007		



G

Grobet USA® Swiss Pattern Precision Files

The World's Standard for Quality and Performance!

Manufactured to precise production standards, using a combination of machine cutting and hand craftsmanship to produce the most accurate, best cutting and longest-lasting files in the world. They are made of the finest heat-tempered, chrome alloy steel and have the "right" feel, action and balance desired by all true craftsmen. Swiss Pattern Precision Files deliver superior performance on all metals. Simply the best you can buy. Files are measured in length from the point where the teeth begin to the end of the file. The handle section (tang) is not considered in the file length. Made in Italy.



A Barrette

Tapered in width and thickness, coming to a point. Only flat side is double cut, providing safe edge and top.

Length of Cut	Width x Thickness	Cut	SKU	Each		Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+					1-11	12+
4"	1 5/32" x 3/32"	00	635-0402			6"	5/8" x 9/32"	00	635-0602		
		2	635-0420					0	635-0601		
								1	635-0610		
								2	635-0620		
								4	635-0640		
						8"	5 3/64" x 1 3/64"	0	635-0801		
								2	635-0820		



B Barrette – Hot Die

Same as regular Barrette files except with ground backs, widely used in making and repairing extrusion dies. Double cut.

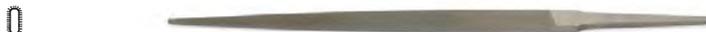
Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	5/32" x 3/32"	00	635-1402		



C Checking Pillar

Parallel in width and gently tapered in thickness. Overcut is parallel to file edges, and upcut is 90° to overcut. Double cut on top and bottom; both edges are safe. Useful for putting serrations on knife edges or for obtaining a checkered design similar to that found on a gun handgrip. Frequently used to create a coarse florentine finish; after initial cut, angle the file 45° or 90° and cut again.

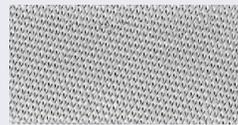
Length of Cut	Width x Thickness	Lines per Inch	Cut	SKU	Each		Length of Cut	Width x Thickness	Lines per Inch	Cut	SKU	Each	
					1-11	12+						1-11	12+
6"	1/2" x 5/32"	20	00	646-0602			6"	1/2" x 9/32"	50	2	646-0620		
			0	646-0601						75	4	646-0640	



D Crochet

Tapered in width and gradually tapered in thickness. Used for filing junctions between flat and curved surfaces and for developing slots with rounded edges. Double cut top and bottom – both edges are single cut.

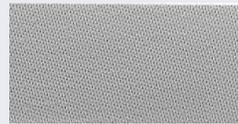
Length of Cut	Width x Thickness	Cut	SKU	Each		Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+					1-11	12+
6"	2 5/64" x 1/8"	0	648-0601			6"	2 5/64" x 1/8"	2	648-0620		



American Cut – Bastard
Swiss Cut – 00



American Cut – Second
Swiss Cut – 0



American Cut – Smooth
Swiss Cut – 2

Scale of Cuts for Swiss Pattern Precision Files*

Teeth per Inch	Swiss Pattern Precision File			Escapement 14cm	Needle 10 to 20cm	DS Rifflers 6" to 7"
	10"+	4" to 8"	3"			
30	00	–	–	–	–	–
41	0	00	–	–	–	–
51	1	0	00	–	–	–
64	2	1	0	0	0	0
79	3	2	1	–	–	–
97	4	3	2	2	2	2
117	–	4	3	3	3	3
142	6	–	4	4	4	4
173	–	6	–	–	–	–
213	–	–	6	6	6	6
295	–	–	–	8	–	–

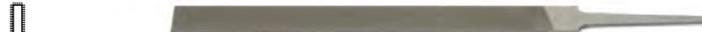
*Except checkering pillar.



A Crossing

Half-round on two sides with one side having a slightly larger radius than the other. Tapered in width and thickness. Cut and usable to the point. Used primarily for filing interior on curved surfaces. The double radius allows filing at the junction of two curved surfaces or of a straight and curved surface. Double cut on both sides.

Length of Cut	Width x Thickness	Cut	SKU	Each		Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+					1-11	12+
6"	5/8" x 1 1/64"	0	642-0601			6"	5/8" x 1 1/64"	2	642-0620		



B Equalling

Parallel in width and thickness. Used primarily for filing slots and corners. Double cut top and bottom, both edges are single cut.

Length of Cut	Width x Thickness	Cut	SKU	Each		Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+					1-11	12+
4"	2 5/64" x 5/64"	0	641-0401			8"	1/2" x 3/32"	00	641-0802		
		2	641-0420					0	641-0801		
		4	641-0440					2	641-0820		
6"	1/2" x 3/32"	00	641-0602								
		0	641-0601								
		2	641-0620								
		4	641-0640								



A Half-Round

Tapered in width and thickness, coming to a point. Double cut on both sides.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	1 ⁵ / ₃₂ " x 9/64"	0	630-0402		
		2	630-0401		
		4	630-0420		
		6	630-0440		
6"	5/8" x 11/64"	0	630-0602		
		0	630-0601		
		1	630-0610		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	5/8" x 11/64"	2	630-0620		
		3	630-0630		
		4	630-0640		
		6	630-0660		
8"	59/64" x 15/64"	00	630-0802		
		0	630-0801		
		1	630-0810		
		2	630-0820		



B Half-Round Slim – Also known as Half-Round Ring

Tapered in width and thickness, coming to a point. Narrower than regular half-round so that it can be used for filing insides of holes and rings. Double cut on both sides.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	1 ⁵ / ₃₂ " x 9/64"	00	630-0602		
		0	630-0601		
		1	630-0610		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	1 ⁵ / ₃₂ " x 9/64"	2	630-0620		
		3	630-0630		
		4	630-0640		



C Hand

Parallel in width and gently tapered in thickness for perfectly flat filing. Double cut top and bottom with one single-cut edge and one safe edge.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	1 ⁷ / ₃₂ " x 1/8"	0	631-0401		
		2	631-0420		
		4	631-0440		
		6	631-0602		
6"	3/4" x 5/32"	00	631-0601		
		0	631-0610		
		1	631-0610		
		2	631-0620		
		3	631-0630		
		4	631-0640		
6	631-0660				

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
8"	29/32" x 3/16"	00	631-0802		
		0	631-0801		
		2	631-0820		
		4	631-0840		
10"	1" x 1/4"	00	631-1002		
		0	631-1001		
		2	631-1020		



A Knife-Edge

Tapered in width and thickness. Knife edge has the same thickness from point to shoulder. The included angle of the sharp edge is approximately 10°. Generally used to file in a slot or wedge-shaped opening. Curved knife edge allows easy filing in restricted areas. Double cut on both sides; top edge is safe while knife edge is single cut.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	1 ⁵ / ₃₂ " x 1/8"	2	645-0420		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	45/64" x 9/32"	0	645-0601		
		2	645-0620		



B Pillar, Demi-Narrow

Pillar files are more narrow than hand files, yet also parallel in width and tapered in thickness to create perfectly flat filing. Double cut on the flat sides only, both edges are safe.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	25/64" x 11/64"	0	638-0601		
		1	638-0610		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	25/64" x 11/64"	2	638-0620		



C Pillar, Extra-Narrow

These very narrow files are parallel in width and tapered in thickness to create perfectly flat filing. Double cut on the flat sides only, both edges are safe.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	9/64" x 1/16"	00	640-0402		
		0	640-0401		
		2	640-0420		
		4	640-0440		
6"	15/64" x 1/8"	00	640-0602		
		0	640-0601		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	15/64" x 3/8"	1	640-0610		
		2	640-0620		
		4	640-0640		
		6	640-0660		
8"	5/16" x 9/64"	00	640-0802		
		0	640-0801		
		2	640-0820		



D Pillar, Narrow

Parallel in width and tapered in thickness. Double cut on the flat sides only, both edges are safe.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	11/64" x 3/32"	0	639-0401		
		2	639-0420		
		4	639-0440		
6"	5/16" x 9/64"	00	639-0602		
		0	639-0601		
		1	639-0610		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	5/16" x 9/64"	2	639-0620		
		4	639-0640		
		6	639-0660		
8"	25/64" x 11/64"	0	639-0801		
		2	639-0820		



A Pillar, Regular

A general-purpose file used primarily for working on flat surfaces. Because pillar files are available in various widths, they are adaptable to filing in slots, keyways, splines and similar areas. Parallel in width and tapered in thickness to provide perfectly flat filing. Double cut top and bottom, both edges are safe.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	3/8" x 3/32"	00	637-0402		
		0	637-0401		
		2	637-0420		
		4	637-0440		
6"	3/64" x 5/32"	00	637-0602		
		0	637-0601		
		1	637-0610		
		2	637-0620		
		4	637-0640		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
8"	19/32" x 13/64"	0	637-0801		
		2	637-0820		
		00	637-1002		
10"	49/64" x 15/64"	00	637-1001		



B Round, Parallel

Double cut over the entire surface. The 4" length is available in 1/16" and 1/8" diameters. The 6" length is available in 3/32", 1/8", 5/32" and 3/16" diameters.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	1/16"	0	633-4501		
		2	633-4520		
		0	633-4401		
	7/64"	0	633-4401		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	3/32"	0	633-3601		
		2	633-3620		
		0	633-4601		
	1/8"	2	633-4620		
	11/64"	0	633-6601		
		2	633-6620		



C Round, Tapered

Gradually tapered. Cut and workable to the point. Used where it is necessary to enlarge a hole or round off a radius. Double cut.

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
4"	5/32"	2	632-0420		
		4	632-0440		

Length of Cut	Width x Thickness	Cut	SKU	Each	
				1-11	12+
6"	15/64"	0	632-0601		
		2	632-0620		
		4	632-0640		
8"	5/16"	1	632-0810		
		2	632-0820		



A Square

Gradually tapered and double cut on all four sides. Cut and usable to the point. A general-purpose file.

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
6"	13/64"	0	643-0601		

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
6"	13/64"	2	643-0620		



B Three-Square

Triangular profile. Gradually tapered, and cut workable to the point. Double cut on all three sides.

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
6"	23/64"	0	634-0601		
		1	634-0610		

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
6"	23/64"	2	634-0620		
		4	634-0640		



C Warding

Parallel in thickness and tapered in width. Good for deburring. Double cut top and bottom, both edges are single cut.

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
4"	31/64" x 3/64"	00	649-0402		
		0	649-0401		
		2	649-0420		
		4	649-0440		

Length of Cut	Size	Cut	SKU	Each	
				1-11	12+
6"	5/8" x 3/64"	00	649-0602		
		0	649-0601		
		2	649-0620		
		4	649-0640		

D-H Grobet USA® Plastic File Handles

Virtually unbreakable plastic handles shaped and textured to fit your hand comfortably and prevent slipping. Feature tempered metal tang-holding inserts that are threaded to ensure proper alignment.

Description	SKU	Each	
		1-11	12+
D #2 Handle	170-6002		
E #3 Handle	170-6003		
F #4 Handle	170-6004		
G #5 Handle	170-6005		
H #6 Handle	170-6006		

Handle Selection Guide

File Shape	File Length (inches)						File Shape	File Length (inches)					
	3	4	6	8	10	12		3	4	6	8	10	12
Barrette	2	3	4	5	--	--	Pillar	2	3	4	5	6	6
Checkering	--	--	4	--	--	--	Pippin	--	3	4	5	--	--
Crochet	--	3	4	5	--	--	Round, Parallel	--	--	2	3	--	--
Crossing	--	3	4	5	--	--	Round, Tapered	--	2	3	4	5	--
Equalling	--	3	4	5	--	--	Square	--	2	3	4	5	--
Half-Round	--	3	4	5	6	6	Three-Square	2	3	4	5	6	6
Hand	--	3	4	5	6	6	Warding	--	3	4	5	--	--
Knife-Edge	--	3	4	5	6	6							



Grobet USA® American Pattern Files

The uniform in cut to permit fast metal removal. Extremely durable and scientifically balanced, each file is the product of a long tradition of superior craftsmanship combined with the most advanced technology. Every file is heat-treated to exacting standards to provide top performance and long life. Made in China.



A Flat (End Tapered)

Universally used by all machinists, this file is recommended for fast stock removal where a smooth finish is not required. Double cut top and bottom; edges are single cut. Differs from the mill file in that it has a thicker cross section.

Length of Cut	Width x Thickness	Cut	SKU	Each	Length of Cut	Width x Thickness	Cut	SKU	Each
6"	5/8" x 5/32"	Bastard	770-0627		10"	3 1/32" x 1/4"	Bastard	770-1027	
		Second	770-0628				Second	770-1028	
		Smooth	770-0629				Smooth	770-1029	
8"	25/32" x 7/32"	Bastard	770-0827		12"	1-5/32" x 9/32"	Bastard	770-1227	
		Second	770-0828				Second	770-1228	
		Smooth	770-0829				Smooth	770-1229	



B Half-Round

In addition to being widely used by machinists, this file is also popular in foundries where castings must be finished by filing. Rounded to approximately a third of a round on one side and double cut flat on the other. Double cut on both sides.

Length of Cut	Width x Thickness	Cut	SKU	Each	Length of Cut	Width x Thickness	Cut	SKU	Each
6"	1 9/32" x 5/32"	Bastard	770-0667		10"	1 5/16" x 9/32"	Bastard	770-1067	
		Second	770-0668				Second	770-1068	
		Smooth	770-0669				Smooth	770-1069	
8"	3/4" x 7/32"	Bastard	770-0867		12"	1-1/8" x 11/32"	Bastard	770-1267	
		Second	770-0868				Second	770-1268	
		Smooth	770-0869						



C Hand

Similar to a flat file but tapered in thickness with one safe edge. This uncut edge allows filing of one surface without damaging an adjoining surface. Especially useful when filing up to a sharp corners. Double cut top and bottom. One edge single, the other is safe.

Length of Cut	Width x Thickness	Cut	SKU	Each	Length of Cut	Width x Thickness	Cut	SKU	Each
6"	5/8" x 5/32"	Smooth	770-0639		10"	3 1/32" x 1/4"	Bastard	770-1037	
							Second	770-1038	
							Smooth	770-1039	
8"	25/32" x 7/32"	Bastard	770-0837						
		Second	770-0838						
		Smooth	770-0839						



A Mill

Used in machine shops as a general-purpose file and for draw filing, lathe work and finishing operations on hard materials. Often used in conjunction with a flat or hand file as a finishing file after the "hogging off" operation. Single cut.

Length of Cut	Width x Thickness	Cut	SKU	Each	Length of Cut	Width x Thickness	Cut	SKU	Each
6"	9/32" x 1/64"	Bastard	770-0617		10"	3 1/32" x 1 1/64"	Bastard	770-1017	
		Second	770-0618				Second	770-1018	
		Smooth	770-0619				Smooth	770-1019	
8"	25/32" x 9/64"	Bastard	770-0817		12"	1-5/32" x 7/32"	Bastard	770-1217	
		Second	770-0818				Second	770-1218	
		Smooth	770-0819				Smooth	770-1219	



B Round

Designed for filing concave surfaces that have a smaller radius than a half-round file, enlarging round holes and making a corner radius. Tapered file is double cut.

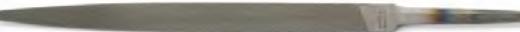
Length of Cut	Diameter	Cut	SKU	Each	Length of Cut	Diameter	Cut	SKU	Each
6"	1/32"	Bastard	770-0677		10"	3/8"	Bastard	770-1077	
		Second	770-0678				Second	770-1078	
		Smooth	770-0679				Smooth	770-1079	
8"	9/16"	Bastard	770-0877		12"	1/2"	Bastard	770-1277	
		Second	770-0878				Second	770-1278	
		Smooth	770-0879				Smooth	770-1279	



C Square

Perfectly square tapering toward the point. Used for enlarging slots, keyways, grooves and holes that have right angles and for filing flat surfaces. All four sides are double cut.

Length of Cut	Width	Cut	SKU	Each	Length of Cut	Width	Cut	SKU	Each
6"	1/32"	Bastard	770-0647		10"	3/8"	Smooth	770-0849	
		Second	770-0648				Bastard	770-1047	
		Smooth	770-0649				Second	770-1048	
8"	9/16"	Bastard	770-0847				Smooth	770-1049	
		Second	770-0848						



D Three-Square

Triangular double cut file. Tapers toward the point and has sharp corners. Used to file acute internal angles that cannot be reached with rectangular files.

Length of Cut	Width	Cut	SKU	Each	Length of Cut	Width	Cut	SKU	Each
6"	1 9/32"	Bastard	770-0657		8"	5/8"	Bastard	770-0857	
		Second	770-0658				Second	770-0858	
		Smooth	770-0659				Smooth	770-0859	
10"	3/4"	Bastard	770-1057				Bastard	770-1057	
		Second	770-1058				Second	770-1058	
		Smooth	770-1059				Smooth	770-1059	

Grobet USA® Swiss Pattern Needle Files



Swiss Pattern needle files are used for precision work in small areas. Finest quality files made. Made of the highest quality steel, machined and finished for precision shape, accuracy and balance. Teeth are sharp and cross-cut, assuring even filing. Recommended for both soft and hard metals. Also used for removing, smoothing and shaping plastic and wood. Round knurled handles to provide a sure grip.



A Barrette

Tapered in width and thickness, coming to a point. Only flat side is cut, providing safe edge and top.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
00	3	6-1/4	16	615-1029			
0	1-3/4	4	10	605-1020			
	2-1/2	5-1/2	14	610-1020			
	3	6-1/4	16	615-1020			
	4-1/8	7-3/4	20	620-1020			
2	1-3/4	4	10	605-1022			
	2-1/2	5-1/2	14	610-1022			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
2	3	6-1/4	16	615-1022			
4	4-1/8	7-3/4	20	620-1022			
	2-1/2	5-1/2	14	610-1024			
2	3	6-1/4	16	615-1024			
	4-1/8	7-3/4	20	620-1024			
6	3	6-1/4	16	615-1026			



B Hot Barrette

This Swiss Pattern, Hot Barrette style, cut 0, 16cm long, needle file is used for precision filing of small areas and for miniature work. Teeth are sharp and cross-cut, assuring even filing. Recommended for both soft and hard metals, including platinum. Handles are knurled to provide a sure grip.

Description	Cut	Cut Length			SKU	Each
		inches	inches	cm		
Grobet USA® Hot Barrette 16cm 0 Cut Swiss Pattern Needle File	0	Barrette	6-1/4	16	615-1150	



C Crochet

Tapered in width and gradually tapered in thickness. Used for filing junctions between flat and curved surfaces and for developing slots with rounded edges.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
2	2-1/2	5-1/2	14	610-1082			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
2	3	6-1/4	16	615-1082			



D 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. The double radius allows filing at the junction of two curved surfaces or of a straight and curved surface.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
0	2-1/2	5-1/2	14	610-1090			
	3	6-1/4	16	615-1090			
	4-1/8	7-3/4	20	620-1090			
2	2-1/2	5-1/2	14	610-1092			
	3	6-1/4	16	615-1092			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
2	4-1/8	7-3/4	20	620-1092			
4	2-1/2	5-1/2	14	610-1094			
	3	6-1/4	16	615-1094			
2	4-1/8	7-3/4	20	620-1094			
	3	6-1/4	16	615-1096			



A Equalling

Parallel in width and thickness. Used primarily for filing slots and corners.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
00	3	6-1/4	16	615-1109			
0	1-3/4	4	10	605-1100			
	2-1/2	5-1/2	14	610-1100			
	3	6-1/4	16	615-1100			
	4-1/8	7-3/4	20	620-1100			
2	1-3/4	4	10	605-1102			
	2-1/2	5-1/2	14	610-1102			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
2	3	6-1/4	16	615-1102			
4	1-3/4	4	10	605-1104			
	2-1/2	5-1/2	14	610-1104			
	3	6-1/4	16	615-1104			
	4-1/8	7-3/4	20	620-1104			
6	3	6-1/4	16	615-1106			



B Half-Round

Tapered in width and thickness, coming to a point. Cut on both sides.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
00	3	6 1/4	16	615-1039			
0	1-3/4	4	10	605-1030			
	2-1/2	5-1/2	14	610-1030			
	3	6-1/4	16	615-1030			
	4-1/8	7-3/4	20	620-1030			
2	1-3/4	4	10	605-1032			
	2-1/2	5-1/2	14	610-1032			
2	3	6-1/4	16	615-1032			
	4-1/8	7-3/4	20	620-1032			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
4	1-1/2	4	10	605-1034			
0	2-1/2	5-1/2	14	610-1034			
	3	6-1/4	16	615-1034			
	4-1/8	7-3/4	20	620-1034			
	6	3	6-1/4	16	615-1036		



C Knife-Edge

Tapered in width and thickness. Knife edge has the same thickness from point to shoulder. The included angle of the sharp edge is approximately 10°. Generally used to file in a slot or wedge-shaped opening. Curved knife edge allows easy filing in restricted areas.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
0	1-3/4	4	10	605-1110			
	2-1/2	5-1/2	14	610-1110			
	3	6-1/4	16	615-1110			
2	1-3/4	4	10	605-1112			
	2-1/2	5-1/2	14	610-1112			
2	3	6-1/4	16	615-1112			
	4-1/8	7-3/4	20	620-1112			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
4	2-1/2	5-1/2	14	610-1114			
0	3	6-1/4	16	615-1114			
	6	3	6-1/4	16	615-1116		



D Marking

Identical to half-round, but cut on round side only. Flat side is safe.

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
0	3	6-1/4	16	615-1120			
2	2-1/2	5-1/2	14	610-1122			
	3	6-1/4	16	615-1122			

Cut	Cut Length			SKU	Each		
	inches	inches	cm		1-11	12+	
4	2-1/2	5-1/2	14	610-1124			
0	3	6-1/4	16	615-1124			



A Oval

Oval shape, gradually tapered to tip. Cut and workable to the point. Used for filing interior curved surfaces.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
2	3	6-1/4	16		615-1142			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	3	6-1/4	16		615-1144			



B Round

Gradually tapered. Cut and workable to the point. Used where it is necessary to enlarge a hole or round off a radius.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
00	3	6-1/4	16		615-1059			
0	1-3/4	4	10		605-1050			
	2-1/2	5-1/2	14		610-1050			
	3	6-1/4	16		615-1050			
	4-1/8	7-3/4	20		620-1050			
2	1-3/4	4	10		605-1052			
	2-1/2	5-1/2	14		610-1052			
	3	6-1/4	16		615-1052			
	4-1/8	7-3/4	20		620-1052			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	1-3/4	4	10		605-1054			
	2-1/2	5-1/2	14		610-1054			
	3	6-1/4	16		615-1054			
	4-1/8	7-3/4	20		620-1054			
6	3	6-1/4	16		615-1056			



C Square

Gradually tapered and cut on all four sides. Cut and usable to the point. A general-purpose file.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
00	3	6-1/4	16		615-2069			
0	1-3/4	4	10		605-1060			
	2-1/2	5-1/2	14		610-1060			
	3	6-1/4	16		615-2060			
	4-1/8	7-3/4	20		620-1060			
2	1-3/4	4	10		605-1062			
	2-1/2	5-1/2	14		610-1062			
	3	6-1/4	16		615-2062			
	4-1/8	7-3/4	20		620-1062			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	2-1/2	5-1/2	14		610-1064			
	3	6-1/4	16		615-2064			
	4-1/8	7-3/4	20		620-1064			
6	3	6-1/4	16		615-2066			



D Three-Square

Gradually tapered and cut to the point.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
00	3	6-1/4	16		615-1069			
0	1-3/4	4	10		605-1010			
	2-1/2	5-1/2	14		610-1010			
	3	6-1/4	16		615-1060			
	4-1/8	7-3/4	20		620-1010			
2	1-3/4	4	10		605-1012			
	2-1/2	5-1/2	14		610-1012			
	3	6-1/4	16		615-1062			
	4-1/8	7-3/4	20		620-1012			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	1-1/2	4	10		*705-1014			
	2-1/2	5-1/2	14		610-1014			
	3	6-1/4	16		615-1064			
	4-1/8	7-3/4	20		620-1014			
6	3	6-1/4	16		615-1066			

*Made in Switzerland.



A Warding

Parallel in thickness and tapered in width. Good for deburring.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
0	2-1/2	5-1/2	14		610-1070			
	3	6-1/4	16		615-1070			
2	1-1/2	4	10		605-1072			
	2-1/2	5-1/2	14		610-1072			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	2-1/2	5-1/2	14		615-1074			
	3	6-1/4	16		615-1074			
6	3	6-1/4	16		615-1076			



B Slitting

Parallel in width and thickness and taper from a centerline down the middle of the file to both edges that meet at a point. Both sides are cut. Used for precision filing of small areas and for miniature work.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
2	2-1/2	5-1/2	14		610-1132			
	3	6-1/4	16		615-1132			
4	2-1/2	5-1/2	14		610-1134			
	3	6-1/4	16		615-1134			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
6	3	6-1/4	16		615-1136			



C Joint Cut

Joint Round Edge and are parallel in width and thickness and are cut only on the rounded edges. Needle files are used for precision filing of small areas and for miniature work.

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
0	3	6-1/4	16		615-1040			
2	2-1/2	5-1/2	14		610-1042			
	3	6-1/4	16		615-1042			

Cut	Cut Length		Overall Length		SKU	Each		
	inches	inches	inches	cm		1-11	12+	
4	2-1/2	5-1/2	14		610-1044			
	3	6-1/4	16		615-1044			



A

A Grobet USA® Swiss Pattern Needle File Sets

Each includes 12 of our most popular files in one cut. 14mm and 16mm come in a storage pouch. Made in Italy.

Cut Length		Overall Length		SKU	Each
inches	cm	inches	cm		
0	2-1/2	5-1/2	14	603-1400	
	3	6-1/4	16	603-1600	
2	1-1/2	4	10	603-1020	
	2-1/2	5-1/2	14	603-1420	
	3	6-1/4	16	603-1620	
4	2-1/2	5-1/2	14	603-1440	
	3	6-1/4	16	603-1640	
6	3	6-1/4	16	603-1660	

B Grobet USA® Hand File Precision Starter Set

The Grobet USA Hand File Precision Starter Set is high quality and includes the most popular hand files. This set is designed to give the user an offering of precision files.

Set Includes:

- 6" Barrette Swiss Pattern File, Cut 2 (635-0620)
- 6" Half Round Swiss Pattern File, Cut 2 (630-0620)
- 6" Half Round Ring Inox File, Cut 2 (602-0061)
- 6" Hand Swiss Pattern File, Cut 2 (631-0620)
- 6" Pillar Swiss Pattern File, Cut 2 (637-0620)
- 8" Vul-Crylic File (604-0010)
- #4 Plastic File Handle (170-6004)

Description	SKU	Each
Grobet USA Hand File Precision Starter Set	604-4000	

C Plastic Needle File Handle

Durable plastic handle for holding all needle files. Measures 3-1/4" long.

Description	SKU	Each
Plastic File Handle	170-4010	1-11 12+

D Wooden File Handle with Collet

Wooden handle with metal collet for needle and escapement files. Measures 4-1/2" long.

Description	SKU	Each
Wooden File Handle with Collet	170-4013	

E Wooden File Handles

Wooden handles with metal ferrules for needle and escapement files. Measure 4" long. Comes in a pack of 3.

Description	Diameter	SKU	Pkg. of 3	
			1-3	4+
E Wooden File Handle	3/8"	170-6010		
	5/8"	170-6011		

F Contoured Wooden File Handles

Polished wooden handles with metal ferrules for needle, escapement and pattern files.

Description	Length	SKU	Each		
			1-2	3-9	10+
F Needle/Escapement File Handle	3-1/2"	170-4011			
	4"	170-4012			

A-F Grobet Inox Needle Files – For Hard Metals

Inox files provide excellent performance on hard-to-file surfaces and hard metals. Feature exceptional hardness of 72 HRC and corrosion resistance for long life. Best of all, they won't clog – one knock is enough to remove metal chips. Handles are yellow for quick identification. Measure approx. 18cm (7") long. 6-Piece set in both Cut 0 and Cut 2 also available containing one each of the below files. Made in Italy.

Style	Shape	Cut 0		Cut 2		Each		
		SKU	SKU	SKU	SKU	1-2	3-11	12+
A	Equalling	☰	602-0021	602-0022				
B	Half-Round	⤿	602-0026	602-0027				
C	Three-Square	△	602-0031	602-0032				
D	Square	□	602-0036	602-0037				
E	Round	○	602-0041	602-0042				
F	Barrette	⤿	602-0046	602-0047				
6-Piece Set			602-0051	602-0052				

G-M Grobet USA® Teborg Needle Files

Economical chrome alloy steel needle files. Measure 5-1/2" (14cm) long and can be used with any file handle. Sold individually and a set of six shapes. Made in Italy.

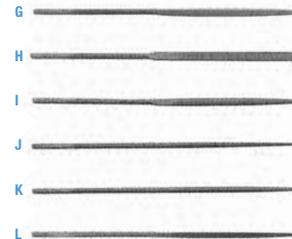
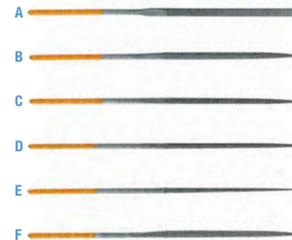
Description	Shape	Cut	SKU	Each	
				1-11	12+
G Barrette	⤿	2	604-3012		
		4	604-3014		
H Equalling	☰	2	604-3022		
		4	604-3024		
I Half-Round	⤿	2	604-3032		
		4	604-3034		
J Round	○	2	604-3042		
		4	604-3044		
K Square	□	2	604-3052		
L Three-Square	△	2	604-3062		
		4	604-3064		
M 6-Piece Set*		2	604-3002		
		4	*604-3004		

*The 6-Piece Set of Cut 4, 604-3004 includes all of the above shapes except the Square Cut 4, instead it contains a Knife in Cut 4.

N Econo Mini Needle File Set

An inexpensive set of 12 miniature needle files in our most popular shapes. Excellent for getting into tight spots and tiny settings. Files measure 4" (10cm) long. Made in China.

Description	Cut	SKU	Each
12-Piece Set	2	705-1000	



Swiss Pattern Escapement Files

Sometimes known as square-handled needle files, escapement files are used for filing even smaller items such as fine extrusion dies and making fine repairs. Measure 14cm (5-1/2") long with 1-1/2" to 2-1/2" cut length. Made in Switzerland.



A Barrette

Tapered in width and thickness, coming to a point. Only flat side is cut, providing safe edge and top.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
0	5-1/2	14	725-1100			6	5-1/2	14	725-1106		
2			725-1102			8			725-1108		
4			725-1104								



B Barrette Parallel

Tapered in width and thickness but with parallel sides.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
4	5-1/2	14	725-1114			6	5-1/2	14	725-1116		



C Crossing

Half-round on two sides with one side having a slightly larger radius than the other. Tapered in width and thickness. Cut and usable to the point. Used primarily for filing interior curved surfaces. The double radius allows filing at the junction of two curved surfaces or of a straight and curved surface.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	725-1032			6	5-1/2	14	725-1036		
4			725-1034								



D Equalling

Parallel in width and thickness. Used primarily for filing slots and corners.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	725-1082			6	5-1/2	14	725-1086		
4			725-1084								



E Half-Round

Tapered in width and thickness, coming to a point. Cut on both sides.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	725-1022			6	5-1/2	14	725-1026		
4			725-1024			8			725-1028		



A Knife-Edge

Tapered in width and thickness. Knife edge has the same thickness from point to shoulder. The included angle of the sharp edge is approximately 10°. Generally used to file in a slot or wedge-shaped opening. Curved knife edge allows easy filing in restricted areas. Made in Italy.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	625-1092			6	5-1/2	14	625-1096		
4			625-1094								



B Round

Gradually tapered. Cut and workable to the point. Used where it is necessary to enlarge a hole or round off a radius. Made in Switzerland.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
0	5-1/2	14	725-1010			4			725-1014		
2			725-1012			6	5-1/2	14	725-1016		
						8			725-1018		



C Rounding Off

Rounding Off shaped Escapement file is significantly smaller overall than needle files. Escapement files are used for the smallest work. Measure 14cm (5-1/2") overall length including handle. Cut on flat side only. Made in Switzerland.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
4	5-1/2	14	725-1124			6	5-1/2	14	725-1126		



D Square

Gradually tapered and cut on all four sides. Cut and usable to the point. A general-purpose file. Made in Switzerland.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	725-1042			6	5-1/2	14	725-1046		
4			725-1044			8			725-1048		



E Three-Square

Three-Square escapement files are significantly smaller overall than most needle files. Escapement files are used for the smallest work. Measure 14cm (5-1/2") overall length including handle. Gradually tapered and cut to the point. Made in Switzerland.

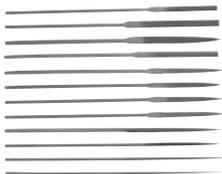
Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
2	5-1/2	14	725-1052			6	5-1/2	14	725-1056		
4			725-1054			8			725-1058		



F Three-Square, Short and Slim

Cut on all three sides, tapered to a point. Made in Italy.

Cut	Overall Length		SKU	Each		Cut	Overall Length		SKU	Each	
	inches	cm		1-11	12+		inches	cm		1-11	12+
4	5-1/2	14	625-1064			6	5-1/2	14	625-1066		



A

A Swiss Pattern Escapement File Set

Includes 12 of the most popular Escapement File Shapes in a Cut 4 that include (2) Pilar, (2) Half-Round, (1) Barrette, (1) Round, (1) Square, (1) Three-Square, (1) Crossing, (1) Knife, (1) Square-Tapered and (1) Round-Tapered. Made in Switzerland.

Description	Cut	SKU	Each
Swiss Escapement File Set	4	725-2004	



B

B File Card

Features steel wire bristles mounted on a wood handle for cleaning particles caught in teeth of files. Measures 8" long.

Description	SKU	Each
File Card	816-2800	1-5 6+



C

C Grobet USA® American Pattern Utility File Set – Six Files to Match Any Job Perfectly!

Includes six American Pattern Files with wooden handles: square, half-round, three-square, round, flat and warding, all smooth cut. Comes complete with hanging pouch. File including handle measures 7" long with approx. 4" cut length. Made in China.

Description	Cut	SKU	Each
Utility File Set	Smooth	705-1005	

Guide to Selecting Grobet USA® Swiss Pattern Precision Files

File selection cannot be reduced to a formula or table but is based to a great degree on experience. However, the chart below gives you a great starting point for file selection.

Keep in mind, there is more to file selection than shape alone. Selecting the correct cut to use is determined by the type of the metal you're working on, as well as the amount of material to be removed and your desired finish.

For example, rapid removal of stock often indicates a cut 00, while working on narrow surfaces would suggest a cut 2 and a fine cut such as cut 4 or cut 6 would be used for final finishing operations.

Types of Files

- Swiss Pattern Precision Files** – The original Swiss Pattern files made in hundreds of shapes and sizes.
- Swiss Pattern Needle Files** – A group of files of various cross-sections with a knurled, round handle. Knurling gives the file a positive, Non-Slip grip for precision filing.
- Escapement Files** – Also called small Square Handled Needle Files. A group of files of various cross-sectioned shapes with a length of cut varying from 3/4" to 2-1/2", with square handles.
- Rifflers** – Originally used and hand forged by die sinkers, die makers, silversmiths, etc., in shapes and cross-sections appropriate to their work. Teeth are cut on small areas on each end and can have a variety of shapes. A long middle portion serves as the handle.

Basic Application	Type of File Recommended
Corners-holes-edges	Three-Square
Corners-holes	Square
Corners-slots	Equalling
Curved surfaces-corners-holes	Half-Round
Curved surfaces-junctures of curved and flat surfaces-corners-holes	Crossing
Flat surfaces	Hand
Flat surfaces-corners-keyways dovetail ways-gear teeth-deburring	Barrette
Flat surfaces-slots	Pillar
Roughening surfaces for hand grips	Checking
Rounded corners-slots-flat surfaces-junctures between curved and flat surfaces	Crochet
Rounded corners-holes – "V" slots	Pippin
Rounded inside corners-holes	Round
Slots	Screwhead
Slots	Warding
Slots-wedge-shaped openings	Knife

Grobet USA® Inox Files

For stainless steel, exotic plastics, and other hard to file materials. The hardest surface known – Rockwell hardness 72HRc. Better performance on hard-to-file surfaces. Little or no clogging; a simple knock is enough to remove the chips. Highly resistant to corrosion. Longer life than standard files. Handles are yellow for quick identification. Inox needle files are also available. Made in Italy.



A Barrette

Tapered in width and thickness, coming to a point. Only flat side is cut, providing safe edge and top.

Length of Cut	Cut	SKU	Each			Length of Cut	Cut	SKU	Each		
			1-2	3-5	6+				1-2	3-5	6+
6	0	602-0070				6	2	602-0072			



B Half-Round

Tapered in width and thickness, coming to a point. Cut on both sides.

Length of Cut	Cut	SKU	Each			Length of Cut	Cut	SKU	Each		
			1-2	3-5	6+				1-2	3-5	6+
6	0	602-0090				6	2	602-0092			



C Hand

Parallel in width and gently tapered in thickness for perfectly flat filing. Double cut top and bottom with one single-cut edge and one safe edge.

Length of Cut	Cut	SKU	Each			Length of Cut	Cut	SKU	Each		
			1-2	3-5	6+				1-2	3-5	6+
6	00	602-0079				6	2	602-0082			
6	0	602-0080									



D Half-Round Ring

Gradually tapered. Cut and workable to the point. Used where it is necessary to enlarge a hole or round off a radius.

Length of Cut	Cut	SKU	Each			Length of Cut	Cut	SKU	Each		
			1-2	3-5	6+				1-2	3-5	6+
6	0	602-0060				6	2	602-0061			

A Grobet USA® Ergo Files

Ergo files are designed for those in-between jobs that are too big for needle files and require finer control than heavier files. Shaped for easy handling and balanced for efficient cutting. Feature strong, secure built-in handles. Available in five different shapes for practically every precision filing requirement. Measure 8-1/2" long with 4" cut length. All double cut. Made in Italy.

Style	Cut		Each	
	00	1	1-9	10+
Hand	604-1000	604-1001		
Half-Round	604-1010	604-1011		
Round	604-1040	604-1041		
Square	604-1030	604-1031		
Three-Square	604-1020	604-1021		
5-Piece Set (one of each)	604-2000	604-2001		

*Quantity discount for orders of one item number only; not assorted.



B-C Vulcrylic (also known as Vulcanite) Files

Select between high-quality half-round files with open teeth and an economical alternative. Used for filing and shaping plastic, wax, wood, and other soft materials. Double ended: one coarse cut, the other medium cut. Each end is 1/2" wide tapering to tip.

Description	Length	SKU	Each	Description	Length	SKU	Each
B Italian	8"	604-0010		C Econo (India)	8"	704-0020	



D Screwhead File with Tang

High quality steel file with smooth sides to cut only on the edge. Will not widen the slot as it deepens. Used for cleaning up marred slots on hard to replace screws or for filing .022" slots in new small screws. Measures 4-1/4"L x 2-3/64"W, with 2-7/8" cut length. Select appropriate thickness for desired slot size.

Description	Thickness	Each			Description	Thickness	Each		
		SKU	1-11	12+			SKU	1-11	12+
#2	0.028"	649-1002			#6	0.018"	649-0999		
#4	0.022"	649-1000			#8	0.014"	649-0998		

E-H Steel Files – For Reciprocating Handpieces

High-quality steel files for reciprocating handpieces. All cut 0. Measure 80mm (3-3/16") long with 3mm shanks. Made in Japan.

Style	SKU	Each
Round	701-0500	
Equalling	701-0520	
Half-Round	701-0540	
Three-Square	701-0560	



A-E Grobet USA® Plastic File Handles

Virtually unbreakable plastic handles shaped and textured to fit your hand comfortably and prevent slipping. Feature tempered metal tang-holding inserts that are threaded to ensure proper alignment and positive grip. Allow easy file changes; just unscrew the file in use and screw in another.

Description	SKU	Each	
		1-11	12+
A #2 Handle	170-6002		
B #3 Handle	170-6003		
C #4 Handle	170-6004		
D #5 Handle	170-6005		
E #6 Handle	170-6006		

Handle Selection Guide

File Shape	File Length (inches)						File Shape	File Length (inches)					
	3	4	6	8	10	12		3	4	6	8	10	12
Barrette	2	3	4	5	-	-	Pillar	2	3	4	5	6	6
Checking	-	-	4	-	-	-	Pippin	-	3	4	5	-	-
Crochet	-	3	4	5	-	-	Round, Parallel	-	-	2	3	-	-
Crossing	-	3	4	5	-	-	Round, Tapered	-	2	3	4	5	-
Equalling	-	3	4	5	-	-	Square	-	2	3	4	5	-
Half-Round	-	3	4	5	6	6	Three-Square	2	3	4	5	6	6
Hand	-	3	4	5	6	6	Warding	-	3	4	5	-	-
Knife-Edge	-	3	4	5	6	6							

F Plastic Needle File Handle

Durable plastic handle for holding all needle files. Measures 3-1/4" long.

Description	SKU	Each	
		1-11	12+
Plastic File Handle	170-4010		

G Wooden File Handle with Collet

Wooden handle with metal collet for needle and escapement files. Measures 4-1/2" long.

Description	SKU	Each	
		1-11	12+
Wooden File Handle with Collet	170-4013		

H Skroo-Zon® File Handle

A white birch handle with heavy-gauge steel ferrule. Features a hardened steel insert inside the handle that cuts a thread on the file tang to grip it firmly. Keeps strain off the handle to prevent it from breaking. Holds 6" files. Measures 4"L x 1-1/8" dia.

Description	SKU	Each	
		1-11	12+
Skroo-Zon File Handle	170-6000		

I Wooden File Handles

Wooden handles with metal ferrules for needle and escapement files. Measure 4" long. Comes in a Pack of 3.

Description	Diameter	SKU	Pkg. of 3	
			1-3	4+
I Wooden File Handle	3/8"	170-6010		
	5/8"	170-6011		

J-K Contoured Wooden File Handles

Polished wooden handles with metal ferrules for needle, escapement and pattern files.

Description	Length	SKU	Each		
			1-2	3-9	10+
J Needle/Escapement File Handle	3-1/2"	170-4011			
	4"	170-4012			
K Pattern File Handle	4"	170-6013			
	5"	170-6014			



Swiss Pattern Diemaker's Riffles

For removing metal and smoothing hard-to-reach surfaces. All are double-ended, both ends identical. Measure approx. 7" overall length. Made in Italy.

A Swiss Pattern Diemaker's Riffler Sets

Styles: 710/603, 711/604, 712/605, 713/606, 731/607, 732/608, 741/609, 750/610, 761/611, 762/612, 771/615, 781/616. Selection subject to change without notice. Made in Italy.

Description	Cut 0		Cut 2		Each
	SKU	SKU	SKU	SKU	
A Set of 12	603-0500	603-0520			

Style Old/New	Cut 0		Cut 2		Each	
	SKU	SKU	SKU	SKU	1-11	12+*
710/603	600-7100	600-7102				
711/604	600-7110	600-7112				
712/605	600-7120	600-7122				
713/606	600-7130	600-7132				
731/607	600-7310	600-7312				
732/608	600-7320	600-7322				
741/609	-	600-7412				
750/610	600-7500	600-7502				
761/611	600-7610	600-7612				
762/612	600-7620	600-7622				
771/615	-	600-7712				
781/616	600-7810	600-7812				

*Quantity discount for orders of one item number only; not assorted.

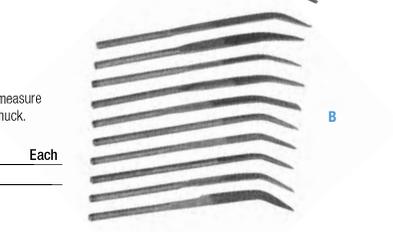
B Riffler Set of 10, Cut 2

Set of 10, cut 2, riffles with anodized aluminum handle (not shown). Single-ended riffles measure approximately 3-1/2" overall length. Specially made handle features a quick-release steel chuck. Handle is knurled for comfort and a sure grip. Only sold as a set.

Description	SKU	Each
B Set of 10	700-1050	



All double-ended



B

Swiss Pattern Diesinker's Riffles

All are double-ended files. Commonly used to shape and finish curved, unusual, or hard-to-reach surfaces. Illustrations feature one side (both sides are identical except for 905/503, which is straight and curved). All measure 6" long. Made in Italy.

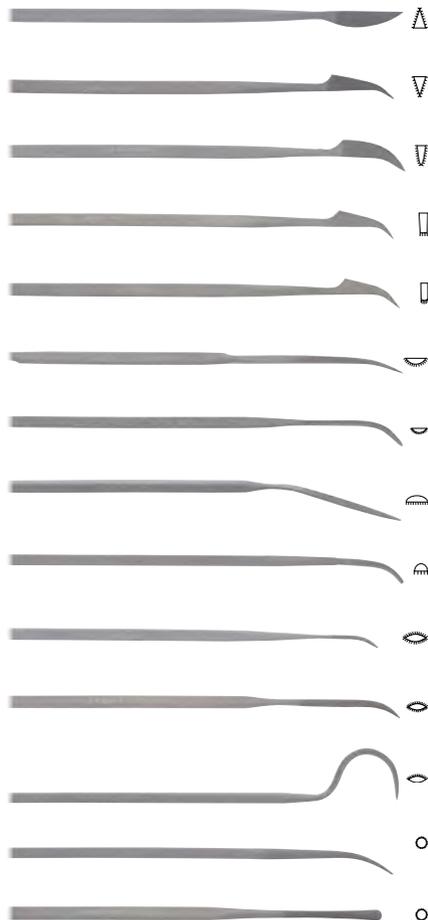
Style Old/New	Cut 0		Cut 2		Each	
	SKU	SKU	SKU	SKU	1-11	12+*
901/502	600-9010	600-9012				
905/503	600-9050	600-9052				
911/505	600-9110	600-9112				
912/506	600-9120	600-9122				
913/507	600-9130	600-9132				
914/508	600-9140	600-9142				
915/509	600-9150	600-9152				
917/511	600-9170	600-9172				
918/512	-	600-9182				
930/515	600-9300	-				
940/517	-	600-9402				
941/518	-	600-9412				
942/519	600-9420	600-9422				

Both ends shown of style 905/503

*Quantity discount for orders of one item number only; not assorted.

Style Old/New	Cut 0	Cut 2	Each	
	SKU	SKU	1-11	12+*
951/522	600-9510	600-9512		
952/523	600-9520	600-9522		
955/525	600-9550	600-9552		
956/526	600-9560	600-9562		
957/527	-	600-9572		
961/529	600-9610	600-9612		
963/531	600-9630	600-9632		
964/532	600-9640	600-9642		
965/533	600-9650	600-9652		
970/534	-	600-9702		
972/536	600-9720	600-9722		
975/539	600-9750	600-9752		
981/541	600-9810	-		
982/542	600-9820	600-9822		

All double-ended



*Quantity discount for orders of one item number only; not assorted.

All double-ended



*Quantity discount for orders of one item number only; not assorted.



A

Style Old/New	Cut 0	Cut 2	Each	
	SKU	SKU	1-11	12+*
983/543	600-9830	600-9832		
984/544	600-9840	600-9842		
985/545	600-9850	600-9852		
986/546	600-9860	600-9862		
996/552	-	600-9962		

A Swiss Pattern Diesinker's Riffer Sets

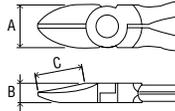
Styles: 955/525, 956/526, 957/527, 961/529, 963/531, 964/532, 965/533, 972/536, 973/537, 975/539, 981/541, 982/542. Subject to change without notice. Made in Italy.

Description	Cut 0	Cut 2	Each
	SKU	SKU	
Set of 12	603-0100	603-0120	

Merry Plastic Gate Cutters

Gate cutters are a specialized hand tool for trimming and removing the excess plastic from molded parts. Merry brand gate cutters are available in several different blade shapes to produce a clean and aesthetically appealing plastic part. Due to their craftsmanship and quality, these cutters leave a clean, smooth cut over a long period of time.

A Merry 99 Series – Heavy-Duty Gate Cutters



The Merry 99 Series gate cutters will cut between 8mm and 10mm of plastic. These heavy-duty cutters are spring loaded for ease of use. The Round style allows deep cutting from both ends of the workpiece to the center and are available either with or without a stopper. The stopper helps prevent misalignment. The Flat style offers the same cutting depth from both edges to the center and all 3 sizes include the stopper.

Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
99-150	Round	No	150.0	22.0	12.5	18.0	200	8.0	180-5000	
99-175	Round	No	175.0	24.0	12.5	23.0	260	9.0	180-5005	
99-200	Round	No	200.0	26.0	13.5	27.0	340	10.0	180-5010	

Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
99S-150	Round	Yes	150.0	22.0	12.5	18.0	210	8.0	180-5030	
99S-175	Round	Yes	175.0	24.0	12.5	23.0	265	9.0	180-5035	
99S-200	Round	Yes	200.0	26.0	13.5	27.0	340	10.0	180-5040	

Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
99SF-150	Flat	Yes	150.0	22.0	12.5	20.0	210	8.0	180-5060	
99SF-175	Flat	Yes	175.0	24.0	12.5	24.0	265	9.0	180-5065	
99SF-200	Flat	Yes	200.0	25.5	13.5	28.0	345	10.0	180-5070	

B Merry 170S – Angled Gate Cutter

Use Merry 170S cutters when you need to access tight areas. The head is bent at a 40° angle and the spring loaded handles make cutting up to 5mm of plastic a simple task.



Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
170S-150	Flat	No	150.0	15.0	10.0	22.0	145	5.0	180-5080	

C Merry 66S – Standard Gate Cutter

These spring loaded and relieved gate cutters are one of the most popular because they handle 5mm thick plastic with ease.

Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
66S-150	Round	No	150.0	17.0	10.0	18.0	150	5.0	180-5090	

A Merry 68S – Narrow Gate Cutter

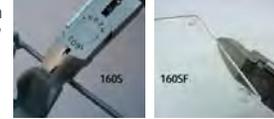


You will find these recessed and relieved cutters will access areas you thought were impossible to reach. Spring loaded Can cut up to 2mm of plastic.

Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
68S-125	Round	No	125.0	12.5	8.0	12.0	90	2.0	180-5100	

B Merry 160 Series – High-Grade Gate Cutters

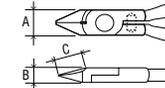
The Merry 160 Series gate cutters are used for cutting either 3mm or 5mm of plastic. These high-grade cutters are spring loaded for ease of use. They all come complete with stoppers which help prevent misalignment. The Round style allows deep cutting from both ends of the workpiece to the center. The Angle style allow even deeper cutting than the round. The Flat style offers the same cutting depth from both edges to the center.



Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
160S-125	Round	Yes	125.0	14.0	7.5	16.0	90	3.0	180-5110	
160S-150	Round	Yes	150.0	16.0	8.0	17.0	130	5.0	180-5115	
160SF-125	Flat	Yes	125.0	14.0	7.5	16.0	90	3.0	180-5120	
160SF-150	Flat	Yes	150.0	16.0	8.0	17.0	130	5.0	180-5125	
160SA-125	Angle	Yes	125.0	14.0	7.5	16.0	90	3.0	180-5130	
160SA-150	Angle	Yes	150.0	16.0	8.0	17.0	130	5.0	180-5135	

C Merry M11/M12 – Miniature Gate Cutters

Both these miniature plastic gate cutters have a capacity of 3mm and are spring loaded. The round style shape allows deep cutting from both ends of the work piece to the center.



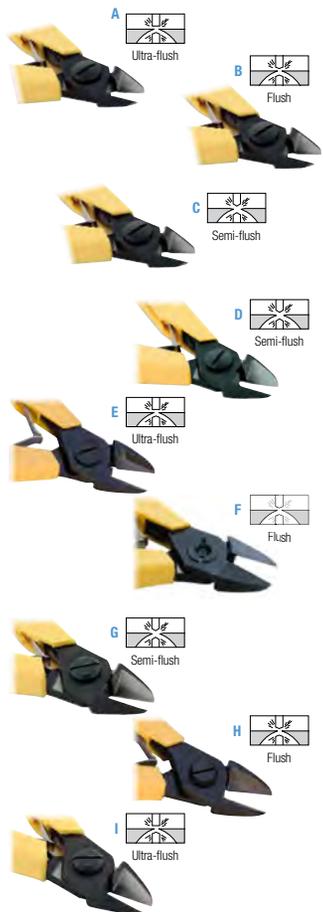
Model#	Blade Shape	Stopper	OAL (mm)	A (mm)	B (mm)	C (mm)	Weight (g)	Cutting Capacity (mm)	SKU	Each
M11-125	Round	No	125.0	14.0	8.0	15.0	85	3.0	180-5175	
M12-125	Round	No	125.0	12.5	8.5	12.0	85	3.0	180-5180	

Lindstrom® Pliers and Nippers

Recognized Worldwide

Unsurpassed in quality materials, design and performance. Made of high-quality steel A grade and are ERS Safe.

Lindstrom 80-Series nippers rank among the highest quality of any cutters made with cutting edge hardness of 63-65 Rockwell. They are the most popular by choice for the traditional user and offer a generous cutting capacity, covering a wide range of wire dimensions and types. Perfect for accessing narrow confined spaces. Feature precision ground black oxides cutting edges for exceptional cutting accuracy and durability, adjustable screw lap joints, return springs and yellow plastics grips. Made in Spain.



A-C Small Diagonal Nippers - #8140/#8141/#8142

Cut 0.1-1.0mm copper. All measure 4-1/8" long.

Description	Jaw Size (L x W)	SKU	Each
A Flush	3/8" x 3/8"	182-8140	
B Semi-Flush Small	3/8" x 3/8"	182-8141	
C Ultra-Flush	3/8" x 3/8"	182-8142	

D-F Medium Diagonal Nippers - #8150/#8151/#8152

Cut 0.3-1.6mm copper. All measure 4-7/16" long.

Description	Jaw Size (L x W)	SKU	Each
D Semi-Flush Medium	1/2" x 1/2"	182-8150	
E Ultra-Flush Medium	1/2" x 1/2"	182-8152	
F Flush	1/2" x 1/2"	182-8151	

G-I Large Diagonal Nippers - #8160/#8161/#8162

#8160 - Cut 0.4-2.0mm copper. #8161 - Cut 0.3-2.0mm copper. #8162 - Cut 0.3-1.6mm copper. All measure 5" long.

Description	Jaw Size (L x W)	SKU	Each
G Semi-Flush Large	5/8" x 5/8"	182-8160	
H Flush	5/8" x 5/8"	182-8161	
I Ultra-Flush	5/8" x 5/8"	182-8162	

The Lindstrom Supreme Series Pliers and Nippers offer a wide selection of the finest lightweight pliers and nippers for general electronics work, repair and fine mechanical work. Adjustable precision screw joint minimizes friction and maximizes jaw alignment. Feature smooth, precision-ground jaws for gripping without marring, spring-loaded handles and white plastic grips. Made in Spain.

A-C Supreme Chain Nose Pliers - #7893/#7892/#7890

Have screw lap joint and precision-ground jaws. #7892 and #7893 measure 4-3/4" long and #7890 measures 5-1/4" in length.

Description	Jaw Size (L x W)	SKU	Each
A Long Chain Nose	1-1/4" x 1/32"	182-7890	
B Ultra-Flush Medium	3/4" x 1/32"	182-7893	
C Bent Chain Nose	1-1/8" x 1/32"	182-7892	

D Supreme Flat Nose Pliers - #7490

Have screw lap joint and precision-ground jaws. Measures 4-3/4" long.

Description	Jaw Size (L x W)	SKU	Each
D Flat Nose	3/4" x 1/8"	182-7490	

E-F Supreme Round Nose Pliers - #7590/#7591

#7590 measures 4-3/4" long. #7591 measures 6-1/2" long.

Description	Jaw Size (L x W)	SKU	Each
E Round Nose	3/4" x 1/32"	182-7590	
F Long Round Nose	1-1/2" x 1/32"	182-7591	

*Tapers to this width.

G Supreme Diagonal Nippers - #7190/#7191

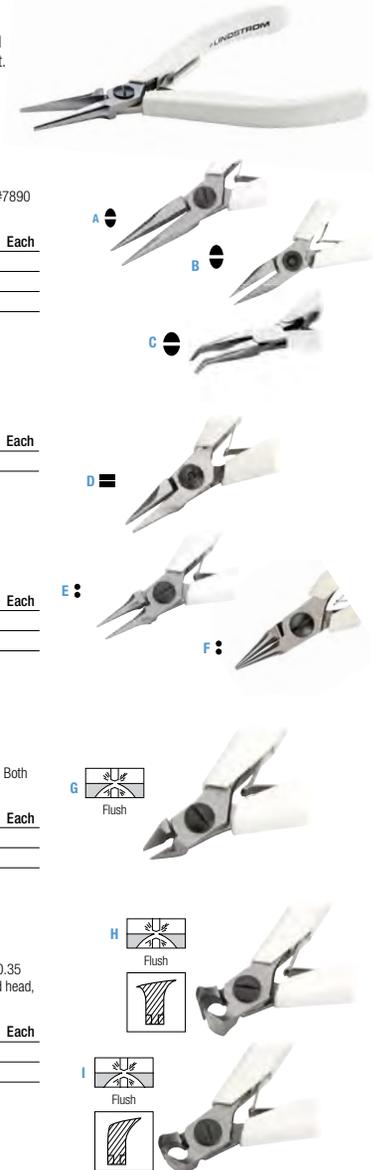
Flush-cutting nippers with screw lap joints and tapered, relieved heads for reaching tight areas. Both can cut up to and measure 108mm (approx 4-1/4") overall length.

Description	Jaw Size (L x W)	SKU	Each
G Diagonal Flush	3/8" x 3/8"	182-7191	
Diagonal Micro	3/8" x 3/8"	182-7190	

H-I Supreme Oblique Nippers - #7291/#7293

Flush cutting nippers with screw lap point and 11° angled heads which cut 0.014" to 0.040" (0.35 to 1.0mm) diameter copper wire. Overall length, 4-1/4". #7291 has both a round and a pointed head, #7293 has a relieved head for access in tight areas.

Description	Jaw Size (L x W)	SKU	Each
H Oblique Flush	9/16" x 1/32"	182-7291	
I Relieved Oblique Flush	3/8" x 1/32"	182-7293	



Grobet USA® Teborg® Swiss Cutters

Available with semi-flush, flush or full flush blades. No-scratch/antigliare satin finish.

- Ergonomic handles combine a soft comfortable gripping surface with a hard plastic core. Designed for comfort, accuracy and continuous use.
- Dual leaf springs are made of stainless steel.
- Lap joint with a screw to achieve a high level of strength and precision.
- Made in Switzerland.



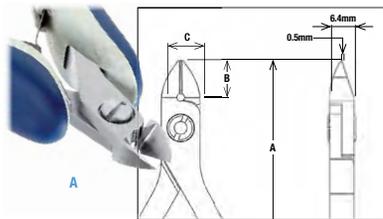
For soft, medium and hard wires



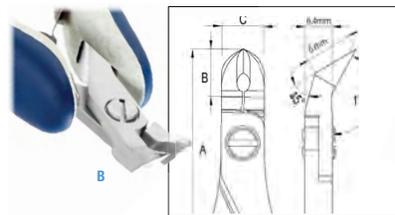
For very precise cutting of soft and medium wires



For perfect cutting of soft and medium wires



Cutting Edges	Head	A (mm)	B (mm)	C (mm)	Cutting Capacity—Wire mm			SKU	Each
					Soft wire	Medium wire	Hard wire		
A Semi-Flush	Oval Sm.	125	10	10	0.2-1.2	0.1 - 1.0	0.03 - 0.6	182-4010	
Flush	Oval Sm.	125	10	10	0.1-1.2	0.1 - 1.0	0.1-1.0	182-4011	
Full-Flush	Oval Sm.	125	10	10	0.1-1.0	0.1 - 0.8	0.1-0.8	182-4012	
Semi-Flush	Oval Lrg.	125	12.5	12.5	0.3-1.6	0.1 - 1.3	0.03 - 0.7	182-4013	
Flush	Oval Lrg.	125	12.5	12.5	0.2-1.6	0.1 - 1.2	0.2-1.4	182-4014	
Full-Flush	Oval Lrg.	125	12.5	12.5	0.2-1.2	0.1 - 1.0	0.2-1.0	182-4015	
Semi-Flush	Oval X Lrg.	130	14	16	0.5 - 3.0	0.4 - 2.5	0.06 - 1.1	182-4016	
Flush	Oval X Lrg.	130	14	16	0.4 - 2.5	0.4 - 2.3	0.3-1.5	182-4017	
Full-Flush	Oval X Lrg.	130	14	16	0.4 - 2.5	0.4 - 2.0	0.3-1.2	182-4018	



Cutting Edges	Head	A (mm)	B (mm)	C (mm)	Cutting Capacity—Wire mm			SKU	Each
					Soft wire	Medium wire	Hard wire		
B Semi-Flush	Oblique Lrg.	125	10	10	0.2-1.2 / 32-17	0.1 - 1.0	0.2-1.0-	182-4020	

Grobet USA® Teborg® Swiss Pliers - Ergonomic Handles

Made of high quality ball bearing steel, hardened to 45 Rockwell feature a superior no-scratch/antigliare satin finish. Lap joint with fine pitched screw for perfect joint adjustment and symmetry, and stainless steel dual leaf springs.

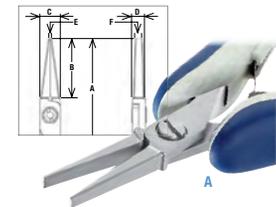
- 2-component ESD safe, user friendly handles have a soft comfortable gripping surface – the latest advancement for ease of use.
- Rounded handle for more comfort, correct shape definition for perfect thumb contact and control.
- Easier pickup from table due to biscuit form.
- Made in Switzerland.



A Grobet USA® Teborg® Swiss Pliers – Flat nose

Flat nose pliers feature a very fine tip, smooth jaws and inner edges. 5-1/4" long.

Jaw Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	SKU	Each
Smooth	135	20	10	6.4	1.2	4.0	182-4004	



B Grobet USA® Teborg® Swiss Pliers – Chain nose bent

All chain nosed pliers are commonly used in electronic assembly and rework. Inner jaws are flat faced. 5-9/4" long.

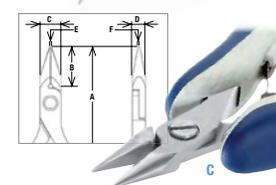
Jaw Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	SKU	Each
Smooth	145	30	10	6.4	1.0	0.5	182-4002	



C Grobet USA® Teborg® Swiss Pliers – Chain nose

All chain nosed pliers are commonly used in electronic assembly and rework. Inner jaws are flat faced. 5-1/4" long.

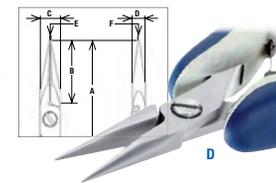
Jaw Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	SKU	Each
Smooth	135	20	10	6.4	1.0	0.5	182-4000	



D Gesswein® Supra Swiss Pliers – Chain nose long

All chain nosed pliers are commonly used in electronic assembly and rework. Inner jaws are flat faced. 5-1/4" long.

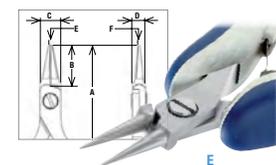
Jaw Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	SKU	Each
Smooth	145	30	10	6.4	1.0	0.5	182-4001	



E Gesswein® Supra Swiss Pliers – Round nose

Round nose pliers have jaws formed by two long cones. A round nose pliers is generally used both to clamp and to form loops on leads or wire. The long jaws also provide increased access. 5-1/2" long.

Jaw Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	SKU	Each
Smooth	140	24	10	6.4	1.2	0.5	182-4006	



Xuron® Pliers and Cutters

Xuron® is one of the leading manufacturers of ergonomic hand tools for the electronics, aerospace, and plastic molding industries. All Xuron® brand products have been manufactured with ergonomic non-slip Xuro-Rubber comfort grips.

We offer a comprehensive variety of pliers and cutters. All made in USA.



A Xuron® 450 Tweezers Nose™ Pliers

Ultra-precise, durable needle nose pliers capable of grasping and holding wire less than 1mm thick with the strength for wire forming. Prevent leads from popping free, tip misalignment and blade crossover. Have radiused edges for protecting lead wires. Feature lightweight construction, Light Touch return spring and glare-free black finish. Measures 5" long.

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
450 Pliers	20 x 10mm	181-0206		



B Xuron® 485FN Flat Nose Pliers

Features plier jaws that are flat and wide for bending, forming, grasping, holding and flattening wire and other materials. The 485FN offers ergonomically shaped grips and a return spring for comfort and control while working. Two sides are attached with a lap joint and a rivet. Measures 5.25".

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
485FN Pliers	12.5 x 15mm	181-0209		



C Xuron® 486 90° Bent Chain Nose Pliers

Strong but not bulky, this chain nose plier has long jaws that are smooth inside with rounded outer edges for forming, bending and manipulating wire as well as strips or sheets of soft metal. Manufactured from heat-treated high carbon steel with aligned, precision ground tips. A built-in return spring and non-slip soft rubber grips keep these pliers secure in the hand for comfort and control.

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
486 Pliers	12.5 x 15mm	181-0211		



D Xuron® 475 Short Chain Nose Pliers

Manufactured from high carbon steel with an extra slim profile to allow access into high density areas. Soft rubber hand grips provide comfort and the return spring always bring the tool back to the open position. Rockwell hardness 49-51 and measures 5"

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
475 Pliers	0.78" x 0.55"	181-0212		



Semi-flush

E Xuron® 2193F Hardwire Semi-Flush Cutters

Features self-adjusting clamping fixtures which hold the wire perpendicular to the jaws. Greatly simplifies the cutting process while allowing for flat cuts on both the cut and cut-off sides of the wire. Used for cutting twisted throttle cable. Cuts music wire up to 0.064" diameter. Two sides are attached with a bearing lap joint and screw. Semi-flush cut wire up to 14 AWG (1.6mm)

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
2193F Cutters	12 x 17mm	181-0207		

Xuron® Micro Shear® Flush Cutters

The patented, bypass design of Xuron® Micro Shear® Cutters creates a shearing effect rather than a strike, resulting in clean, square cuts, with no spikes.

- Blades stay sharper longer than others because there is no edge-to-edge impact.
- Greatly reduced mechanical shock delivered to components.
- Requires roughly 50% less effort to cut wire than conventional compression-type wire cutters.

A, B Xuron® 9100 and 9100F Micro-Shear® Flush Cutters

Manufactured from tough alloyed steel with the state of art heat treating and ultra precise CNC grinding to create the ultimate shear cutter. Both feature an oval head for added durability. Jaw size measures 9x12.2mm. Overall: 5" long. The 9100F contains a unique wire retaining clip.

Description	AWG	SKU	Each	
			1-2	3+
A 9100 Cutters	12 (2mm)	181-0202		
B 9100F Cutters	16 (1.3mm)	181-0203		



Flush

C Xuron® 9200 Micro-Shear® Flush Cutters

Made of tough steel alloy with ultra-precise CNC grinding and state-of-art heat treating. Features tapered head for cutting in high density areas. Comfortable for high-volume applications. Used in manufacturing, telecommunications, plastic de-gating, electronics and electrical. Flush cuts soft wire up to 14 AWG (1.6mm). Measures 5" long.

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
9200 Cutters	9 x 12.2mm	181-0204		



Flush

D Xuron® LX Maxi-Shear™ Flush Cutters

Features ultra slim profile with precision ground cutting edges, extra tough 0.100" thick high carbon steel blades. Flush cuts soft wire up to 16 AWG (1.29mm). Measures 4.8" long.

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
LX Cutters	9 x 14mm	181-0200		



Flush

E Xuron® 2175 Maxi-Shear® Flush Cutters

Features elongated and tapered head with extra-tough high-carbon steel blades for cutting in high-density areas. Has non-protruding flat return spring for excellent feel without excessive tension and glare-free black finish. Micro-Shear® technology allows flush cuts of soft wire up to 12 AWG (2mm). Measures 6" long.

Description	Jaw Size (L x W)	SKU	Each	
			1-2	3+
2175 Cutters	12 x 17mm	181-0208		



Flush

F Xuron® 9180NS HD Scissors/Shear

A heavy-duty pair of scissors (Non-serrated blade) – excellent for jewelers and metalsmiths for cutting thin sheets of soft metal or lead up to 0.030"/20 ga. (0.8mm) thick. Also cuts jump rings leaving a flat end on both sides of the wire ring. Manufactured from heat-treated high carbon steel, this pair of scissors is durable and strong. Designed for left or right handed use, the built-in return spring always brings the blades back to the open position. Jaw size: 19mm x 10mm. Overall Length: 6"

Description	SKU	Each
Xuron 9180NS HD Scissors/Shear	181-0218	



Standard-Weight Pliers and Nippers

Feature box joints that minimize undesirable joint movement for precise jaw alignment. Pliers have smooth jaws for holding work without marring. Plastic non-slip grips. Nippers cut up to 1mm diameter copper or annealed 14K gold wire. Measure 5-1/2" long. Made in Germany.



A Chain Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Chain Nose	1/8" x 1/16"	180-1221		

*Tapers to this width.



B Flat Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Flat Nose	1" x 3/16"	180-1220		



C Round Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Round Nose	1/8" x 1/16"	180-1222		

*Tapers to this width.



D Half Round/Flat Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Half Round/Flat	1/8" x 3/16"	180-1223		



E Round/Flat Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Round/Flat	1" x 1/16"	180-1230		



F Semi-Flush Diagonal Nippers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Semi-Flush Diagonal	3/4" x 9/16"	180-1250		

*Tapers to this width.



G German Standard-Weight Pliers - Set of 4
Set includes 1 each of the Chain-Nose, Flat-Nose, Round Nose and Half-Round/Flat pliers. Comes in a handy, zippered storage case.

Description	SKU	Each
4-Piece Set	180-1225	

Slimline Box-Joint Pliers and Nippers

Feature spring-loaded handles with plastic nonslip grips. Pliers have smooth jaws for holding work without marring. Nippers cut up to 1.5mm diameter copper wire. Measure 4-1/2" long. Box joints provide stability. Color may vary. Made in Germany.

A Chain Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Chain Nose	1/8" x 1/16"	180-1722		

*Tapers to this width.

B Flat Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Flat Nose	3/4" x 1/8"	180-1720		

C Round Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Round Nose	1/8" x 1/16"	180-1721		

*Tapers to this width.

D Diagonal Nippers		Each		
Description	Jaw Size	SKU	1-2	3-9 10+
Diagonal	1/2"	180-1726		

E Oblique Nippers		Each		
Description	Jaw Size	SKU	1-2	3-9 10+
Oblique	5/8"	180-1729		

Foam-Grip Stainless Steel Pliers and Nippers

Economical stainless steel box-joint pliers and nipper. Feature spring-loaded handles with extra-thick foam nonslip grips. Measure 4-1/2" long. Imported.

F Chain Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Chain Nose	1/8" x 1/16"	180-0330		

*Tapers to this width.

G Flat Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Flat Nose	7/8" x 9/32"	180-0331		

H Round Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Round Nose	3/4" x 1/16"	180-0332		

*Tapers to this width.

I Bent Chain Nose Pliers		Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9 10+
Bent Chain Nose	1/8" x 1/16"	180-0336		

J Diagonal Nippers		Each		
Description	Jaw Size	SKU	1-2	3-9 10+
Diagonal	1/2"	180-0333		

K Foam-Grip Stainless Steel Plier and Nippers Set

Includes all Foam-Grip Stainless Steel Pliers and Nipper listed above except bent chain pliers.

Description	SKU	Each
4-Piece Set	180-0335	



Color may vary.



Color may vary.



Color may vary.



Semi-flush



Color may vary.



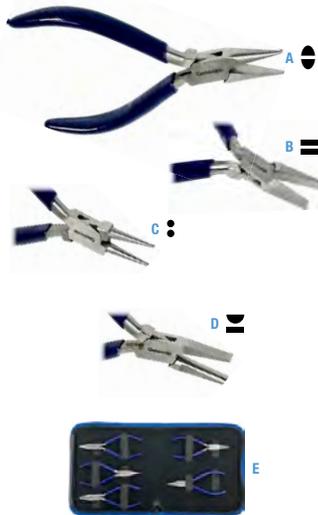
Semi-flush



K

Economy Stainless Steel Pliers

Affordable 5-1/4" pliers with box joints for stability and PVC grip-tight handles. Made in Pakistan.



			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Chain Nose	3/4" x 1/16"	180-0352		

*Tapers to this width.

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Flat Nose	3/4" x 1/4"	180-0350		

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Round Nose	3/4" x 1/16"	180-0351		

*Tapers to this width.

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Half-Round/Flat	3/4" x 1/4"	180-0353		

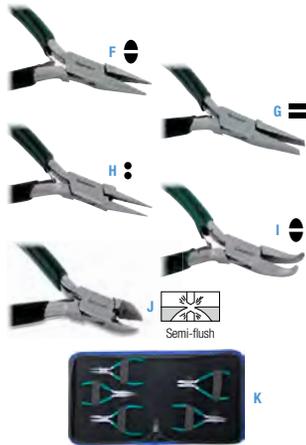
E Economy Stainless Steel Pliers Set

Set of all 5 Economy Stainless Steel Pliers. Imported.

Description	SKU	Each
Economy Stainless Steel Pliers - Set of 5	180-0360	

ValueLine Pliers and Nippers

Affordable 4-1/2" tools with box joints for stability, smooth double leaf springs, green PVC grips, and brushed finishes. Made in Pakistan.



			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Chain Nose	7/16" x 1/32"	180-0340		

*Tapers to this width.

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Flat Nose	7/16" x 1/8"	180-0341		

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Round Nose	7/16" x 1/32"	180-0342		

*Tapers to this width.

			Each	
Description	Jaw Size (L x W)	SKU	1-2	3+
Bent Chain Nose	3/4" x 1/16"	180-0344		

			Each	
Description	Jaw Size	SKU	1-2	3+
Side Cutter	1/2"	180-0343		

K ValueLine Pliers and Nippers Set

Includes all ValueLine Pliers and Nippers above.

Description	SKU	Each
5-Piece Set	180-0345	

A Compound Cutter – Cuts Gold Sprues Up to 3mm

This heavy-duty tool cuts gold sprues and soft wire up to 3mm thick. Features compound joint for cutting with minimal effort and insulated plastic grips. Measures 7-1/4" long with 7/16" long jaws. Made in Germany.

			Each		
Description	SKU		1-2	3-9	10+
Compound Cutter	181-4060				

B Power Max Cutters – Cuts Gold Sprues Up to 3mm

Feature leverage-enhancing design and induction-hardened, high-grade steel jaws for extra-close cutting. Have ergonomically shaped handles for preventing fatigue and injuries. Cuts gold and soft wire up to 3mm thick. Measures 6-1/2" long. Made in Japan.

			Each		
Description	SKU		1-2	3-9	10+
Flush Cutter	181-4066				

C Micro Flush Cutter

Hardened tool steel cutter with induction-hardened jaws. Features relieved cutting edges for clean cutting, fine points for tight work, steel return spring and comfort grips. Measures 4-3/4" long.

			Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9	10+
Diagonal	1/2"	180-4090			

D Oblique Nipper

Flush-cutting nipper with 20°-angle head for reaching tight areas. Has return spring for smooth cutting action and nonadjustable lap joint. Cuts 28-18 AWG, .014"-.059" or 0.3-1.25mm diameter copper or soft wire. Measures 4-1/2" long. Made in Sweden.

			Each		
Description	Jaw Size (L x W)	SKU	1-2	3-9	10+
Oblique	14mm	182-7231			

E Barracuda Diagonal Nipper

Flush-cutting nipper made of tool steel alloy. Features 61-63 HRC cutting edges, lap joint, double leaf springs and cushion-grip handles. Cuts up to 26 AWG or 0.40mm hard wire. Measures 4-1/2" long.

			Each		
Description	Jaw Size (L x W)	SKU	1-2	3+	
Diagonal	1/2"	181-4094			

F Diagonal Cut Nipper

Cut sprues up to 3mm with less hand strain. Features a heavy-duty spring that opens jaws for repetitive use. Measures: 5-1/2" with 15mm long jaws. Comes with nickel-plated handles.

			Each		
Description	SKU		1-2	3-9	10+
Diagonal Nipper	181-4050				

G Carbide Diagonal Cut Nipper

Cuts up to 12-gauge nonferrous metal. Features PVC cushion grip handles and return springs. Measures 5-1/2" long. Made in Pakistan.

			Each		
Description	SKU		1-2	3+	
Carbide Diagonal Cut Nipper	181-4095				



A



B



C



D



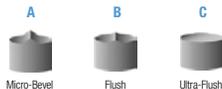
E



F



G



A-C Lindstrom Tapered Diagonal Head Cutters

The small, tapered heads of these flush cut diagonal cutters are perfect for accessing narrow, confined spaces. Features precision-ground, black oxidized cutting edges for exceptional cutting accuracy and durability, adjustable screw lap joints, double leaf return springs, and yellow plastic grips. Measures 4-1/2" and Jaw Size 10.5 x 8mm.

Description	Cut	SKU	Each	
			1-2	3+
A #8143	Micro-Bevel	182-8143		
B #8144	Flush	182-8144		
C #8145	Ultra-Flush	182-8145		



D The EDGE Dura Shear Cutters

The EDGE line of shear cutters TAPERED HEAD Dura Shear #6151 The EDGE Dura Shear Cutters offer durability like no other. Their machine-ground symmetrical edge angles with bevels deliver a consistent Micro EDGE cut result, suitable for fine cutting work on sensitive electronics with a tapered head that facilitates access to compact spaces.

Description	SKU	Each	
		1-2	3+
Dura Shear Cutters	182-6151		



E The Flush EDGE Accu Shear Cutters

Accu Shear #6152 The Flush EDGE Accu Shear Cutters are the ultimate cutting tool for executing precise cuts. The by-pass cutting technology produces an extremely clean, flush cut of the workpiece, thanks to the unique EDGE shear misalignment of the induction-hardened cutting blades with non-beveled edges. Perfect fine mechanics, radio technicians, industrial electricians, mechatronics engineers and electronics engineers.

Description	SKU	Each	
		1-2	3+
Accu Shear Cutters	182-6152		



F POINTY HEAD Peak Shear #6159

POINTY HEAD Peak Shear #6159 The EDGE Peak Shear Cutters offer outstanding accessibility for applications ranging from microscopy to micro-electronics applications. This model's unique, pointy head, symmetrical tips and non-beveled blades provide maximum access and reach and allow users to get underneath delicate components and execute Flush EDGE cuts on hard-to-access wires.

Description	SKU	Each	
		1-2	3+
Peak Shear Cutters	182-6159		



G Wire Twisting Pliers

Twists wire up to .060-gauge with simple one-pull action. Produces durable strands that won't unravel. Hardened and tempered. Measures 9" long.

Description	SKU	Each
Wire Twisting Pliers	180-4095	

A Xuron 9180NS HD Scissors/Shear

A heavy-duty pair of scissors (Non-serrated blade) – excellent for jewelers and metalsmiths for cutting thin sheets of soft metal or lead up to 0.030"/20 ga. (0.8mm) thick. Also cuts jump rings leaving a flat end on both sides of the wire ring. Manufactured from heat-treated high carbon steel, this pair of scissors is durable and strong. Designed for left or right handed use, the built-in return spring always brings the blades back to the open position. Jaw size: 19mm x 10mm. Overall Length: 6"

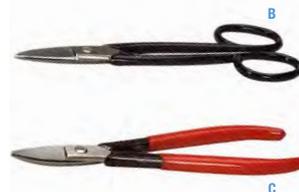
Description	SKU	Each
Xuron 9180NS HD Scissors/Shear	181-0218	



B-C Lightweight Metal Snips

For cutting templates and patterns from medium-hard metal sheet up to B&S 20 or from soft sheet up to B&S 16. Available with either straight blades for making straight cuts or curved blades for cutting circular shapes. Also choose between looped and plain handles. Measure 7" long with 1-1/2" long blades. Made in Germany.

Description	SKU	Each
B Straight Snips with Looped Handles	819-0150	
Straight Snips with Plain Handles	819-0100	
Curved Snips with Looped Handles	819-0200	
C Curved Snips with Plain Handles	819-0050	



D Micro Beading Snips

Use these snips to cut cords and snip apart knotted strands for restringing. Reflex action lets you do light work quickly and easily. Measure 3-1/2" long with 1-1/8" long blades.

Description	SKU	Each
Micro Beading Snips	819-0210	



E Precision Scissors

Lightweight, maneuverable scissors for easy cutting in tight spaces. Feature small (1-1/4" long) pointed blades made of high-quality stainless steel, large contoured ABS plastic handles and rivet and nylon washer assembly for smooth action. Measure 4-1/4" long.

Description	SKU	Each
Precision Scissors	819-0110	



F Crown Scissors

Stainless steel scissors with small (1" long) blades and large looped handles. Can be used on soft wire and very light metals. Great for cutting around bezels. Measure 4-1/2" long.

Description	SKU	Each
Crown Scissors	819-0115	

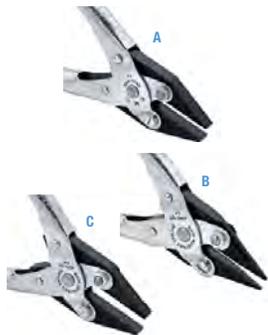


G Short-Blade Scissors

Feature small (1" long), sharp blades with fine points for easy cutting in the tightest spaces. Excellent for cutting thread, ribbon and bead cord. Measure 3-1/2" long. Stainless Steel.

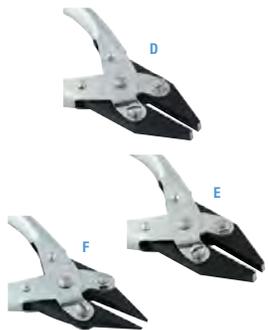
Description	SKU	Each
Short-Blade Scissors	819-0125	



**A-C Maun Pliers**

Maun parallel action pliers are known worldwide for their open throat design which allows wire to be fed through the throat and then firmly and securely held along the entire length of the jaw. Extremely useful when working with long wire. The box joint construction keeps the pliers aligned. Their smooth jaws are case hardened to HRC-57 and open to a maximum of 10mm (0.394"). Metal, zinc-plated handles are detailed for added grip. Rust proof finish. Made in England.

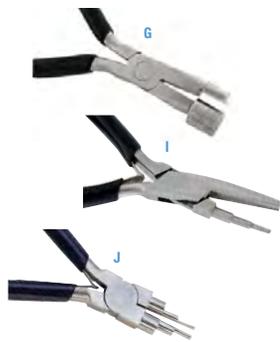
Description	Jaw Length	Overall Length	SKU	Each		
				1-2	3-9	10+
A Half-Round/Flat	22mm (0.866")	140mm (5.5")	181-1000			
B Chain Nose	30mm (1.8")	125mm (4.9")	181-1010			
C Flat Nose	30mm (1.8")	125mm (4.9")	181-1020			

**D-F Parallel-Jaw Pliers**

Feature jaws that stay parallel along their entire lengths whether opened or closed for positive grip of square and hexagonal components. Have nickel-plated sealed handles with anti-rust finish and fully heat-treated black jaws.

Available in two styles: flat and chain. Flat pliers come with smooth or serrated jaws that open to 7/16" (11mm). Serrated version has a single longitudinal V-slot. Chain pliers come with smooth jaws that open to 3/8" (10mm) and measures 3/32" (2mm) square at each tip. Both styles allow wire to be fed through the throats from either end and held firmly over full jaw lengths. Overall length: 5".

Description	SKU	Each		
		1-2	3-9	10+
D Flat Pliers w/smooth jaws	181-1035			
E Flat Pliers w/serrated jaws	181-1030			
F Chain Pliers w/smooth jaws	181-1060			

**G-I Looping Pliers**

These pliers were developed for the jewelry trade, but are so useful when working with wire, many other fields are using them to bend wire. All made of stainless steel.

Wrap and Tap Barrel Pliers: Size 14mm and 19mm

Wire Looping Pliers: Sizes 5, 7 and 10mm.

Multi-Size Wire Looping Pliers: Sizes 2.4, 3.4, 4.4, 6.4, 8.35 and 9.35mm.

Description	Joint Type	Leaf Springs	Length	SKU	Each
G Barrel - 14mm	Lap	No	6"	180-0160	
H Barrel - 19mm	Lap	No	6"	180-0161	
I Wire Looping	Box	Yes	5-5/8"	180-0035	
J Multi-size	Box	Yes	6"	180-0036	

A Econo Bow Closing Pliers

Use these stainless steel box-joint pliers for closing loops, rings, bows and more.

Description	SKU	Each	
		1-2	3+
Econo Bow Closing	180-0355		

**Nylon-Jaw Pliers**

Heavy-duty stainless steel pliers with box joints and plastic comfort grips. Feature replaceable nylon jaws for gripping firmly without marring. Can be easily customized by filing or carving. Measures 5-3/4" long unless otherwise noted. Made in Pakistan.

B Flat Pliers

For general-purpose work. Jaw size: 1" L x 7/16"W.

Description	SKU	Each
B Flat Pliers	180-0001	
Replacement Jaws, pair	180-0002	

**C Bending Pliers**

Feature a gentle arch for shaping and reshaping bracelets. Have a pronounced curve for bending ring sizes 6-1/2 and larger.

Description	SKU	Each
C Bracelet Bending Pliers	180-0282	
Replacement Jaws, pair	180-0283	
Ring Bending Pliers	180-0286	
Replacement Jaws, pair	180-0287	

**D Ring Closing Pliers**

Commonly used to reshape or close rings after sizing. Bottom jaw is nylon with V-groove. Top jaw is polished stainless steel.

Description	SKU	Each
D Ring Closing Pliers	180-0288	
Replacement Jaws, pair	180-0289	

**E Ring Holding Pliers**

Feature parallel nylon jaws for holding rings securely while working the inside.

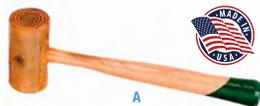
Description	SKU	Each
E Ring Holding Pliers	180-0284	
Replacement Jaws, pair	180-0285	

**F Spring Bar Bending Pliers**

These unique and practical spring bar bending pliers delicately bend spring bars of any size to the proper shape. Feature stainless steel box-joint construction with high-impact grooved nylon jaws that hold the spring bar in place while bending. Measure 5" long.

Description	SKU	Each
Spring Bar Bending Pliers	180-0294	

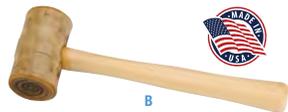




A Weighted Rawhide Mallets

Feature heads made of lead strips surrounded by multiple layers of tough water buffalo hide with screw fastening for great longevity. Deliver extra-strong blows without scratching fine work surfaces. Hickory handles. Made in USA.

Head Dia. x L	Head Wt.	Length	SKU	Each	
				1-2	3+
1-1/4" x 2-1/2"	8 oz.	9-1/4"	821-8000		
1-1/2" x 3"	12 oz.	10"	821-8001		
1-3/4" x 3-3/8"	16 oz.	11-1/2"	821-8002		
2" x 3-1/2"	20 oz.	12"	821-8003		



B Rawhide Mallets

Compressed rawhide mallets for use when extra care must be taken not to mar the work surface. Hickory handles. Most popular size for general purpose work is 1-1/2" x 3". Made in USA.

Head Dia. x L	Head Wt.	Length	SKU	Each	
				1-2	3+
1" x 2"	2-1/2 oz.	8"	821-8800		
1-1/4" x 2-1/2"	4-1/2 oz.	9"	821-8850		
1-1/2" x 3"	6 oz.	10"	821-8900		
1-3/4" x 3-1/2"	9-1/2 oz.	11"	821-8950		
2" x 3-1/2"	12 oz.	11-3/4"	821-9000		
2-3/4" x 4-1/4"	1-1/2 lbs.	13-1/2"	821-9050		



C Polyethylene Mallet

Made of dense, nonporous polyethylene, which is nonmarring and easy to clean. Hickory handle. Made in USA.

Head Dia. x L	Head Wt.	Length	SKU	Each	
				1-2	3+
1-3/4" x 3-7/8"	8 oz.	11-1/4"	821-8790		



D Del Rey™ Nylon Dead Blow Mallet

Use to strike metal to bend, form, forge, flatten and shape. The dead-blow with shot increases the power of the strike while reducing recoil. Also known as a shot hammer or mallet. Hickory wood handle.

Head Dia. x L	Head Wt.	Length	SKU	Each	
				1-2	3+
25mm x 4-1/4"	9 oz.	12"	821-7054		
30mm x 4-1/2"	12 oz.	13-1/2"	821-7055		
35mm x 4-1/2"	16 oz.	13-1/2"	821-7056		
40mm x 4-1/2"	20 oz.	13-1/2"	821-7057		



E Econo Goldsmith Hammer

Polished economy steel hammer with flat and chisel faces for riveting, shaping and forming; mounted on a sturdy wooden handle. Made in India.

Description	SKU	Each
Econo Goldsmith Hammer	821-8236	

A-B Brass and Nylon Mallets

Feature replaceable brass and nylon faces. Hardwood handles. Made in India.

Head Dia. x L	Head Wt.	Length	SKU	Each
A 3/16" x 2"	2-1/2 oz.	9"	822-0010	
B 5/16" x 2-3/8"	5 oz.	9"	822-0015	
Replacement Face		Type	SKU	Each
3/16" dia.		Brass	822-0020	
3/16" dia.		Nylon	822-0025	
5/16" dia.		Brass	822-0030	
5/16" dia.		Nylon	822-0035	



C-D Brass Mallets with Wooden Handles

Feature small brass heads. Will not mar steel. Hardwood handles.

Head Dia. x L	Head Wt.	Length	SKU	Each
C 1-1/16" x 2" USA	4 oz.	8-1/4"	822-0040	
D 1/2" x 2" Imported	2 oz.	9-1/2"	822-0042	

E Economy Ball-Peen Hammers

Steel hammers with flat and ball-peen faces. Wooden handles. Imported.

Head Dia. x L	Head Wt.	Length	SKU	Each
1/2" x 2"	2 oz.	10-1/2"	821-8050	
3/4" x 2-3/4"	4 oz.	10-1/2"	821-8100	
7/8" x 3"	8 oz.	10-1/2"	821-8150	



F Plastic Mallet

Features nonmarring plastic head with flat faces. Hardwood handle. Made in Germany.

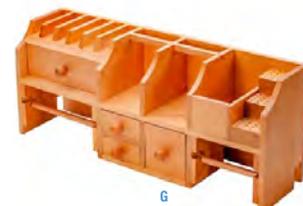
Head Dia. x L	Head Wt.	Length	SKU	Each
3/4" x 2-3/4"	5-1/2 oz.	10-1/2"	821-8795	



G Benchtop Organizer

Organizer measures 18-3/4"W x 4-3/4"D x 7-1/4"H and is manufactured out of solid beech wood. A great compliment to any work area! Made in India.

Description	SKU	Each
Benchtop Organizer	816-4054	



Peddinghaus Hammers

German made Peddinghaus hammers are crafted using the time-tested process of forging. These high-quality hammers are not cast. Finely balanced with curved ash handles, they are the choice of metal smiths for riveting, forming, embossing, grooving and raising. These hammers are manufactured in accordance with strict ISO and DIN standards. Made in Germany.



A Peddinghaus Polishing Hammer

Fine steel hammer with highly polished lightly bowed (24mm dia.) and heavily bowed (24mm dia.) faces. Solid ash handle. Meets strict ISO and DIN standards. Made in Germany.

Head Length	Head Wt.	Length	SKU	Each	
				1-2	3+
104mm	8-3/4 oz.	11-3/4"	821-7026		



B Peddinghaus Chasing Hammer

Fine steel hammer with two satin-polished differently bowed (15 and 20mm thick) faces. Solid ash handle. Meets strict ISO and DIN standards. Made in Germany.

Head Length	Head Wt.	Length	SKU	Each	
				1-2	3+
117mm	14 oz.	12-1/4"	821-7025		



C Peddinghaus Goldsmith's Hammer

Fine chrome-plated steel hammer with highly polished flat and chisel faces. Solid ash handle. Meets strict ISO and DIN standards. Made in Germany.

Head Length	Head Wt.	Length	SKU	Each	
				1-2	3+
16 x 90mm	2-3/4 oz.	11-1/2"	821-7020		



D Peddinghaus Embossing Hammers

Fine steel HB hammer with two highly polished heavily bowed (18 and 21mm dia.) faces. Fine steel DB hammer with two highly polished differently bowed (11 and 14mm dia.) faces. Solid ash handle. Meets strict ISO and DIN standards. Made in Germany.

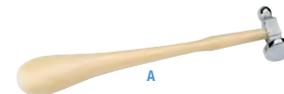
Head Length	Head Wt.	Length	SKU	Each	
				1-2	3+
135mm	7 oz.	11"	821-7021		



A Economy Chasing Hammer

Has flat face for striking chasing tools and polished ball-peen face for hammering directly on metal. Wooden handle. Imported.

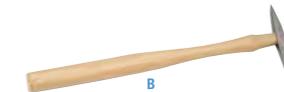
Head Dia.	Head Wt.	Length	SKU	Each
1-1/8"	4 oz.	10-1/2"	821-8253	



B Riveting Hammers

Polished steel hammers with flat and chisel faces. Wooden handles. Made in USA.

Head Dia. x L	Head Wt.	Length	SKU	Each
3/8" x 2-3/4"	2-1/2 oz.	10"	821-8600	
1/2" x 3-1/2"	4 oz.	10"	821-8650	
9/16" x 4"	5 oz.	10"	821-8700	
5/8" x 4-1/4"	7 oz.	10"	821-8750	



C Riveting Hammer

Made of hardened steel for solid striking force. One end flat, other chisel-shaped. Wooden handle. Head length: 80mm long. Face dimensions: 15mm square. Made in Germany.

Head Dia. x L	Head Wt.	Length	SKU	Each
1/2" x 3-5/32"	3.5 oz.	10-1/8"	821-8625	



D Planishing Hammer

Precision-ground and hardened steel domed hammer with polished face. Domed style has flat and slightly domed round faces. Solid ash handle. Made in Germany.

Head Dia. x L	Head Wt.	Length	SKU	Each
7/8" x 33/4"	12 oz.	11 1/2"	821-8242	



E UFO Hammer with Three Faces

One hammer that does work of three! This unique hammer features an egg-shaped head with three different removable faces: brass, nylon and steel. Has ergonomic vibration-dampening handle for comfortable grip. Made in Taiwan.

Description	Head Dia. x H	Head Wt.	Length	SKU	Each
E UFO Hammer	7/8" x 3/8"	4.5 oz.	8-3/4"	822-0050	
Replacement Brass Face				822-0051	
Replacement Nylon Face				822-0052	
Replacement Steel Face				822-0053	



F Thirteen-In-One Texturing Hammer

Make your jewelry come alive by creating designs and textures with this easy-to-use texturing hammer with 13 interchangeable faces. This great bench tool is simplistic and you can work with two designs at a time. Change the textured faces easily by loosening the nut holder and swapping out the texturing face. The 13 faces and head are tool hardened steel, nylon and brass. The head is mounted in a sturdy hardwood handle. The perfect combination to create endless custom designs with five smooth and eight textured faces. Made in India.

Description	SKU	Each
Thirteen-In-One Texturing Hammer	822-0055	



Sawblade Specifications

Blade Size	Blade Thickness	Blade Depth	Approx. Teeth per inch	Recommended for (B&S) Gauge	Drill Size for Piercing
8/0	.0063"	.0126"	89	up to 26	80
7/0	.0067"	.0134"	86	24-26	80
6/0	.0071"	.0142"	81	24	79
5/0	.0079"	.0157"	76	22-24	78
4/0	.0087"	.0173"	71	22	77
3/0	.0094"	.0189"	66	22	76
2/0	.0102"	.0205"	61	20-22	75
0 (1/0)	.0110"	.0220"	56	18-22	73

A Super Pike Sawblades

These quality Swiss blades stand out as the finest quality and stay sharper far longer (sharper teeth) than competitive saw blades. Manufactured slightly differently with an added heat treatment process which makes these blades harder and quite flexible, but not more fragile thus allowing you to saw harder materials. These blades are also given a thin coating that acts like a cutting lubricant making them cut with less resistance. Made in Switzerland. Sold by the gross (144 each).

Size	SKU	Dozen	Gross Prices		
			1-2	3-5	6+
10/0	185-1495				
8/0	185-1500				
7/0	185-1501				
6/0	185-1502				
5/0	185-1503				
4/0	185-1504				
3/0	185-1505				
2/0	185-1506				
0 (1/0)	185-1507				
1	185-1508				
2	185-1509				
3	185-1510				
4	185-1511				
5	185-1512				
6	185-1513				
8	185-1515				

B Skip-Tooth Sawblade

Designed for smooth wax cutting. Teeth are widely spaced to prevent clogging. Measures 13cm (5-1/4") long. Sold by the dozen (12 each).

Description	SKU	Dozen Prices	
		1-2	3+
Skip-Tooth Sawblade	186-9060		

C Spiral Sawblade

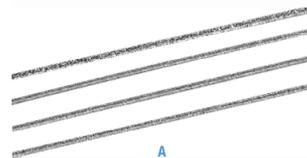
For cutting hard wax models. Teeth are spaced to prevent clogging. Circular design permits cutting in all directions. Measures 13cm (5-1/4") long. Sold by the dozen (12 each).

Description	SKU	Dozen Prices	
		1-2	3+
Spiral Sawblade	186-9050		

A Diamond Saw Blades

Consist of piano wire electroplated with diamond particles. Make quick work of sawing glass, ceramic and stones. Available in four grits. Fit standard sawframes. Measure 5-3/8" long. Plated portion measures approx. 3" long. Sold individually.

Description	Approx. Diameter	SKU	Dozen Prices	
			1-2	3+
60 Coarse	0.058"	226-1500		
100 Medium-Coarse	0.048"	226-1505		
120 Medium	0.045"	226-1510		
140 Medium-Fine	0.043"	226-1515		



B Herkules® White Label Saw Blades

High-quality sawblades made of a special alloy steel. Feature teeth that are uniform in size, shape and sharpness for fast, easy cutting. Can be used on both hand- and power-driven tools that have a blade clamping device. Measure 13cm (5-1/4") long. Made in Germany. Sold by the dozen (12 each) or the gross (144 each).

Size	SKU	Dozen	Gross Prices		
			1-2	3+	6+
10/0	185-0099				
8/0	185-0080				
7/0	185-0070				
6/0	185-0060				
5/0	185-0050				
4/0	185-0040				
3/0	185-0030				
2/0	185-0020				
0 (1/0)	185-0010				
1	185-0100				
2	185-0200				
3	185-0300				
4	185-0400				
5	185-0500				
6	185-0600				
7	185-0700				
8	185-0800				
10	185-1000				
12	185-1200				
14	185-1400				



C SUPRA® Golden Piercing Sawblades – The World's Finest Sawblades at Great Prices!

Extremely flexible straw-colored sawblades made of the finest steel using the latest technology. Cut straight and stay sharp. Can be used on both hand- and power-driven tools that have a blade clamping device. Measure 13cm (5-1/4") long. Made in Germany. Sold by the gross (144 each).

Size	SKU	Gross Prices			Size	SKU	Gross Prices		
		1-2	3-5	6+			1-2	3-5	6+
6/0	187-0060				2/0	187-0020			
5/0	187-0050				0 (1/0)	187-0010			
4/0	187-0040				1	187-0100			
3/0	187-0030				2	187-0200			
					3	187-0300			



**A Razor Saw**

A must for cutting metal, wood and plastic rod and tubing. Features specially hardened, rigid thin blade with fine teeth (32 teeth per inch) ideal for making straight cuts. Lets you cut with light pressure to prevent tubing collapse. Measures 9-1/8" overall length. Blade measures 4-1/2"L x 7/16"D.

Description	SKU	Each
Razor Saw	812-1281	

**B Medium Adjustable Saw Frame - With End Screw**

Quality steel sawframe with end screw and comfortable wooden handle. Holds sawblades up to 6" long. End screw allows precise adjustment of blade tension. Imported.

Description	Depth	SKU	Each	
			1-2	3+
Medium Adjustable Saw Frame	2-7/8"	187-1026		

**C-E Flat Sawframes**

Quality adjustable steel frames in four convenient sizes. Feature thumbscrews for quick tightening and loosening of sawblades and hardened steel plates with serrated surfaces for firmly holding sawblades up to 6" in length. Adjust to allow use of broken sawblades. Have comfortably shaped hardwood handles. Imported.

Description	Depth	SKU	Each	
			1-2	3+
D Small Flat	2-1/4"	187-1159		
Medium Flat	2-7/8"	187-1160		
D Large Flat	3-3/4"	187-1170		
E X-Large Flat	4-3/4"	187-1171		

**F-G Swiss Sawframes**

Spring steel frames with aluminum guide posts and guides, holes at both ends for quick blade insertion and perfect alignment every time. Feature easy-lock mechanism that prevents wobble, reducing blade breakage. Have ultra-lightweight rubber-coated sure-grip handles for easier cutting and reduced arm fatigue. Available fixed for standard 5-1/4" sawblades or adjustable for broken blades. Made in Switzerland.

Description	Depth	SKU	Each	
			1-2	3+
F Adjustable Swiss	2-3/4"	187-1120		
G Fixed Swiss	2-3/4"	187-1122		

Lindstrom® High-Precision Tweezers

Handcrafted to perfect tip symmetry and balance, polished edges, superior no-scratch/anti-glare satin finish. Many styles and materials are available for the special needs of industry, electronic and medical device manufacturers. **SA = Stainless Steel Anti-magnetic.** Good corrosion resistance. The alloy is low carbon and contains 16.5% to 18.5% chromium plus nickel and molybdenum. Made in Switzerland.

A Style #00

Tips	Length	SKU	Each
SA-SL Strong, flat edge, thick	120mm (4-3/4")	195-1176	

B Style #1

Tips	Length	SKU	Each
SA-SL Strong, straight, fine	120mm (4-3/4")	195-1160	

C-D Style #3C and #3

Tips	Length	SKU	Each
C 3C SA-SL Very sharp, fine	110mm (4-1/4")	195-1164	
D 3 SA-SL Very sharp, fine	120mm (4-3/4")	195-1166	

E Style #5

Tips	Length	SKU	Each
SA-SL Extra fine, superior finish	110mm (4-1/4")	195-1170	

F Style #7

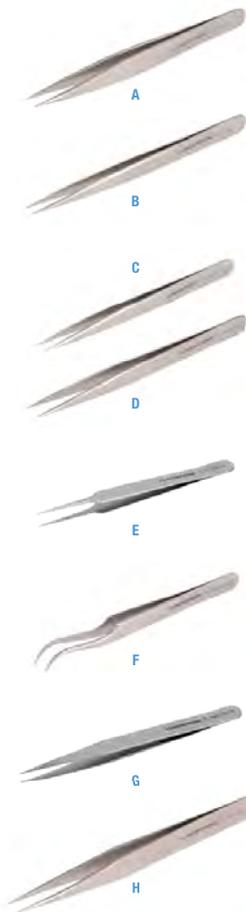
Tips	Length	SKU	Each
SA-SL Very fine, curved	115mm (4-1/2")	195-1172	

G Style #MM

Tips	Length	SKU	Each
SA-SL Strong, fine	120mm (4-3/4")	195-1192	

H Style #5-SA-SL

Tips	Length	SKU	Each
SA-SL Straight fine	128mm (5")	195-1178	



Dumont® High-Tech Tweezers

Manufactured by the original Swiss Dumont factory. Forged from premium-grade stainless steel unless otherwise noted and machined to a smooth satin finish. Extensive hand operations are used in shaping, adjusting and finishing the points. Ideally suited for holding miniature parts, gemstones, etc.

A Dumont® 3C

For handling all miniature and micro-miniature parts. They have tapered shanks with bevel edges; points have been honed and are very sharp. Measure approximately 4-1/4" long. Stainless steel.

Description	SKU	Each		
		1-2	3-9	10+
Style 3C	195-0400			

B Dumont® 5

Very narrow, needle-like points have been extra-honed to extreme sharpness. Ideally suited for handling microscopic parts and delicate work. Indented shanks with bevel edges. Measure approximately 4-1/4" long. Stainless steel.

Description	SKU	Each		
		1-2	3-9	10+
Style 5	195-0392			

C Dumont® 7

Excellent tweezers for handling all miniature and micro-miniature parts and components. The curved shanks permit the user to rest active hand on the bench during assembly operations. Points have a plain finish and are very sharp. Measure approximately 4-1/2" long. Stainless steel.

Description	SKU	Each		
		1-2	3-9	10+
Style 7	195-0395			

D-E Dumont® PP and SS

Style PP is for sorting, assembling and handling miniature parts. Have tapered shanks with bevel edges. Points are sharp. Style SS is similar to PP but is very slim. Measure approximately 5-3/8" long. Stainless steel.

Description	SKU	Each		
		1-2	3-9	10+
D Style PP	195-0410			
E Style SS	195-0405			

F Dumont® P

Have extremely hard regular points for general work. Good when rust and corrosion are not significant factors. Measure approximately 4-3/4" long. Carbon steel.

Description	SKU	Each		
		1-2	3-9	10+
Style P	195-0340			

G Dumont® Titanium – Lightweight

These 100% nonmagnetic tweezers are made of titanium, which is 60% stronger and 40% lighter than steel, for superior durability and a more delicate touch. Feature finely honed tips.

Description	Length	SKU	Each		
G Style 3	4-3/4"	195-3281			

A-E Dumont® Serrated Tip Diamond Tweezers

The finest in the industry. Precision-made with perfect alignment at the tips. Tips are serrated at a perpendicular angle for the best grip possible. Available in medium (M), medium grooved (MG), or fine (F) points, with or without a locking mechanism. All measure 6-1/2" long except the grooved which is 5-7/8" long. Made of stainless steel. Made in Switzerland.

Tips	Locking	Finish	SKU	Each		
				1-2	3-9	10+
A F	No	Stainless	195-0350			
B M	No	Stainless	195-0355			
C MG	No	Stainless	195-0356			
D F	Yes	Stainless	195-0360			
E M	Yes	Stainless	195-0365			

F-K Economical Diamond Tweezers

Value-engineered for precision work. Available in locking or non-locking, fine (F) or medium (M) points. All have serrated tips and measure 6-3/8" long.

Tips	Locking	Finish	SKU	Each		
				1-2	3-9	10+
F F	No	Stainless	195-0334			
G F	No	Black	195-0335			
H M	No	Stainless	195-0336			
I M	No	Black	195-0337			
J F	Yes	Stainless	195-0330			
K M	Yes	Stainless	195-0332			

L Diamond Tweezers with Shovel

Stainless steel nonlocking tweezers with medium serrated tips and shovel attached to end for convenient handling of stones and beads. Measure 7-1/8" long.

Description	SKU	Each		
Diamond Tweezers with Shovel	195-0331			

M Dumont® Boley Style Tweezers AA

Superbly machined Swiss tweezers. Made of stainless steel for very fine sorting, inspection and handling of miniature parts. The sharp points have received some finishing at the tips. Excellent for use under low-power magnification. Style AA is for general use. Measure approximately 5" long.

Description	Length	SKU	Each		
			1-2	3-9	10+
Style AA	5"	195-1050			

N Dumont® Carbon #1 Tweezers

Dumont Tweezers Style #1 are made of carbon steel, a very strong metal that allows for the very finest points of any tweezers. Points measure 0.10mm x 0.17mm. Made in Switzerland.

Description	Length	SKU	Each		
			1-2	3-9	10+
Style #1	120mm	195-0345			





A-B Boley Style Tweezers RR and MM

These stainless steel general-utility tweezers are excellent general utility tweezers for handling miniature parts. All shanks are tapered and have bevel edges. The sharp points have received some finishing at the tips. Style RR is a hefty, heavy-duty tweezers with wide shanks. Style MM is for general use.

Description	Length	SKU	Each		
			1-2	3-9	10+
A Style RR	5-1/2"	195-1300			
B Style MM	5"	195-1200			



C Utility Tweezers

Straight nickel plated steel tweezers with smooth tips. Measure 7" long.

Description	Length	SKU	Each		
Utility Tweezers	7"	195-3052			



D Bead Stringing Tweezers

Feature narrow tapered ends for easy knot tying. Made of stainless steel with nonglare satin finish. Measure 4-1/2" long.

Description	SKU	Each		
Bead Stringing Tweezers	195-1355			



E Economical Tweezers

Economical steel tweezers. Hand-finished, pointed tips. Good for working with miniature parts under low magnification. Measure 5" long.

Description	Length	SKU	Each		
			1-2	3-9	10+
Economical Tweezers	5"	195-1350			



F-G D-Master Soft Tip Tweezers

These stainless-steel tweezers have polypropylene jaws and the medium point tips are manufactured from an ESD safe elastomer material. Overall length is 125mm (5") with an opening tip width of 10mm (0.40").

Description	Length	SKU	Each		
F Soft Tip Tweezers	5"	195-1340			
G Replacement Tips		195-1341			



H Plastic Tweezers

Synthetic nonconductive tweezers ideal for changing watch batteries. Measure 5" long. Imported.

Description	Length	SKU	Each		
			1-2	3-9	10+
Plastic Tweezers	5"	195-3262			

A Stand-Up Cross-Locking Tweezers

Free hands for soldering. Tweezers lie flat to hold piece about 1" off soldering board. Tips are serrated. Made of stainless steel. Measure 6-1/4" long.

Description	SKU	Each		
		1-2	3-9	10+
Stand-Up Cross-Locking Tweezers	195-0325			

B-D Cross-Locking Tweezers

Tips close automatically when pressure is released from the handles. Most often used to hold objects for soldering; however, also used in a variety of general applications. Excellent heat sink when soldering. Nickel-plated.

Points	Length	SKU	Each		
			1-2	3-9	10+
B Pointed	4-3/4"	195-1375			
C Pointed	6-1/2"	195-1450			
D Blunt	6-1/2"	195-1400			

E-F Insulated Cross-Locking Tweezers

Similar to standard cross-locking tweezers, but handles are insulated to protect hands from heat of soldering flame. Stainless steel with serrated tips.

Points	Length	SKU	Each		
			1-2	3-9	10+
E Straight	6-3/4"	195-2050			
F Curved	6-3/4"	195-2075			

G Third Hand

Ideal for soldering difficult pieces. Leaves hands free. Heavy cast-iron base securely holds a cross-locking tweezers. Tweezers may be angled in any direction for most convenient working position.

Description	SKU	Each		
Third Hand	816-1800			

H Third Hand – Ball Style

This remarkable third hand features incredibly flexible positioning and ease of use to speed up your soldering jobs. Twist and turn the ball joint to any position and it stays fixed without slipping. This economic alternative to the magnetic third hand, automatically provides the right amount of tension to hold and move your work without continuous adjustment. Includes 6" self-locking tweezers.

Description	SKU	Each		
Single	816-1822			

I-JI Copper Tongs

Designed especially for use with pickling and acid solutions. Will not contaminate solutions nor corrode. Fishtail tips are thinner to pick up small or flat items. Measure 9" long.

Description	SKU	Each	
		1-2	3-9
I Copper Tongs	195-0100		
J Copper Fishtail Tongs	195-0110		





A Head-and-Shank Tweezers

Position setting and shank for easy soldering of solitaires. Curved, grooved tip securely holds shank; flat serrated base prevents slippage. Slide-locking. Made of stainless steel. Measure 5-1/2" long. Made in Switzerland.

Description	SKU	Each
H&S Tweezers	195-3000	



B Econo Head-and-Shank Tweezers

Use these slide-locking tweezers to hold rings for easy soldering of solitaires. Curved, grooved tip securely holds ring shank while flat serrated base prevents slippage. Made of steel. Measure 5-1/2" long.

Description	SKU	Each		
		1-2	3-9	10+
Econo H&S Tweezers	195-3005			



C LaVaque Head & Shank Tweezers with Visual Alignment

If you've ever soldered a head onto a shank only to find it misaligned by a few degrees, you'll love these tweezers. Feature patented LaVaque visual alignment for soldering settings accurately the first time, every time. Curved, grooved tip securely holds the shank in place while the transparent glass base secures the head, allowing you to see from the top and all sides for perfect alignment. Replaceable high-temperature glass withstands direct flame and soldering temperatures required for gold and silver, lasting for dozens of jobs. Not recommended for platinum and other metals that require higher soldering temperatures.

Description	SKU	Each
LaVaque Head & Shank Tweezers	195-3500	
LaVaque Replacement Glass	195-3505	



D Cup-Shaped Pearl Tweezers

Tweezers with cup-shaped ends for holding pearls, beads and more. Coated tips prevent scratching of delicate surfaces. Measure 5-3/4" long.

Description	SKU	Each		
		1-2	3-9	10+
Cup-Shaped Pearl Tweezers	195-0310			



E Hand Vise Wide Nose with 5/8" Jaws

5/8" wide jaws. Hollow handle opens to 1/4", 3/16" gap. Overall length: 4-1/2".

Description	SKU	Each
Hand Vise Wide Nose with 5/8" Jaws	820-4150	

A-B Vacuum Tweezers

Gesswein's Vacuum Tweezer offers unmatched precision over standard tweezers. The self-contained miniature vacuum pump has 2 handpieces.

Comes complete with 4 stainless steel tips (2 Each of 1.2mm and 0.9mm) for holding stones of various sizes. Vacuum is created by placing the forefinger over a hole in the handpiece. To break the vacuum, place the stone where you want it to be placed and simply lift your finger from the hole. The vacuum generator measures just 5" long x 3-3/4" wide x 2" high with an airflow of 125 cu. in/min. 110V. Shipping Weight: 1.2 lbs. Made in Thailand.

Includes :

- Vacuum Unit with 2 Inlet Holes
- 2 pencil-thin, lightweight aluminum pens
- 4 stainless steel tips (2 Each of 1.2mm and 0.9mm)
- 2 flexible air tubes each measuring 36" in length

Description	SKU	Each
A Vacuum Tweezers	195-3307	
Replacement Pens Set of 2	195-3006	
B Replacement Tips Set of 4 (2 of each)	195-3007	



C-D Premium Steam Tweezers

The premium coating on tips provides chemical resistance for long wear and use. Use with steam cleaners and ultrasonic cleaners for non-scratch retrieving. Made of Nickel plated steel. Available in 8" or 10" lengths. Rubber coating is 3" length. Made in Pakistan.

Description	SKU	Each	
		1-5	6+
C Premium Steam Tweezers, 8"	195-1904		
D Premium Steam Tweezers, 10"	195-1905		



E Long-Reach Tweezers

Made of stainless steel. Ideal for holding pieces while they are being cleaned. Heat-resistant plastic-covered tips for firm grip on work piece without scratching. Chrome-plated. Measure 10" long. Made In India.

Description	SKU	Each		
		1-2	3-9	10+
Long-Reach Tweezers	195-1900			

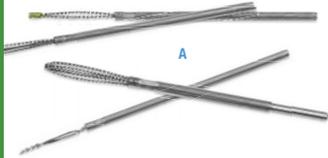


F Long-Reach 12" Steam Cleaning Tweezer

Our 12" long steam cleaning tweezer is made of stainless steel, so it's ideal for holding pieces that are being steam cleaned. The heat-resistant plastic-covered tips offer a firm grip on your workpiece, without scratching. Made in Pakistan.

Description	SKU	Each		
		1-2	3-9	10+
Long-Reach 12" Steam Cleaning Tweezer	195-1901			





A Cross Hole Deburring Tool – 3mm Shanks

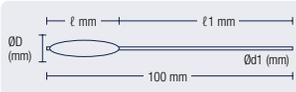
These specialty rods are designed to remove the hard to reach burrs created by cross-drilled holes. Available in 4 shapes: Oval, Cross, Ring, and Thin, and a variety of diameters for different cross hole sizes and shapes.

The cutting wires are made from a slightly flexible, twisted piano wire and measure approx. 0.027" in wire diameter. The wires are more aggressive than brushes, yet less aggressive than traditional cutting burs. These deburring tools work best on harder metals such as steel. Recommended for use in a rotary power tool or CNC machine. 1,000 Max RPM. All rods measure 4" in OAL. 3mm shank diameter.

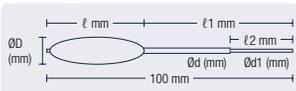
Two kits are available. Cross Hole Small Kit * consists of one each of the smallest of the 4 shapes. Cross Hole 6mm Kit ** consists of one each of the three 6mm size tools. Made in Japan.



3 mm and 4 mm sizes



5 mm and larger sizes



Style	Type/Shape	Fig.	ØD	ℓ	ℓ1	ℓ2	L	Ød	Ød1	SKU	Each
UD-1*	Oval	1	3	30	70	–	100	3	3	846-0103	
UD-2	Oval	1	4	30	70	–	100	3	3	846-0104	
UD-3	Oval	2	5	30	50	20	100	4	3	846-0105	
UD-4**	Oval	2	6	30	50	20	100	5	3	846-0106	
UD-5	Oval	2	7	40	40	20	100	5	3	846-0107	
UD-6	Oval	2	8	40	40	20	100	5	3	846-0108	
UD-7	Oval	2	9	45	35	20	100	6	3	846-0109	
UD-8	Oval	2	10	45	35	20	100	6	3	846-0110	
UD-9	Oval	2	11	50	30	20	100	6	3	846-0111	
UD-10	Oval	2	12	50	30	20	100	6	3	846-0112	
UZ-1*	Cross	2	5	30	70	20	100	4	3	846-0125	
UZ-2**	Cross	2	6	30	70	20	100	4	3	846-0126	
UZ-3	Cross	2	7	30	50	20	100	5	3	846-0127	
UZ-4	Cross	2	8	30	50	20	100	5	3	846-0128	
UZ-5	Cross	2	9	30	50	20	100	6	3	846-0129	
UZ-6	Cross	2	10	30	50	20	100	6	3	846-0130	
UZ-7	Cross	2	11	30	50	20	100	6	3	846-0131	
UZ-8	Cross	2	12	30	50	20	100	6	3	846-0132	
UR-1*	Ring	1	3	30	70	–	100	3	3	846-0143	
UR-2	Ring	1	4	30	70	–	100	3	3	846-0144	
UR-3	Ring	2	5	30	50	20	100	4	3	846-0145	
UR-4**	Ring	2	6	30	50	20	100	4	3	846-0146	
UR-5	Ring	2	7	30	50	20	100	5	3	846-0147	
UR-6	Ring	2	8	30	45	20	100	5	3	846-0148	
UH-1*	Thin	1	2	25	75	–	100	3	3	846-0152	
Cross Hole Small Kit*										846-0095	
Cross Hole 6mm Kit**										846-0096	

B Ceramic Deflashing Tools - Micro Deburring Pen

These tools feature ceramic blades that debur hard plastics effortlessly while eliminating the fear of cutting your hands or fingers in the process. Blade holds its edge indefinitely and provides complete user safety.

Ideal for curved and complicated shapes. Excellent on ultra-hard resins that defy carbon steel tools. Can also be used on soft metals like aluminum, copper and brass.



Description	SKU	Each
B Ceramic Deflashing Tools - Micro Deburring Pen	351-0001	
Ceramic Deflashing Tools - Micro Replacement Blades (Pkg. of 5)	351-0002	
C Ceramic Deflashing Tools - Small Ceramic Deflasher	351-0294	
D Ceramic Deflashing Tools - Large Ceramic Deflasher	351-0295	

A 3-Tube Econo Fluorescent Light

Manufactured of metal construction with a plastic housing for a lighter weight with strong durability. Features a universal clamp for easy installation or you can also purchase an optional screw-in base. The innovative "floating arm" was designed to raise, lower or tilt the lamp to direct the light source with a slight touch. Includes (3) 14W (6400K) T5 fluorescent tubes for maximum brightness and high efficiency. Electrical: 110V with 5 foot power cord, UL approved. Reaches 36" (91cm) x Head Length: 24" (61cm) x Head Width: 4.5" (11.5cm). One-year manufacturer's warranty. Made In China.

Description	SKU	Each		
		1-2	3-5	6+
A 3-Tube Econo Light	821-5002			
Each				
T5 Replacement Bulb	821-5008			
Optional Screw-In Base	821-5014			

B Econo LED Bench Light

Suitable for a bench, workshop or a desktop, our 84-LED bench lamp provides 6000-7000K and both economical and durable. The innovative design enables the user to raise, lower or tilt to direct the light source quickly and efficiently. Features a universal clamp for easy installation. Reaches 36" (91cm) x Head Length: 24" (61cm) x Head Width: 4.5" (11.5cm). One-year manufacturer's warranty. Made in China.

Specifications:

- 84 White LED Bulbs with Diffuser
- Multi-Function dimmer switch
- Energy efficient, 21 Watts (1100 Lumens)
- Ergonomic design and easy to adjust
- Comes with Universal Clamp with a maximum opening of 2.5 inches or optional screw-in base

Description	SKU	Each		
		1-2	3-5	6+
B Econo LED Bench Light	821-5003			
Each				
Optional Screw-In Base	821-5014			

C Econo Fluorescent Magnifying Lamp

The affordable solution for viewing small, detailed areas. Uses a 13W fluorescent tube and 5X lens. Provides cool white light and good magnification to reduce eyestrain, helping you work faster. Flexible 11-1/2" gooseneck allows easy positioning. Weighted metal base with nonslip pad ensures stability. Flip-down cover protects 4" diameter lens from dust when not in use. Electrical: 120V, 60Hz with 5 foot power cord and polarized plug. UL listed. Imported.

Description	SKU	Each
Econo Magnifying Lamp	821-5010	

D Fluorescent Flip Lamp

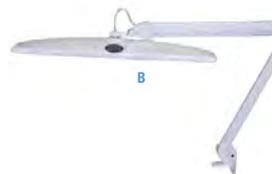
A compact 13W fluorescent lamp ideal for the workshop. Unique swivel arm with 180° range delivers light at the precise angle you need: just raise arm to turn on lamp, and lower to turn off. Easy to use on crowded benchtops. Lightweight yet sturdy. Measures 10-1/2" high with 3-1/4" square base. Electrical: 120V, 60Hz with 6 foot power cord and polarized plug. Imported.

Description	SKU	Each
D Flip Lamp	821-5006	
Replacement Fluorescent Bulb	821-5009	

E Magna Deluxe LED Lamp

Features 14W LED lights (6000K) for bright, crisp lighting. LED's are placed in the 20° swivel head that has a diffuser installed over the LED lights to provide uniform light with maximum surface area. Another added feature includes the ability to dim the light with dimmer knob. Head swivels 310° and tilts 210° for great flexibility. Heavy-duty 32" arm with tempered steel springs and smooth-glide tension control knobs allows easy adjustment. Includes C-clamp for easy mounting on work surface tops up to 2" thick. Electrical: 115V, 60Hz. UL listed. Shipping weight: 7.5 lbs. Made in Taiwan.

Description	SKU	Each
Magna Deluxe LED Lamp	821-5026	





A-B Dazor® Fluorescent 43" Reach Floating-Arm Lamps

Dazor's classic 2-tube and 3-tube fluorescent lamps have been stylishly redesigned and now include mirror reflectors providing even more light than original versions. Complete with superior energy efficient electronic ballasts, these lamps are equipped with the classic patented "floating" arm allowing precise positioning with ease without drifting or bouncing. The lamps are still durable, all metal construction with single click rocker style on/off switch for instant response. Both have a 43" reach, 7' cord and 3-prong plug. Lamps come complete with a universal clamp which allows the lamp to be clamped or bolted to a horizontal surface up to a 2-1/4" thick.

Select between 2 bulb (30W) and 3 bulb (45W) lamps in either black or white and 110V or 220V. All supplied with 15W Daylight (6500K) bulbs. Optional 15W Full Spectrum (5500K) bulbs are also available for purchase (see below). Backed by a 2-year Electrical and 5-year Mechanical Warranty. Made in USA.

Description	SKU	Each		
		1-2	3-5	6+
A Dazor 2-Tube, FL 43" White, 110V	821-5590			
B Dazor 2-Tube, FL 43" Black, 110V	821-5592			
Dazor 3-Tube, FL 43" White, 110V	821-5594			
Dazor 3-Tube, FL 43" Black, 110V	821-5596			

C-D Dazor® Lumilus LED 31"/41" Floating-Arm Lamps

Our Lumilus Black Clamp-style LED lamp from Dazor is the future generation of energy efficient lighting. Exceptionally designed for years of continuous and reliable use. Precision made components house the latest LED technology while utilizing optimal dimming control (to 20%). 41" reach of the patented floating adjustable arm gives you flexibility. Delivers the brilliant white, 6500K light from 288 LED bulbs, fully diffused to eliminate the shadows and hot spot issues of traditional LED light sources, while giving you pure white light with the highest (1400) lumen efficiency available. This equates to 30% brighter than a comparable 3-bulb fluorescent lamp and 50% brighter than a 2-bulb fluorescent. Lamp head measures 14.25" x 6", rotates 360° and tilts 180°. 100-240V, 50/60Hz. Backed by a 2-year Electrical and 5-year Mechanical Warranty. Made in the USA.

Key Features:

- Produces pure white light with the highest lumen efficiency available.
- 30% brighter than a Dazor 3-tube Fluorescent; 50% brighter than a 2-tube fluorescent light.
- DiffuseTec light management produces an evenly diffused light pattern without multi-shadowing.
- Consists of 288 fully diffused, ultra-bright adjustable LEDs.
- Dimmable to 20% intensity.
- Features Dazor's patented floating adjustable arm.
- Innovative thermal engineering allows the LEDs to achieve their rated life of 50,000 hours.

Description	SKU	Each		
		1-2	3-5	6+
C Dazor Lumilus LED 41" Black	821-5601			
Dazor Lumilus LED 41" White	821-5602			
Dazor Lumilus LED 31" Black Desk Base	821-5603			
D Dazor Lumilus LED 31" White Desk Base	821-5604			

A Dazor® EcoFlex LED Lamp

The EcoFlex by Dazor is an affordable, rugged, environmentally friendly LED bench light. The sleek head rotates 340° vertically and 90° horizontally, and features four 1-watt dimmable high brightness white LEDs optically mixed to produce an even light pattern. The 25" flexible arm exceeds the depth of most work surfaces and allows you to aim the light exactly where you need it. Dazor's clever thermal engineering allows the LEDs to achieve their rated life of 50,000 hours without any heat! Backed by a 2-year Electrical and 5-year Mechanical Warranty. Made in China.

Description	SKU	Each	
		1-2	3+
Dazor EcoFlex LED Light 100-240V	821-5584		

B GEMORO® Horizon LED 2 Task Lamp

Professional Variable Color Temperature Grading / Inspection Lamp for Diamonds, Gemstones, Pearls & Jewelry The GemOro® Horizon LED 2 Task Lamp offers the perfect lighting for diamonds, the full range of gemstones, pearls, and jewelry. Using "Smart Technology" and enhanced LED lighting, it features 4 different user-adjustable color temperature setting modes for viewing and grading: True Diamond Color 5200K Gemstones 2700K Pearls 4000K Jewelry Enhancement 6200K

The GemOro® Horizon LED 2 grading and inspection lamp has a modern, ergonomic design and may be placed on your counter for showing jewelry and stones under its super bright, high-power LED's. It makes a great addition to any showroom, executive desk, or workbench. It even has 5 variable brightness settings and a USB power port for charging your smartphone and other devices. The ultimate lamp for all jewelry professionals, exclusively from GEMORO! Made in China

Description	SKU	Each
GEMORO® Horizon LED 2 Task Lamp	821-5011	

C LED Bench Inspection Lamp

This economical lamp bolsters a full 5" diameter lens with 90 Super Bright LED's surrounding the lens to give you optimal brightness. Made of durable metal construction that utilizes an adjustable movable arm. Clamps onto your work station or bench (clamp included or can purchase an optional screw-in base). Use this economical LED as a task lamp or for inspection, simply flip up the convenient lens cover which also serves as protection to keep your glass lens clean from dust and debris. 110V with 5 foot power cord, UL approved. One-year manufacturer's warranty. Made in China.

Description	SKU	Each		
		1-2	3-5	6+
C LED Bench Inspection Lamp	821-5052			
Optional Screw-In Base	821-5014			

D LED Table Top Inspection Lamp

Powerful yet economical, this tabletop LED desk light is a must for any bench, table or workstation needing bright LED lighting and superb optics. This lamp boasts a 1.75X magnification with 72 bright white LED's placed around the 5" diameter magnifier giving you the ultimate clear, crisp lighting! For optimal use, the 1.75X (3 Diopter) viewing of your task should be about 14" from the lens. Lamp flexes side to side and up and down and the viewing area (head) moves side to side with ease on a ball joint. 110V with 5 foot power cord, UL approved. One-year manufacturer's warranty. Made in China.

Description	SKU	Each		
		1-2	3-5	6+
LED Table Top Inspection Lamp	821-5053			



Dino-Lite®

High Performance Digital Scopes for Industrial Applications

The Dino-Lite digital microscope is an amazing and easy to use portable handheld device for inspection, testing, and documentation. As the live image is displayed on a monitor, users are able to inspect and analyze the image using software while sitting in a comfortable upright position.



A Dino-Lite® Pro Scope – AM4111T

The Dino-Lite AM4111T handheld digital microscope is featured with the unique MicroTouch snapshot feature and comes with a high quality 1.3 megapixel image sensor that views and takes highly detailed images for professionals. The MicroTouch (touch sensitive static sensor) feature on the handheld digital microscope gives users the option of taking a picture right from the scope itself. Measures 10.5cm x 3.2cm (4.13" x 1.26").

Model	Magnification Power	SKU	Each
AM4111T	10-50X, 220X	810-0086	



B Dino-Lite® Edge Series Scope – AF4115ZTW

The Dino-Lite Edge 1.3MP AF4115ZTW is designed for wide-angle macro applications. It's 10-50X magnification with Flexible LED Control (FLC) provides lighting adjustment options including intensity settings from 1-6, as well as the ability to turn on/off LEDs by quadrant.

It delivers higher image quality with a larger Field-of-View (FOV) and Depth-of-Field (DOF), which makes it ideal for macro viewing applications. When viewing a working distance of more than 1cm from the target, once in focus, rotating the knob will receive another focal point, and thus, effectively zoom in the image optically.

The new modular wireless-ready design allows for USB 2.0 connection or a quick swap to wireless with a WF-20 adapter (810-0235, sold separately) making it a completely cordless and portable microscope.

Model	Magnification Power	SKU	Each
AF4115ZTW	10-50X	810-0215	



C Dino-Lite® Edge Far Working Scope – AF4115ZTF

The Dino-Lite AM4115ZTF Edge "Far" working distance polarizing model is designed to provide extra-long working distance with a magnification range of 1x-70X. At 10x with 19" working distance and 70" at 4.25". The 1.3MP AM4115ZTF offers a minimum of 115mm viewing distance with maximum 70x magnification. In comparison to the Edge Series long working distance models, the AM4115ZTF extends 80mm working distance at 70x magnification, making it an ideal option for fabrication or observation requiring long distance. The built-in polarizer helps reduce or eliminate glare on reflective surfaces providing a clearer view and high-quality image. Dimensions (LxD), 10.5 x 3.2cm (4.13" x 1.26"). Weighs 105g (3.7oz).

Model	Magnification Power	SKU	Each
AF4115ZTF	10-70X	810-0202	



D Dino-Lite® Edge Far Working Scope – AM73115MTF

The Dino-Lite Edge AM73115MTF is a "Far" working distance polarizing model is designed to provide extra-long working distance with a magnification range of 1-70x. By using the USB 3.0, the AM73115MTF is capable of providing 45 FPS at 1280 x 960 resolution.

This model features a Flexible LED Control (FLC), which enables partial illumination to provide enhanced contrast and allows intensity adjustment for better adaptability; interchangeable front caps, and a rugged metal housing. Dimensions (LxD), 10.5 x 3.2cm (4.13" x 1.26"). Weighs 110g (3.88oz). Made in Taiwan.

Model	Magnification Power	SKU	Each
AM73115MTF	10-70X	810-0203	

A Dino-Lite® EdgePlus Microscope – AM4917MZT

Dino-Lite EdgePLUS AM4917MZT raises performance and quality to a new level in terms of color fidelity, frame rate, and low-light performance. Combining the latest in EdgePLUS technology with FLC (Flexible Lighting Control) and AMR (Automatic Magnification Reading) makes the AM4917MZT the right choice for a wide range of applications.

FLC provides lighting adjustment options including intensity settings from 1-6, as well as the ability to turn on or off LEDs by quadrant. AMR displays the current magnification on screen with the included software for Windows or Mac OS. Simple setup with a USB 2.0. AMR removes the hassle of stopping your work to check the magnification before performing a measurement.

Focus stacking is made easy with the AM4917MZT with the added feature of EDOF (Extend Depth of Field). The EDOF capture mode can take several pictures at different levels of focus and stack them into a clear image from its original pictures which can be reviewed in included DinoCapture 2.0. Polarization can be switched on/off or can be adjusted to offer full or half polarization for controlling glare.

Model	Magnification Power	SKU	Each
AM4917MZT	20-220X	810-0210	

B Dino-Lite® Edge Series Scope – AM73915MZT

The Dino-Lite Edge AM73915MZT is a USB 3.0 model that provides uncompressed viewing to deliver exceptional sharpness, enhanced color accuracy and image quality with a magnification range of 10-220x. By using the USB 3.0 the AM73915MZT is able to provide 45 FPS at 1280 x 960 resolution, allowing usage in a wider range.

The AM73915MZT includes an Extended Depth of Field (EDOF is available on Windows only) and Automatic Magnification Reading (AMR). EDOF allows users to capture multiple images and various depths to automatically combine them into one clear image. Flexible LED Control (FLC) will allow for partial illumination control to enhance contrast and provide intensity adjustments for better adaptability; combined with the built-in polarizer, interchangeable front caps and rugged, durable metal housing.

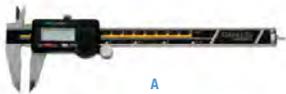
Included with each Dino-Lite digital microscope is a copy of DinoCapture software, enabling you to capture either a photograph, video or time-lapsed video and perform measurement and other critical tasks. USB and power cables are also included. Dimensions (LxD), 11.9 x 3.3cm (4.69" x 1.30"). Weighs 110g (3.88oz).

Model	Magnification Power	SKU	Each
AM73915MZT	10-220X	810-0204	

C-K Dino-Lite® Optional Accessories

Description	SKU	Each
C MSAK826W Enclosed Light Box	810-0121	
D MSAK843 Slotted Stand	810-0225	
E MSA2P Pole for Dino-Lite Table Stand / MSAK826 Light Box	810-0125	
F MS35B Tabletop Stand – Tabletop	810-0091	
G RK-06A Tabletop Stand	810-0208	
H RK-06A Pole for Dino-Lite Table Stand	810-0126	
I RK-06A Optional XY Arm	810-0209	
J Wireless Adapter for Dino-Lite AF Models	810-0235	
K AM-T Style Diffuser	810-0101	





A

A Electronic Digital Caliper – Max 6"/150mm

Provides full digital accuracy at a reasonable price. Features large LCD screen for good readability. Has conversion and zero functions. Uses setscrew to prevent jaws from moving. Runs for one year on 1.5V silver oxide watch battery (included). Measures inside, outside, depth and step. Comes in fitted plastic box. Made in Switzerland.

Specifications:

- Resolution: 0.0005"/0.01mm
- Accuracy: $\pm 0.001"/0.03\text{mm}$

Description	SKU	Each
6" Electronic Digital Caliper	825-1630	



B

B Econo Digital Caliper – Max 6"/150mm

Convert measurement from millimeters to inches with a touch of a button. LCD display with auto-off system. Measures inside, outside and depth. Comes with nylon case and spare battery. Made in China.

Specifications:

- Max. Measurement: 6"/150mm
- Accuracy: $\pm 0.0001"/0.01\text{mm}$

Description	SKU	Each
6" Econo Digital Caliper	825-1632	



C

C Pocket Digital Caliper – Max 4"/100mm

Provides digital accuracy and portability at a very affordable price. Features large LCD screen as well as conversion and zero functions. Uses setscrew to prevent jaws from moving. Runs for one year on 1.5V silver oxide watch battery (included). Measures inside, outside, depth and step. Comes in fitted plastic box. Made in China.

Specifications:

- Resolution: 0.0005"/0.01mm
- Accuracy: $\pm 0.001"/0.02\text{mm}$

Description	SKU	Each
4" Pocket Digital Caliper	825-1625	



D

D Mitutoyo® 6" Premium Digital Caliper

An innovation in electronic measuring, the Mitutoyo® 6" Digital Caliper (0 to 6", 0.0005" resolution) uses high efficiency sensor technology like no other on the market today and manufactured with premium hardened stainless steel for stability and durability. The caliper features a digital readout in both inch and metric, a resolution of 0.0005"/0.01mm with hold and zero function. An additional hold down screw locks the jaw in position for a precise stable reading. Inner, outer and depth readings are possible. Battery 303/357 included. -Made in Japan.

Description	SKU	Each
6" Premium Digital Caliper	825-1634	



E

E 1" Mini Digital Thickness Gauge

Measures in inches and mm. This compact gauge is small enough to take everywhere. Overall length is just 3-1/2". Features large LCD screen for good readability as well as conversion and zero functions. Includes setscrew to keep jaws in place. Runs for one year on a 1.5V silver oxide watch battery (included). Measures inside and outside.

Description	SKU	Each
1" Mini Digital Thickness Gauge	825-1620	

A Plastic/Fiberglass Dial Caliper – Max 6"/150mm

Made of durable super polyamide plastic and fiberglass. Measuring capacity: 150mm. Dial graduations: 0.1mm. Measures inside, outside, depth and step. Comes complete with fitted plastic case. Made in Switzerland.

Description	SKU	Each
Plastic/Fiberglass Dial Caliper	825-1660	

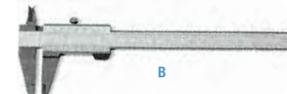


A

B Econo Vernier Caliper – Max 6"/150mm

Graduations with Vernier: 0.001" and 0.02mm. Depth of jaws: 1.6". Made of hardened stainless steel. Uses setscrew to prevent jaws from moving. Has black graduations on a satin chrome finish for easy inside, outside and depth measurements. Comes in plastic box. Made in China.

Description	SKU	Each
Econo Vernier Caliper	825-1725	



B

D Combination Degree Gauge

Made of satin-finished steel with brass index plate. Capacity: 15mm or 6 lignes (72 douziemes). Graduations: 0.1mm or 1/2 ligne (douzieme). Measures 6-1/2" long. Made in Pakistan.

Description	SKU	Each
Combination Degree Gauge	813-0900	



D

E Mini Degree Gauge

A compact, lightweight gauge made of polished stainless steel. Features easy-to-read indices on both sides. Smaller than conventional gauges yet just as accurate. Capacity: 10mm. Graduations: 0.1mm. Measures 4" long. Made in Pakistan.

Description	SKU	Each
Mini Degree Gauge	813-0850	



E

**A-C Gems 10X HEX Loupes, 22mm Lens**

Quality made 10X Loupes are configured in a hex shape for easy secure handling. Each loupe is made with a precision 22mm lens providing excellent color and clarity with no distortion. As an added feature, the lens is made with a high-grade antireflective optical coating film that helps eliminate glare. Each loupe comes complete with a fabric pouch for safe keeping as well as a handy lanyard cord. Comes in black, chrome, and chrome/gold.

Description	Lens Diameter	SKU	Each		
			1-2	3-5	6+
A Black	22mm	272-4061			
B Chrome	22mm	272-4062			
C Chrome/Gold	22mm	272-4063			

D-F Gesswein® 10X HEX Triplet Loupes, 20.5mm

Generously sized, 20.5mm diameter 10x Triplet Loupes with hex shape for secure grip. A triplet lens (three lenses bonded together) provides excellent color and clarity. These loupes are available in black, silver and gold finishes. Supplied in a leather storage case. Made in China.

Description	Focal Distance	Lens Diameter	SKU	Each	
				1-2	3+
D 10X Black Loupe	1"	20.5mm	272-4055		
E 10X Silver Loupe	1"	20.5mm	272-4056		
F 10X Gold Loupe	1"	20.5mm	272-4057		

G-I Gesswein® 10X Triplet Loupes, 18mm

High-quality 18mm triplet loupes, featuring a rubber grip for comfort and control. 18mm diameter triplet lens is actually three lenses bonded together for higher correction. Available in black, chrome and gold finishes. Supplied in a leather storage case. Imported.

Description	Focal Distance	Lens Diameter	SKU	Each	
				1-2	3+
G 10X Black Loupe	1"	18mm	272-4058		
H 10X Chrome Loupe	1"	18mm	272-4059		
I 10X Gold Loupe	1"	18mm	272-4060		

J-L 10X Diamond-Cut Triplet Loupes, 18mm

These loupes feature a unique diamond-cut design that offers the user a much better grip than conventional loupes. Each has large lens that provides good depth of field with minimal glare. Available in black, chrome and gold finishes. Complete with leather pouch. Made in India.

Description	Focal Distance	Lens Diameter	SKU	Each	
				1-2	3+
J 10X Black Loupe	1"	18mm	272-4036		
K 10X Chrome Loupe	1"	18mm	272-4038		
L 10X Gold Loupe	1"	18mm	272-4037		

A Eschenbach Aplanatic 10X Precision Metal Loupe

A precision loupe made of matte chrome-plated brass. Features a 10X aplanatic optical glass lens that delivers a distortion-free image over the entire field of view. Meets EN ISO 9001 standards. Backed by a one-year manufacturer's warranty. Made in Germany.

Description	Focal Distance	Lens Diameter	SKU	Each
10X Metal Loupe	1"	23mm	272-3255	

B Eschenbach Aplanatic 10X Precision Fiberglass Loupe

A precision folding loupe made of durable fiberglass-reinforced polyamide. Features a 10X aplanatic optical glass lens that delivers a distortion-free image over the entire field of view. Keeps out dust when closed, protecting lens from damage. Meets EN ISO 9001 standards. Backed by a one-year manufacturer's warranty. Made in Germany.

Description	Focal Distance	Lens Diameter	SKU	Each
10X Fiberglass Loupe	1"	23mm	272-3240	

C Bausch & Lomb® Lens Magnifier, 3.5X

An engraver's magnifier with two plano-convex lenses. Has near-universal application in precision work. Provides a wide, flat field. 3.5X magnification with a 3" focal distance with a diameter of 2-1/4". Made in USA.

Description	Focal Distance	Lens Diameter	SKU	Each
3.5X Engraver's Magnifier	3"	40mm	272-5015	

D Doublet 10X Loupe

Quality loupes at inexpensive prices. Each has chrome-plated metal swing-away case. Knurled metal grip prevents slipping. Focal distance equals 1" and comes supplied in a vinyl pouch. Made in China.

Description	Focal Distance	Lens Diameter	SKU	Each	
				1-2	3+
Doublet 10X Loupe	1"	21mm	272-4031		

E Silver-Plated Loupe Chain

This snake-style chain allows you to keep a loupe around your neck so it's always available. Highly flexible for comfortable extended wear. Heavily plated in silver and coated with an anti tarnish agent to keep it looking bright. Measures 39" long. Made in USA.

Description	SKU	Each
Silver-Plated Loupe Chain	272-4047	





A Bench Setter's Microscope

Lightweight yet durable, the Bench Setter's Microscope boasts an all-metal aluminum alloy body with premium components and chemical-resistant finishes providing stability and durability for a lifetime of dependable use.

The easily maneuverable boom stand with friction arms, focus block and padded headrest ensures superb flexibility and comfort. Entire assembly can be easily positioned and quickly swung away when not in use. Friction arms lock in place when needed. Focus block securely holds microscope body. Dimmable Ring Light (included) with extra-bright LED bulbs provides cool, glare-free illumination. Fits many other competitive microscopes as well. Made in China.

Features: Binocular scope body can be rotated 360° and locked in any position. Standard 10X eyepieces with magnification Range of 3.5X-45X, High-resolution optics for yielding upright and unreversed stereoscopic images, Rugged all-metal bodies and components designed to last a lifetime, Ergonomically positioned bilateral zoom controls.

Description	SKU	Each
A Bench Setter's Microscope	271-3045	



B-D GRS® Leica® A60 Microscope Systems

Leica FusionOptics provides a greater depth of field and a high-resolution view of hand engraving and many other tasks. Comes supplied on a GRS Acrobat Versa Stand or Flexible Swing-Arm stand, specifically for the popular Leica A60 Microscope. The 38° viewing angle on the Leica head allows the user to maintain a natural head posture. The operating elements such as the zoom adjustment, focus knob, and ring light are intuitive and easily accessible, by left and right-handed users alike. Complete Package Includes: Leica A60 Microscope W/10X Fixed Eyepieces/0.63 Objective Lens, GRS Acrobat Versa Stand or Flexible Swing-Arm Stand, Dual Voltage LED Optia LED Light (Versa Stand Model) or Leica Dual Voltage LED Ring light (Swing-Arm Model) and GRS Headrest (Versa Stand Model Only). One-year manufacturer's warranty. Made in Germany (Except GRS Versa Stand which is Made in USA).

Specifications:	Standard	with Objective Lens 0.63X
• Magnification range:	5X to 30X	3.15X to 18.9X
• Depth of field:	13.6mm to 0.54mm	N/A
• Object field diameter:	46.0mm to 7.7mm	70.0mm to 11.7mm

Description	SKU	Each
B Leica Scope System/Versa Stand	271-3060	
C Leica Scope System/Flex Swing-Arm	271-3100	
D Leica Scope System/Acrobat Versa Stand Only	271-3061	



A-B Donegan OptiVISOR® Magnifiers

Each OptiVISOR features an interchangeable binocular lens plate made of high-quality optical glass, ground and polished to precision ophthalmic standards. Lightweight, impact-resistant visor assembly with pivot mechanism and adjustable genuine leather headband allow comfortable extended wear. Available in blue and black. Replacement lenses available separately. Made in USA.

Description	Power	Focal Distance	SKU	Each	
				1-2	3+
A DA-2 Blue	1-1/2X	20"	270-1020		
DA-3	1-3/4X	14"	270-1030		
DA-4	2X	10"	270-1040		
DA-5	2-1/2X	8"	270-1050		
DA-7	2-3/4X	6"	270-1070		
DA-10	3-1/2X	4"	270-1100		
B DA-2 Black	1-1/2X	20"	270-1120		
DA-3	1-3/4X	14"	270-1130		
DA-4	2X	10"	270-1140		
DA-5	2-1/2X	8"	270-1150		
DA-7	2-3/4X	6"	270-1170		
DA-10	3-1/2X	4"	270-1180		

Replacement Items	Each
Blue Visor Assembly only	270-1010
Black Visor Assembly only	270-1115
Replacement Lens OptiVISOR – #2	270-2020
Replacement Lens OptiVISOR – #3	270-2030
Replacement Lens OptiVISOR – #4	270-2040
Replacement Lens OptiVISOR – #5	270-2050
Replacement Lens OptiVISOR – #7	270-2070
Replacement Lens OptiVISOR – #10	270-2100



C Donegan OptiVISOR® LX Magnifiers

Available as a complete set of all four lenses with one visor assembly or specific lens with visor. Each features a high-quality optical acrylic lens plate made from a precision-ground, highly polished mold. Lightweight yet tough visor assembly with pivot mechanism and adjustable padded leather headband allow comfortable extended wear. Available in blue only. Replacement lenses available separately. Made in USA.

Description	Power	Focal Distance	SKU	Each	
				1-2	3+
C Complete Set	All	All	270-1204		
LX3	1-3/4X	14"	270-1200		
LX4	2X	10"	270-1201		
LX5	2-1/2X	8"	270-1202		
LX7	2-3/4X	6"	270-1203		

Replacement Items	Each
Replacement Lens #LX3	270-1205
Replacement Lens #LX4	270-1206
Replacement Lens #LX5	270-1207
Replacement Lens #LX7	270-1208



D Quasar LED Light Attachment for OptiVISOR®

The revolutionary Quasar LED lighting system is the best possible lighting solution available for your magnifying visor. The fixture snaps over the OptiVISOR lens plate and significantly increases visibility. Made in China.

Description	SKU	Each
Quasar LED Light Attachment	270-2110	





A

A Eschenbach Galilean Precision Binoculars

These lightweight, well-balanced binoculars provide comfortable hands-free viewing for detailed work. Feature prescription-grade shatter-resistant achromatic 23mm lenses made of PXM optically pure plastic, focusing adjustment and diopter setting for each eyepiece and adjustable nose bridge. Available in 2.5X and 4X powers with 3-1/2" and 1-1/4" fields of view, respectively. Include leather carrying case. Meet EN ISO 9001 standards. Backed by a one-year manufacturer's warranty. Made in Germany.

Description	Power	Focal Distance	SKU	Each
A Galilean Binoculars	2-1/2X	14"	272-3245	
	4X	10"	272-3246	

B Telesights®

Binocular magnifiers with optical-quality acrylic lenses coated to resist abrasion. Include half-frame for independent use.

Description	Power	Focal Distance	SKU	Each	
				1-2	3+
B #43	1-3/4X	13-1/2"	270-0430		
#44	2X	10"	270-0440		
#45	2-1/4X	8"	270-0450		
#46	2-1/2X	6-2/3"	270-0460		
#48	3X	5"	270-0480		

*Measured from eye. (not from lens as customary)

C Donegan Magnifiers

From the makers of OptiVISOR, these magnifiers are ideal for small jobs that require your hands to be free. Feature lightweight construction with dual-lens system that eases eyestrain by converging on focal point. Include half-frame for independent use and small clip for attachment to eyeglasses.

Description	Power	Focal Distance	SKU	Each
C C03	1-3/4X	14"	271-1200	
C04	2X	10"	271-1201	
C05	2-1/2X	8"	271-1202	
C07	2-3/4X	6"	271-1203	

D-E Eschenbach Clip-On Magnifiers

Feature prescription-grade lenses made of PXM optically pure plastic coated with Cera-Tec for resistance to breakage and scratching and lightweight fiberglass-reinforced plastic clip assembly. Include four soft rubber clip sleeves that protect eyeglasses from abrasion, plastic box and lens cleaning cloth. Meet EN ISO 9001 standards. Backed by a one-year manufacturer's warranty. Made in Germany.

Description	Power	Lens Diameter	SKU	Each
D Clip-On Binocular	2-1/2X	7"	272-3260	
	2X	8.5"	272-3259	
	3X	6"	272-3261	
E Clip-On Monocular	4X	2"	272-3270	

A Eschenbach MaxDetail Magnifier

This top-quality headset magnifier with Galilean design provides wide field of view (20°) and independently adjustable magnification and focus for each lens, ensuring excellent clarity for each eye. Objective lenses compensate for ±3-diopter spherical correction or allow adjustment for close-up activities. Lightweight PXM(R) optics, flexible plastic temples and smooth bridge allow extended wear. Frosted objective housing eliminates reflections. Magnifies up to 2X. Includes carrying case and head strap. Made in Germany.

Description	SKU	Each
MAXDetail	272-3280	



A

B Optisight™ Magnifier with Three Lens Plates

From the makers of OptiVISOR, this lightweight yet tough magnifier features a visor assembly with pivot mechanism and headband with adjustable strap for comfortable extended wear. Provides hands-free magnification. Includes three high-quality 1-3/4X, 2X and 2-1/2X interchangeable lens plates with focal distances of 14", 10" and 8", respectively. Optional 2-3/4X lens plate with focal distance of 6" also available for intermittent close-up work.

Description	SKU	Each
B Optisight with 3 lens plates	270-0400	
Optional 2-3/4X Lens Plate	270-0404	
Replacement 2-1/2X Lens Plate #3	270-0401	
Replacement 2X Lens Plate #4	270-0402	
Replacement 1-3/4X Lens Plate #5	270-0403	



B

C 3" Econo Divider

A steel divider with hardened points, knurled pivot handle and adjusting screw. Measures 3" long. Imported. Made in India.

Description	SKU	Each	
		1-2	3+
3" Econo Divider	812-1705		



C

D 2" Steel Square

Forms an exact 90° angle for making corners and centering stones. Made of milled steel. Made in India.

Description	SKU	Each		
		1-4	5-9	10+
2" Steel Square	811-1715			



D



C

Eyeglass clip



D

E



A-I Pin Vises

A wide selection of pin vises for holding small drills, wires, taps, screwdriver blades and more.

Description	Length	SKU	Each		
			1-2	3-5	6+
A 5/8" wide jaws, hollow handle opens to 1/4", 3/16" gap. - Made in Germany.	4-1/2"	820-4150			
B 5/16" wide jaws, hollow handle opens to 1/4", 3/16" gap. Made in Germany.	4-1/2"	820-4050			
C Extra screw and nut for #820-4150 and #820-4050. Made in Germany.	-	820-4100			
D Double-ended with different size steel collets mounted in both ends of hollow handle. Capacity: 0"-0.064". Made in France.	4-1/4"	820-4650			
E Double-ended with reversible steel collets. Capacity: 0"-0.125". Made in India.	4-1/4"	820-4350			
F Two steel chucks with hollow brass handle. Capacity: 0"-0.032". Made in France.	3-3/4"	820-4300			
G Steel four-jaw chuck with hollow aluminum handle. Capacity: 0"-0.032". Made in France.	4-1/4"	820-4250			
H Swivel head pin vise for drilling or tapping. Two double-ended chucks. Capacity: 0"-0.125". Made in India.	3-1/2"	820-4355			
I Swivel head pin vise for drilling or tapping. Two double-ended chucks. Capacity: 0"-0.125". Made in India.	4-1/2"	820-4260			

J-M Precision Pin Vises

Durable hardened steel pin vises with hollow handles for accommodating long wires. Black finish. Sold individually and in a money-saving set of all four. Made in India.

	Length	Collet Capacity	SKU	Each
J	76mm	0-1.0mm	820-4186	
K	86mm	0-1.5mm	820-4187	
L	96mm	1.5-3.0mm	820-4188	
M	105mm	2.7-4.5mm	820-4189	
	4-Piece Set (one of each)		820-4185	

N. Setting Bur Chuck with Swivel Handle

For holding burs, reamers and taps. Ball-shaped wooden swivel handle fits in palm of hand. For 3/32" shanks. Measures 4" long.

Description	SKU	Each
Setting Bur Chuck	840-4200	

A, B Adapter Chucks - 3/32" Shank

Allow you to use tools with small shanks in standard flex shaft handpieces. Threads are right-hand. Made in France.

Description	SKU	Each
A 1.00mm Chuck	840-3210	
2.62mm Chuck	840-3220	

C. Econo 4-Collet Adapter Chuck - 3/32" Shank

Works in standard flex shaft handpieces. Threads are right-hand. Includes a collet that completely closes for holding smallest of tools as well as 1.50, 2.50 and 3.00mm collets. Made in India.

Description	SKU	Each
Econo 4-Collet Adapter Chuck	840-3240	

D. Magnetic Ball Vise

The magnetic ball vise is made of the highest quality anodized aluminum and is used to hold workpieces for polishing, grinding, micro-welding and a variety of other general purpose applications. Tilts from 180 degrees to 90 degrees without losing stability. The permanent magnet is spring loaded. An Allen wrench is used to release the magnet allowing workpieces to be placed on and off the top plate easily. Ball vise sits on a small stand. 6" (Height: 4 3/4", Wt. 28 lbs) fine pole magnetic working surface. Allen wrench included. Made in USA.

Description	SKU	Each
D 6" Magnetic Ball Vise	814-0101	

E. Foredom® Mini Vise

Securely holds small parts. Has 13/4" slotted grooves in the base for mounting on a drill press or workbench. Stationary jaw has a perpendicular V-groove, and moveable jaw has a horizontal V-groove for holding round stock or tube. Glare-free black finish.

Specifications:

Jaw Width	1 3/4"
Jaw Opening	1 3/4"
Dimensions	4"L x 2 3/8"W x 1 1/2"H
Ship. Wt.	1/2 lb.

Description	SKU	Each
Mini Vise	820-4700	

F. Drill Press Vise

All aluminum vise has slots to attach to bench top drill press (850-0595 p. 446). Quick release feature for ease of use. Jaw width 29/16". Jaw opening 23/4". Measures 9 1/2"L x 4 1/2"W x 2 1/4"H.

Description	SKU	Each
Drill Press Vise	850-0594	



A



A. Rotating Bench Vise - 3/4" Jaw Opening

Base mount for mounting vise on the workbench or table. Table clamp screw that opens to a maximum depth of 2". The clamp vise head can rotate 360 degrees and tilts approximately 90 degrees with lockable handle. Steel jaws have 1 horizontal and vertical V-groove on each. Made in Pakistan.

Specifications:

Jaw Width : 3/4"	Clamping Height: 2"	360 Swivel & ~ 90 Degree Tilt
360 Swivel & ~ 90 Degree Tilt	Table Clamp Height : 2"	Weight: 16.25 lbs
Clamping range: 4 1/2"	Table Clamp Depth : 2"	

Description	SKU	Each
Rotating Bench Vise - 3/4"	820-4040	



B. Panavise Model 301 - 2 1/2" Jaw Opening

An all-purpose vise that tilts, turns and rotates. Vise head can be turned 360°, tilted 90° and locked in any position. When head is locked in desired position, stem can be rotated or locked in place. All movement is controlled by one convenient variable pressure knob. Nonmarring nylon jaws open to 2 1/2".

Description	SKU	Each
B. Panavise Model 301	814-0200	
Replacement Nylon Jaws, set of 2	814-0805	



C. Base Mount #311 for Panavise Model 301

Platform base mount for attaching Panavise Model 301 securely to the edge of a workbench or counter. Attaches with a clamp screw that opens to a maximum of 3-1/2" (89mm). Comes with three screws for securing Panavise to base mount.

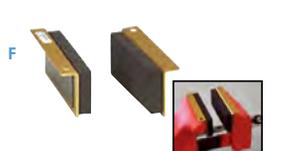
Description	SKU	Each
Base Mount #311 for Panavise Model 301	814-0700	



D. Panavise Model 381 - 2 1/2" Jaw Opening

An all-purpose vise with the same features as Model 301—with the added benefit of portability. A half-turn of the mount lever permits easy mounting of the vise on any smooth, nonporous surface. Suction holds vise to surface until lever is released.

Description	SKU	Each
D Panavise Model 381	814-0190	
Replacement Nylon Jaws, set of 2	814-0805	



E. Mini Bench Vise - 1" Jaw Opening

Great for small, precision work. Jaws are 1" wide and open to 1". C-clamps to bench or tabletop up to 1 1/8" thick. Body is cast iron with heavy red enamel coating. Ship. Wt: 1 lb.

Description	SKU	Each
Mini Bench Vise	820-4052	

F

F. Foredom® Soff Jaws

Attach to any 3" or 4" bench vise via built-in magnetic strips. Made of resilient ethylene vinyl acetate (soft rubber-like material). Grip odd shapes with ease. Prevent marring of polished and painted surfaces and threaded parts. Measure 3-1/2" long.

Description	SKU	Each
Rubber Soff Jaws, pair	820-4705	

A. GRS® Positioning Vise for Stereo Zoom Microscopes

Simply pull a lever, and this vise lets you easily reposition its center of rotation to keep the object within your microscope's field of view. Its upper half moves off-center to left or right as desired; after moving, it rotates about set position. Includes upper jaw plates, five pins and wrench. Spherical diameter: 7.1". Jaw size: 3"W x 1.8"H. Max. jaw opening: 3.5". Weighs a massive 42 lbs. for incredible stability.

Description	SKU	Each
Positioning Vise for Stereo Zoom Microscopes	271-3025	



B-D GRS® Engraver's Blocks

The Magnablock and the Small Block are extremely well-made devices used to hold objects firmly for engraving, stone setting and general-purpose work. Each holds both large and small items. Adjustable friction lock from zero to full lock for crown rotation control. Nonglare satin finish on body, black oxide finish on jaws for protection. Precision-machined parts for smooth, efficient operation. Solid steel construction provides heavy weight and adjustable drags for keeping the workpiece in the proper position. Uses two industrial ball bearings and a large roller thrust bearing to eliminate side play and wobble. Includes rubber ring pad with Nylon glides, upper jaw plates, five pins and wrench. Made in USA.

Features:

Adjustable friction lock from zero to full lock for crown rotation control. Nonglare satin finish on body, black oxide finish on jaws for protection. Precision-machined parts for smooth, efficient operation.

Specifications:	Magnablock	Small Block
Spherical Diameter	5 3/4"	5 1/8"
Jaw Size	3"W x 1 3/4"H	2 1/2"W x 1 1/2"H
Max. Jaw Opening	3 1/2"	3"
Net/Ship. Wt.	30/33 lbs.	19/22 lbs.

Description	SKU	Each
B Magnablock	856-0275	
C Small Block	821-6000	
D Attachment Set 30-piece	856-0277	



E. GRS® Engraver's Blocks

Compact, low-profile design is perfect for microscope work and other jobs where a larger vise is an obstacle. Smooth, self-centering jaw system and adjustable internal brake system lets the user choose the amount of rotational resistance from totally free to fully locked. Machined from solid stainless steel and finished with low-glare treatment to reduce eyestrain. Includes positioning ring, four jaw pins, wrenches and Thermo-Loc Sample Kit (four bars). Measures 3.1" diameter with 1.8"W x .87"H jaws. Max. jaw opening: 2". Made in USA

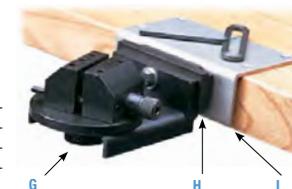
Description	SKU	Each
F Microblock	856-0304	
G Microblock with 30-Piece Attachment Set	856-0305	



H-J GRS® BenchMate™ Multipurpose Vise

Attaches to BenchMate or directly to your bench. Tilts left and right and rotates on vertical axis so you can find the best working angle. Features holes in top for holding pins or the padded ring clamp from GRS 30-Piece Attachment Set #856-0277 (see p. 545). Made of satin-finished steel. To mount, fit in Fixed Mounting Plate, secure to Benchtop Mounting Adapter, then screw into bench. Made in USA.

Description	SKU	Each
G Multipurpose Vise	856-0172	
H Fixed Mounting Plate	856-0196	
I Benchtop Mounting Adapter	856-0193	



Sisma Laser Engravers

- For basic engraving we offer the LOGO marker. Compact and affordable. Yag laser source which features automatic axis
- For production engraving and light cutting consider one of the Easy Models. These fiber machines are easy to use and equipped with a Z motorized axis
- For cutting and engraving choose from one of our Smarky or Big Smark models. These fiber machines boast upgrades such as increased speed, larger working chamber and higher working power.

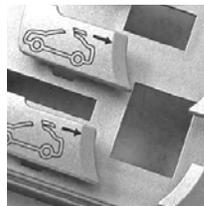


	LOGO 200F	EASY-GO 200F	EASY-GO 300F
Technical Data	823-1500	823-5971	823-5973
Average Laser Power	20W	20W	30W
Frequency	–	20–60 kHz	30–60 kHz
Source Type	Diode	Ytterbium (Yb)	Ytterbium (Yb)
Wavelength	1064nm	1060nm ~ 1085nm	1060nm-1085nm
Pulse Duration	4ns	120ns @20 kHz	120ns @20 kHz
Peak Power	20kW	8.5kW	8.5kW
Beam Quality	–	<1.8 M ²	<1.8 M ²
Z Axis Stroke	–	13.39"	13.39"
4" Axis	–	Optional	Optional
Power Supply	100–240V, 50/60Hz, 1Ph	230V ±15%, 1 Ph, 50/60Hz, CEE 16 plug	230V ±15%, 1 Ph, 50/60Hz, CEE 16 plug
Working Chamber	100 x 100 x 100mm	19.68" x 11.42" x 11"	19.68" x 11.42" x 11"
Machine Dimensions (W x D x H)	19" x 17.5" x 24"	22" x 27" x 31"	22" x 27" x 31"
Weight	95 lbs.	165 lbs.	165 lbs.

Some details subject to change. Visit gesswein.com for the latest information

	EASY 200F EP	EASY 300F	EASY 500F EP	EASY 7000F
Technical Data	823-6061	823-6063	823-6066	823-6069
Average Laser Power	20W	30W	50W	55W
Frequency	1–1000 kHz	30–80 kHz	1–1000 kHz	70–140 kHz
Source Type	Ytterbium (Yb)	Ytterbium (Yb)	Ytterbium (Yb)	Ytterbium (Yb)
Wavelength	1059–1064nm	1080–1095nm	1059–1064nm	1080–1095nm
Pulse Duration	6–500ns	50–200ns	6–500ns	50–200ns
Peak Power	10kW	8.5kW	10kW	10kW
Beam Quality	<1.6 M ²	<1.6 M ²	<1.6 M ²	<1.6 M ²
Z Axis Stroke	11.42"	11.42"	11.42"	11.42"
4" Axis	–	–	–	–
Power Supply	230V ±10%, 50/60Hz	230V ±10%, 50/60Hz	230V ±10%, 50/60Hz	230V ±10%, 50/60Hz
Working Chamber	20.47" x 11.42" x 13.38"			
Machine Dimensions (W x D x H)	22" x 30" x 30.3"			
Weight	187 lbs.	187 lbs.	187 lbs.	187 lbs.

Some details subject to change. Visit gesswein.com for the latest information



SMARKY 200F EP SMARKY 3000F SMARKY 500F EP SMARKY 7000F SMARKY 700F EP

Technical Data	823-6090	823-6096	823-6093	823-6098	823-6099
Average Laser Power	20W	30W	50W	55W	70W
Frequency	1-1000 kHz	30-80 kHz	1-1000 kHz	70-140 kHz	1-1000 kHz
Source Type	Ytterbium (Yb)				
Wavelength	1059-1064nm	1080-1095nm	1059-1064nm	1080-1095nm	1059-1064nm
Pulse Duration	6-500ns	50-200ns	6-500ns	5-200ns	9-500ns
Peak Power	>10kW	8.5kW	>10kW	>10kW	>10kW
Beam Quality	<1.6 M ²				
Z Axis Stroke	15.75"	15.75"	15.75"	15.75"	15.75"
4" Axis	-	-	-	-	-
Power Supply	230V ± 15%, 1 Ph 50/60 Hz				
Working Chamber	20" x 20" x 15.75"				
Machine Dimensions	21.8" x 37.2" x 37.5"				
Weight	275 lbs.				

Some details subject to change. Visit gesswein.com for the latest information

BIG SMARK 200F EP BIG SMARK 3000F BIG SMARK 500F EP BIG SMARK 7000F BIG SMARK 700F EP BIG SMARK 1000F EP

Technical Data	823-6080	823-6075	823-6070	823-6077	823-6078	823-6086
Average Laser Power	20W	30W	50W	55W	70W	100W
Frequency	1-1000 kHz	30-80 kHz	1-1000 kHz	70-140 kHz	1-1000 kHz	1-4166 kHz
Source Type	Ytterbium (Yb)					
Wavelength	1059-1064nm	1080-1095nm	1059-1064nm	1080-1095nm	1059-1064nm	1059-1064nm
Pulse Duration	6-500ns	50-200ns	6-500ns	50-200ns	9-500ns	6-2020ns
Peak Power	>10kW	8.5kW	>10kW	>10kW	>10kW	>14kW
Beam Quality	<1.6 M ²					
Z Axis Stroke	15.75"	15.75"	15.75"	15.75"	15.75"	15.75"
4" Axis	-	-	-	-	-	-
Power Supply	230V ± 15%, 1 Ph 50/60 Hz					
Working Chamber	20" x 20" x 15.75"					
Machine Dimensions	25.59" x 40.94" x 69.29"					
Weight	530 lbs.					

Some details subject to change. Visit gesswein.com for the latest information

GRS® Air Powered Engraving

Easy to operate, GRS Power Engravers will help you make clean, sharp cuts in metal as well as other materials (glass, stone, crystal, wood, etc.). Redesigned in 2024 with a simplified interface and enhanced components. Requires an air source providing a minimum of 45 psi (3 bar) pressure and 1.4 cfm (40 liters per minute) flow. Includes foot pedal, regulator, hoses and fittings for handpieces – handpieces sold separately.



A

A GRS® GraverMax® Rev24

For decades, artisans, luxury stone setters, and production setters have relied on the GraverMax. This workhorse provides a significant increase in power while maintaining the delicate startup essential for precision cutting. The streamlined internal design features a brushless DC motor to ensure exceptional reliability. Precision-machined components guarantee the durability required for years of dependable service. The GraverMax separates speed and power, giving users optimal control for various applications. It features connections for two standard handpieces and one for auxiliary air tools, such as the GRS Ultra 850 Rotary handpiece or GRS Air Pen. The included foot pedal offers intuitive control of the handpiece, with an increased size for easier use. The system itself has a smaller footprint (approx. 7" W x 6-1/2" D), freeing up valuable bench space. Includes GraverMax Air System, foot pedal, air filter, and power cord. Handpieces sold separately. Requires clean, oil-free compressed air with a minimum of 45 psi (3 bar) pressure and 1.4 cfm (40 liters per minute) flow.

Description	SKU	Each
GRS GraverMax Rev24	856-9905	



B

B GRS® GraverSmith® Rev24

The lean design of the GraverSmith air system delivers essential functionality without sacrificing power or precision. Its brushless DC motor and streamlined internal design ensure exceptional reliability, while precision machined components provide the durability needed for years of dependable service. The GraverSmith separates speed and power, offering optimal control for a variety of applications. It features a single standard handpiece connection. The redesigned larger foot pedal provides intuitive control and easier use. With its compact footprint (approx. 7" W x 6-1/2" D), the system frees up valuable bench space. Includes GraverSmith Air System, foot pedal, air filter, and power cord. Handpieces sold separately. Requires clean, oil-free compressed air with a minimum of 45 psi (3 bar) pressure and 1.4 cfm (40 liters per minute) flow.

Description	SKU	Each
GRS GraverSmith Rev24	856-9900	



C

C SilentAir Compressors

The SilentAir Val-Air Compressor is a premium value model with cast aluminum lid with cooling fins for improved ventilation and Filter-Regulator with auto-drain feature and condensate bottle. Coalescent Filter to 0.01 Micron. Has the same pumps, air tanks, pressure gauges and noise level as the Sil-Air. Both versions feature powerful 1/2 HP motors which provide over 2 CFM of air. They can handle up to 10 large Wax Injectors and are fully automatic. Both make about as much noise as a refrigerator, so you can work without distraction. Both measure 14" dia. x 22"H and weigh 58 lbs. Both may require additional filter at the air tool to eliminate condensation that can form in very long airlines. Accept 1/4" male fittings. This Val-Air model includes an air intake filter and a moisture trap with filter not found on the Sil-Air version. Made in Italy.

Features:

- 4 gallon storage tank.
- Line pressure gauge.
- Internally coated tank for prevention of rust.
- Includes moisture trap and filter (Only included on this Val-Air model).
- Safety valve.
- Air-intake filter (Only included on this Val-Air model).
- Integrated handle for balanced carrying.
- Includes 22 oz. bottle of compressor oil.

Description	SKU	Each
SilentAir Val-Air Compressor	265-3100	
SilentAir Sil-Air Compressor	265-3094	

A GRS® #901 Quick-Change Handpiece – For Max/G8/SC, Mach/AT & Smith

Offers a wide power range and fine control. Excellent for fine engraving, deep relief work, and hammer setting. Features heat-treated stainless steel construction, ergonomic handle and adjustable side hose connection. Available with six quick-change holders or in a complete set with quick-change handle, and tool tray. Measures 2.6" long. Weighs 2.6 oz.

Description	SKU	Each
A #901 Quick-Change Handpiece	855-9991	
#901 Quick-Change Handpiece Set	855-9992	



A

B GRS® #921 Monarch Quick-Change Handpiece – For Max/G8/SC, Mach/AT & Smith

The top-quality Monarch impact handpiece makes ultra-fine engraving easier than ever, including bulino and barknote styles. Features heat-treated stainless steel construction, graver-style handle and adjustable side hose connection. Includes six quick-change holders. Measures 2.4" long. Weighs 1.8 oz.

Description	SKU	Each
B #921 Monarch Quick-Change Handpiece	855-9990	



B

C GRS® #940 Magnum Quick-Change Handpiece – For Max/G8/SC, Mach/AT & Smith

The compact handpiece with an unmatched combination of power and control – try it and you'll be more than impressed. Offers a better range of power than any other handpiece, from very fine to amazingly heavy. In fact, it exceeds the power of previous models that are twice as large. Also offers fine control with shading capability that's significantly better than any handpiece with this much top-end power. Includes palm knob, head and six quick-change holders. Oval knob available as a special order. Measures 2.8" long. Weighs 6.4 oz.

Description	SKU	Each
C #940 Magnum Quick-Change Handpiece	856-0303	



C

D GRS® #710 Quick-Change Handpiece – For Max/G8/SC, Mach/AT & Smith

Offers plenty of power for working on hard metals such as platinum and steel as well as good control for making smooth cuts in soft metals. Features stainless steel construction, ergonomic handle and quiet rear exhaust. Includes six quick-change holders. Measures 4.4" long. Weighs 6.4 oz.

Description	SKU	Each
D #710 Quick-Change Handpiece	856-0015	



D

E-F GRS® #610 Hammer Handpiece – For Max/G8/SC, Mach/AT & Smith

This exceptional impact tool offers power and control. Built for all-day use. Produces the brightest stippling possible when used with Lazer Point 850-3590 (sold separately). Setscrew chuck holds round tools up to 0.13" (3.3mm) and square tools up to 0.10" (2.5mm). Measures 4.5" long. Weighs 5.5 oz.

Description	SKU	Each
E #610 Hammer Handpiece	856-0280	



E

Description	SKU	Each
F Lazer Point	850-3590	1-2 3+



F

H Handpiece Storage Strip

The Handpiece Storage Strip keeps handpieces within easy reach. Four holes provide storage for multiple handpieces of varying size. The durable, molded plastic, storage strip includes clips that fit the side of some commercial benches. It can also be mounted to a flat surface with the included hardware.

Description	SKU	Each
Handpiece Storage Strip	850-0604	



G



A-B GRS® #850 Ultra-High-Speed Rotary Handpiece

Provides considerably more power and torque than other rotary handpieces. Operates at 300,000–400,000rpm for effortless engraving, decorating and grinding of metal, plastic, glass, stone, wood and many other materials. Runs with virtually no vibration or noise. Needs no lubrication. Accepts only 1/16" tools due to its high operating speed. Includes air tubing, connectors and carbide bur. Connects to auxiliary airport on all GRS systems (excluding GraverSmith and GraverMeister) or any regulated air supply. Requires 1.3 CFM of air at 30–35 PSI. Measures approx. 5/8" dia. x 5-1/8" long. Weighs 2.5 oz.

Description	SKU	Each
A #850 Ultra-High-Speed Rotary Handpiece	855-9989	
B Carbide Bur Set – 1/16" shank	856-0288	

C GRS® Air Pen

The precision Air Pen from GRS features a sleek design for optimal air application. The cone shape and smaller opening allows for precisely using air to blow off chips and dust from your workpiece without concern of losing your findings. The air pen connects to the auxiliary port your GRS machine (excluding GraverSmith and GraverMeister) or can connect directly to your compressed air source. Simply control the amount of air flow by depressing the button on the pen. Measures 5" in length. Comes with six feet of 1/4" hose.

Description	SKU	Each
Air Pen	265-2285	

D SmartPro Air Do X – No Air Compressor Required

The SmartPro Air Do X system combines a micromotor and a pneumatic engraver with a built-in compressor, making the system ideal for engraving, drilling, polishing, buffing and lapping. This compact unit saves space on your bench and eliminates the need for an external compressor. The Air Do X has a digital LED display function for easy tool selection and is complete with overload protection and an automatic emergency stop for your safety.

This set is supplied with the H2 heavy-duty handpiece which provides powerful, high-speed engraving thanks to its durable construction and optimized airflow. It will give you the control needed for engraving on hard metals. Advanced adjustment speed controls allow you to achieve high precision with ease. Also available is an optional collet for GRS QC Traditional engraver holders which expands the variety of gravers you can use with this machine. See our 856-0234 – sold separately. Whether an engraver, polisher or both, having the flexibility of two handpieces allows you to tackle any project with ease.

This two-in-one system is affordable, compact, reliable, and ultra-durable. One-year manufacturer's warranty on handpiece and controller. Dual Voltage: 100–240V, 50/60Hz. Dimensions L x W x H: 240mm (9-1/2") x 130mm (5-1/8") x 185mm (7-3/8"). Made in Thailand.

Features:

- Two in One – Engraver and Micromotor – Saves Bench Space
- Precise Pneumatic System with Internal Pump (Compressor)
- 35,000 RPM Micromotor Handpiece for Drilling and Polishing
- Heavy-duty Engraver handpiece with Powerful Strokes from 240 up to 8,000 SPM
- Easy-to-Read Digital LED Display for speed control and tool selection
- Achieve High Precision with adjustable hand and foot switch control
- Overload and Safety Protection

Included Accessories:

- SmartPro Air Do X Control Box
- Heavy-Duty Engraver Handpiece
- 6 pcs Carbon Engraver
- 2.5 mm Collet (Pkg of 3)
- 3.5 mm Collet (Pkg of 3)
- Micromotor Handpiece 35000 RPM
- Micromotor Handpiece Stand
- Foot Pedal
- Power Cable or AC power cable
- User manual & warranty card

Description	SKU	Each
D SmartPro Air Do X	856-0231	
SmartPro Air Do X Collet for GRS	856-0234	

A Foredom® Power Graver™ – For Engraving

Power Graver is a flexible shaft system specially designed for engraving and hammering. Uses standard gravers to give you the feel of hand engraving with less effort and fatigue.

Includes motor, #9D hammer handpiece with duplex spring, manual speed controller, on/off foot switch, accessories, and instructional DVD. Permanently lubricated ball bearing motor provides high torque at low speed for tough jobs. The #9D handpiece comes with 3/32", 1/8" and 3mm collets for gravers. Benchtop manual speed controller runs motor at 500–2,800 strokes/min., keeping selected speed constant. On/off foot switch lets you stop and start again without readjusting speed.

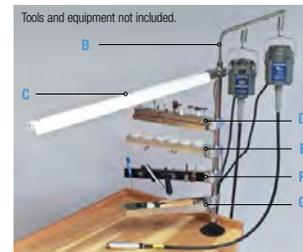
Description	SKU	Each
Power Graver, 110V	821-6725	



B-K Foredom® Bench System

Keep your most frequently used tools within easy reach. Start with the Foredom Flex Shaft Hanger to hang up to 2 flex shaft motors. Purchase the LED Light Bar (100-240V AC) and your choice of accessories to create the perfect holder for your tools.

Description	SKU	Each
B Flex Shaft Hanger – Adjustable height hanger with 2 spring hooks.	850-0531	
C LED Light Bar – Rotates, swings and raises 90°. Dimensions: 31-1/2"L.	850-0532	
D 2 tier, 95 hole, Bur Holder Arm – For 3/32" (57) and 1/8" (38) shank burs/tools.	850-0533	
E Magnetic Tool Arm – With non-scratch felt surface. 12"L x 1/2"W x 1-1/2"H.	850-0535	
F Jar Holder Arm – With 6 – 1.35oz. (40ml) cups with screw-on plastic tops, 1-1/4 (3.7cm) in diameter. 12"L x 2-1/4"W x 2-1/4"H.	850-0534	
G Tray Arm – Has movable partitions. 12"L x 2-1/4"W.	850-0536	
H Multi Handpiece Arm	850-0537	
Small Shelf Arm	850-0538	
Medium Shelf Arm	850-0539	
I Large Shelf Arm	850-0540	
J Peg Arm 1/ Handpieces & Tools	850-0541	
K Dual Handpiece Holder	850-0542	



L GRS® Combination Tool Carousel – For Gravers and Small Tools

Spend more time engraving and less time searching for tools with this efficient organizer. Top tray holds up to 30 tools and gravers, and bottom tray has four removable QC (quick-change) tool trays that each hold 10 gravers with GRS QC Holders attached. All trays rotate for easy access. Small footprint occupies very little space on the workbench.

Description	SKU	Each
Combination Tool Carousel	856-0293	



M STEP™ Quick Change Tool Organizer & Dispenser

The STEP™ can hold up to 59 QC gravers. Smooth rotating design, allows easy access, enhancing productivity. Measures 4" in diameter with a height of 4".

Description	SKU	Each
STEP™ Quick Change Tool Organizer & Dispenser	816-4068	



Muller® Swedish Steel Gravers

Made of premium-grade Swedish steel pretempered for work on nonferrous metals such as gold, platinum, silver and copper. Can be retempered to suit individual requirements.



A Muller® – Flat

No.	SKU	Each	
		1-2	3+
36	165-1360		
37	165-1370		
38	165-1380		
39	165-1390		
40	165-1400		
41	165-1410		
42	165-1420		
43	165-1430		
44	165-1440		
45	165-1450		
46	165-1460		
47	165-1470		
48	165-1480		
49	165-1490		

B Muller® – Round

No.	SKU	Each	
		1-2	3+
50	165-1500		
51	165-1510		
52	165-1520		
53	165-1530		
54	165-1540		

C Muller® – Point (Onglette)

No.	SKU	Each	
		1-2	3+
000	165-6003		
00	165-6002		
0	165-6001		
1	165-6010		
2	165-6020		
3	165-6030		

D Muller® – Bevel Edge

No.	SKU	Each	
		1-2	3+
1	165-0010		
2	165-0020		
3	165-0030		

E Muller® – Knife

No.	SKU	Each	
		1-2	3+
0	165-4000		
1	165-4010		
2	165-4020		
3	165-4030		
4	165-4040		

F Muller® – Square

No.	SKU	Each	
		1-2	3+
2	165-7020		
4	165-7040		
6	165-7060		
8	165-7080		
10	165-7100		
12	165-7120		

G Muller® – Tapered Square

No.	SKU	Each	
		1-2	3+
1	165-8010		
2	165-8020		
3	165-8030		

H-I Graver Sharpening

Crocker-Style Graver Sharpening Fixture: Holds graver at any angle; just set index as desired and lock in for repeated accuracy. Stone and graver not included. **Graver Sharpening Holder:** Holds gravers in either of two angled openings. Has roller on bottom for smooth action. Use with a bench stone.

Description	Dimensions (W x H)	SKU	Each
H Crocker-Style Graver Sharpening Fixture	–	816-1000	
I Graver Sharpening Holder	1-3/8" x 1-1/2"	816-1012	



Stone and graver not included

Gesswein® High-Speed Red Tang Gravers

Made of high-speed steel. Generally preferred for use on gold, platinum, silver and steel. Hold cutting edges four to five times longer than Swedish tool steel gravers. Made in USA.



A Gesswein® HS – Flat

No.	SKU	Each	
		1-2	3+
36	166-1360		
37	166-1370		
38	166-1380		
39	166-1390		
40	166-1400		
41	166-1410		
42	166-1420		
43	166-1430		
44	166-1440		
45	166-1450		

B Gesswein® HS – Round

No.	SKU	Each	
		1-2	3+
50	166-1500		
51	166-1510		
52	166-1520		
53	166-1530		
54	166-1540		
55	166-1550		
56	166-1560		
57	166-1570		

C Gesswein® HS – Point (Onglette)

No.	SKU	Each	
		1-2	3+
0	166-5001		
1	166-5010		
2	166-5020		
3	166-5030		
4	166-5040		

D Gesswein® HS – Knife

No.	SKU	Each	
		1-2	3+
0	166-4000		
1	166-4010		
2	166-4020		
3	166-4030		
4	166-4040		

High-Speed Yellow Tang Gravers

Made of high-speed steel specially melted and rolled just for gravers. Suitable for use on precious metals, wood, bone, ivory and onyx. Made in Turkey.



E Yellow Tang – Flat

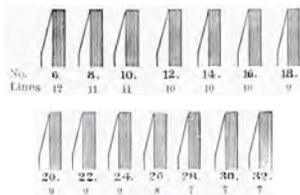
No.	SKU	Each
36	166-7210	
37	166-7211	
38	166-7212	
39	166-7213	
40	166-7214	
41	166-7215	
42	166-7216	
43	166-7217	

F Yellow Tang – Point (Onglette)

No.	SKU	Each
4/0	166-7198	
2/0	166-7200	
0	166-7201	
1	166-7202	
2	166-7203	
3	166-7204	
4	166-7205	
5	166-7206	
6	166-7207	

G Yellow Tang – Round

No.	SKU	Each
50	166-7220	
51	166-7221	
52	166-7222	
53	166-7223	
54	166-7224	



A-B Muller® Line Gravers (Liners)

Every industry knows the adage "time is money" and liners are a terrific time saving tool for engravers. Use to make multiple parallel lines with a single stroke for shading, backgrounds, achieving a Florentine finish and cross-hatch or checkering patterns. Made of premium-grade Swedish steel. Choose from straight and bent styles. Each has a size that represents the distance between lines (the first number) and the number of lines (the second number). The larger the first number, the greater the distance between lines. Size 18/10 creates a standard Florentine finish. Can be used on a variety of metals, woods, plastics etc.. Made in USA.

Style	Size	SKU	Each
A Straight	6/4	167-0604	
	6/6	167-0606	
	6/8	167-0608	
	6/10	167-0610	
	8/6	167-0806	
	8/10	167-0810	
	12/10	167-1210	
	14/10	167-1410	
	18/6	167-1806	
	18/8	167-1808	
	18/10	167-1810	
	18/12	167-1812	
	20/10	167-2010	
	24/6	167-2406	
	24/8	167-2408	
26/10	167-2610		
28/10	167-2810		
30/10	167-3010		
32/8	167-3208		
32/10	167-3210		
B Bent	6/4	168-0604	
	6/6	168-0606	
	6/8	168-0608	
	6/10	168-0610	
	8/6	168-0806	
	14/10	168-1410	
	18/10	168-1810	
18/12	168-1812		

C-F GRS® GlenSteel™ Gravers

Made of GlenSteel, a high-speed tool steel forged exclusively by GRS for engraving, setting and other demanding work. Stay sharp longer and resist breakage better than other gravers and tools. Easier to grind and cobalt-free for increased safety. Measure 0.093" (2.35mm) square x 2.7" (70mm) long. Fit all GRS QC (quick-change) impact handpieces.

Style	SKU	Each
C Square	856-0001	
D Flat	856-0002	
E 120° Point	856-0003	
F Blank	856-0004	

G-H Carbide Gravers

Made of a special grade of extra-fine-grain carbide that withstands impact better than any other grade. Sharpen with Power Hone and diamond wheel. Square has one end angled at 45°. Blank is unground and ready to be custom-shaped. Measure just under 3/32" square x 2" long.

Style	SKU	Each
G Square	856-0292	
H Blank	856-0290	



A-E Hardwood Graver Handles

Five different hardwood handles with metal ferrules for firmly holding traditional gravers.

Description	Style	SKU	Pkg. of 3		
			1-2	3-5	6+
A Small 1/2-Head	4	170-2045			
B Medium 1/2-Head	8	170-2085			
C Large 1/2-Head	7	170-2075			
D Pear	9	170-2095			
E Ball/Round	11	170-2115			



F-I Rosewood Graver Handles

Four different rosewood handles with metal ferrules for firmly holding traditional gravers.

Description	SKU	Each
F Small 1/2-Head	170-2140	
G Long 1/2-Head	170-2141	
H Mushroom	170-2143	
I Ball/Round	170-2142	



J Graver Handle with Tool Chucks

Wooden handle with two interchangeable tool chucks for holding gravers and other small tools up to 3mm. To swap tools, just unscrew knurled holder, remove chuck, replace with other chuck and screw holder back on. Graver not included.

Description	SKU	Each
Graver Handle w/ Tool Chucks	840-4210	

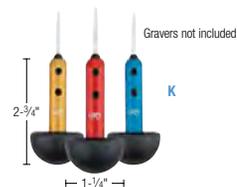


K GRS® Adjustable Graver Handle Set

Three different colored handles help you quickly identify your gravers. Each securely holds tools with either a 1/8" diameter or a 3/32" diameter shank. Also works well with square shanks such as on the GRS C-MAX Gravers and the GlenSteel Gravers. Not for use with standard gravers.

Made from aircraft aluminum, these holders are durable and lightweight. Easily adjust your graver length to the most comfortable working distance for you. Simply loosen the lock screws and slide the graver to the desired position and tighten. Not available individually.

Description	SKU	Each
Adjustable Graver Handle Set	170-2201	



L GRS® QC Handle

Rubber-covered handle with short reach and comfortable feel for engraving by hand. Includes three QC (quick-change) traditional holders for fast tool changes. Accepts square tools up to 0.10" (2.5mm) thick, round tools up to 0.13" (3.3mm) in diameter and most gravers.

Description	SKU	Each
QC Handle	856-0264	



A-F GRS® QC Gravers – In Convenient Ready-To-Go Shapes

Just sharpen and use. Eliminate the need for tedious shaping – think of the time they'll save. Fit all GRS QC (quick-change) impact handpieces when mounted in GRS QC Holders (see below). Also fit many other handpieces, including Power Graver, Magna-Graver and more. Precision-ground from high-speed chrome tool steel.

A GRS® QC Gravers – Flat



Diameter	Width	SKU	Each
#36	0.2mm	855-9736	
#37	0.4mm	855-9975*	
#38	0.6mm	855-9976	
#39	0.8mm	855-9977	
#40	1.0mm	855-9978*	
#41	1.2mm	855-9963	
#42	1.4mm	855-9979*	
#43	1.6mm	855-9964	
#44	1.8mm	855-9980	
#45	2.0mm	855-9965	
#46	2.2mm	855-9746	
#47	2.4mm	855-9747	
#48	2.6mm	855-9748	
#49	2.8mm	855-9749	

*Engraver's Kit.

B GRS® QC Gravers – Round



Diameter	Width	SKU	Each
#50	0.2mm	855-9981*	
#51	0.4mm	855-9982*	
#52	0.6mm	855-9983*	
#53	0.8mm	855-9984*	
#54	1.0mm	855-9997	
#55	1.2mm	855-9755	
#56	1.4mm	855-9998	
#57	1.6mm	855-9999	
#58	1.8mm	855-9758	
#59	2.0mm	855-9759	
#60	2.2mm	855-9760	
#61	2.4mm	855-9761	
#62	2.6mm	855-9762	
#63	2.8mm	855-9763	

*Engraver's Kit.



E

F

E GRS® QC HSS Graver Set for Engravers

Description	SKU	Each
QC HSS Graver Set for Engravers	855-9968*	

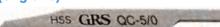
*Engraver's Kit.

F GRS® QC Holders Traditional Style – For Fast Tool Changes

Fit GRS QC (quick-change) impact handpieces, QC Handle and QC Sharpening Fixture. Allow fast tool changes. Accept square tools up to 0.10" (2.5mm) thick, round tools up to 0.13" (3.3mm) in diameter and most gravers, including GRS QC Gravers (see above).

Description	SKU	Each
QC Holders Traditional Style – Pkg. of 10	855-9988	
QC Holders Traditional Style – Pkg. of 3	855-9987	

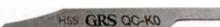
C GRS® QC Gravers – Point (Onglette)



Diameter	Width	SKU	Each
#5/0	1.16mm	855-9973	
#4/0	1.24mm	855-9995	
#3/0	1.35mm	855-9996	
#2/0	1.45mm	855-9969*	
#0	1.58mm	855-9970*	
#1	1.78mm	855-9971*	
#2	1.94mm	855-9702	
#3	2.16mm	855-9972	
#4	2.54mm	855-9704	
#5	2.74mm	855-9705	
#6	2.94mm	855-9706	
#7	3.14mm	855-9707	
#8	3.36mm	855-9708	

*Engraver's Kit.

D GRS® QC Gravers – Knife



Diameter	Width	SKU	Each
#0	1.8mm	855-9993	
#1	2.0mm	855-9985*	
#2	2.2mm	855-9986*	
#3	2.4mm	855-9994	
#4	2.6mm	855-9724	
#5	2.8mm	855-9725	
#6	3.0mm	855-9726	
#7	3.2mm	855-9727	

*Engraver's Kit.

A-I GRS® C-Max Gravers and Holders – Tungsten Carbide, 1/8" Shank, Length: 1.8" Unless Otherwise Noted

Years of development have produced a tungsten carbide graver with the right blend of hardness and toughness for hand engraving and stone setting applications. C-Max achieves a metallurgical balance like no other carbide. For years, engravers and jewelers have used other carbide gravers that break easily or do not hold a fine edge. This frustration is gone forever, thanks to C-Max carbide. Try these tools and do better work in noticeably less time. Shank includes two flat alignment areas.

A GRS® C-Max – Parallel Flat

Parallel Flat has parallel sides with a flat tool bottom.



Diameter	Width	SKU	Each
#38	0.6mm	855-9822	
#39	0.8mm	855-9823	
#40	1.0mm	855-9824	
#41	1.2mm	855-9825	
#42	1.4mm	855-9826	
#43	1.6mm	855-9827	
#44	1.8mm	855-9828	
#45	2.0mm	855-9829	

B GRS® C-Max – Tapered Flat

Tapered Flat has angled sides that taper down to a flat tool bottom.



Diameter	Width	SKU	Each
#36	0.2mm	855-9832	
#37	0.4mm	855-9833	
#38	0.6mm	855-9834	
#39	0.8mm	855-9835	
#40	1.0mm	855-9836	
#41	1.2mm	855-9837	
#42	1.4mm	855-9838	
#43	1.6mm	855-9839	
#44	1.8mm	855-9840	

C GRS® C-Max – Tapered Round

Tapered Round has angled sides that taper down to a rounded tool bottom.



Diameter	Width	SKU	Each
#50	0.2mm	855-9809	
#51	0.4mm	855-9810	
#52	0.6mm	855-9811	
#53	0.8mm	855-9812	
#54	1.0mm	855-9813	
#55	1.2mm	855-9814	
#56	1.4mm	855-9821	

D GRS® C-Max – Point (Onglette)

For stone setting, and general engraving.



Diameter	Width	SKU	Each
#0	0.55"	855-9815	
#1	0.66"	855-9818	
#2	0.60"	855-9816	
#3	0.88"	855-9819	
#4	0.96"	855-9817	
#5	1.04"	855-9820	

E GRS® C-Max – Round Blank – Sharpen Before Use



Diameter	SKU	Each
1.8mm	855-9856	
2.35mm	855-9855	
1/8"	855-9854	

F GRS® C-Max – Square Blank – Sharpen Before Use



Size	SKU	Each
2.0mm	855-9858	
3/32"	855-9857	

G GRS® C-Max – Stepped Round – 2.35mm Shank



Diameter	SKU	Each
0.8mm	855-9845	
1.0mm	855-9846	
1.2mm	855-9847	
1.4mm	855-9848	
1.6mm	855-9849	
1.8mm	855-9850	
2.0mm	855-9851	
2.2mm	855-9852	
Tapered Point	855-9853	

H GRS® C-Max – V-Point – Sharpen Before Use



Diameter	SKU	Each
60°	855-9860	
75°	855-9861	
90°	855-9862	
105°	855-9863	
120°	855-9864	

I GRS® QC Holders

Description	SKU	Each
QC Holders for 1.8mm Round – Pkg. of 3	855-9943	
QC Holders for 3/32" Round – Pkg. of 3	855-9941	
C-Max QC Holders 1/8" – Pkg. of 3	855-9947	
C-Max QC Holders 1/8" – Pkg. of 10	855-9948	



Work Holding Blocks, Vises and Accessories

A nice variety of blocks/vises to securely hold your workpieces free of vibration or movement. Select the size that fits your requirements. All feature solid steel construction, with an adjustable friction lock for crown rotation control and all provide easily adjustable working angles.

A GRS® Engraver's Blocks and Vises



Specifications	MicroBlock*	MicroBlock* XL
Spherical/Ball Diameter	3.1"	3.9"
Jaw Size	1.8"W x 0.87"H	1.8"W x 0.87"H
Max. Opening	2"	2.75"
SKU	856-0304	856-0335
Each		
SKU with 30-Piece Attachment Set	856-0305	856-0336
Each		
Accessories	SKU	Each
30-Piece Attachment Set	856-0277	✓
Ring Holding Clamps	856-0296	✓
Contoured Vise Jaw Set	821-5997	-
Super Pins 1/4"	821-5998	-
Super Pins 3/8"	821-5999	-
MicroBlock Step Risers	856-0176	✓



Available with or without 30pc attachment set

Standard Block



Low profile provides more vertical work space.

Low-Profile Vise



Available with or without 30pc attachment set

MagnaBlock*



Unique positional center of rotation

Positioning Vise

5.125"	6.125"	5.75"	7.1"
2.5"W x 1.5"H	3"W x 1.8"H	3"W x 1.8"H	3"W x 1.8"H
3"	3.5"	3.5"	3.5"
821-6000	856-0315	856-0275	271-3025
821-6005	-	856-0276	
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
-	✓	✓	✓
-	-	-	-

C



C GRS® 30-Piece Attachment Set

With a variety of pins that fit the upper jaw plates of every GRS Block, users can now instantly solve work holding problems and start working sooner. Includes 30 small attachments for GRS Engraver's Blocks. Includes storage base. Weighs 0.9 lbs.

Pins fit upper jaw plates of all GRS vises.

- 4 one-half Thermo-Loc sticks
- 8 small pins
- 4 flat square pins
- 2 rectangular inset-curve pins
- 4 thick round inset pins
- 8 rubber-coated pins
- 2 leather-faced ring clamp pins (also sold separately, see 856-0296)

Description	SKU	Each
C 30-Piece Attachment Set	856-0277	

D



D GRS® Contoured Vise Jaw Set

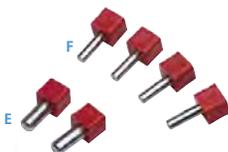
Designed for jewelers, this versatile attachment will securely hold mold inserts and other unusually shaped items in your GRS block/vise. The rubber-lined, rotating jaws easily conform to irregular shapes.

Description	SKU	Each
D Contoured Vise Jaw Set	821-5997	

E-F GRS® Super Pins

For securely holding large parts to be polished without marring them. Made of heavy-duty plastic over steel.

Description	SKU	Each
E Super Pins with 3/8" shanks, pkg. of 2	821-5999	
F Super Pins with 1/4" shanks, pkg. of 4	821-5998	



A GRS® MicroBlock® Step Risers

Stack risers (1/2" each) under your GRS Microblock or MicroBlock XL to set height for your optimal use.

Description	SKU	Each
A MicroBlock Step Risers – Set of 5	856-0176	



A

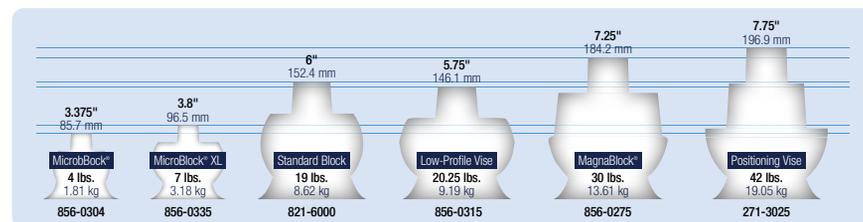
B GRS® Thermo-Loc®

Heat to soften this plastic, mold it around your items, and when it cools, it will harden and hold them securely. Gray color reduces eyestrain. Reusable. Thermo-Loc Starter Kit includes 6" x 6" microwave-safe Pad and 1 lb. of Thermo-Loc.

Description	SKU	Each
B Thermo-Loc, 1/2 lb.	816-1592	
Thermo-Loc, 1 lb.	816-1593	
Thermo-Loc, 5 lbs.	816-1594	
Thermo-Loc Starter Kit	816-1597	



B





A-B Pitch Bowls

Made of cast iron. The 5" diameter bowl holds up to 2 lbs. of pitch, and the 8" diameter bowl holds up to 4 lbs. of pitch (not included). Use with ring pad (see below) for stability.

Description	Diameter	SKU	Each
A Small Bowl	5"	811-1290	
B Large Bowl	8"	811-1310	



C-D Ring Pads

Use with pitch bowls to insulate the workbench surface from heat. Lets you tilt engraver's block or pitch bowl so you can find the best working angle.

Description	Diameter	SKU	Each
C Small Rubber Pad	5"	811-1291	
D Large Rubber Pad	8"	811-1311	



E GRS® Pitch Cup

Compact pitch cup for mounting in jaws of any vise or engraver's block. Each comes pre-filled with black pitch, a special material that softens when heated and provides firm support for hard-to-hold, irregularly shaped and delicate items. Gently reheat pitch to remove workpiece.

Description	Dimensions	SKU	Each
Pitch Cup	2" diameter	856-0171	



F Black Pitch

Traditional, ready-to-mix pitch for holding and supporting small workpieces during engraving and more. Especially useful for holding objects too delicate to hold in an engraver's block. Use in a pitch bowl and set into a ring pad for a handy engraving fixture. Mix with plaster or pumice and linseed oil to vary hardness. Includes instructions for mixing and use. Sold in 8 oz. containers.

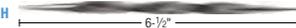
Description	SKU	Each
Black Pitch, 8 oz.	811-1805	



G Peg Clamp

A mini handheld tool for holding odd-shaped items for engraving. Features 2" dia. half-round spring-loaded jaws that open and close on twin guides at the turn of a thumb screw. Includes four pegs that can be easily positioned in any of the 30 holes in each jaw. Has wooden handle. Measures 5" long. Max. jaw opening: 7/8".

Description	SKU	Each
G Peg Clamp	812-0210	
Replacement Pegs, pkg. of 4	812-0200	



H-J Scribes

Double-ended steel scriber features one-piece steel construction and twisted center for good grip. Carbide-tipped scriber can be used on hard metals, glass, stones, and diamond scriber can be used on all metals and most stones. Both have hexagonal aluminum handles that prevent rolling.

Description	SKU	Each
H Double-Ended Steel Scriber	816-0890	1-2
I Carbide-Tipped Scriber	816-0950	3+
J Diamond Scriber	220-1900	



K Chinese White

A fast-drying, nontoxic, white watercolor for layout work. Forms a background so letters or designs can be drawn on the work surface prior to engraving. To use, simply moisten surface with water using fingertip or soft brush, then apply to workpiece. Sold in 0.175 oz. half-cake packaged in aluminum foil for protection from moisture.

Description	SKU	Each
K Chinese White	812-0100	

A-B GRS® GraverHone VS Complete Sharpening Systems

Meet the next generation sharpening system from GRS Tools. These complete packages contain the high-torque, variable speed GraverHone VS with your choice of fixtures. Select the Dual Angle System for use with regular Gravers and select the Apex System for use with QC Gravers. Either package includes the GraverHone VS which features variable speed (400-900 RPM), dual direction and time-saving quick lock for diamond wheels (no threads). UL approved. Made in the USA.

Packages also include 3 diamond wheels, 260, 600, and 1200 grit, as well as the handy diamond wheel rack.

Description	SKU	Each
A GraverHone VS with Apex Sharpening System 110V, 60 Hz	856-0332	
B GraverHone VS with Dual Angle Sharpening Fixture, Head and Post 110V, 60 Hz	856-0334	



A-E GRS® Power Hone Wheels

The low-cost, high-quality Diamond Wheels eliminate heat buildup in gravers and tools, last for years and stay flat for accuracy. Produce a fine, dependable finish. Excellent for sharpening carbide, cobalt and standard steel tools. The solid Cast Iron Lap produces a mirror finish on tools, resulting in bright cuts on your workpieces. Must be periodically charged with Diamond Spray, or Diamond Powder.

Description	Dia. x AH	Grit	SKU	Each
A Diamond Wheel	5" x 1/2"	260	856-0259	
Diamond Wheel	5" x 1/2"	600	856-0256	
Diamond Wheel	5" x 1/2"	1200	856-0032	
B Cast Iron	6" x 1/2"		856-0272	
C Diamond Spray – 1 carat diamond		1/2 micron	856-0260	
D Diamond Powder – 5 carats diamond		1/5 micron	856-0271	
E Wheel Storage Rack			856-0035	



C GRS® Apex Sharpening System – For QC Tool Holders Only

The Apex Sharpening System is the perfect fixture for anyone from the novice learning to sharpen their first graver to the veteran seeking efficient repeatability. The new shorter fixture nose and longer fixture post easily accommodate longer gravers. Locking knobs have been updated with a quality knurled steel. A quarter-turn locking system works exclusively with GRS QC tool holders to promote ultimate efficiency for loading and locking tools. The post dial has been simplified to promote finding the correct angle setting quickly. Most notably, the fixture now features the ability to switch Apex dials in seconds without tools or screws to turn. A simple switch to the Dual Angle dial and you can make any graver geometry desired. Includes: Apex Sharpening Fixture, color coded 90°, 105°, dial, 120° dial, Dual Angle dial for unlimited graver geometries, Apex fixture magnetic post, and storage rack. Made in USA.

Description	SKU	Each
Apex Sharpening System	856-0291	



D-E GRS® Dual-Angle Sharpening Fixture

Holds gravers with or without handles and those in QC Holders for precise sharpening. Features two large, easy-to-read degree dials for setting both elevation and rotation angles. Available with or without post.

Description	SKU	Each
D Dual-Angle Sharpening Fixture, head only	856-0299	
E Dual-Angle Sharpening Fixture, head and post	856-0018	



Gesswein® Power Hand® 3 Multifunctional Micromotor System

Designed with the latest technology in micromotor systems, the Power Hand 3 can handle almost any finishing job. This interchangeable system allows the operator to choose from a selection of motors and heads to create the right tool for a variety of polishing applications. With the quick disconnect feature, the operator can switch heads within seconds.

Power Hand 3 is the third generation of its line and comes with several new features such as: convenient on/off switch on each motor case, higher torque output for heavier grinding, and slim lightweight handpiece cable. The Power Hand 3 controller features a load indicator light to warn operator of excessive pressure, and digital RPM display to indicate exact rotational speed of handpiece. Backed by a one-year warranty. Made in Japan.



Forward/Reverse button

To control the rotational direction for each motor. LED light indicates rotational direction.

Digital Rotation Display

2-digit display for easy adjustment of rotation speed. Dialing in the exact RPM for each tool ensures optimal performance.



Optional PH2X Handpieces

Our previous Power Hand 2X handpieces with three-prong plugs will connect directly to the controller. RPM display, load indicator, and error code message will not be displayed.

Optional Variable Speed Foot Rheostat

Now with the Auto Cruise feature, it is possible to set a fixed speed with the optional foot pedal, allowing the operator to free their foot from the pedal.

Error Code

Displays an error message for easy troubleshooting due to heat build-up, overloading the handpiece, or a defective motor cord.



Load Indicator

8 steps of LED lights from green to yellow to red. The display lights up when too much force is applied. For the best results and long life, stay within the green.



A Power Hand® 3 Controller

Power Hand 3 Controller is designed for one-person use. Has 2 output stations with switch to instantly change power from one handpiece to the other. Speed can be adjusted by the dial rheostat on the face of the unit or by an optional variable speed foot rheostat. Output 3-30V DC. Weight: 5-1/4 lbs (2.3kg)

Description	SKU	Each
A PH3 Controller, 115V	510-3300	
PH3 Controller, 230V	510-3302	
PH3 Handpiece Holder for Standard Controller	510-3301	

Gesswein® Power Hand® 3 Rotary Handpieces

Choose from six sturdy, true-running, well-balanced handpieces with powerful 30V DC air-cooled motors. Enhanced motor design increases torque by 20% and improves airflow to keep handpieces cool. They operate with minimal vibration and have flexible power cords for easy reach. All handpieces have a quick-tool-change feature and new on/off switch located on the motor. All six handpieces are two-piece construction and can accept various Power Hand head attachments. Standard Head is included. Supplied with 3/32" and 1/8" collets, collet wrenches and replacement motor brushes. Please visit www.gesswein.com for handpiece diagram and parts list. Backed by a limited warranty for six months. Made in Japan.



A High-Torque Rotary Handpieces

Designed to handle the toughest jobs. These workhorses have the highest torque rating. Available in 3 different speeds: 8,000, 15,000, and our most popular 30,000rpm. Use for hand grinding, heavy deburring, cutting, polishing and finishing all types of material. Supplied with 3/32" and 1/8" collets. Weight 9.74 oz.

Description	Speed	Torque	SKU	Each
A 08X	1,000–8,000rpm	9.8	510-3310	
15X	1,000–15,000rpm	8.8	510-3320	
30X	1,000–30,000rpm	6.8	510-3340	



B Standard Rotary Handpieces

These handpieces are smaller and lighter weight compared to the high-torque handpieces. They fit comfortably in the hand and are well suited for continuous use for general purpose grinding and polishing. Available in 20,000 and 35,000rpm. Supplied with 3/32" and 1/8" collets. Weight 7.76 oz.

Description	Speed	Torque	SKU	Each
B 20X	1,000–20,000rpm	6.4	510-3330	
35X	1,000–35,000rpm	5.4	510-3350	



C High Speed Rotary Handpiece

The lightest, fastest and most comfortable of our straight rotary handpieces. This 55,000rpm handpiece is a great choice for tools that perform at high speeds. Use for precision work. Supplied with 3/32" and 1/8" collets. Weight 6.70 oz.

Description	Speed	Torque	SKU	Each
55X	1,000–55,000rpm	3.6	510-3370	

Gesswein® Power Hand® 3 Rotary Head Attachments & Motors System Configuration Chart

Create Your Own Handpiece!

All Power Hand 3 rotary handpieces are two-part design so heads and motors can be switched to create new combinations to best suit your particular job. Use the system configuration chart to determine what heads and motors can be used together.

Note: Lower RPM motors have more available head options, while higher RPM motors are limited to either the Slender Head or Standard Head configurations.



Optional Heads

						
Mini Filer Head 510-2266 510-2264 510-2265	SZX Swing Head 510-2256	Contra Angle Head 120° 510-2250	Right Angle Head 90° 510-2240	Heavy-Duty Head 510-2230	Slender Head 510-2220	Standard Head 510-2200
						
		Contra Angle Head 120° 510-2250	Right Angle Head 90° 510-2240	Heavy-Duty Head 510-2230	Slender Head 510-2220	Standard Head 510-2200
						
					Slender Head 510-2220	Standard Head 510-2200
						
				Heavy-Duty Head 510-2230	Slender Head 510-2220	Standard Head 510-2200
						
					Slender Head 510-2220	Standard Head 510-2200
						
					Slender Head 510-2220	Standard Head 510-2200



Slender Head with M-20X 20,000rpm Motor Combination



M-20X
20,000rpm
510-3331

Motors

	M-08X 8,000rpm 510-3311
	M-15X 15,000rpm 510-3321
	M-20X 20,000rpm 510-3331
	M-30X 30,000rpm 510-3341
	M-35X 35,000rpm 510-3351
	M-55X 55,000rpm 510-3371

Controller



PH3 Controller
510-3300

Gesswein® Power Hand® 3 Head Attachments

These Power Hand head attachments will connect to PH3 motors and to the previous version PH2X motors. Be sure not to exceed the maximum RPM for each head attachment. Backed by a limited six month warranty. Made in Japan.



A Standard Head – Provided with all PH3 Rotary Handpieces

This all-purpose rotary head is compatible with all motor assemblies. Supplied with a 3/32" collet (501-0100) and a 1/8" collet (501-0105). 3mm collets also available (501-0106).

Description	Max. RPM	SKU	Each
Z-STX	55,000	510-2200	



B Slender Head – For Access Into Deep Ribs and Holes

Pencil-like design only 3/8" (9.0mm) in diameter at the finger grips gives 1-9/16" (40mm) more reach than a standard rotary head. Ideal for intricate, deep, hard-to-reach cavities and delicate areas. Compatible with all motor assemblies. Supplied with a 1/8" collet (501-0100) and a 3/32" collet (501-0105). 3mm collets also available (501-0106).

Description	Max. RPM	SKU	Each
Z-SLX	55,000	510-2220	



C Heavy-Duty Head – For Use with 1/4" Shank Tools

Use with large tools through 1/4" shank for greater stock removal. Compatible with M-08X, M-15X and M-30X motors. Supplied with a 1/4" collet; 3/32", 1/8" and 6.0mm collets also available.

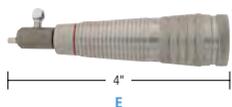
Description	Max. RPM	SKU	Each
Z-HDX	30,000	510-2230	



D Mini Filer Heads – Reciprocating Head

Mini filer heads for lightweight profiling. Slim nose design allows polishing and finishing of narrow, confined spaces. Choose from three stroke lengths. All models hold tools up to 3.5mm diameter. For best results, use with M-08X motor.

Fixed Stroke Length	Max. Strokes /Min.	SKU	Each
D 0.5mm	12,000	510-2266	
1.0mm	12,000	510-2264	
1.5mm	12,000	510-2265	



E SZX Swing Head – For Side to Side Stroke

This head is identical to that on our SZX Profiler. It gives a unique side-to-side reciprocating action with a stroke that is easily adjustable. It's perfect for polishing base areas in deep cavities, corners and deep slots and helps eliminate rounding of sharp corners. Prevents bottoming out in blind holes. Holds 1.5 to 5mm (3/16") diameter tools. Use on M08X motor assembly only.

Description	Max. Strokes /Min.	SKU	Each
SZX	8,000	510-2256	

F Right-Angle Head

This 90° Angle Head provides more comfortable usage than a straight handpiece in some applications. Available in a money saving kit with the M-15X motor or sold alone to use with either the M-08X or M-15X motors. Employs double spur gear that provides durable power. Supplied with 3mm collet (501-0106) and a 1/8" collet (501-0105). 3/32" collet (501-0100) also available.

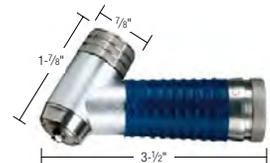
Description	Max. RPM	SKU	Each
Z-ANX Right-Angle Head (90°)	15,000	510-2240	



G Contra-Angle Head

This 120° Angle Head's unique shape provides more comfortable usage than a straight handpiece in some applications. Available in a money saving kit with the M-15X motor or sold alone to use with either the M-08X or M-15X motors. Employs double spur gear that provides durable power. Supplied with 3mm collet (501-0106) and a 1/8" collet (501-0105). 3/32" collet (501-0100) also available.

Description	Max. RPM	SKU	Each
Z-CNX Contra-Angle Head (120°)	15,000	510-2250	



H-J Disc Holders for Angle Rotaries – 3mm Shank

Specially designed for Power Hand angle handpieces and head attachments. Shanks machined to precise dimensions to reduce vibration. Made of soft rubber to work well on flat or contoured surfaces. Precisely made to hold pre-cut abrasive and felt discs. Or use your own abrasives cut to size, such as diamond foil, diamond sheet or diamond film.

Size	SKU	Each
H 10mm round	510-0260	
I 20mm round	510-0265	
J 30mm round	510-0270	



K-P Silicon Carbide and Felt Discs for Angle Rotaries

Pre-cut to fit our disc holders, these discs have pressure-sensitive adhesive backing. Use sandpaper for rough through intermediate finish; use felt for final finish of metal surfaces.

Silicon Carbide Discs	Grit				Pkg. of 10
	80 Grit	120 Grit	180 Grit	320 Grit	
K 11mm round	510-0600	510-0605	510-0610	510-0615	
L 21mm round	510-0620	510-0625	510-0630	510-0635	
M 31mm round	510-0640	510-0645	510-0650	510-0655	
Felt Discs	SKU				Pkg. of 10
N 11mm round	510-0245				
O 21mm round	510-0250				
P 31mm round	510-0255				



Gesswein® Power Hand® 3 Motors

Purchase a motor separately to construct your own Power Hand 3 handpiece. Power Hand 3 motors accept all Power Hand head attachments. Please refer to the maximum rpm speed of the head attachment when pairing with motors. All motors feature a new and convenient on/off switch. RPM speed is indicated on the motor casings. Supplied with a pair of replacement motor brushes. Backed by a six month warranty. Made in Japan.



A



B



C



D



E



F



G

A-B High-Torque Motors

For heavy grinding applications where high torque is required. When selecting a head attachment, please refer to the maximum rpm speed of the head attachment. Weight 6.2 oz.

Description	Speed	Max. Torque (Ncm)	SKU	Each
A M-08X	1,000–8,000rpm	9.8	510-3311	
M-15X	1,000–15,000rpm	8.8	510-3321	
M-30X	1,000–30,000rpm	6.8	510-3341	
Description	SKU	Set of 2		
B Replacement Set of Carbon Brushes	510-0161			

C-D Standard Motors

Small, lightweight motors for general purpose finishing. Fits comfortably in hand. For use with Standard Head and Slender Head attachments only. Weight 4.25 oz.

Description	Speed	Max. Torque (Ncm)	SKU	Each
C M-20X	1,000–20,000rpm	6.4	510-3331	
M-35X	1,000–35,000rpm	5.4	510-3351	
Description	SKU	Set of 2		
D Replacement Set of Carbon Brushes	510-0169			

E-F High-Speed Motor

The lightest, fastest, and most comfortable high-speed motor. For use with Standard Head and Slender Head attachments only. Weight 3.2 oz.

Description	Speed	Max. Torque (Ncm)	SKU	Each
E M-55X	1,000–55,000rpm	3.6	510-3371	
Description	SKU	Set of 2		
F Replacement Set of Carbon Brushes	510-0168			

G Power Hand® 3 Motor Cord

Description	SKU	Each
PH3 Motor Cord	510-3382	

Gesswein® Power Hand® Reciprocating Profilers

These light (24 oz.) reciprocating handpieces come complete with powerful 30V DC air-cooled motors and sealed bearings. Use for polishing flat surfaces, deburring, filing, stoning, scraping, lapping and draw-stoning deep cavities. Special V-shaped chucking system firmly secures a wide variety of abrasives and other tools. Reciprocating stroke lengths are adjustable. Use with PH3 controller or PH2X controller, as well as ULTRAMAX DF and ULTRAMAX MF. Backed by a six month warranty. Made in Japan.

A Power Hand® Z-2X and Z-6X Reciprocating Profilers

Both Z-2X and Z-6X provide standard back-and-forth reciprocating action. Z-2X has a 0-2.0mm length of stroke with a variable strokes per second rate up to 117. Z-6X has a 0-6.0mm length of stroke with a variable strokes per second rate up to 70. They hold 1.5 to 6.35mm (1/4") diameter tools. Secured tools can float freely and be fixed at any position through 360°.

Description	SKU	Each
A Z-2X	510-2150	
Z-6X	510-2160	

B-E Power Hand® Tool Holders for Z-2X, Z-6X and SZX

These 3mm shank holders are designed to hold precut PSA felt and sandpaper pads (see below) to make your reciprocating handpieces more versatile. You can cut your own abrasives, such as diamond foil and diamond film, to fit the holder pads.

Style	Dimensions (mm)	SKU	Each
B Fixed Holder	10 x 20 x 40	510-0560	
C Fixed Holder	10 x 20 x 65	510-0410	
D Free Holder with 180° swivel	10 x 20 x 80	510-0420	
Description	SKU	Set of 2	
E Replacement Set of Carbon Brushes	510-0163		

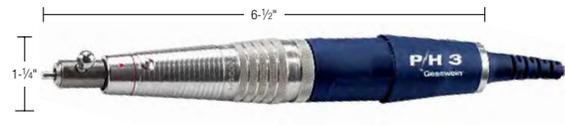
F-G PSA Sandpaper and Felt Pads – Silicon Carbide

Precut waterproof SiC sandpaper pads, 10 x 20mm, with pressure-sensitive adhesive backing. Precut PSA felt pads can be charged with diamond compound. Excellent for use on flat surfaces. For use with Z-2X, Z-6X and SZX handpiece holders (see above).

Description	Grit	SKU	Pkg. of 10
F Sandpaper Pad	180	510-0200	
	240	510-0210	
	320	510-0220	
	400	510-0230	
	600	510-0240	
G Felt Pad	–	510-0300	

Gesswein® Power Hand® 3 SZX Side-to-Side Profiler

Provides unique side-to-side reciprocating action with adjustable stroke (up to 133 strokes per second). Length of stroke ranges from 0–1.6mm (increases with tool length). Perfect for polishing base areas in deep cavities, corners and deep slots. Helps eliminate rounding of sharp corners. Weighs 13 oz. Special V-shaped chucking system firmly secures 1.5 to 5mm (5/16") diameter tools. Made in Japan.



G Power Hand® 3 SZX Side-to-Side Profiler

Description	SKU	Each
1.05 in SZX Profiler	510-3309	



Gesswein® Power Hand® BZX Belt Sander

Ideal for a wide variety of precision finishing applications. Use for deburring, removing EDM and machine tool marks and sanding flat and curved surfaces and narrow slots. Operates with minimal vibration and has flexible power cord for easy reach. Supplied with straight and 45° angle arms for 6 and 8mm wide abrasive belts. Arms are spring-loaded for rapid belt changes. Weighs 16 oz. Backed by a limited six month warranty. Made in Japan.



A-D Power Hand® BZX Belt Sander

Description	SKU	Each
A BZX Belt Sander w/ 2 arms	510-2131	
B Optional Straight Arm (for 4mm belts)	510-0494	
C Replacement 45°-Angle Arm (for 6 and 8mm belts)	510-0495	
D Replacement Straight Arm (for 6 and 8mm belts)	510-0496	

E Sanding Belts for BZX – Aluminum Oxide

Sanding belts specially made for use with our Power Hand BZX Belt Sander. Belts fit on either straight or 45° angle arms.

Size	Grit				Pkg. of 10*	
	80 Grit	120 Grit	180 Grit	320 Grit	1-2	3+
E 4mm	510-0501	510-0506	510-0511	510-0517		
6mm	510-0521	510-0526	510-0528	510-0532		
8mm	510-0536	510-0541	510-0546	510-0552		

*Quantity discount for orders of one item number only; not assorted.

F-H Sanding Belts for BZX – Ceramic, Zirconia, and Diamond

All belts are 8mm and will fit on either 8mm straight or 45° angle arms. Ceramic and Zirconia belts can be used on both hard and soft materials, such as aluminum and brass. Diamond belts are suitable for grinding and polishing brittle materials such as stone, glass and hard metals.

Abrasive	Grit						Pkg. of 10
	40 Grit	60 Grit	80 Grit	100 Grit	120 Grit	180 Grit	
F Ceramic	510-0565	510-0567	510-0569	510-0571	510-0573	–	–
G Zirconia	–	–	510-0575	–	510-0577	510-0579	–
H Diamond	–	–	–	–	–	510-0581	510-0583

Micromotor Drive Mark II Di-Profilers

Connect to any Power Hand Controller

Gesswein is proud to offer the NEW Di-Profiler Mark II systems – the most advanced handpiece systems yet. The Professional and Classic MM Drive Di-Profilers are built with a micromotor inside every handpiece and can connect directly to any Gesswein Power Hand controller. Both Professional and Classic Mark II models now incorporate the protective finger sleeve into the handpiece. Made in Sweden.

A Diprofil® 1/4" Mark II Pro Micromotor with Counterweight – Maximum Efficiency, Minimal Vibrations

Simply the best reciprocating handpiece in the market today, the Professional Di-Profiler combines ergonomic design and heavy duty power. A counter balance weight system located on the opposite end of the tool holder reduces vibration levels. As the tool reciprocates, the counter balance weight reciprocates in the opposite direction thereby stabilizing the handpiece. As a result, vibration in the user's hand is greatly reduced. Comes complete with operations guide, rubber sleeve, storage case, wrench and lubricating oil. Adjustable stroke length 0–6mm. 8,000rpm maximum.

Description	SKU	Each
Diprofil 1/4" Mark II Pro Micromotor – Handpiece 1/4" chuck capacity	850-1908	

Operation Guide is included with profiler for safety and operating instructions. For information on hand transmitted vibration see ANSI Standard S2.70 2006 (R2011).

B Diprofil® 1/4" Classic Mark II

Comes complete with operations guide, rubber sleeve, storage case, wrench and lubricating oil. Adjustable stroke length 0–6mm. 8,000rpm maximum.

Description	SKU	Each
Diprofil 1/4" Mark II – MM 1/4" chuck capacity	850-1915	

Operation Guide is included with profiler for safety and operating instructions. For information on hand transmitted vibration see ANSI Standard S2.70 2006 (R2011).

C Adjustable Stone Holder – 3mm Shank

Our finest quality. Made of nonmagnetic stainless steel with a 3mm shank. The surface has been tumble-polished to create a nonreflecting satin finish. Accommodates stones up to 1/4" in thickness.

Description	SKU	Each
Adjustable Stone Holder	403-1000	

D DiProfiling Stone Holder – 3mm Shank

Expands the use of your mini-filer or other profilers. Accommodates both flat and round stones or tools up to 6mm (0.236") Shank length 1-3/8", overall 2-5/8". Use for fine, more precise profiling jobs.

Description	SKU	Each
Universal Tool Holder	403-1050	

E Ceramic Stone Holder – 3mm Shank

Holds stones up to 1mm thick and up to 8mm wide. Slim size helps reduce vibrations. Shank length 3/4", overall length 1-1/4".

Description	SKU	Each
Ceramic Stone Holder	403-1045	





A Marathon Handy 700 Brushless Micromotor System

The Handy 700 system features an advanced controller and a 50,000rpm, 230W brushless rotary handpiece for incredible power – even at low speeds! Provides ample torque at all times to ensure fast and smooth metal removal.

Ideal for a variety of applications, including grinding, finishing and polishing. Use with Power Hand 3 handpieces for profile polishing or belt sanding.

System includes: Handy 700 controller and BH-60 handpiece with 1/8" or 3/32" collet, variable-speed foot rheostat (FS60), handpiece cradle rest, detachable handpiece holder and replacement fuse. Backed by a 6 month warranty. CE approved.

Features:

- Incredible power – even at low speeds
- Full compatibility with Power Hand 3 brush-type handpieces
- Dial or foot rheostat speed control
- Auto-cruise function for fixed-speed operation with foot rheostat
- Easy-to-read digital speed display for precise speed and torque settings
- Forward/reverse rotation
- Error-checking/troubleshooting system with digital display
- Overload protection

Specifications:

Handy 700 Controller

- Electrical: 100–120V, 40W, 50/60Hz
- Dimensions: 5-3/8"W x 9-1/16"D x 7-1/16"H
- Net weight: 6 lbs.

BH-60 Handpiece – Brushless

- Speed range: 1,000–50,000rpm
- Max. power: 230W
- Max. torque: 7.8 N-cm
- Collet size: 1/8" or 3/32"
- Dimensions: 6-3/16"L x 1-1/16" to 3/4" dia.
- Net weight: 8.4 oz.

Description	SKU	Each
A Handy 700 System, 1/8" collet	510-2925	
Handy 700 System, 3/32" collet	510-2920	
Replacement BH-60 Handpiece with 1/8" Collet	500-0224	
Replacement BH-60 Motor only	500-0225	

B BH-60 Motor Adaptor

This easy-to-use motor adaptor connects PH3 head attachments to the BH-60 Handpiece (included in the Marathon Handy 700 micromotor system). Simply remove the BH-60 head and attach the adaptor to the motor to increase the versatility of your Handy 700. Motor also sold separately (see above).

Description	SKU	Each
BH-60 Motor Adaptor	500-0223	

Increase the versatility of your Handy 700

Possible Configurations



A Marathon Micromotor System – Do-it-all System!

This rotary micromotor system performs a wide range of grinding, deburring and polishing operations. Includes compact controller, lightweight 35,000rpm rotary handpiece, variable-speed foot rheostat, handpiece cradle rest and safety glasses. Controller features a voltage selector switch, dial speed control, forward/reverse handpiece direction switch and motor overload cutoff switch. Accommodates our full line of Power Hand 3 handpieces. Measures 4-1/2"W x 5-3/4"D x 3-3/4"H. Weighs 2.6 lbs. The handpiece has a max. operating speed: 35,000rpm. Measures 6"L x 1" to 5/8" dia. Weighs 7.5 oz.

Description	SKU	Each
A Marathon System with 1/8" Collet	510-2946	
Marathon System with 3/32" Collet	510-2956	
Marathon System with 3mm Collet	510-2971	
Marathon Controller only	510-2960	
Variable-Speed Foot Rheostat TPF-77 only	510-2940	
PHP35 Handpiece only (with 1/8" Collet)	510-5144	
PHP35 Handpiece only (with 3/32" Collet)	510-5145	



B OZ Elite Micromotor System

The OZ Elite Micromotor system features an advanced controller and a 50,000 rpm, 230W brushless rotary handpiece for incredible power. Ideal for a variety of applications including grinding, finishing and polishing. Made in South Korea. One-year warranty.

System includes: Controller, handpiece with 3/32" and 1/8" collet, variable speed foot rheostat, handpiece cradle rest.

Description	SKU	Each
B OZ Elite Micromotor System	510-2985	
Collets for OZ Elite Micromotors – 1/8"	501-0124	
Collets for OZ Elite Micromotors – 3/32"	501-0123	
Foot Pedal for the OZ Elite Micromotor System	510-2986	
Replacement Handpiece for the OZ Elite Micromotor System	510-2987	



C Foredom® Brushless Micromotor System

This powerful, steady, and smooth running micromotor system delivers high-torque and two speed settings for grinding, finishing, and polishing. Can be run at full speed at 50,000 rpm or between 500–5,000 rpm. The sealed plastic housing protects the controller from dust, noise and excessive vibration. Made in China.

Set Includes: Controller, brushless handpiece (3/32" and 1/8" collets), variable-speed foot rheostat and a handpiece cradle rest and holder.

Description	SKU	Each
C Foredom Brushless Micromotor System	510-2929	
Handpiece for the Foredom Brushless Micromotor System	510-2931	
Foot Rheostat for Foredom	510-2932	



D Foredom® Splitter Box for Brush Type Micromotors

Foredom's Micromotor Splitter Box HP4-920 allows users to keep 2 brush type handpieces plugged in and ready to use one at a time.

Description	SKU	Each
Foredom Splitter Box for Brush Type Micromotors	510-2939	



Gesswein® Power Hand® Marathon System

Accessories/Replacement Parts

**A-C Collets for Straight and Angle Rotary Handpieces PH3, PH2X & Marathon**

For all Power Hand Straight and Angle Handpieces except Z-HDX Heavy-Duty Head and Micro-Angle Heads.

Size	SKU	Each
A 3/32" (2.35mm)	501-0100	
B 3.0mm	501-0106	
C 1/8" (3.2mm)	501-0105	

**D-F Collets for Z-HDX Heavy-Duty Head**

For Power Hand Z-HDX Heavy-Duty Head only.

Size	SKU	Each
3/32" (2.35mm)	501-0103	
1/8" (3.2mm)	501-0104	
D 3.0mm	501-0101	
E 6.0mm	501-0107	
F 1/4" (6.35mm)	501-0108	

**G-K Reducing Collets**

Use the proper reducing collet to convert your standard 1/8", 3mm or 3/32" collet to hold a 3/32" or 1/16" tool shank. Simply slip reducing collet into collet on your Power Hand standard or angle head to use smaller shanked tools. Make sure both the reducing collet and the tool shank are fully inserted into the collet. Stainless steel.

Size	SKU	Each
G 1/8" to 3/32"	816-1501	
H 1/8" to 1/16"	816-1502	
I 3mm to 3/32"	816-1504	
J 3mm to 1/16"	816-1505	
K 3/32" to 1/16"	816-1503	

**L Power Hand® Chuck Joint Wrench**

Description	SKU	Each
For all Straight and Angle Heads	510-0179	

**M-N Power Hand® Collet Wrenches**

Description	SKU	Each
M For all Straight and Angle Heads	510-0180	
N For Z-HDX Heavy-Duty Head	510-0182	

A Power Hand® Handpiece Cradle Rest

Description	SKU	Each
PH2X Handpiece Cradle Rest	510-1130	

**B Power Hand® 3 Variable Speed Foot Rheostat VC90**

Now with Auto Cruise feature, it is possible to set a fixed speed with the foot pedal, allowing the operator to free their foot from the pedal.

Description	SKU	Each
Variable Speed Foot Rheostat VC90	510-3306	

**C-E Power Hand® 3 Motor Cord**

Description	SKU	Each
C PH3 Motor Cord	510-3382	
D Power Cord, 2nd Generation	510-0170	
E Power Cord, 1st Generation	510-0171	

**F-G Power Hand® Extension Cords**

Description	SKU	Each
F PH3 Handpiece Extension Cord – 9'	510-3380	
G PH2X Handpiece Extension Cord – 6'	510-1120	

**H Power Hand® 3 Adaptor**

This adaptor will connect new PH3 handpiece motors to our older PH2X controllers. The PH3 motors consist of 5-pronged plugs and the PH2X controllers have 3-prong plug receptacles. Therefore, this adaptor serves as a reducer from a 5 to 3-prong plug.

Description	SKU	Each
Adaptor for PH3 handpieces	510-3304	

**I-J Power Hand® 2 Foot Pedals**

Description	SKU	Each
I Variable Speed Foot Rheostat	510-2995	
J On-Off Foot Switch	510-3105	



E-Force® Brushless Micromotor System

Sleek and Simple, the E-Force Brushless System is portable enough to go with you anywhere in the shop and compact enough to leave plenty of space when you're at your workbench. Both the Solid and Interchangeable handpieces are made with a zero plastic-full metal body design and a cooling fan to prevent overheating. Use for grinding, polishing, milling and deburring.



Space Saving Compact Design
1/2 the area of conventional models

A E-Force® The Controller

The digital display shows the RPM speed in 1,000rpm increments, and the load meter illuminates when the operator is using too much force.

Specifications:

- Electrical: AC 100V, 50/60Hz
- Weight: 1.95kg (4.3lbs)
- Dimensions: (W x D x H): 60 x 230 x 150mm (2.36" x 9" x 5.91")
- Dual input ports connect up to 2 motors

Description	SKU	Each
The Controller	510-8000	

1 LOAD Meter

- Operating load condition indicated with LED
- Continuous Load Range (Continuously operable level. Recommended use within this range.)
- Intermittent Load Range (Operable level with intermission)
- Overloaded Condition (Too much load)

2 Rotation Speed Indicator

- Operating load condition is indicated with LED

3 Rotation Speed Set Button

- Increases the rotation speed by pressing (▲) button and decreases with (▼) button

4 Motor A Button

- Turns ON/OFF Motor A

5 Motor B Button

- Turns ON/OFF Motor B

6 Rotation Direction Switch Button

- Switches the direction of rotation

7 Foot Pedal Mode Select Button

- Available when the Foot Pedal (optional) is connected
- Momentary mode: Tool rotates at the set speed when Foot Pedal is pressed
- Alternate mode: Tool rotates at the set speed when Foot Pedal is pressed once, and stops when Foot Pedal is pressed again
- Analog mode: Rotation speed changes according to the amount of pressing of the Foot Pedal

8 Power Switch

9 Motor A Connector

10 Motor B Connector



All measurements in millimeters unless specified. Includes a 6 month warranty for any defective parts.

E-Force® Solid Handpieces

The solid handpieces are the lightest and smallest handpiece in the E-Force line. They are best suited for long duration and when changing heads is not necessary. The motor casing has several air slots and a cooling fan that allows heat to escape, which helps prevent overheating. At the base of the brushless motor is a multi-function switch that will turn the motor on or off and adjust the variable speed of the brushless motor.



A 20K Solid Handpiece

Specifications:

- Max. operational speed: 20,000rpm
- Max. output: 73W
- Max. torque: 5.0cNm
- Weight: 213g (excluding motor cord)
- Motor cord: (1.5m)
- 2 Collets, 3.175mm (1/8") and 2.35mm (9/32")
- 3mm sold separately

Description	SKU	Each
20K Solid Handpiece	510-8002	



B 40K Solid Handpiece

Specifications:

- Max. operational speed: 40,000rpm
- Max. output: 84W
- Max. torque: 4.0cNm
- Weight: 172g (excluding Motor Cord)
- Motor cord: (1.5m)
- 2 Collets, 3.175mm (1/8") and 2.35mm (9/32")
- 3mm sold separately

Description	SKU	Each
40K Solid Handpiece	510-8004	



C 50K Solid Handpiece

Specifications:

- Max. operational speed: 50,000rpm
- Max. output: 84W
- Max. torque: 4.0cNm
- Weight: 170g (excluding Motor Cord)
- Motor cord: (1.5m)
- 2 Collets, 3.175 (1/8") and 2.35mm (9/32")
- 3mm Collet sold separately

Description	SKU	Each
50K Solid Handpiece	510-8001	

All measurements in millimeters unless specified. Includes a 6 month warranty for any defective parts.

E-Force® 40K Motor & Interchangeable Heads

The E-Force 40K Motor can only be used with the Interchangeable Heads featuring the red color interlock exchange (Standard, Slim, Slim Long, and Clamp Styles).



A E-Force® 40K Motor

Specifications

- Max. operating speed: 40,000rpm
- Max. output 84W
- Max. torque 4.0cNm
- Weight: 96g (excluding Motor Cord)
- Motor cord: (1.5m)

Description	SKU	Each
40K Motor	510-8040	



B E-Force® Standard Rotary

Slim body supports subtle touch for the fine finish. Recommended for boring, deburring, and cutting. The max. operating speed is 40,000rpm. This head weighs 120 grams and includes 2 collets (1/8" and 3/32").

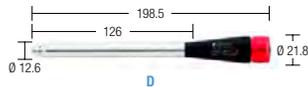
Description	SKU	Each
Standard Rotary	510-8011	



C E-Force® Slim Rotary

Ultimately slim, long, straight nose. Spanner driven chucking system provides sure tool holding. Recommended for Deburring and Polishing (Deep Hole, Tight Hole, Narrow Section). The max. operating speed is 40,000rpm. This attachment weighs 114 grams and includes 2 collets (1/8" and 3/32").

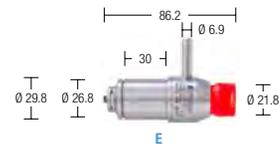
Description	SKU	Each
Slim Rotary	510-8012	



D E-Force® Slim Long Rotary

Extended version of Rotary Slim model. Spanner driven chucking system provides sure tool holding. Recommended for Deburring and Polishing (Deep Hole, Tight Hole, Narrow Section). Max. operating speed: 40,000rpm. This attachment weighs 152 grams and includes 2 collets (1/8" and 3/32").

Description	SKU	Each
Slim Long Rotary	510-8014	



E E-Force® Lever Clamp Rotary

Self-cooling model, applicable to automated machines and mountable to robots. Recommended for Deburring and Cutting. Max. operating speed: 40,000rpm. This attachment weighs 278 grams and includes 2 collets (1/8" and 3/32").

Description	SKU	Each
Lever Clamp Rotary	510-8015	

E-Force® 20K Motor & Interchangeable Heads

Incredibly versatile, the E-Force 20K Motor can be used with all of the Interchangeable Heads regardless of color.

A E-Force® 20K Motor – Compatible with All Red & Blue Interchangeable Heads

Specifications:

- Max. operating speed: 20,000rpm
- Max. output: 73W
- Max. torque: 5.0cNm
- Weight: 142g (excluding motor cord)
- Motor cord: (1.5m)

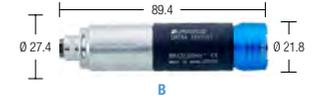
Description	SKU	Each
20K Motor	510-8020	



B E-Force® 6.35mm HD Rotary

Tools up to 6.35 available. Spanner driven chucking system provides sure tool holding. Recommended for boring, deburring and cutting. Max. operating speed is 20,000rpm. This motor weighs 141 grams. Comes standard with (1/4") collet.

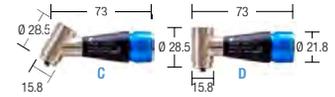
Description	SKU	Each
6.35mm HD Rotary	510-8016	



C-D E-Force® Angle Rotary Heads

Larger diameter gears improve durability from conventional models. Recommended for deburring and cutting. Max. operating speed is 20,000rpm. These attachments weight 92 grams and come with a 1/8" and 3/32" collet.

Description	SKU	Each
C 60° Angle Rotary Head	510-8013	
D 90° Angle Rotary Head	510-8019	

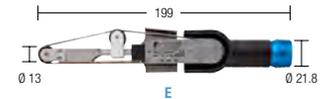


E E-Force® Belt Sander

Adjustable belt angle and switchable working side. Recommended for deburring and polishing. Max. operating speed: 20,000rpm. Belt speed: 0-1,000m/min. This attachment weighs 227 grams.

- 2 Hexagon wrenches included
- Belt Included: 4mm wide #120x2 #240x2
- 6mm wide #120x2 #240x2 #400x2
- 8mm wide #120x2 #240x2 #400x2

Description	SKU	Each
Belt Sander	510-8018	



F E-Force® Mini Reciprocating Head

Easy-to-grip pen shaped body for high-speed polishing. Recommended for polishing small parts, ribs, and slits. Max. operating speed: 20,000rpm. Stroke length is 1.0mm.

- Hexagon wrench included
- Spring holder included
- Ceramic fiber grindstone holder included
- Ceramic fiber grindstone 1 x 6 x 50 #1200 included
- Electroplated diamond file 1.8 x 5 x 55 #150 included

Description	SKU	Each
Mini Reciprocating	510-8017	



G E-Force® 4:1 Reducer

Max. operating speed: 20,000rpm. Used with E-Force 20K motor, (see our 510-8020) this reducer is installed between the motor and the head multiplying the torque 4 times, while reducing the rotational speed by 1/4.

Description	SKU	Each
4:1 Reducer	510-8009	





A



B



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A E-Force® Variable Foot Pedal

Variable speed controlled, limited only by the top RPM for the handpiece in use. Can be modified into an ON/OFF version.

Description	SKU	Each
Variable Foot Pedal	510-8007	

B E-Force® 3 Meter Cord Extension

Provides an additional 3 meters (approx. 10 feet) of reach, for when you need to bring equipment to your workpiece.

Description	SKU	Each
3 Meter Cord Extension	510-8006	

C E-Force® Handpiece Holder

Hard rubber, designed to keep your handpiece within reach.

Description	SKU	Each
Handpiece Holder	510-8008	

D-F E-Force® Collets for Straight Heads and Handpieces

Description	SKU	Each
D 3/32" (2.35mm)	501-0142	
E 3.00mm	501-0143	
F 1/8" (3.2mm)	501-0144	

G-I E-Force® Collets for Angle Rotary Heads

Description	SKU	Each
G 3/32" (2.35mm)	501-0132	
H 3.00mm	501-0133	
I 1/8" (3.2mm)	501-0134	

J-K E-Force® Collets for HD Rotary Head

Description	SKU	Each
J 3/32" (2.35mm)	501-0103	
3.00mm	501-0101	
1/8" (3.2mm)	501-0104	
K 6.0mm	501-0107	
1/4" (6.35mm)	501-0108	

L-P Reducing Collets

Use the proper Reducing Collet to convert standard 1/8", 3mm, or 3/32" collet to hold a 3/32" or 1/16" tool shank.

Description	SKU	Each
L 1/8" to 3/32"	816-1501	
M 1/8" to 1/16"	816-1502	
N 3mm to 3/32"	816-1504	
O 3mm to 1/16"	816-1505	
P 3/32" to 1/16"	816-1503	

Service & Support



Trained Professionals

Our team of sales and service specialists are fully trained on our micromotor systems so we can give you the best quality of service.



Repair Services

We offer in-house repair services on our micromotor systems.



Preventative Maintenance

Simple recommendations are easy to follow to keep your micromotors running problem free for many years to come.



Customer Support

Warranty support for any concerns and follow up consultations are available. Reach out directly to our Micromotor Technician, Lenny Provenzano III.

Air Grinders

Specialty Selected for Mold, Tool and Die Makers

These air-operated rotary handpieces are perfect for precision grinding and deburring. Use reciprocating models for honing and lapping. All require Filter/Regulator-Lubricator.

A High-Speed Rotary Air Grinder HS80 – 80,000rpm

High-speed, quiet-running, well-balanced rotary handpiece for deburring and finishing. Ideal for precision grinding. Includes 1/8" collet (optional 3/32" and 3.0mm collets also available). Supplied with air hose, coupler and tool changing wrenches. Requires Filter/Regulator-Lubricator. Measures 5-3/16" L x 1-3/16" dia. Weighs 5.7 oz. Made in Taiwan.

Model	Max. RPM	PSI	CFM	SKU	Each
A HS80	80,000	90	1.77	850-2235	
Description				SKU	Each
Optional HS80 3/32" Collet				850-2236	
Optional HS80 3.0mm Collet				850-2237	
Replacement HS80 1/8" Collet				850-2238	

B UHT Ushio High Torque Straight Air Grinder – 24,000rpm

The most powerful High Torque Air Grinder in our UHT Air Micro Grinder Series. Even under load, the high torque will handle both deburring and polishing tasks with ease. Air pressure 0.4MPa, air consumption 75 NL/min. Recommend using a filter, regulator and lubricator in the air line. Measures: 160.8mm (approx. 6-3/8") in length, 16.7mm (approx. 5/8") in diameter, slightly tapered at nose. Weighs 135 grams (4.76 ounces). Collets are not interchangeable. Made in Japan.

Model	Max. RPM	Air Pressure	PSI	SKU	Each
B HTSG-32S High Torque 3mm Straight Grinder	24,000	0.4MPa	58	850-0950	
HTSG-32S High Torque 1/8" Straight Grinder	24,000	0.4MPa	58	850-0955	

C-D UHT Ushio Air Grinders – 53,000 and 65,000rpm, Slim and Lightweight Pencil-Like Design

Quiet running handpieces ideal for many applications, including precision grinding, finishing and polishing. Feature self-lubricating vanes for dependable performance.

The Contra-Angle 120° model allows access to hard-to-reach, deep areas. Both offer rear speed control and rear exhaust. Supplied with 5' of 3/16" air hose, 1/4" NPT coupler, 13" exhaust hose, wrench and pin. Collets on the Contra-Angle Grinders are not interchangeable. Use with Filter/Regulator-Lubricator. Contra-angle handpiece measures 5"L x 3/8" dia. Weighs 5 oz. Straight handpiece measures 5-3/8"L x 3/8" dia. Weighs 4.5 oz. Made in Japan.

Model	Max. RPM	PSI	CFM	SKU	Each
C Contra-Angle 1/8"	53,000	85	4.2	850-0905	
Contra-Angle 3mm*	53,000	85	4.2	850-0906	

*Collets are not interchangeable

Model	Max. RPM	PSI	CFM	SKU	Each
D Straight 1/8"	65,000	85	4.2	850-0900	
Straight 3mm	65,000	85	4.2	850-0901	
Straight 3/32"	65,000	85	4.2	850-0902	

Description	SKU	Each
1/8" Collet for UHT Ushio Straight Air Grinders	850-0897	
3mm Collet for UHT Ushio Straight Air Grinder	850-0898	
3/32" Collet for UHT Ushio Straight Air Grinder	850-0899	

A High-Torque Precision Air Grinder HT60 – 60,000rpm

High-torque, quiet-running, well-balanced rotary handpieces for deburring and finishing work. Supplied with air hose, coupler and tool changing wrenches. Requires Filter/Regulator-Lubricator. Measures 5-3/8" L x 1-1/16" dia. Weighs 6.4 oz.

Model	Max. RPM	PSI	CFM	SKU	Each
HT60 – 3/32"	60,000	90	4.1	850-2225	
HT60 – 3mm	60,000	90	4.1	850-2221	
A HT60 – 1/8"	60,000	90	4.1	850-2230	

B Nitto Kohki Air Sonic – 35,000rpm, High-Torque Handpiece

The rugged Nitto Kohki Air Sonic high-torque unit provides maximum power for grinding, deburring, production grinding on small castings and removing welding slag. Rear exhaust and built-in air silencer ensures quiet operation. Supplied with 1/4" to 3/8" reducing collet sleeve, 5' of 1/4" hose with 1/2" NPT coupler, 19" exhaust hose and wrenches. Use with Filter/Regulator-Lubricator. Measures 7"L x 1-1/4" dia. Weighs 1 lb.

Model	Max. RPM	PSI	CFM	SKU	Each
B L-35B	35,000	85	12.3	850-7012	
Reducing Collet Sleeves				SKU	Each
Optional 1/4" to 3/16"				850-7016	
Replacement 1/4" to 1/8"				850-7015	

C Nitto Kohki MYS-20 Air Angle Disc Sander – 19,000rpm

This powerful, compact, right-angle sander has a low-profile head which is ideal for sanding dies or molds made out of steel or aluminum, and for finishing welds. Lightweight (1.2 lbs. [0.54kg]) and compact (1-1/2" barrel diameter) for continuous sanding in small, confined areas. The new coated gears and high-life blades are designed to offer extended run-time performance. Throttle lever has a safety flip lock to prevent accidental start-ups and to automatically turn the unit off. Requires 1/4" NPT air connection. Use with Miniature Filter/Regulator-Lubricator (sold separately #8507349). Made in Japan.

Max. RPM	PSI	CFM	SKU	Each
19,000	85	14.8	850-7017	

D Air-Operated FPD Di-Profilor Set – 10,000 Strokes Per Minute

Employs a high-quality, variable-speed, air-driven reciprocating handpiece similar to our popular Di-Profilors. In addition to FPD Di-Profilor, set includes air line, filter/regulator-lubricator, lubricating oil, 5' of reinforced flexible hose, quick-disconnect hose connector, wrench, lathe adapter post and molded storage case. Accepts tools up to 1/8" in diameter. Measures 6-3/4"L x 1-1/4" dia. Weighs 2 lbs.

Strokes Per Minute	Length	PSI	CFM	SKU	Each
10,000	0–6.0mm	57	0.18–2.3	850-1845	

E Air Gun with Self-Coiling Hose

A high-quality blow gun with responsive spring-loaded trigger. Produces a very narrow air stream on-demand.

Includes convenient self-coiling 1/4" hose and 1/4" NPT coupler. Gun tip extends roughly 4" out of molded plastic handle.

Strokes Per Minute	Length	PSI	CFM	SKU	Each
10,000	0–6.0mm	57	0.18–2.3	265-2325	



A



B



C



D



A



B



C



D



E



A



B



C



D

A-D Angle Surface Air Grinder AG22 – 7mm 22,000rpm

A 120°-angle rotary handpiece for grinding, chamfering, deburring and finishing welds and larger surface areas. Includes collet chuck with 7mm screw shaft for mounting abrasive cup wheels and abrasive discs. Supplied with air hose, coupler, 30mm cup wheel (60 grit), ten 30mm PSA discs (60, 100 and 150 grit), 30mm PSA disc holder and changing tool for cup wheels and PSA disc holder. Requires Filter/Regulator-Lubricator. Measures 6-3/8" L x 3/8" dia. Weighs 7 oz. Made in Taiwan.

	Max. RPM	PSI	CFM	SKU	Each
A	22,000	90	3.0	850-2240	

B-D UHT Ushio Micro-Angle Surface Air Grinder – 6mm, 7mm

Quiet-running handpieces are ideal for precision grinding, finishing and polishing. Feature self-lubricating vanes for dependable performance. Read speed control and rear exhaust. Supplied with 5' of 3/8" air hose and 1/4" NPT coupler. Airline filter/regulator/lubricator required. Both 90° and 120° handpieces optimize ergonomics and offer 7mm threaded shaft for delivering maximum torque to 30mm diameter grinding, sanding, and buffing tools. Made in Japan.

	Description	Max. RPM	CFM	SKU	Each
B	MAG-093N Micro-Angle 90° Grinder 7mm	24,000	4.2	850-0890	
C	MAG-123N Micro-Angle 120° Grinder 7mm	23,500	4.2	850-0895	
D	MAG-122N Contra 120° Angle Air Grinder 6mm	35,000	4.2	850-0875	

E Cup Wheel

Our 30mm diameter, 60 grit, cup wheels come in a box of 48 pieces - ID is sized for use with our 7mm surface grinders.

	Description	Dia.	Grit	SKU	Pkg. of 48
E	Cup Wheel	30mm	60	850-2242	
			100	850-2243	
			150	850-2244	



E

F 30mm PSA Disc Holder for 7mm Thread Surface Air Grinders

Our 30mm diameter, 60 grit, cup wheels come in a box of 48 pieces - ID is sized for use with our 7mm surface grinders.

	Description	Dia.	SKU	Each
F	PSA Disc Holder	30mm	850-2241	



F

G PSA Disc 30mm Diameter

These 30mm diameter, 60 grit Aluminum Oxide PSA discs come 150 in a box. Made in Japan. Use with holder (850-2241, not included but sold separately) for use with any of our Surface Air Grinders which accept a 7mm screw shaft. To use with other handpieces, consider purchasing our 5100255 which has a 3mm shank.

	Description	Dia.	Grit	SKU	Pkg. of 150
G	PSA Disc	30mm	60	850-2229	
			100	850-2231	
			150	850-2232	
			240	850-2233	
			320	850-2234	
			400	850-2239	
			600	850-2249	



G

A PSA Disc Holder – For 6mm Surface Air Grinders

This is the disc holder needed for all the PSA discs. Will fit our Ushio 6mm Contra Angle Grinder (MAG-122N). Made in Japan.

Description	Dia.	SKU	Each
PSA Disc Holder	20mm	840-0140	



A

B Aluminum Oxide PSA Discs – 20mm

Our 20mm PSA Discs have pressure sensitive adhesive backing to allow them to affix to any 20mm holder. If your surface grinder has a 6mm shaft, you can use our 840-0140 holder.

Description	Dia.	Grit	SKU	Pkg. of 150
B	PSA Disc	20mm	60	105-0402
			100	105-0404
			150	105-0406
			240	105-0408
			320	105-0410
			400	105-0412
			600	105-0414



B

C Cup Wheels – For 6mm Surface Air Grinders

Cup wheels are sold in a 24 pack and will fit our Ushio 6mm Contra Angle Grinder (MAG-122N).

Description	Dia.	Grit	SKU	Pkg. of 24
Cup Wheels	20mm	60	245-3000	
		100	245-3002	
		150	245-3004	



C

D Chicago Pneumatic Air Scribe®

The CP9361 Air Scribe is an air tool that writes as easily as a ballpoint pen on a variety of metals. Comes with replaceable carbide tip.

Model	Measurements	SKU	Each
D	CP9361	1 1/16" dia x 4-3/4" long	850-7395
Replacement Parts		SKU	Each
E	Replacement Carbide Stylus for Chicago Pneumatic Air Scribe	850-7396	
F	Optional Round Tip for Chicago Pneumatic Air Scribe	850-7397	
G	Optional Blank Tip for Chicago Pneumatic Air Scribe	850-7398	
H	Optional Flat Tip for Chicago Pneumatic Air Scribe	850-7399	



D



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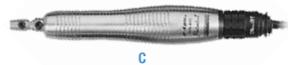
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A-C Turbo Air Lappers – Reciprocating Handpieces

Low-vibration, quiet-running, durable reciprocating handpiece with a short stroke. Perfect for polishing ribs, slots and other tight areas. Produces great results with Diamond Poli Files and Super Ceramic Stones. These color coded models are supplied with air hose, coupler, foam sleeve and three tool holders for 1mm to 1/8" flat tools and 3mm round tools. Requires Filter/Regulator-Lubricator. UTR-30, measures 7-7/8"L x 1-3/32" dia., weighs 6.7 oz. UTR-70, measures 8"L x 1-1/8" dia. Weighs 6.7 oz.; UR-120, measures 8-3/16"L x 1-3/16" dia. Weighs 6.0 oz. 90 day manufacturers warranty. Made in Taiwan.

Description	Strokes			PSI	CFM	SKU	Each
	Per Minute	Length	PSI				
A UTR-30	30,000	0.3mm	90	1.76	850-2250		
B UTR-70	28,000	0.7mm	90	1.76	850-2245		
C UR-120	12,000	1.2mm	90	2.83	850-2251		

Description	Accepts Tools	SKU	Each
Holder #64	1mm flat, 3mm round	850-2246	
Holder #65	1mm flat	850-2247	
Holder #62	1/8" flat	850-2248	

D-F UHT Ushio TurboLap Air Filers – Reciprocating Handpieces

TurboLap delivers high-speed reciprocation with high torque and a short stroke. Ideal for filing, lapping and polishing molds or honing precision parts.

Makes quick work of polishing ribs, slots and intricate areas. Runs quietly and is designed to be operated for long periods without getting hot. Provides optimum results with Diamond Poli Files and 1mm flat Super Ceramic Stones. Lightweight with good balance and ergonomic soft-grip design.

Three color-coded models, each supplied with hexagonal wrench, 1 Diamond Poli File, 1.5m air hose, overhose, hose bands and quick joint with filter. Accepts up to 1mm flat or 3mm round tools.

Requires 1/4" NPT air connection and Filter/Regulator. No oil lubrication required. Measures 7" long x 1" diameter. Weighs 5.9 ounces. Made in Japan.

Description	Strokes			PSI	CFM	SKU	Each
	Stroke Length	Per Minute	PSI				
D Blue	0.3mm	52,000	90	1.65	850-0928		
E Red	0.7mm	28,000	90	1.65	850-0930		
F Yellow	1.2mm	19,000	90	1.65	850-0932		

G-I UHT Ushio TurboLap Air Side-to-Side Filer

This UHT Ushio TurboLap is a high-speed horizontal elliptical swing air tool with a 1.2mm stroke length. Ideal for filing, lapping and polishing molds or honing precision parts. Makes quick work of using a side-to-side motion while polishing intricate areas. Runs quietly and is designed to be operated for long periods without getting hot. Lightweight with good balance and ergonomic soft-grip design. Accepts up to 1mm flat or 3mm round tools. Requires 1/4" NPT air connection and Filter/Regulator. No oil lubrication required. Provides optimum results with Diamond Poli Files and 1mm flat Super Ceramic Stones. See also our Turbo Lap diamond files. Lightweight with good balance and ergonomic soft-grip design. Measures 7" long x 1" diameter.

Description	Stroke Length	PSI	SKU	Each
G Yellow	1.2mm	90	850-0933	
H Red	.7mm		850-0931	
I Blue	.3mm		850-0929	

A Super Hand Pneumatic Filer

A powerful reciprocating tool for an efficient way to file. Vibration-free due to its double-piston design. Accepts tool diameters up to 1/4". Comes complete with 6" hose with 1/4" NPT connector, four coarse files (three-square, half-round, flat and round tapered) and wrench. Use with Filter/Regulator-Lubricator. Measures 6-1/2"L x 1-1/2" dia. Weighs 2.4 lbs. Made in Japan.

Strokes Per Minute	Stroke Length	PSI	CFM	SKU	Each
4,000	5.0mm	85.3	6	850-7200	

B ASH-900 Super Hand Pneumatic Filer

Fast, efficient filing, sanding, and deburring tool eliminating time consuming manual hand-filing operations. Accepts tool diameters up to 5mm. Comes complete with a 5' hose with threaded adapter 1/2" PT x 1/4" NPT connector, four coarse files (triangular tapered, half round, flat and round tapered), and 2.5mm allen wrench. Use with Filter/Regulator-Lubricator. Measures 7.17"L x 1.5" dia. Weighs 1.6 lbs. Made in Japan.

Strokes Per Minute	Stroke Length	PSI	CFM	SKU	Each
6,300	9.0mm	85	7.1	850-7260	

C Turbo Lap Diamond File Sets – Set of 11

Our set of 11, 120 grit diamond files were designed for finishing in tight areas. The high quality diamond abrasive performs well in high speed and short stroke applications. The U-shape design locks the file into Turbo Air Lappers and UHT Ushio TurboLaps handpieces. Can also be used by hand with the Diamond File Holder (see our 2410684). Each diamond file has maximum thickness of 1mm and tapers down to 0.5mm thick. Files are also sold individually. Made in Taiwan.

Description	Shape	Grit	SKU	Each
C Diamond Files	Assorted	120	241-0637	
		200	241-0638	
		400	241-0639	



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A SilentAire Compressors – Quiet Yet Powerful!

The Val-Air is a premium value model with cast aluminum lid with cooling fins for improved ventilation and Filter-Regulator with auto-drain feature and condensate bottle. With a coalescent filter to 0.01 micron.

Sil-Air is the same without the aluminum lid with cooling fins or coalescent filter.

Both versions feature powerful 1/2 HP motors which provide over 2 CFM of air. They can handle up to 10 large Wax Injectors and are fully automatic. Both make about as much noise as a refrigerator, so you can work without distraction. Both measure 14" dia. x 22"H. Weigh 58 lbs. May require additional filter at the air tool to eliminate condensation that can form in very long airlines. Accepts 1/4" male fittings. 220V also available. Made in Italy.

Features:

- Tank and line pressure gauge
- Line pressure regulator
- Moisture trap and filter
- Safety valve
- Air-intake filter

Specifications:

- Motor: 1/2 HP
- Max. Pressure: 114 PSI
- Tank Capacity: 4 gals.
- Displacement: 2.15 CFM
- Noise Level: 40 dB

Description	FOB	Electrical	SKU	Each
A SilentAire Val-Air Compressor	CT	110V	265-3100	
SilentAire Val-Air Compressor	TX	110V	265-3101	
SilentAire Sil-Air Compressor	TX	110V	265-3095	
SilentAire Sil-Air Compressor	CT	110V	265-3094	
Replacement Oil, 24 oz.			265-3103	

B Oil-Free Air Compressor – 3/4 HP Oil-Free Air Compressor

Engineered and built with the latest technology to provide high quality clean air. The Oil-Free Dual Piston Pump System allows the air compressor to work more efficiently, creating less noise and less wear for a longer pump life. Oil-less operation makes it virtually maintenance free! Includes tank and line pressure gauge, line pressure regulator, moisture trap with filter, safety valve, and air intake filter. Made in China.

Specifications:

- Motor: 3/4 HP
- Max. Pressure: 116 PSI/8 bar
- Tank Capacity: 6 gals.
- Displacement: 4.2 CFM
- Noise level: 52 dB
- Airflow: 118 liters per minute
- Dimensions: 16" dia. x 21H"
- Weight: 61lbs.

Description	FOB	Electrical	SKU	Each
Oil-Free Air Compressor	CT	110V, 600 watts	265-3120	

C California Air Tools 4610AC – 1 HP & Oil-Free Air Compressor

Quiet, (60 dB) oil-free and lightweight. Designed to increase duty cycle and allow for longer continuous run times. Powerful 1.0 HP motor is engineered to dissipate heat, allowing for a cooler operation while reducing wear. The Oil-Free Dual Piston Pump System is engineered for high performance and durability. Complete with two pressure control gauges, air filter, two universal 1/4" quick connectors, and thermal overload protector. Made in China.

Specifications:

- Motor: 1 HP
- Max. Pressure: 120 PSI
- Tank Capacity: 4.6 gals. (Aluminum Tank)
- Noise level: 60 dB
- Dimensions: 19-1/8"L x 16-3/4"W x 19-3/4"H
- Weight: 45.5 lbs.

Description	Electrical	SKU	Each
California Air Tools 4610AC	110V/60Hz	265-3127	



Air Tool Accessories

It is extremely important that compressed air be dry, clean and regulated to a pressure suitable for the operation of any air tool. When air tools require lubrication to reduce friction, filters should be installed in the air line as close as possible to the air tool to prevent water vapor condensation.

A-B Miniature Filter/Regulator/Lubricator Assembly – For Air Handpieces

Combines functions of filter, regulator and lubricator. General-purpose filter removes solid and liquid particles down to 5 microns. Regulator allows outlet pressure adjustment from 5 to 100 PSI. Micro-fog lubricator provides oil mist to lubricate moving parts of air handpieces. Has 1 oz. reservoir. Use optional bracket to mount on wall or bench. Maximum inlet pressure: 150 PSI. Ports: 1/8".

Description	SKU	Each
A Filter Assembly	850-7349	
B Mounting Bracket	850-7335	
Replacement Filter	850-7369	



C-E Miniature Filter/Regulator

Combines the functions of filter and regulator. Filter removes solid and liquid particles in compressed air down to 5 microns. Regulator allows outlet pressure adjustment from 5 to 100 PSI. Maintains nearly constant outlet pressure despite changes in inlet pressure. Use optional bracket to mount on wall or bench. Maximum inlet pressure: 150 PSI. Ports: 1/4".

Description	SKU	Each
C Filter Assembly	850-7333	
D Mounting Bracket	850-7335	
E Replacement Filter	850-7369	



F-Q Quick Disconnect Air Hose and Fittings

Sturdy 1/4" O.D. nylon air hose with .040" wall thickness and a collection of timesaving quick-disconnect fittings. To connect, just push air hose into fitting – it automatically locks in place. To disconnect, push back plastic ring on fitting and pull air hose out. The 1/4" and 1/8" male fittings work with a variety of sandblasters, wax injectors, sprue cutters and more. Use 1/4" males for air filters, regulators and vacuum pumps.

Description	SKU	Per Foot
F Nylon Air Hose, 1/4" O.D.	265-2286	
Description	SKU	Each
G QD Connector, Male, 1/4"	265-2276	
H QD Elbow, Male, 1/4"	265-2288	
I QD Swivel Elbow, Male, 1/8"	265-2291	
J QD Swivel T-Connector, Male, 1/4"	265-2278	
K QD Connector, Male, 1/8"	265-2277	
L Nipple Reducer, 1/4"-1/8"	265-2289	
M Plug for QD 1/4" Connectors	265-2283	
N Coupling, Female, 1/4" to 1/4"	265-2284	
O QD Union (Straight), 1/4"	265-2282	
P QD Union T, 1/4"	265-2281	
Q QD Union Elbow, 1/4"	265-2279	



R Reinforced Air Hose

Sturdy 1/4" I.D. rubber air hose reinforced to withstand air pressures up to 250 PSI. Use for compressed air and vacuum pumps. Works with barbed fittings. Sold by the foot.

Description	SKU	Per Foot
Reinforced Air Hose	265-2273	



S Air Handpiece Oil

Description	SKU	Each
Air Handpiece Oil – 1 Liter	850-0988	



Foredom® Flexible Shaft Motors & Kits

Ideal for grinding, carving, drilling, deburring, engraving, polishing and more. Our wide selection of flexible shaft motors, handpieces and accessories allows you to grind and finish almost any material. Each motor comes complete with flexible shaft and sheath. Motors are sold individually, with handpiece, with handpiece and foot pedal or in kits that include motor, handpiece and foot rheostat. Flexshafts backed by manufacturer's two-year warranty. Foredom branded handpieces are a 90-day warranty unless otherwise noted. All motors have fully grounded wiring. UL listed. Made in USA.

Motor Specifications	TX and TXH	SR, SRM and SRH	LX
Max. Operating Speed	15,000rpm	18,000rpm	5,000rpm
Power	1/3 HP	1/6 HP	1/10 HP
Applications	Toughest grinding & finishing	General purpose grinding & finishing	Controlled grinding & finishing

A-C Foredom® Series TX – 1/3 HP

Provides full torque and smooth, controlled acceleration throughout the entire speed range. Ideal for polishing, milling, drilling and other applications that call for high torque. Offer great control under any load. Speed range: 0–15,000rpm. All 50/60Hz. Not available in 230V.

- TX is a hanging-style flexible shaft motor with 39" shaft and sheath. Longer 66" replacement shaft and sheath also available, 850-3398. Use with TXR or SXR foot rheostat or EMX speed controller (850-3516) and all standard quick disconnect (QD) handpieces.
- TXH is a hanging-style square-drive flexible shaft motor with heavy-duty (HD) 60" flexible shaft with sheath liner/silencer. Ideal for the toughest applications using large tools mounted on 1/4" and 6mm shanks. Use with TXR or SXR foot rheostat or EMX speed controller (850-3516). Can only use 25H, 30H and 44HT handpieces.

Quick Disconnect (QD) Keyway Drive

Description	Electrical	SKU	Each
A TX Motor (with shaft & sheath)	115V	850-0381	
B TX + 30 + TXR-1 Kit*	115V	850-0498	

*Includes flex shaft accessory set and rotating bur holder.

Heavy Duty (HD) Square Drive

Description	Electrical	SKU	Each
C TXH Motor (with shaft & sheath)	115V	850-0465	
D TXMH Motor (with shaft & sheath)	115V	850-0380	

E-F Foredom® Series LX – 1/10 HP

Great for low-speed, high-torque applications that require more control. Prevent tools from slowing under load. Speed range: 0–5,000rpm. 50/60Hz. Available either in Bench-Style or Hanging-style flexible shaft motor with 39" shaft. Longer 66" replacement shaft and sheath also available, 850-3398, and more flexible neoprene sheath. Use with TXR, SXR or FCT-1 or EFC foot rheostats or EMX speed controller (850-3516) and all standard quick disconnect handpieces.

Quick Disconnect (QD) Keyway Drive

Description	Electrical	SKU	Each
E LX Motor (with shaft & sheath)	115V	850-1220	
LX-2 Motor (with shaft & sheath)	230V	850-1221	
F LXB Motor+ SXR-1	115V	850-0516	

A-C Foredom® Series SR – 1/6 HP

These motors combine all the best features: power, reliability and reversibility. Built with a larger commutator, brushes and fan to increase performance and longevity, they provide all you need for general-purpose grinding and finishing. Reverse capability allows both left- and right-handers to control direction of debris. Speed range: 0–18,000rpm. 50/60Hz.

- SR is a hanging-style flexible shaft motor with 39" shaft and sheath. Longer 66" replacement shaft and sheath also available. Use with FCT, SCT or WF-7 foot rheostat or EM speed controller and all standard quick disconnect handpieces.
- SRM is a bench-mounted flexible shaft motor with 39" shaft and sheath. Longer 66" replacement shaft and sheath also available and built-in speed control. Use with all standard quick disconnect handpieces.
- SRH is a hanging-style square-drive flexible shaft motor with heavy-duty 60" flexible shaft with sheath liner/silencer. Ideal for tough applications using large stones and tools mounted on 1/4" and 6mm shanks. Use with FCT, SCT or EFC foot rheostats or EM speed controller and 25H, 30H or 44HT handpieces.

Quick Disconnect (QD) Keyway Drive

Description	Electrical	SKU	Each
A SR Motor (with shaft & sheath)	115V	850-0480	
SR-2 Motor (with shaft & sheath)	230V	850-0482	
SR + 20 + FCT-1	115V	850-0477	
SR + 20 + FCT-2	230V	850-0478	
SR + 20 + FCT-1 Kit*	115V	850-0493	
SR-2 + 20 + FCT-2 Kit*	230V	850-0494	
SR + 30 + FCT-1	115V	850-0475	
B SR + 30 + FCT-1 Kit*	115V	850-0495	
SR + 30 + SCT-1 Kit*	115V	850-0486	
SR + 20 + 30 + FCT-1	115V	850-0499	
SR-2 + 30 + FCT-2 Kit*	230V	850-0496	
SR-2 + 30 + FCH-2	230V	850-0487	
C SRM Motor (with shaft & sheath)	115V	850-0497	

*Includes flex shaft accessory set and rotating bur holder.

Replacements

	SKU	Each
SR, SR-2, SRM Shaft	850-3395	
SR, SR-2, SRM Sheath	850-3010	
SR, SR-2, SRM Brushes (pair)	850-4108	

Alternates

	SKU	Each
66" Inner Shaft	850-3397	
66" Outer Sheath	850-3396	

Heavy Duty (HD) Square Drive

Description	Electrical	SKU	Each
SRH Motor (with shaft & sheath)	115V	850-1462	
SRH-2 Motor (with shaft & sheath)	230V	850-1466	

Replacements

	SKU	Each
SRH, SRH-2 Shaft/Sheath Assembly	850-3401	
SRH, SRH-2 Brushes (pair)	850-4108	



Foredom® Handpieces for Standard Flexible Shaft Machines

We offer a wide selection of handpieces to fit your needs, including both rotary and reciprocating handpieces with fixed collets, changeable collets or chucks. Several come with a quick-tool-change mechanism, and many are also available with a duplex spring for better control. All quickly detach from shaft. Compatible with all flexible shaft motors except TXH, TXMH, SRH and H.



A-B Foredom® #30 Handpiece

The #30 handpiece features a geared Jacobs chuck that accepts up to 5/32" shanks and maintenance-free pre lubricated ball bearings. Includes chuck key with handle. Choose between blue and traditional silver. Measures 1" dia. x 5"L. Weighs 6 oz.

Color	SKU	Each
A Silver	850-1350	
B Blue	850-1352	
Description	SKU	Each
Chuck Key without Handle	850-3550	
Replacement Chuck	850-2220	
Replacement Chuck Key with Handle	850-3545	

C Foredom® Angle Grinder Attachment

Foredom's Angle Grinder Attachment is designed for use with the #30 Handpiece. Can be used to grind, sand, and polish on metal, wood, stone, glass, ceramics, bondo and more. This quality-machined, sturdy, and compact device works with 2" and smaller discs and 2" wheels with 3/8" arbor holes. 73 piece accessory set is sold separately: Contains comprehensive collection of abrasives for metal working.

- Optimum operated speed: 10,000 to 15,000rpm
- Maximum speed: 18,000rpm for short intervals
- Measures 3-1/8"L x 2-1/2"W, 2-3/4"D
- 0.75 to 1 gear reduction.

Description	SKU	Each
C Foredom Angle Grinder Attachment	850-1358	
Optional 73 Piece Accessory Set	850-0514	

D Foredom® #44T Handpiece

Similar to #30 handpiece except that it has a collet-type chuck for holding various shank sizes. Six collets from 1/16" to 1/4" available, plus 3mm and 6mm collets. Includes 3/32", 1/8" and 1/4" collets, pin and collet wrench. Pre lubricated ball bearings require no maintenance. Measures 1" dia. x 5-1/2"L. Weighs 7 oz.

Description	SKU	Each				
D #44T Handpiece with 3/32", 1/8" and 1/4" collets	850-1425					
Collet	5/32"	3/16"	1/4"	3mm	6mm	Each
	SKU	SKU	SKU	SKU	SKU	
	850-5440	850-5450	850-5470	850-5475	850-5480	
	Description	SKU	Each			
	Set of all 7 collets	850-5400				

A Technique Rotary Handpiece

A lightweight, vibration-free, high-precision handpiece with quick-change flip-lever chuck release. Supplied with 3/32" collet. Shaped for the hand. Can be held like a pen. Has all-metal dustproof casing. Includes wrench and screwdriver. Measures approx. 1" dia. x 6"L. Weighs 4-1/2 oz. Made in Switzerland.

Description	SKU	Each
A Technique Handpiece	850-2054	
Optional 1/8" Collet	850-2058	
Replacement 3/32" Collet	850-2057	



B Foredom® #28 Handpiece

A lightweight handpiece for intricate work and general grinding, polishing, deburring and carving applications. Slim, tapered grip provides comfort and control. Permanently lubricated ball bearings ensure smooth operation. Includes 3/32" and 1/8" collets, pin and collet wrench. Measures 3/4" dia. x 5-3/8"L. Weighs 2.9 oz.

Description	SKU	Each
B #28 Handpiece with 3/32" and 1/8" collets	850-1348	
Replacement 1/16" Collet	850-5030	
Replacement 3/32" Collet	850-5040	
Replacement 1/8" Collet	850-5050	
Set of 4 Collets	850-5010	



C-D Foredom® #20/#20D Quick-Change Handpiece

Lever action allows instant tool changes. Wider metal body is designed to stay cooler. Front-end tapers to a molded plastic grip for close, easy handling. Prelubricated ball bearings require no oil. Accepts 3/32" shanks only. Measures 1-1/8"-3/8" dia. x 5-5/8"L (without duplex). Weighs 4 oz.

Description	SKU	Each
C #20 Handpiece	850-1280	
D #20D Handpiece with Duplex Spring	850-1285	
Replacement 3/32" Collet	850-5425	



E-F Foredom® #10/#10D Handpiece

Features a quick-release lever for rapid tool changing. Prelubricated ball bearings require no maintenance. Accepts 3/32" shanks only. Measures 3/4" dia. x 10-3/4"L (without duplex). Weighs 5 oz.

Description	SKU	Each
E #10 Handpiece	850-1252	
F #10D Handpiece with duplex spring	850-1253	
Replacement 3/32" Collet	850-1254	





A-B Foredom® #18/#18D Quik Change Handpiece

Allows faster bur changes for improved productivity. Ideal for stone setting and applications that require many bur changes. Has permanently lubricated ball bearing for cool and quiet continuous operation. Includes $\frac{3}{32}$ " collet. Measures $\frac{3}{8}$ " dia. x 7"L (without duplex). Weighs 3.5 oz.

Description	SKU	Each
A #18 Handpiece	850-1325	
B #18D Handpiece with duplex spring	850-1320	
Replacement $\frac{3}{32}$ " Collet	850-5485	

C SVTN-S Handpiece

Right angle handpiece with a telescopic head. Maximum extension is 3- $\frac{1}{4}$ ". Excellent for hard-to-reach areas. Complete with $\frac{1}{8}$ " and $\frac{3}{32}$ " collets as well as a wrench for changing collets. Replacement collets available. Optional 3mm collet also available. Handpiece measures $\frac{3}{4}$ " diameter x 7- $\frac{3}{4}$ " long. Weighs 6- $\frac{1}{2}$ oz. This handpiece is an update to the older VTX model. Made in Germany.

Description	SKU	Each
C SVTN-S Handpiece	850-2150	
Replacement $\frac{3}{32}$ " Collet	850-5340	
Replacement $\frac{1}{8}$ " Collet	850-5350	
3mm Collet	850-5255	

D Foredom® #29 Right Angle Handpiece

The Foredom #29 Right Angle Handpiece is designed to have a slim profile making ideal for maneuvering through tight spaces. Comes with a $\frac{1}{8}$ " collet installed so we recommend using a reducing collet to expand the range of tools you can use. Select our 8161501 to reduce to $\frac{3}{32}$ " and select 816-1502 to reduce to $\frac{1}{16}$ " diameter shanked tools. The pin wrench for tightening the right-angle handpiece head to the handpiece body and an assortment of abrasives is supplied with the handpiece. Does not require lubrication. Recommended speed is 3,000–15,000 rpm.

Description	SKU	Each
D Foredom #29 Right Angle Handpiece	850-1329	

A-B Foredom® Hammer Handpiece #15/#15D – 5,000rpm

Hammer handpiece with reciprocating action for general work. Has $\frac{1}{32}$ " stroke with adjustable impact. Includes anvil point. Can also be used with Pavé Point for special texturing or Carbide Stylus for texturing, marking or scribing hardened steel. Speed range for most applications: 0–5,000rpm. Measures $\frac{1}{2}$ " dia. at tip x 9- $\frac{1}{2}$ "L (without duplex). Weighs 4 oz.

Description	SKU	Each
A #15 Handpiece	850-1270	
B #15D Handpiece with duplex spring	850-1272	
Optional Pavé Point	850-1275	
Optional Carbide Stylus	850-1274	
Replacement Anvil Point	850-1273	

C Technique Hammer Handpiece – 5,000rpm

Features a lightweight, slender body that you can hold comfortably for long periods. Runs with very little vibration. Includes screw-in pointed tip. Optional tips available (see below). Measures $\frac{1}{2}$ " dia. x 5- $\frac{1}{2}$ "L. Weighs 2 oz. Precision-made in Switzerland.

Description	SKU	Each
Technique Handpiece	850-1295	

D-E Badeco Swiss Hammer Handpiece – 5,000rpm

Provides adjustable striking force for closing bezels and prongs or creating textures. Minimizes vibration for comfortable extended use. Includes Round Flat Tip 850-3720. Additional tips available (see below). Measures $\frac{1}{2}$ " dia. x 9- $\frac{1}{2}$ "L (without duplex). Weighs 6 oz.

Description	SKU	Each
D Badeco Swiss Handpiece	850-1333	
E Badeco Swiss Handpiece with duplex spring	850-1330	
Badeco Hammer Handpiece Tips		Each
Round Concave Tip, 1mm	850-3715	
Rectangular Flat Tip, 1 x 2mm	850-3725	
Rectangular Grooved Tip, 1.2 x 2.5mm	850-3730	
Rectangular Smooth Tip, 1.2 x 2.5mm	850-3735	

F Anvil Tip Set for Hammer Handpieces

Set of 6 assorted anvil tips can be used with your hammer handpiece. Maximum 5,000rpm (forward rotation mode only). Made in China.

- Universal fit for standard 3mm and $\frac{1}{8}$ -48 US threads
- Heat-treated steel tips with a black oxide finish
- Includes tightening rod

6 shapes are included in the set:

- Ball Nose
- Bezel Rocker
- Fine Tip
- Rectangle
- Round
- Square

Description	SKU	Each
Anvil Tip Set of 6	850-3785	

G Foredom® Duplex Spring Adaptor

Foredom's Duplex Spring Adapter is the ideal attachment to turn your standard handpiece into a duplex spring style in seconds. Simply attach this Duplex Spring Adaptor between your flexshaft (cable) and your handpiece giving you extra flexibility while offering more subtle, finer movement of the handpiece when you're working at the bench. Works on all Foredom key tip accepting handpieces (except the H.50 handpiece and certain attachments (Filer, Angle Grinder, Belt Sander). Measures 7- $\frac{5}{8}$ " x 1- $\frac{1}{16}$ " diameter.

Description	SKU	Each
Foredom Duplex Spring Adaptor	850-1962	



Foredom® Heavy-Duty Rotary Handpieces for TXH, TXMH and SRH

Included uses are grinding, carving, drilling, deburring, engraving, polishing and more. All three handpieces have square drives and attach quickly with positive sheath locking mechanisms to TXH, TXMH and SRH flexible shaft motors, as well as H flexible shaft motors. Have shielded ball bearings that require no lubrication. Feature compact, lightweight designs for accessing tight areas while minimizing hand fatigue.

A Foredom® #25H Handpiece

Features one-piece spindle construction with permanently lubricated, double-sealed ball bearings for cool extended running. Includes 1/8" and 1/4" collets. Measures 1" dia. x 6-1/8"L. Weighs 8-1/2 oz.

Description	SKU	Each
A #25H Handpiece	850-1340	
3/32" Collet	850-5210	
Replacement 1/8" Collet	850-5220	
3/16" Collet	850-5230	
Replacement 1/4" Collet	850-5240	
3mm Collet	850-5242	
4mm Collet	850-5245	
Set of all 5 inch-size collets*	850-5052	

*1/16" collet included in set and not sold separately.

B Foredom® #29H Handpiece

The Foredom #29H Right Angle Handpiece is designed to have a slim profile making ideal for maneuvering through tight spaces. Comes with a 1/8" collet installed so we recommend using a reducing collet to expand the range of tools you can use. Select our 816-1501 to reduce to 3/32" and select 816-1502 to reduce to 1/16" diameter shanked tools. The pin wrench for tightening the right-angle handpiece head to the handpiece body and an assortment of abrasives is supplied with the handpiece. Does not require lubrication. Recommended speed of 3,000–15,000rpm. Note: Only fits SRH, TXH and H flexible shaft units with 1/4" square drives ONLY – if you require a handpiece that works with a keyway (US style) flex shaft, please consider our 850-1329.

Description	SKU	Each
B Foredom #29H Handpiece	850-1345	

C Foredom® #30H Handpiece

Chuck-style handpiece with prelubricated ball bearings. Features geared Jacobs chuck that accepts shanks up to 3/32". Includes chuck key without handle. Measures 1" dia. x 5-3/8"L. Weighs 7-1/4 oz.

Description	SKU	Each
C #30H Handpiece	850-1355	
Chuck Key with Handle	850-3545	

D Foredom® #44HT Handpiece

Collet-type version of #30H handpiece. Includes 3/32", 1/8" and 1/4" collets. Measures 1" dia. x 6-1/8"L. Weighs 8-1/2 oz.

Description	SKU	Each
D #44HT Handpiece	850-1455	
Replacement 3/32" Collet	850-5420	
Replacement 1/8" Collet	850-5430	
3/32" Collet	850-5440	
3/16" Collet	850-5450	
Replacement 1/4" Collet	850-5470	
3mm Collet	850-5475	
6mm Collet	850-5480	
Set of all seven collets	850-5400	

A Foredom® TXR, FCH and FCT Foot Rheostats

Solid-state foot-operated speed controllers for exceptionally smooth control over the entire speed range. Feature heavy-duty, low-profile Ryrite plastic housing with wide footpad and skid-resistant bottom for comfort and stability. Run continuously without heat buildup. Measures 6-3/4"L x 4-1/2"W x 2-1/2"H. All 50/60Hz.

Model	Electrical	For Flex Shaft	SKU	Each
TXR-1*	115V	TX, TXB, TXH, TXBH; LX, LXB	850-3510	
FCH-1*	115V	H, HB	850-3460	
FCH-2	230V	1/6 HP SR, SRB, SRH; H, HB	850-3461	
A FCT-1*	115V	1/6 HP SR, SRB, SRH; 1/8 HP SR, SRB; S, SB; CC; L, LB	850-3480	
FCT-2	230V	1/8 HP SR, SRB; S, SB; CC; L, LB	850-3485	

*CSA Listed



B Foredom® SXR, SCH and SCT Foot Rheostats

Solid-state foot-operated speed controllers for immediate response with light pressure. Feature heavy-duty, low-profile cast-iron housing with ribbed top and skid-resistant bottom for comfort and stability. Run continuously without heat buildup. Measures 6-1/4"L x 5"W x 2-1/4"H. All 50/60Hz.

Model	Electrical	For Flex Shaft	SKU	Each
SXR-1	115V	TX, TXB, TXH, TXBH; LX, LXB	850-3508	
SCH-1*	115V	H, HB	850-3455	
SCH-2	230V	1/6 HP SR, SRB, SRH; H, HB	850-3456	
B SCT-1*	115V	1/6 HP SR, SRB, SRH; 1/8 HP SR, SRB; S, SB; CC; L, LB	850-3503	
SCT-2	230V	1/8 HP SR, SRB; S, SB; CC; L, LB	850-3504	

*CSA Listed



C Foredom® EMX, EMH and EM Manual Speed Controllers

Dial-operated speed controllers for benchtop use – great alternatives to foot rheostats. Feature tough plastic housing with low profile for stability. Measures 6"L x 5"W x 2-1/2"H. All 50/60Hz.

Model	Electrical	For Flex Shaft	SKU	Each
C EMX-1	115V	TX, TXB, TXH, TXBH; LX, LXB	850-3516	
EMH-1	115V	H, HB	850-3515	
EM-1	115V	1/6 HP SR, SRB, SRH; 1/8 HP SR, SRB; S, SB; CC; L, LB	850-3511	

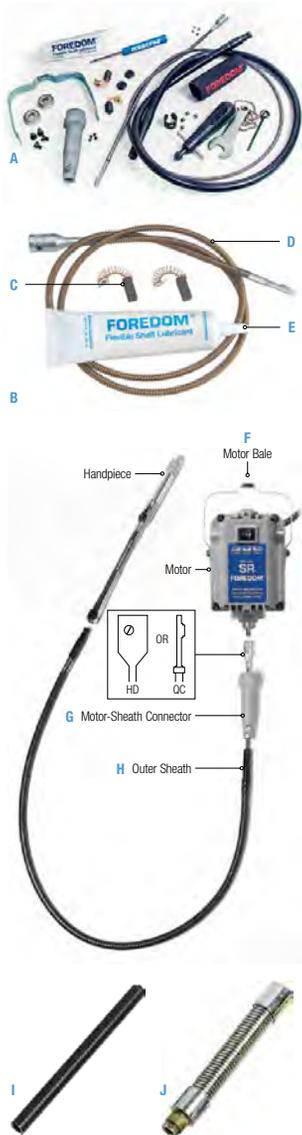


D Foredom® EMF and EM FX Dual Speed Controllers

To further enhance the Foredom Filer, we recommend the new Foredom Dual Speed Range Dial since it has a "LO" setting that restrict speed to the allowable range of the filer between 1,000–10,000rpm or 400–4,000spm. Can switch back to the optimum speed by flipping a switch and already set at the optimum speed setting. The "HI" setting permits use with rotary hand pieces at regular speeds.

Model	Electrical	For Flex Shaft	SKU	Each
D EMF	115V	SR + CC	850-3522	
EM FX	115V	TX	850-3523	



**A-H Maintenance Supplies and Replacements**

Description	For Flex Shafts	SKU	Each
A Tune Up Kit	LX/LXB, TX	850-3410	
Tune Up Kit	SR	850-3403	
Tune Up Kit	CC	850-3404	
Maintenance Kit	CC, DD, MM (115V only)	850-4015	
Maintenance Kit	EE, GG	850-4005	
B Maintenance Kit	S/SR, SM/SRM (1/8 HP)	850-4017	
Maintenance Kit	SR, SRM (1/6 HP)	850-4020	
Maintenance Kit	LX/LXB, TX	850-4006	
Replacements	For Flex Shafts	SKU	Each
Motor Brushes, pair	CC, DD, MM (110V only)	850-4110	
Motor Brushes, pair	CC, DD, MM (220V only)	850-4113	
Motor Brushes, pair	EE, GG, R/RB	850-4113	
C Motor Brushes, pair	H, S/SR, SM/SRM (1/8 HP)	850-4117	
Motor Brushes, pair	SR, SRH, SRM (1/6 HP)	850-4108	
Motor Brushes, pair	L/LB, LX/LXB, PG/PGX, TX, TXH	850-4119	
Brush Cap, individual	CC, EE, GG, L/LB, LX/LXB, PG/PGX, R/RB, S/SR (1/8 HP), SRH (1/8 HP), TX, TXH	850-4120	

Description	For Flex Shafts	SKU	Each
D Inner Shaft	CC, K, L/LB, LX/LXB, PG/PGX, R/RB, S/SR, SM/SRM, TX	850-3395	
Inner Shaft	EE, GG	850-3390	
Inner Shaft	SRH, TXH/TXBH/TXMH	850-3405	

Description	For Flex Shafts	SKU	Each
E Flex Shaft Grease, 1 oz.	All	850-4100	
Flex Shaft Oil, .25 oz.	All	850-4105	

Description	For Flex Shafts	SKU	Each
F Motor Bale	CC, H, L/LB, LX/LXB, PG/PGX, R/RB, S/SR, TX, TXH	850-2207	
G Motor-Sheath Connector	CC, L/LB, LX/LXB, PG/PGX, R/RB, S/SR, TX	850-2180	

Description	For Flex Shafts	SKU	Each
H Outer Sheath – Standard	CC, K, L/LB, LX/LXB, PG/PGX, R/RB, S/SR, SM/SRM, TX	850-3010	
Outer Sheath – Standard	EE, GG	850-3000	
Outer Sheath – Neoprene	L/LB, LX/LXB	850-3015	

Description	For Flex Shafts with Square Drives	SKU	Each
Shaft & Sheath Assembly	SRH, TXH/TXBH/TXMH	850-3401	
Shaft/Sheath Assembly	H	850-3400	

Description	For Flex Shafts	SKU	Each
Extra Long Alternates	For Flex Shafts	SKU	Each
66" Shaft/Sheath Assembly	CC, K, L/LB, R/RB, S/SR, SM/SRM, TX	850-3398	
66" Inner Shaft	CC, K, L/LB, R/RB, S/SR, SM/SRM, TX	850-3397	
66" Outer Sheath	CC, K, L/LB, R/RB, S/SR, SM/SRM, TX	850-3396	

I-J Replacements for Handpieces with Duplex Springs

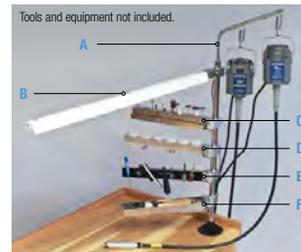
Suitable for all Gesswein/Foremost flexible shaft handpieces except #180/00.

Description	SKU	Each
I Inner Duplex Spring	850-3800	
J Outer Duplex Spring Cover	850-3802	

A-J Foremost® Bench System

Keep your most frequently used tools within easy reach. Start with the Foremost Flex Shaft Hanger to hang up to 2 flex shaft motors. Add in the LED Light Bar (100-240V AC) and your choice of Bur Holder Arm, Magnetic Tool Arm, Cup Holder Arm, Tray Arm, Handpiece Arm, Small Shelf, Medium Shelf, Large Shelf, Peg Arm and Dual Handpiece Holder.

Description	SKU	Each
A Flex Shaft Hanger – Adjustable height hanger with 2 spring hooks.	850-0531	
B LED Light Bar – Rotates, swings and raises 90°. Dimensions: 31-1/2"L.	850-0532	
C 2 tier, 95 hole, Bur Holder Arm – For 3/32" (57) and 1/8" (38) shank burs/tools.	850-0533	
D Magnetic Tool Arm – With non-scratch felt surface. 12"L x 1/2"W x 1-1/2"H.	850-0535	
E Jar Holder Arm – With 6 – 1.35oz. (40ml) cups with screw-on plastic tops, 1-1/4" (3.7cm) in diameter. 12"L x 2-1/4"W x 2-1/4"H.	850-0534	
F Tray Arm – Has movable partitions. 12"L x 2-1/4"W.	850-0536	
G Multi Handpiece Arm	850-0537	
Small Shelf Arm	850-0538	
Medium Shelf Arm	850-0539	
H Large Shelf Arm	850-0540	
I Peg Arm f/ Handpieces & Tools	850-0541	
J Dual Handpiece Holder	850-0542	

**K-L Single and Double Flex Shaft Hangers**

Telescoping hanger extends 42" above your work surface. Height adjustments are made easily with the thumbscrew. Includes solid mounting base to screw firmly into your work surface. Made in India.

Double Flex Shaft Hanger attaches to your work surface by using screws or "C" clamps (not included) and allows you to hang one or two Flex Shaft motors. Made of powder coated steel, the flex shaft hanger extends between 25-1/2" and 40". Made in USA.

Description	SKU	Each
K Flex Shaft Hanger	850-0509	
L Double Flex Shaft Hanger	850-0515	

**M-N Foremost® Flex Shaft Hangers**

Features a 3-piece hexagonal support rod, top safety hook rod for holding one or two motors. Available with a sturdy bench clamp for attaching to any bench top up to 2-3/4" thick or base which screw into the top or side of your work surface. The rod height can be adjusted with the locking screw built onto the clamp. Made in USA.

Description	SKU	Each
M Foremost Flex Shaft Hanger with Clamp	850-0506	
N Foremost Flex Shaft Hanger with Base	850-0507	

**O Modular Flex Shaft Hanger**

Built of heavy duty construction, this flex shaft hanger breaks down for easy portability. The C-Clamp design allows for easy positioning and relocation in just minutes. The special bracket design holds your flex shaft motor in place during operations. When all pieces are put together, the flex shaft hanger stands 29" over your bench and the clamp opens up to 3" max. If a shorter flex shaft hanger is needed, simply detach one of the pieces/sections. Made in Taiwan

Description	SKU	Each
O Modular Flex Shaft Hanger	850-0518	



A



B



C



D



E

A Universal Flex Shaft Complete Set

The Universal Flex Shaft Set is a high-value workhorse built for a wide variety of applications from drilling to polishing. Universal Motor's 110v, 1/6 HP BM21C pendant motor hangs above your work bench, taking up virtually no space while delivering high torque at up to 15,000 rpm through the flex shaft to a universal quick-change handpiece. The heavyweight variable speed foot pedal offers intuitive speed control. This flex shaft machine is compatible with handpieces that have a keyway slot which includes but is not limited to, the Foredom #30 and #20 handpieces. Motor covered by two-year manufacturer's warranty. Made in Turkey.

Includes:

- Universal Motor 1/6 HP BM21C motor
- Variable speed foot pedal with non-slip bottom
- Flex shaft and sheath
- Universal quick-change handpiece with a 2.35mm (3/32") fixed collet
- Hanger spring and one set of replacement carbon brushes

Description	SKU	Each
A Universal Flex Shaft Complete Set	850-0700	
Universal 1/6 HP Motor & Pedal	850-0701	
Replacement Items	SKU	Each
Replacement Carbon Brushes	850-0702	
Replacement Flexible Shaft Only	850-0704	
Replacement Inner Shaft Only	850-0705	
Replacement Foot Pedal	850-0710	
Replacement Lever-Style Handpiece	850-0715	
Replacement 3/32" Collet f/ Handpiece	850-0716	

B Foredom® Mini Vise

Securely holds small parts. Has 1-3/4" slotted grooves in the base for mounting on a drill press or bench. Stationary jaw has a perpendicular V-groove, and movable jaw has a horizontal V-groove for holding round stock or tube. Jaw width: 1-3/4". Jaw opening: 1-3/4". Measures 4"L x 2-3/8"W x 1-1/2"H. Glare-free black finish.

Description	SKU	Each
Mini Vise	820-4700	

C Benchtop Drill Press

Small and compact describes this 110V drill press. The base measures 6-3/4" x 6-3/4" with a drill clearance of 5". Drill press has three settings that allow for a range of 0-8,500rpm. When space is an issue, this drill press will perform with ease. The Jacobs chuck accepts bits up to 6mm. One year warranty. Weighs 13 lbs. Canada safety approved.

Description	SKU	Each
Bench Drill Press	850-0595	

D Drill Press Vise

All aluminum vise has slots to attach to benchtop drill press 850-0595 (above) quick jaw release feature for ease of use. Jaw width 2-3/16". Jaw opening 2-3/4". Measures 9-1/2"L x 4-1/2"W x 2-1/4"H.

Description	SKU	Each
Drill Press Vise	850-0594	

E Foredom® DP30 Drill Press

The Foredom DP30 drill press can be used with any flexible shaft and any 1" diameter handpiece (Foredom #30, #30H, #44HT or #44T – sold separately) giving you a complete benchtop drill press system. Held in a securely vertical position with a lever that allows you to drill straight, accurate holes and can be set to any specific depth. The sturdy, all metal stand is fully adjustable, has a 2" throat capacity, and a stroke length up to 1-1/4". The worktable moves up and down on the post or can swing out of the way when drilling large pieces. Made in USA.

Description	SKU	Each
Foredom DP30 Drill Press for 1" Diameter Handpieces	850-0600	

A Classic Flex Shaft Drive Di-Profilor, Mark II Version

Di-Profilor Mark II reciprocating handpiece attaches to most standard flexible shafts except models TXH, TXMH, and H. This precise, fast-action, easy-to-operate reciprocating tool is ideal for profile polishing, filing, honing and lapping straight and curved surfaces and finishing complicated dies and molds. Each Di-Profilor allows easy stroke adjustments for fast, precise work. Spring cushioned to prevent damage to workpiece or tool. For best results and reduced vibration, operate between 5,000 and 7,000rpm with a stroke length between 1-3mm and 1/4" chuck capacity. This model also incorporates the protective finger sleeve into the handpiece for improved ergonomics and user flexibility. Comes complete with operations guide, rubber sleeve, storage case, wrench and lubricating oil. Adjustable stroke length 0-6mm. 8,000rpm Maximum. Made in Sweden.

Description	SKU	Each
A Di-Profilor 1/4" chuck capacity for Flex Shaft	850-1905	
Replacement Rubber Grip	850-1937	

B FMR Mini-Files

Each attaches to any standard Gesswein/Foredom flexible shaft machine except models TXH, TXMH and H. Designed for light-duty profiling work. Ergonomic design results in effective finishing and polishing. Slim nose is especially useful in tight spaces. Holds tools up to 3.6mm in diameter. Max. operating speed: 10,000 strokes per minute (5,000-7,000 strokes per minute recommended). Measures 5-1/4" L x 1" dia. Weighs 5.5 oz.

Length of Stroke	SKU	Each
0.5mm	850-1923	
1.0mm	850-1924	
1.5mm	850-1922	



A



B

SAFETY RECOMMENDATIONS: For FPS and FPC Di-Profilers as well as FMR Mini Filers and Micromotor Drive Di-Profilers

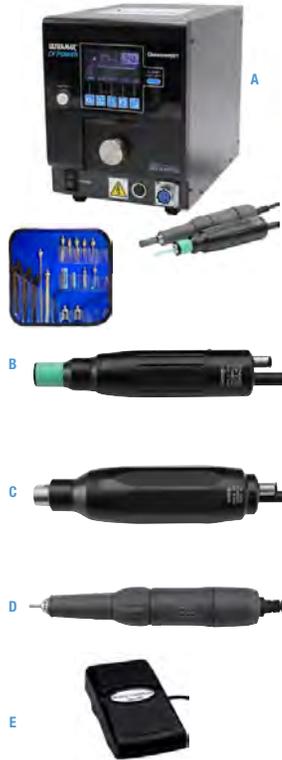
Prolonged use of vibrating or reciprocating tools may result in vibration-induced circulation problems in the hands. Always follow safe operating procedures. Using hand protection (i.e., insulated gloves) and taking frequent breaks can help minimize but not guarantee against injury. Operating these types of tools in cold weather or with a tight grip will reduce the period of operation before risking potential injury. Individuals with a tendency to suffer from poor circulation, frequently cold fingers or itchy hands should closely monitor the condition of their hands. If symptoms appear, seek medical advice immediately.

ULTRAMAX® Ultrasonic Polishing Systems

Reduce Finishing Time By More Than 50%!

The ULTRAMAX DF Power is a dual-function system that gives you the versatility of both ultrasonic and mechanical polishing. Achieve mirror finish on milled and EDM surfaces using the ULTRAMAX DF Power with finishing stones, fil files, ceramic stones, lapping stones with diamond compounds, and sintered, resin, and plated diamond tools. With a maximum output of 100 Watts, you can even polish the toughest metals like titanium and tungsten carbide with ease.

The ULTRAMAX DF Power comes with a UF-9705 ultrasonic handpiece, a PHP35 rotary handpiece, and its DC motor port is compatible with the entire line of Gesswein Power Hand micromotor system handpieces. For the toughest jobs, turn to the optional UF-7405 handpiece with 8mm thread. Ideal if you have very heavy-duty EDM applications.



A-E ULTRAMAX® DF POWER SET

Set Includes:

- Controller
- UF-9705 Ultrasonic Handpiece (500-1321)
- PHP35 Rotary Handpiece (510-5144)
- Standard tools and accessories
- Power cord
- Tool box

Specifications

- Frequency (range): 17-31kHz
- Frequency adjustment: Auto feedback system
- Ultrasonic power output: 100W Maximum
- Power hand: 2x Output 0-30V DC
- Output adjustment (power/stroke): Continuously variable
- Power consumption: 300VA
- Outside dimensions (W x D x H): 180 x 263 x 229mm (7.08" x 10.35" x 9.0")
- Electrical: 100/120V AC, 1 Ph, 50/60Hz
- Net weight: 11.9 lbs

Description	SKU	Each
A ULTRAMAX DF Power Set – 1/6"	500-1320	
Accessories and Replacements		Each
ULTRAMAX DF Power Controller	500-1319	
B ULTRAMAX DF Power Handpiece UF-9705	500-1321	
C ULTRAMAX DF Power Heavy Duty Handpiece UF-7405	500-1322	
D PHP35 Handpiece Only (with 1/8" Collet)	510-5144	
E Optional Variable Speed Foot Rheostat for PH3 and UMAX DF	510-3306	
Allen Wrench 3mm	501-0116	

ULTRAMAX® DF POWER FUNCTIONS

NANO Function – The normal stroke length of the DF Power is adjustable between 3-40µm. With NANO mode, you can reduce the adjustable stroke length to a minute 1-3µm range. This is ideal for ultra-high polishing such as diamond compound polishing or when you need to remove a very small amount of metal.

TOUCH Function – When the TOUCH function is activated, the mounted tool in your ultrasonic handpiece will reciprocate at full power only when contact is made with the metal surface of your workpiece. When you remove the tool from the metal surface, the reciprocation reduces to minimum power to protect your workpiece from any accidental contact.

FINE Function - Allows you to finetune the output. The unit will normally save you time by jumping in increments of 5's but switching to the FINE Function allows you to further set the output to the exact whole number you require.

ULTRAMAX® MF 3-in-1 Complete Package

With Either MF TOUCH or MF Standard Control Box

The Multi-Function ULTRAMAX MF TOUCH and MF Standard are our most versatile polishing systems. They utilize a high-efficiency microprocessor to deliver power to ultrasonic, brushless DC, and brush-type DC handpieces. The MF Touch system offers touch screen control and read out while the MF Standard has all the same functions utilizing push buttons.

The Complete 3-in-1 Packages Includes:

- MF TOUCH Control Box or MF Standard Control Box
- MF Ultrasonic Handpiece: provides 36W of continuously variable power for precision reciprocating action.
- BH-60 Rotary Handpiece: delivers 50,000rpm utilizing a 230W brushless rotary motor for incredible power – even at low speeds! Provides ample torque at all times to ensure fast and smooth metal removal.
- Z-6X or Z-2X Power Hand Reciprocating Profiler. Use for polishing flat surfaces, deburring, filing, stoning, scraping, lapping and draw-stoning deep cavities. They operate with minimal vibrations to reduce fatigue and have flexible power cords for easy reach. 3-in-1 MF Cabinet: Organize your workbench with the 3-in-1 Cabinet. With a separate handpiece holder for each handpiece it's easy to reach your

handpieces when you're ready to work. Includes two drawers with plastic inserts for storing your tools and polishing supplies.

- Handpiece rest
- Tool changing wrenches
- 1mm & 3mm flat clamp tool holders
- 3mm round tool holder
- Variable speed foot pedal



A ULTRAMAX® MF TOUCH 3-in-1

Description	SKU	Each
A MF TOUCH 3-in-1 Complete (w/ Z-6X Profiler)	500-0232	
MF TOUCH 3-in-1 Complete (w/ Z-2X Profiler)	500-0233	
MF TOUCH Control Box, Ultrasonic Handpiece, and Foot Pedal	500-0237	

B ULTRAMAX® MF STANDARD 3-in-1

Description	SKU	Each
B MF STANDARD 3-in-1 Complete (w/ Z-6X Profiler)	500-0230	
MF STANDARD 3-in-1 Complete (w/ Z-2X Profiler)	500-0231	
MF STANDARD Control Box, Ultrasonic Handpiece, and Foot Pedal	500-0220	



C-E ULTRAMAX® MF STANDARD 3-in-1

Accessories and Replacements	SKU	Each
C Replacement Ultrasonic Handpiece	500-0222	
D Replacement Brushless Rotary Handpiece	500-0224	
Replacement Z-6X Handpiece	510-2160	
E Replacement Z-2X Handpiece	510-2150	
Replacement Variable Speed Foot Pedal	500-0221	
Optional – On/Off Foot Switch	500-0227	
MF TOUCH Cabinet Only	500-0236	
MF TOUCH Complete Transport Case	830-1559	
MF STANDARD Cabinet Only	500-0229	



F Power Hand® Handpiece Cradle Rest

Description	SKU	Each
F Cradle Rest	510-1130	



A ULTRAMAX® UM-1200 Ultrasonic Polisher

The most affordable ultrasonic polisher for polishing with diamond tools and ceramic stones. The high quality UM-1200 produces 25,000 cycles per second of longitudinal vibration in a small, comfortable handpiece with an invisible minute stroke of 10 to 35 microns from low to high output levels.

Include controller, UM-1200 handpiece with 8mm screw thread standard accessory set (two sintered and six plated diamond tools and two ceramic stones), one flat clamp tool holder, two round clamp tool holders, on/off foot switch, handpiece cradle rest, bench jig, wrench and hex key.

Specifications:

- Vibration frequency: 8–25kHz
- Stroke length: 10–35 microns
- Max. output power: 39W
- Electrical: 90–240V, 50/60Hz
- Controller measures: 7-1/2"W x 5-1/2"D x 3-1/2"H
- Handpiece measures: 5"L x 1-3/16" dia.

Description	Electrical	SKU	Each
A ULTRAMAX UM-1200	90–240V	500-1200	
Description	SKU	Each	
Replacement Handpiece	500-0101		
Replacement Power Cord for UM-1200 – Handpiece	500-0103		
Accessory Set for UM-1200	500-0140		
UM1200 ON/OFF Foot Switch	500-0107		
Power Hand® Handpiece Cradle Rest	510-1130		

B 3-in-1 Consumable Set – Set of Polishing Supplies for ULTRAMAX MF Complete Packages

This set contains 98 polishing consumables specifically selected for the ULTRAMAX MF 3-in-1 Complete Packages. Provides the full range of abrasive consumables from aggressive polishing and grinding, up to diamond and mirror polishing. Keep your tools in the convenient carrying case or store in the MF metal cabinet.

Includes:

- Diemaker All Grit Stone Set
- EDM All Grit Stone Set
- Mounted Stone Sampler Set
- New Super Stone All Grit Set
- Round Ceramic Stone Set
- Finishing Stone Holder
- 6 Grades of Diamond Compound
- Soft End Brushes
- Hard End Brushes
- Soft Cup Brushes
- Hard Cup Brushes
- Soft Wheel Brushes
- Hard Wheel Brushes
- Soft Felt Bob Set
- Hard Felt Bob Set
- GMX Soft Cylinders
- Diamond Files
- Rockwood & Soft Sticks
- Supreme Green Stoning Oil

Description	SKU	Each
3-in-1 Consumable Set	500-0234	

C MF Touch Complete Transport Case

Durable and functional, this transport case makes moving the MF Touch Complete convenient within your organization.

Measures 20"W x 15"H x 25"L.

Description	SKU	Each
C MF Touch Complete Transport Case	830-1559	



A ULTRAMAX® Mini

The ULTRAMAX Mini Ultrasonic Polishing System allows you to polish Ribs, slots and intricate details much faster than by hand. Take a rough milled surface to a mirror finish using diamond tools and ceramic stones. Includes a compact ultrasonic handpiece with an infinitely variable stroke length of 3-40µm, 36 watts output power, 20-30kHz oscillation frequency and a complete accessories kit.

Set Includes:

- 1 – ULTRAMAX Mini Controller
- 1 – ULTRAMAX Mini Handpiece GS-H26 (500-0222)
- 1 – 6mm Adapter
- 2 – M6 Flat Tool Holders, 1.0mm and 3.0mm (508-3122, 508-3126)
- 1 – M6 Round Tool Holder, 3.0mm diameter (508-3133)
- 1 – Plug/Power Cord
- 1 – Foot Switch (500-0221)
- 1 – Tool Changing Rack
- 1 – Handpiece Cradle Rest
- 1 – Hex Wrench
- 1 – Spanner Wrench
- 4 – Ceramic Stones in various grits
- 6 – Diamond Files in various grits

Specifications:

- Power supply: AC 90-250V, 50/60Hz
- Maximum power consumption: 36 watts
- Strokes/second: 22,000
- Adjustment of ultrasonic output: Continuous
- Ultrasonic amplitude: 3-40µm
- Suspension detection & protective circuit: Yes
- Overload protection circuit: Yes
- Dimensions (W x D x H): 120 x 160 x 230mm (5" x 6.5" x 9")
- Net weight: 2.0kg (4.4 lbs.)
- Shipping weight: 5.2kg (11.5 lbs.)
- Handpiece dimensions (Dia x L): 1.125" tapers to 0.875" x 5" (29 to 22 x 127mm)
- Handpiece Weight: 0.16kg (0.35 lbs.)

Description	SKU	Each
A ULTRAMAX Mini Ultrasonic Polishing System for Industrial Applications	500-0301	
ULTRAMAX MF & Mini Ultrasonic Handpiece	500-0222	



B ULTRAMAX® Cutter

Use this innovative cutter anywhere you would usually use a knife to cut through material.

Applications:

- Printed circuit boards
- Natural fibers
- Synthetic fiber
- All forms of paper
- Bottom films made of rubber, silicone, PP, PE, and other plastic sheets (< 2mm)

Comes complete with:

- GSONIC-1082 Cutter Controller
- UC-60N-Q3A Cutter Handpiece (500-0405)
- Foot switch (500-0227)
- Cutting Blades 20 pieces (500-0406)
- L Wrenches 5 pieces (500-0409)
- Fixing screws 12 pieces (500-0407)
- Cleaning file (500-0410)
- Holder clip (500-0408)
- Spare fuse
- Plastic toolbox for easy storage (500-0411)

Controller Specifications:

- Power: 90–240 VAC 50/60Hz
- Max. power consumption: 45 Watts
- Consumption: 50VA
- Output power: 40 Watts
- Adjustment of ultrasonic output: Continuous
- Ultrasonic amplitude: 3-40µm
- Protections: Suspension detection, overload
- Dimensions (W x D x H): 120mm x 160mm x 230mm (4.7" x 6.3" x 9")
- Weight: 2.0 kg (4.4lbs)

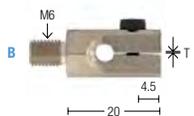
Description	SKU	Each
B Gesswein Ultramax Cutter	500-0400	
Handpiece for Gesswein Ultramax Cutter	500-0405	



Accessories for ULTRAMAX® DF Power and UF-9701 Handpiece

Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use the M6 (6mm thread) clamp tool holders in the UF-9700 ultrasonic handpiece supplied with ULTRAMAX DF. For optimum machine performance, choose a medium clamp tool holder for tools up to 6.35mm in width and a large clamp tool holder for tools up to 15mm in width. Replacement screws are available from stock.

All drawing measurements are in millimeters



A 6mm Thread Round Clamp Tool Holder – For Round Tools

	For Do (Diameter)	SKU	Each
A	2.0mm round tool	508-3508	
	2.35mm (9/32") round tool	508-3509	
	3.0mm round tool	508-3512	
	3.3mm (1/8") round tool	508-3516	

B 6mm Thread Medium Clamp Tool Holder – For Flat Tools Up to 6.35mm (1/4") Wide

	For T (Thickness)	SKU	Each
B	0.5mm flat tool	508-3495	
	0.8mm flat tool	508-3500	
	1.0mm flat tool	508-3502	
	1.5mm flat tool	508-3504	
	2.0mm flat tool	508-3506	
	3.0mm flat tool	508-3510	
	3.3mm (1/8") flat tool	508-3514	

C 6mm Thread Adjustable Clamp Tool Holder – For Flat Tools 0.1mm to 8.0mm Wide

	For T (Thickness)	SKU	Each
	0.1mm to 1.5mm thick	508-3522	

D 4mm Thread Clamp Tool Holders

	Description	SKU	Each
D	Flat 0.8mm	508-3223	
	Flat 1mm	508-3325	
	Flat 1.5mm	508-3225	
	Flat 2mm	508-3227	
	Flat 3mm	508-3228	
	Flat 1/8"	508-3233	
	Round 2mm	508-3224	
	Round 2.35mm	508-3231	
	Round 3mm	508-3226	
	Round 1/8"	508-3229	

E-F ULTRAMAX® DF Accessories

	Description	SKU	Each
E	6/4mm Tool Adapter (to hold M4 ultrasonic tools)	508-3342	\$
F	Standard Handpiece Protector Sleeve	500-0208	

Accessories for ULTRAMAX® MF units

Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use 6mm thread for the MF handpiece.

A 6mm Round Tool Holders

	For Do (Diameter)	SKU	Each
A	3.0mm Round	508-3133*	
	1/8" Round	508-3134	

*Supplied with ULTRAMAX MF

B 6mm Flat Clamp Tool Holders

	For T (Thickness)	SKU	Each
	0.5mm Flat	508-3120	
B	1.0mm Flat	508-3122*	
	2.0mm Flat	508-3124	
	3.0mm Flat	508-3126*	
	1/8" Flat	508-3128	

*Supplied with ULTRAMAX MF

C ULTRAMAX® MF Ultramax MF Adapter

	Description	SKU	Each
	6mm to 4mm adapter	508-3114	

*Supplied with ULTRAMAX MF



Accessories for ULTRAMAX® UM-1200 units

Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use 8mm thread for the UM-1200 handpiece.

E 8mm Thread Round Tool Holders

	For Do (Diameter)	SKU	Each
	1.0mm round tool	500-0134	
	2.0mm round tool	500-0135	
	2.35mm (9/32") round tool	500-0136	
E	3.0mm round tool	500-0109	
	1/8" round tool	500-0137	

F 8mm Thread Flat Clamp Tool Holders

	For T (Thickness)	SKU	Each
	0.5mm flat tool	500-0111	
	0.8mm flat tool	500-0131	
F	1.0mm flat tool	500-0108	
	2.0mm flat tool	500-0132	
	3.0mm flat tool	500-0110	
	1/8" flat tool	500-0133	

G-H ULTRAMAX® UM-1200 Accessories and Replacements

	Description	SKU	Each
G	8/4mm Tool Adapter (to hold M4 ultrasonic tools)	500-0129	
	Replacement Standard Accessory Set	500-0140	
	Replacement On/Off Foot Switch	500-0107	
	Replacement Handpiece Cradle Rest	510-1130	
	Replacement UM1200 2.5mm Hex Key	500-0112	



ULTRAMAX® Diamond Tools

M4 (4mm Thread)

All **ULTRAMAX Diamond Tools** are made to match the resonant frequency of Gesswein ULTRAMAX units. For best results, use only **ULTRAMAX Diamond Tools**. The manufacturer will not accept any liability for another brand of tools. All measurements in millimeters. All lengths given are cutting lengths. Please check drawings for overall tool dimensions.

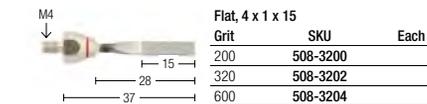
- Mount in 6/4mm tool adapter 508-3342 for use with DF
- Use 508-3114 6/4mm tool adapter for MF-ULTRAMAX
- Mount in 8/4mm tool adapter (see 500-0129) for use with UM-1200

A Mounted Diamond Files – For ULTRAMAX® units

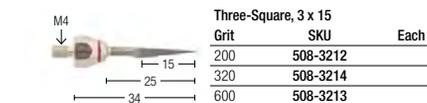
Use these fast-cutting diamond files for intermediate finishing. Excellent for finishing slot sidewalls and flat or curved surfaces. Diamond particles, precision-graded to assure consistency, are electrodeposited on threaded steel shanks.



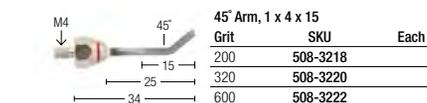
Flat, 5 x 1 x 40		
Grit	SKU	Each
200	508-3206	
320	508-3208	
600	508-3210	



Flat, 4 x 1 x 15		
Grit	SKU	Each
200	508-3200	
320	508-3202	
600	508-3204	



Chisel, 4 x 0.8-0.5 x 15		
Grit	SKU	Each
200	508-3362*	
320	508-3364*	
600	508-3366	



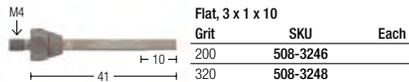
Three-Square, 3 x 15		
Grit	SKU	Each
200	508-3212	
320	508-3214	
600	508-3213	

Diamond Tool Color Coding

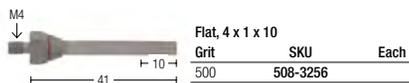
Color	Grit
Red	200
Black	320
Blue	500
White	600

B Mounted Diamond Stones – For ULTRAMAX® units

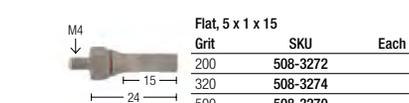
Precision-graded diamond particles throughout, not just on the surface, give these tools long life. Can be shaped with a diamond wheel or file for easy polishing of tapered or deep, narrow slots. Great for intermediate and fine finishing.



Flat, 3 x 1 x 10		
Grit	SKU	Each
200	508-3246	
320	508-3248	



Flat, 3 x 1 x 15		
Grit	SKU	Each
200	508-3264	
320	508-3266	
500	508-3268	



Flat, 4 x 1 x 10		
Grit	SKU	Each
500	508-3256	



Flat, 5 x 1 x 10		
Grit	SKU	Each
200	508-3258	
320	508-3260	

A-M Gesswein® Diamond Poli Files – 3mm Shank

Parallel diamond machine files for use in ULTRAMAX Round Tool Holders. All have 3mm shanks. Measure approx. 2" long. Plated ends measure 3/8" long.

Style	Shape	W x Thick	Grit	SKU	Each
A	Flat	2 x 1mm	150	240-1120*	
B		3 x 1mm	150	240-1130	
C		4 x 1mm	150	240-1140	
D		5 x 2mm	150	240-1150	
E	Three-Square	2mm	150	240-1520*	
F		3.5mm	150	240-1535	
G		4.5mm	150	240-1545	
H	Crossing	2 x 1mm	150	240-1410*	
I	Round	1mm	150	240-1310	
J		2mm	150	240-1320*	
K		3mm	150	240-1330	
L	Flat	4 x 1mm	150	240-1230*	
M	Knife	4 x 1mm	150	240-1610*	
				*6-Piece Set (one of each asterisked item)	240-1706
				12-Piece Set (one of each except 240-1150)	240-1712

N-Q Gesswein® Tapered Diamond Poli Files – 3mm Shank

Tapered diamond machine files for use in ULTRAMAX Round Tool Holders. All have 3mm shanks. Plated ends measure 15mm (19/32") long with 1.4-0.3mm taper.

Style	Size (mm)	Grit			Each
		200 Grit	400 Grit	600 Grit	
N	Flat	3 x 56	241-0814	241-0815	241-0816
O		6 x 56	241-0817	241-0818	241-0819
P		3 x 72	241-0820	241-0821	241-0822
Q		6 x 72	241-0823	241-0824	241-0825
				SKU	Each
				12-Piece Set (one of each)	241-0813

R ULTRAMAX® UM-1200 Sintered Diamond Machine Files – 3mm Shank

Feature solid diamond portion that measures 20mm (approx. 3/4") long x 1.5mm thick. Shape to reach tight areas. Have 3mm shanks. Use with proper tool holder (500-0109).

Size (W x L)	Grit			Each
	200 Grit	400 Grit	600 Grit	
6 x 72mm	500-0126*	500-0127*	500-0128	

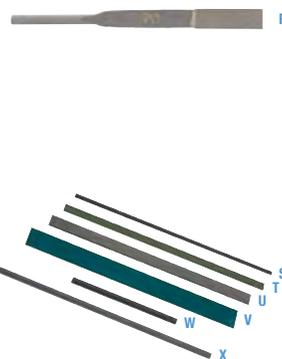
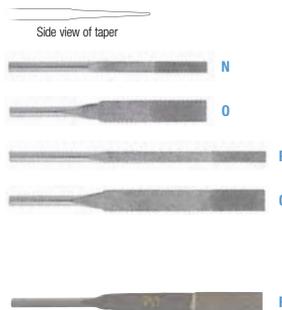
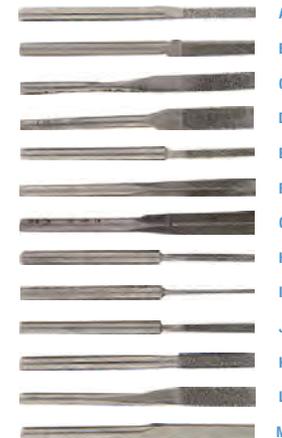
*Supplied with ULTRAMAX UM-1200.

S-X SUPER Ceramic Diamond Stones

SUPER Ceramic Diamond (SCD) Stones combine ceramic fibers with multiple layers of evenly distributed diamond particles to ensure continuous cutting action. SCD Stones will cut and polish flat to a surface, allowing fast and accurate polishing in open areas. SCD Stones are perfect for polishing ribs, hard-to-reach slots and sidewalls, and milled or EDM flat surfaces. Their strong, durable ceramic fiber construction makes them ideal for use in ultrasonic polishers and mechanical profilers or by hand.

Shape	Size (mm)	Grit				Each
		Black 200 Grit	Gray 400 Grit	Green 600 Grit	Aqua 800 Grit	
S	Flat	351-0797	351-0798	351-0799	351-0815	
T		351-0800	351-0801	351-0802	351-0816	
U		351-0803	351-0804	351-0805	351-0817	
V		351-0806	351-0807	351-0808	351-0818	
W	Round	351-0809	351-0810	351-0811	351-0819	
X		351-0812	351-0813	351-0814	351-0820	

*Quantity discount for orders of one item number only; not assorted.



ENESKApotprocess

A Safe and Efficient Solution for 3D Post Processing that powers a variety of electrical and air tools to perform various post-processing tasks such as support and substrate removal, grinding, deburring, and polishing.

Key Features:

- Completely enclosed downdraft table
- Eliminates 99.9% of toxic dust
- Explosion-proof design
- High safety standards, no need for protective suits
- Ergonomically designed for ease of use
- Versatile tool connectivity (pneumatic and electric)
- Steel, stainless steel, aluminum, titanium, carbon, Inconel, ceramics, plastics and more.



Belt Grinder



Hand-Filing Machine



Compressed-Air Filing Machine



A



B



C



D

E

A 3D Post-Processing Station – ENESKApotprocess

Description	SKU	Each
A Dry System	510-0000	
Oil System	510-0004	
Oil System with Height Adjustment	510-0006	
Optional Accessories		
JOKE ENESKApotprocess Hexagonal Rotary Table	510-0020	
JOKE Easy-Work Positioner with T-Slot Clamping Plate, Round	510-0120	

B JOKE ENESKAmicro COMPACT HT60-D6 Handpiece

The micro COMPACT HT60-D6 brushless handpiece is designed to work inside the ENESKApotprocess machines. The handpiece utilizes one of the ports inside the closed confines providing the ultimate in safety for the operator. The COMPACT HT60-D6 handpiece produces a motor speed up to a maximum of 50,000 rpm with an output of 8.9 N cm at 280 W. Measures just 30mm in diameter. Accepts 6mm shanked tools.

Description	SKU	Each
JOKE ENESKAmicro COMPACT HT60-D6 Handpiece	510-0060	

C JOKE ENESKA Air Filer – LFC-11

The ENESKA LFC-11 compressed air reciprocating filer machine is designed to work inside the ENESKApotprocess machines. The pneumatic, 6,000-12,000 strokes/minute handpiece plugs into a port inside the closed confines providing the ultimate in safety for the operator. Often used for support removal in the additive area, this versatile unit is also ideal for grinding, filing, polishing, cutting, sawing and also deburring larger areas. Holds 4mm diameter tools.

Description	SKU	Each
JOKE ENESKA Air Filer – LFC-11	510-0070	

D-E Diamond Vacuum Brazed Points – Set of 10

The vacuum-brazed bonding provides a much better adhesion of grits to the carrier thanks to direct fusing. These 3mm and 6mm shanked, D427 grit diamond points are particularly suited for fiber reinforced materials such as GFR and CFR plastics (in aircraft construction and shipbuilding), tungsten carbide green components (unsintered carbide), ceramics (valve cover rings for car engines), coal products (brake discs, carbon brushes), titanium and cast materials. Overall length: 55–60mm.

Description	SKU	Each
D 3mm Shank	226-3000	
E 6mm Shank	226-3020	

Accessories

A ENESKApotprocess Mounting Set for Chisels with 4mm Shank (2 pieces)

This set is needed for connecting chisel (see our 510-0131) to the JOKE Eneska Air Filer LFC-11 (see our 510-0070). The plastic tool holder protects the Air Filer piston from excessive vibrations.

Description	SKU	Each
ENESKApotprocess Mounting Set for Chisels with 4mm Shank (2 pieces)	510-0130	



A

B ENESKApotprocess Flat Chisel – 4mm Shank

Chisel measures 9mm wide x 3mm thick x 50mm long. Made of High Speed Steel with a 4mm shank. Used with JOKE LFC-11 (our 510-0070) for chiseling support structures.

Description	SKU	Each
ENESKApotprocess Flat Chisel – 4mm shank	510-0131	



B

C Air Belt Sander MBS 20 DH

Small, handy and powerful – that best describes the Air Belt Sander from JOKE. With a weight of just 570g (20 ounces), it sits comfortably in one hand leaving your other hand free to manipulate the workpiece into the ideal position. The grinding belt is ideally suitable for deburring, grinding and finishing work. No matter what the radius, the JOKE Air Belt Sander contacts the workpiece perfectly, and with a little sensitivity of touch achieves a fine, satin-textured surface. Can accommodate belt widths between 6mm and 12mm. A wide range of belts is available, from a coarse grinding belt to a fleece belt for finishing work. Belts are easily replaced with just one action.

Description	SKU	Each
Air Belt Sander MBS 20 DH	510-0090	



C

D ENESKAair G1000 Compressed Air Grinder

The ENESKAair G1000 oil-free grinder is designed to work inside the ENESKApotprocess machines. The pneumatic, 100,000rpm handpiece plugs into a port inside the closed confines providing the ultimate in safety for the operator. The extremely compact, stainless steel construction of the handpiece, includes ceramic ball bearings and creates a quiet-running with very low vibration experience for the user. Accepts 3mm shanked tools. Measures: 21mm (a little over ¾”) in diameter x 129mm (a little over 5”) in length.

Description	SKU	Each
ENESKAair G1000 Compressed Air Grinder	510-0080	



D

E ENESKApotprocess Replacement High Performance Mineral Oil – 20 Liters

20 liters of JOKE ENESKApotprocess High Performance Mineral Oil for the extraction of reactive materials.

Description	SKU	Each
ENESKApotprocess Replacement High Performance Mineral Oil – 20 liters	510-0048	



E

F ENESKApotprocess Stop Pins (2)

Used for mounting your work pieces in the Eneska Post Process.

Description	SKU	Each
ENESKApotprocess Stop Pins (2)	510-0021	



F

G ENESKApotprocess Clamping Device Set of 10

The 10 piece clamping device set consists of:

- M8 x 100 mm threaded bolts (2 pieces)
- Hexagon nut with flange M 8 (2 pieces)
- T-nut with thread M8 (2 pieces)
- Clamping claws for 10 mm T-slot width and M8 thread (2 pieces) with counter holder (2 pieces)

Description	SKU	Each
ENESKApotprocess Clamping Device Set of 10	510-0019	



G

A



A-B ARBE Model 7.5 HP and 3 HP Dust Collectors – 220V

Suitable for the collection and extraction of all dust and particulate. With 6 inlets the 7.5 HP unit can be set up for 6-8 stations and the filter area is 360 square feet while the 3 HP unit can handle 4-6 stations and has a filter area of 180 square feet. Provides powerful of suction and the filtration system utilizes ultra-weave filter bags. These bags are manufactured with a unique entanglement process that blends their fibers, creating a more uniform material with a smaller pore size providing better surface loading of dust and preventing penetration deep into the media. With better surface loading, these ultra-weave bags provide improved cleaning and greater filtration efficiency. One-year manufacturer's warranty. Made in USA.

	A. ARBE 7.5 HP	B. ARBE 3 HP
Size of Suction Motor	7.5 HP	3 HP
Air Flow	2,000 CFM	1,300 CFM
Noise Level	70 dBA	68 dBA
Inlets: Qty / Size	6 / 3"	5 / 3"
Overall Dimensions	25"W x 38"D x 77"H	28"W x 28"D x 61"H
Electrical	220V, 15A, 60Hz, 3Ph	
Net Weight	490 lbs.	350 lbs.
SKU	854-1307	854-1303
Each		

Replacement Filters:	7.5 HP	3 HP
Filter Bags	854-1308 (26)	854-1304 (30)
Set		

B



C Quatro Multi-Station Power 6 Dust Collector – 220V

The high quality Quatro Multi – Station "Power 6" Dust Collector (6 X 1.5" Inlets) is a must for any facility needing one powerful dust collector for up to 6 work stations. Its certified HEPA filtration and high airflow brushless motor works efficiently to capture 99.97% of the dust/submicron particulates while offering "clean air" surroundings and quiet operation. The Power 6 is ideal for all grinding and polishing applications while offering a solution for dust collection and clean air. Includes a 50 foot 1.5" hose. One-year manufacturer's warranty. Made in Canada.

Features:

- Allergy-Safe, high capacity sealable bag filters allow you to safely capture and contain large amounts of debris. Can reclaim your dust and particles for refining, 6 bag filters are required and 2 HEPA filters.
- HEPA Filter, 99.97% efficiency on submicron particles
- Intelligent controls provide constant monitoring and maintenance alerts.

	C. Quatro Multi-Station Power 6
Size of Suction Motor	Qty 2, 1 HP
Air Flow	900 CFM
Noise Level	59 dBA
Inlets: Qty / Size	6 / 1.5"
Overall Dimensions	22"W x 25"D x 39"H
Electrical	230V, 10A, 1Ph, 50/60Hz
Net Weight	200 lbs.
SKU	854-1402
Each	

Description	SKU	Each
Replacement Filter Bags (6 pack)	854-2189	
Replacement HEPA Filter	854-2079	

C



A-B Quatro Velocity Dust Collectors

These professional units collect 99.97% of all compound dust and particulate down to submicron levels. Ideal for grinding and polishing applications. Prefilter (which prolongs filter cartridge life 2-4 years) and cartridge filter ensure return air is absolutely clean. Built-in collection tray captures dust and lets you reclaim it without removing the cartridge filter. Backed by a one-year manufacturer's warranty. CSA and CE approved. Made in Canada.

Features:

- Unique sub-micron dust collection filtration down to .03 microns. (Category C: 99.97% dust extraction) recirculates clean air back into the workplace eliminating the need for outside ventilation.
- Inlet ports can be positioned on top or side of unit.
- Optional on/off foot switch and silencer (reduces sound 10-15%, easily attaches to unit without tools) also available.

	A. Quatro 2-Port Velocity	B. Quatro 4-Port Velocity
Size of Suction Motor	3/4 HP	1 HP
Air Flow	400 CFM	800 CFM
Noise Level	56 dBA	58 dBA
Inlets: Qty / Size	2 / 3"	2 / 3"
Overall Dimensions	14"W x 25"D x 17"H	18"W x 34"D x 22"H
Electrical	120V, 6.1A, 60Hz	120V, 9.2A, 60Hz
Net Weight	73 lbs.	120 lbs.
SKU	854-1382	854-1380
Each		

Replacement Filters:	2-Port	4-Port
Prefilters (20)	854-1392	854-1389
Each		
Cartridge Filter	854-1391	854-1388
Each		

Optional Equipment	SKU	Each
Quatro Hand Switch Single for Dust Collectors	854-1368	
Quatro Single Foot Pedal Switch for Dust Collectors	854-1369	
Silencer for Velocity units	854-1528	

C Quatro PGR Dust Collector

Superior suction, in a compact design. Select between 3 models: SuperFlow (1-1/2HP brushless suction motor) and MixedFlow (1/2HP suction motor) utilize 3 filter bags. The IsoFlow (1/2HP suction motor) uses 2 bags which is ideal when separation of metals for reclamation is worthwhile. Two stage filtration uses bags, then HEPA filters ensuring 99.7% efficiency. Includes 12ft of Heavy Duty 3" diameter hose & clamps. One-year manufacturer's warranty. Made in Canada.

	C. PGR "IsoFlow"	PGR "MixedFlow"	PGR "SuperFlow"
Size of Suction Motor	1/2 HP	1/2 HP	1-1/2 HP
Air Flow	350 CFM	400 CFM	450 CFM
Noise Level	59 dBA		
Inlets: Qty / Size	2 / 3"		
Overall Dimensions	22"W x 14"D x 26"H	22"W x 14"D x 32"H	
Electrical	120V, 10A, 60Hz		
Net Weight	106 lbs.	126 lbs.	
SKU	854-1475	854-1478	854-1479
Each			

Description	SKU	Each
Replacement Bag Filters (6) (All PGR Models)	854-2189	
Replacement HEPA Filter (All PGR Models)	854-2079	
Optional Castor Wheel Kit	854-1473	
D Optional Quatro Fishmouth Adapter	854-1508	

A



B



C



Shown with optional castor wheel kit

D



A



A ARBE DFT Direct Flow Dust Collector

The ARBE direct flow dust collector has a built in silencer, for whisper quiet operation (approx. 55 decibels with hoses attached, rated at 63 decibels without hoses). Uses 2 hanging filter bags along with a second stage ultra-weave pleated filter. Since it uses two separate filter bags, not only is it the most cost effective option it gives you the option of separating your metal collection by hooking up a different hood to each bag. Hoods not included. One set of hanging filter bags and a pleated filter are shipped with the unit. Made in USA. One year manufacturer's warranty.

	A. ARBE DFT	Replacement Filters:	
Size of Suction Motor	1/2 HP	Pleated Filter	854-1294
Air Flow	600 CFM	Each	
Noise Level	55 dBA	Filter Bag	854-1293
Inlets: Qty / Size	2 / 3"	Each	
Overall Dimensions	16"W x 16"D x 20"H		
Electrical	110V, 9A, 60Hz		
Net Weight	65 lbs.		
SKU	854-1295		
Each			

B



B ARBE Closed DFT Direct Flow Stand Up System

The ARBE Closed DFT Stand Up System includes the DFT Dust Collector, see above, two work shelves, a dual spindle 1/2 HP polishing motor and two enclosed hoods. Since each filter bag is mounted directly to the Totally Enclosed Polishing Hood, simply use each hood for a different metal. There are sockets in the hoods for standard, incandescent light bulbs, which are not included. Measures: 40"W x 24"D x 54"H. One year manufacturer's warranty. Made in USA.

The system comes complete with:

- 1/2 HP 600 CFM Dust Collector
- 2 original "Super Flow" Totally Enclosed Polishing Hoods
- Dual spindle Pro-Series 1/2 HP Polishing Motor
- 2 Work Shelves

Description	SKU	Each
B ARBE Closed DFT Direct Flow Stand Up System	854-1290	

C-E Quatro CollectAll Dust Collectors

Available suction motor options: A high-speed brushless, turbine (1.5 HP) motor providing long continuous use before needing to replace motor brushes. Two quieter running Infinity hybrid (1 HP) motors which will provide 2,000-3,000 hours of use before needing motor replacement.

Both feature a three-stage filtration system that captures fumes and particulate down to 0.3 micron: bag filter captures large particles from grinding and polishing and HEPA filter captures the smallest particulate down to submicron levels. Returns 99.97% clean air, making outside ventilation unnecessary. Includes flex hose and clamps. Backed by a one-year manufacturer's warranty. Made in Canada.

	C. Quatro CollectAll Turbine	Quatro CollectAll Infinity
Size of Suction Motor	Qty 1, 1-1/2 HP	Qty 2, 1 HP
Air Flow	600 CFM	450 CFM
Noise Level	58 dBA	55 dBA
Inlets: Qty / Size	2 / 3"	
Overall Dimensions	16"W x 13"D x 26"H	
Electrical	120V, 12A, 60Hz	
Net Weight	75 lbs.	
SKU	854-2179	854-2187
Each		

Description	SKU	Each
D Replacement Bag Filters (6)	854-2189	
E Replacement HEPA Filter	854-2093	
Optional Hand Switch	854-1368	
Optional Single Foot Pedal Switch	854-1369	
Optional Caster Wheel Kit	854-1473	
Optional Quatro Fishmouth Adapter	854-1508	

D



E



A ARBE Model 1 HP Dust Collector

This is suitable for the collection and extraction of all dust and particulate. This two-station dust collector is strong and compact. Filter bags are manufactured with a unique entanglement process that blends their fibers, creating a more uniform material with a smaller pore size providing better surface loading of dust and preventing penetration deep into the media. With better surface loading, these ultra-weave bags provide improved cleaning and a lower pressure drop, which results in greater energy savings and greater filtration efficiency. One-year manufacturer's warranty. Made in USA.

	A. ARBE 1 HP	Replacement Filters:	
Size of Suction Motor	1 HP	Filter Bags	854-1467
Air Flow	1,000 CFM	Set of 24	
Noise Level	63 dBA		
Inlets: Qty / Size	2 / 3"		
Overall Dimensions	25"W x 25"D x 39"H		
Electrical	110V, 9A, 60Hz		
Net Weight	205 lbs.		
SKU	854-1465		
Each			

A



B-C ARBE Dual Motor Floor Model Polishing Systems

Both ARBE Dual Motor Floor Model Polishing Systems allow 2 users to work independently. Supplied with the 1 HP dust collector, see above, these set-ups include two 3/4 HP single spindle polishing motors, and two polishing hoods (select closed or open style) mounted on a sturdy, 48"Wx31"D high-impact, mahogany surface laminate work surface. The 3,450rpm polishing motors are sealed and permanently lubricated and are mounted on a rubber base to reduce vibration. Each is supplied with a right hand tapered spindles. Measures: 48"W x 31"D x 56" H. Ships fully assembled. One-year manufacturer's warranty. Made in USA.

Description	SKU	Each
B Closed Dual Motor Floor Model Polishing System	854-1315	
C Open Dual Motor Floor Model Polishing System	854-1335	

C



D-E ARBE Double Spindle Floor Model Polishing Systems

Both ARBE Double Floor Model Polishing Systems include the ARBE 1 HP dust collector (see above), a 1/2 HP double spindle polishing motor, and 2 extra-wide, easy access, steel constructed, powder coated, polishing hoods (choose closed or opened), mounted on a sturdy 48" wide by 31" deep, high-impact, mahogany surface laminate work surface. The 2,450rpm sealed polishing motor sits upon a rubber base to reduce vibration. Supplied with tapered spindles. Measures: 48"W x 31"D x 56" H. Ships fully assembled. One-year manufacturer's warranty. Made in USA.

Description	SKU	Each
D Closed Double Floor Model Polishing System	854-1310	
E Open Double Floor Model Polishing System	854-1330	

E



A ARBE 1/2 HP Dust Collector

Fits neatly under many workbenches, saving precious bench space without taking up too much legroom. Includes silencer for quiet operation, external foot pedal for filter shakedown and removable catch pan for easy reclamation. One-year manufacturer's warranty. Made in USA.



	A. ARBE 1/2 HP	Replacement Filters:	
Size of Suction Motor	1/2 HP	Filter Bags	854-3152
Air Flow	400 CFM	Set of 14	
Noise Level	50 dBA		
Inlets: Qty / Size	2 / 3"		
Overall Dimensions	16"W x 16"D x 20"H		
Electrical	110V, 9A, 60Hz		
Net Weight	85 lbs.		
SKU	854-1370		
Each			



B-C ARBE Mini Single Floor Model Polishing Systems

These space-saving Mini Single Floor Model Polishing Systems come complete with a 3/4 HP single spindle polishing motor, and an extra-wide, easy access, steel constructed, powder coated, open-style polishing hood, supported by a sturdy 24" wide by 24" deep, high-impact, mahogany surface laminate benchtop. The sealed, 3450RPM polishing motor is installed on a rubber mounted base to reduce vibration. Supplied with spindles. Measures: 24"W x 24"D x 48"H. Ship weight of 206 lbs. One-year manufacturer's warranty. Made in USA.

Description	SKU	Each
B Closed Mini Single Floor Model Polishing System	854-1300	
C Open Mini Single Floor Model Polishing System	854-1320	



D-E ARBE Mini Double Spindle Floor Model Polishing Systems

Both ARBE Mini Double Floor Model Polishing Systems come complete with a 1/2 HP double spindle, sealed polishing motor, and an extra-wide, easy access, steel constructed, powder coated, open-style polishing hood, and is supported by a sturdy 40" wide by 22" deep, high-impact, mahogany surface laminate benchtop. The 3450rpm polishing motor is installed on a rubber mounted base to reduce vibration. Supplied with spindle. Measures: 40"W x 22"D x 48"H. Ship weight of 269 lbs. One-year manufacturer's warranty. Made in USA.

Description	SKU	Each
D Closed Mini Double Floor Model Polishing System	854-1305	
E Open Mini Double Floor Model Polishing System	854-1325	

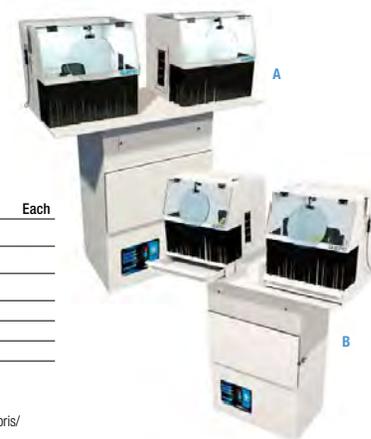
A-B Quatro SPU Polishing and Dust Collecting Units – without Polishing Motors

These units use 2-stage filtration systems to capture all your dust and particulate, not just a portion of it. The Two-Station models are essentially the same except the "Deluxe" model contains a capture drawer with a mesh bottom under each hood. Clearview hoods fully enclose buff areas, trapping dust and particulate inside. Energy-efficient, LED, low-heat lights in hoods use much less power than incandescent lights and keep your work area much brighter and cooler. Backed by a one-year manufacturer's warranty. Made in Canada.

Features:

- Advanced 2-stage filtration systems and powerful suction motors for maximum metal dust recovery.
- Strategically placed inlet locations for optimal intake.
- Office-friendly whisper-quiet operation.
- Optional on/off foot pedal for on-the-fly polishing.
- Optional handy accessory drawer for storing supplies
- Use with your own polishing motor; not included.

	A. SPU Superflow	B. SPU Superflow Deluxe
Size of Suction Motor	1-1/2HP	
Air Flow	450-550 CFM	
Noise Level	59 dBA	
Overall Dimensions	38.5"W x 24"D x 52"H	
Electrical	120V, 6.1A, 60Hz	
Net Weight	230 lbs.	266 lbs.
SKU	854-2141	854-2138
Each		



Description	SKU	Each
Replacement HEPA Filter	854-2079	
Replacement Filter Bags	854-2189	
Optional Accessory Drawer	854-1497	
Optional On/Off Foot Pedal	854-1413	
Optional 1/4 HP #25 Polishing Motor	854-1030	
Optional 1/2 HP #16 Polishing Motor	854-1254	

C Quatro Gold Vault Extra Infinity

The affordable Quatro Gold Vault Extra Infinity is an "All-In-One" unit to handle both dust debris/particles and odor.

Comes with a long lasting Infinity motor which will last 4-5 times longer than any standard motor, while carrying a small footprint for tight spaces. The high speed turbine style motor allows for fast efficient debris removal and the filter system ensures almost 100% capture of dust and particulate. Filter system consists of disposable filter bags followed by Odor and HEPA filters. Includes a "T" connector and two 6' hoses for two-station use.

Optional on/off hand switch available (854-1368) or on/off foot pedal also available (854-1369). Use your Gold Vault with your 3" diameter hoses/hoods by purchasing a 1-1/2" to 3" adapter (854-3041). Backed by a one-year manufacturer's warranty. Made in Canada.

	C. Quatro Gold Vault
Size of Suction Motor	1 HP
Air Flow	150 CFM
Noise Level	49 dBA
Inlets: Qty / Size	2" / 1.5"
Overall Dimensions	9"W x 9"D x 19"H
Electrical	120V, 7A, 60Hz
Net Weight	28 lbs.
SKU	854-1541
Each	

Description	SKU	Each
Replacement Sealable Filter Bags (3)	854-1548	
Replacement HEPA Filter	854-1543	
Replacement Odor Filter	854-1544	
Optional On/Off Hand Switch	854-1368	
Optional On/Off Foot Pedal	854-1369	
Optional 1.5", 2", 2.5", 3" Inlet Adapter	854-3041	





A



B



C



D

A Quatro Basic

With this unit, you don't have to sacrifice air quality or recovery capability even if your space is limited. Great for grinding, polishing, engraving and much more. Ideal for tight spaces. High-speed turbine motor for fast collection in a replaceable bag filter.

Includes 6' of 1-1/2" diameter hose and a convenient On/Off pedal switch. Use with 3" hoods and hoses by purchasing the optional 1.5" to 3" adapter (854-3041 see below). One-year manufacturer's warranty. Made in Canada.

Specifications:

- Suction motor: 1 HP
- Electrical: 120V, 7A, 1 Ph, 60Hz
- Airflow: 130-150 CFM
- Inlet size: 1-1/2" diameter
- Noise level: 60-64 dBA
- Dimensions: 7"W x 9-3/4"H (11"H to top of inlet) x 16"D

Description	SKU	Each
A Quatro Basic + Foot Switch	854-1357	
Replacement Bag Filters (3)	854-1427	
Replacement HEPA Filters	854-1415	
B Optional 1.5", 2", 2.5", 3" Inlet Adapter	854-3041	

C Foredom® Dust Collector

The cyclonic polycarbonate collection chamber pre-filters 99% of all debris and HEPA filter eliminates 99.98% of debris up to 0.3 micron. It is a stand-alone unit for collecting dust from grinding, polishing, deburring and sanding wood, metal, die stone, plaster and many other materials. 2 Year Limited Manufacturer's Warranty. Ship weight 42 lbs. Made in Taiwan.

Includes: 2 HEPA filters with MERV 16 rating 5' flexible 2-1/4" diameter vacuum hose. Remote on/off switch with 9' cable. Casters for easy portability. 6' power cord.

Specifications:

- Suction motor: 1 HP
- Electrical: 115V, 6.5A
- Airflow: 115 CFM
- Noise Level: 52 dBA
- Dimensions: 15.25"W x 15.25"D x 19.5"H
- Inlet size: 2.5" diameter

Description	SKU	Each
C Foredom MADC20	854-2200	
Replacement HEPA Filter	854-2203	
Replacement Canister Filter	854-2206	

D ARBE Compact Vacuum System

This compact, efficient, quiet system fits neatly under or next to your bench, removing air contaminants while you work. Features a fish-mouth suction hood that can be placed on top of your workspace to capture dust and particulate. Has on/off switch on top for easy accessibility.

Includes 6'L x 1-1/2" dia. flexible hose and two quick-change filters: disposable bag filter for particulate and activated charcoal filter for odors (replace every 6-8 months). Backed by a one-year manufacturer's warranty. Made in USA.

Specifications:

- Suction motor: 1/2 HP
- Electrical: 110V, 4.5A, 50/60Hz
- Airflow: 110 CFM
- Noise Level: 56 dBA
- Dimensions: 10"W x 15.25"D x 14"; H
- Inlet size: 1.5" diameter

Description	SKU	Each
D Compact Vacuum System	854-1762	
Replacement Bag Filters (6)	854-1763	
Replacement Charcoal Filter	854-1764	

A-F Quatro SolderPure Fume and Particulate Extractors

Ideal for brazing, dedrossing, and soldering applications. Removes solder and wax fumes from the air before you breathe them (not suitable for cyanide).

Features a four-stage filtration system that captures fumes and particulate down to 0.3 micron: prefilter captures large particles to extend life of three subsequent filters; high-capacity dust filter captures small particulate; advanced refillable media filter formulated for specific applications captures fumes; HEPA filter captures smallest particulate down to submicron levels.

Robust 1/3 HP suction motor returns 99.97% clean air to your workplace, making outside ventilation unnecessary. Includes capture hood with flex arm, which can be flexed and rotated 360° to accommodate your layout. Includes table bracket and 6' flex hose that can be cut to desired length for remote location as well as casters for mobility. Installs quickly and easily. Backed by a one-year manufacturer's warranty. Made in Canada.

Specifications:

- Airflow: 125 CFM
- Noise Level: 50-55 dBA
- Electrical: 100-120V, 1A, 60Hz
- Dimensions: 13"W x 16"D x 20"H
- Net Weight: 65 lbs.

Description	SKU	Each
A SolderPure for Soldering and Wax Fumes	854-1405	
Replacement Optional Odor Filter	854-1378	
B Replacement Prefilters (6)	854-1393	
Media Refills (4) for soldering fume odor filter	854-1409	
D Replacement HEPA Filter	854-2093	
E Optional Start/Stop Foot Pedal	854-1488	
F Optional Start/Stop Hand Switch	854-1413	

G Quatro Fume Extractor

Our Brushless Fume Extractor & Reclamation System utilizes 3-stages to capture the dust, particulate and fumes from burning and melting metal down to 0.3 micron, keeping your workspace clean. The HEPA filter (854-2093) captures the smallest particulate down to submicron levels while the bag filter (854-2189) captures large particles for ease in refining. Finally, the odor filter (854-1614) captures noxious fumes and returns 99.97% clean air to your shop, making outside ventilation unnecessary.

This unit is powered by one, heavy-duty, 1.5 HP brushless motor providing 240 CFM of airflow. Comes supplied with a remote start cable allowing your unit to turn on as the machine is operating and will automatically shut-off when not in operation. Designed specifically for use with Sisma Engravers and Welders but can connect to any product utilizing 1-1/2" diameter hose.

Comes supplied with all filters in place, 4 casters (2 locking, 2 regular), remote start cable (10'), 10 feet of 1-1/2" hose with 3 connectors to connect with any Sisma Welder or Engraver. Backed by a one-year manufacturer's warranty. Ships in (2) Boxes by UPS/FedEx. Made in Canada.

Specifications:

- Airflow: 240 CFM
- Noise Level: 55 dBA
- Electrical: 120V, 12A, 60Hz
- Overall Dimensions: 16"W x 13"D x 26"H
- Net Weight: 75 lbs.

Description	SKU	Each
G Quatro Fume Extractor	854-1612	
Replacement HEPA Filter (1)	854-2093	
Replacement Bag Filters (6)	854-2189	
Media Odor Refills (2)	854-1614	
Optional Dual-connection Kit	854-1613	



F



G



A

A ARBE Down Draft Variable Speed Polisher Dust Collector

This ARBE unit is unique because it is a variable speed polishing motor with a down draft dust collector. The particulate, which naturally falls onto the base panel, is captured by a filter leaving your work area cleaner. Constructed of steel with a powder coated finish. Holds buffs up to 4" in diameter. Includes a 1/8" thick plastic hood shield measuring 6"W x 9"H, pleated cotton fiber filter, tapered spindle, and work light socket for a 60W bulb (bulb not included). Weighs 96 lbs. One-year manufacturer's warranty. Made in USA.

Specifications:

- Suction motor with squirrel-cage turbine
- Airflow: 465 CFM
- 18-gauge steel construction for longevity
- 1/2 HP variable speed (0-3,600rpm) polishing motor
- Dimensions: 18-1/4"W x 19"D x 16-1/4"H
- Can be shipped UPS

Description	SKU	Each
A ARBE Down Draft	854-4050	
Replacement Filter for ARBE Down Draft	854-4052	



B

B ARBE Enclosed Tabletop Polisher Dust Collector

Totally enclosed tabletop dust collector captures dust and debris in a pleated cotton fiber filter (which provides better filtration than traditional filters made of other materials). Installed in the unit, the shaft height is set so you can easily use 6" buffs. Generously sized arm holes provide full access and the clear plastic viewing portal (a little over 9" high) almost spans the entire unit for excellent visibility. Complete with double work light socket for 60W bulbs (bulbs not included). Constructed of steel and has a powder coated finish. Shipping weight is 104lbs. Ships in two boxes. One-year manufacturer's warranty. Made in USA.

Specifications:

- Suction motor with squirrel-cage turbine
- Airflow: 600 CFM
- Double Spindle 1/2 HP (3,450rpm) polishing motor
- Dimensions: 24"W x 29-1/2"D x 14-1/2"H
- Can be shipped UPS

Description	SKU	Each
B ARBE Enclosed	854-4055	
Replacement Filter for ARBE Enclosed	854-4057	

C-E Accumulator™ – Cyclonic Collectors

A problem-solving prefilter for your current dust collection system. Protects workers and equipment from harm, collecting dust and metals before they reach the dust collector. How it works:

(1) air with dust and debris enters the swirling vortex inside the Accumulator; (2) dust and debris separate out of air and fall into Accumulator bowl; (3) cleaned air, 95% free of dust and debris, flows out of the Accumulator and into your dust collector.

Installs between your existing dust collector and polishing stations. Adapts easily with PVC fittings and can be mounted anywhere along the line. Creates no noticeable drop in suction. Made of durable polyethylene. Choose from small (for 1 station), medium (for 1-2 stations) and large (for 1-4 stations) styles. Made in USA.

Style	Size (L x W x H)*	Hose Inlet Size	SKU	Each
C Small	9" x 4-1/2" x 13-3/4"	1-1/2"	854-0995	
D Medium	11" x 6" x 24"	2-1/2", 3"	854-1000	
E Large	13-1/2" x 8" x 30"	4"	854-1005	

*Allow 2" extra height for cup removal.



E

A-B ARBE Benchtop Polisher/Dust Collector

Features suction motor with squirrel-cage turbine, 18-gauge steel construction for longevity, hinged front that tilts up for polishing large pieces and 1/2" lip for storing buffs and compounds. Holds buffs up to 6" in diameter, as well as long ring buffs. Includes replaceable fiberglass filter and double work light (60W bulbs not included). Backed by a one-year manufacturer's warranty. Made in USA.

Specifications:

- Electrical: 110V, 50/60Hz
- Airflow: 465 CFM
- Polishing motor: 1/2 HP (3,450 RPM)
- Filter size: 29-3/4" x 11-3/4" x 2"
- Dimensions: 32-1/2"W x 22"D x 12"H
- Can be shipped UPS

Description	SKU	Each
A Benchtop + Motor	854-4042	
B Benchtop w/o Motor	854-4009	
Replacement Filter	854-4012	
Replacement Double-Spindle Motor – Open	854-1263	



A

B

C ARBE Compact Double-Spindle Polisher/Dust Collector

Ideal for shops with very limited space. Features suction motor with squirrel-cage turbine, 18-gauge steel construction for longevity and 1/2 HP double-spindle polishing motor. Holds buffs up to 6" in diameter. Includes replaceable fiberglass filter, 1/2" tapered spindles and double work light (60W bulbs not included). Backed by a one-year manufacturer's warranty. Made in USA.

Specifications:

- Electrical: 110V, 50/60Hz
- Airflow: 165 CFM
- Polishing motor: 1/2 HP (3,450 RPM)
- Filter size: 22" x 12" x 2"
- Dimensions: 22-1/2"W x 19"D x 12"H
- Ship weight: 57 lbs.

Description	SKU	Each
C Compact Double Spindle	854-4006	
Replacement Filters (3)	854-4011	
Replacement Double-Spindle Motor – Open	854-1263	



C

D ARBE Compact Single-Spindle Polisher/Dust Collector

Ideal for shops with very limited space. Features suction motor with squirrel-cage turbine, 18-gauge steel construction for longevity and 1/2 HP single-spindle polishing motor. Holds buffs up to 6" in diameter. Includes replaceable fiberglass filter, 1/2" tapered spindle and work light (60W bulb not included). Backed by a one-year manufacturer's warranty. Made in USA.

Specifications:

- Electrical: 110V, 50/60Hz
- Airflow: 165 CFM
- Polishing motor: 1/2 HP (3,450 RPM)
- Filter size: 13" x 9-3/4" x 2"
- Dimensions: 15"W x 17"D x 10"H
- Ship weight: 47 lbs.

Description	SKU	Each
D Compact Single Spindle	854-4005	
Replacement Filters (3)	854-4010	
Replacement Single-Spindle Motor – Open	854-1268	



D

A-C Foredom® Bench Lathe

The high-torque permanent-magnet motor provides ample power for grinding and polishing tasks. Features variable speed control, permanently lubricated ball bearings, fully sealed motor housing, cast-iron base and power light. Includes two tapered spindles for buffs up to 4" diameter.

Purchase the Foredom Bench Lathe with spindles only, with spindles and two polishing hoods, or with spindles and select accessories (collet holder with 3/32", 1/8", and 1/4" collets and wheel mandrel). Made in USA.

Specifications:

- 1/6 HP, high torque motor
- Variable Speed, 500-7,000 RPM
- 115 Volt, 2A, 50/60 Hz
- 125 Watts (continuous rating)
- Motor shaft diameter: 9/16"
- Shaft height: 3-3/4"
- Height: 5-1/8"
- Width: 13" between spindles
- 6"W x 5"D base
- Weight: 7.5 lbs
- CSA Certified
- One-Year Warranty

Description	SKU	Each
A Bench Lathe & Spindles Only	850-0610	
B Bench Lathe with 2 Polishing Hoods	850-0625	
C Bench Lathe & Spindles & Accessories	850-0619	
Polishing hood only, 2" inlet, (4-3/4"W x 8"D x 6-3/8"H)	850-0626	



A



B



C



D



E



F



G



H

D Foredom® Bench Lathe with Filter Hood

The Foredom Filter Hood when mated with the Foredom Bench Lathe is a compact, powerful system which collects particles from grinding and polishing. Offers strong suction for collecting both dust and precious metal. Features a variable-speed motor with voltage selector switch, removable watertight metal tray, LED gooseneck lamp and acrylic safety shield. Includes three replaceable filters (each measures 5-13/16" x 5-7/8" x 1/2" thick). These filters remove coarse, large dust particles whereas the replacement charcoal filters, removes small, fine intermediate particles. Electrical: 110/220V. Hood measures 6"W x 12-3/4"D x 7-1/2"H. One-year warranty. CE approved. Bench Lathe made in USA and Filter Hood made in Taiwan.

Description	SKU	Each
D Foredom Bench Lathe with Filter Hood	850-0644	
Filter Hood only	850-0640	
Replacement Filter 5-pack	850-0641	
Replacement Charcoal Filter 5-pack	850-0643	

E-H Foredom® Bench Lathe Accessories

Description	SKU	Each
E Optional Jacobs Chuck Arbor	850-0629	
F Optional Left Wheel Mandrel	850-0613	
G Optional Right Wheel Mandrel	850-0621	
H Optional 1/8" Collet*	850-5430	
H Optional 3/32" Collet*	850-5420	
H Optional 1/4" Collet*	850-5470	
H Optional 1/4" Right Collet Holder*	850-0624	

*Included in 850-0619

A Foredom® Lighted Work Chamber

Perfect for custom fabricators working with prototypes and other small workpieces.

Included a bright LED light which tilts to focus light exactly where needed. The 5" diameter, 2-1/2X magnifier has a 10X insert for close work. Two hinged, polycarbonate shields help to contain dust and debris, and a removable watertight tray holds spillage when working with water and other lubricants. Padded arm rests on both sides for comfort.

Designed for use with compressed air and dust collection. Includes an adjustable compressed air nozzle which can be pivoted to direct dust and debris away from your work piece and to the chamber's rear into a dust collection system. A 2-pin style plug outlet on the back could be used for connecting a dust collector with remote on/off switches. When the remote connection is in use, the front power button on the chamber will activate both the LED light and the dust collection system. Dual voltage. Made in Taiwan.

Chamber dimensions: 8"H x 10-1/2"W x 6-1/2"D

Overall dimensions: 11-1/2"H x 11"W x 10"D

Description	SKU	Each
A Super Flow Enclosed Hood	850-0645	



A

B Foredom® MALC30 Jumbo Work Chamber

The Jumbo Work Chamber is appealing to fabricators of all kinds working with small to medium sized pieces because the hinged access can handle a larger range of items while containing most dust and debris. Features movable magnetic LED light, padded armrest, and removable debris tray. Chamber tapers 20" to 3-3/4" in width, is approximately 20" in depth and tapers from 20-1/2" down the 4-3/4" in height. Overall dimensions are 22-1/2"W x 23"D x 21" H. Easy assembly. Universal Voltage. Made in Taiwan.

Features:

LED Light: Super bright, 200 lumen daylight quality 5-bulb fixture tilts on its magnetic base to focus light where needed. Has Magnetic On/Off remote switch box for positioning on outside of unit wherever convenient for your application.

Vacuum Port and Elbow: Supplied Elbow fits a 2-1/4" diameter hose for right or left side hook up to a shop vacuum or other dust collection system (not included).

Shield Acrylic Shield: has ample cut-outs for easy access and movement of arms inside the chamber. Shield is hinged at the top and magnetically secured with knob at the bottom.

Description	SKU	Each
B Super Flow Enclosed Hood	850-0659	



B

C ARBE Super Flow Enclosed Hood

Fabricated out of steel, this hood has a special design which helps direct all debris directly into the back of the hood. With dimensions of 14"W x 15"D x 15-1/4"H you will have a roomy work area with a clear plastic viewing shield. There are sockets in the hoods for standard, incandescent light bulbs, which are not included. 110V. Made in USA.

Description	SKU	Each
C Super Flow Enclosed Hood	854-3105	



C

D-E 3" Flexible Hose and Hose Clamp

Use our heavy-duty 3" diameter hose to connect dust collection equipment. Sold by the foot.

Description	SKU	Each
D 3" Flexible Hose, 1' length	854-3050	
E 3" Hose Clamp	854-3060	



E

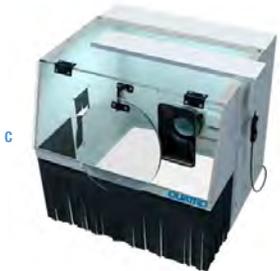
F 1.5" Flexible Hose

Reinforced suction hose. 1-1/2" diameter. Sold in 6' or 10' lengths. Color may vary.

Description	SKU	Each
F 1.5" Flexible Hose - 6' length	854-2131	
1.5" Flexible Hose - 10' length	854-2132	



F



A Quatro Clearview Hood with LED Lighting

Features solid metal construction with top and front made of durable acrylic and LED lighting for optimal viewing of polishing operations. Includes rubber sweeper strips in front and at the spindle inlet to provide maximum containment. Works on left or right side of polishing motor. Has 3" rear inlet for dust collector hose (hose clamp included). Available Accessory Drawer also available for retrofit on this Clearview Hood only. Measures 15.5"W x 14.25"D x 15"H. Assembly required. Made in Canada.

Description	SKU	Each
A Clearview Hood	854-2083	
Clearview Metal Collection Drawer (for retrofit)	854-2097	

B Quatro Deluxe Clearview Hood with Drawer and Mesh Bottom and 2X Magnifier

Features solid metal construction with top and front made of durable acrylic and LED lighting for optimal viewing of polishing operations. Includes rubber sweeper strips in front and at the spindle inlet to provide maximum containment. Works on left or right side of polishing motor. Has 3" rear inlet for dust collector hose. Includes collection drawer with mesh bottom as well as a pre-installed 2X magnifier for increased viewing. For better control of the airflow, upgrade your hood by adding an MSV (Manual Start Valve) 854-1511 or ASV (Auto Start Valve) 854-1482 which are available separately for purchase. Measures 15.5"W x 14.25"D x 17"H. Assembly required. Made in Canada.

Description	SKU	Each
B Deluxe Clearview Hood with Drawer	854-2196	
Manual (MSV) Airflow Control Valve	854-1511	
Auto-Remote (ASV) Airflow Control Valve	854-1482	

C Quatro Clearview Hood with 8" Magnifier, Source Capture Nozzle & ASV

This Quatro Clearview Hood comes equipped with bright LED lights for easy viewing of the work being done and has a convenient on/off switch. The ClearView workbench containment box is made of heavy-duty powder coated steel and the clear acrylic viewing area makes it easy to see the work being done. Opening on either side allows working with a lathe (polishing motor) on the left or right. Front rubber curtain makes access to grinding/polishing a breeze.

Comes complete with a round 8" hinged magnifier with 2X magnification. If you don't need magnification, just flip it out of the way. Source capture nozzle enhances the debris capture which helps you to retain your precious metal. The Auto-Start Valve (ASV) is the improved feature which conveniently controls your dust collector from inside the ClearView Hood. Electrical 100-120V, 60Hz, 0.3A. Measures 15.5"W x 14.25"D x 15"H. Weighs 18 lbs. Assembly required. Made in Canada.

Description	SKU	Each
Clearview Hood with ASV	854-1481	

D-E Incandescent Collection Hood

Powder-coated heavy-gauge metal hood with two incandescent light fixtures and 3" screened rear inlet. Requires two 60W incandescent bulbs. Works on either side of motor. 110V. Made in USA. Optional adjustable collection hood shield protects the user from flying particles. Meets OSHA requirements.

Description	Dimensions	SKU	Each
D Incandescent Collection Hood	12-3/4"W x 16"D x 15"	854-3104	
E Collection Hood Shield	6"W x 9"H x 1/8"	854-3135	

A Baldor-Reliance® #75 Sealed Motor – 3/4 HP; 3,600 RPM

Very strong motor for buffs up to 8" in diameter. Designed for continuous operation. Has threaded tapered shaft. Motor height: 10-1/2". Shaft height: 7-7/8". Ship weight: 46 lbs. Recommended spindle is 840-4700, Right-Hand (#75R) and 840-4710, Left-Hand (#75L). Both internally threaded. Made in USA.

Model	Electrical	Base (W x D)	SKU	Each
A #75R	220-460V / 3 Ph / 50/60Hz	8" x 8-1/2"	854-1070	
#75L	220-460V / 3 Ph / 50/60Hz	8" x 8-1/2"	854-1077	

Plugs not supplied for 220V models. Other voltages available. Motor speed at 50Hz: 3,000 RPM.

B Baldor-Reliance® #50 Sealed Motor – 1/2 HP; 3,600 RPM

Heavy-duty motor for buffs up to 8" in diameter. Designed for continuous operation. Has threaded tapered shaft. Motor height: 11-9/8". Shaft height: 8-1/8". Ship weight: 39 lbs. Recommended spindle is 840-4700, Right-Hand (#50R) and 840-4710, Left-Hand (#50L). Both internally threaded. Made in USA.

Model	Electrical	Base (W x D)	SKU	Each
B #50R	110V, 1 Ph, 50/60Hz	8" x 8-1/2"	854-1050	
#50L	110V, 1 Ph, 50/60Hz	8" x 8-1/2"	854-1051	

Plugs not supplied for 220V model. Motor speed at 50Hz: 3,000 RPM.

C Baldor-Reliance® #29-1 Sealed Motor – 1/2 HP; 3,600 RPM

Double-spindle heavy-duty motor for buffs up to 8" in diameter. Has 9/8" diameter straight shafts. Motor height: 11-1/2". Shaft height: 8-1/8". Ship weight: 51 lbs. Recommended tapered spindle is 840-5350, Right-Hand and 840-5300, Left-Hand. Made in USA.

Electrical	Base (W x D)	SKU	Each
110V, 1 Ph, 50/60Hz	8" x 8-1/2"	854-1250	

Motor speed at 50Hz: 3,000 RPM.

D Baldor-Reliance® #16 Sealed Motor – 1/2 HP; 3,450 RPM

Sealed double-spindle motor for buffs up to 6" in diameter. Slightly tapered 3/8" shaft tips allow quick change of chucks and hold spindles true, preventing buff wobble. Shaft height: 5". Ship weight: 37 lbs. Recommended Ritter friction fit spindle is 840-5050, Right-Hand and 840-5000, Left-Hand. Made in USA.

Electrical	Base (W x D)	SKU	Each
115V, 1 Ph, 60Hz	6-1/2" x 7-1/2"	854-1254	

E Baldor-Reliance® #25 Sealed Motor – 1/4 HP; 3,450/1,725 RPM

Sealed double-spindle two-speed motor for buffs up to 6" in diameter. Slightly tapered 3/8" shaft tips allow quick change of chucks and hold spindles true, preventing buff wobble. Shaft height: 5-1/4". Ship weight: 37 lbs. Recommended Ritter friction fit spindle is 840-5050, Right-Hand and 840-5000, Left-Hand. Made in USA.

Electrical	Base (W x D)	SKU	Each
115V, 1 Ph, 60Hz	6-1/2" x 7-1/2"	854-1030	

F Mandrel Chuck

For right side of motor. Screws snugly onto tapered spindle. Holds 3/32" and 1/8" shanks. Measures 3-1/2" long.

Description	SKU	Each		
		1-2	3-9	10+
Mandrel Chuck	840-4250			



A-B ARBE 3/4 HP Single Spindle Motors

This ARBE Pro Series quality motor sits on a rubber framed resilient base to minimize excessive vibration. This 3/4 HP, single-spindle motor operates at 3,450 RPM. Comes supplied with a tapered spindle. Overall width (spindle to spindle): 13". Motor height: 11". Height to center of shaft: 7" so it accommodates large diameter buffs. One-year manufacturer's warranty. 110V. Made in the USA.

Description	SKU	Each
A ARBE 3/4 HP RH	854-1230	
B ARBE 3/4 HP LH	854-1234	



C ARBE 1/2 HP Single Spindle Motor

This ARBE Pro Series quality motor sits on a rubber framed resilient base to minimize excessive vibration. This 1/2 HP, single-spindle motor operates at 3,450 RPM. Comes supplied with right-hand tapered spindle. One-year manufacturer's warranty. 110V. Made in the USA.

Description	SKU	Each
C ARBE 1/2 HP RH	854-1240	

D ARBE 1/2 HP Variable Speed Double Spindle Motor

This ARBE Pro Series quality motor sits on a rubber framed resilient base to minimize excessive vibration. This 1/2 HP, 2-spindle motor is variable speed, from 0-3,600 RPM. Comes supplied with tapered spindles as well as arbors for both right and left sides – which will hold wheels with 1/2" arbor holes. One-year manufacturer's warranty. 110V. Made in the USA.

Description	SKU	Each
D ARBE 1/2 HP Variable Speed Double Spindle Motor	854-1260	



E-F ARBE Open Motors – 1/2 HP; 3,450 RPM

These ARBE Pro Series quality motors sit on rubber framed resilient bases to minimize excessive vibration. Come supplied with tapered spindles. Electrical: 110V/60Hz, 1PH. Shaft height is 3" so use with 4" buffs or place on a platform to use with 6" buffs. One-year manufacturer's warranty. 110V. Made in USA.

Description	Width to Spindle End	Base (W x D)	SKU	Each
E Double Spindle	15"	6-1/2" x 9-3/4"	854-1263	
F Single Spindle	12"	6-1/2" x 9-3/4"	854-1268	



A-F Arbors

Used to mount wheels with 1/2" arbor holes onto polishing or lapping motors.

Description	I.D.		SKU	Each
	R or L	R or L		
A For straight shafts. Setscrews	1/2"L		840-4501	
B For straight shafts. Setscrews	1/2"R		840-4551	
C Flange Combo	5/8"L		840-4667	
D Internally Threaded	5/8"L		840-4675	
E For #29-1*	5/8"R		840-4668	
F For #50, #75R**	R		840-4670	

*Has extended tapered spindle for cloth buffs.

**Threaded and tapered.

G-X Tapered Spindles

Used to mount buffs onto polishing or lapping motors.

Description	I.D. R or L	Thread Length	Overall Length	SKU	Each
G For #16, #25. Ritter left taper friction fit. No setscrews.	L	2-5/8"	3-5/8"	840-5000	
H For #16, #25. Ritter right taper friction fit. No setscrews.	R	2-5/8"	3-5/8"	840-5050	
I For #16, #25. Left taper friction fit, brass. No setscrews.	L	2"	3-1/4"	840-5055	
J For #16, #25. Right taper friction fit, brass. No setscrews.	R	2"	3-1/4"	840-5056	
K For straight shafts. Setscrews.	1/2"L	2"	3-1/2"	840-5200	
L For straight shafts. Setscrews.	1/2"R	2"	3-1/2"	840-5250	
M For #29-1, #15. For straight shafts. Setscrews.	5/8"L	2-5/8"	4-3/16"	840-5300	
N For #29-1, #15. For straight shafts. Setscrews.	5/8"R	2-5/8"	4-3/16"	840-5350	
O For straight shafts. Setscrews.	1/2"L	2-5/8"	6"	840-5363	
P For straight shafts. Setscrews.	1/2"R	2-5/8"	6"	840-5362	
Q For #29-1, #15. Split Lapping Machine. For straight shafts. Setscrews.	5/8"L	2-5/8"	6"	840-5361	
R For #29-1, #15. For straight shafts. Setscrews.	5/8"R	2-5/8"	6"	840-5360	
S For #50L, #75L. No setscrews.*	L	2-5/8"	6"	840-4710	
T For #50R, #75R. No setscrews.*	R	2-5/8"	6"	840-4700	
U Bench Motor	5/16" L			850-0627	
V Bench Motor	5/16" R			850-0628	

*Also for Whirlwind and Red Wing motors. Threaded and tapered.



A Quatro Fresh-Air Series HEPA Air Purifiers

Polishing operations and bench work creates a great deal of dust, some harmless and some toxic. Many dust collectors pick up much of the dust at the source, but some polishing operations also allow a substantial amount of dust to become airborne and settle around the perimeter of the shop.

Fresh-Air Series Air Purifiers by Quatro capture airborne dust and other contaminants in an advanced three-stage filtration system, then recirculate clean air back into the room. All provide complete room air exchange approximately 15 times per hour. Each includes smooth casters for easy relocation to dusty areas. Electrical: 120V (240V available). Optional odor filter also available by special order. Backed by a one-year manufacturer's warranty. Made in Canada.

Filtration System Features:

- **Stage-1 Prefilter** – Captures the biggest particles, prolonging the life of subsequent filters. Inexpensive and easy to change.
- **Stage-2 HiCap Filter** – Provides high-capacity particle retention. (Most debris and contaminants will be captured by stage-1 and 2 filters, which can be sent to your refiner for reclamation.)
- **Stage-3 HEPA Filter** – Picks up 99.97% of 0.3 micron particulate, including soot and pollen. Recirculates clean air back into the room to help minimize heating and AC costs.



Fresh-Air Model	400	1000	2000
Max. Room Size, (with 8' ceiling)	1,125 sq.ft.	2,250 sq.ft.	3,750 sq.ft.
Current Draw	0.6A	1.6A	5.4A
Net Weight	63 lbs.	190 lbs.	350 lbs.
Dimensions, (W x D x H, inches)	13 x 16 x 28-1/2	22 x 16 x 52	24 x 26 x 71
SKU	854-1523	854-1521	854-1520
Each			
Replacement Filters			
Dust Pre-Filter	854-1394	854-2103	854-2104
Package Quantity	6 each	8 each	8 each
HICAP	854-2105	854-2107	854-2108
Package Quantity	2 each	1 each	1 each
HEPA	854-2139	854-2192	854-2195
Package Quantity	1 each	1 each	1 each
Optional Odor Filter	854-1378	854-1353	854-1353
Package Quantity	1 each	1 each	1 each

B-C Quatro Ductless Fume Hoods

Units feature a two-stage filtration system that captures fumes, then recirculates clean air back into the room to save on heating and AC costs. Burnout fume hood installs right on wall behind burnout furnace and ideal for those without access to outside ductwork. Rhodium fume hood installs directly over plating area. See Optional Stand. Each has a metal-frame filter container that holds an activated charcoal media mixture specifically formulated for the respective application. Backed by a one-year manufacturer's warranty. Made in Canada.

Specifications:

- Electrical: 120V, 1.6A, 60Hz
- Dimensions: 28"W x 18"D x 26"H
- Net Weight: 50 lbs.

Description	SKU	Each
B Burnout Fume Hood	854-1525	
Rhodium Fume Hood	854-1526	
Replacement Dust Filters (8)	854-2103	
Stage-2 Media Refills (4) for both fumes	854-1409	
Stage-3 Media Refills (4) for burnout fumes	854-1527	
Stage-3 Media Refills (4) for rhodium fumes	854-1396	
C Optional Stand	854-1524	

Ultrasonic Cleaner Brand Comparison

Brand	BestBuilt	L&R Quantrex	Elma "Xtra" Series	Elma "Select" Series	Elma "Easy" Series	Elma "P" Series
Capacity	1.2 qts., 2 qts., 3.5 qts., 6 qts., 10 qts., or 22 qts.	2 qts., 3.4 qts., 6 qts., 14.4 qts., or 26 qts.	5.25 qts., 6.5 qts., 15 qts., or 20.5 qts.	2.85 qts., 4.10 qts., 6.25 qts., 10 qts., 13.65 qts., 19 qts., or 29 qts.	1 qts., 2 qts., 3 qts., 4 qts., 6 qts., 10 qts., 13.5 qts., 18 qts., or 30 qts.	3 qts., 6 qts., 14 qts., 20 qts., or 30 qts.
Frequency	40kHz	43kHz	37kHz	37kHz	37kHz	37/80kHz
Workload	Medium to Heavy	Medium to Heavy	Medium to Heavy	Medium to Heavy	Medium to Heavy	Medium to Heavy
Control	Digital	Analog	Analog	Digital	Analog	Analog & Digital
Timer	5-40 min.	0-60 min.	1-30 min.	0-60 min.	0-30 min.	0-30 min.
Timer Bypass	No	No	Yes	No	Yes	Yes
Heater	Yes	Yes	Yes	Yes	Yes	Yes
Housing	Powder-Coated Steel	Vinyl-Clad Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Tank	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Lid	Yes	Yes	Yes	Yes	Yes	Sold Separately
Drain	10 qt. and larger	3.4 qt. and larger	All	6.25 qt. and larger	6 qt. and larger	All
Country of Origin	South Korea	USA	Germany	Germany	Germany	Germany
Warranty	2 Year	2.5 Year	2 Year	2 Year	2 Year	2 Year

Elma "P" Series Ultrasonics



Elma "P" ultrasonic cleaners are manufactured with industrial strength and durability for a long life. This series are extremely versatile and have 8 special ultrasonic features plus an intuitive, user-friendly operations display. The 2 frequency control allows for either high energy density for deep cleaning applications (37kHz – or for gentle, quiet cleaning of delicate items such as pearls or small diameter tubes and capillaries (80kHz). Lids sold separately. Two-year Manufacturer's Warranty. Made in Germany.

Features:

- **Normal:** For general cleaning and heavy debris removal.
- **Pulse Mode:** Gives additional power through increased peak performance.
- **Sweep:** Distributes the ultrasonic power throughout the tank.
- **Degas:** Quickly degases liquid when freshly added to the tank.

- **Power Control:** Optimizes output for special and laboratory applications.
- **Pause:** Interrupts the operation.
- **Auto Start:** Automatic start when temperature is reached.
- **Heat Control:** Adjustable.



Model	P30H	P60H	P120H	P180H	P300H
Capacity (qts.)	3 Quart	6 Quart	14 Quart	20 Quart	30 Quart
Frequency	37/80 kHz	37/80 kHz	37/80 kHz	37/80 kHz	37/80 kHz
Tank Dimensions (W x D x H, inches)	9.45 x 5.39 x 3.94	11.81 x 5.94 x 5.91	11.81 x 9.45 x 7.87	12.87 x 11.81 x 7.87	19.88 x 11.81 x 7.87
Drain	Yes	Yes	Yes	Yes	Yes
Overall Dimensions (W x D x H, inches)	11.81 x 7.05 x 8.70	14.37 x 7.32 x 10.67	14.37 x 10.94 x 12.64	15.35 x 13.38 x 12.64	22.36 x 13.38 x 12.64
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	8 lbs.	12 lbs.	17 lbs.	19 lbs.	25 lbs.
Manf. Warranty	2 Year	2 Year	2 Year	2 Year	2 Year
SKU	851-1030	851-1032	851-1033	851-1034	851-1035
Each					

Lids	P30H Lid	P60H Lid	P120H Lid	P180H Lid	P300H Lid
SKU	851-1036	851-1037	851-1038	851-1039	851-1040
Each					



Elma “Easy” Series Ultrasonics

The Elma “Easy” series is characterized by many as simple and “easy” to use with an intuitive user-friendly operation. Each unit maintains 37 kHz ultrasonic frequency with two ultrasonic modes; Dynamic which allows for intensive cleaning with higher cleaning power as well as sweep for real deep cleaning or Eco Mode for gentle cleaning and quiet operation. Choose your selected cleaning time between 1-30 minutes or continuous operation (Max 6 hours). Easy series also has adjustable optimal temperature control in 5°C increments and ranges from 30–80°C (86–175°F). Tanks are made of durable stainless steel and for easy draining, a side drain plug is included (Only on Models 60H or Larger). Unit comes complete with a lid but basket is sold separately. Safety features include an auto switch-off with wake function (either after 8 hours of inactivity or in the event of a brief interruption in the power supply) and will also shut-off if ultrasonic bath temperature exceeds 90°C (175°F). Made in Germany.

Features:

- More power with Dynamic Mode for removing dirt, polishing compound and hand cream.
- Visual limit temperature warning to protect sensitive parts.
- Shuts down after 8 hours of inactivity or disruption in the power supply.
- Eco Mode for gentle cleaning and quiet operation.
- Electronic timer up to 30 minutes and also able to work continuously up to 6 hours.
- Thermostat controlled heating with safety shut off function.



Model	Easy 10H	Easy 20H	Easy 30H	Easy 40H
Capacity (qts.)	1	2	3	4
Frequency	37 kHz	37 kHz	37 kHz	37 kHz
Tank Dimensions (W x D x H, inches)	7.25 x 3.15 x 2.15	5.5 x 4.95 x 3.75	8.65 x 4.75 x 3.75	8.45 x 4.5 x 5.70
Drain	No	No	No	No
Overall Dimensions (W x D x H, inches)	9.25 x 5 x 7.85	8.45 x 7.5 x 9	12 x 7.5 x 9	12 x 7.5 x 11
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	4.4 lbs.	4.63 lbs.	7.25 lbs.	8.8 lbs.
Manf. Warranty	2 Year	2 Year	2 Year	2 Year
SKU	851-1100	851-1101	851-1102	851-1103

Each



Model	Easy 60H	Easy 100H	Easy 120H	Easy 180H	Easy 300H
Capacity (qts.)	6	10	13.5	18	30
Frequency	37 kHz	37 kHz	37 kHz	37 kHz	37 kHz
Tank Dimensions (W x D x H, inches)	11 x 5.1 x 5.70	9.85 x 8.65 x 5.70	10.8 x 8.5 x 7.75	11.8 x 10.6 x 7.75	18.5 x 10.6 x 7.75
Drain	Yes	Yes	Yes	Yes	Yes
Overall Dimensions (W x D x H, inches)	14.5 x 8.25 x 11	15 x 12.5 x 11	15 x 12.5 x 11	16 x 14.15 x 13	22.5 x 14.75 x 13
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	11.25 lbs.	13 lbs.	16.5 lbs.	18.75 lbs.	24.25 lbs.
Manf. Warranty	2 Year	2 Year	2 Year	2 Year	2 Year
SKU	851-1104	851-1105	851-1106	851-1107	851-1108

Each



Elma “Select” Series Ultrasonics

The Elma “Select” series offers exceptional cleaning with easy-to-use controls while containing many features making this series by Elma professional, heavy-duty and robust. Each unit maintains 37 kHz ultrasonic frequency with five ultrasonic modes; Eco-Mode for gentle cleaning and quiet operation, Sweep-Mode for thorough cleaning in the ultrasonic bath, Pulse-Mode for removing difficult contaminants and caked-on compound, Dynamic-Mode which combines Sweep and Pulse features for exceptional cleaning performance and Degas-Mode for removal of excessive bubbles caused by the mixing of ultrasonic solution with water. Choose your selected cleaning time between 1 minute with a max of 6 hours), “Select” series also has adjustable optimal temperature control in 5°C increments and ranges from 25–80°C (77–175°F). Tanks are made of durable stainless steel. Unit comes complete with a soundproof lid but basket is sold separately. Safety features include an auto switch-off with wake function (either after 8 hours of inactivity or in the event of a brief interruption in the power supply). Made in Germany.



Model	30H	40H	60H
Capacity (qts.)	2.85	4.10	6.25
Frequency	37 kHz	37 kHz	37 kHz
Tank Dimensions (W x D x H, inches)	8.65 x 4.7 x 3.75	8.5 x 4.5 x 5.7	11 x 5.10 x 5.7
Drain	No	No	Yes
Overall Dimensions (W x D x H, inches)	12 x 10.6 x 9.05	12 x 10.6 x 11	14.5 x 8.25 x 11
Electrical	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	8 lbs.	8 lbs.	12 lbs.
Manf. Warranty	2 Year	2 Year	2 Year
SKU	851-1120	851-1121	851-1122

Each



Model	100H	120H	180H	300H
Capacity (qts.)	10	13.65	19	29
Frequency	37 kHz	37 kHz	37 kHz	37 kHz
Tank Dimensions (W x D x H, inches)	11 x 8.65 x 5.7	11 x 8.65 x 7.65	11.8 x 10.6 x 7.6	18.7 x 10.6 x 7.6
Drain	Yes	Yes	Yes	Yes
Overall Dimensions (W x D x H, inches)	15 x 11.8 x 11	15 x 11.8 x 13	16 x 14.15 x 13	22.6 x 14.5 x 13
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	14 lbs.	17 lbs.	24 lbs.	28 lbs.
Manf. Warranty	2 Year	2 Year	2 Year	2 Year
SKU	851-1123	851-1124	851-1125	851-1126

Each

Elma "Xtra" Series Ultrasonics



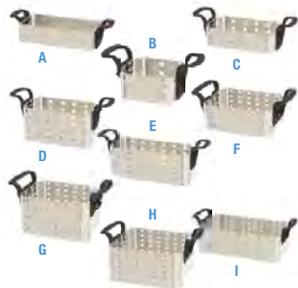
The Elma "Xtra" series offers exceptional cleaning with easy-to-use controls while containing many features making this series by Elma professional, robust and considered heavy-duty. Each unit maintains 37 kHz of ultrasonic frequency with two ultrasonic modes; Dynamic-Mode for intense cleaning with higher cleaning power while Sweep and Pulse alternate for homogeneous and powerful cleaning. The second is Eco-Mode which serves as gentle cleaning with quieter operation which helps save energy while prolonging the life of your tank. Choose your selected cleaning time between 1 minute and 30 minutes or set to continuous operation (ultrasonic max operation is 6 hours). Xtra series also has adjustable optimal temperature control in 5°C increments and ranges from 30–80°C (85–175°F). Tanks are made of durable stainless steel. Made in Germany.



Model	40H	60H	120H	180H
Capacity (qts.)	5.25	6.5	15	20.5
Frequency	37 kHz	37 kHz	37 kHz	37 kHz
Tank Dimensions (W x D x H, inches)	9.25 x 5.3 x 5.9	11.8 x 5.3 x 5.9	11.8 x 9.25 x 7.5	13 x 11.6 x 7.5
Drain	Yes	Yes	Yes	Yes
Overall Dimensions (W x D x H, inches)	17 x 8.5 x 13	20 x 8.5 x 13	20 x 12.5 x 15	20.8 x 15 x 15
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	15 lbs.	17.5 lbs.	25 lbs.	29 lbs.
Manf. Warranty	2 Year	2 Year	2 Year	2 Year
SKU	851-1130	851-1131	851-1132	851-1133
Each				

A-I Elma "Modular" Ultrasonic Baskets

Our Stainless-Steel Elma Modular Basket is necessary to secure your workpieces when submerged in an Ultrasonic for general cleaning. Each basket comes with durable ergonomic plastic handles for easy transport as well as the bayonet style holes (lateral clean-out) along the bottom and sides. Baskets are always sold separately and do not come supplied with Elma Ultrasonics. Elma Modular Baskets fit current and previous Elma "Easy", "Select", "P" and "Xtra" series Ultrasonics. Made in Germany.



Model	Dimensions (W x D x H)	SKU	Each
A 10H	6" x 2.75" x 1.5"	851-1110	
B 20H	4.35" x 4.15" x 2"	851-1111	
C 30H	7.65" x 4.15" x 2"	851-1112	
D 40H	7.65" x 4.15" x 3.75"	851-1113	
E 60H	10" x 4.15" x 3.75"	851-1114	
F 100H	9.65" x 7.65" x 3.55"	851-1115	
G 120H	9.65" x 7.65" x 5.5"	851-1116	
H 180H	10.85" x 10" x 5.5"	851-1117	
I 300H	17.5" x 10" x 5.3"	851-1118	

L&R Quantrex® Ultrasonic Cleaners



Quantrex by L&R ultrasonics feature durable stainless steel housing, stainless steel tank, durable ABS plastic lid (plastic lid on models Q90, Q140 and Q210 while models Q360 and Q650 have stainless-steel lid), 60-minute timer and a drain with hose & clip (except model 90, which has timer but no drain). Include integral heating elements at a preset temperature of approximately 160°F while providing quiet yet powerful 43kHz cleaning action. 220V Export models available upon request. Made in USA.



Model	Q90	Q140	Q210	Q360	Q650
Capacity (qts.)	2 Quart	3.4 Quart	6 Quart	14.4 Quart	26 Quart
Frequency	43 kHz	43 kHz	43 kHz	43 kHz	43 kHz
Tank Dimensions (W x D x H)	5.9 x 5.4 x 4	9.4 x 5.4 x 4	11.8 x 6 x 6	11.5 x 9.3 x 8	19.8 x 11.8 x 6.5
Drain	No	Yes	Yes	Yes	Yes
Overall Dimensions (W x D x H)	7 x 6.4 x 8.8	10.3 x 6.5 x 8.3	12.8 x 7 x 11	12.8 x 10.5 x 14.3	21.8 x 13.8 x 12.7
Electrical	110V, 50/60Hz	110V, 50/60Hz	110V, 50/60Hz	110V, 50/60Hz	110V, 50/60Hz
Ship Wt.	6.5 lbs.	9 lbs.	12 lbs.	20 lbs.	32 lbs.
Manf. Warranty	2.5 Year	2.5 Year	2.5 Year	2.5 Year	2.5 Year
SKU	851-5230	851-5232	851-5234	851-5236	851-5238
Each					

BestBUILT Ultrasonic Cleaners

BestBUILT Ultrasonic Cleaners utilize industrial transducers to create powerful 40 kHz ultrasonic wavelengths – and powerful enough to remove caked-on dirt as well as rouge and other compounds. All BestBUILT models have a 40 minute timer (except 1.2 qt model which is 1/3/5 minute and 2 qt model which is 30 minute) and stainless-steel cover/lid (except 1.2 qt model which is plastic). Made in South Korea.



Model	28-D100	28-180	28-330	28-600	28-1000	28-2200
Capacity (qts.)	1.2	2	3.5	6	10	22
Frequency	40 kHz					
Variable Temperature Control	No	No	Yes	Yes	Yes	Yes
Tank Dimensions (W x D x H, inches)	5.5 x 6 x 2.5	5.9 x 5.3 x 3.9	9.4 x 5.5 x 3.9	11.4 x 5.9 x 5.9	11.4 x 9.4 x 5.9	19.5 x 11.75 x 5.9
Drain	No	No	No	No	Yes	Yes
Overall Dimensions (W x D x H, inches)	7 x 6.4 x 6.5	7 x 6.4 x 8.3	11.7 x 6.4 x 9.8	14.1 x 6.9 x 11.9	15.5 x 10.4 x 14.5	23.5 x 13.75 x 12.35
Electrical	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Ship Weight	5.5 lbs.	7 lbs.	11 lbs.	13 lbs.	20 lbs.	35 lbs.
Manf. Warranty	1 Year/2 Year Transducer					
SKU	851-1015	851-1090	851-1092	851-1094	851-1096	851-1098
Each						

Ultrasonic Cleaning Solutions

Gesswein Cleaning Solutions are formulated for light, medium or heavy-duty cleaning and all reduce surface tension in order to clean more effectively and enhance cavitation (formation of microscopic cleaning bubbles).

Ultrasonic cleaning technology utilizes high frequency sound waves to agitate the cleaning solution that in turn acts on contaminants adhering to metals, plastics, glass and ceramics. Ultrasonic cleaners remove dust, dirt, oil, pigments, grease, polishing compounds, mold release agents and biological residue such as blood, fingerprints and saliva. All are Made in USA.

Color of Solution may vary from batch to batch.



A-D Gesswein® Classic Ultrasonic Solution

The Gesswein Classic Ultrasonic Solution will work hard to remove tough dirt, grease, hand cream and still powerful enough to remove the toughest polishing compounds. Solution should be used at a 35:1 mixing ratio and is clear so you can see your parts throughout the cleaning cycle. Environmentally friendly as well! Available in Pint, Quart, Gallon, and 5 Gallon Pail. Also available in a bulk drum upon request. Made in USA.

Description	Yield at 40:1	SKU	Each
A 1 pt. Bottle	4-½ gals.	851-5378	
B 1 qt. Bottle	8-¾ gals.	851-5376	
C 1 gal. Bottle	35 gals.	851-5374	
D 5 gal. Pail	175 gals.	851-5372	

E-H SUPRA® FC Ultrasonic Solution

The SUPRA FC Ultrasonic Solution is a must for any industrial user needing fast cleaning action. FC Ultrasonic Solution is fast and cleans the heaviest of compounds and dirt quickly and effortlessly. Compared to other solutions, SUPRA FC Solution is industrial strength and has minimal odor. It is non-ammoniated, non-flammable, alcohol free, mildly alkaline, environmentally friendly and non-hazardous to ship. Concentrated: use 50:1 in regular tap water and 100:1 in distilled or deionized water. Available in Pint, Quart, Gallon, and 5 Gallon Pail. Also available in a bulk drum upon request. Made in USA.

Description	Yield at 40:1	SKU	Each
E 1 pt. Bottle	4-½ gals.	851-5388	
F 1 qt. Bottle	8-¾ gals.	851-5386	
G 1 gal. Bottle	35 gals.	851-5384	
H 5 gal. Pail	175 gals.	851-5382	

I-J BCR Ultrasonic Solution

BCR, which is known as the Original Buffing Compound Remover is fast-acting alkaline cleaning solution developed especially for the removal of buffing compounds and works effectively on gold, platinum, silver, steel, stainless steel, zinc, magnesium, brass, copper and aluminum. Exceptional rinsability eliminates hand wiping and streaking. Available in Gallon and 5 Gallon Pail. Also available in a bulk 54 gallon drum upon request. Made in USA.

Description	SKU	Each
I 1 gal. Bottle 	812-0600	
J 5 gal. Pail 	812-0605	

K-L BCR Plus Ultrasonic Solution

BCR Plus, which is known as the more aggressive Buffing Compound Remover is for your toughest cleaning jobs. Works effectively on gold, platinum, silver, steel, stainless steel, zinc, magnesium, brass, copper and aluminum. Concentrated: use 3–20% by volume depending on extent of compound buildup. Exceptional rinsability eliminates hand wiping, streaking and discoloration. Available in Gallon and 5 Gallon Pail. Also available in a bulk 54 gallon drum upon request. Made in USA.

Description	SKU	Each
K 1 gal. Bottle 	812-0620	
L 5 gal. Pail 	812-0625	

A Gesswein® Brite Ultrasonic

Concentrated Brite solution is formulated for industrial applications. Ideal for ultrasonic cleaning, hand brushing and immersion or soak cleaning. Contain no chelating agents. Can be used from room temperature up to 160°F. Use in concentration of 2–20% for best results. Ideal for gold, silver, platinum, copper, brass and titanium. Available in a 1 Quart bottle. Made in USA.

Description	SKU	Each
Brite	851-5311	



B-D Magic Green Ultrasonic Cleaning Powder

Magic Green is more economical and occupies much less space than liquid concentrates. Saves on shipping costs, too. And since it won't evaporate, it even keeps longer. Simply mix it to meet needs as product is adjustable for time of run and speed. Start with 1 ounce per gallon and up to 3 ounces per gallon. The stronger the mix, the faster it works and the longer it works. Ammonia-free and biodegradable. Made in USA.

Description	SKU	Each	6+
B 24 oz. Bottle	812-0704		
C 10 lb. Pail	812-0702		
D 50 lb. Pail	812-0703		



E-K Stainless Steel Mesh Baskets

High-quality stainless steel mesh baskets with convenient handles that let you move pieces into and out of your ultrasonic cleaner with ease. Designed to fit many brands. Made in USA.

	Approx. Overall Width	Dimensions (W x D x H)	SKU	Each
E	8"	5.25" x 4.75" x 2"	851-5099	
F	8"	5.375" x 5" x 3.25"	851-5101	
G	10-¼"	8.5" x 5" x 3.5"	851-5147	
H	11-½"	9" x 5" x 3.375"	851-5121	
I	12-¼"	10.75" x 8.5" x 5"	851-5148	
J	13-½"	11" x 5.375" x 5.25"	851-5126	
K	13-½"	11.125" x 8.75" x 4.875"	851-5131	



Reliable Steam Cleaners

Stainless steel is the optimal choice for pressurized steam cleaners around the world. The elegant design and solid construction of Reliable Cleaners utilizes this unsurpassed material both inside and out. Unlike cast iron, these stainless steel models will not rust. One-year manufacturer's warranty on units. Two-year manufacturer's warranty on the boiler tank. cETLus certified. See gesswein.com for other Reliable Steamer models available. Made in Italy.

Series Features All of these RELIABLE stainless steel steamers have:

- Pressure switch, probe safety thermostat on the heating element, safety cap with safety valve, automatic low water shut-off.
- Quick release fittings
- Carrying handle for portability
- 12-gauge heavy-duty wiring
- Steam temperature 221°F/105°C
- Adjustable nozzle and foot pedal



Model	5100CJ	6000CJ	8000CJ
Capacity (gals/liters)	0.50/1.9	1.25/4.7	1.3/5
Steam Time (hours)	2-3	4-5	Unlimited
Pressure (PSI/bar)	50/3.5	65/4.5	80/5.5
Heat Up (minutes)	10-15	15-20	20-30
Heating Element	Copper, 1000W	Incoloy, 1200W	Incoloy, 1200W
Electrical	120V, 10 Amps	120V, 10 Amps	120V, 20 Amps
Blow Down Valve	No	Yes	Yes
Water Level	Stick	Stick	Direct Connect*
Dimensions (W x D x H, inches)	12-3/4 x 8 x 10	13" x 8-3/4 x 15	12-3/4 x 14-1/4 x 20-1/2
Net Weight (lb/kg)	11.68/5.3	16.7/7.5	26/11.7
Ship Weight. (lb/kg)	16/7.3	23/10.4	30/13.6
SKU	853-0105	853-0108	853-0130

*Water line or portable supply Auto Shut Off and Thermostat Reset Switch.



A Reliable Steam Gun

Transforms pedal/nozzle operation into hand held steam gun for flexibility. Reliable Steam Gun Complete Assembly will convert your Reliable steamer (except 4100CJ) into a targeted steam cleaner. Comes with the reliable steam gun, 8" hose, connection valve and elbow bracket. Made in Italy

Description	SKU	Each
Steam Gun	853-0115	



B Long-Reach Econo Steam Tweezers

Made of stainless steel. Ideal for holding pieces while they are being cleaned. Heat-resistant plastic-covered tips for firm grip on work piece without scratching. Chrome-plated. Measure 10" long. Made in India.

Description	SKU	Each
Long-Reach Econo Steam Tweezers	195-1900	



C-D Premium Steam Tweezers

The premium coating on tips provides chemical resistance for long wear and use. Use with steam cleaners and ultrasonic cleaners for non-scratch retrieving. Made of Nickel plated steel. Available in 8" or 10" lengths. Rubber coating is 3" length. Made in Pakistan.

Description	SKU	Each
C Premium Steam Tweezers, 8"	195-1904	
D Premium Steam Tweezers, 10"	195-1905	

A Reimers Deluxe Junior Steamer

This compact tabletop unit boasts up to 40% greater effective capacity than similar units, so it provides more steam before needing a water refill. Features a high-limit pressure control switch that regulates heat and pressure automatically. An automatic cutoff shuts the unit down if the water level drops below the heating element. Made of the toughest heavy-duty materials to withstand constant use. Easy to install with no plumbing required. Includes fast-response heating element, foot-controlled solenoid switch, safety relief valve, low-water cutoff with reset switch, steam pressure gauge, lockable blowdown drain valve and water fill funnel and valve. Complies with ASME safety code. UL and CSA approved. Uses ordinary tap water. Optional Mobile Steam Jet Gun available and fits easily onto the Deluxe Junior Steamer. (Includes 7 feet of sturdy flexible hose and T-fitting for easy hookup.) One-year manufacturer's warranty. Made in USA.

Specifications:

- Electrical: 120V, 12.5A, 1500W, 60Hz
- Max. Pressure: 60-85 PSI
- Capacity: 1.5 gals.
- Dimensions: 16-1/2"W x 12"D x 19"H

Description	SKU	Each
A Reimers Jr. Steamer	853-0059	
Mobile Steam Jet Gun	853-7070	

B Steam Cleaner Powder

For removing rust and mineral deposits from boiler chamber of steam cleaner. The 4 oz. supply is sufficient for one cleaning, which should be done once a week.

Description	SKU	Each
Steam Cleaner Powder, 4 oz.	853-1000	1-2 3-9 10+.

C-D Automatic Water Feed Series Steamers

The Auto 6 and Auto 8 eliminates the need to manually fill and refill. Each model is equipped with an automatic water feeder that injects water as needed into the boiler under full pressure. Eliminates downtime, making steam readily available. Provides constant steam at approx. operating pressure of 50 PSI. Auto-6 is a compact version with one steam jet. Auto-8 has two steam jets. Electrical plugs not supplied. All models plumb to water line. Comply with ASME safety code. Use ordinary tap water. Made in USA.

Specifications	C	D
	Auto-6	Auto-8
Electrical*	208V, 1 Ph, 60Hz	240V, 1 Ph, 60Hz
Watts/Amps	6/8kW / 33 (1 Ph)	10kW / 48/42 (1 Ph)
Jets	1	2
Chamber Size	0.33 cu. ft.	0.92 cu. ft.
Max. Pressure	60-85 PSI	60-85 PSI per jet
Steam Generation	27 lbs./hour	34 lbs./hour
Dimensions (W x D x H, inches)	14-1/4 x 14-1/4 x 18	18 x 30 x 21
Ship Weight	76 lbs.	184 lbs.
SKU	853-0209	853-0217*
Each		

* Other Voltage/Phase models available for purchase. Call or visit gesswein.com for product offering.

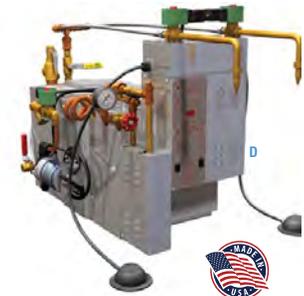
E Steam Dragon™ Steamer (Steam on Demand)

This space-saving unit produces steam on-demand rather than holding it under pressure like boiler-type steamers, so it eliminates the risk of explosion. Performs comparably to much larger machines yet requires no boiler permits. Simple to operate: just insert the supplied water feed hose into a bottle of distilled water (Requires Distilled Water ONLY), step on the foot pedal to feed water into your unit. Flow of steam stops when all the water has boiled to steam. Constructed of 20 gauge stainless-steel with solid state controls including an on/off foot switch to dispense the steam. UL Listed. Made in USA.

Specifications:

- Electrical: 115V, 11A, 1300W, 60Hz
- Dimensions: 9"W x 12"D x 10"H
- Max. Pressure: 90-125PSI
- Ship Weight: 26 lbs.

Description	Electrical	SKU	Each
Silver Dragon Steamer	115V	853-0042	



Gesswein® Mold Performance Sprays



Gesswein

Improve Plastics Processing & Mold Performance

Using the right Mold Performance Spray is a critical step for any plastic injection or blow molding shop to improve cycle times and extend mold longevity. With proper care, your molds will be clean, rust-free, and easy-to-release keeping your production running smoothly. Our Rust Prevent Dry has been formulated to work in unison with the Plastic Injection Mold Cleaner offering up to 2-years of protection, when mold is stored indoors in normal conditions. It also does not require cleaning off before putting the mold back into production.

- **Rust Prevent** sprays to protect your molds during downtime and transit
- **Plastic Injection Mold Release** to increase cycle efficiency
- **Plastic Injection Mold Cleaner** to remove build-up and contaminants
- **Mold Polishing ACE** and **Welding Prep Clean** to improve your mold polishing and welding processes



A

A Rust Prevent Dry

Protect your molds with Gesswein's rust preventative treatments. Use the dry formula when mold downtime is at a minimum. Dry formula is easy to clean up and get the mold back into production quickly. It is self-cleaning in startup, thus eliminating the need to flush off with a cleaner. The dry formula will naturally "flash off" within the first few shots of plastic. A non-penetrating mist prevents marking of plastic parts when molds are put back in service.

Sold individually or in a Box of 12. Made in USA.

Key Features

- Dry coating is quick and easy to clean up
- Self-cleaning in startup.
- Seals out condensation.

Description	SKU	Each	SKU	Box of 12
Rust Prevent Dry	816-2947		816-2948	



B

B Rust Prevent Wet

Protect your molds with Gesswein's rust preventative treatments. Wet formula is the choice when extreme protection is required or during lengthy downtime such as 1 year or more. If the mold is exposed to humid conditions, which can happen when shipping overseas, the Wet formula gives the maximum protection. This one-step rust preventative contains both an acid neutralizer and a rust preventative.

Sold individually or in a Box of 12. Made in USA.

Key Features

- Extreme protection
- Wet coating displaces moisture.
- Up to 5 year protection indoors.

Description	SKU	Each	SKU	Box of 12
Rust Prevent Wet	816-2949		816-2950	



C

C Plastic Injection Mold Release

A general purpose mold release spray for plastic injection molds. Can be used on all metals and thermoplastics such as ABS, Polypropylene, Nylon, Wax, Acrylic, Polycarbonate, Polyethylene, etc. Can also be used for rubber. This silicone based spray is non-paintable. NSF registered formulation safe for food applications.

Sold individually or in a Box of 12. Made in USA.

Key Features

- Light-duty silicone release.
- For use on all thermoplastics
- Max operating temp – 600°F

Description	SKU	Each	SKU	Box of 12
Plastic Injection Mold Release	816-2953		816-2954	

A Plastic Injection Mold Cleaner

Clean your plastic injection mold with ease. The fast evaporating formula leaves no residue, so there is no need for wiping! Remove build-up of silicones, grease, oil and wax on surfaces. Ideal for cold molds. Does not contain chlorinated solvents and is both non-conductive and non-abrasive. Independently certified NSF category P1 and registered as safe for use on food machinery and molds.

Sold individually or in a Box of 12. Made in USA.

Key Features

- Cleans without wiping!
- Leaves no residue
- Removes silicones grease, oil, and wax build-up

Description	SKU	Each	SKU	Box of 12
Plastic Injection Mold Cleaner	816-2951		816-2952	



A

B Mold Polishing ACE

The mold polisher's best friend! Mold Polishing ACE provides the most effective solution for cleaning your mold cavity during the polishing process. The acetone formula cleans and evaporates fast. Get into tight corners, ribs, and holes by using the convenient nozzle attachment. No reportable VOC's. Meets California CARB standards.

Sold individually or in a Box of 12. Made in USA.

Key Features

- Acetone evaporates fast
- Clean surface in-between steps
- Contains only EPA-exempt VOC compounds

Description	SKU	Each	SKU	Box of 12
Mold Polishing ACE	816-2945		816-2946	



B

C Welding Prep Clean

For the best weld result, use Welding Prep Cleaner to remove grease, oil, and other contaminants from the weld surface. This fast-evaporating solvent leaves no residue. Ideal for both TIG and laser welding. Contains no chlorinated solvents. VOC compliant (74.9% VOC) and non-corrosive.

Sold individually or in a Box of 12. Made in USA.

Key Features

- 99% Isopropyl alcohol
- Evaporates fast without residue
- Removes grease and oil

Description	SKU	Each	SKU	Box of 12
Welding Prep Clean	816-2943		816-2944	



C

D Gesswein® Mold Maintenance Set of 3

This complete Mold Maintenance Kit is the ideal all-in-one solution for cleaning and protecting your molds. Perfect for use either at the bench or at the press, these products are sure to save your team time and money.

Using these products in conjunction with one another is the surest way to keep your molds highly maintained and protected from acids, grease and buildup.

Simply use the Simichrome 218-2050 to eliminate any imperfections in the mold and renew the metal surface. Follow this by a generous spray of our Plastic Injection Mold Cleaner (no wiping necessary) to remove molding remnants, grease, vapor residue from outgassing, and more. This will prep the surface of the mold perfectly for the all-important step of rust prevention.

Our Rust Prevent Dry 816-2947 has been formulated to work in unison with the Plastic Injection Mold Cleaner 816-2951 offering up to 2-years of protection, when mold is stored indoors in normal conditions. It also does not require cleaning off before putting the mold back into production.

Description	SKU	Each
Gesswein Mold Maintenance	816-2960	



D





A Benchtop Sandblaster – Dual Entry

Compact unit with solid molded construction for eliminating annoying leaks, large viewing glass, adjustable pressure regulator and self-cleaning nozzle with replaceable orifice. Has left-hand and right-hand heavy-duty rubber gloves and foot pedal blast control. It sits comfortably atop the workbench and can be easily moved when not in use. Holds and recirculates coarse or fine media, including matte sand, crushed ruby or glass beads. Includes two replacement ceramic orifices, internal light bulb and 5 lbs. Quartz abrasive.

Specifications:

- Media capacity: 5 lbs.
- Air requirement: 25–100 PSI at 2.4 CFM
- Dimensions: 11-1/2"W x 12"D x 18"H
- Ship. Weight: 18 lbs.

Description	Electrical	SKU	Each
A Dual Sandblaster	110V, 50/60Hz	854-0060	
	220V, 50/60Hz	854-0065	
Replacement Viewing Panel (no hardware)		854-0056	
Replacement Nozzle Assembly Kit (two ceramic orifices and two setscrews)		854-0057	
Replacement Gloves, pair		854-1278	

B Wide View Sandblaster – Dual Entry

This compact unit provides all the features you've wanted in a sandblaster: crystal-clear acrylic cabinet lets in plenty of light for easy viewing of work in progress; large lid opens wide to accommodate big pieces and is lined with replaceable Protective Shield to prevent frosting; pivoting nozzle adjusts to differently sized pieces; on/off switch located inside the cabinet offers quick flow control; rear-mounted air filter eliminates clump-causing moisture and includes a quick-disconnect fitting for your air hose; integral dust filter and lid gasket keep hazardous dust out of the workplace; and metal grate holds pieces above the abrasive media. Permits two-handed operation for easy working. Holds and recirculates coarse through fine media, including matte sand, crushed ruby or glass beads. Imported.

Specifications:

- Media Capacity: 5 lbs.
- Air Requirement: 42–70 PSI
- Dimensions: 19"W x 17"D x 16"H
- Ship. Weight: 19 lbs.

Description	SKU	Each
B Wide View Sandblaster	854-0080	
Replacement Protective Shield	854-0081	
Replacement Gloves	854-0082	

C California Air Tools 4610AC – Ultra Quiet & Oil-Free Air Compressor

Ultra-quiet, (60 dB) oil-free and lightweight. Designed to increase duty cycle and allow for longer continuous run times. Powerful 1.0 HP motor is engineered to dissipate heat, allowing for a cooler operation while reducing wear. The motor operators at only 1680 RPM creating less noise and less wear. The Oil-Free Dual Piston Pump System is engineered for high performance and durability. Made in China.

Features:

- Two pressure control gauges
- Comes complete with Air Filter
- Two universal 1/4" quick connectors
- Thermal Overload Protector
- Time to fill tank – 130 Seconds. Recovery time from 90 PSI to 120 PSI – 30 Seconds

Specifications:

- Motor: 1 HP
- Max. pressure: 120 PSI
- Noise level: 60 decibels
- Tank capacity: 4.6 gals. (Aluminum Tank)
- Dimensions: 19-1/8"L x 16-3/4"W x 19-3/4"H

Description	Electrical	SKU	Each
C California Air Tools 4610AC	110V/60Hz	265-3125	

Sandblasting Medias

Sandblasting abrasive medias have many different applications, including cleaning, peening metal, removing investment from cast parts, removing imperfections, blending surfaces, deburring, finishing, decorating and descaling. Work is cleaned, deburred, decorated and cold-worked without etching, removing surface details or leaving undesirable residues.

A Matte Sand

Graded aluminum oxide in a 300–350 micron range for imparting a beautiful matte finish coarser than glass beads and slightly finer than crushed ruby. Produces a finish similar to the traditional quartz abrasive but contains no silica. Yields best results with 50–80 PSI of air pressure. Cannot be used with Microetcher due to micron size. Sold in 5 lb. package.

Description	Micron	SKU	Each
Matte Sand, 5 lbs.	300–350	854-1298	



A

B Crushed Ruby

Synthetic ruby crushed to a 212–300 micron range for imparting a unique matte finish with a subtle sparkle. Provides best results with 60–80 PSI of air pressure. Cannot be used with Microetcher due to micron size. Sold in 5 lb. package.

Description	Micron	SKU	Each
Crushed Ruby, 5 lbs.	212–300	854-1297	



B

C Jet Brite Glass Beads

Glass beads in the 50–105 micron range coated with silicone to repel moisture. Stay separated to prevent clogging of sandblaster. Impart an attractive satin-blasted finish. Can be used with any sandblaster. Air pressure must be kept under 45 lbs. to obtain best results and prevent beads from shattering. Sold in 5 lb. package.

Description	Micron	SKU	Each	
			1-4	5+
Jet Brite Glass Beads, 5 lbs.	50–105	810-1200		



C

D Glass Beads

Glass beads, 100 micron. Actual round beads, not cupels (oval-shaped beads with seams that crack easily), so they cost less in the long run. Impart an attractive satin-blasted finish. Can be used with any sandblaster. Air pressure must be kept under 45 lbs. to obtain best results and prevent beads from shattering. Sold in 5 and 25 lb. packages.

Description	Micron	SKU	Each
Glass Beads, 5 lbs.	100	854-1291	
Glass Beads, 25 lbs.	100	854-1292	



D



C

Mold & Die Micro TIG Welder U6

The Latest Technology in Micro TIG Welding

A The U6...developed for Mold and Die Repair

Incorporating the latest technology, the U6 Mold & Die micro TIG welder offers an easy to use solution for precision mold and die repairs. Utilizing micro TIG technology, the welder produces small, consistent spot welds that penetrate the mold surface. The welded areas are strong and can withstand the pressures and working conditions during the molding process. All heat is concentrated at the spot of the weld thereby eliminating the possibility of distortion and metal stress caused by overheating. Backed by a one year manufacturer's warranty

The Applications:

- Repairing parting lines, mold seams and three point corners and edges
- Filling in pores and deep scratches on the mold surface
- Weld into slots, corners and ribs
- Repair slides, ejectors and core pins
- For use on all common tool steels, stainless steels, aluminum and copper

The U6 Complete Package:

The system comes complete with microscope, LED Light, electrode handpiece, sets of 0.6mm, 0.8mm and 1.0mm electrodes, electrode sharpener, ground cable and an argon gas regulator.



Description	SKU	Each
Gesswein Mold & Die Micro TIG Welder U6	830-1650	

Save Money

- Precision welding done in house!
- Affordable alternative to a laser welder at a fraction of the cost.
- Standby mode.

Easy to Use

- Ready to use with pre-programmed presets for most common applications. Takes the calculations and guess work out.
- Extremely accurate weld placement. Sharp electrode tip touches the exact location of weld spot.

Mobility

- Take the U6 welder to the press for repair.
- Magnetic microscope attaches directly to mold while still in the press.

Minimal Heat

- Prevents damage caused by overheating mold.
- All heat is concentrated only at the spot of the weld.

Handpiece

- 20% faster and more agile.
- Higher acceleration of electrode travel compared to U5.
- Increased electrode lifespan when using the 1.0mm electrode.

The Microscope...Maximize Mobility

Weld anywhere on any type of mold large OR small! The adjustable and magnetic microscope base affixes to any metal surface and is extremely flexible, which allows for comfortable welding. Keep the microscope at your bench or take it to the mold for a quick in-press repair. The 10X microscope comes complete with integrated LED lighting for proper illumination of the welding surface. A protective eye shutter built into the microscope provides protection for eyes.

Save Time

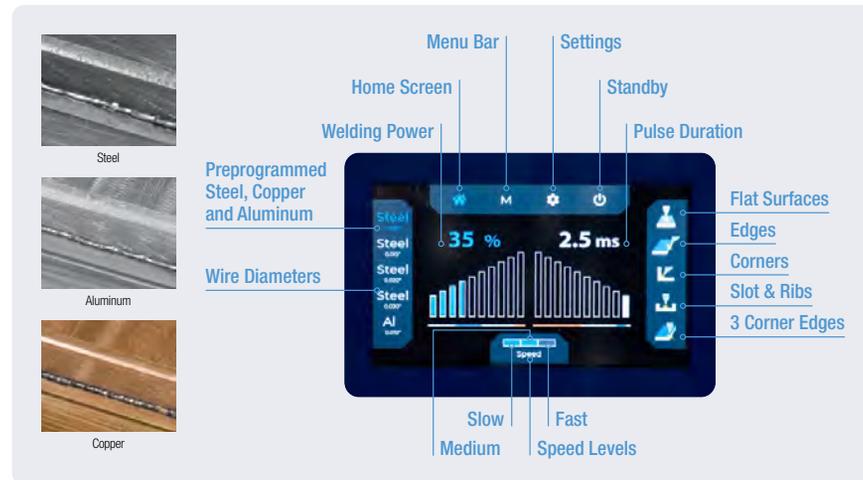
- Repair your molds the same day.
- No pre-welding heat treatment required.
- Welds quickly: 1 spot weld every 0.3 seconds!
- Small spot welds polish out quickly.



The Microscope and U6 Controller

Pre-Programmed for Steel, Aluminum and Copper

Take the guess work out! Simply select the pre-program for your mold repair application and start welding! Each pre-program is set to the optimal weld pulse and time lapse for the specified mold repair application. Or if you prefer, manually override the pre-programmed settings to dial in your preferred setting.



Mold & Die Welder U6 – Technical Data

Power	5–1200A
Welding Speed	(Slow) 0.78–1.750 (Medium) 0.43–1.250 (Fast) 0.3–1.9 sec
Preprogrammed Settings	Steel, Aluminum, and Copper
Included Electrodes	10 Each of 1.0mm, 0.8mm, 0.6mm
Impulse Length	0.1–34ms
Welding Wire Diameter	0.005"–0.030"
Control Box	Turn-push controller with tilt function
Software Updates	USB Port for Software Updates
Screen Resolution	800 x 840
Standby Mode	Reduces energy consumption by 80%
Low Power Range	50% smaller welding spots

Microscope USM M&D – Technical Data*

Magnification	10X
Field of vision /diameter	20mm
Operating distance	145mm
Integrated-Automatic-LCD-Filter (Glare shield)	Included
Degree of luminescence / obscurity	DIN 3 / DIN 11
UV Protection / IR Protection	> UV11 / > IR11
LED lighting	3 W

*Due to the technical nature of these products, some details may change. Please see our website for the most up-to-date information.



The Microscope...Maximize Mobility

U4-U6 Replacement Parts



A Argon Gas Regulator

The flow regulator enables the exact setting of the recommended 2 liters per minute flow rate. It's precise and easy but above all, it's reliable! The argon gas allows for clean, oxidation free welds.

Description	SKU	Each
Argon Gas Regulator (for U4, U5, and U6)	830-1516	

B Argon Screw Nut

Description	SKU	Each
Argon Screw Nut (for U4, U5, and U6)	830-1521	

C Electrode Collets – Available in 0.6mm, 0.8mm or 1.0mm Sizes

Description	SKU	Each
Electrode Collets – 0.6mm (for U4, U5, and U6)	830-0931	
Electrode Collets – 0.8mm (for U4, U5, and U6)	830-0933	
Electrode Collets – 1.0mm (for U4, U5, and U6)	830-1503	

D Electrodes

10 pre-sharpened electrodes for immediate use, 50mm in length. The thin electrode increases precision by touching the exact spot of weld. Just prior to weld, the electrode pulls back into the handpiece by allowing for a clean and precise weld spot. Thorium-oxide free.

Description	SKU	Pkg. of 10
Electrodes – 0.6mm (for U4, U5, and U6)	830-1499	
Electrodes – 0.8mm Electrodes (for U4, U5, and U6)	830-0934	
Electrodes – 1.0mm Electrodes (for U4, U5, and U6)	830-1651	

E 1.0mm Dia. Extended Electrodes

These 1.0mm Diameter electrodes are 200mm long (approx. 7.8") - sold as a pair. The electrode increases precision by touching the exact spot of weld. Just prior to weld, the electrode pulls back into the handpiece by allowing for a clean and precise weld spot. Thorium-oxide free. Other diameters also available.

Description	SKU	Each
1.0mm Dia. Extended Electrodes	830-1598	

F PUK® U5 U6 Extended Electrodes and Cap Kit

Description	SKU	Each
PUK Extended Electrodes and Cap Kit	830-1577	

G Extended Handpiece Caps

These come in 30mm, 50mm and 100mm sizes.

Description	SKU	Each
30mm	830-1592	
50mm	830-1593	
100mm	830-1594	

A Microscope Rubber Eye Flaps

Description	SKU	Each
Microscope Rubber Eye Flaps (for U4, U5, and U6)	830-1512	

B Microscope Glass

Description	SKU	Each
Microscope Glass (for U4, U5, and U6)	830-0966	

C U5/U6 Microscope

10X microscope comes with internal shutter eye protection, 20mm diameter field of view, magnetic base and LED illumination. The multi-adjustable joints with sturdy and secure knobs enable ease of positioning and user comfort. The fully adjustable hydraulic pivoting arm allows it to pivot and rotate in any direction, making work ergonomic and fatigue-free. With the switchable magnetic base, you can easily mount the microscope onto your workspace.

Description	SKU	Each
U5/U6 Microscope	830-1599	
Replacement Magnetic Base	830-0926	

D Replacement Handpiece

(5" in length) with 48" cable for PUK U4, U5, U6

Description	SKU	Each
Replacement Handpiece	830-0938	

E U5/U6 Handpiece Nut

This replacement collet nut fits on all the PUK handpieces.

Description	SKU	Each
U5/U6 Handpiece Nut	830-1523	

F Handpiece Cap with Ceramic Tip

Description	SKU	Each
PUK Handpiece Standard 3mm Cap (Snap On)	830-1524	

G Extension Package for PUK® U5 & U6

For some large molds and in-press repairs, a few extra feet of reach may be necessary. This package includes: Extended handpiece cable (measures approximately 84" (2.5m) compared to the 48" handpiece cable included with the PUK U5 and U6.) Extended magnet cable (measures 84" in length.) Microscope extension cables (add on an additional 77" in length to the standard PUK microscope.)

Description	SKU	Each
PUK Extension Package (for PUK U4 and U5)	830-0939	
Extension Package (for U6 only)	830-1660	





A

B



C



D



E



F

A Magnet Ground Cable for U6 Mold & Die Micro TIG Welder 2.5m

Replacement Magnet Ground Cable for U6 Mold & Die Micro TIG Welder. See 8300967 if you need one for either the PUK U4 the U5

Description	SKU	Each
Replacement Magnet Ground Cable	830-1654	

B Contact Clamp Ground for U6 Mold & Die Micro TIG Welder 1.5m

Replacement alligator-style ground clip for U6 Mold & Die Micro TIG Welder. Used with copper and aluminum metals.

Description	SKU	Each
Replacement Contact Clamp Ground	830-1656	

C Rubber O-Ring for Handpiece Cap

This replacement rubber gasket is used with 3mm (830-1524), 4mm (830-1502), 30mm (830-1592), 50mm (830-1593), and 100mm (830-1594) replacement caps for the PUK handpieces.

Description	SKU	Each
Rubber O-Ring for Handpiece Cap	830-1630	

D Mold & Die Welder U6 Transport Case II

The durable and functional Transport Case makes moving the U6 convenient. It also works well for stowing your U6 when not in use.

Description	SKU	Each
Mold & Die Welder U6 Transport Case II	830-1652	

E Electrode Sharpener

For simple and rapid sharpening of electrodes. The diamond disc rotates when the button is pressed allowing for quick and convenient electrode sharpening.

Description	SKU	Each
Electrode Sharpener (for U4, U5, and U6)	830-1625	

F Electrode Sharpener Diamond Wheel

Replacement diamond wheel for Electrode Sharpener. See video on gesswein.com for instructions.

Description	SKU	Each
Electrode Sharpener Diamond Wheel	830-1626	

Comparing the U5 vs U6



Technical Data	PUK U5	MOLD & DIE WELDER U6
Power	4-630A	5-1200A
Welding Speed	(Slow) 0.9-1.7 sec (Fast) 0.7-1.5 sec	(Slow) 0.78-1.750 (Medium) 0.43-1.250, (Fast) 0.3-1.9 sec
Preprogrammed settings	Steel, Aluminum and Copper	Steel, Aluminum and Copper
Included Electrodes	10 Each of 0.6mm and 0.8mm	10 Each of 1.0mm, 0.8mm, 0.6mm
Impulse Length	0.5-34ms	0.1-34ms
Welding Wire Diameter	0.010-0.030	0.005-0.030
Control Box	Touch Screen	Turn-push controller with tilt function
Software updates	N/A	USB Port for Software Updates
Screen Resolution	Low Resolution	Higher Screen resolution w/ improved viewing angle (800x840)
Standby Mode	N/A	80% lower energy consumption between welding jobs when using standby mode
Low Power Range	No dedicated low power range	50% smaller welding spots

Laser Welding Wire

Sold in 25 gram packages. All wires are 320mm (12.59") in length.

Laser Welding Wires are available in a wide range of alloys with different diameters. The wires allow for welding materials with high & low melting points and are engraved with material identification to eliminate confusion and improve safety. Made in Germany.

Stainless Steel

Material	Dia.	SKU	Pkg. of 25
SS-304	0.3mm	830-3143	
SS-304	0.4mm	830-3144	
SS-304	0.5mm	830-3145	
SS-304	0.6mm	830-3146	
SS-308	0.3mm	830-3153	
SS-308	0.4mm	830-3154	
SS-308	0.6mm	830-3156	
SS-316	0.2mm	830-3162	
SS-316	0.3mm	830-3163	
SS-316	0.4mm	830-3164	
SS-316	0.5mm	830-3165	
SS-316	0.6mm	830-3166	
SS-316	0.8mm	830-3168	
SS-410M	0.3mm	830-3173	
SS-410M	0.4mm	830-3174	
SS-410M	0.6mm	830-3176	
SS-420	0.2mm	830-3182	
SS-420	0.3mm	830-3183	
SS-420	0.4mm	830-3184	
SS-420	0.5mm	830-3185	
SS-420	0.6mm	830-3186	
SS-420	0.8mm	830-3188	
SS-INOX-H	0.2mm	830-3032	
SS-INOX-H	0.3mm	830-3033	
SS-INOX-H	0.4mm	830-3034	
SS-INOX-H	0.5mm	830-3035	
SS-INOX-S	0.3mm	830-3093	
SS-INOX-S	0.4mm	830-3094	
SS-INOX-S	0.5mm	830-3095	
STAVAX	0.2mm	830-3012	
STAVAX	0.3mm	830-3013	
STAVAX	0.4mm	830-3014	
STAVAX	0.5mm	830-3015	
STAVAX	0.6mm	830-3016	
STAVAX	0.8mm	830-3018	

Tool Steel

Material	Dia.	SKU	Pkg. of 25
A-2	0.2mm	830-3042	
A-2	0.3mm	830-3043	
A-2	0.4mm	830-3044	
A-2	0.5mm	830-3045	
A-2	0.6mm	830-3046	
A-2	0.8mm	830-3048	

Tool Steel

Material	Dia.	SKU	Pkg. of 25
D2	0.2mm	830-3022	
D2	0.3mm	830-3023	
D2	0.4mm	830-3024	
D2	0.5mm	830-3025	
D2	0.6mm	830-3026	
D2	0.8mm	830-3028	
H-13	0.2mm	830-3212	
H-13	0.3mm	830-3213	
H-13	0.4mm	830-3214	
H-13	0.5mm	830-3215	
H-13	0.6mm	830-3216	
H-13	0.8mm	830-3218	
H-13M	0.2mm	830-3062	
H-13M	0.3mm	830-3063	
H-13M	0.4mm	830-3064	
H-13M	0.5mm	830-3065	
H-13M	0.6mm	830-3226	
H-13M	0.8mm	830-3228	
M-2	0.2mm	830-3242	
M-2	0.3mm	830-3243	
M-2	0.4mm	830-3244	
M-2	0.5mm	830-3245	
M-2	0.6mm	830-3246	
M-2	0.8mm	830-3248	
NAK55	0.2mm	830-3052	
NAK55	0.3mm	830-3053	
NAK55	0.4mm	830-3054	
NAK55	0.5mm	830-3055	
NAK55	0.6mm	830-3056	
NAK55	0.8mm	830-3058	
P-20	0.2mm	830-3202	
P-20	0.3mm	830-3203	
P-20	0.4mm	830-3204	
P-20	0.5mm	830-3205	
P-20	0.6mm	830-3206	
P-20	0.8mm	830-3208	
P-20M	0.3mm	830-3083	
P-20M	0.4mm	830-3084	
P-20M	0.5mm	830-3085	
P-20M	0.6mm	830-3086	
P-20M	0.7mm	830-3087	
P-20M	0.8mm	830-3088	
S-7	0.2mm	830-3252	
S-7	0.3mm	830-3253	
S-7	0.4mm	830-3254	
S-7	0.5mm	830-3255	
S-7	0.6mm	830-3256	
S-7	0.8mm	830-3258	

Approx. Wire Per 25 Grams

Wire Dia.	Steel	Aluminum	Copper
0.2mm	318	922	278
0.3mm	141	410	124
0.4mm	80	230	69
0.5mm	50	147	44
0.6mm	36	104	32
0.8mm	21	58	18

Tool Steel

Material	Dia.	SKU	Pkg. of 25
DIEVAR	0.2mm	830-3002	
DIEVAR	0.3mm	830-3003	
DIEVAR	0.4mm	830-3004	
DIEVAR	0.5mm	830-3005	
DIEVAR	0.6mm	830-3006	
DIEVAR	0.8mm	830-3008	

Copper

Material	Dia.	SKU	Pkg. of 25
BECU	0.2mm	830-3262	
BECU	0.3mm	830-3263	
BECU	0.4mm	830-3264	
BECU	0.5mm	830-3265	
BECU	0.6mm	830-3266	
AMPCO**	0.3mm	830-3103	
AMPCO**	0.4mm	830-3104	
AMPCO**	0.5mm	830-3105	

Aluminum

Material	Dia.	SKU	Pkg. of 25
4043	0.3mm	830-3123	
4043	0.4mm	830-3124	
4043	0.5mm	830-3125	
4043	0.6mm	830-3126	
4043	0.8mm	830-3128	
5356	0.3mm	830-3133	
5356	0.4mm	830-3134	
5356	0.5mm	830-3135	
5356	0.6mm	830-3136	
5356	0.8mm	830-3138	
5554	0.3mm	830-3113	
5554	0.4mm	830-3114	
5554	0.5mm	830-3115	
5554	0.6mm	830-3116	
5554	0.8mm	830-3118	
7075	0.3mm	830-3273	
7075	0.4mm	830-3274	
7075	0.5mm	830-3275	
7075	0.6mm	830-3276	
7075	0.8mm	830-3278	

STELLITE

Material	Dia.	SKU	Pkg. of 25
STELLITE*	0.3mm	830-3073	
STELLITE*	0.4mm	830-3074	
STELLITE*	0.5mm	830-3075	

Welding Wire

Steel, Nickel Based Superalloy, Aluminum, and Copper

Available in a variety of alloys with different lengths and diameters. These wires can be used with any TIG welder and laser welder.

Stainless Steel

Material	Size	SKU	Pkg. of 25
174PH SS	.007"x9"	830-2582	
174PH SS	.010"x18"	830-2583	
174PH SS	.015"x18"	830-2584	
174PH SS	.020"x18"	830-2585	
174PH SS	.025"x18"	830-2586	
174PH SS	.030"x18"	830-2587	
174PH SS	.035"x18"	830-2588	
SS-304	.005"x9"	830-2501	
SS-304	.007"x9"	830-2502	
SS-304	.010"x18"	830-2503	
SS-304	.015"x18"	830-2504	
SS-304	.020"x18"	830-2505	
SS-304	.025"x18"	830-2506	
SS-304	.030"x18"	830-2507	
SS-308	.005"x9"	830-2511	
SS-308	.007"x9"	830-2512	
SS-308	.010"x18"	830-2513	
SS-308	.015"x18"	830-2514	
SS-308	.020"x18"	830-2515	
SS-308	.025"x18"	830-2516	
SS-308	.030"x18"	830-2517	
SS-310	.010"x18"	830-2523	
SS-310	.015"x18"	830-2524	
SS-310	.020"x18"	830-2525	
SS-310	.025"x18"	830-2526	
SS-310	.030"x18"	830-2527	
SS-312	.010"x18"	830-2533	
SS-312	.015"x18"	830-2534	
SS-312	.020"x18"	830-2535	
SS-312	.025"x18"	830-2536	
SS-312	.030"x18"	830-2537	
SS-316	.010"x18"	830-2543	
SS-316	.015"x18"	830-2544	
SS-316	.020"x18"	830-2545	
SS-316	.025"x18"	830-2546	
SS-316	.030"x18"	830-2547	
SS-410	.010"x18"	830-2743	
SS-410	.015"x18"	830-2744	
SS-410	.020"x18"	830-2745	
SS-410	.025"x18"	830-2746	
SS-410	.030"x18"	830-2747	
SS-410M	.005"x9"	830-2551	
SS-410M	.007"x9"	830-2552	
SS-410M	.010"x18"	830-2553	
SS-410M	.015"x18"	830-2554	
SS-410M	.020"x18"	830-2555	
SS-410M	.025"x18"	830-2556	
SS-410M	.030"x18"	830-2557	
SS-420	.005"x9"	830-2561	
SS-420	.007"x9"	830-2562	
SS-420	.010"x18"	830-2563	
SS-420	.015"x18"	830-2564	
SS-420	.020"x18"	830-2565	
SS-420	.025"x18"	830-2566	
SS-420	.030"x18"	830-2567	
SS-440C	.030"x18"	830-2577	

Tool Steel

Material	Size	SKU	Pkg. of 25
A-2	.005"x9"	830-2631	
A-2	.010"x18"	830-2633	
A-2	.015"x18"	830-2634	
A-2	.020"x18"	830-2635	
A-2	.025"x18"	830-2636	
A-2	.030"x18"	830-2637	
D-2	.010"x18"	830-2823	
D-2	.015"x18"	830-2824	
D-2	.020"x18"	830-2825	
D-2	.025"x18"	830-2826	
D-2	.030"x18"	830-2827	
H-13	.005"x9"	830-2611	
H-13	.010"x18"	830-2613	
H-13	.015"x18"	830-2614	
H-13	.020"x18"	830-2615	
H-13	.025"x18"	830-2616	
H-13	.030"x18"	830-2617	
H-13M	.005"x9"	830-2621	
H-13M	.010"x18"	830-2623	
H-13M	.015"x18"	830-2624	
H-13M	.020"x18"	830-2625	
H-13M	.025"x18"	830-2626	
H-13M	.030"x18"	830-2627	
M-2	.007"x9"	830-2642	
M-2	.010"x18"	830-2643	
M-2	.015"x18"	830-2644	
M-2	.020"x18"	830-2645	
M-2	.025"x18"	830-2646	
M-2	.030"x18"	830-2647	
P-20	.005"x9"	830-2601	
P-20	.007"x9"	830-2602	
P-20	.010"x18"	830-2603	
P-20	.015"x18"	830-2604	
P-20	.020"x18"	830-2605	
P-20	.025"x18"	830-2606	
P-20	.030"x18"	830-2607	
P-20M	.005"x9"	830-2591	
P-20M	.007"x9"	830-2592	
P-20M	.010"x18"	830-2593	
P-20M	.015"x18"	830-2594	
P-20M	.020"x18"	830-2595	
P-20M	.025"x18"	830-2596	
P-20M	.030"x18"	830-2597	
QuFe18	.007"x9"	830-2832	
QuFe18	.010"x18"	830-2833	
QuFe18	.015"x18"	830-2834	
QuFe18	.020"x18"	830-2835	
QuFe18	.030"x18"	830-2837	
S-7	.005"x9"	830-2491	
S-7	.007"x9"	830-2492	
S-7	.010"x18"	830-2493	
S-7	.015"x18"	830-2654	
S-7	.020"x18"	830-2655	
S-7	.025"x18"	830-2656	
S-7	.030"x18"	830-2657	

Copper

Material	Size	SKU	Pkg. of 25
BeCu	.005"x9"	830-2661	
BeCu	.007"x9"	830-2662	
BeCu	.010"x18"	830-2663	
BeCu	.015"x18"	830-2664	
BeCu	.020"x18"	830-2665	
BeCu	.025"x18"	830-2666	
BeCu	.030"x18"	830-2667	

Aluminum

Material	Size	SKU	Pkg. of 25
1100	.015"x18"	830-2674	
1100	.020"x18"	830-2675	
1100	.025"x18"	830-2676	
1100	.030"x18"	830-2677	
4043	.005"x9"	830-2731	
4043	.010"x18"	830-2733	
4043	.015"x18"	830-2734	

Welding Accessories



A

A Magnetic Ball Vise 6"

The 6" magnetic ball vise is made of the highest quality anodized aluminum and is used to hold workpieces for polishing, grinding, micro-welding and a variety of other general purpose applications. Tilts from 180 degrees to 90 degrees without losing stability. The permanent magnet is spring loaded. An Allen wrench is used to release the magnet allowing workpieces to be placed on and off the top plate easily. Ball vise sits on a small stand. Available on 6" fine pole magnetic working surface. Allen wrench included. Colors may vary. Made in USA.

Description	SKU	Each
Magnetic Ball Vise 6"	814-0101	



B

B YAG Laser Safety Glasses

Laser glasses should always be worn by bystanders while the laser is in use. These YAG laser OTG (Over The Glasses) safety glasses are made to be worn over personal glasses and have a polycarbonate green lens filter that provides laser protection in a durable and lightweight frame. Made of high-quality plastic, the OTG laser safety glasses feature adjustable temples and integrated side shields.

Description	SKU	Each
YAG Laser Safety Glasses	816-1791	



C

C Laser Safety Glasses

Features:

- Lens type: YAG
- Filter type: Polycarbonate
- Large viewing area
- Comfortable rubber nose pad to keep glasses firmly in place
- Complete with case, adjustable strap & microfiber pouch

Description	SKU	Each
Laser Safety Glasses	816-1790	



D

D Deluxe Extra-Large Adjustable Saddle Stool

Features:

- Durable black resin base with height-adjustable foot-rest ring
- One-touch pneumatic mechanism makes setting height of stool effortless
- 5 dual wheel casters allow easy mobility
- Seat Height Range: 25" – 35" (635 – 889mm)

Description	SKU	Each
Deluxe Extra-Large Adjustable Saddle Stool	810-1816	



E

E Pin Vise, Double Ended

Wire holder capacity: 0"–0.064". Overall length 4.25".

Description	SKU	Each
Pin Vise, Double Ended (for U4, U5)	820-4650	



F

F PUK® Wire Holder

Made of aluminum anodized, the PUK Wire holder feeds wires from 0.004" to 0.025". During the welding process, the ergonomic holder is comfortable to grip and the wire feeds effortlessly by means of two wheels. Measures 5.5" x .25" Diameter and weighs 1.5 oz. Made in Germany. Wire holder capacity: 0.004"–0.025".

Description	SKU	Each
PUK Wire Holder (for U4, U5, and U6)	830-2499	

Gesswein Mold & Die Micro TIG Welder U6



The Little Torch™

When you pick up The Little Torch, you know immediately that you are holding a superbly balanced torch that will enable you to extend your skills far beyond all previous limits. Whether you are in the first stages of learning your craft or have mastered it completely, The Little Torch will open a new world of possibilities for you. Features a rugged aluminum alloy body that weighs only 1.5 ounces and a thin, flexible, lightweight hose that provides added maneuverability.

Offers unmatched versatility – can be used with several fuels, including acetylene, hydrogen, propane, propylene, MAPP and natural gas. Produces a perfectly controlled, completely stable flame hot enough to melt gold, silver, platinum, glass and even ceramic. One year manufacturer's warranty.

Tip Size	Gas Pressures (PSI)	
	Oxygen	Fuel Gas
2	2	2
3	4	4
4	4	4
5	6	6
6	6	6
7	8	8

Flame drawings are not actual size. Each tip is capable of a variety of settings, with flame sizes larger and smaller than those shown.



A-B The Little Torch™ Deluxe Sets

Each set includes The Little Torch handpiece, five brazing tips, 8' oxygen and 8' fuel gas twin hose with 3/16" connectors, two single-stage regulators (one for oxygen, one for fuel gas), one (empty) oxygen tank, one (empty) fuel gas tank and a carrier.

Description	SKU	Set
A For Oxy/Acetylene, plastic carrier	830-1020	
B For Oxy/Propane, metal carrier with 5 lb. tank	830-1018	



C The Little Torch™ Deluxe Oxygen Disposable Propane

This Little Torch set includes one torch handpiece, five brazing tips, 8' oxygen and 8' fuel gas twin hose with 3/16" connectors, two regulators (one for oxygen, one preset for a 14.1 oz disposable propane tank), one empty oxygen tank and a handy carrying caddy making this an extremely portable unit. Due to the preset regulator on the propane, this unit cannot be used with heating tips.

Description	SKU	Each
Torch Little Deluxe Oxygen Disposable Propane	830-1017	



D The Little Torch™ Starter Set

The starter set includes The Little Torch handpiece, 8' oxygen and 8' fuel gas twin hose with 3/16" connectors and five brazing tips.

Description	SKU	Each
Starter for Propane or Natural Gas	830-1002	

E The Little Torch™ Set for Disposable Cylinders

Perfect for locations where larger compressed air tanks are not permitted. Includes The Little Torch handpiece, #5 tip, 8' oxygen hose, 8' fuel gas hose, preset oxygen regulator, preset propane regulator, wire stand for disposable oxygen and MAPP/LP cylinders and instruction manual. Disposable cylinders not included.

Description	SKU	Each
E The Little Torch Set for Disposable Cylinders	830-1245	
Replacement Oxygen Regulator	830-1027	
Replacement Propane Regulator	830-1029	

A-D The Little Torch™ Regulators

For single torch use. Compact regulators provide accurate control of oxygen and acetylene or propane for welding, soldering, brazing and heating operations. Contain protective check valves and maintain uniform pressure. Easy-turning T-bars. Made in USA.

Description	CGA Connection	SKU	Each
A For Oxygen	540	830-1021	
B For Acetylene MC Tank	200	830-1022	
C For Acetylene B Tank	520	830-1024	
D For Propane	510	830-1023	



E-J The Little Torch™ Brazing Tips

Because of their extraordinarily small orifices, tips 2 and 3 are fitted with synthetic sapphires to assure accurate performance and control.

Tip	Oxygen Pressure (PSI)	Fuel Gas Pressure (PSI)	SKU	Each	
				1-2	3+
E 2"	2	2	830-1102		
F 3	3	3	830-1103		
G 4	4	4	830-1104		
H 5	6	6	830-1105		
I 6	6	6	830-1106		
J 7	8	8	830-1107		

**For acetylene or hydrogen only.*

K-P Uniweld Tips

Curved torch tips. Tip #2 (acetylene or hydrogen only) features a sapphire insert for superior flame control. Tips 3-7 are for use with all fuel gases: acetylene, hydrogen, propane, MAPP, propylene and natural gas.

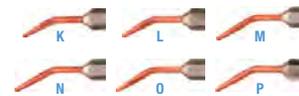
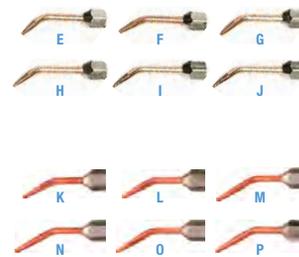
Tip	Oxy/Fuel PSI	SKU	Each
K 2"	2/2	830-1446	
L 3	3/3	830-1447	
M 4	4/4	830-1448	
N 5	6/6	830-1449	
O 6	6/6	830-1450	
P 7	8/8	830-1451	

**For acetylene or hydrogen only.*

Q-R The Little Torch™ Heating Tips

For melting up to 3 oz. gold or silver and other work. These tips are specially designed with 4 orifices to produce 4 flames that come together to form one flame. Equal in size to tip 4. Maximum temperature is 3,600°F for propane, 6,000°F for all other fuels.

For	SKU	Each	
		1-2	3+
Q Propane or Natural Gas	830-1116		
R All other fuels	830-1115		



S Holder for The Little Torch™

Holds The Little Torch at the perfect angle, making it handy and safe to use. Keeps up to six tips conveniently organized. Made with a sturdy cast base and heavy-duty (4mm) steel rod, this torch holder is virtually indestructible. Made in USA.

Description	SKU	Each
Holder for The Little Torch	830-1307	

T Magnetic Torch Stand and Tip Organizer

Solid metal stand with weighted base. Includes holes drilled and numbered for tips 2-7. Just a twist of the wrist removes the torch from the magnet. Magnetic clip mounts easily on The Little Torch body (torch and tips sold separately). Measures 4-1/2" high.

Description	SKU	Each
Magnetic Stand	830-1250	



The Small Torch™ by Gentec

This lightweight, durable torch features user-friendly control knobs for quick, precise, one-handed flame adjustments and nickel-plated brass handle with stainless steel inner gas tubes for superior strength. Designed specifically for brazing and soldering at the bench as well as melting small amounts of metal. Provides stable, concentrated feather flames up to 6,000°F. Compatible with accessories listed below and other popular brands of accessories. Backed by a two-year manufacturer's limited warranty. UL approved. Made in China.

A. The Small Torch™ Caddy Sets

Each kit includes The Small Torch handle, torch tip(s) and 12' dual oxygen and fuel hose with "B" (3/16") fittings and adapter for "A" (3/8") fittings. Oxy/Acetylene Caddy Kit also includes regulators, a convenient carrying caddy and reusable oxygen and fuel tanks. Oxy/Propane Caddy Kit includes a convenient carrying caddy and oxygen tank (only for use with disposable propane tanks not provided). All tanks shipped empty.

Description	Tips	SKU	Each
A Oxy/Acetylene Caddy Set	#2, 3, 4, 5, 6	830-1604	
Oxy/Propane Disposable Tank Caddy Set	#3, 4, 5, 6, 7	830-1603	

B The Small Torch™ Basic Sets

Each Set contains the Small Torch with easy turn knobs, 5 tips and 12' oxygen and fuel hose.

Description	Tips	SKU	Each
B Oxy/Acetylene Basic Kit (no regulators/tanks)	#2, 3, 4, 5, 6	830-1601	
Oxy/Propane Torch Kit (no regulators/tanks)	#3, 4, 5, 6, 7	830-1600	

C The Small Torch™ Disposable Set – For Propane and Oxygen Tanks

Comes complete with Small Torch, #4 tip, 6' hoses and regulators.

Description	Tips	SKU	Each
Oxy/Propane Disposable Tank Kit (no regulators/tanks)	#4	830-1602	

D The Small Torch™ Dual Hoses

Each includes flexible green (oxygen) hose and red (fuel) hose with 3/16" fittings.

Description	SKU	Each
D 6' Dual Hose	830-1605	
12' Dual Hose	830-1606	

E-I The Small Torch™ Regulators

Single-stage regulators manufactured using state-of-the-art equipment. Feature chrome-plated housing caps and bodies machined from class "A" brass bar stock. Single-stage, rear-entry design ensures safe, neat fit in caddy systems. Internal safety pressure relief valve and stem-type seat assembly. Imported.

Description	SKU	Each
E Oxygen Regulator	830-1607	
F Propane Regulator	830-1608	
G Acetylene Regulator	830-1609	
H Oxygen Regulator for Disposable Tanks	830-1610	
I Fuel Gas Regulator for Disposable Tanks	830-1611	

J-L The Small Torch™ Tips

Rosebud melting tips are 6" long and multi-orifice tips for melting up to 3 oz. of gold, silver or bronze.

Tips	SKU	Each
J 2 (oxy/acetylene use only)	830-1614	
3	830-1615	
4	830-1616	
5	830-1617	
6	830-1618	
7	830-1619	
K Twin 3	830-1620	
L Propane Rosebud Melting	830-1612	
Acetylene Rosebud Melting	830-1613	

A SilverSmith™ Air-Acetylene Torch Kits

Delivers the ultimate in quality and flame control. Produces a soft, consistent flame. Ideal for silversmithing and for melting small amounts of metal for casting. Choose between 2 sets:

- 830-0732 includes durable Nickel-plated brass handle with a precision #00 tip with jeweled orifice, 12' grade-R hose, acetylene regulator with CGA 520 fitting for acetylene B tank (not included, acetylene B tank #830-0760) and torch lighter.
- 830-0753 contains all the items in set 830-0732 as well as an Acetylene B tank, leak detection fluid, wrench and soldering glasses. Sold separately. UL listed. Made in USA.

Description	SKU	Each
A Torch Set with one tip #00, Regulator and Hose	830-0732	
Replacement Torch Handle only	830-0998	

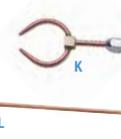
Description	Orifice Size	SKU	Each
#4 Extra-Large Melting Tip	3/8"	830-1465	
#3 Large Melting Tip	1/4"	830-1464	
#2 Medium Tip	3/16"	830-1463	
#1 Small Tip	0.147"	830-1462	
#0 Fine Tip	0.095"	830-1461	
Replacement #00 Super-Fine Tip	0.066"	830-1460	

*Included in sets with 3 tips.

B Leak Detector Fluid

Safety is always priority when working with torches! Apply this fluid every time you change your torch, hook up a new tank or torch, or simply when you want to check for any leaks that may have formed in any of the connections. Should a leak be present, the liquid will bubble within seconds of application alerting you of a leak. Contains 8 fl. oz. Please Note: CAUTION! Do not use standard soap solutions to test for leaks; these solutions may contain combustible ingredients. Made in USA.

Description	SKU	Each
Leak Detector Fluid	830-0757	





A-E Swiss Torch

The best-selling torch in Europe, this versatile and reliable lightweight torch has interchangeable heads for precision light work to casting to larger flames for melting. Use it with propane or natural gas. Not for use with ACETYLENE. The standard torch comes with standard head with three nozzles of graduating tip sizes, each produces a strong and pointed flame. The head features two handy dials (for fuel and oxygen) at the top of the torch where your thumb can easily reach both for tight control and on-the-fly flame adjustments. Made in Switzerland.

Do not use the Swiss Torch with ACETYLENE otherwise damage will occur.

Description	SKU	Each
Swiss Torch Kit w/Standard Head and 3 Standard Tips	830-1482	
A Swiss Torch Body Only	830-1480	
B Swiss Standard Head and 3 Standard Tips	830-1481	
C Swiss Oxygen Head Ring Flame	830-1483	
D Swiss Torch Platinum Head	830-1487	
E Swiss Torch Head w/ 3 Needle Tips	830-1489	

F-H Micro Torch Head

Replacement 0.90 tip for use with our Micro Torch Head (830-1489) and the Swiss Torch body (830-1480).

Description	SKU	Each
F 0.90 Needle Nozzle Tip for Swiss Torch	830-1491	
G 1.20 Needle Nozzle Tip for Swiss Torch	830-1492	
H 1.60 Needle Nozzle Tip for Swiss Torch	830-1493	

I-J Gentec Casting Torch

Casting torch for use with oxygen/propane or oxygen/natural gas. Features a high-quality forged brass handle with "tube-in-a-tube" design for high strength. Combine with Heating Tip to create a versatile casting, soldering and melting torch. Handle measures 6" long.

Description	SKU	Each
I Casting Torch Handle only	830-1621	
J #6 Heating Tip with Tube	830-1622	

K-L Original HOKE®-JEWEL Torch

For soldering, brazing, welding and melting. All parts are machined from solid brass stock and seamless brass tubing and completely nickel-plated. Tip tube (neck) is fixed and nonadjustable. Valves are easily and smoothly operated by fingertip. Uses standard 1/4" hose (not included). Includes tips ranging in size from pinpoint to large brush. Measures 9" long. Adapter set includes six micro-tips which produce a nonoxidizing flame so less time is needed in the pickler. Not recommended for use with acetylene

Description	No. of Tips	SKU	Each
Natural Gas	3	830-0221	
K Propane/Butane	4	830-0222	
Acetylene	4	830-0210	
L Adapter Set for HOKE-JEWEL Torches	6	830-1240	

Replacement Tips for Natural Gas and Oxygen

Size	Max. Oxygen PSI	Flame Size	SKU	Each
35-1	2 to 3	Fine	830-1200	
35-2	3 to 4	Medium	830-1205	
35-3	4 to 5	Broad	830-1210	

Replacement Tips for Propane or Butane and Oxygen

Size	Max. Oxygen PSI	Flame Size	SKU	Each
M 1	2 to 4	Pinpoint	830-1220	
N 2	2 to 4	Fine	830-1225	
O 3	6 to 10	Medium	830-1230	
P 5	15 to 20	Broad	830-1235	

*Includes pilot that provides continuous flow of gas for quick ignition.



A Harris® Check Valves for Regulators

Oxygen and fuel gas kept separately are not explosive. When mixed in a hose or regulator and then ignited, they can explode. Check valves prevent backup of gases into regulator so they cannot mix. Harris Check Valves may be installed on any regulator outlets with standard 1/16"-18 tpi. connections.

Model	SKU	Each
A Oxygen	830-1417	
Fuel Gas	830-1416	



B-D Harris® Single-Stage Regulators with Check Valve

For general use when using one torch. Features all-brass construction to hold up even in corrosive atmospheres. Extra-large 2-3/4" pressure gauges so you can easily read PSI even when you are at a distance from the cylinder. Large 2-3/4" diaphragm ensures constant delivery pressure. A check valve is installed on all regulators. Oxygen Regulator is equipped with a Harris Surge Guard for protection against sudden overflow of oxygen into the regulator. Standard 1/16" connections. UL listed.

Model	CGA	SKU	Each
B Oxygen	540	830-1412	
C Acetylene for MC and B tanks*	200, 520	830-1432	
D Propane	510	830-1411	

*Includes adapter to convert MC regulator to B tank.



E Smith Flashback Arrestors for Torch or Regulator

Flashback arrestors with built-in check valves for preventing flashback fires and reverse gas flows. Feature sintered stainless steel filter, high-quality brass construction and rugged corrosion-resistant case. Easy to install on any torch with standard B (1/16") fittings or regulator. Sold in set of two: one for oxygen and one for fuel gas. UL listed.

Description	SKU	Set of 2
Flashback Arrestors, set of 2, for regulator	830-0812	



F Y-Connectors

For multiple torch hookups. Complete with shutoff valves. All connections 1/16".

Model	SKU	Each
F Oxygen	830-0780	
Fuel Gas	830-0785	





A-B Primo™ Fire Resistant Torch Hoses

Safety is always top priority when operating a torch! Primo has gone that extra step and created Fire Resistant Torch Hoses for Little Torch, Swiss Torch, and Meco Torch. These premium high quality replacement torch hoses are lighter in weight than most competitive hoses and much more flexible in use. This equates to better productivity on the bench. Each hose is complete with quality stainless steel clamp and sold brass fittings making the hookup to your torch fast and easy. Tank end connectors are North American B 3/16"

Description	Hose ID	Torch End Connector	Length	SKU	Each
A For Little Torch	1/8"	SS Crimp-on (x2)	6ft.	830-1047	
			8ft.	830-1048	
			10ft.	830-1049	
B For Swiss Torch	3/16"	Hose Clamps (x2)	6ft.	830-1050	
			8ft.	830-1051	

C Torch Wrench

A multi-use wrench for nuts on torches, regulators and tanks. Measures 8-1/2" overall.

Description	SKU	Each
Torch Wrench	830-0790	

D-E Lighters

Electric Torch Mate simply and automatically lights any torch – using only one hand. Rest the torch on the lighter's ignition switch, and small spark from the electrode immediately lights the torch. This handy benchtop accessory comes complete with two AA batteries.

Torch Lighter produces a spark by friction, supplied with one flint.

Description	SKU	Each
D Automatic Electric Torch Lighter	830-0408	
E Torch Lighter	830-0410	
Flints, kg. of 5	830-0411	

F Blazer Micro Torch

Hand-held butane refillable micro torch. Built-in Piezo Quartz Crystal Electronic Ignition is activated with one push. Gas flow is easily adjusted to provide a variety of flame sizes from a maximum length of about 3-1/2" down to a pinpoint. The 26-gram fuel chamber, when filled, can provide heat up to 2,500°F for 90 minutes.

Easy-to-grip size. The main tank body features a diamond grid design for a superior, and extra safe, grip and also includes a detachable base for hands free table-top work. Made in Japan.

We recommend using a triple refined, premium grade butane gas specially designed for use with micro torches. Otherwise the small parts and orifices can become clogged with the dirt and grime found in standard brands of butane gas.

Description	SKU	Each
F Blazer Torch without refill	830-0010	
Butane Refill Cartridge, 9 fl. oz. 	830-0012	

 UPS® hazardous shipping surcharge applies. Ships via UPS® Ground only, no air, FedEx®, or US Mail shipments. Cannot ship to Alaska, Hawaii or Puerto Rico.

A Harris® Torch Tip Cleaners

Set of 13 tip cleaners with individual tip cleaner numbers and drill sizes embossed in case. Covers drill sizes 49 to 77.

Description	SKU	Each
Harris Torch Tip Cleaners	830-1418	

B-C Torch Holders

Convenient and safe way for hanging your torch when it is not in use. Mount anywhere on workbench and accommodate most torches except The Little Torch.

Description	Length	SKU	Each
B Bracket-Type Holder	11"	830-1305	
Short Bracket-Type Holder	3-1/2"	830-1301	
C Hook-Type Holder	12"	830-1300	

D Soldering Glasses

Made of black lightweight plastic. Feature adjustable earpieces for comfortable fit and easily replaceable polycarbonate lenses. Lens #7 is approved by the Platinum Guild for platinum soldering. Lens #10 is used for casting. Lens #5 can be used for gold and silver. CE approved. Meet ANSI Z87.1 requirements.

Description	SKU	Each
D Soldering Glasses with #5 Lens for Gold & Silver	816-1784	
Soldering Glasses with #7 Lens for Platinum	816-1785	
Soldering Glasses with #10 Lens for Casting	816-1786	





A Finger Guard Safety Tape

Made of surgical-grade gauze coated with natural latex rubber. Sticks only to itself – not to your skin, hair or clothing. Ideal skin protection for grinding and buffing. Length 90 feet.

Description	SKU	Each
A Safety Tape, 3/4" Green roll	816-0203	
Safety Tape, 3/4" pkg. of 16 rolls	816-0202	
Safety Tape, 1" Green roll	816-0199	
Safety Tape, 1" pkg. of 12 rolls	816-0198	

B 3M Vetrap™ Bandage Tape

This easy-to-use flexible tape wraps securely around fingers. Stays comfortable and cool, helping maintain your sense of touch. Available in four colors. Sold in 15'L x 2"W rolls.

Description	SKU	Each	
		1-4	5-17 18+
B Blue Roll	816-0214		
Green Roll	816-0215		
Red Roll	816-0217		
White Roll	816-0218		

C Rhino Finger Skins

Rhino Finger Skins are made of a surgical grade neoprene that stretches in both directions and gives almost full sensation. These flexible, stretch fit, durable finger skins will help protect against abrasions, cuts, and burns on your fingers and thumbs while grinding, sanding, polishing and finishing. The skins are especially effective in providing heat protection up to approximately 200°F (93°C) with full sensitivity to the piece being worked on. Made in USA.

Description	SKU	Set of 4
C Small/Medium	816-0228	
Medium/Large	816-0229	

D-G Leather Finger and Thumb Guards

These thick guards offer greatest protection from compounds, abrasives and heat. Available in suede or grain (smoother surface) leather all with elastic cloth back for a comfortable fit. Thumb guard available in over end style. Finger guards available in open, super (open with more leather covering the side of the finger) and closed end styles.

Description	Style	Type	SKU	Pkg. of 10	
				1-9	10+
D Finger	Open	Suede	816-0201		
E Finger	Super	Suede	816-0200		
F Finger	Closed	Grain	816-0197		
G Thumb	Over End	Grain	816-0196		

A Rubber Finger Guards

Superior guards for sure grip and extra-long life. Ventilated for comfort. Protect fingers while polishing and handling workpieces. Sold by the dozen.

Description	Style	SKU	Pkg. of 12		
			1-5	6-11	12+
A Small Guards	11	816-0220			
Medium Guards	12	816-0225			
Large Guards	13	816-0230			
X-Large Guards	14	816-0235			

B-C Latex Finger Cots

Powder-free, antistatic latex finger cots in white or pink for protection from mild chemicals. Available in small, medium and large. Sold by the gross (pkg of 144) or bulk (Pkg of 1440).

Description	White		Pink		Pkg. of 144	
	SKU	SKU	SKU	SKU	1-2	3+*
B Small	816-0250	816-0255				
Medium	816-0251	816-0256				
Large	816-0252	816-0257				

* Quantity discount for orders of one item number only; not assorted.

Description	White		Pink		Pkg. of 1440
	SKU	SKU	SKU	SKU	
C Small	816-0260	816-0265			
Medium	816-0261	816-0266			
Large	816-0262	816-0267			

D Orange Finger Cots

Premium finger cots feature a roughened surface that provides better gripping and anti-slipping. Durable to provide excellent finger protection. Prevents transfer of fingerprints, sweat and other contaminants to the work piece. The bright orange color makes for easy recognition on your bench. Offered in convenient 10 packs or bulk packs of 100.

Description	SKU	Pkg. of 10	
		1-2	3+
D Small	816-0270		
Medium	816-0271		
Large	816-0272		

Description	SKU	Pkg. of 100
Small	816-0275	
Medium	816-0276	
Large	816-0277	

E PR-88 Hand Protectant

This glycerine-based compound prevents grease and grime from penetrating your skin. Apply before working to form an invisible shield that lasts for hours. Removes easily with soap and water.

Description	SKU	Each
3.5 oz. Tin	812-0490	





A

A MicroFlex® UltraSense™ Powder-Free Nitrile Glove – The Alternative to Latex!

Powder-free UltraSense is a breakthrough in nitrile technology, providing the fit and feel of latex while eliminating the possibility of natural rubber latex allergic reaction. Provides reliable barrier protection against many hazardous and infectious substances. Highly elastic for easy conformance and reduced fatigue. Textured fingertips offer excellent grip in wet or dry conditions. Ambidextrous. Beaded cuff. Polymer-coated for easy donning. Length: 245mm (9-5/8"). Thicknesses: 5.1mil finger, 3.5mil palm. Color: blue. Sold in dispenser box of 100.

Size	SKU	Pkg. of 100
Small	805-1072	
Medium	805-1071	
Large	805-1070	



B

B MicroFlex® NeoPro® EC Glove – Ideal for Rhodium Plating!

Exceptional comfort in a tough synthetic glove. NeoPro EC offers the barrier protection of a synthetic with the comfort, fit and feel of natural rubber latex. Offers 90% more puncture resistance than natural rubber latex. Resists a broad range of chemicals. Ideal for rhodium plating, electrocleaning and most other plating operations. Textured fingertips provide a secure grip. Extended, beaded cuff guards against splashes and spills. Made of polychloroprene, the generic name for neoprene. Ambidextrous. Powder-free and polymer-coated for easy donning. Length: 300mm (11.8"). Thicknesses: 8.3mil finger, 6.3mil palm, 4.7mil cuff. Color: green. Sold in dispenser box of 50.

Size	SKU	Pkg. of 50
Small	805-1052	
Medium	805-1051	
Large	805-1050	



C

C White Cotton Glove

Very good for handling merchandise for packing. Available in light weight and medium weight cotton. Small (women's) gloves measure 8", medium (men's) measure 9" and Large (men's) measure 10" in length.

Size	SKU	Pkg. of 12		
		1-2	3-11	12+
Lightweight/Small	805-1030			
Lightweight/Medium	805-1032			
Lightweight/Large	805-1033			
Medium Weight/Small	805-1055			
Medium Weight/Medium	805-1056			
Medium Weight/Large	805-1057			



D

D Nitrile Blue Glove

While giving the feel and fit of latex, these large, disposable, powder-free, blue, nitrile gloves offer excellent tactile sensitivity, dexterity, and comfort like no other glove. Features texture finish for excellent wet or dry grip. Gloves are 3mil thick and an overall length of 9". Packaged 100 gloves to a box. Made in Indonesia.

- Powder-free
- Disposable
- Textured finish

Size	SKU	Pkg. of 100	
		1-2	3+
Small	805-1077		
Medium	805-1076		
Large	805-1075		

A Bib Apron with Pockets

Protects clothing and holds most frequently used tools close at hand. Includes extra-long waist strings for front tying. Made of machine washable heavyweight cotton. Available with or without pockets. Comes in royal blue with our white, screen-printed Gesswein logo. Measures 18-1/2"W x 25"L. Made in USA.

Description	SKU	Each
A Bib Apron with pockets	827-1201	



A

B Suede Bib Apron

This durable, comfortable apron protects clothing while you work with power equipment and hand tools. Has no pockets in which debris can be trapped. Made of tanned, split, rust-colored heavyweight suede. Includes adjustable ties with brass grommet reinforcements. One size fits all. Measures 24"W x 36"L.

Description	SKU	Each
Suede Bib Apron	827-1507	



B

C Fire-Resistant Apron

Made of fire-resistant fabric and ideal for welding applications. Full-coverage design provides protection of chest and lap. Utilizes adjustable neckband strap and extra-long adjustable waist strap that fastens with high-quality snaps. Light green in color and one size fits most. Measures 24"W x 36"L. Made in China.

Description	SKU	Each
Fire-Resistant Apron	827-1512	



C

D 3M™ Half-Facepiece Respirator

Protects you from dusts, mists and airborne contaminants. NIOSH rated N95 for protection from respirable silica (in investment, quartz, tripoli and more). Also suitable for rhodium plating. Features a soft, pliable silicone face seal for a secure, gapless fit on most every face shape. Extremely comfortable to wear, especially for extended periods of use. Roomy nose chamber and special 3M Cool Flow valve ensure easy natural breathing while reducing heat and condensation in the facepiece. Complete respirator includes facepiece, two deluxe cartridges, two deluxe prefilters and two retainer rings. NIOSH approved.

Description	SKU	Each
D Half-Facepiece Respirator	805-1035	
Replacement Deluxe Cartridges, pair	805-1036	
Replacement Retainer Rings, pair	805-1038	
E Respirator Replacement Prefilters	805-1037	



D



E

F-H 3M™ Disposable Particulate Respirators

Classic disposable N95 particulate respirator designed to help provide comfortable and protection against certain non-oil based particles. Features Advanced Electrostatic Media, welded strap attachment, soft nose foam, and an adjustable nose clip to help ensure a custom and secure seal. Disposable N95 particulate flatfold respirator features soft inner material and 3M Cool Flow™ Valve to provide comfortable, reliable respiratory protection. Ideally suited for work situations involving heat, humidity, or long periods of wear.

Description	SKU	Each	
		1-2	3+
F Particulate, 20 per case	805-0995		
G Particulate Flatfold, 10 per case	805-0997		
H Particulate Welding, 10 per case	805-0999		



F



G



H

A



A Face Shield – Complete protection with excellent optics.

Lightweight plastic shield for full face and neck protection while grinding, drilling or polishing. Can be worn over dust masks, respirators and glasses. Features pivoting visor for easy raising and lowering, molded visor edge for reinforcement, cushioned vinyl comfort band and adjustable headbands. Visor measures 8"L x 12"W x .040" thick. Does not eliminate need for safety glasses.

Description	SKU	Each
A Face Shield	270-0210	
Replacement Visor	270-0212	
Replacement Vinyl Sweatband	270-0214	

B



B Safety Glasses

Comfortable, lightweight safety glasses with high-impact plastic lenses for full eye protection when drilling, polishing and more. One size fits all. Meet ANSI Z87.1 requirements.

Description	SKU	Each
Safety Glasses	270-0205	

C



C Aspen Safety Glasses

Our Aspen Safety Glasses provide eye protection against most common eye hazards of polishing and benchwork except for severe impacts. Feature polycarbonate lenses, browbar and side shields. Also offer UV protection. Meet ANSI Z87.1 requirements.

Description	Frame	SKU	Each
Aspen Safety Glasses	Clear plastic	270-0123	

D



D Safety Goggles

A must for polishing, buffing and grinding. Comfortable and lightweight, they easily fit over glasses. Have polycarbonate lens. The sides and top are perforated to reduce fogging. One size fits all. Meet ANSI Z87.1 requirements.

Description	SKU	Each	
		1-2	3+
Safety Goggles	270-0200		

E YAG Laser Safety Glasses OTG

These YAG laser OTG (Over The Glasses) safety glasses are made to be worn over personal glasses and have a polycarbonate green lens filter that provides laser protection in a durable and lightweight frame. Made of high-quality plastic, the OTG laser safety glasses feature adjustable temples and integrated side shields.

Description	SKU	Each
YAG Laser Safety Glasses OTG	816-1791	

E



A Laser Safety Glasses

Laser glasses should always be worn by bystanders while the laser is in use. Our polycarbonate laser safety glasses are lightweight, economical and offer excellent protection. Comes complete with advanced anti-scratch coating making the lenses extremely durable and scratch resistant. They meet or exceed the ANSI Z136.1 and ANSI Z87.1 standards and protect for the wavelength of 1064nm which is the wavelength of our Sisma welders.

Description	SKU	Each
Laser Safety Glasses	816-1790	

B Soldering Glasses

Made of black lightweight plastic. Feature adjustable earpieces for comfortable fit and easily replaceable polycarbonate lenses. Lens #7 is approved by the Platinum Guild for platinum soldering. Lens #5 can be used for gold and silver. CE approved. Meet ANSI Z87.1 requirements.

Description	SKU	Each
B Soldering Glasses with #5 Lens for Gold & Silver	816-1784	
Soldering Glasses with #7 Lens for Platinum	816-1785	

C Laser Safety Barriers

Laser barriers are ideal for containing a laser to a specific area. Our laser barriers are available in standard configurations listed in the chart below. Each comes with casters to make the barrier mobile for your shop. Frames are constructed of durable coated metal tubing. The coating is designed to prevent corrosion and decrease laser reflection. Our standard barrier material protection level is 200W per centimeter squared (200w/cm²) with a beam size of 5mm for 100 seconds.

Hinges are used to connect the barriers from the bottom to the top. They are 3' wide so you can have a 90 degree bend between barriers. They are made of the same laser safe material as the barriers to keep up with OSHA/ANSI specifications. Each hinge has the laser safe specification on them. Hinges connect with Velcro® which runs the length on each side to the barriers. The hinges are used on the inside of the barrier closest to the laser. You would need 4 hinges to connect 4 barriers to create a safe environment. They are available in 4 sizes, 7' X 8', 7' X 10' and 8' X 8', 8' X 10'. The larger 10' barriers will need to ship via truck. Suitable for the SWT and SWA, 1064 nm wavelength.

Description	SKU	Each
C Laser Barrier 8x10'	810-3100	
Laser Barrier 7x10'	810-3110	
Laser Barrier 8x8'	810-3103	
Laser Barrier 7x8'	810-3113	
Hinge for 7' Laser Safety Barrier	810-3115	
Hinge for 8' Laser Safety Barrier	810-3105	

C



A



B



C



A-C Cratex® Small Wheel Mandrels

Fit Cratex small wheels. Max. operating speed with 1/2" overhang (exposed mandrel length) or less: 25,000rpm. With each additional 1/4" of overhang, max. operating speed decreases by at least 20%. Use light working pressure.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
A #2	3/32"	1/16"	840-3183		
B #3	1/8"	1/16"	840-3186		
C #5	1/8"	1/8"	840-3187		

D-F Cratex® Cylinder and Point Mandrels

Fit Cratex cylinders and points. Mandrels #1 and #4 have a number 3-48 thread and hex nut flange. Mandrel #6 has a number 5-40 thread and hex nut flange.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
D #1	3/32"	3/32"	840-3182		
E #4	1/8"	3/32"	840-3185		
F #6	1/8"	1/8"	840-3085		

G Cratex® Cone Mandrel – 1/4" Shank

Fits Cratex cones. Max. operating speed with 1/2" overhang (exposed mandrel length) or less: 20,000rpm. With each additional 1/4" of overhang, max. operating speed decreases by at least 20%.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
1341	1/4"	1/4"	840-3180		

H Cratex® Large Wheel Mandrel – 1/4" Shank

Fits Cratex wheels up to 3" dia. x 1/2" thick or less. Max. operating speeds with 1/2" overhang or less: 15,000rpm for 1 1/2" wheels; 8,300rpm for 2" wheels; 7,000rpm for 3" wheels (based on 5,500 surface feet per minute). Best results are usually obtained at 30% to 80% of max. operating speed.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
1342	1/4"	1/4"	840-3184		

I-K Split Mandrels – 3/32" Shank

For holding strips of abrasive paper. Have 3/32" shanks.

Description	SKU	Each	
		1-11	12+
I Straight Head, 1-1/64"	840-3405		
J Straight Head, 9/64"	840-3406		
K Tapered Head, 3/32"-3/16"	840-3407		

L Sun Snap Mandrel

Use with Sunburst Snap-On abrasive.

Style	Shank	SKU	Each	
			1-5	6+
Single	3/32"	840-3411		
Pkg. of 3	3/32"	840-3410		

M Snap-On Mandrel for E.C. Moore Discs

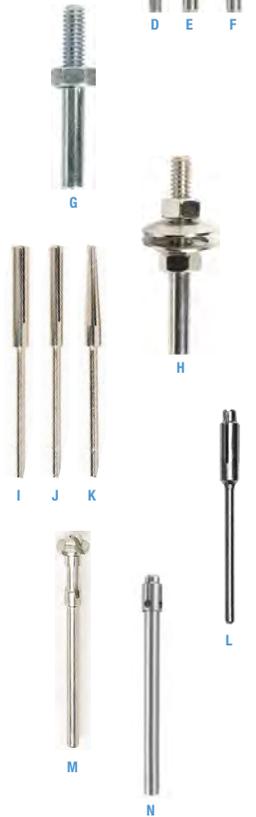
One-piece construction from high quality nickel-plated steel. For use with Moore's Snap-On discs.

Description	SKU	Each
Snap-On Mandrel, 3/32" Shank	840-3200	

N EVE® Pop-on Mandrel for Flex Discs

Used with all EVE® Pop-On® Discs (8452401-8452404). Cannot be used on the Standard Snap-On Discs.

Description	SKU	Pkg. of 2
Pop-on Mandrel, 3/32" Shank	840-3208	



A-1 Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels up to 1/4" thick. Threads are right-hand. Style 321-1/2" is made of stainless steel.

Style	Shank	For Hole	SKU	PKG of 3	
				1-3	4+
A 321	3/32"	1/16"	840-3170		
B 321-1/2	3/32"	1/16"	840-3160		
C 304	3/32"	1/16"	840-3175		
D 2	3/32"	1/8"	840-3060		
E 311	1/8"	1/16"	840-3150		
F 20	1/8"	1/8"	840-3100		
G 22	1/8"	1/8"	840-3110		
H 24	1/8"	1/4"	840-3112		

Style	Shank	For Hole	SKU	Each	
				1-11	12+
I 25	1/4"	1/4"	840-3115		

J Screw Mandrels

Use in handpieces and hand grinders for holding felt wheels, pumice, Cratex and other wheels up to 1/4" thick. Threads are right-hand. Style 321-1/2" is made of stainless steel.

Style	Shank	For Hole	SKU	Each	
				1-11	12+
J 321	1/4"	3/8"	840-3116		

K-P Tapered Threaded Mandrels

For use with felt buffs, wheels, cylinders, points and more. Threads are right-hand.

Style	Shank	For Hole	Length of Taper	SKU	PKG of 3	
					1-3	4+
K 3	3/32"	1/16"	3/16"	840-3070		
L 13	1/8"	1/16"	3/16"	840-3090		
M 0	3/32"	1/16"	3/8"	840-3040		
N 30	1/8"	1/16"	3/8"	840-3120		

Style	Shank	For Hole	SKU	Each	
				1-11	12+
O 33	1/8"	1/4"	840-3130		
P 43	1/4"	3/8"	840-3140		

Q-R Threaded Mandrels with Nut

For use with rubberized points, cones, and cylinders such as Cratex. Threads are right-hand.

Style	Shank	For Hole	Length of Taper	SKU	PKG of 3	
					1-3	4+
Q 1	3/32"	3/32"	1/2"	840-3050		
R 4	1/8"	3/32"	1/2"	840-3080		

S Polishing Rod Mandrels

Holds securely with a twist-tightening grip. Nickel-plated tool steel, 3/32" shank.

Description	SKU	Each
S 2mm	145-1217	
3mm	145-1218	
4mm	145-1219	

T-U Edenta TopStar Rod Mandrels

High quality, precision machined for smooth-as-silk opening and closing. 3/32" shank.

Description	SKU	Each
T 2mm	145-1418	
U 3mm	145-1419	



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By Phone

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International Toll Free: 800-243-4466

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For your convenience we have included pricing in our catalog. Please use it as a guide only. All prices are in U.S. dollars and subject to change without notice. Fluctuations in raw material costs, manufacturing costs or foreign currency exchange rates may require price adjustments. Our prices do not include shipping and handling charges.

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Technical Support

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Repairs

repairs@gesswein.com

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The quickest way to access SDS information is on our website, gesswein.com. Simply search for the product, and the SDS will be available on its product page. If you need further assistance, our customer service team is happy to help.

Shipping & Delivery

Domestic Orders

We ship via UPS, FedEx, USPS, and other common carriers. Orders typically ship within 1–2 business days, depending on stock availability. Expedited shipping is available upon request.

Your shipping rate is based on the order weight destination, carrier service and the speed of delivery you've chosen.

Orders by 1PM ET are usually shipped same-day if in stock. Non-Stock and Special Order items require additional time.

Hazardous Shipments

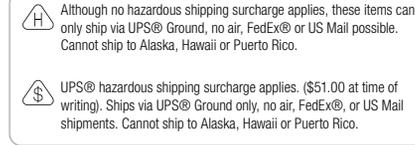
The Department of Transportation (DOT) regulates the labeling, packaging, and handling of certain materials, which increases shipping costs.

- UPS® Ground and most trucking firms charge an additional fee for the transport of hazardous materials.
- UPS® limits the quantity and type of hazardous

items per carton and applies surcharges on a per-carton basis.

- Most trucking firms charge hazardous material fees per shipment.

The icons below indicate hazardous materials and their approved shipping methods in this catalog.



Shipping Damage

If your order arrives damaged or with missing items, do not sign the freight bill or receipt without noting the issue. Retain all packaging and shipping cartons until the carrier completes an inspection.

- If you used your own shipping account, you are responsible for filing the damage claim.
- If your order was shipped through Gesswein's account, our team is happy to assist with the claim process.

For assistance, please contact our customer service team as soon as possible.

International Orders

International customers are responsible for duties, taxes, and import fees. Contact us for shipping estimates and payment options.

Returns

If you need to return an item, please contact us to request a Return Merchandise Authorization (RMA) number before shipping.

- Returns must be unused, in original packaging, and shipped prepaid with the RMA# clearly marked.
- Use a carrier with tracking (UPS or FedEx recommended). If using USPS, make sure to include tracking.
- Returns within 30 days of invoice date are eligible for a refund.
- Returns after 30 days may be subject to refusal or a 15% restocking fee.
- Non-returnable items include special orders and hazardous materials, unless you are an authorized hazardous shipper.
- Refunds will be processed in the original payment method within 10 business days.

Repairs

Some equipment is covered by a one-year manufacturer's warranty, unless otherwise stated. Repaired items come with a 30-day guarantee.

- All repairs require an RMA#
- Contact repairs@gesswein.com for more details.
- Repairs typically take 3–6 weeks to process.

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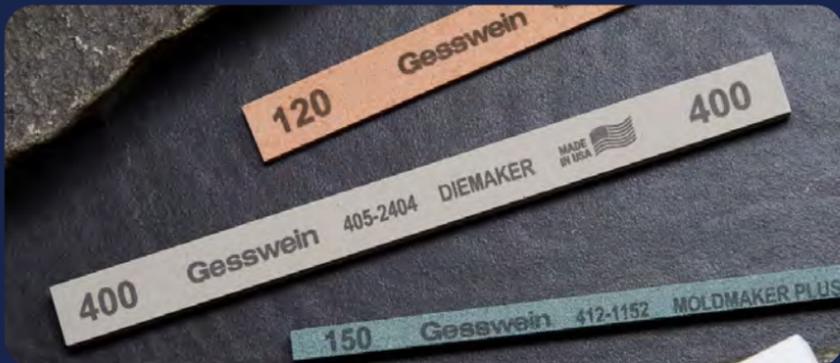


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