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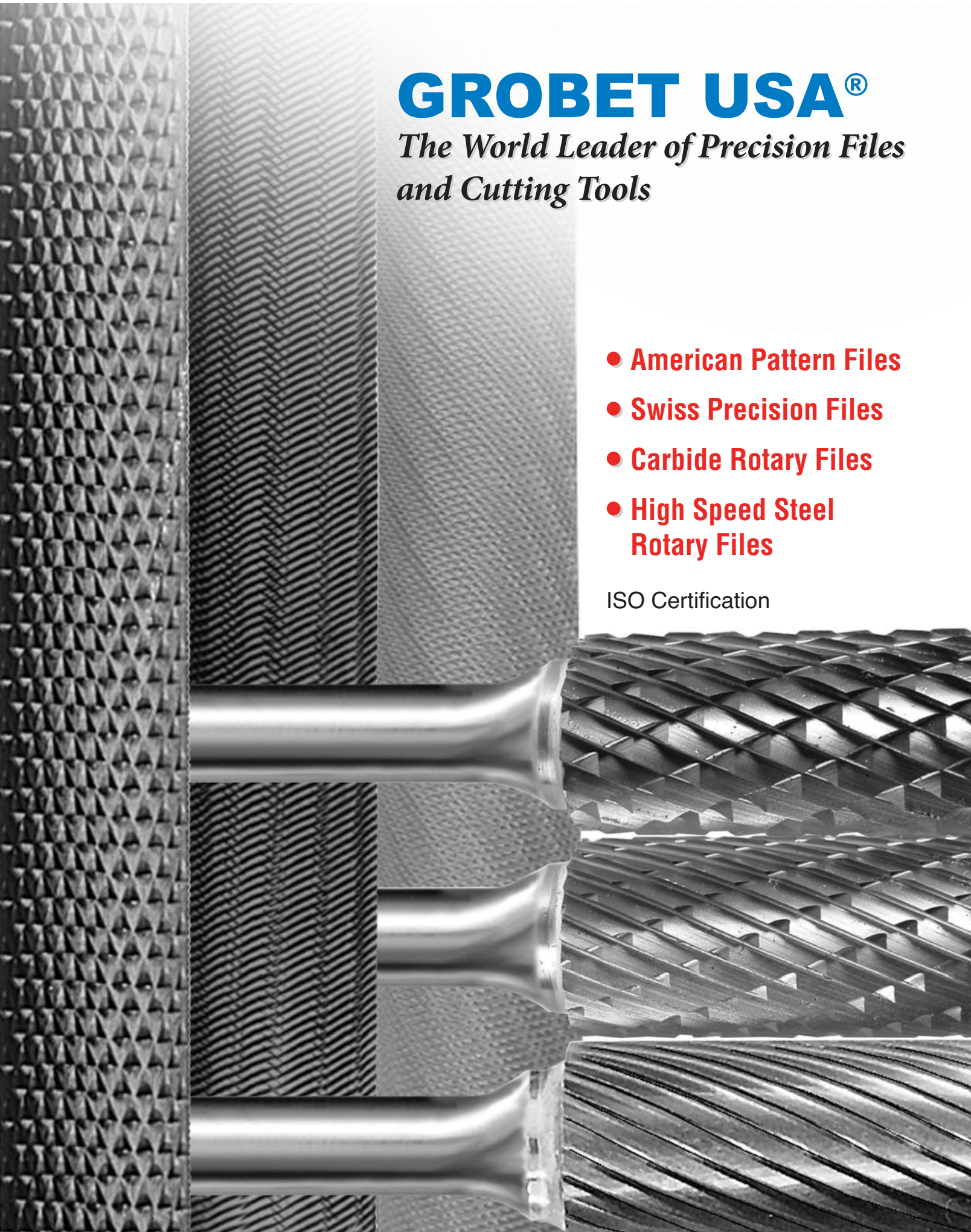
GROBET USA®

The World Leader of Precision Files and Cutting Tools

- American Pattern Files
- Swiss Precision Files
- Carbide Rotary Files
- High Speed Steel Rotary Files

ISO Certification



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Growing to serve you better!

Our 40,000 square-foot state-of-the-art production plant in Cheyenne, WY is allowing us to meet the increased demand for our products and will accommodate the further expansion of our product design & manufacturing capabilities.

Welcome to the **GROBET USA®** File Catalog.

We have a proud heritage of over 140 years in the design, production and distribution of precision tools for professional technicians and craftsmen.

GROBET USA® maintains state-of-the-art production facilities in the US and Switzerland, as well as a global network of suppliers to provide an offering of more than 18,000 products used by:

- Manufacturers
- Machinists / Metal Workers
- Jewelers
- Lapidaries
- Dental Laboratory Technicians
- Hobbyists & Model Makers

GROBET USA® products are available worldwide through our international network of authorized distributors.

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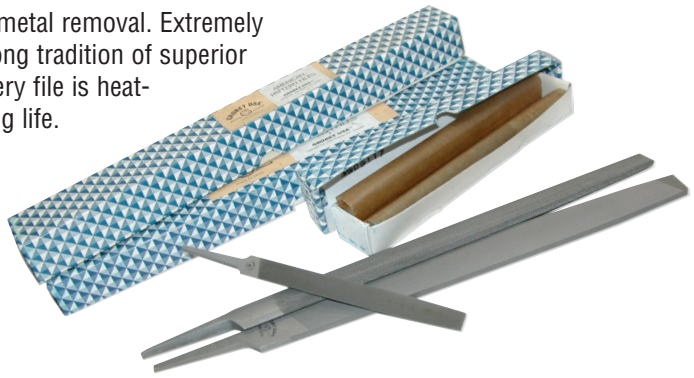
American Pattern Files

Grobet American Pattern Files are 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.

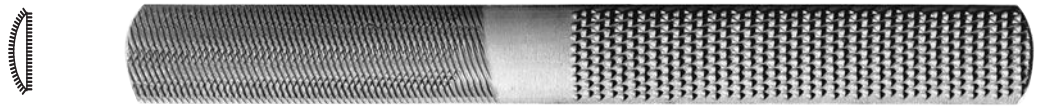


- **GROBET BRAND**
- In Stock for Immediate Delivery
- Strict Quality Control Program
- Excellent Cutting Efficiency
- ISO 9001 : 2000 Certified
- Superior Longevity

COMPARABLE CUT DESIGNATIONS FOR SWISS PRECISION AND AMERICAN PATTERN FILES

SWISS	No. 00	No. 0	No. 2
AMERICAN PATTERN	Bastard	Second Cut	Smooth Cut

There is no equivalent in American Pattern Files for Swiss cuts numbered from No. 4 to No. 8.



ALL PURPOSE FILE

For the homeowner, home craftsman, boat builder and mechanic. Half-round shape. Has file section and rasp section on both flat side and half-round side. **Both sides of file section are double cut – Both sides of rasp section are rasp cut.**

Length	Width	GROBET SWISS Thickness	Bastard Cut
8"	7/8"	1/4"	**32.502**

ALUMINUM TYPE A, FLAT

Special tooth construction is effective in eliminating clogging. Developed for use on soft material, such as aluminum. This double cut file tapers in thickness and width. **Double cut top and bottom – Both edges are single cut.**

Length	Width	Thickness	Bastard Cut
6"	5/8"	5/32"	**32.260**
8"	25/32"	7/32"	**32.261**
10"	31/32"	1/4"	**32.262**
12"	1-5/32"	9/32"	**32.263**

ALUMINUM TYPE A, HALF-ROUND

Eliminates chip clogging. Designed for soft materials, such as aluminum. The Half-Round file allows modification of concave surfaces and holes. This tapered file is rounded on one side and flat on the other. **Double cut on both sides.**

Length	Width	GROBET Thickness	Bastard Cut
6"	19/32"	5/32"	**32.265**
8"	3/4"	7/32"	**32.266**
10"	15/16"	9/32"	**32.267**
12"	1-1/8"	11/32"	**32.268**

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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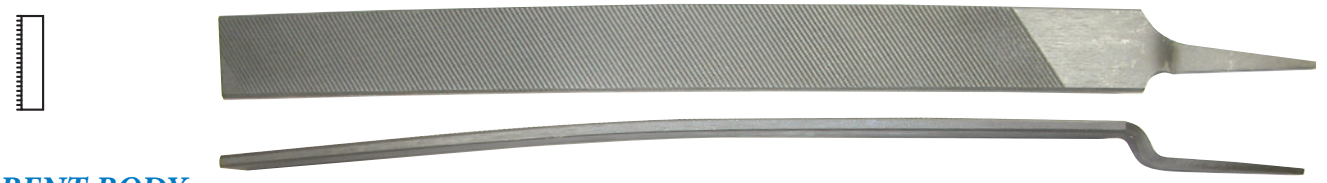


BENT BODY

Grobet's Body Files are precision hand cutting tools designed to cut or level off a metal surface. Body Files are commonly used in Automotive industry for metal finishing and repair work. The thin metal and aluminum used to form the auto body is easily damaged or dented. Before painting, all dents and deep scratches have to be removed. This file tapers toward the end. **Cut bottom - Top is safe - Both edges are safe.**

Length	Width	Thickness	TPI	Second Cut	Smooth Cut
14"	1-5/16"	7/32"	13	**32.48801**	—
14"	1-21/64"	7/32"	20	—	**32.48802**

CHAIN SAW, ROUND - *See page 11 for Chain Saw File Sets*

Use for sharpening all sizes of chain saw teeth. This file maintains the proper tooth shape throughout extensive use. The chain saw file user will experience a fast, smooth cutting action creating an excellent finish. **Double cut.**

Length	Diameter	GROBET Smooth Cut	GROBET SWISS Smooth Cut	GROBET PREMIUM SWISS Smooth Cut
8"	13/64"	**32.27001**	**32.270S**	**32.270**
8"	3/16"	**32.27101**	**32.271S**	**32.271**
8"	5/32"	**32.27201**	**32.272S**	**32.272**
8"	7/32"	**32.27301**	**32.273S**	**32.273**
8"	1/4"	**32.27401**	**32.274S**	**32.274**

CONTACT POINT

Use for cleaning engine distributor points, contact points of magnets, switches, electric bell, etc. and spark plugs.
Single cut top and bottom – Both edges are safe.

Length	No.
5"	**32.500**

FARMER'S OWN FILE

General pupose file with rectangular shape. **One side double cut – One side single cut – One edge single cut – One edge is safe.**

Length	Width	Thickness	Bastard Cut
8"	31/32"	3/16"	**32.498**
10"	31/32"	3/16"	**32.499**

FLAT

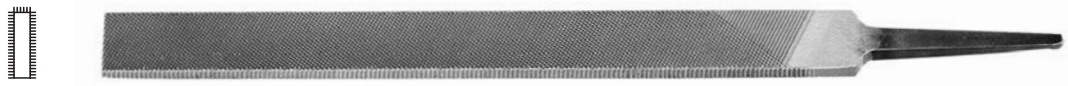
Most often used by machinists, machinery builders and repair personnel. Use when rapid material removal is required. This double cut file is tapered in width and thickness. **Double cut top and bottom – Both edges are single cut.**

Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
4"	15/32"	5/64"	**32.288**	**32.295**	**32.302**
6"	5/8"	5/32"	**32.289**	**32.296**	**32.303**
8"	25/32"	7/32"	**32.290**	**32.297**	**32.304**
10"	31/32"	1/4"	**32.291**	**32.298**	**32.305**
12"	1-5/32"	9/32"	**32.292**	**32.299**	**32.306**
14"	1-11/32"	5/16"	**32.293**	**32.300**	**32.307**

HALF-ROUND

These files are popular with foundries and machinists. Use for rapid material removal while leaving a smooth finish. Used for filing concave, convex and flat surfaces as well as rounding out holes. This file is rounded on one side and flat on the other. **Double cut on both sides.**

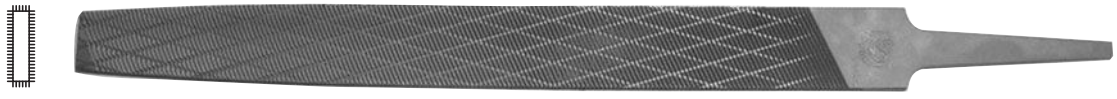
Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
4"	7/16"	1/8"	**32.309**	**32.317**	**32.324**
6"	19/32"	5/32"	**32.310**	**32.318**	**32.325**
8"	3/4"	7/32"	**32.311**	**32.319**	**32.326**
10"	15/16"	9/32"	**32.312**	**32.320**	**32.327**
12"	1-1/8"	11/32"	**32.313**	**32.321**	**32.328**
14"	1-9/32"	13/32"	**32.314**	**32.322**	**32.329**



HAND

Use for rapid metal removal on sharp corners, shoulders and flat surfaces. This double cut file is similar to the Flat file without the taper. The Hand file offers one safe edge which reduces damage to the workpiece when filing up to a corner. **Double cut top and bottom – One edge single cut – One edge is safe.**

Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
6"	5/8"	5/32"	**32.331**	**32.336**	**32.341**
8"	25/32"	7/32"	**32.332**	**32.337**	**32.342**
10"	31/32"	1/4"	**32.333**	**32.338**	**32.343**
12"	1-5/32"	9/32"	**32.334**	**32.339**	**32.344**



HIGH SPEED CHIPBREAKER

This tapered file features two sets of chipbreakers, forming a diamond pattern. The High Speed chipbreaker reduces chip clogging and generates a smooth finish. The coarse teeth remove metal quickly. This file can also be used on cast iron, bronze, brass and plastics. **Diamond Pattern cut top and bottom – Both edges are single cut.**

Length	Width	Thickness	Bastard Cut
8"	25/32"	7/32"	**32.345**
10"	31/32"	1/4"	**32.346**
12"	1-5/32"	9/32"	**32.347**

KNIFE

The Knife file is the file of choice by tool and die makers for filing keyways, slots and acute angles. **Both sides are double cut – top edge is safe – knife edge is single cut.**

Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
4"	15/32"	7/64"	—	**32.354**	**32.359**
6"	21/32"	5/32"	**32.350**	**32.355**	**32.360**
8"	27/32"	3/16"	**32.351**	**32.356**	**32.361**
10"	1-1/32"	1/4"	**32.352**	**32.357**	**32.362**

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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LONG ANGLE LATHE

Primarily for lathe work, the Long Angle Lathe file can be used for bench filing of brass, bronze and aluminum. The teeth were designed with a long angle which provide for free cutting, rapid filing. **Single cut top and bottom – Both edges are safe.**

Length	Width	Thickness	Bastard Cut
10"	31/32"	1/4"	**32.364**
12"	1-5/32"	9/32"	**32.365**
14"	1-11/32"	5/16"	**32.366**

MILL

Where a smooth finish is desired, a Mill file is the file of choice. The Mill file has many applications such as sharpening saws and tools, finishing metal, lathe work, draw filing as well as general shop use. **All sides are single cut.**

Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
4"	7/16"	5/64"	**32.368**	**32.378**	**32.384**
6"	19/32"	7/64"	**32.369**	**32.379**	**32.385**
8"	25/32"	9/64"	**32.370**	**32.380**	**32.386**
10"	31/32"	11/64"	**32.371**	**32.381**	**32.387**
12"	1-5/32"	7/32"	**32.372**	**32.382**	**32.388**
14"	1-5/16"	1/4"	**32.373**	**32.383**	**32.389**
8"	2 Round Edges		**32.376**	—	—
10"	2 Round Edges		**32.377**	—	—

MILLED CURVED TOOTH FILES

Designed for automotive and aircraft manufacturers, these efficient files are known for their fast cutting action and longer life. The sharp edges are also popular with machinists, foundries, railroad and shipyards.

FLAT WITH TANG

Designed for use on aluminum, brass, copper, steel and hard rubber. Essential when fast filing is required.

Length	Width	Thickness	No.
10"	1"	7/32"	**32.48201**
12"	1-5/32"	17/64"	**32.48301**
14"	1-11/32"	5/16"	**32.48401**

ADJUSTABLE FLEXIBLE FILE HOLDER

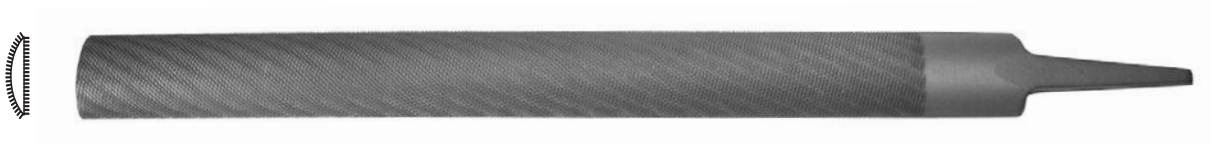
See Page 39

FLEXIBLE WITHOUT TANG

When working with sheet metal, this is the file of choice. A holder is required when using this file. This file was designed for outward, inward and flat use as teeth are present on both sides of the file.

Length	Width	Thickness	No.
10"	1"	5/32"	**32.49001**
12"	1-5/32"	3/16"	**32.49101**
14"	1-11/32"	3/16"	**32.49201**

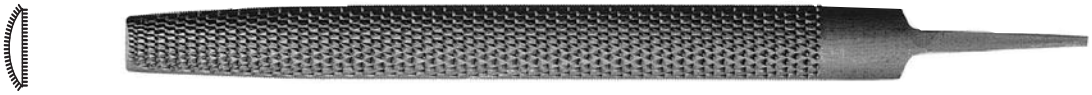
Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.



PIPE-LINER

This file is used to file weld beads and scale off pipeline. **Double cut on both sides.**

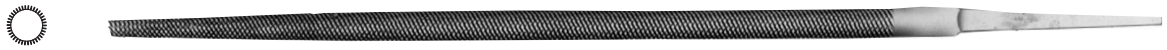
Length	Width	Thickness	No.
14"	1-9/32"	13/32"	**32.497**



RASP, HALF-ROUND

When working with plywood, plastics, wallboard or other soft materials, rasps are the file of choice for cabinet makers and woodworkers. The teeth of a rasp are uniform and individually formed.
Rasp cut on top and bottom – Both edges are single cut.

Length	Diameter	Bastard Cut	Second Cut
8"	5/16"	**32.503**	**32.507**
10"	3/8"	**32.504**	**32.508**
12"	1/2"	**32.505**	**32.509**
14"	5/8"	**32.506**	



ROUND

When holes need enlarging and corners rounding, a round file is the solution. This file tapers, making it adaptable to a variety of hole sizes.
Double cut.

Length	Diameter	Bastard Cut	Second Cut	Smooth Cut
4"	5/32"	**32.395**	**32.402**	**32.408**
6"	7/32"	**32.396**	**32.403**	**32.409**
8"	5/16"	**32.397**	**32.404**	**32.410**
10"	3/8"	**32.398**	**32.405**	**32.411**
12"	1/2"	**32.399**	**32.406**	**32.412**
14”	5/8"	**32.400**	—	—

SQUARE

This double cut file is used when filing slots, grooves, keyways, inside corners and square holes. Tapered toward the point, all four sides are equal filing surfaces. **Double cut on all four sides.**

Length	Diameter	Bastard Cut	Second Cut	Smooth Cut
4"	5/32"	**32.414**	**32.421**	**32.427**
6"	7/32"	**32.415**	**32.422**	**32.428**
8"	5/16"	**32.416**	**32.423**	**32.429**
10"	3/8"	**32.417**	**32.424**	**32.430**
12"	1/2"	**32.418**	**32.425**	**32.431**
14"	5/8"	**32.419**	—	**32.432**

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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TAPER SAW, SINGLE CUT

The Taper Saw file is a triangular, single cut file designed for filing a variety of saws with 60 degree angled teeth. Tapered toward a point, this file has cut edges for filing gullets between saw teeth. Taper saw files are available in a number of widths: regular, slim, extra slim and double extra slim. **Single cut on all three sides.**

REGULAR TAPER

Length	Width	No.	Length	Width	No.
4"	1/4"	**32.43101**	7"	17/32"	**32.434**
5"	5/16"	**32.43201**	8"	19/32"	**32.435**
6"	15/32"	**32.433**	10"	23/32"	**32.436**

SLIM TAPER

Length	Width	No.	Length	Width	No.
4"	7/32"	**32.438**	7"	13/32"	**32.441**
5"	9/32"	**32.439**	8"	15/32"	**32.442**
6"	11/32"	**32.440**	10"	5/8"	**32.443**

EXTRA SLIM TAPER

Length	Width	No.	Length	Width	No.
4"	3/16"	**32.445**	7"	5/16"	**32.448**
5"	15/64"	**32.446**	8"	13/32"	**32.449**
6"	9/32"	**32.447**			

DOUBLE EXTRA SLIM

Length	Width	No.	Length	Width	No.
4"	5/32"	**32.450**	7"	1/4"	**32.453**
5"	3/16"	**32.451**	8"	5/16"	**32.454**
6"	7/32"	**32.452**			

THREE - SQUARE

The Three Square file is the file of choice by machinists when filing angles more acute than 90 degrees, for cleaning out corners and filing taps and cutters. This triangular file is tapered to the point. This file can get into corners other files cannot. **Double cut on all three sides.**

Length	Width	Bastard Cut	Second Cut	Smooth Cut
4"	11/32"	**32.455**	**32.45501**	**32.45502**
6"	15/32"	**32.456**	**32.460**	**32.464**
8"	5/8"	**32.457**	**32.461**	**32.465**
10"	3/4"	**32.458**	**32.462**	**32.466**
12"	31/64"	**32.459**	**32.463**	**32.467**

WARDING

A popular file with locksmiths, the Warding file was designed for filing or repairing “wards” in locks and keys. As the Warding file is thin, it is also suited for any application where the space is too narrow for other files to fit. This file tapers toward the end. **Double cut top and bottom – Both edges are single cut.**

Length	Width	Thickness	Bastard Cut	Second Cut	Smooth Cut
4"	15/32"	3/64"	**32.468**	**32.473**	**32.477**
6"	5/8"	5/64"	**32.469**	**32.474**	**32.478**
8"	25/32"	3/32"	**32.470**	**32.475**	**32.479**

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

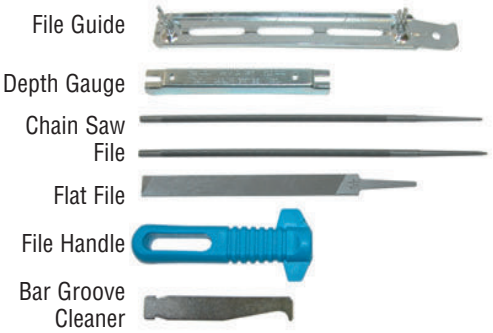
CHAIN SAW SHARPENING KITS

This sharpening kit was designed with the assistance of a forestry school. It is suited to the needs of non-professional and occasional users. In the blister pack version, the kit is delivered with a CD, which will guide the user in acquiring proper chain sharpening technique. File diameters must be selected according to the type of chain to be sharpened.

Benefits:

- Guaranteed easy learning
- Precise and efficient sharpening
- Increased safety
- Smooth cut and bite
- All tools close at hand
- Always neat and tidy
- Saves space
- Easily transportable

This kit contains:



A demonstration CD is supplied with the blister pack version

Rolled version

Part Number	(in)
No. **32.28001**	13/64"
No. **32.28002**	3/16"
No. **32.28003**	5/32"
No. **32.28004**	7/32"

Blister pack version

Part Number	(in)
No. **32.28201**	13/64"
No. **32.28202**	3/16"
No. **32.28203**	5/32"
No. **32.28204**	7/32"

7-PIECE FILE SETS

Recommended for both professional and home use. Comes in a heavy duty black canvas pouch - no handles

- Quality in hardness and regularity
- Efficient bite to the edges
- Long life

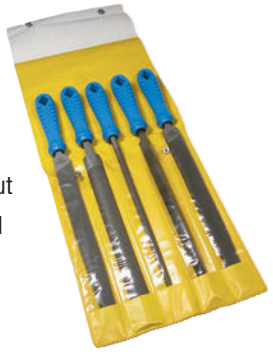
No.**32.4807**

Set Includes:

10" Mill Bastard Cut, 10" Half Round Bastard Cut, 10" Flat Bastard Cut, 10" Flat Smooth Cut, 10" Round Bastard Cut, 10" Square Bastard Cut, 7" Slim Taper.

5 PIECE AMERICAN PATTERN FILE SETS

- Uniform cut for fast metal removal
- Extremely durable
- Unsurpassed in accuracy of shape and cut
- Best results on steel, cast iron, wood and thermoplastics



Each Set Includes:

Round, Half Round, Mill, 3 Square and Flat Files with handles.

No. **32.520** - Bastard Cut 8"
No. **32.522** - Bastard Cut 10"
No. **32.521** - Second Cut 8"
No. **32.523** - Second Cut 10"

9-PIECE FILE SETS

Recommended for both professional and home use, these tools have an exceptional filing capacity. Comes in a heavy duty black canvas pouch

• Quality in hardness and regularity • Efficient bite to the edges • Long life

All files come pre-assembled with Ergo handles.

Set Includes:

6" Double Extra Slim Taper, 10" Mill Bastard Cut, 8" Half Round Wood Rasp Bastard Cut, 10" Half Round Bastard Cut, 8" Flat Bastard Cut, 10" Flat Bastard Cut, 10" Round Bastard Cut, 12" Mill Bastard Cut, 6" Slim Taper.

No.**32.4809**

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Grobet Swiss Precision Files

The world's standard for quality and performance!

Grobet Swiss Precision Files are 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. **Grobet Swiss Precision Files** deliver superior performance on all metals. Simply the best you can buy. Grobet Swiss Precision 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.*

Guide to Selecting Swiss Precision Files

As shown in the File Finder chart, each configuration calls for a different type of file. There is more to file selection than shape alone. The cut selected is equally important. Determination of cut depends on the type and form of material to be worked, amount of material to be removed and the finish desired. For example, rapid removal of stock often indicates a No. 00 cut, while working on narrow surfaces would suggest a No. 2 cut and final finishing operations might take a fine cut such as No. 4. In the final analysis, file selection cannot be reduced to a formula or table but will be based to a great degree on experience and common sense. Whatever type, shape, size or cut may be required, one thing is certain: there is a Grobet Swiss precision file that meets the specifications. And the accuracy and finish delivered by these files will clearly show why craftsmen have made Grobet Swiss the leader in precision files for so many years.

File Finder

Basic Application	Type of File Recommended
Corners-holes-edges	Three-Square
Corners-holes	Square
Corners-slots	Equalling
Corners-slots	Slitting
Curved surfaces-corners-holes	Half-Round
Curved surfaces-junctures of curved and flat surfaces-corners-holes	Crossing
Edges, joints	Joint
Flat surfaces	Hand
Flat surfaces-corners-keyways dovetail ways-gear teeth-deburring	Barrette
Flat surfaces-slots	Pillar
Roughening surfaces for hand grips	Checkering
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

Scale of Cuts

The scale of cuts for Swiss precision files as well as the basic shapes were developed by Grobet, dating back to the founding of Grobet Freres in 1812. Additions and refinements have been made to meet the changing requirements of modern technologies. Here is the scale of cuts for Grobet Swiss precision files.

Teeth per inch (upcut)	30	41	51	64	79	97	117	142	173	213	295
Files 10" and over in length	00	0	1	2	3	4	-	6	-	-	-
Files 4" to 8" in length	-	00	0	1	2	3	4	-	6	-	-
Files 3" in length	-	-	00	0	1	2	3	4	-	6	8
Escapement Files	-	-	0	-	2	3	4	-	6	-	-
Needle Files 4" to 7-3/4"	-	-	0	-	2	3	4	-	6	-	-
Regular Rifflers	-	-	0	-	2	3	4	-	6	-	-

Types of Files

There are four types of files detailed in the following pages:

Swiss Precision Files - The original Grobet-Swiss files made in hundreds of shapes and sizes.

Swiss 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 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", and long, 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.

BARRETTE

Tapered in width and thickness, coming to a point. Only flat side is cut, providing safe edge and top. **Double cut.**

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4
3"	75	23/64"	9.1	3/32"	2.4	—	**31.021**	—	—	—
4"	100	1/2"	12.7	1/8"	3.2	**31.022**	**31.023**	**31.024**	**31.025**	**31.026**
6"	150	23/32"	18.3	5/32"	4.0	**31.027**	**31.028**	**31.029**	**31.030**	**31.031**
8"	200	7/8"	22.2	13/64"	5.2	—	**31.032**	—	**31.033**	—

BARRETTE-HOT DIE

Same as regular Barrette files except with ground backs, widely used in making and repairing extrusion dies. **Double cut.**

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00
3"	75	3/8"	9.5	3/32"	2.4	**31.017**
4"	100	1/2"	12.7	1/8"	3.2	**31.018**

CHECKERING

Parallel in width and gently tapered in thickness. Overcut is parallel to file edges and upcut is 90° to overcut. Useful for putting serrations on knife edges and to obtain a checkered design similar to a gun hand grip. **Double cut top and bottom – Both edges are safe.**

HAND CHECKERING

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2
6"	150	3/4"	19.1	3/16"	5.2	**31.035**	**31.036**	**31.037**	**31.038**
Lines per inch/cm						20/8	30/12	40/16	50/20

PILLAR CHECKERING

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4
6"	150	1/2"	12.7	11/64"	4.4	**31.040**	**31.041**	**31.042**	**31.043**	**31.045**
Lines per inch/cm						20/8	30/12	40/16	50/20	75/30

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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CROCHET

Tapered in width and gradually tapered in thickness. Used in filing junctions between a flat and curved surface. Useful in developing slots with rounded edges. **Double cut top and bottom – Both edges are single cut.**

Length		Width		Thickness				
(in)	(mm)	(in)	(mm)	(in)	(mm)	Cut 00	Cut 0	Cut 2
4"	100	5/16"	7.9	3/32"	2.4	—	**31.047**	**31.048**
6"	150	13/32"	10.3	9/64"	3.6	**31.049**	**31.050**	**31.051**
8"	200	15/32"	11.9	11/64"	4.4	**31.052**	**31.053**	**31.054**

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 makes possible the filing at the junction of two curved surfaces or a straight and a curved surface. **Double cut on both sides.**

Length		Width		Thickness				
(in)	(mm)	(in)	(mm)	(in)	(mm)	Cut 0	Cut 2	Cut 4
4"	100	15/32"	11.9	9/64"	3.6	**31.056**	**31.057**	**31.058**
6"	150	19/32"	15.1	3/16"	4.5	**31.059**	**31.060**	**31.061**
8"	200	13/16"	20.6	15/64"	6.0	**31.062**	**31.063**	—

EQUALLING

Parallel in width and thickness. Used primarily for filing slots and corners. **Double cut top and bottom – Both edges are single cut.**

Length		Width		Thickness					
(in)	(mm)	(in)	(mm)	(in)	(mm)	Cut 00	Cut 0	Cut 2	Cut 4
4"	100	13/32"	10.3	5/64"	2.0	—	**31.065**	**31.066**	**31.067**
6"	150	1/2"	12.7	7/64"	2.8	**31.068**	**31.069**	**31.070**	**31.071**
8"	200	21/32"	16.7	1/8"	3.2	**31.072**	**31.073**	**31.074**	—

Equalling-Special Thickness

Length		Width		Approx. Thickness		Stubs Iron			
(in)	(mm)	(in)	(mm)	(in)	(mm)	Wire Gauge No.	Cut 0	Cut 2	Cut 4
4"	100	13/32"	10.3	.047"	1.25	18	**31.076**	**31.077**	—
4"	100	13/32"	10.3	.035"	0.91	20	—	**31.080**	**31.081**
4"	100	13/32"	10.3	.031"	0.81	21	**31.082**	**31.083**	—
4"	100	13/32"	10.3	.028"	0.71	22	—	**31.084**	**31.085**
4"	100	13/32"	10.3	.022"	0.56	24	—	**31.086**	**31.087**
4"	100	13/32"	10.3	.018"	0.46	26	—	**31.088**	—
4"	100	13/32"	10.3	.014"	0.38	28	—	**31.090**	**31.091**
6"	150	1/2"	12.7	.083"	2.05	14	**31.092**	**31.093**	—
6"	150	1/2"	12.7	.065"	1.65	16	**31.094**	**31.095**	—
6"	150	1/2"	12.7	.047"	1.25	18	**31.096**	**31.097**	—

HALF-ROUND

Tapered in width and thickness, coming to a point. **Double cut on both sides.**

Length		Width		Thickness								
(in)	(mm)	(in)	(mm)	(in)	(mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4	Cut 6
3"	75	5/16"	7.9	3/32"	2.5	—	—	—	**31.100**	—	—	—
4"	100	15/32"	11.9	9/64"	3.6	**31.102**	**31.103**	—	**31.104**	**31.106**	**31.107**	—
5"	125	33/64"	13.1	5/32"	4.0	—	—	—	**31.108**	—	—	—
6"	150	19/32"	15.1	3/16"	4.8	**31.111**	**31.112**	**31.113**	**31.114**	**31.115**	**31.116**	**31.117**
8"	200	13/16"	20.6	15/64"	6.0	**31.118**	**31.119**	**31.120**	**31.121**	—	**31.122**	—
10"	250	1"	25.4	19/64"	7.5	**31.123**	**31.124**	—	**31.125**	—	—	—

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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HALF-ROUND RING

Tapered in width and thickness, coming to a point. Narrower than regular half-round and, therefore, useful for filing inside of rings.
Double cut on both sides.

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4
6"	150	15/32"	11.9	9/64"	3.6	**31.127**	**31.128**	**31.129**	**31.130**	**31.131**	**31.132**

ECONOMY HALF-ROUND RING

Made with a built in handle.

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 0
6"	150	7/16"	11.1	1/8"	3.2	**33.814**

HAND

Parallel in width and tapered in thickness. **Double cut top and bottom – One edge single cut – One edge is safe.**

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4	Cut 6
4"	100	17/32"	13.5	1/8"	3.2	—	**31.140**	—	**31.141**	—	**31.142**	—
6"	150	3/4"	19.1	5/32"	4.0	**31.143**	**31.144**	**31.145**	**31.146**	**31.147**	**31.148**	**31.149**
8"	200	29/32"	22.0	3/16"	4.8	**31.150**	**31.151**	**31.152**	**31.153**	—	**31.154**	—
10"	250	1"	25.4	1/4"	6.4	**31.155**	**31.156**	—	**31.157**	—	—	—
12"	300	1-3/16"	30.0	5/16"	7.9	**31.158**	**31.159**	—	—	—	—	—

JOINT ROUND EDGE

Parallel in width and thickness, with rounded edges, these files are cut on the edges only. Length is 4" (100 mm). **Cut is number 2 – Single Cut.**

No.	31.161	31.162	31.163	31.164	31.165	31.166	31.167	31.168	31.169
Approx. thickness-inch	.059"	.047"	.039"	035"	.031"	.028"	.024"	.020"	.016"
Approx. thickness-mm	1.5	1.2	1.0	.9	.8	.7	.6	.5	.4
Stubs iron wire gauge	17	18	19	20	21	22	23	25	27

(This file is too thin to use with plastic handles.)

KNIFE

Tapered in width and thickness, with the knife edge having 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 for easily filing in restricted areas.
Double cut on both sides – Top edge is safe – Knife edge is single cut.

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4
4"	100	15/32"	11.9	1/8"	3.2	**31.174**	**31.175**	**31.176**	**31.177**	**31.178**
6"	150	23/32"	18.3	5/32"	4.0	**31.179**	**31.180**	**31.181**	**31.182**	**31.183**
8"	200	7/8"	22.2	13/64"	5.2	**31.184**	**31.185**	**31.186**	**31.187**	—

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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PILLAR FILES

These files are parallel in width and tapered in thickness to make possible perfectly flat filing. **Double cut top and bottom – Both edges are safe.**

EXTRA NARROW PILLAR

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4	Cut 6
3"	75	1/8"	3.2	5/64"	2.0	—	—	—	**31.200**	—	—
4"	100	5/32"	4.0	5/64"	2.0	**31.201**	**31.202**	—	**31.204**	**31.205**	—
6"	150	13/64"	5.2	1/8"	3.2	**31.206**	**31.207**	**31.208**	**31.209**	**31.210**	**31.211**
8"	200	9/32"	7.1	9/64"	3.6	**31.212**	**31.213**	**31.214**	**31.215**	**31.216**	—
10"	250	11/32"	8.7	11/64"	4.4	**31.217**	—	—	—	—	—

NARROW PILLAR

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4	Cut 6
4"	100	3/16"	4.8	3/32"	2.5	**31.219**	**31.220**	**31.221**	**31.222**	**31.223**	—
6"	150	1/4"	6.4	9/64"	3.6	**31.224**	**31.225**	**31.226**	**31.227**	**31.228**	**31.229**
8"	200	11/32"	8.7	11/64"	4.4	**31.230**	**31.231**	**31.232**	**31.233**	—	—
10"	250	25/64"	9.9	3/16"	4.8	**31.234**	**31.235**	—	—	—	—

DEMI-NARROW PILLAR

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 0	Cut 1	Cut 2
6"	150	3/8"	9.5	5/32"	4.0	**31.192**	**31.193**	**31.194**

REGULAR PILLAR

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4	Cut 6
4"	100	3/8"	9.5	1/8"	3.2	**31.237**	**31.238**	**31.239**	**31.240**	—	**31.241**	—
6"	150	1/2"	12.7	11/64"	4.4	**31.243**	**31.244**	**31.245**	**31.246**	**31.247**	**31.248**	**31.249**
8"	200	19/32"	15.1	13/64"	5.2	**31.251**	**31.252**	**31.253**	**31.254**	**31.255**	**31.256**	—
10"	250	23/32"	18.3	15/64"	6.0	**31.257**	**31.258**	—	**31.259**	—	—	—
12"	300	25/32"	19.8	9/32"	7.1	**31.260**	**31.261**	—	—	—	—	—

PIPPIN

Tapered in width and thickness. Combines the cross-sections of the round file, with the crossing file, along with the edge of a knife file. For finishing the junction of two different curved surfaces and for opening slots when a "V" shape is required.
Double cut on both sides – Top and bottom edge are single cut.

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 0	Cut 2	Cut 4
6"	150	25/64"	9.9	9/64"	3.6	**31.267**	**31.268**	**31.269**
8"	200	15/32"	11.9	11/64"	4.4	**31.271**	**31.272**	—

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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ROUND

Gradually tapered and cut and workable to the point. Used where it is necessary to enlarge a hole or round off a radius. **Double cut**.

Length (in)	Length (mm)	Diameter (in)	Diameter (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4	Cut 6
3"	75	3/32"	2.4	—	*31.275	31.276	31.277	—	—	—
4"	100	5/32"	4.0	*31.279	*31.280	31.281	31.282	—	31.283	—
5"	125	13/64"	5.2	—	—	—	31.286	—	—	—
6"	150	1/4"	6.4	*31.287	*31.288	31.289	31.290	31.291	31.292	31.293
8"	200	5/16"	7.9	*31.294	*31.295	31.296	31.297	—	31.298	—
10"	250	13/32"	10.3	*31.299	*31.300	—	31.302	—	—	—

**Indicates blunt end*

ROUND PARALLEL

Cut over the entire surface (does not taper to point). **Double cut**.

Length (in)	Length (mm)	Diameter (in)	Diameter (mm)	Cut 00	Cut 0	Cut 2
4"	100	1/16"	1.6	—	31.304	31.305
4"	100	1/8"	3.2	—	31.307	—
6"	150	3/32"	2.4	—	31.311	31.312
6"	150	1/8"	3.2	—	31.315	31.316
6"	150	5/32"	4.0	31.318	31.319	31.320
6"	150	3/16"	4.8	31.321	31.322	31.323
6"	150	1/4"	6.4	—	—	31.326

SCREWHEAD with TANG

Used for filing slots in small screws. Available in thicknesses ranging from No. 1 (thickest) to No. 8 (thinnest). **Single cut on both edges – Both sides are safe.**

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness 1 (.032") (.80 mm)	2 (.028") (.70 mm)	3 (.024") (.60 mm)	4 (.022") (.55 mm)	6 (.018") (.45 mm)	8 (.014") (.35mm)
3"	75	25/64"	9.9	—	31.332	31.333	31.334	31.335	31.336
4"	100	15/32"	11.9	31.337	31.338	—	31.339	—	—

UNIVERSAL PIVOT FILE/BURNISHER

These regular burnishers are polished and have slightly rounded corners. 7⅛" (18 cm) length.

No. **31.01710** Right

No. **31.01720** Left

SLITTING

Parallel in width with identical contour on top and bottom. Thinner than knife files and used for filing slots. **Double cut top and bottom – Both edges are single cut.**

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 0	Cut 2
6"	150	19/32"	15.1	1/8"	3.2	31.342	31.343

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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SQUARE

A general purpose file, cut and usable to the point. Gradually tapered. **Double cut on all four sides**.

Length (in)	Length (mm)	Diameter (in)	Diameter (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4
4"	100	5/32"	4.0	*31.345	*31.346	—	31.348	—
6"	150	15/64"	6.0	*31.349	*31.350	31.351	31.352	31.353
8"	200	5/16"	7.9	*31.354	*31.355	—	31.356	—
10"	250	13/32"	10.3	*31.357	—	—	—	—

**Indicates blunt end*

THREE-SQUARE

Gradually tapered, cut and workable to the point. **Double cut on all three sides**.

Length (in)	Length (mm)	Diameter (in)	Diameter (mm)	Cut 00	Cut 0	Cut 1	Cut 2	Cut 4
4"	100	9/32"	7.1	31.366	31.367	31.368	31.369	31.370
6"	150	3/8"	9.5	31.371	31.372	31.373	31.374	31.375
8"	200	1/2"	12.7	31.376	31.377	31.378	31.379	—

THREE-SQUARE SLIM

Same as three-square, except thinner, for working in smaller areas. **Double cut on all three sides**.

Length (in)	Length (mm)	Width (in)	Width (mm)	Cut 0	Cut 2
6"	150	5/16"	7.9	31.381	31.382

Use plastic file handles: size 4.

VUL-CRYLIC

Double-end vulcanite file with open, coarse teeth for filing plastics, waxes and soft materials. One end is coarser than the other. **Double cut on both sides.**

Length (in)	Length (mm)	Width (in)	Width (mm)	No.
7"	175	1/2"	12.7	31.385
8"	200	35/64"	14	31.384

WARDING

Parallel in thickness and tapered in width. Useful for removal of burs. **Double cut top and bottom – Both edges are single cut**.

Length (in)	Length (mm)	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 0	Cut 2	Cut 4
3"	75	23/64"	9.1	1/32"	0.8	—	31.387	31.388	—
4"	100	1/2"	12.7	3/64"	1.2	31.389	31.390	31.391	31.392
6"	150	5/8"	15.9	5/64"	2.0	31.393	31.394	31.395	31.396
8"	200	7/8"	22.2	7/64"	2.8	31.397	31.398	31.399	—

Warding-Special Thickness

No.	Length (in)	Length (mm)	Width (in)	Width (mm)	Approx. Thickness (in)	Approx. Thickness (mm)	Stubs Iron Wire Gauge	Cut No.
31.401	3"	75	23/64"	9.1	.025"	0.61	23	0
31.402	4"	100	1/2"	12.7	.031"	0.81	21	0
31.403	6"	150	5/8"	15.9	.065"	1.65	16	0
31.405	6"	150	5/8"	15.9	.047"	1.25	18	2
31.406	6"	150	5/8"	15.9	.042"	1.02	19	0
31.407	6"	150	5/8"	15.9	.042"	1.02	19	2

(This file is too thin to use with plastic handles.)

Note: See pages 33-35 for our complete file handle line, including charts on plastic file handles.

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DIE SINKERS' FILES

Overall length: 5-1/4" (133 mm). Length of cut: 3-1/2" (89 mm).

AURIFORM

Cut 0	Cut 2
31.420	31.421

CROCHET

Cut 0	Cut 2
31.422	31.423

FLAT

Cut 0	Cut 2
31.424	31.425

HALF-ROUND

Cut 0	Cut 2
31.426	31.427

KNIFE

Cut 0	Cut 2
31.428	31.429

LOZENGE

Cut 0	Cut 2
31.430	31.431

OVAL

Cut 0	Cut 2
31.432	31.433

PIPPIN

Cut 0	Cut 2
31.434	31.435

ROUND

Cut 0	Cut 2
31.436	31.437

SQUARE

Cut 0	Cut 2
31.438	31.439

THREE-SQUARE

Cut 0	Cut 2
31.440	31.441

WARDING

Cut 0	Cut 2
31.442	31.443

ASSORTED SET OF 12

Cut 0	Cut 2
31.445	31.446

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GROBET SWISS NEEDLE FILES

Precision files, for exacting work, especially under magnification. Made of the highest quality steel, machined and finished for precision shape, accuracy and balance. With round, knurled handles or plastic handles as noted.

- Length 4" (10 cm) has cut portion of 1-3/4" (44 mm)
- Length 5-1/2" (14 cm) has cut portion of 2-1/2" (64 mm)
- Length 6-1/4" (16 cm) has cut portion of 3" (76 mm)
- Length 7-3/4" (20 cm) has cut portion of 4-1/8" (105 mm)

Knurled Handle

Plastic Handle

BARRETTE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	—	**31.450**	**31.451**	**31.452**	—	**30.450**	**30.451**	—
5-1/2"	14	—	**31.453**	**31.454**	**31.456**	—	**30.453**	**30.454**	**30.456**
6-1/4"	16	**31.458**	**31.459**	**31.461**	**31.463**	**31.464**	**30.459**	**30.461**	**30.463**
7-3/4"	20	**31.465**	**31.466**	**31.468**	**31.470**	**31.471**			

BARRETTE, GROUND BACK

Widely used in making and repairing extrusion dies.

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0
5-1/2"	14	**31.693**
6-1/4"	16	**31.694**

CROCHET

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4
4"	10	**31.474**	**31.475**	—
5-1/2"	14	**31.477**	**31.478**	**31.479**
6-1/4"	16	**31.480**	**31.481**	**31.482**

CROSSING

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	**31.484**	**31.485**	—	—	**30.484**	**30.485**	—
5-1/2"	14	**31.487**	**31.488**	**31.489**	—	**30.487**	**30.488**	**30.489**
6-1/4"	16	**31.490**	**31.491**	**31.492**	**31.493**	**30.490**	**30.491**	**30.492**
7-3/4"	20	**31.494**	**31.495**	**31.496**	—			

EQUALLING

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	—	**31.498**	**31.499**	**31.500**	—	**30.498**	**30.499**	—
5-1/2"	14	—	**31.501**	**31.502**	**31.503**	—	**30.501**	**30.502**	**30.503**
6-1/4"	16	**31.505**	**31.506**	**31.508**	**31.510**	**31.511**	**30.506**	**30.508**	**30.510**
7-1/4"	20	—	**31.512**	**31.513**	**31.514**	—			

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HALF-ROUND

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	—	31.516	31.517	—	—	30.516	30.517	—
5-1/2"	14	—	31.519	31.520	31.522	—	30.519	30.520	30.522
6-1/4"	16	31.524	31.525	31.527	31.529	31.530	30.525	30.527	30.529
7-3/4"	20	31.53101	31.531	31.533	31.535	—			

JOINT ROUND EDGE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	31.537	31.538	31.539	—	30.537	30.538	—
5-1/2"	14	31.540	31.541	31.542	—	30.540	30.541	30.452
6-1/4"	16	31.543	31.544	31.545	31.546	30.543	30.544	30.545

PILLAR ROUND EDGE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4
6-1/4"	16	31.547	31.548	31.549

KNIFE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	31.551	31.552	—	—	30.551	30.552	—
5-1/2"	14	31.554	31.555	31.556	—	30.554	30.555	30.556
6-1/4"	16	31.558	31.559	31.561	31.562	30.558	30.559	30.561
7-3/4"	20	31.563	31.564	31.565	—			

MARKING

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	31.567	31.568	31.569	—	30.567	30.568	—
5-1/2"	14	31.570	31.571	31.572	—	30.570	30.571	30.572
6-1/4"	**16**	31.573	31.574	31.575	31.576	30.573	30.574	30.575

OVAL

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4
6-1/4"	16	31.578	31.579	31.580

ROUND

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	—	31.582	31.583	31.584	—	30.582	30.583	—
5-1/2"	14	—	31.585	31.586	31.588	—	30.585	30.586	30.588
6-1/4"	16	31.590	31.591	31.593	31.595	31.596	30.591	30.593	30.595
7-3/4"	20	31.59701	31.597	31.598	31.599	—			

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SLITTING

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Price	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	**31.601**	**31.602**	—		—	—	**30.602**	—
5-1/2"	14	**31.604**	**31.605**	**31.606**		—	**30.604**	**30.605**	**30.606**
6-1/4"	16	**31.607**	**31.608**	**31.609**		**31.610**	—	—	—

SQUARE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	—	**31.612**	**31.613**	—	—	**30.612**	**30.613**	—
5-1/2"	14	—	**31.615**	**31.616**	**31.617**	—	**30.615**	**30.616**	**30.617**
6-1/4"	16	**31.619**	**31.620**	**31.622**	**31.624**	**31.625**	—	**30.622**	**30.624**
7-3/4"	20	—	**31.626**	**31.627**	**31.628**	—			

THREE SQUARE

Overall Length (in)	(cm)	KNURLED HANDLES Cut 00	Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	**31.629**	**31.630**	**31.631**	**31.632**	—	**30.630**	**30.631**	—
5-1/2"	14	—	**31.633**	**31.634**	**31.636**	—	**30.633**	**30.634**	**30.636**
6-1/4"	16	**31.637**	**31.638**	**31.640**	**31.642**	**31.643**	**30.638**	**30.640**	**30.642**
7-3/4"	20	**31.644**	**31.645**	**31.647**	**31.649**	**31.650**			

WARDING

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	**31.656**	**31.657**	**31.658**	—	**30.656**	**30.657**	—
5-1/2"	14	**31.659**	**31.660**	**31.661**	—	—	—	**30.661**
6-1/4"	16	**31.663**	**31.664**	**31.666**	**31.667**	**30.663**	**30.664**	**30.666**
7-3/4"	20	**31.668**	**31.669**	**31.670**	—			

SETS of 12 ASSORTED GROBET NEEDLE FILES

The 4" (10 cm), 5-1/2" (14 cm) and 6-1/4"(16 cm) sets consist of one each barrette, crossing, equalling, half-round, joint round edge, knife, marking, round, slitting, square, three-square, and warding. The 7-3/4" (20 cm) sets consists of two each half-round, round and three-square and one each barrette, crossing, equalling, knife, square and warding.

Overall Length (in)	(cm)	KNURLED HANDLES Cut 0	Cut 2	Cut 4	Cut 6
4"	10	**31.672**	**31.673**	—	—
5-1/2"	14	**31.675**	**31.676**	**31.677**	—
6-1/4"	16	**31.679**	**31.680**	**31.681**	**31.682**
7-3/4"	20	**31.683**	**31.684**	—	—

Overall Length (in)	(cm)	PLASTIC HANDLES Cut 0	Cut 2	Cut 4
4"	10	**30.672**	**30.673**	—
5-1/2"	14	**30.675**	**30.676**	**30.677**
6-1/4"	16	**30.679**	**30.680**	**30.681**

6-PIECE SWISS NEEDLE FILE SET WITH HANDLES

- Swiss made
- 5-1/2" (14 cm)
- Has cut portion of 2-1/2" (64 mm)
- Convenient vinyl storage pouch
- Rubber coated plastic handles
- Competitive price

Precision files, for exacting work, especially under magnification. Made of the highest quality steel, machined and finished for precision shape, accuracy and balance.

Set Includes:

One each Half Round, Round, Three-square, Square, Equalling and Warding files.

No.**31.674H**

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VALTITAN NEEDLE & HAND FILES

"The File with the Yellow Tang"

For platinum, 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.

VALTITAN NEEDLE FILES

Overall length is 7" (18 cm), has cut portion of 3-1/4" (80 mm).

BARRETTE

Cut 00	Cut 0	Cut 2
30.100V	30.101V	30.102V

EQUALLING

Cut 00	Cut 0	Cut 2
30.103V	30.104V	30.105V

HALF-ROUND

Cut 00	Cut 0	Cut 2
30.106V	30.107V	30.108V

ROUND

Cut 00	Cut 0	Cut 2
30.118V	30.119V	30.120V

SQUARE

Cut 00	Cut 0	Cut 2
30.115V	30.116V	30.117V

THREE-SQUARE

Cut 00	Cut 0	Cut 2
30.112V	30.113V	30.114V

WARDING

Cut 00	Cut 0	Cut 2
30.109V	30.110V	30.111V

SET of SIX "YELLOW TANG" FILES (ALL BUT WARDING)

Cut 00	Cut 0	Cut 2
30.121V	30.122V	30.123V

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VALTITAN PRECISION FILES

BARRETTE	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	30.201V	30.202V

HALF ROUND	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	30.231V	30.232V
	8"	200	—	30.235V

HALF ROUND SLIM	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	30.241V	30.242V

HAND	Length (in)	Length (mm)	Cut 00	Cut 0	Cut 2
	6"	150	30.210V	30.211V	30.212V
	8"	200	30.213V	30.214V	30.215V

PILLAR	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	30.221V	30.222V

ROUND	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	*30.251V	30.252V
	8"	200	*30.254V	30.255V

*Indicates blunt cut

SQUARE	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	*30.271V	30.272V

*Indicates blunt cut

THREE-SQUARE	Length (in)	Length (mm)	Cut 0	Cut 2
	6"	150	30.261V	30.262V
	8"	200	30.264V	30.265V

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GROBET ESCAPEMENT FILES

Also known as square handled needle files, these precision files are available in most of the needle file shapes. Overall length is 5-1/2" (14 cm), length of cut is 1-9/16" to 2-9/16" (40 to 65 mm) depending upon shape.

BARRETTE	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	31.700	31.701	31.703	31.704	31.705

BARRETTE, PARALLEL	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.708	31.709	31.710	—

CROSSING	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.714	31.715	31.716	—

EQUALLING	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.720	31.721	31.722	—

HALF-ROUND	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	31.724	31.725	31.727	31.728	31.729

KNIFE	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.731	31.732	31.733	—

PILLAR	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.737	31.738	31.739	—

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ROUND	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	31.742	31.743	31.745	31.746	31.747

ROUNDING OFF	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.750	31.751	31.752	—

SQUARE	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	31.754	31.755	31.756	31.757	31.758

THREE-SQUARE	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	31.760	31.761	31.762	31.763	31.764

THREE-SQUARE SLIM AND SHORT	Cut 0	Cut 2	Cut 4	Cut 6	Cut 8
	—	31.766	31.767	31.768	—

SETS of 12 ASSORTED GROBET ESCAPEMENT FILES

Contains 12 assorted files .
Pillar shape not included in sets.

Cut	No.
2	31.770
4	31.771
6	31.772

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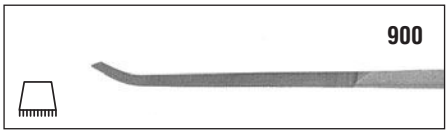
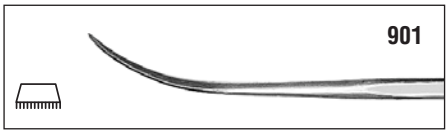
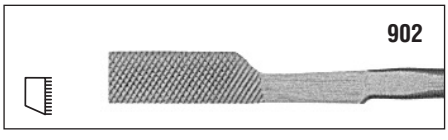
GROBET DIE SINKERS' RIFFLERS

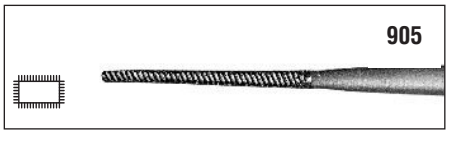
A comprehensive selection of precision rifflers. All are double-ended and 6" (152 mm) long.

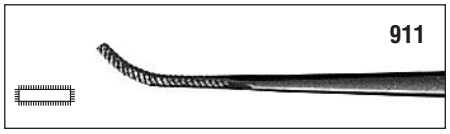
Style No.	Cut 0	Cut 2	Cut 4
900	31.835	31.836	31.837
901	31.838	31.839	31.840
902	31.842	31.843	—
905	31.846	31.847	31.848
911	31.850	31.851	31.852
912	31.854	31.855	31.856
913	31.858	31.859	31.860
914	31.862	31.863	31.864
915	31.865	31.866	31.867
916	32.017	32.018	—
917	31.869	31.870	—
918	31.872	31.873	—
919	31.876	31.877	31.878
920	31.879	31.880	—
930	31.882	31.883	—
931	31.885	31.886	—
940	31.888	31.889	31.890
941	31.892	31.893	31.894
942	31.896	31.897	31.898
943	32.033	32.034	—
950	31.900	—	—
951	31.903	31.904	31.905
952	31.906	31.907	31.908
953	31.910	31.911	—
954	31.914	31.915	31.916
955	31.917	31.918	31.919

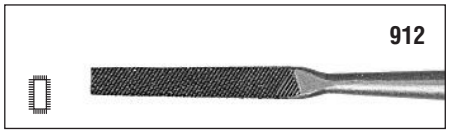


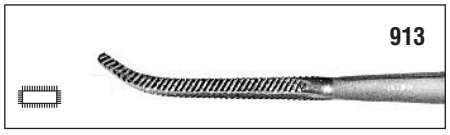


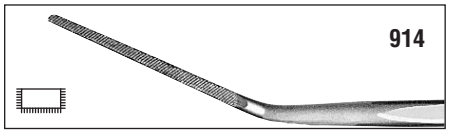


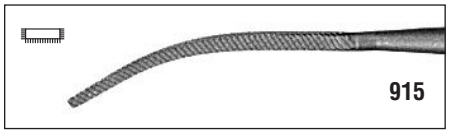


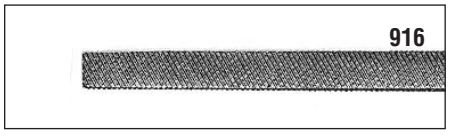


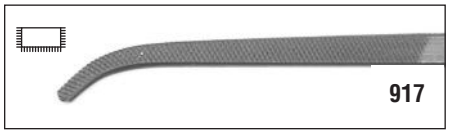


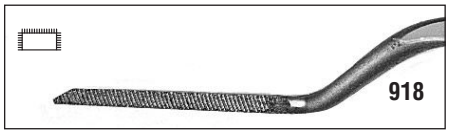


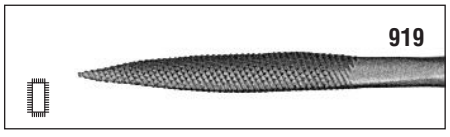


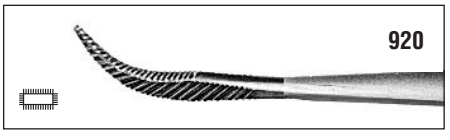


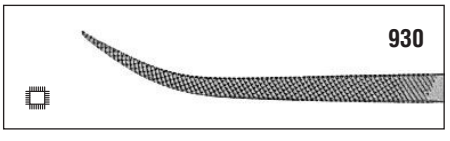


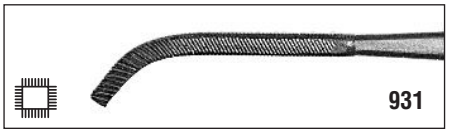


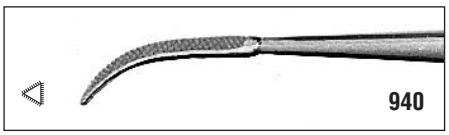


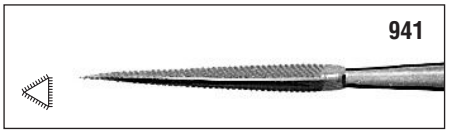


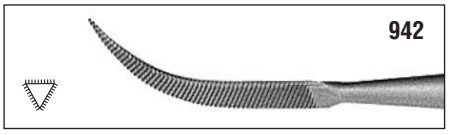


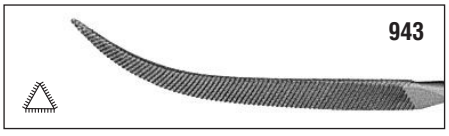


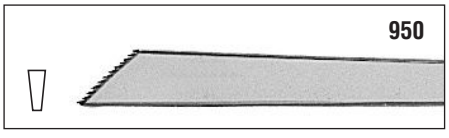


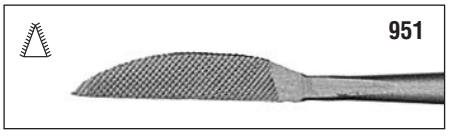


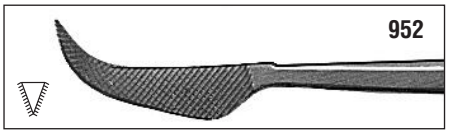


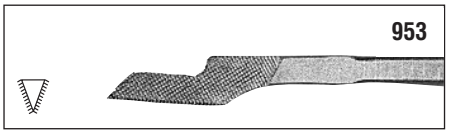


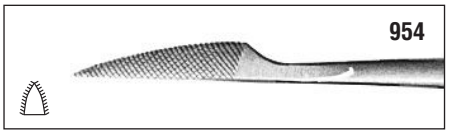


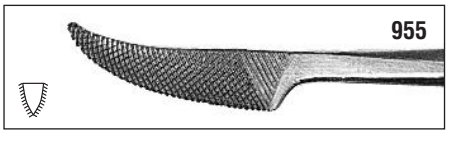












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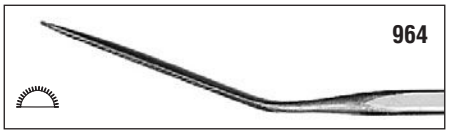
Style No.	Cut 0	Cut 2	Cut 4
956	31.921	31.922	—
957	31.925	31.926	31.927
958	31.929	31.930	31.931
961	31.932	31.933	—
962	31.936	31.937	—
963	31.939	31.940	31.941
964	31.943	31.944	—
965	31.946	31.947	31.948
970	31.950	31.951	31.952
971	31.954	31.955	—
972	31.957	31.958	31.959
973	31.961	31.962	—
974	31.965	31.966	31.967
975	31.969	31.970	—
980	32.019	32.027	32.02702
981	31.972	31.973	31.974
982	31.976	31.977	31.978
983	31.979	31.980	31.981
984	31.983	31.984	31.985
985	31.986	31.987	31.988
986	31.990	31.991	31.992
987	31.994	31.995	31.996
988	31.997	31.998	31.999
990	—	32.002	—
995	32.007	—	—
996	32.010	32.011	32.012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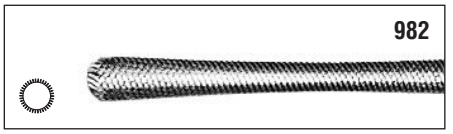
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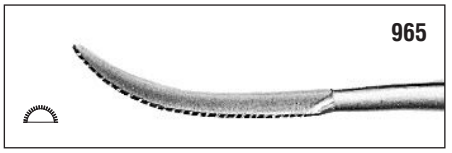
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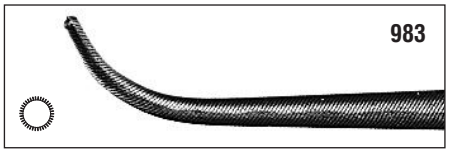
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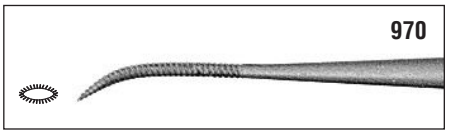
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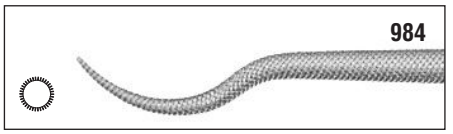
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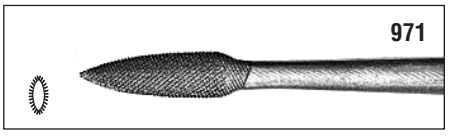
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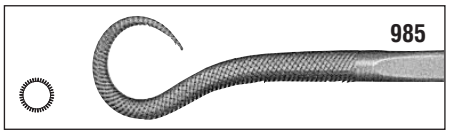
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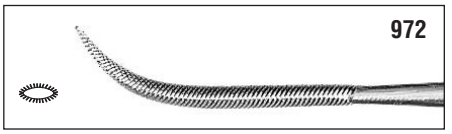
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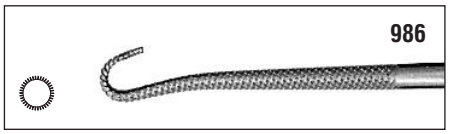
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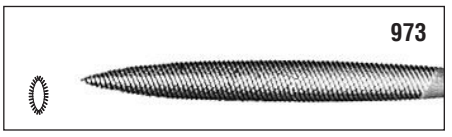
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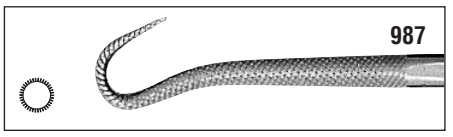
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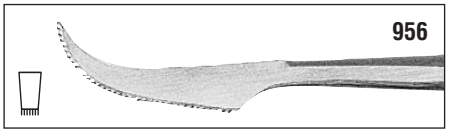
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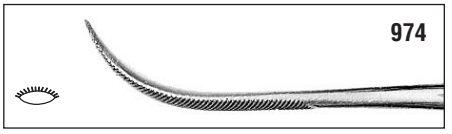
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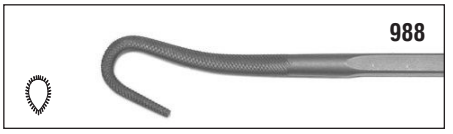
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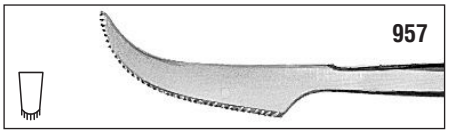
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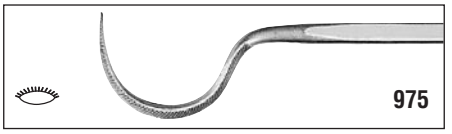
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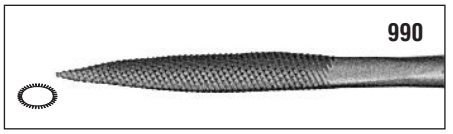
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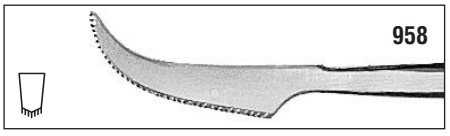
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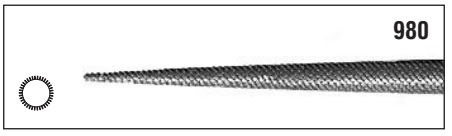
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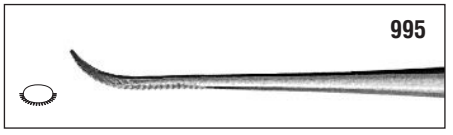
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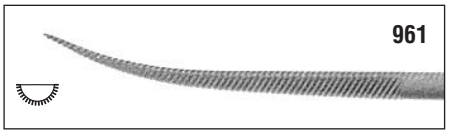
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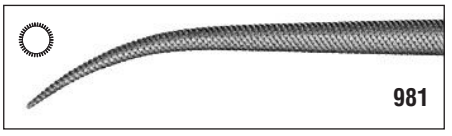
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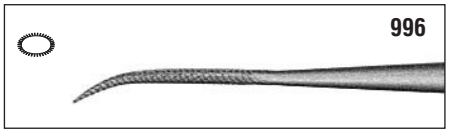
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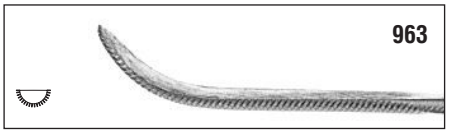
963

SETS OF DIE SINKERS' RIFFLERS

Contain the most widely used shapes from above.

Pieces In Set	Cut 0	Cut 2	Cut 4
12	32.020	32.021	32.022
18	—	32.025	32.026
24	—	32.029	—

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GROBET SILVERSMITHS' RIFFLERS

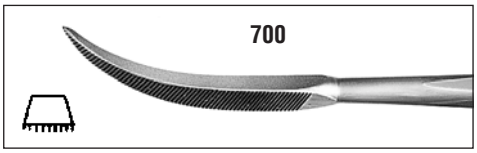
For removing metal and smoothing in tight places. All are double-ended and 7" (17.8 cm) overall.

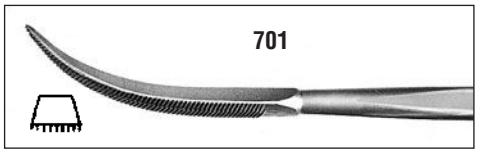
Style Nos.	Cut 0	Cut 2
700	**31.790**	**31.791**
701	**31.792**	—
710	**31.830**	**31.834**
711	**31.794**	**31.795**
712	**31.796**	**31.797**
713	**31.798**	**31.799**
731	**31.800**	**31.801**
732	**31.802**	**31.803**
741	**31.804**	**31.805**
750	**31.806**	**31.807**
761	**31.808**	**31.809**
762	**31.810**	**31.811**
763	**31.812**	**31.813**
764	**31.814**	**31.815**
771	**31.816**	**31.817**
781	**31.818**	**31.819**
782	**31.820**	**31.821**
783	**31.822**	—
790	**31.824**	**31.825**
795	**31.826**	**31.827**
796	—	**31.829**

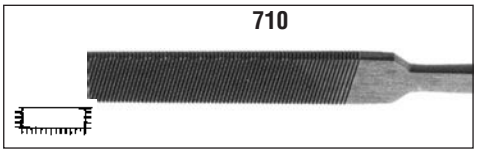
SETS of 12 ASSORTED SILVERSMITHS' RIFFLERS

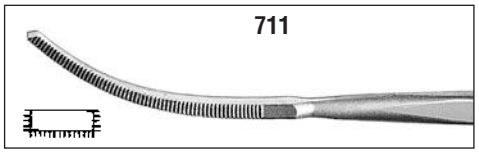
Contain 12 popular riffler shapes from above, in the cut indicated.

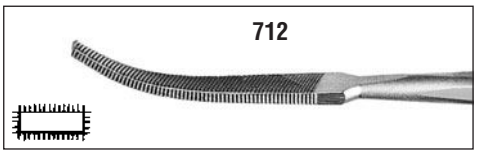
No. **31.831** Cut 0
No. **31.832** Cut 2

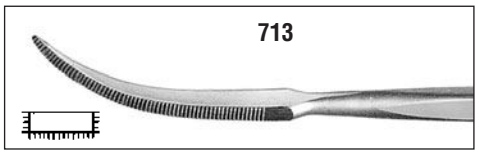


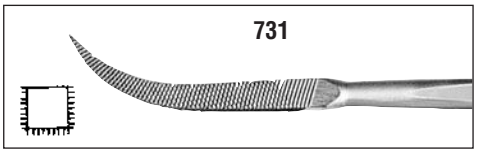


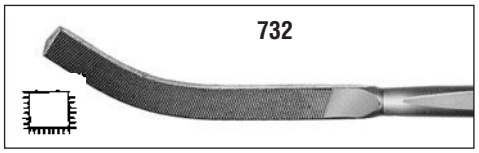


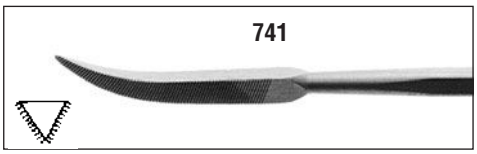


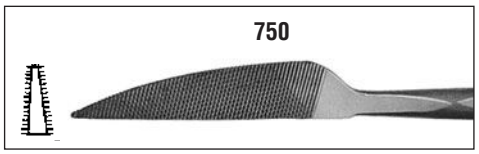


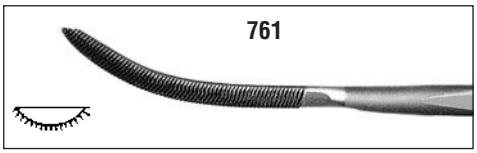


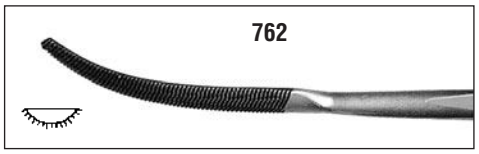


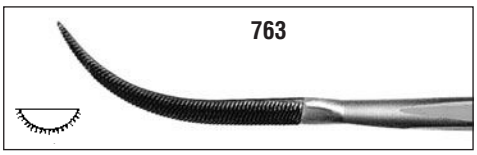


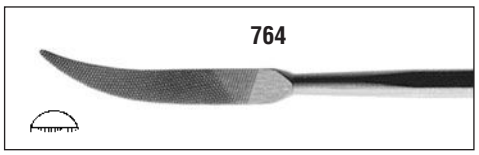


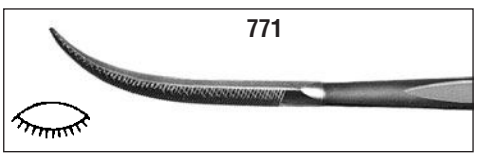


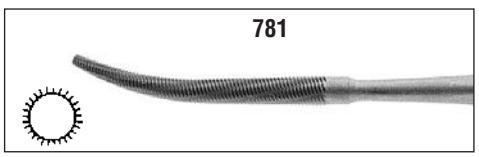


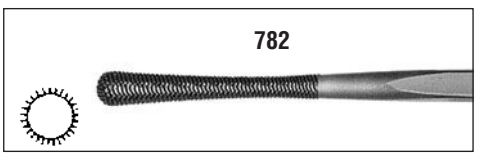


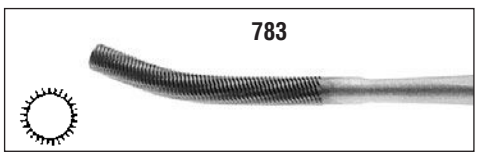


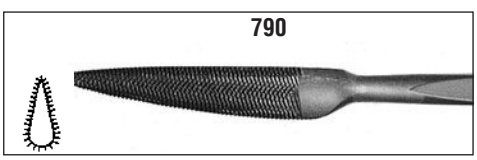


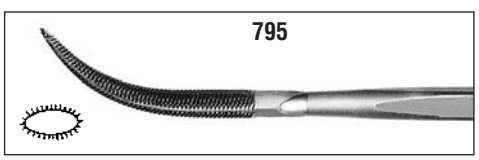


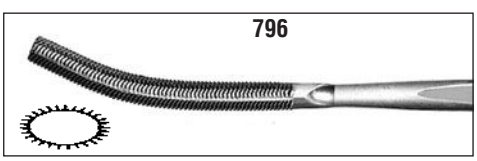












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GROBET TOOL MAKERS' RIFFLERS

This group of 12" (305 mm) tool makers' rifflers rounds out the most complete line of Swiss precision rifflers available to industry anywhere. They are made of chrome-alloy steel for long, efficient life and corrosion resistance. They are contoured to make difficult-to-reach areas readily accessible and are well balanced to facilitate delicate finishing work. All supplied in cut 0. Sold individually.

32.075

32.077

32.079

32.081

32.083

32.085

32.087

32.093

ASSORTED SET of 10 RIFFLERS
32.097

1

1 MASCOT® NEEDLE FILES

Swiss-made, single-cut files do not clog as easily as double-cut. Overall length 5-1/2" (14 cm). Smooth cut only. Sold individually.

No.	Shape
33.860	Equalling
33.861	Flat
33.862	Half-Round
33.863	Round
33.864	Square
33.865	Three-Square

SET of MASCOT® NEEDLE FILES

Set of six contains equalling, flat, half-round, round, square, and three-square styles in a plastic pouch.
No. **33.867**

To Order Contact: Exact Tooling / www.exacttooling.com / sales@exacttooling.com / 888-988-8820

1 SWISS NEEDLE FILES

Well-made, yet economical, Swiss needle files are made of chrome alloy steel. Overall length is 5-1/2" (14 cm), with the cut portion 3" (7.6 cm). Sold by the dozen.

Shape	Medium	Fine
Barrette	**33.880**	**33.881**
Crossing	**33.882**	**33.883**
Equalling	**33.884**	**33.885**
Half-Round	**33.886**	**33.887**
Knife	**33.890**	**33.891**
Square	**33.898**	—
Round	**33.894**	**33.895**
Three-Square	**33.900**	**33.901**
Warding	**33.902**	**33.903**

SETS of SWISS NEEDLE FILES

Assorted shapes in a plastic pouch.

Cut	Set of 6	Set of 12
Medium	**33.906**	**33.908**
Fine	**33.907**	**33.909**

1

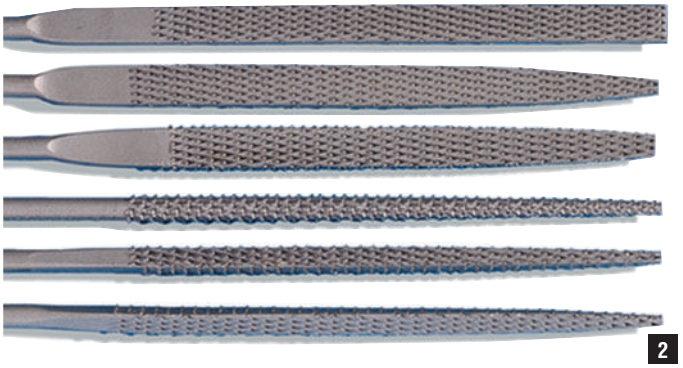
2 SWISS WAX FILES

Excellent for shaping waxes and other materials, such as wood and plastic. Wide-tooth style does not clog as easily as conventional file. Overall length 5-1/2" (14 cm).

No.	Shape	No.	Shape
33.915	Equalling	**33.918**	Round
33.916	Flat	**33.919**	Square
33.917	Half-Round	**33.920**	Three-Square

SET of SWISS WAX FILES

All six shapes listed above in a plastic pouch.
No. **33.922**



2

3 MASCOT® 6 PC UTILITY FILE SET

This handy utility set consists of six American Pattern file shapes: square, half-round, three-square, round, flat, and warding. File cut lengths are approximately 4" (10 cm) with an overall length of 7" (17 cm). Each file has a smooth wooden handle and the set comes in a hanging pouch.
No. **32.510**

3

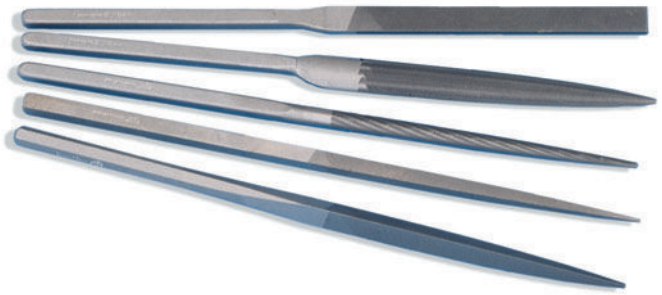
4 HABILIS™ FILES

Habilis files offer the craftsman something different; precision files designed for those "in-between" jobs, too big for needle files and requiring finer control than a larger, heavier file can deliver. The distinctive design includes a built-in handle, so there's no separate handle to buy and they're shaped for easy handling and balanced for efficient cutting. These strong, durable files are ideal for a variety of uses. Length of cut is 4" (10 cm) and the overall length is 8-1/2" (22 cm). Sold individually or in sets as listed.

Shape	Width (in)	Width (mm)	Thickness (in)	Thickness (mm)	Cut 00	Cut 1
Hand	3/8"	9.5	1/8"	3.2	**33.820**	**33.821**
Half-Round	15/32"	11.9	9/64"	3.6	**33.822**	**33.823**
Round	1/4"	6.4	—	—	**33.824**	**33.825**
Square	1/4"	6.4	—	—	**33.826**	**33.827**
Three-Square	3/8"	9.5	—	—	**33.828**	**33.829**

SET of HABILIS™ FILES

Five files, one of each shape, in sturdy vinyl pouch.
No. **33.831** Cut 00
No. **33.832** Cut 1



4

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1

1 HABILIS™ RASPS

For cutting wood, fiberglass, plastics or soft metals. The comfortable-to-use, conveniently-sized Habilis style is now available in five shapes. The built-in handle and balanced feel will help you work faster, with better control. Offered individually in the most popular shapes or as a set of all five.

No. **33.834** Hand
No. **33.835** Half-Round
No. **33.836** Round
No. **33.837** Square
No. **33.838** Three-Square

SET of FIVE HABILIS™ RASPS
No. **33.840**

2

2 HABILIS™ RIFFLERS

Ideal for filing unusually-shaped or hard-to-reach areas.The built-in handles can be used as is, or the specially designed plastic handle (No. 33.848) can be used when a heavier grip is required. Supplied in six individual shapes, five curved and one straight, or as a set of all six plus the plastic handle.

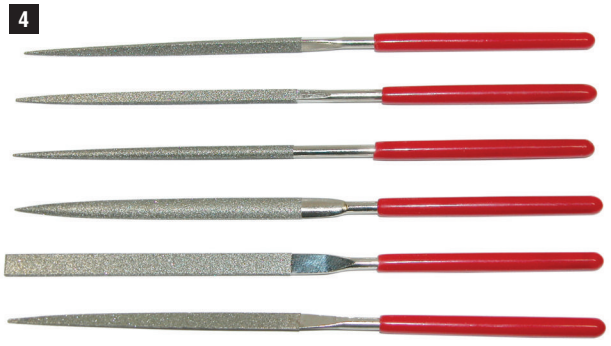
No. **33.842** Hand
No. **33.843** Half-Round
No. **33.844** Round
No. **33.845** Square
No. **33.846** Three-Square
No. **33.847** Knife

SET of SIX with HANDLE
No. **33.850**

3

3 HANDLE for HABILIS RIFFLERS

No. **33.848**



4

4 ECONO DIAMOND NEEDLE FILES

Engineered to deliver performance unequaled by any other file.
For use on ultra-hard materials, metals, ceramics, and glass.
Excellent material removal.
Unique process which bonds the 2-1/2" long diamond surface at an affordable price.
Available in medium grit (120/140) Overall length is 5-1/2" (14 cm).
Sold individually or in sets as listed.

No. **34.011** Barrette
No. **34.012** Equalling
No. **34.013** Half-Round
No. **34.014** Round
No. **34.015** Square
No. **34.016** Three-Square

SET of Five in VINYL POUCH
Contains 5 assorted files from the list above.
No. **34.020**

5

5 DIAMOND NEEDLE FILES

Engineered to deliver performance unequaled by any other file, for use on ultra-hard materials. Carbide, hardened steel, exotic metals, ceramics, and glass are no match for these precision files. Excellent material removal is the result of a unique process which bonds the 2-1/2" (64 mm) long diamond surface. Available in fine grit, medium grit and coarse grit. Sets of Overall length is 5-1/2" (14 cm). Sold individually or in sets as listed.

	Fine Grit (170/220)	Medium Grit (120/140)	Coarse Grit(80/100)
Barrette	**33.958**	**33.980**	**34.004**
Crossing	**33.959**	**33.984**	—
Equalling	**33.961**	**33.971**	**34.005**
Half-Round	**33.962**	**33.972**	**34.006**
Round	**33.963**	**33.973**	**34.007**
Square	**33.964**	**33.974**	**34.008**
Three-Square	**33.965**	**33.975**	**34.009**
Crochet	**33.966**	**33.976**	—
Warding	**33.967**	**33.977**	—
Knife	**33.968**	**33.978**	—

SET of FIVE in VINYL POUCH
Contains one each of equalling, half-round, round, square and three-square.
No. **33.960** Fine grit
No. **33.970** Medium grit

SET of TEN in VINYL POUCH
Contains 10 assorted files listed above.
No. **33.950** Fine grit

1 DIAMOND ESCAPEMENT FILES

These square handle files have an overall length of 5-1/2" (14 cm). Their diamond surface is 1-9/16" to 2-9/16" (40 to 65 mm), according to shape. Used in fine watchmaking, in finishing fine castings, and other delicate work. 126 grit. Sold individually.

No. **33.951** Half-Round
No. **33.952** Crossing
No. **33.953** Three-Square
No. **33.954** Equalling
No. **33.955** Square
No. **33.956** Round

SET of SIX in VINYL POUCH

No. **33.957** - Contains one of each 6 files listed above.

2 HABILIS™ DIAMOND FILES

Excellent for filing large areas of different materials as well as hard plastics, fiberglass, graphite, and epoxy. Can also be used for marble shaping applications. In spite of the heavy-duty applications, these diamond files have a very high resistance to wear. Overall length is 8-1/2" (22 cm), and diamond surface is 4" (10 cm). 126 grit. Sold individually.

No. **33.873** Three-Square
No. **33.874** Square
No. **33.875** Round
No. **33.876** Half-Round
No. **33.877** Hand

SET of FIVE in VINYL POUCH

No. **33.852** - Contains one of each 5 files listed above.

3 DIAMOND RIFFLERS

For easy access to hard-to-reach places. Double-ended with diamond coating on both ends. Overall length is 6" (15 cm). 126 grit. Sold individually.

No. **33.991** Style 15
No. **33.992** Style 18
No. **33.993** Style 20
No. **33.994** Style 22
No. **33.995** Style 16

SET of FIVE in VINYL POUCH

No. **33.996** - Contains one of each 5 files listed above.

4 GROBET USA™ DIAMOND HAND/MACHINE FILES

These tapered files are used in filing inside slots and grooves, where access with parallel files is impossible. They can be used by hand or in any reciprocating machine, and were specially designed for the aluminum extruders industry as well as the plastic mold industry. The diamond coating is 5/8" (15.9 mm). The shank is 1/8". Grits and overall length as shown.

No.	Grit	Head Width (in)	Head Width (mm)	Taper (in)	Taper (mm)	Overall Length (in)	Overall Length (mm)
33.929	325	1/8"	3.2	1/16"	1.6	2-1/4"	57
33.930	200	1/8"	3.2	1/16"	1.6	2-1/4"	57
33.931	600	1/8"	3.2	1/16"	1.6	2-7/8"	73
33.932	325	1/8"	3.2	1/16"	1.6	2-7/8"	73
33.933	200	1/8"	3.2	1/16"	1.6	2-7/8"	73
33.934	600	1/4"	6.2	3/64"	1.2	2-1/4"	57
33.935	325	1/4"	6.2	3/64"	1.2	2-1/4"	57
33.936	600	1/4"	6.2	3/64"	1.2	2-7/8"	73
33.937	325	1/4"	6.2	3/64"	1.2	2-7/8"	73
33.938	200	1/4"	6.2	3/64"	1.2	2-7/8"	73

SET of TEN

No. **33.939** - Contains one of each 10 files listed above.

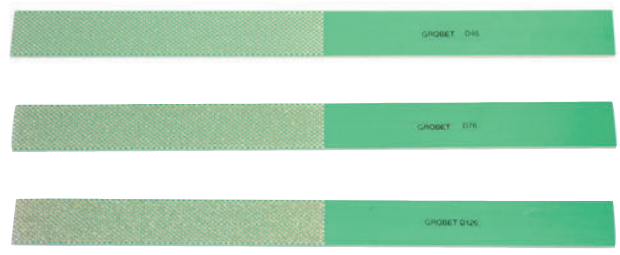
5 GROBET USA® DIAMOND FLEXI-FILES

The unique composite blank makes these files flexible, yet extremely strong and lightweight. The special "Dots" plating system allows for easy removal of the filed material, resulting in a superior finish.

- Reliable Performance • Easy to Clean • Long Lasting
- Available in 3 Grits, Fine, Medium and Coarse

Specifications:6-3/4" length x 9/16" wide x 1/16" thick, Plated length 3-1/2"

No. **33.99701** Fine
No. **33.99702** Medium
No. **33.99703** Coarse



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FILES FOR STRING INSTRUMENT

SWISS FRET FILE
No. **30.950** 4.5", Radius 1mm, Fine
No. **30.951** 4.5", Radius 2mm, Medium
No. **30.952** 4.5", Radius 3mm, Large

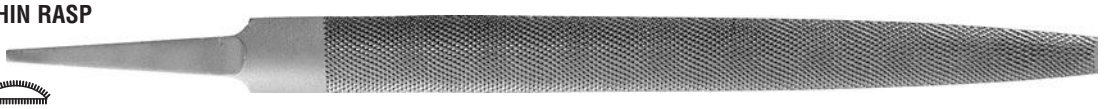
SWISS DIAMOND FRET FILE
No. **30.955** 4.5", Radius 2.5mm, Grit 46
No. **30.956** 4.5", Radius 2.5mm, Grit 76

SWISS DIAMOND FRET FILE
No. **30.957** 9", Radius 3mm, Grit 46
No. **30.958** 9", Radius 3mm, Grit 76

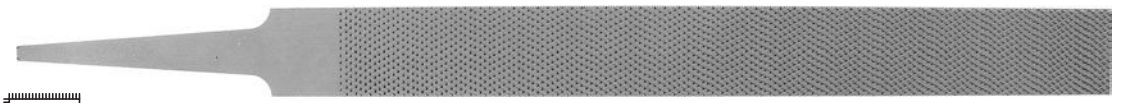
SWISS SINGLE CUT BARRETTE FILE
No. **30.960** 5", Cut 1

SWISS THREE SQUARE FRET FILE
No. **30.961** 18 cm, Cut 3

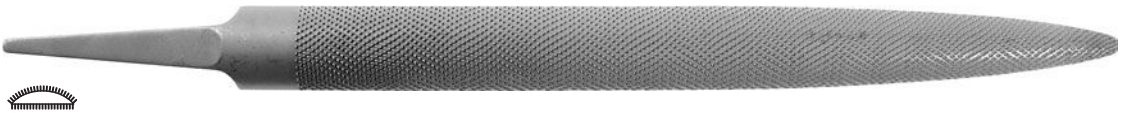
SWISS HALF ROUND SLIM THIN RASP
No. **30.965** 10", Cut 5
No. **30.966** 10", Cut 6



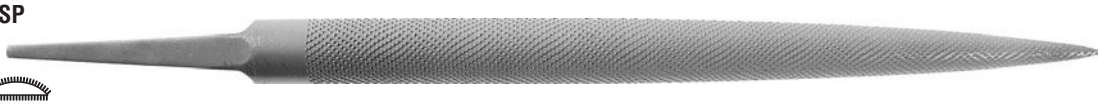
SWISS HAND RASP
No. **30.968** 8", Cut 6
No. **30.969** 6", Cut 7
No. **30.970** 10", Cut 7



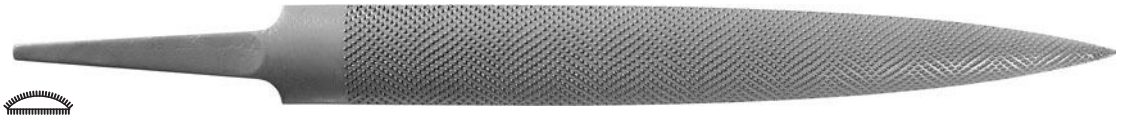
SWISS HALFROUND RASP
No. **30.971** 8", Cut 6
No. **30.972** 6", Cut 7
No. **30.973** 10", Cut 7



SWISS HALFROUND SLIM RASP
No. **30.975** 8", Cut 6
No. **30.976** 6", Cut 7



SWISS HALFROUND CABINET RASP
No. **30.980** 8", Cut 6
No. **30.981** 10", Cut 6
No. **30.982** 6", Cut 7
No. **30.983** 10", Cut 7



SWISS ROUND RASP
No. **30.985** 6", Cut 7
No. **30.986** 8", Cut 6
No. **30.987** 10", Cut 6

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Ski files **THE NEW TUNING TECHNOLOGY**

DIAMOND PLATES

New diamond plates with an ergonomic shape ensuring an improved comfort use. The high quality diamond combined with a brand new design, split on 2 areas, give the user a better work flexibility and provide an optimal contact with the edge. The new Icecut diamond plates guarantee a smooth finish and precise work in all circumstances!

No.	Grit		Length (in)	Length (mm)
32.187	1000	Extra Fine	4"	100
32.188	600	Fine	4"	100
32.189	400	Medium	4"	100
32.190	200	Coarse	4"	100

PROFESSIONAL

Due to their high level of precision and performance, these files are considered as a global reference by the world's most renowned professional skimen. They are chosen by the most demanding users for their smooth and consistent bite. Chrome-plated or non-chrome, it's your choice!

Flash Chrome-Plated	Non-Chrome-plated	Grit	Length (in)	Length (mm)	Length (CM)
32.135	**32.13501**	600 Fine	6"	150	20

Flash Chrome-Plated	Non-Chrome-plated	Grit	Length (in)	Length (mm)	Length (CM)
32.136	**32.13601**	400 Medium	8"	200	16

Flash Chrome-Plated	Non-Chrome-plated	Grit	Length (in)	Length (mm)	Length (CM)
32.137	**32.13701**	200 Coarse	8"	200	13

RACE FILE

Manufactured in a special steel and issue from the last technology of cut, this file presents three major advantages compared with a traditional ski file: it sharpens faster, enjoys broadly/widely increased life time and gives to the edges a powerful sharp side.
The best file for the advanced sportsman, the workshop of preparation and for the professional skier.

No.	Grit		Length (in)	Length (mm)	TPI
32.115	1000	Extra Fine	4"	100	22

No.	Grit		Length (in)	Length (mm)	TPI
32.116	600	Fine	4"	100	17

No.	Grit		Length (in)	Length (mm)	TPI
32.117	400	Medium	4"	100	13

CARVING

FLASH CHROME-PLATED ***NON CHROME-PLATED**

Identical to the Professional range, but 5" / 120 mm in size; these files are particularly well suited for tuning SL and GS skis and snowboards.

Flash Chrome-Plated	Grit		Length (in)	Length (mm)	(CM)
32.138	600	Fine	5"	120	20

Flash Chrome-Plated	Grit		Length (in)	Length (mm)	(CM)
32.139	400	Medium	5"	120	16

Flash Chrome-Plated	Grit		Length (in)	Length (mm)	(CM)
32.140	200	Coarse	5"	120	13

Non Chrome-plated	Grit		Length (in)	Length (mm)	(CM)
32.14001	200	Coarse	5"	120	13

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FILE HANDLE SIZE RECOMMENDED

SWISS PRECISION FILES

File Length	4"	6"	8"	10"	12"	14"
Type/Shape						
Barrette	3	4	5	–	–	–
Checkering	–	4	–	–	–	–
Crochet	3	4	5	–	–	–
Crossing	2	4	5	–	–	–
Equalling	2	3	4	–	–	–
Half-Round	3	4	5	6	–	–
Hand	3	4	5	6	7	–
Knife	3	4	5	6	7	7
Pillar	3	4	4	6	6	–
Pippin	3	4	5	–	–	–
Round	1	3	4	5	–	–
Round Parallel: 3/16" (4.8 mm)	–	2	3	–	–	–
Round Parallel: 1/4" (6.4 mm)	–	2	3	–	–	–
Round Parallel: 1/8" (3.2 mm)	1	1	–	–	–	–
Round Parallel: 5/32" (4.0 mm)	1	1	–	–	–	–
Round Parallel: 3/8" (9.5 mm)	–	–	4	–	–	–
Slitting	2	4	–	–	–	–
Square	2	3	4	5	6	–
Three-Square	2	4	4	5	6	–
Warding	2	4	5	6	7	–

AMERICAN PATTERN FILES

File Length	4"	5"	6"	7"	8"	10"	12"	14"	16"
Type/Shape									
Aluminum Type A Flat	–	–	4	–	5	5	6	–	–
Aluminum Type A, Half-Round	–	–	4	–	5	6	7	–	–
Cabinet Rasp, Half-Round	–	–	–	–	5	5/6	6	–	–
Cant Saw	–	–	4	–	5	5	–	–	–
Chain Saw Round 5/32" (4.0 mm), 3/16" (4.8 mm) dia.	–	–	–	–	2	–	–	–	–
Chain Saw Rnd 13/64" (5.2 mm) dia.	–	–	–	–	3	–	–	–	–
Cross Cut	–	–	–	–	5	6	–	–	–
Flat	3	–	4	–	5	6	6	7	8
Half- Round	3	–	4	–	5	6	7	7	7
Hand	–	–	4	–	5	5/6	7	–	–
High Speed Chipbreaker	–	–	–	–	5	6	7	–	–
Knife	3	–	4	–	4/5	5/6	–	–	–
Long Angle Lathe	–	–	–	–	–	5/6	6	7/8	–
Mill	3	–	4	–	5	5/6	6/7	7	8
Pillar	–	–	4	–	5	–	–	–	–
Pipe-Liner	–	–	–	–	–	–	–	7	–
Round	1	–	3	–	4	4	5	6	–
Square	1/2	–	3/4	–	4	4/5	5/6	6/7	–
Taper, Regular	–	–	4	4	5	5/6	–	–	–
Taper, Slim	1	2	3	3/4	4	5	–	–	–
Taper, Extra Slim	1	2	2	2/3	3	–	–	–	–
Taper, Double Extra Slim	–	1	1	–	3	–	–	–	–
Three Square	–	–	4	–	5	6	–	–	–
Warding	3	–	4	–	5	5	–	–	–
Milled Curved Tooth, Flat	–	–	–	–	5	5	6	7	–
Milled Curved Tooth, Flat Utility	–	–	–	–	5	6	–	–	–
Half Round Solid	–	–	–	–	5	6	7	–	–

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FILE HANDLES

1 BLUE PLASTIC FILE HANDLES/METAL GRIPPING INSERT

Unbreakable plastic, with textured surface for a non-slip grip. Specially shaped to fit the hand for working comfort even over long periods. Hole at top permits convenient hang-up storage. Tang-gripping insert is tempered metal, with two threaded sections of different diameters. This assures proper alignment and positive hold for files, and also allows handle to be reused. Simply unscrew the file in use and insert a new one. Refer to separate charts on page 38 for Swiss Precision, American Pattern files.

No.	File Handle Size	No.	File Handle Size
37.781	1	**37.785**	5
37.782	2	**37.786**	6
37.783	3	**37.787**	7
37.784	4	**37.788**	8

2 BLUE PLASTIC FILE HANDLES/PLASTIC GRIPPING INSERT

Unbreakable plastic, with textured surface for non-slip grip and specially shaped to fit the hand for working comfort even over long periods. Hole at top permits convenient hang-up storage near work bench. Has plastic gripping insert.

No.	ID (mm)
37.815	4 mm
37.816	6 mm
37.817	8 mm
37.818	10 mm

3 PLASTIC FILE HANDLES for GROBET SWISS AMERICAN PATTERN FILES

Unbreakable plastic, bright handles with textured surface for a non-slip grip. Ergonomically designed to fit the hand for comfort.

	File Length		File Size	
No.	(in)	(mm)	(in)	(mm)
37.811S	3-1/2"	90	4"-6"	100-150
37.812S	4-1/4"	110	6"-12"	150-300
37.813S	4-1/4"	110	12"-14"	300-350

4 BLACK PLASTIC FILE HANDLES/PLASTIC GRIPPING INSERT

Unbreakable plastic, with textured surface for non-slip grip and specially shaped to fit the hand for working comfort even over long periods. Hole at top permits convenient hang-up storage near work bench. Has five plastic gripping inserts.
No. **37.854**

5 RED PLASTIC FILE HANDLES/PLASTIC GRIPPING INSERT

Unbreakable plastic, with textured surface for non-slip grip and specially shaped to fit the hand for working comfort even over long periods. Has five plastic gripping inserts.
No. **37.855**

6 ADJUSTABLE FLEXIBLE FILE HOLDER

Holder can easily be adjusted for curving file outward or inward. Holder can be used with either 12" or 14" files.
No. **37.840**

1 WOOD FILE HANDLES
With natural finish. Wound wire ferrule provides extra strength to prevent splitting. Select handle to fit files 2" to 20" (5.1 to 51 cm).
No. **37.791** 2"-4" (5-10 cm)
No. **37.792** 4"-6" (10-15 cm)
No. **37.793** 6"-10" (15-25 cm)
No. **37.794** 10"-14" (25-35 cm)
No. **37.795** 14"-16" (35-40 cm)
No. **37.796** 16"-20" (40-50 cm)

2 LUTZ WOOD FILE HANDLES
Sturdy, force-fit type of handle.
No. **37.801** 3"-6" (7.5-15 cm)
No. **37.802** 6"-8" (15-20 cm)
No. **37.803** 8"-12" (20-30 cm)
No. **37.804** 14"-16" (35-40 cm)

3 SKROO-ZON WOOD FILE HANDLES
Steel die inside wood handle cuts its own thread on file tang.
No. **37.820** For 6" (152 mm) files only.

4 FILE and BURNISHER HANDLE
Hardwood handle with metal ferrule. Overall length 3-3/4" (95.3 mm), 1/2" (12.7 mm) diameter.
No. **37.822**

5 NEEDLE FILE HANDLE
Precision chuck in smooth wooden handle holds 5-1/2" (14 cm) and 6-1/4" (16 cm) needle files securely.
No. **37.830**

6 NEEDLE FILE STAND
Attractive metal stand conveniently holds and displays up to 12 needle files in 4" (10 cm), 5-1/2" (14 cm), or 6-1/4" (16 cm) lengths. Free-standing on workbench, hanging on a peg, or snapped closed for carrying, this stand keeps your frequently used files visible and handy at all times. (Files not included.)
No. **31.685**

7 FILE CLEANER with BRUSH
Steel wire bristles mounted on wood handle with handy brush on reverse side. Overall length 10" (25 cm).
No. **33.979**

8 FILE CLEANER
Steel wire bristles mounted on wood handle, for removing particles clogging teeth of file. Overall length 10" (25 cm).
No. **33.981**

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STANDARD CUT

Most commonly used for general purpose deburring of steel, cast iron and other ferrous materials.

DOUBLE CUT

Basically a standard cut tool, with cuts made on the left hand spiral. The design produces a finer finish on material and reduces the size of the chips and slivers. It gives greater tool control.

BEAR CUT

Designed to substantially cut manufacturing production costs. This design and cut removes more material per hour. Engineered for heavy-duty applications. More durable due to the depth of the teeth. More resistant to chipping. Wider teeth make longer chips, which break up easier, and the profile of the teeth makes them less prone to filling up with chips.

ALUMNA CUT

For use on aluminum, magnesium, soft steel and non-ferrous materials such as hard plastic, rubber and wood. Provides easy chip flow and faster stock removal with little or no clogging.

MAXIMUM RECOMMENDED SPEEDS FOR STANDARD CUT CARBIDE ROTARY FILES

Head Diameter	Table 1*	Table 2*	Head Diameter	Table 1*	Table 2*	Head Diameter	Table 1*	Table 2*
1/16"	50,000	75,000	5/16"	20,000	30,000	5/8"	15,000	23,000
3/32"	40,000	60,000	3/8"	18,000	27,000	3/4"	14,000	21,000
1/8"	35,000	53,000	7/16"	17,000	26,000	7/8"	13,000	20,000
3/16"	25,000	38,000	1/2"	16,000	24,000	1"	12,000	18,000
1/4"	22,000	33,000						

Table 1 - for use in determining maximum recommended speeds for malleable iron, steel welds, cast iron, tool steels, die steels, bronze, brass and aluminum

Table 2 - for use in determining maximum recommended speeds for stainless steel.

IMPORTANT: 6" SHANKS SHOULD BE RUN 20% TO 25% LESS RPM

CYLINDRICAL - Plain end

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SA61	1/16"	1/4"	1-1/2"	3/32"	**32.80902**	**32.80903**	—	—
SA41	1/16"	1/4"	1-1/2"	1/8"	**32.81502**	**32.81503**	—	—
SA62	5/64"	5/16"	1-1/2"	3/32"	**32.810**	**32.811**	—	—
SA63	3/32"	3/8"	1-1/2"	3/32"	**32.814**	**32.815**	—	—
SA42	3/32"	1/2"	1-1/2"	1/8"	**32.832**	**32.833**	—	—
SA43	1/8"	1/2"	1-1/2"	1/8"	**32.835**	**32.836**	—	—
SA11	1/8"	1/2"	2"	1/4"	**32.540**	**32.541**	—	—
SA12	1/8"	5/8"	2"	1/4"	**32.54102**	**32.54103**	—	—
SA13	5/32"	5/8"	2"	1/4"	**32.54110**	**32.54111**	—	—
SA14	3/16"	5/8"	2"	1/4"	**32.543**	**32.544**	—	—
SA51	1/4"	1/2"	2"	1/8"	**32.838**	**32.839**	—	—
SA1	1/4"	5/8"	2"	1/4"	**32.546**	**32.547**	**32.546SY**	**32.95002**
SA1L6	1/4"	1/2"	6"	1/4"	**32.93522**	**32.93523**	—	—
SA1L	1/4"	1"	2"	1/4"	**32.54702**	**32.54703**	—	—
SA2	5/16"	3/4"	2-1/2"	1/4"	**32.549**	**32.550**	—	—
SA3	3/8"	3/4"	2-1/2"	1/4"	**32.552**	**32.553**	**32.552SY**	**32.95011**
SA3L6	3/8"	3/4"	6"	1/4"	**32.93537**	**32.93538**	—	—
SA3L	3/8"	1"	2-3/4"	1/4"	**32.55302**	**32.55303**	—	—
SA3X	3/8"	1-1/2"	3-1/4"	1/4"	**32.55310**	**32.55311**	—	—
SA4	7/16"	1"	2-3/4"	1/4"	**32.55320**	**32.55321**	**32.55320SY**	—
SA5	1/2"	1"	2-3/4"	1/4"	**32.555**	**32.556**	**32.555SY**	**32.95017**
SA5L6	1/2"	1"	6"	1/4"	**32.93557**	**32.93558**	—	—
SA6	5/8"	1"	2-3/4"	1/4"	**32.558**	**32.559**	**32.558SY**	**32.95020**
SA15	3/4"	1/2"	2-1/4"	1/4"	**32.55902**	**32.55903**	—	—
SA16	3/4"	3/4"	2-1/2"	1/4"	**32.561**	**32.562**	—	—
SA7	3/4"	1"	2-3/4"	1/4"	**32.564**	**32.565**	—	**32.95023**
SA8	7/8"	1"	2-3/4"	1/4"	**32.56502**	**32.56503**	—	—
SA9	1"	1"	2-3/4"	1/4"	**32.567**	**32.568**	—	—

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CYLINDRICAL - End cut

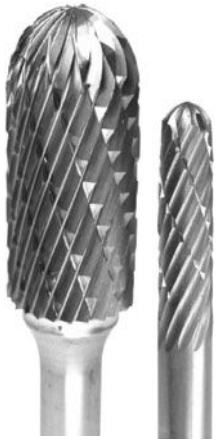
SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SB43	1/8"	9/16"	1-1/2"	1/8"	**32.83902**	**32.83903**	—	—
SB11	1/8"	1/2"	2"	1/4"	**32.573**	**32.574**	—	—
SB12	1/8"	5/8"	2"	1/4"	**32.57402**	**32.57403**	—	—
SB13	5/32"	5/8"	2"	1/4"	**32.57410**	**32.57411**	—	—
SB14	3/16"	5/8"	2"	1/4"	**32.576**	**32.577**	—	—
SB51	1/4"	3/16"	2"	1/8"	**32.83910**	**32.83911**	—	—
SB1	1/4"	5/8"	2"	1/4"	**32.579**	**32.580**	—	—
SB1L	1/4"	1"	2"	1/4"	**32.58002**	**32.58003**	—	—
SB2	5/16"	3/4"	2-1/2"	1/4"	**32.582**	**32.583**	—	—
SB3	3/8"	3/4"	2-1/2"	1/4"	**32.585**	**32.586**	—	—
SB3L	3/8"	1"	2-3/4"	1/4"	**32.58602**	**32.58603**	—	—
SB3X	3/8"	1-1/2"	3-1/4"	1/4"	**32.58611**	**32.58612**	—	—
SB4	7/16"	1"	2-3/4"	1/4"	**32.58621**	**32.58622**	—	—
SB5	1/2"	1"	2-3/4"	1/4"	**32.588**	**32.589**	—	—
SB6	5/8"	1"	2-3/4"	1/4"	**32.591**	**32.592**	—	—
SB15	3/4"	1/2"	2-1/4"	1/4"	**32.59202**	**32.59203**	—	—
SB16	3/4"	3/4"	2-1/2"	1/4"	**32.594**	**32.595**	—	—
SB7	3/4"	1"	2-3/4"	1/4"	**32.597**	**32.598**	—	—
SB8	7/8"	1"	2-3/4"	1/4"	**32.59802**	**32.59803**	—	—
SB9	1"	1"	2-3/4"	1/4"	**32.600**	**32.601**	—	—

CYLINDRICAL - Double End cut

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SBECO	1/8"	—	1-1/2"	1/8"	**32.841**	—	—	—

CYLINDRICAL - Radius end

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SC61	3/32"	3/8"	1-1/2"	3/32"	**32.817**	**32.818**	—	—
SC41	3/32"	1/2"	1-1/2"	1/8"	**32.844**	**32.845**	—	—
SC42	1/8"	1/2"	1-1/2"	1/8"	**32.847**	**32.848**	—	—
SC11	1/8"	1/2"	2"	1/4"	**32.606**	**32.607**	—	—
SC12	1/8"	5/8"	2"	1/4"	**32.60702**	**32.60703**	—	—
SC13	5/32"	5/8"	2"	1/4"	**32.60710**	**32.60711**	—	—
SC14	3/16"	5/8"	2"	1/4"	**32.609**	**32.610**	—	—
SC53	3/16"	1/2"	2"	1/8"	—	**32.85111**	—	—
SC51	1/4"	1/2"	2"	1/8"	**32.850**	**32.851**	—	—
SC1	1/4"	5/8"	2"	1/4"	**32.612**	**32.613**	—	**32.95102**
SC1L6	1/4"	1/2"	6"	1/4"	**32.93722**	**32.93723**	—	—
SC1L	1/4"	1"	2"	1/4"	**32.61302**	**32.61303**	—	—
SC2	5/16"	3/4"	2-1/2"	1/4"	**32.615**	**32.616**	—	—
SC3	3/8"	3/4"	2-1/2"	1/4"	**32.618**	**32.619**	**32.618SY**	**32.95111**
SC3L6	3/8"	3/4"	6"	1/4"	**32.93737**	**32.93738**	—	—
SC3L	3/8"	1"	2-3/4"	1/4"	**32.61902**	**32.61903**	—	—
SC3X	3/8"	1-1/2"	3-1/4"	1/4"	**32.61910**	**32.61911**	—	—
SC4	7/16"	1"	2-3/4"	1/4"	**32.61912**	**32.61913**	**32.61912SY**	—
SC5	1/2"	1"	2-3/4"	1/4"	**32.621**	**32.622**	**32.621SY**	**32.95117**
SC5L6	1/2"	1"	6"	1/4"	**32.93757**	**32.93758**	—	—
SC6	5/8"	1"	2-3/4"	1/4"	**32.624**	**32.625**	**32.624SY**	**32.95120**
SC15	3/4"	1/2"	2-1/4"	1/4"	**32.62502**	**32.62503**	—	—
SC16	3/4"	3/4"	2-1/2"	1/4"	**32.62510**	**32.62511**	—	—
SC7	3/4"	1"	2-3/4"	1/4"	**32.627**	**32.628**	—	**32.95123**
SC9	1"	1"	2-3/4"	1/4"	**32.62802**	**32.62803**	—	—



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BALL

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SD41	3/32"	1/8"	1-1/2"	1/8"	32.853	32.854	—	—
SD61	3/32"	1/8"	1-1/2"	3/32"	32.820	32.821	—	—
SD42	1/8"	1/8"	1-1/2"	1/8"	32.856	32.857	—	—
SD11	1/8"	1/8"	2"	1/4"	32.633	32.634	—	—
SD53	3/16"	3/16"	1-11/16"	1/8"	32.858	32.861	—	—
SD14	3/16"	1/4"	2"	1/4"	32.636	32.637	—	—
SD51	1/4"	1/4"	1-3/4"	1/8"	32.859	32.860	—	—
SD1	1/4"	7/32"	2"	1/4"	32.639	32.640	—	32.95305
SD1L6	1/4"	7/32"	6"	1/4"	32.93812	32.93813	—	—
SD2	5/16"	5/16"	2-1/16"	1/4"	32.642	32.644	—	—
SD3	3/8"	5/16"	2-1/16"	1/4"	32.645	32.646	32.645SY	32.95311
SD3L6	3/8"	5/16"	6"	1/4"	32.93822	32.93823	—	—
SD4	7/16"	3/8"	2-1/8"	1/4"	32.64602	32.64603	32.64602SY	—
SD5	1/2"	7/16"	2-3/16"	1/4"	32.648	32.649	32.648SY	32.95317
SD5L6	1/2"	7/16"	6"	1/4"	32.93832	32.93833	—	—
SD6	5/8"	9/16"	2-5/16"	1/4"	32.651	32.652	32.651SY	32.95320
SD7	3/4"	11/16"	2-7/16"	1/4"	32.654	32.655	—	32.95323
SD9	1"	15/16"	2-11/16"	1/4"	32.65502	32.65503	—	—

OVAL

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SE61	3/32"	1/8"	1-1/2"	3/32"	32.86102	32.86103	—	—
SE41	1/8"	7/32"	1-1/2"	1/8"	32.862	32.863	—	—
SE11	3/16"	5/16"	2"	1/4"	32.65902	32.65903	—	—
SE53	3/16"	9/32"	1-1/2"	1/8"	—	32.86603	—	—
SE51	1/4"	3/8"	1-7/8"	1/8"	32.865	32.866	—	—
SE1	1/4"	3/8"	2"	1/4"	32.660	32.661	—	—
SE1L6	1/4"	3/8"	6"	1/4"	32.93907	32.93908	—	—
SE3	3/8"	19/32"	2-11/32"	1/4"	32.663	32.664	32.663SY	32.95411
SE3L6	3/8"	19/32"	6"	1/4"	32.93912	32.93913	—	—
SE5	1/2"	7/8"	2-5/8"	1/4"	32.666	32.667	32.666SY	32.95417
SE5L6	1/2"	7/8"	6"	1/4"	32.93917	32.93918	—	—
SE6	5/8"	1"	2-3/4"	1/4"	32.669	32.670	32.669SY	32.95420
SE7	3/4"	1"	2-3/4"	1/4"	32.67002	32.67003	—	32.95423

TREE RADIUS

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SF61	3/32"	1/4"	1-1/2"	3/32"	32.88802	32.88803	—	—
SF41	1/8"	1/4"	1-1/2"	1/8"	32.889	32.890	—	—
SF42	1/8"	1/2"	1-1/2"	1/8"	32.892	32.893	—	—
SF51	1/4"	1/2"	2"	1/8"	32.895	32.896	—	—
SF11	1/4"	1/2"	2"	1/4"	32.70102	32.70103	—	—
SF1	1/4"	5/8"	2"	1/4"	32.702	32.703	—	32.95705
SF1L6	1/4"	1/2"	6"	1/4"	32.94207	32.94208	—	—
SF3	3/8"	3/4"	2-1/2"	1/4"	32.705	32.706	32.705SY	32.95711
SF3L6	3/8"	3/4"	6"	1/4"	32.94212	32.94213	—	—
SF4	7/16"	1"	2-3/4"	1/4"	32.70602	32.70603	32.70602SY	—
SF13	1/2"	3/4"	2-1/2"	1/4"	32.70610	32.70611	32.70610SY	—
SF5	1/2"	1"	2-3/4"	1/4"	32.708	32.709	32.708SY	32.95717
SF5L6	1/2"	1"	6"	1/4"	32.94227	32.94228	—	—
SF6	5/8"	1"	2-3/4"	1/4"	32.711	32.712	32.711SY	32.95720
SF7	3/4"	1"	2-3/4"	1/4"	32.71202	32.71203	—	—
SF14	3/4"	1-1/4"	3"	1/4"	32.714	32.715	—	32.95744
SF15	3/4"	1-1/2"	3-1/4"	1/4"	32.71502	32.71503	—	—

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TREE POINTED

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SG61	3/32"	1/4"	1-1/2"	3/32"	32.87902	32.87903	—	—
SG41	1/8"	1/4"	1-1/2"	1/8"	32.880	32.881	—	—
SG42	1/8"	5/16"	1-1/2"	1/8"	32.88102	32.88103	—	—
SG43	1/8"	3/8"	1-1/2"	1/8"	32.883	32.884	—	—
SG44	1/8"	1/2"	1-1/2"	1/8"	32.88402	32.88403	—	—
SG51	1/4"	1/2"	2"	1/8"	32.886	32.887	—	—
SG1	1/4"	5/8"	2"	1/4"	32.684	32.685	—	—
SG1L6	1/4"	1/2"	6"	1/4"	32.94102	32.94103	—	—
SG2	5/16"	3/4"	2-1/2"	1/4"	32.68502	32.68503	—	—
SG3	3/8"	3/4"	2-1/2"	1/4"	32.687	32.688	32.687SY	—
SG3L6	3/8"	3/4"	6"	1/4"	32.94112	32.94113	—	—
SG13	1/2"	3/4"	2-1/2"	1/4"	32.690	32.691	32.690SY	—
SG5	1/2"	1"	2-3/4"	1/4"	32.693	32.694	32.693SY	—
SG5L6	1/2"	1"	6"	1/4"	32.94122	32.94123	—	—
SG6	5/8"	1"	2-3/4"	1/4"	32.696	32.697	32.696SY	—
SG7	3/4"	1"	2-3/4"	1/4"	32.69702	32.69703	—	—
SG15	3/4"	1-1/2"	3-1/4"	1/4"	32.69710	32.69711	—	—

FLAME

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SH41	1/8"	1/4"	1-1/2"	1/8"	32.868	32.869	—	—
SH53	3/16"	3/8"	1-7/8"	1/8"	—	32.86903	—	—
SH1	1/4"	5/8"	2"	1/4"	32.673	32.674	—	—
SH2	5/16"	3/4"	2-1/2"	1/4"	32.675	32.676	—	—
SH2L6	5/16"	3/4"	6"	1/4"	32.94007	32.94008	—	—
SH5	1/2"	1-1/4"	3"	1/4"	32.678	32.679	—	—
SH5L6	1/2"	1-1/4"	6"	1/4"	32.94012	32.94013	—	—
SH6	5/8"	1-7/16"	3-3/16"	1/4"	32.67902	32.67903	—	—
SH7	3/4"	1-5/8"	3-3/8"	1/4"	32.67910	32.67911	—	—

DEBURRING 60°

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SJ1	1/4"	3/16"	2"	1/4"	32.777	32.778	—	—
SJ3	3/8"	5/16"	2-1/16"	1/4"	32.780	32.781	—	—
SJ5	1/2"	7/16"	2-3/16"	1/4"	32.783	32.784	—	—
SJ6	5/8"	9/16"	2-5/16"	1/4"	32.78402	32.78403	—	—
SJ7	3/4"	11/16"	2-7/16"	1/4"	32.78410	32.78411	—	—
SJ9	1"	15/16"	2-11/16"	1/4"	32.78420	32.78421	—	—

DEBURRING 90°

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SK1	1/4"	1/8"	2"	1/4"	32.789	32.790	—	—
SK3	3/8"	3/16"	1-15/16"	1/4"	32.792	32.793	—	—
SK5	1/2"	1/4"	2"	1/4"	32.795	32.796	—	—
SK6	5/8"	5/16"	2-1/16"	1/4"	32.798	32.799	—	—
SK7	3/4"	3/8"	2-1/8"	1/4"	32.801	32.802	—	—
SK9	1"	1/2"	2-1/4"	1/4"	32.804	32.805	—	—

DEBURRING - Double end

SCTI	Head Dia.	Head Length	Overall Length	Angle	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SJ42	1/8"	3/32"	1-1/2"	60°	1/8"	32.871	32.872	—	—
SK42	1/8"	1/16"	1-1/2"	90°	1/8"	32.874	32.875	—	—

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CONE - Radius nose 14° taper

SCTI	Head Dia.	Head Length	Overall Length	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SL41	1/8"	3/8"	1-1/2"	1/8", 6°	32.89702	32.89703	—	—
SL42	1/8"	1/2"	1-1/2"	1/8", 7°	32.898	32.899	—	—
SL1	1/4"	5/8"	2"	1/4"	32.720	32.721	—	—
SL1L6	1/4"	5/8"	6"	1/4"	32.94302	32.94303	—	—
SL2	5/16"	7/8"	2-5/8"	1/4"	32.723	32.724	—	—
SL3	3/8"	1-1/16"	2-13/16"	1/4"	32.726	32.727	32.726SY	32.95811
SL3L6	3/8"	1-1/16"	6"	1/4"	32.94312	32.94313	—	—
SL4	1/2"	1-1/8"	2-7/8"	1/4"	32.729	32.730	32.729SY	32.95814
SL4L6	1/2"	1-1/8"	6"	1/4"	32.94317	32.94318	—	—
SL5	5/8"	1-3/16"	2-15/16"	1/4"	32.73002	32.73003	32.73002SY	32.95817
SL6	5/8"	1-5/16"	3-1/16"	1/4"	32.732	32.733	32.732SY	32.95820
SL7	3/4"	1-1/2"	3-1/4"	1/4"	32.73302	32.73303	—	32.95823

CONE

SCTI	Head Dia.	Head Length	Overall Length	Angle	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SM61	3/32"	5/16"	1-1/2"	10°	3/32"	32.826	32.827	—	—
SM41	1/8"	3/8"	1-1/2"	14°	1/8"	32.913	32.914	—	—
SM42	1/8"	1/2"	1-1/2"	12°	1/8"	32.916	32.917	—	—
SM43	1/8"	5/8"	1-1/2"	9°	1/8"	32.919	32.920	—	—
SM51	1/4"	1/2"	2"	22°	1/8"	32.910	32.911	—	—
SM1	1/4"	1/2"	2"	22°	1/4"	32.738	32.739	—	—
SM2	1/4"	3/4"	2"	14°	1/4"	32.741	32.742	—	—
SM3	1/4"	1"	2"	12°	1/4"	32.744	32.745	—	—
SM4	3/8"	3/4"	2-1/2"	28°	1/4"	32.747	32.748	32.747SY	—
SM5	1/2"	1"	2-3/4"	28°	1/4"	32.750	32.751	32.750SY	—
SM6	5/8"	1-1/8"	2-7/8"	31°	1/4"	32.753	32.754	32.753SY	—

INVERTED CONE - End cut

SCTI	Head Dia.	Head Length	Overall Length	Angle	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SN1	1/4"	1/4"	2"	10°	1/4"	32.768	32.769	—	—
SN4	1/2"	1/2"	2-1/2"	14°	1/4"	32.771	32.772	—	—

INVERTED CONE - Plain end

SCTI	Head Dia.	Head Length	Overall Length	Angle	Shank	Standard	Double Cut	Bear Cut	Alumna Cut
SN41	3/32"	1/8"	1-1/2"	10°	1/8"	32.901	32.902	—	—
SN61	3/32"	1/8"	1-1/2"	10°	3/32"	32.823	32.824	—	—
SN42	1/8"	1/8"	1-1/2"	14°	1/8"	32.904	32.905	—	—
SN51	1/4"	1/4"	1-3/4"	10°	1/8"	32.907	32.908	—	—
SN1	1/4"	1/4"	2"	10°	1/4"	32.759	32.760	—	—
SN2	3/8"	3/8"	2-1/8"	13°	1/4"	32.761	32.76102	—	—
SN4	1/2"	1/2"	2-1/2"	14°	1/4"	32.762	32.763	—	—
SN6	5/8"	3/4"	2-1/2"	18°	1/4"	32.76302	32.76303	—	—
SN7	3/4"	5/8"	2-5/8"	30°	1/4"	32.76310	32.76311	—	—

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CARBIDE SETS

BUR SETS IN HINGED WOODEN CASES

1/4" SHANK SETS
wood case measures 3-3/16" x 3-3/16" x 3-3/8"

Specially designed Bear Cut removes more material per hour and is engineered for heavy duty applications. 8-piece set includes; SA5, SC5, SE5, SF3, SF5, SG5, SL3, SL4
No. **32.931SY -** Bear Cut set

8-piece sets of most popular shapes and sizes include; SA5, SC1, SC3, SD3, SE5, SF5, SG1, SK5
No. **32.924 -** Standard Cut set
No. **32.925 -** Double Cut set

5-PC BUR SET IN DURABLE PLASTIC CASES, 1/4" SHANK
Double Cut set; SB3, SC3, SC5, SF3, SF5,
No. **32.950 -** Double Cut set

Bear Cut set; SA5, SC5, SE5, SF5, SL4
No. **32.951SY -** Bear Cut set

1/8" SHANK SETS
wood case measures 3-5/8" x 2- 5/8" x 2-1/8"

12-piece sets of most popular shapes and sizes include; SA43, SA51, SC42, SC51, SD42, SD51, SF51, SG43, SL42, SM51, SN42, SN51,

No. **32.926 -** Standard Cut set
No. **32.929 -** Double Cut set

SPECIAL APPLICATION BUR SETS
supplied in a handy plastic container that measures 2-3/4" dia. X 3-3/4" high

8-piece double cut set of popular shapes and sizes on 1/4" shank. Excellent assortment for a variety of uses, including metal grinding, smoothing out welds, enlarging holes or porting heads. Includes: SA5, SA3, SC3, SC1, SD1, SD3, SF3, SF5.
No. **32.932 -** Double Cut set

5-piece Alumna Cut set, for use in applications such as aluminum, copper, brass and softer alloys. This kit contains 5 popular shapes with a 3/8" head diameter on 1/4" shank: SA3, SC3, SE3, SF3, SL3.
No. **32.933 -** Alumna Cut set

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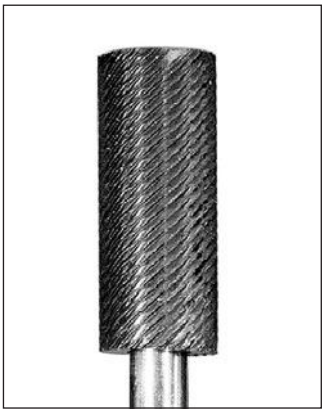
HIGH SPEED STEEL BURS



GROUND-FROM-THE-SOLID ROTARY FILES

Ground from blanks of hardened high speed steel, these files have smooth, unbroken flutes. The design is particularly well-suited for filing mild steels and ductile, stringy materials such as aluminum, brass, lead and magnesium. They can also be used on some grades of plastics. Ground cut rotary files perform best at medium speeds in flexible shaft machines and air tools. The teeth have standard helix angles of approximately 30 with C/L.

CHISEL (HAND) CUT ROTARY FILES

The skilled hand crafting required to produce these files sets them apart from the others. Even those files which are machine chiseled must be completed with hand detailing. Teeth of these high speed steel files are staggered in contrast to the smooth flutes of ground-from-the-solid files. This irregular tooth design especially suits the requirements for working on dense, tough materials, such as die steels, steel forgings and other ferrous materials. They are best suited for operation at lower speeds such as in hand flexible shaft machines, drill presses, lathes, etc. Standard chisel cut high speed steel rotary files have 18 teeth per inch.

SCALE OF CUTS FOR HSS, STANDARD CUT GROUND-FROM-THE-SOLID ROTARY FILES

Head Diameter	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1-1/8"
Teeth To The Circumference	10	12	15	18	20	25	25	25	30	30

IMPORTANT NOTE ON OPERATING SPEEDS: Before using any rotary file, be certain to check the maximum recommended speed chart, since speed recommendations vary according to type of file, file diameter and material being removed or finished.

MAXIMUM RECOMMENDED SPEEDS FOR HIGH SPEED STEEL ROTARY FILES USED ON THE FOLLOWING MATERIALS:

Diameter	MILD STEEL	CAST IRON	ALUMINUM
	Maximum Speed (RPM)		
1/8"	4,000	6,000	15,000
1/4"	2,500	3,400	10,000
3/8"	2,000	2,250	8,000
1/2"	1,500	1,750	6,000
5/8"	1,350	1,450	5,000
3/4"	1,200	1,250	4,000
1"	800	1,000	2,500

Diameter	BRASS	BRONZE	MAGNESIUM
	Maximum Speed (RPM)		
1/8"	15,000	15,000	8,000
1/4"	10,000	10,000	7,000
3/8"	8,000	8,000	6,500
1/2"	6,000	6,000	6,000
5/8"	5,000	5,000	5,000
3/4"	4,000	4,000	4,000
1"	2,500	2,500	4,000

NOTE: *Rotary files must be chucked true and to the full capacity of the machine chuck. Also, when using double cut rotary files, reduce speed by approximately 1/3 to 1/2 from that shown for standard cut.*

CYLINDRICAL - Plain end

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	1/2"	2-1/4"	**33.026**	**33.401**
3/16"	1/2"	2-1/4"	**33.029**	—
1/4"	1"	2-1/4"	**33.032**	**33.407**
5/16"	1"	2-1/4"	**33.035**	—
3/8"	1"	2-1/4"	**33.038**	**33.410**
1/2"	1"	2-1/4"	**33.041**	**33.413**
5/8"	1"	2-1/4"	**33.044**	**33.416**
1/4"	1-1/2"	2-3/4"	**33.047**	**33.419**
5/16"	1-1/2"	2-3/4"	—	**33.422**
3/8"	1-1/2"	2-3/4"	**33.050**	**33.425**
1/2"	1-1/2"	2-3/4"	**33.053**	**33.428**
3/4"	3/4"	2-1/4"	**33.056**	**33.438**
1"	1"	2-1/4"	**33.059**	**33.441**

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	5/8"	1-1/2"	**33.298**	**33.640**
1/4"	1/2"	1-1/2"	**33.301**	**33.643**

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CYLINDRICAL - Radius end

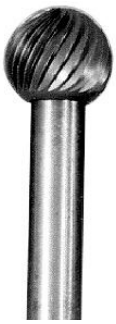
Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	1/2"	2-1/4"	**33.065**	**33.444**
1/4"	1"	2-1/4"	**33.071**	**33.447**
5/16"	1"	2-1/4"	**33.074**	—
3/8"	1"	2-1/4"	**33.077**	**33.450**
1/2"	1"	2-1/4"	**33.083**	**33.453**
5/8"	1"	2-1/4"	**33.086**	—
3/4"	1-1/4"	2-1/2"	**33.089**	**33.459**
1/4"	1-1/2"	2-3/4"	**33.092**	**33.462**
3/8"	1-1/2"	2-3/4"	**33.095**	**33.468**
1/2"	1-1/2"	2-3/4"	**33.098**	—

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	5/8"	1-1/2"	**33.304**	**33.646**
1/4"	1/4"	1-1/2"	**33.307**	—

BALL

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	1/8"	2-1/4"	**33.106**	**33.477**
3/16"	3/16"	2-1/4"	**33.109**	**33.479**
1/4"	1/4"	2-1/4"	**33.112**	**33.482**
5/16"	5/16"	2-1/4"	**33.115**	**33.485**
3/8"	3/8"	2-1/4"	**33.118**	**33.488**
1/2"	1/2"	2-1/4"	**33.121**	**33.491**
5/8"	5/8"	2-1/4"	**33.124**	**33.494**
3/4"	3/4"	2-1/4"	**33.127**	**33.497**
1"	1"	2-3/16"	**33.130**	**33.500**

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/4"	1/4"	1-3/8"	**33.313**	**33.649**
3/8"	3/8"	1-1/2"	**33.317**	**33.652**



TREE POINTED

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/4"	3/4"	2-1/4"	**33.184**	**33.543**
3/8"	3/4"	2-1/4"	**33.187**	**33.546**
1/2"	3/4"	2-1/4"	**33.190**	**33.549**
5/8"	1"	2-1/2"	**33.193**	**33.552**
1/2"	1-1/8"	2-1/2"	**33.196**	**33.555**

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/8"	1/2"	1-1/2"	**33.334**	**33.664**

TREE RADIUS

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
¼"	¾"	2¾"	**33.202**	**33.558**
¼"	1½"	2¾"	**33.205**	—
⅜"	¾"	2¼"	**33.208**	**33.564**
½"	1"	2½"	**33.211**	—
½"	1⅛"	2⅜"	———	**33.567**
½"	1⅛"	2⅝"	**33.214**	—
⅝"	1⅛"	2⅝"	**33.217**	—
¾"	1¼"	2½"	**33.220**	—
¾"	1¼"	3¼"	———	**33.570**
1⅛"	2"	3¼"	**33.223**	—

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OVAL

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
3/8"	5/8"	2-1/4"	**33.136**	**33.503**
3/4"	1-1/8"	2-1/2"	**33.142**	**33.509**
1"	1-3/8"	2-5/8"	—	**33.512**
1/4"	1/2"	2-1/4"	**33.148**	**33.516**
1/2"	7/8"	2-1/4"	**33.151**	**33.519**
1/2"	1"	2-1/4"	—	**33.522**
5/8"	1"	2-1/2"	—	**33.525**

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/4"	1/2"	1-1/2"	**33.322**	**33.655**

CONE

Head Dia. (1/4" Shank)	Head Length	Overall Length	Angle	Ground Cut Standard	Chisel Cut Standard
1/4"	1/2"	2-1/4"	24°	**33.229**	**33.576**
1/4"	3/4"	2-1/2"	16°	**33.232**	**33.579**
1/4"	1"	2-1/2"	12°	**33.235**	**33.582**
1/4"	1-1/8"	2-1/2"	11°	**33.238**	**33.585**
5/16"	3/4"	2-1/4"	21°	**33.241**	—
5/16"	1"	2-1/2"	16°	—	**33.591**
5/16"	1"	2-1/2"	15.5°	**33.244**	—
3/8"	5/8"	2-1/4"	30°	—	**33.594**
1/2"	7/8"	2-3/8"	30°	—	**33.600**
1/2"	7/8"	2-9/16"	30°	**33.253**	—

Head Dia. (1/8" Shank)	Head Length	Overall Length	Angle	Ground Cut Standard	Chisel Cut Standard
1/8"	9/16"	1-1/2"	9.5°	**33.346**	**33.673**
1/4"	1/4"	1-3/8"	50°	**33.355**	—
1/4"	1/2"	1-1/2"	24°	—	**33.676**
3/8"	3/8"	1-1/2"	51°	**33.358**	—

INVERTED CONE - Plain end

Head Dia. (1/4" Shank)	Head Length	Overall Length	Angle	Ground Cut Standard	Chisel Cut Standard
½"	¾"	2¼"	18°	—	**33.528**
¾"	⅝"	2¼"	34°	—	**33.531**

CONE - Radius nose

Head Dia. (1/4" Shank)	Head Length	Overall Length	Angle	Ground Cut Standard	Chisel Cut Standard
5/8"	13/16"	2-1/4"	36°	—	**33.603**
1"	1-3/8"	2-5/8"	36°	—	**33.606**
5/16"	5/8"	2-3/4"	19°	**33.265**	**33.609**
5/16"	1-1/4"	2-3/4"	8°	**33.268**	**33.612**
3/8"	1-3/4"	3"	7.5°	**33.271**	—
3/8"	1-3/4"	3"	8°	—	**33.615**
5/8"	15/16"	2-11/16"	31.5°	**33.274**	—

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FLAME

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
5/8"	1-7/16"	2-3/4"	**33.172**	**33.534**
5/8"	7/8"	2-1/2"	**33.178**	—
3/4"	1-3/4"	3"	—	**33.537**

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/4"	1/2"	1-1/2"	**33.331**	**33.661**

WHEEL - End and underside cut

KNIFE EDGE

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
5/8"	1/8"	1-1/4"	**33.370**	**33.688**

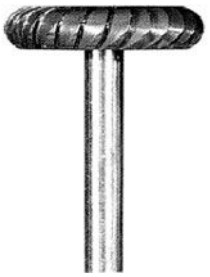
WHEEL - Plain end

ROUND EDGE

Head Dia. (1/8" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
5/8"	1/8"	1-1/4"	**33.364**	**33.682**

SQUARE EDGE

Head Dia. (1/8" Shank)	Head Length	Overall Length		Chisel Cut Standard
5/8"	1/8"	1-1/4"		**33.685**



CONVEX-CONCAVE

Head Dia. (1/4" Shank)	Head Length	Overall Length	Ground Cut Standard	Chisel Cut Standard
1/4"	1"	2-1/4"	**33.280**	**33.618**
5/16"	1-1/8"	2-1/2"	**33.283**	—

CONCAVE

Head Dia. (1/4" Shank)	Head Length	Overall Length		Chisel Cut Standard
3/4"	15/32"	2-1/4"		**33.624**

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INSIDE TUBE DEBURRING - CHISEL CUT

DEBURRING 90°

Head Dia. (1/4" Shank)	Length of Cut	Length Overall	Chisel Cut Standard
1/2"	1/4"	1-13/16"	**33.713**
5/8"	5/16"	2-1/8"	**33.716**
3/4"	3/8"	2"	**33.719**
1"	1/2"	2-1/8"	**33.722**

INSIDE & OUTSIDE TUBE DEBURRING GROUND-FROM-THE-SOLID

Grobet's combination inside and outside tube deburring rotary files are adjustable so as to increase or decrease the relative amount of chamfer between inside and outside wall tubing. Standard files make a 45° chamfer on outside wall of tubing and a 30° on the inside. Speed ranges from 50 to 250 RPM, according to size. Tube may be fed to file by hand, but better finish is obtained with rigid guides or support.

Tube Outside Diameter	Tube Inside Diameter	Standard
1/4"	3/16"	**33.749**
3/8"	5/16"	**33.751**
1/2"	7/16"	**33.753**
5/8"	9/16"	**33.755**
3/4"	5/8"	**33.756**
7/8"	3/4"	**33.757**
1"	7/8"	**33.758**

CHATTERLESS COUNTERSINKS

Head Diameter	Overall Length	82° Angle	90° Angle
1/4"	1-1/2"	—	**33.767**
5/16"	1-3/4"	**33.771**	—
3/8"	1-3/4"	**33.776**	**33.777**
1/2"	2"	**33.781**	—
5/8"	2-1/4"	**33.786**	**33.787**

Note: *Countersinks shown have a 82° or 90° angle C/L. Countersinks at angles other than these are also available.*

HIGH SPEED STEEL SHANK SETS

BUR SETS IN HINGED WOODEN CASES

1/8" SHANK SETS
(wood case measures 3-1/2" x 2-1/2" x 2-1/4")

Assortment of twelve popular shapes and sizes.

No. **33.376 -** Standard Cut set
No. **33.691 -** Chisel Cut set

1/4" SHANK SETS
(wood case measures 3-1/8" x 3-7/16" x 3-1/8")

Assortment of eight popular shapes and sizes.

No. **33.375 -** Standard Cut set
No. **33.690 -** Chisel Cut set

CHATTERLESS COUNTERSINKS SETS

These 6-flute countersinks are made with staggered cutting edges which give a shearing cut that eliminates practically all chatter.

EIGHT COUNTERSINKS
(1/4" diameter to 1" diameter) in a wood box measuring 4-7/8" x 3-1/4" x 4".
No. **33.808** 82° angle

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