

## Hand Files are Great for Many Application

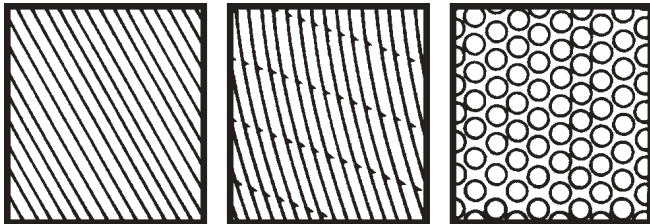
*Filing • Deburring • Shaping • Forming • Chamfering • Sharpening  
Smoothing • Beveling • De-Flashing • Trimming and De-Scaling*

### Severance Offers Four Types of Hand Files To Solve Virtually Every Application

**Carbide** – Severance Tool originated the Carbide Hand files which are ideal for use on hard materials, which quickly dull ordinary steel files. They are available in several sizes, styles, cuts and tooth patterns to meet almost any application requirement. Carbide files are stocked in coarse, medium and fine cuts, and in standard tooth pattern. Other cuts and patterns can be supplied promptly to order. **Severance Tool can regrind dull carbide files many times for a fraction of the new file cost.**

**Cubic Boron Nitride** – The CBN file segment has thousands of cubic boron nitride particles on its surface. Low heat generation makes it ideal for high speed rotary applications (such as working on a lathe or turning machinery) versus conventional files. Removes material quickly and easily without clogging or loading up. Ideal for use on High Speed Tool Steels, High Nickel Alloys, Hardened Structural Steels.

#### Standard Tooth Patterns



Standard Tooth

Curved Tooth

Diamond Grid  
CBN Grid

#### Tooth Patterns Available

**Standard Tooth**– Used in deburring and smoothing many different types of materials; M-2, M-42, Cold and Hot Roll Steels. Used with light pressure for smooth finishes or to sharpen cutting surfaces on Steel, Aluminum, Cast Iron, Bronze.

**Curved Tooth**– Used in removing and smoothing different types of surfaces: Flat, Curved, and Round. Used for fast material removal with less material loading up on file. Used in the Auto Industries for shaping Sheet Metals, also used in Aluminum, Cast Iron, Bronze, Lead Zinc, and Plastics.

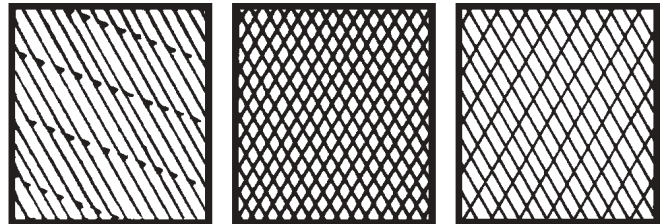
**Diamond Grid**– High stock removal rate makes jobs easier and faster. Deep recesses remove material quickly without clogging or loading up. Available in coarse or fine grits. Works on Carbide, Hardened Steel, Ceramics, Glass, Fiberglass, Composites, and more.

**CBN Grid (Cubic Boron Nitride)** – Used in high speed rotary applications because it will not generate heat. Removes material

**Diamond** – The diamond file segment has thousands of diamonds on its surface. Deep recesses remove material quickly and easily without clogging or loading up. High stock removal rate makes jobs faster and easier than conventional files. Very little pressure is used, thereby reducing worker fatigue and increasing output. Works on: Carbide, Glass, Fiberglass, Laminates, Graphite, Plexiglas, Hard Alloys, Hardened Dies, and more.

**Steel** – Tough, fatigue-resistant select grade of Molybdenum steel. Heat treated before final grinding to provide the optimum combination of properties for high performance. Steel Files will produce the same cutting action as our Carbide Files and are the ideal “medium” material where inexpensive files do not hold up and where chipping might occur using Carbide Files on an interrupted cut. Steel files may also be reground for new tool life.

#### Special Tooth Patterns



Chip Breaker

Rasp Tooth

Double Cut

NOTE: Standard tooth patterns will be supplied, unless specified.

easily without clogging or loading up. Available in coarse or fine grits. Works on High Speed Tool Steels, High Nickel Alloys and more.

**Chip Breaker** – Adding chip breakers will not reduce the finish but will make them cut a little better since no large shavings are produced.

**Rasp Tooth** – Ideal for fast material removal on relatively soft materials. Used with heavy pressure for rough finishes, shaping or sharpening cutting surfaces on Steel, Aluminum, Cast Iron, Bronze, Wood and other soft material. Rasp tooth pattern will produce a rougher finish than other tooth patterns.

**Double Cut** – Used with medium pressure for medium finishes, shaping or sharpening cutting surface on Steel, Aluminum, Cast Iron, and Bronze.

## Hand Files

6" Stroke, In Line Style

Cutting Area: 3/4" x 6"

Overall Length 11 3/4"



Carbide Hand Files Can Work on Materials That an Ordinary Steel File Won't Even Touch

### High Speed Steel

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FJ-3	20070
Med. Fine	31	FJ-4	20071
Medium	25	FJ-5	20072
Med. Coarse	20	FJ-6	20073
Coarse	16	FJ-7	20074

#### Curved Cut

Fine	40	FCT-3	20075
Med. Fine	31	FCT-4	20076
Medium	25	FCT-5	20077
Med. Coarse	20	FCT-6	20078
Coarse	16	FCT-7	20079

#### Chip Breaker

Fine	40	FJ-3-CB	20080
Med. Fine	31	FJ-4-CB	20081
Medium	25	FJ-5-CB	20082
Med. Coarse	20	FJ-6-CB	20083
Coarse	16	FJ-7-CB	20084

#### Rasp Cut

Fine	40	FJ-3-RASP	20085
Med. Fine	31	FJ-4-RASP	20086
Medium	25	FJ-5-RASP	20087
Med. Coarse	20	FJ-6-RASP	20088
Coarse	16	FJ-7-RASP	20089

#### Double Cut

Fine	40	FJ-3-DBL	20090
Med. Fine	31	FJ-4-DBL	20091
Medium	25	FJ-5-DBL	20092
Med. Coarse	20	FJ-6-DBL	20093
Coarse	16	FJ-7-DBL	20094

### Borazon (CBN)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FJ-CBN-F	19720
Coarse	100	FJ-CBN-C	19722

### Carbide

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FJ-3-W	19770
Med. Fine	31	FJ-4-W	19771
Medium	25	FJ-5-W	19772
Med. Coarse	20	FJ-6-W	19773
Coarse	16	FJ-7-W	19774

#### Curved Cut

Fine	40	FCT-3-W	19775
Med. Fine	31	FCT-4-W	19776
Medium	25	FCT-5-W	19777
Med. Coarse	20	FCT-6-W	19778
Coarse	16	FCT-7-W	19779

#### Chip Breaker

Fine	40	FJ-3-W-CB	19780
Med. Fine	31	FJ-4-W-CB	19781
Medium	25	FJ-5-W-CB	19782
Med. Coarse	20	FJ-6-W-CB	19783
Coarse	16	FJ-7-W-CB	19784

#### Rasp Cut

Fine	40	FJ-3-W-RASP	19785
Med. Fine	31	FJ-4-W-RASP	19786
Medium	25	FJ-5-W-RASP	19787
Med. Coarse	20	FJ-6-W-RASP	19788
Coarse	16	FJ-7-W-RASP	19789

#### Double Cut

Fine	40	FJ-3-W-DBL	19790
Med. Fine	31	FJ-4-W-DBL	19791
Medium	25	FJ-5-W-DBL	19792
Med. Coarse	20	FJ-6-W-DBL	19793
Coarse	16	FJ-7-W-DBL	19794

### Diamond (DCF)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FJ-DCF-F	19970
Coarse	100	FJ-DCF-C	19974

### Severance hand files pay for themselves:

A customer reported: Hand filing long beads of tough titanium weld. The previous method consumed 40 to 60 16" steel files each day. Costing \$15.00 each, a total daily cost of approximately \$750.00. One Severance FJ-7-W carbide file did the same amount of work as 15 of the steel bastard files. A single savings of over \$500 per day. Plus Severance hand files may be reground many times at a fraction of the list price.

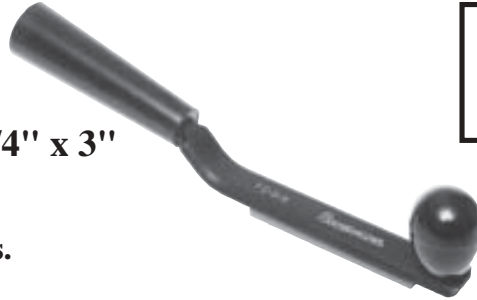
## Hand Files

3" Stroke, Offset Handle

With Knob, Cutting Area: 3/4" x 3"

Overall Length 9 1/2"

Can Be Resharpend Many Times.



How much is your hand filing costing you?  
Severance Carbide Hand Files often outlast regular files 1 to 100, and the Severance files can be resharpened over and over again!

### High Speed Steel

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FZ-3-K	20120
Med. Fine	31	FZ-4-K	20121
Medium	25	FZ-5-K	20122
Med. Coarse	20	FZ-6-K	20123
Coarse	16	FZ-7-K	20124

#### Curved Cut

Fine	40	FCZ-3-K	20125
Med. Fine	31	FCZ-4-K	20126
Medium	25	FCZ-5-K	20127
Med. Coarse	20	FCZ-6-K	20128
Coarse	16	FCZ-7-K	20129

#### Chip Breaker

Fine	40	FZ-3-K-CB	20130
Med. Fine	31	FZ-4-K-CB	20131
Medium	25	FZ-5-K-CB	20132
Med. Coarse	20	FZ-6-K-CB	20133
Coarse	16	FZ-7-K-CB	20134

#### Rasp Cut

Fine	40	FZ-3-K-RASP	20135
Med. Fine	31	FZ-4-K-RASP	20136
Medium	25	FZ-5-K-RASP	20137
Med. Coarse	20	FZ-6-K-RASP	20138
Coarse	16	FZ-7-K-RASP	20139

#### Double Cut

Fine	40	FZ-3-K-DBL	20140
Med. Fine	31	FZ-4-K-DBL	20141
Medium	25	FZ-5-K-DBL	20142
Med. Coarse	20	FZ-6-K-DBL	20143
Coarse	16	FZ-7-K-DBL	20144

### Borazon (CBN)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FZ-CBN-K-F	19747
Coarse	100	FZ-CBN-K-C	19749

### Carbide

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FZ-3-W-K	19820
Med. Fine	31	FZ-4-W-K	19821
Medium	25	FZ-5-W-K	19822
Med. Coarse	20	FZ-6-W-K	19823
Coarse	16	FZ-7-W-K	19824

#### Curved Cut

Fine	40	FCZ-3-W-K	19825
Med. Fine	31	FCZ-4-W-K	19826
Medium	25	FCZ-5-W-K	19827
Med. Coarse	20	FCZ-6-W-K	19828
Coarse	16	FCZ-7-W-K	19829

#### Chip Breaker

Fine	40	FZ-3-W-K-CB	19830
Med. Fine	31	FZ-4-W-K-CB	19831
Medium	25	FZ-5-W-K-CB	19832
Med. Coarse	20	FZ-6-W-K-CB	19833
Coarse	16	FZ-7-W-K-CB	19834

#### Rasp Cut

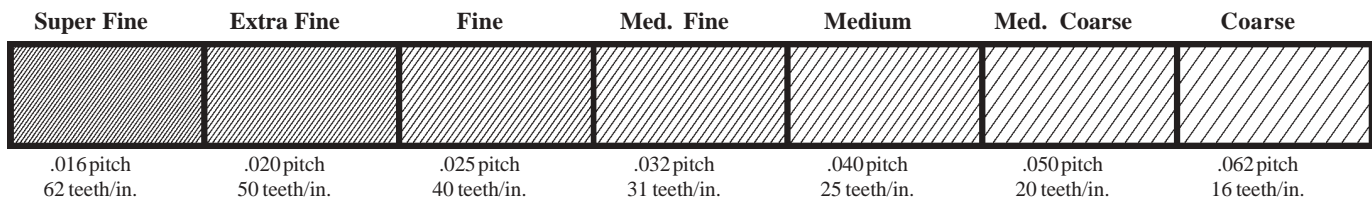
Fine	40	FZ-3-W-K-RASP	19835
Med. Fine	31	FZ-4-W-K-RASP	19836
Medium	25	FZ-5-W-K-RASP	19837
Med. Coarse	20	FZ-6-W-K-RASP	19838
Coarse	16	FZ-7-W-K-RASP	19839

#### Double Cut

Fine	40	FZ-3-W-K-DBL	19840
Med. Fine	31	FZ-4-W-K-DBL	19841
Medium	25	FZ-5-W-K-DBL	19842
Med. Coarse	20	FZ-6-W-K-DBL	19843
Coarse	16	FZ-7-W-K-DBL	19844

### Diamond (DCF)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FZ-DCF-K-F	19996
Coarse	100	FZ-DCF-K-C	20000

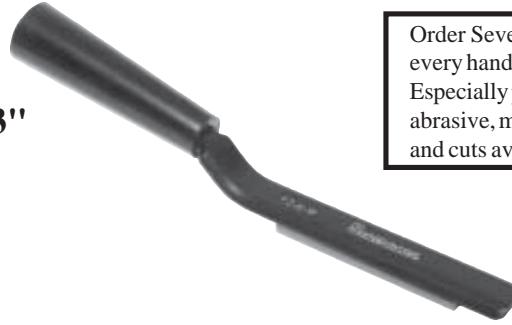


## Hand Files

Offset Handle, No Knob

3" Stroke, Cutting Area: 3/4" x 3"

Overall Length 8 3/4"



Order Severance Carbide Hand Files for every hand filing spot in your plant. Especially profitable when working hard, abrasive, materials. Special shapes, sizes, and cuts available on short notice.

Can Be Resharpend Many Times.

### High Speed Steel

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FZ-3	20095
Med. Fine	31	FZ-4	20096
Medium	25	FZ-5	20097
Med. Coarse	20	FZ-6	20098
Coarse	16	FZ-7	20099

#### Curved Cut

Fine	40	FCZ-3	20100
Med. Fine	31	FCZ-4	20101
Medium	25	FCZ-5	20102
Med. Coarse	20	FCZ-6	20103
Coarse	16	FCZ-7	20104

#### Chip Breaker

Fine	40	FZ-3-CB	20105
Med. Fine	31	FZ-4-CB	20106
Medium	25	FZ-5-CB	20107
Med. Coarse	20	FZ-6-CB	20108
Coarse	16	FZ-7-CB	20109

#### Rasp Cut

Fine	40	FZ-3-RASP	20110
Med. Fine	31	FZ-4-RASP	20111
Medium	25	FZ-5-RASP	20112
Med. Coarse	20	FZ-6-RASP	20113
Coarse	16	FZ-7-RASP	20114

#### Double Cut

Fine	40	FZ-3-DBL	20115
Med. Fine	31	FZ-4-DBL	20116
Medium	25	FZ-5-DBL	20117
Med. Coarse	20	FZ-6-DBL	20118
Coarse	16	FZ-7-DBL	20119

### Borazon (CBN)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FZ-CBN-F	19738
Coarse	100	FZ-CBN-C	19740

### Carbide

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FZ-3-W	19795
Med. Fine	31	FZ-4-W	19796
Medium	25	FZ-5-W	19797
Med. Coarse	20	FZ-6-W	19798
Coarse	16	FZ-7-W	19799

#### Curved Cut

Fine	40	FCZ-3-W	19800
Med. Fine	31	FCZ-4-W	19801
Medium	25	FCZ-5-W	19802
Med. Coarse	20	FCZ-6-W	19803
Coarse	16	FCZ-7-W	19804

#### Chip Breaker

Fine	40	FZ-3-W-CB	19805
Med. Fine	31	FZ-4-W-CB	19806
Medium	25	FZ-5-W-CB	19807
Med. Coarse	20	FZ-6-W-CB	19808
Coarse	16	FZ-7-W-CB	19809

#### Rasp Cut

Fine	40	FZ-3-W-RASP	19810
Med. Fine	31	FZ-4-W-RASP	19811
Medium	25	FZ-5-W-RASP	19812
Med. Coarse	20	FZ-6-W-RASP	19813
Coarse	16	FZ-7-W-RASP	19814

#### Double Cut

Fine	40	FZ-3-W-DBL	19815
Med. Fine	31	FZ-4-W-DBL	19816
Medium	25	FZ-5-W-DBL	19817
Med. Coarse	20	FZ-6-W-DBL	19818
Coarse	16	FZ-7-W-DBL	19819

### Diamond (DCF)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FZ-DCF-F	19983
Coarse	100	FZ-DCF-C	19987

Super Fine

Extra Fine

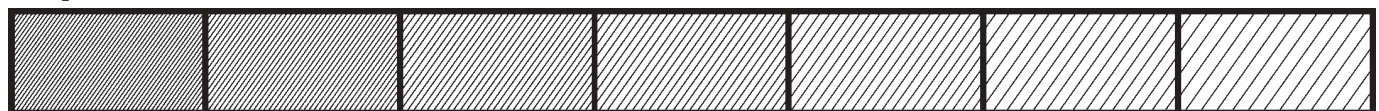
Fine

Med. Fine

Medium

Med. Coarse

Coarse



.016 pitch  
62 teeth/in.

.020 pitch  
50 teeth/in.

.025 pitch  
40 teeth/in.

.032 pitch  
31 teeth/in.

.040 pitch  
25 teeth/in.

.050 pitch  
20 teeth/in.

.062 pitch  
16 teeth/in.

## Hand Files

3" Stroke, Plain Style

Cutting Area: 3/4" x 3"

Overall Length 6"



These Carbide Files are "Designed" for One Hand Operations!

### High Speed Steel

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FS-3	20145
Med. Fine	31	FS-4	20146
Medium	25	FS-5	20147
Med. Coarse	20	FS-6	20148
Coarse	16	FS-7	20149

#### Curved Cut

Fine	40	FCS-3	20150
Med. Fine	31	FCS-4	20151
Medium	25	FCS-5	20152
Med. Coarse	20	FCS-6	20153
Coarse	16	FCS-7	20154

#### Chip Breaker

Fine	40	FS-3-CB	20155
Med. Fine	31	FS-4-CB	20156
Medium	25	FS-5-CB	20157
Med. Coarse	20	FS-6-CB	20158
Coarse	16	FS-7-CB	20159

#### Rasp Cut

Fine	40	FS-3-RASP	20160
Med. Fine	31	FS-4-RASP	20161
Medium	25	FS-5-RASP	20162
Med. Coarse	20	FS-6-RASP	20163
Coarse	16	FS-7-RASP	20164

#### Double Cut

Fine	40	FS-3-DBL	20165
Med. Fine	31	FS-4-DBL	20166
Medium	25	FS-5-DBL	20167
Med. Coarse	20	FS-6-DBL	20168
Coarse	16	FS-7-DBL	20169

### Borazon (CBN)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FS-CBN-F	19750
Coarse	100	FS-CBN-C	19751

### Carbide

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Fine	40	FS-3-W	19845
Med. Fine	31	FS-4-W	19846
Medium	25	FS-5-W	19847
Med. Coarse	20	FS-6-W	19848
Coarse	16	FS-7-W	19849

#### Curved Cut

Fine	40	FCS-3-W	19850
Med. Fine	31	FCS-4-W	19851
Medium	25	FCS-5-W	19852
Med. Coarse	20	FCS-6-W	19853
Coarse	16	FCS-7-W	19854

#### Chip Breaker

Fine	40	FS-3-W-CB	19855
Med. Fine	31	FS-4-W-CB	19856
Medium	25	FS-5-W-CB	19857
Med. Coarse	20	FS-6-W-CB	19858
Coarse	16	FS-7-W-CB	19859

#### Rasp Cut

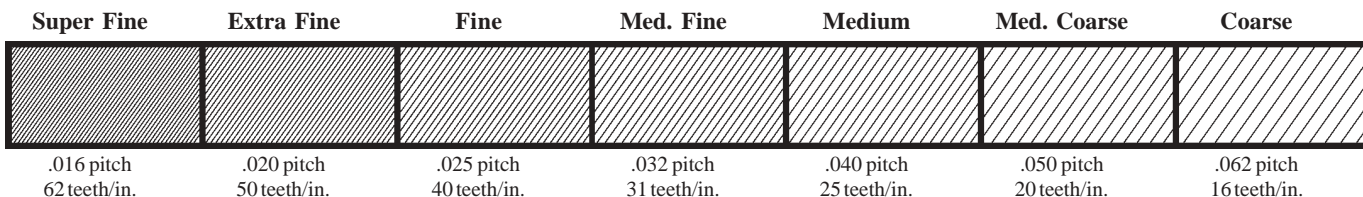
Fine	40	FS-3-W-RASP	19860
Med. Fine	31	FS-4-W-RASP	19861
Medium	25	FS-5-W-RASP	19862
Med. Coarse	20	FS-6-W-RASP	19863
Coarse	16	FS-7-W-RASP	19864

#### Double Cut

Fine	40	FS-3-W-DBL	19865
Med. Fine	31	FS-4-W-DBL	19866
Medium	25	FS-5-W-DBL	19867
Med. Coarse	20	FS-6-W-DBL	19868
Coarse	16	FS-7-W-DBL	19869

### Diamond (DCF)

Abrasive Action	Grit SIZE	Severance Tool Name	EDP Order Number
Fine	200	FS-DCF-F	20009
Coarse	100	FS-DCF-C	20013





## Hand Files

1-1/2" Stroke, Plain Style

Cutting Area: 3/8" x 1-1/2"

Overall Length 6"

Can Be Resharpend Many Times.

### High Speed Steel

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Super Fine	62	FE-1	20170
Extra Fine	50	FE-2	20171
Fine	40	FE-3	20172
Med. Fine	31	FE-4	20173
Medium	25	FE-5	20174

#### Curved Cut

Super Fine	62	FCE-1	20175
Extra Fine	50	FCE-2	20176
Fine	40	FCE-3	20177
Med. Fine	31	FCE-4	20178
Medium	25	FCE-5	20179

#### Chip Breaker

Super Fine	62	FE-1-CB	20180
Extra Fine	50	FE-2-CB	20181
Fine	40	FE-3-CB	20182
Med. Fine	31	FE-4-CB	20183
Medium	25	FE-5-CB	20184

#### Rasp Cut

Super Fine	62	FE-1-RASP	20185
Extra Fine	50	FE-2-RASP	20186
Fine	40	FE-3-RASP	20187
Med. Fine	31	FE-4-RASP	20188
Medium	25	FE-5-RASP	20189

#### Double Cut

Super Fine	62	FE-1-DBL	20190
Extra Fine	50	FE-2-DBL	20191
Fine	40	FE-3-DBL	20192
Med. Fine	31	FE-4-DBL	20193
Medium	25	FE-5-DBL	20194

### Borazon (CBN)

Abrasive Action	Grit Size	Severance Tool Name	EDP Order Number
Fine	200	FE-CBN-F	19756
Coarse	100	FE-CBN-C	19758

### Carbide

Cut	Teeth Per Inch	Severance Tool Name	EDP Order Number
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#### Standard Cut

Super Fine	62	FE-1-W	19870
Extra Fine	50	FE-2-W	19871
Fine	40	FE-3-W	19872
Med. Fine	31	FE-4-W	19873
Medium	25	FE-5-W	19874

#### Curved Cut

Super Fine	62	FCE-1-W	19875
Extra Fine	50	FCE-2-W	19876
Fine	40	FCE-3-W	19877
Med. Fine	31	FCE-4-W	19878
Medium	25	FCE-5-W	19879

#### Chip Breaker

Super Fine	62	FE-1-W-CB	19880
Extra Fine	50	FE-2-W-CB	19881
Fine	40	FE-3-W-CB	19882
Med. Fine	31	FE-4-W-CB	19883
Medium	25	FE-5-W-CB	19884

#### Rasp Cut

Super Fine	62	FE-1-W-RASP	19885
Extra Fine	50	FE-2-W-RASP	19886
Fine	40	FE-3-W-RASP	19887
Med. Fine	31	FE-4-W-RASP	19888
Medium	25	FE-5-W-RASP	19889

#### Double Cut

Super Fine	62	FE-1-W-DBL	09890
Extra Fine	50	FE-2-W-DBL	19891
Fine	40	FE-3-W-DBL	19892
Med. Fine	31	FE-4-W-DBL	19893
Medium	25	FE-5-W-DBL	19894

### Diamond (DCF)

Abrasive Action	Grit Size	Severance Tool Name	EDP Order Number
Fine	200	FE-DCF-F	20022
Coarse	100	FE-DCF-C	20026

Super Fine

Extra Fine

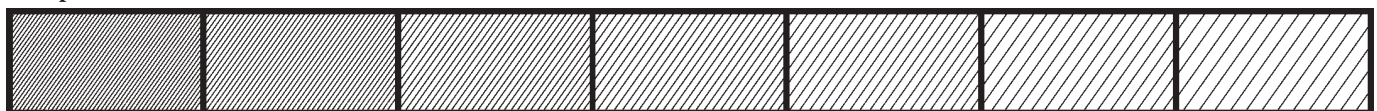
Fine

Med. Fine

Medium

Med. Coarse

Coarse



.016 pitch  
62 teeth/in.

.020 pitch  
50 teeth/in.

.025 pitch  
40 teeth/in.

.032 pitch  
31 teeth/in.

.040 pitch  
25 teeth/in.

.050 pitch  
20 teeth/in.

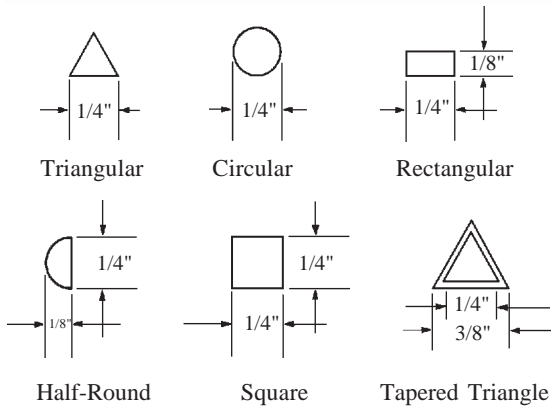
.062 pitch  
16 teeth/in.



## Die Files

Severance carbide Die Files are used for finishing work on hardened materials. All have 2" long cutting surfaces and are available in cuts and tooth patterns to specification. Handles are supplied with all Die Files.

Below tools will be supplied with standard spiral – medium cut.

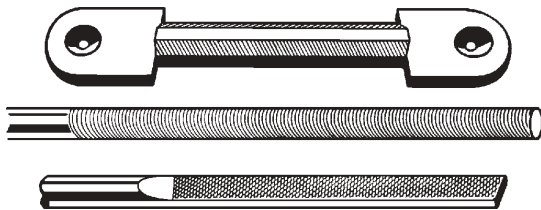


### Carbide

Cutting Surface	Severance Shape	Severance Tool Name	EDP Order Number
2"	Triangular	DFT-1/4-STD	20270
2"	Circular	DFC-1/4-STD	20275
2"	Rectangular	DFR-1/4-STD	20280
2"	Half-Round	DFHR-1/4-STD	20285
2"	Square	DFS-1/4-STD	20290
2"	Tapered Triangle	DFTT-1/4-STD	20295

## Carbide Machine Files

Carbide machine files can cut hardened steel, often eliminating the need for annealing and rehardening critical tools. These files are custom made to specified sizes, shapes, cuts and mounting dimensions. Many variations of the Severance Carbide Hand File may be obtained for unusual filing applications. Machine mounted, automatic deburring applications of Special Severance Carbide Files are steadily increasing and proving very successful. Submit details of your filing and deburring problems - attention to our Engineering Department.



## Tools Made To Your Specifications

How much is your hand filing costing you? Severance Carbide Hand Files often outlast regular files 1 to 100, and the Severance files can be resharpened over and over again!



### Carbide Way Scraper

Over all length is approximately 21 inches, the Carbide Scraper Blade has a 3" radius cutting edge, is 1/16" thick, 1-1/4" wide, and is hollow ground. Easy to hold handle and end designed to scrape and rescraper machine ways.

REF.#55000

This is a special Way Scraper used for machine way repair.



REF.#55533

This is a special hand file made with a special handle for a customers application.