# Nicholson®

FILES, SAWS AND MULTI-PURPOSE TOOLS



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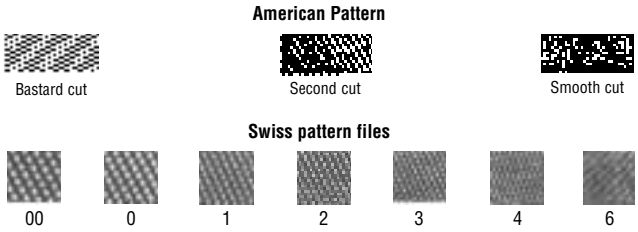

## Safety Precautions



**Always wear safety glasses. Warn workers nearby to stay clear before you make each cut.**

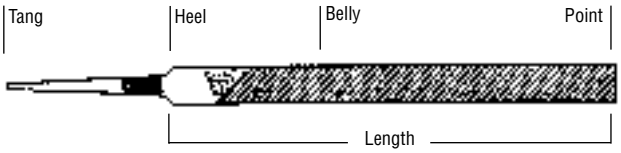
# File Terminology

## Coarseness



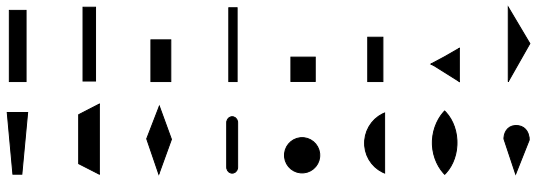

- Work to be accomplished, roughing or finishing, will determine type of teeth and coarseness for each application
- Most American pattern files are available with 3 grades of cut: bastard-cut, second-cut and smooth-cut
- Swiss pattern files are available in seven cuts: No. 00, 0,1, 2, 3, 4, and 6
- The degree of coarseness is greater in longer files, but differences between bastard, second and smooth are proportionate

## Length




- Length is measured exclusive of tang, from point to heel, unless specified otherwise
- Desired stroke length, type of material and size will determine length required

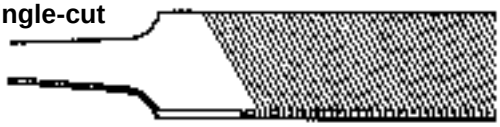
## Shape



- Area to be filed will determine specific cross-section (round, square, flat, etc.) to be used

# Kinds of Teeth

## Single-cut



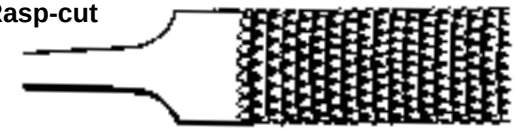
- Single set of parallel, diagonal rows of teeth
- Single-cut files are often used with light pressure to produce a smooth surface finish or to put a keen edge on knives, shears or saws

## Double-cut



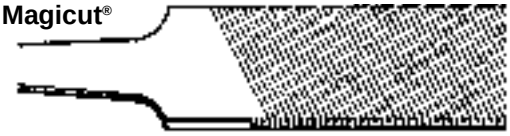
- 2 sets of diagonal rows of teeth
- Second set of teeth cut in opposite diagonal direction and on top of the first set
- First set of teeth is known as the overcut, second is known as upcut
- Upcut is finer than overcut
- Double-cut file is used with heavier pressure than the single-cut and removes material faster from the workpiece

## Rasp-cut



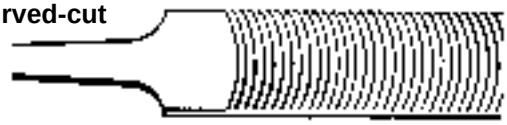
- Series of individual teeth which are formed by a single-pointed tool
- Produces a rough cut that is used primarily on wood, hooves, aluminum and lead

## Magicut®



- Single cut teeth divided by angular serrations into shorter cutting edges, which free themselves readily from chips and perform roughing and smoothing at the same time

## Curved-cut



- Teeth arranged in curved contours across the file face
- Curved-cut file is normally used in automotive body shops for smoothing body panels

# Files with Ergonomic Handles






- Rubber coating and rounded shape eliminates pressure points
- Flared neck, raised ribs, and wide middle section keep your hand from slipping and provides maximum comfort and control
- Rear taper allows your hand to lock securely around the handle, increasing push force
- Hang hole for easy storage

| Length Inch | mm | Cut | Packed | Code No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| **HAND** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016100601** | 104 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016100602** | 104 | 6 |
| 6 | 150 | Smooth | Carded | **0016100603** | 110 | 6 |
| 8 | 200 | Bastard | Carded | **0016100801** | 140 | 6 |
| 8 | 200 | 2nd cut | Carded | **0016100802** | 140 | 6 |
| 8 | 200 | Smooth | Carded | **0016100803** | 215 | 6 |
| 10 | 250 | Bastard | Carded | **0016101001** | 350 | 6 |
| 10 | 250 | 2nd cut | Carded | **0016101002** | 350 | 6 |
| 10 | 250 | Smooth | Carded | **0016101003** | 350 | 6 |
| 12 | 300 | Bastard | Carded | **0016101201** | 520 | 6 |
| 12 | 300 | 2nd cut | Carded | **0016101202** | 530 | 6 |
| 12 | 300 | Smooth | Carded | **0016101203** | 520 | 6 |
| **HAND MAGICUT** | | | | | | |
| 8 | 200 | Magicut | Carded | **0016110800** | 196 | 6 |
| 10 | 250 | Magicut | Carded | **0016111000** | 344 | 6 |
| **HALFROUND** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016300601** | 92 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016300602** | 99 | 6 |
| 8 | 200 | Bastard | Carded | **0016300801** | 176 | 6 |
| 8 | 200 | 2nd cut | Carded | **0016300802** | 174 | 6 |
| 10 | 250 | Bastard | Carded | **0016301001** | 310 | 6 |
| 10 | 250 | 2nd cut | Carded | **0016301002** | 296 | 6 |
| 12 | 300 | Bastard | Carded | **0016301201** | 487 | 6 |
| 12 | 300 | 2nd cut | Carded | **0016301202** | 506 | 6 |
| **ROUND** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016500601** | 68 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016500602** | 68 | 6 |
| 8 | 200 | Bastard | Carded | **0016500801** | 102 | 6 |
| 8 | 200 | 2nd cut | Carded | **0016500802** | 102 | 6 |
| 10 | 250 | Bastard | Carded | **0016501001** | 180 | 6 |
| 10 | 250 | 2nd cut | Carded | **0016501002** | 180 | 6 |
| 12 | 300 | Bastard | Carded | **0016501201** | 238 | 6 |

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# Files with Ergonomic Handles

| Length Inch | Length mm | Cut | Packed | Code No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| **SQUARE** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016400601** | 75 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016400602** | 81 | 6 |
| 8 | 200 | Bastard | Carded | **0016400801** | 112 | 6 |
| 8 | 200 | 2nd cut | Carded | **0016400802** | 120 | 6 |
| 10 | 250 | Bastard | Carded | **0016401001** | 230 | 6 |
| 10 | 250 | 2nd cut | Carded | **0016401002** | 218 | 6 |
| **THREESQUARE** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016600601** | 117 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016600602** | 119 | 6 |
| **WARDING** | | | | | | |
| 6 | 150 | Bastard | Carded | **0016900601** | 80 | 6 |
| 6 | 150 | 2nd cut | Carded | **0016900602** | 65 | 6 |
| **MILL BLUNT 1 RE (1 Round Edge)** | | | | | | |
| 6 | 150 | 2nd cut | Carded | **0015170602** | 86 | 6 |
| 8 | 200 | 2nd cut | Carded | **0015170802** | 144 | 6 |
| 10 | 250 | 2nd cut | Carded | **0015171002** | 290 | 6 |
| 12 | 300 | 2nd cut | Carded | **0015171202** | 434 | 6 |
| **MILL BLUNT 2 RE (2 Round Edges)** | | | | | | |
| 8 | 200 | 2nd cut | Carded | **0015180802** | 144 | 6 |
| 10 | 250 | 2nd cut | Carded | **0015181002** | 290 | 6 |
| **SLIM TAPER** | | | | | | |
| 6 | 150 | Single cut | Carded | **0015090600** | 104 | 6 |
| **HANDY FILE** | | | | | | |
| 8 | 200 | Single and double cut | Carded | **0017310800** | 226 | 6 |
| **WOODCRAFT RASP** | | | | | | |
| 8 | 200 | Rasp and file cut | Carded | **0017000800** | 258 | 6 |
| **WOOD RASP ROUND** | | | | | | |
| 8 | 200 | Bastard | Carded | **0017130800** | 115 | 6 |
| **CABINET RASP REGULAR** | | | | | | |
| 8 | 200 | 2nd cut | Carded | **0017090801** | 168 | 6 |
| 10 | 250 | 2nd cut | Carded | **0017091001** | 248 | 6 |
| 12 | 300 | 2nd cut | Carded | **0017091201** | 470 | 6 |
| **5 PIECE SETS (HAND, ROUND, HALFROUND, SQUARE, THREESQUARE)** | | | | | | |
| 8 | 200 | 2nd cut | Pouch | **0012990800** | 750 | 6 |
| 10 | 250 | 2nd cut | Pouch | **0012991000** | 810 | 6 |
| **HANDLE ONLY** | | | | | | |
| with 5 inserts/adapters | | Carded | | **0010000150** | 90 | 6 |

# Aluminum Files - Type “A” Flat



- Special tooth construction eliminates clogging when filing aluminum
- Flat shape
- Double-cut
- All sizes have same number of teeth per inch
- Smooth finish obtained by using shearing cut toward left

| Length Inch | mm | Packed | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 8 | 200 | Boxed | **00024** | **0012030800** | 1361 | 12 |
| 10 | 250 | Boxed | **00047** | **0012031000** | 3289 | 6 |

# Aluminum Files - Type “A” Half Round



- Special tooth construction eliminates clogging when filing aluminum
- Half-round shape
- Double-cut
- Smooth finish obtained by using shearing cut toward left

| Length Inch | mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 10 | 250 | Boxed | **00161** | 2608 | 6 |

# Bodifiles



- For those who work on automobile bodies, particularly in blending solder with sheet metal
- Rectangular shape
- Files have teeth on convex side only
- Files have offset tangs for knuckle clearance in filing large sheet metal surfaces
- D/C refers to double-cut
- For fine finishing steel surfaces

| Type | Teeth per Inch | Size Inch x Inch | Packed | Code No. | Bend ”R” Inch | Bend ”R” mm | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|---|---|
| **50-404 D/C** | 20 | 1 $^{11}/_{32}$" x $^{5}/_{16}$" -14 Flat Bent | Boxed | **03184** | 196 | 4981 | 7541 | 6 |

## Cabinet Files



- Used by cabinetmakers and woodworkers
- Files are half-round in section
- Teeth are slightly finer than those of wood files
- Radius is larger and thinner than regular half-round files

| Length Inch | Length mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 10 | 250 | Boxed | **0013081000** | 2466 | 6 |

## Cantsaw Files



- Used for sharpening crosscut saws with “M” teeth, circular saws and saw teeth with less than 60° angle
- Triangular shape
- Single-cut
- Edges set and cut
- Same number of teeth per inch as mill bastard files of equivalent length
- Supplied with “cut back”

| Length Inch | Length mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | Boxed | **01327** | 652 | 12 |

# Chain Saw Files - Round Smooth



- Round shape
- Smooth-cut
- Carded files, 3 files on card

| Length Inch | Length mm | Diameter Inch | Diameter mm | Type | Code No. | Packed | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|---|---|---|
| 6 | 150 | 1/8 | 3,20 | **610** | **0011266100** | Boxed | 90 | 6 |
| 6 | 150 | 1/8 | 3,20 | **610** | **0015266100** | Carded | 200 | 4 |
| 6 | 150 | 9/64 | 3,60 | **615** | **0011266150** | Boxed | 110 | 6 |
| 6 | 150 | 9/64 | 3,60 | **615** | **0015266150** | Carded | 220 | 4 |
| 6 | 150 | 5/32 | 4,00 | **620** | **0011266200** | Boxed | 120 | 6 |
| 6 | 150 | 5/32 | 4,00 | **620** | **0015266200** | Carded | 260 | 4 |
| 8 | 200 | 5/32 | 4,00 | **825** | **0011268250** | Boxed | 130 | 6 |
| 8 | 200 | 5/32 | 4,00 | **825** | **0015268250** | Carded | 340 | 4 |
| 8 | 200 | 11/64 | 4,50 | **827** | **0011268270** | Boxed | 150 | 6 |
| 8 | 200 | 11/64 | 4,50 | **827** | **0015268270** | Carded | 380 | 4 |
| 8 | 200 | 3/16 | 4,80 | **83** | **0011268300** | Boxed | 180 | 6 |
| 8 | 200 | 3/16 | 4,80 | **83** | **0015268300** | Carded | 440 | 4 |
| 8 | 200 | 13/64 | 5,20 | **832** | **0011268320** | Boxed | 210 | 6 |
| 8 | 200 | 13/64 | 5,20 | **832** | **0015268320** | Carded | 500 | 4 |
| 8 | 200 | 7/32 | 5,60 | **835** | **0011268350** | Boxed | 240 | 6 |
| 8 | 200 | 7/32 | 5,60 | **835** | **0015268350** | Carded | 560 | 4 |
| 8 | 200 | 1/4 | 6,40 | **84** | **0011268400** | Boxed | 260 | 6 |

# Chain Saw Files - Flat



- Used for cutter-raker type (2 round edges) chain saw
- Rectangular shape

| Type | Length Inch | Length mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| **16** | 6 | 150 | Boxed | **0011251600** | 767 | 12 |
| **18** | 8 | 200 | Boxed | **0011251800** | 1304 | 12 |

# Crosscut - Great American



- Used for sharpening saws of Great American type and varieties of crosscut saws
- Triangular shape
- Single-cut
- Rounded back and thin edge are cut
- Same number of teeth per inch as mill bastard files of equivalent length
- Rounded back used to deepen rounded gullets of saw teeth

| Length Inch | Length mm | Packed | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 8 | 200 | Boxed | **02435** | **0011340800** | 1474 | 12 |
| 10 | 250 | Boxed | **02465** | **0011341000** | 2835 | 12 |

# Double Ender Files



- Triangular shape
- Sides and edges are single-cut from points to center giving full use of file
- All files supplied with handles
- Single-cut

| Length Inch | Length mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | Boxed | **02884M** | 312 | 12 |
| 7 | 175 | Boxed | **02905M** | 369 | 12 |
| 8 | 200 | Boxed | **02926M** | 567 | 12 |
| 9 | 225 | Boxed | **02949M** | 907 | 12 |
| 10 | 250 | Boxed | **02969M** | 1077 | 12 |

# Farmer's Own Files



- General purpose file suited for agricultural use
- Rectangular shape
- Single-cut
- Safe edges
- Length measured exclusive of handle
- Convenient hang up hole

| Length Inch | Length mm | Packed | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 8 | 200 | Boxed | **06649** | **0013290800** | 2155 | 12 |
| 10 | 250 | Boxed | **06668** | **0013291000** | 4508 | 12 |

# Flat Files



- Used by machinists, machinery builders, ship and engine builders, repairman and others who require rapid removal of metal
- Rectangular in cross section and taper slightly towards point in width
- Double-cut on sides, single-cut on edges
- American pattern, available in bastard, second and smooth-cut
- Boxed

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf Pack |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | |
| 4 | 100 | **03367** | **0012000401** | **03401** | **0012000402** | **03434** | **0012000403** | 255 | 12 |
| 6 | 150 | **03467** | **0012000601** | **03500** | **0012000602** | **03533** | **0012000603** | 709 | 12 |
| 8 | 200 | **03566** | **0012000801** | **03599** | **0012000802** | **03632** | **0012000803** | 1701 | 12 |
| 10 | 250 | **03665** | **0012001001** | **03698** | **0012001002** | **03731** | **0012001003** | 3261 | 6 |
| 12 | 300 | **03764** | **0012001201** | **03797** | **0012001202** | **03830** | **0012001203** | 5103 | 6 |
| 14 | 350 | **03863** | **0012001401** | **03896** | **0012001402** | **03929** | **0012001403** | 7541 | 6 |

# Half Round Files



- Used on concave, convex and flat surfaces
- Rounded on 1 side, flat on opposite
- Backs of all half-round bastard files are double-cut
- Backs of all half-round second-cut files longer than 6" are double-cut
- Backs of all 4 and 6" files are single-cut
- Backs of all half-round smooth files are single-cut
- Flat sides of all half-round files are double-cut
- Boxed

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf Pack |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | |
| 4 | 100 | **04695** | **0012300401** | **04729** | **0012300402** | **04762** | **0012300403** | 284 | 12 |
| 6 | 150 | **04795** | **0012300601** | **04828** | **0012300602** | **04861** | **0012300603** | 709 | 12 |
| 8 | 200 | **04896** | **0012300801** | **04927** | **0012300802** | **04960** | **0012300803** | 1503 | 12 |
| 10 | 250 | **04995** | **0012301001** | **05026** | **0012301002** | **05059** | **0012301003** | 2750 | 6 |
| 12 | 300 | **05094** | **0012301201** | **05125** | **0012301202** | **05158** | **0012301203** | 4763 | 6 |
| 14 | 350 | **05194** | **0012301401** | **05225** | **0012301402** | **05258** | **0012301403** | 7371 | 6 |

# Hand Files



- Rectangular shape
- Double-cut
- 1 safe edge
- Same coarseness as flat files of corresponding lengths
- Boxed

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | Pack |
| 4 | 100 | **05652** | **0012100401** | **05675** | **0012100402** | **05698** | **0012100403** | 397 | 12 |
| 6 | 150 | **05738** | **0012100601** | **05771** | **0012100602** | **05804** | **0012100603** | 794 | 12 |
| 8 | 200 | **05853** | **0012100801** | **05886** | **0012100802** | **05919** | **0012100803** | 1758 | 12 |
| 10 | 250 | **05968** | **0012101001** | **06001N** | **0012101002** | **06034** | **0012101003** | 3402 | 6 |
| 12 | 300 | **06084** | **0012101201** | **06117** | **0012101202** | **06150** | **0012101203** | 7768 | 6 |
| 14 | 350 | **06198** | - | - | - | - | - | 7836 | 6 |

# Handy File



- One side is single-cut for use in tool sharpening and smoothing metal surfaces, reverse side is double-cut for general filing and rapid stock removal
- Rectangular shape
- 1 cut edge, 1 safe edge
- Length measured exclusive of handle
- Boxed

| Length | | | Weight per doz. | Shelf |
|---|---|---|---|---|
| Inch | mm | Code No. | g | Pack |
| 8 | 200 | **0013310801** | 2581 | 12 |

# Plastics File



- Used for filing wide range of plastics and other soft materials
- Rectangular shape
- Easily cleaned
- Finish easily varied by user
- Laboratory tests were performed on Masonite, C-Grade Phenolic, UHMW Polyethylene, Nylon and Acrylic with outstanding results
- Boxed

| Length | | | Weight per doz. | Shelf |
|---|---|---|---|---|
| Inch | mm | Code No. | g | Pack |
| 8 | 200 | **06610** | 1150 | 6 |

# Knife Files



- Used primarily by tool and die makers with work having acute angles
- Triangular shape
- Double-cut on sides, single-cut on sharp edge
- Knife files are supplied with safe backs
- Boxed

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | Pack |
| 4 | 100 | **06711** | **0012700401** | **06742** | **0012700402** | **06773** | **0012700403** | 170 | 12 |
| 6 | 150 | **06804** | **0012700601** | **06836** | **0012700602** | **06867** | **0012700603** | 539 | 12 |
| 8 | 200 | **06898** | **0012700801** | **06930** | **0012700802** | **06961** | **0012700803** | 1134 | 12 |
| 10 | 250 | **06992** | **0012701001** | **07023** | **0012701002** | **07054** | **0012701003** | 2098 | 12 |

# Long Angle Lathe Files - Bastard



- Rapid, free cutting files designed for lathe filing
- Rectangular shape
- Single-cut
- Safe edges to protect shoulder or dog
- Made on flat blanks in bastard-cut
- Cut faster than regular mill files and leave smoother finish
- Boxed

| Length | | Code No. | Code No. | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | g | Pack |
| 10 | 250 | **07657** | **0012191001** | 3260 | 6 |
| 12 | 300 | **07688** | **0012191201** | 5103 | 6 |
| 14 | 350 | **07719** | **0012191401** | 7541 | 6 |

# Long Angle Lathe Files - Fine



- Specially designed for finishing rapid stock removal on lathe work
- Rectangular shape
- Safe edges
- Cut faster than regular mill files and leave smoother finish
- Boxed

| Length | | Code No. | Code No. | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | g | Pack |
| 10 | 250 | **07842** | **0012191002** | 1730 | 6 |
| 12 | 300 | **07851** | **0012191202** | 2638 | 6 |
| 14 | 350 | **07863** | **0012191402** | 3998 | 6 |

# Magicut® Files - Flat

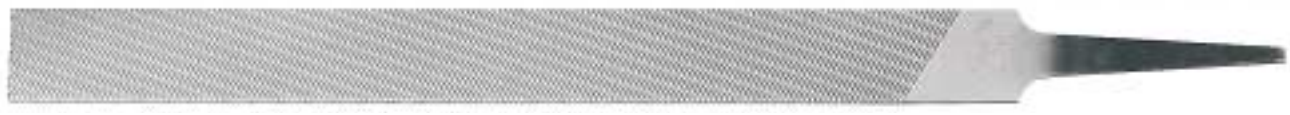




- Used by machinists as all-purpose file to remove stock rapidly and to leave a smooth finish
- Tapered point in width
- File features a pattern of narrow chip breakers created by steep and angled serrations for rapid removal and smoother finish
- Boxed

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 8 | 200 | **07894** | **0012010800** | 1701 | 12 |
| 10 | 250 | **07917** | - | 3260 | 6 |
| 12 | 300 | **07941** | - | 5103 | 6 |

# Magicut® Files - Hand



- Used by machinists as all-purpose file to remove stock rapidly and to leave a smooth finish
- Rectangular shape
- Parallel edges full length
- File features a pattern of narrow chip breakers created by steep and angled serrations for rapid removal and smoother finish
- Boxed

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 8 | 200 | - | **0012110800** | 1740 | 12 |
| 10 | 250 | - | **0012111000** | 3360 | 6 |
| 12 | 300 | **08204** | - | 7768 | 6 |

# Magicut® Files - Halfround



- Used by machinists as all-purpose file to remove stock rapidly and to leave a smooth finish
- Used on concave, convex or flat surfaces
- Rounded on one side, flat on the other side
- File features a pattern of narrow chip breakers created by steep and angled serrations for rapid removal and smoother finish
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 8 | 200 | **0012310800** | 1560 | 12 |
| 10 | 250 | **0012311000** | 2940 | 6 |
| 12 | 300 | **0012311200** | 4960 | 6 |

# Mill Blunt Files



- Used for sharpening mill or circular saws
- Also for draw-filing and finishing metals
- Rectangular shape
- Single-cut on sides and edges
- 1 or 2 round edges and parallel edges
- Boxed

| Length Inch | Length mm | Type Cut | Two Square Edges Code No. | One Round Edge Code No. | Two Round Edges Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|---|
| 6 | 150 | Bastard | **0011160601** | - | - | 600 | 12 |
| 8 | 200 | Bastard | **0011160801** | - | - | 1320 | 12 |
| 10 | 250 | Bastard | **0011161001** | - | - | 2640 | 12 |
| 12 | 300 | Bastard | **0011161201** | - | - | 4440 | 6 |
| 8 | 200 | 2nd cut | **0011160802** | - | - | 1380 | 12 |
| 10 | 250 | 2nd cut | **0011161002** | - | - | 2640 | 12 |
| 12 | 300 | 2nd cut | **0011161202** | - | - | 4380 | 6 |
| 8 | 200 | Bastard | - | **0011170801** | - | 1260 | 12 |
| 10 | 250 | Bastard | - | **0011171001** | - | 2520 | 12 |
| 6 | 150 | 2nd cut | - | **0011170602** | - | 600 | 12 |
| 8 | 200 | 2nd cut | - | **0011170802** | - | 1320 | 12 |
| 10 | 250 | 2nd cut | - | **0011171002** | - | 2580 | 12 |
| 12 | 300 | 2nd cut | - | **0011171202** | - | 4320 | 6 |
| 6 | 150 | 2nd cut | - | - | **0011180602** | 540 | 12 |
| 8 | 200 | 2nd cut | - | - | **0011180802** | 1320 | 12 |
| 10 | 250 | 2nd cut | - | - | **0011181002** | 2400 | 12 |
| 12 | 300 | 2nd cut | - | - | **0011181202** | 4260 | 6 |
| **Mill Blunt Heavy** | | | | | | | |
| 8 | 200 | - | - | **0011210800** | - | 2160 | 12 |
| 10 | 250 | - | - | **0011211000** | - | 3540 | 6 |
| 8 | 200 | - | - | - | **0011220800** | 2040 | 12 |
| 10 | 250 | - | - | - | **0011221000** | 3480 | 6 |

# Pillar File



- Used mostly by machinists for filing slots and keyways
- Similar to hand files but narrower
- Rectangular cross section
- 1 safe edge

| Length Inch | Length mm | Packed | Type Cut | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 8 | 200 | Boxed | Bastard | **11118** | 1673 | 12 |

# Square Files



- Used on slots, keyways and general surface filing
- Square shape
- Double-cut
- Tapered slightly towards point
- Larger sizes frequently preferred to corresponding flat files because of heavier section and 4 filing surfaces
- Boxed

| Length | | Diameter | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf Pack |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | |
| 4 | 100 | 5/32 | 4 | **12790** | **0012400401** | **12824** | **0012400402** | **12857** | **0012400403** | 113 | 12 |
| 5 | 125 | 3/16 | 5 | **-** | **0012400501** | **-** | **0012400502** | **-** | **0012400503** | 240 | 12 |
| 6 | 150 | 1/4 | 6 | **12967** | **0012400601** | **13000** | **0012400602** | **13033** | **0012400603** | 482 | 12 |
| 8 | 200 | 5/16 | 8 | **13081** | **0012400801** | **13114** | **0012400802** | **13147** | **0012400803** | 879 | 12 |
| 10 | 250 | 3/8 | 10 | **13196** | **0012401001** | **13229** | **0012401002** | **13262** | **0012401003** | 1758 | 12 |
| 12 | 300 | 1/2 | 13 | **13310** | **0012401201** | **13343** | **0012401202** | **13376** | **0012401203** | 3799 | 6 |

# Round Files



- Primarily used to file circular openings or concave surfaces
- Round shape
- All 4, 5, 6, 8, 10, 12" files are single-cut
- 14" bastard file is double-cut
- Tapered slightly towards point
- Boxed

| Length | | Diameter | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf Pack |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | |
| 4 | 100 | 1/8 | 3 | **11526** | **0012500401** | **11559N** | **0012500402** | **11592N** | **0012500403** | 113 | 12 |
| 5 | 125 | 3/16 | 5 | **11637** | **0012500501** | **11665** | **0012500502** | **-** | **0012500503** | 255 | 12 |
| 6 | 150 | 1/4 | 6 | **11716** | **0012500601** | **11748** | **0012500602** | **11781** | **0012500603** | 397 | 12 |
| 8 | 200 | 5/16 | 8 | **11904** | **0012500801** | **11936** | **0012500802** | **11969** | **0012500803** | 624 | 12 |
| 10 | 250 | 3/8 | 10 | **12019** | **0012501001** | **12051** | **0012501002** | **12084** | **0012501003** | 1446 | 12 |
| 12 | 300 | 1/2 | 13 | **12134** | **0012501201** | **12166** | **0012501202** | **12199** | **0012501203** | 3090 | 6 |
| 14 | 350 | 5/8 | 16 | **12248** | **0012501401** | **12282** | **0012501402** | **-** | **-** | 5415 | 6 |

# Taper (Triangular) Saw Files

| Number of Saw Points | Files Recommended |
|---|---|
| 5 | 7"/178 mm Taper Regular |
| 5 1/2 | 7"/178 mm Taper Regular |
| 6 | 7"/178 mm or 8"/200 mm Slim |
| 7 | 6"/150 mm or 7"/178 mm Slim |
| 8 | 6"/150 mm Slim |
| | 7"/178 mm Extra Slim |
| | 8"/200 mm Double Extra Slim |
| 9 | 6"/150 mm Extra Slim |
| | 7"/178 mm Double Extra Slim |
| 10 | 5"/127 mm of 6"/150 mm Extra Slim |
| 11 | 5"/127 mm Extra Slim |
| | 6"/150 mm Double Extra Slim |
| 12 | 5"/127 mm Extra Slim |
| 13 and 14 | 5"/127 mm Double Extra Slim |
| 15 and 16 | 4"/102 mm Double Extra Slim |

- Made for filing saws with 60° angle teeth
- Triangular shape
- Single-cut
- Edges set and cut for filing gullets between saw teeth
- In filing handsaws, it is important to select the right file
- In general, the table lists suggested size and type of file that will give best results

# Taper Files - Regular and Heavy



- Triangular shape
- Boxed
- Edges set and cut for filing gullets between saw teeth
- Tapers slightly towards the point

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Mexico | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| **Regular** | | | | | |
| 3 1/2 | 88 | - | **0011000350** | 180 | 12 |
| 4 | 100 | **13727M** | **0011000400** | 311 | 12 |
| 4 1/2 | 113 | **13750M** | **0011000450** | 425 | 12 |
| 5 | 125 | **13772M** | **0011000500** | 567 | 12 |
| 6 | 150 | **13807** | **0011000600** | 907 | 12 |
| 7 | 175 | **13841** | **0011000700** | 1332 | 12 |
| 8 | 200 | **13875** | **0011000800** | 1956 | 12 |
| 9 | 225 | - | **0011000900*** | 2520 | 12 |
| 10 | 250 | **13930** | **0011001000*** | 3402 | 12 |
| **Heavy** | | | | | |
| 6 | 150 | - | **0011070600*** | 1200 | 12 |
| 7 | 175 | - | **0011070700** | 1680 | 12 |
| 8 | 200 | - | **0011070800** | 2400 | 12 |

* Made in Brazil

## Taper Files - Slim



- Triangular shape
- Boxed
- Edges set and cut for filing gullets between saw teeth

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Mexico | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 4 | 100 | **14106** | **0011090400** | 170 | 12 |
| 4 1/2 | 113 | **14139** | **0011090450** | 226 | 12 |
| 5 | 125 | **14162** | **0011090500** | 255 | 12 |
| 6 | 150 | **14224** | **0011090600** | 482 | 12 |
| 7 | 175 | **14255** | **0011090700** | 765 | 12 |
| 8 | 200 | **14290** | **0011090800*** | 1191 | 12 |

*Made in Brazil

## Taper Files - Extra Slim



- Triangular shape
- Boxed
- Edges set and cut for filing gullets between saw teeth

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Mexico | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 4 | 100 | **14547** | **0011100400** | 113 | 12 |
| 4 1/2 | 113 | **14579** | **0011100450*** | 141 | 12 |
| 5 | 125 | **14599** | **0011100500** | 170 | 12 |
| 6 | 150 | **14665** | **0011100600** | 312 | 12 |
| 7 | 175 | **14698** | **0011100700** | 539 | 12 |
| 8 | 200 | **14729** | **0011100800*** | 851 | 12 |

*Made in Brazil

## Taper Files - Double Extra Slim



- Triangular shape
- Boxed
- Edges set and cut for filing gullets between teeth

| Length Inch | Length mm | Packed | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 4 | 100 | Boxed | **0011120400** | 82 | 12 |
| 5 | 125 | Boxed | **0011120500** | 142 | 12 |

# Taper Files - Bandsaw Regular and Heavy



- For filing and sharpening bandsaws
- Triangular shape
- Edges set and cut for filing gullets between saw teeth
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| **REGULAR** | | | | |
| 5 | 125 | **0011010500** | 540 | 12 |
| 6 | 150 | **0011010600** | 900 | 12 |
| 7 | 175 | **0011010700** | 1320 | 12 |
| 8 | 200 | **0011010800** | 1920 | 12 |
| **HEAVY** | | | | |
| 6 | 150 | **0011080600** | 1080 | 12 |
| 7 | 175 | **0011080700** | 1640 | 12 |
| 8 | 200 | **0011080800** | 2360 | 12 |

# Taper Files - Machine Bandsaw Blunt



- File is blunt over the whole body length
- Triangular shape
- Edges set and cut for filing gullets between saw teeth
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 8,5 | 210 | **0011060850** | 1980 | 12 |

# Three Square Files



- For general use by machinists for filing internal angles more acute than right angles, clearing out square corners and filing taps and gutters
- Triangular shape
- Double-cut
- Sharp corners are slightly set and cut
- Cut to the point
- Boxed

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | Pack |
| 4 | 100 | **15803M** | **0012600401** | - | **0012600402** | - | **0012600403** | 340 | 12 |
| 5 | 125 | - | **0012600501** | - | **0012600502** | - | **0012600503** | 540 | 12 |
| 6 | 150 | **15925** | **0012600601** | **15958** | **0012600602** | **15991** | **0012600603** | 879 | 12 |
| 8 | 200 | **16036** | **0012600801** | **16069** | **0012600802** | **16102** | **0012600803** | 1928 | 12 |
| 10 | 250 | **16147** | **0012601001** | **16180** | **0012601002** | **16213** | **0012601003** | 3402 | 12 |
| 12 | 300 | **16258** | **0012601201** | **16291** | **0012601202** | - | **0012601203** | 5216 | 6 |

# Tungsten Point Files



- Designed for dressing distributor points that are tipped with tungsten, iridium and similar metals
- Thin rectangular shape
- Double-cut
- 5 1/4" overall
- Chisel tip of file enters slots or gaps easily
- Approximate size 5/16"/8 mm x 0,044"/1,10 mm
- Available with attractive carded display
- Code No. 02381 contains 12 files

| Length | | | | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Packed | Code No. | g | Pack |
| 5 1/4 | 133 | Boxed | **02373** | 1134 | 12 |
| 5 1/4 | 133 | 1/cd | **02375** | 567 | 6 |
| 5 1/4 | 133 | 12/cd | **02381** | 1588 | 12 |

# Warding Files



- Used primarily by locksmiths in repairing and filing ward notches in keys
- Thin rectangular shape
- Double-cut on sides, single-cut on edges
- Also suited for use in narrow spaces where other files will not fit

| Length | | Bastard Cut Code No. | | Second Cut Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | Pack |
| 4 | 100 | **16507** | **0012900401** | **16540** | **0012900402** | **16573** | - | 142 | 12 |
| 6 | 150 | **16663** | - | **16696** | - | **16729** | - | 369 | 12 |
| 8 | 200 | **16761** | - | **16794** | - | **16827** | - | 737 | 12 |

# Hoof Knife File



- Specially designed to sharpen hoof knives
- Rectangular shape
- Both sides single-cut
- 2 round cut edges
- Contoured to sharpen entire knife, even at hook end
- Boxed

| Length | | | Weight per doz. | Shelf |
|---|---|---|---|---|
| Inch | mm | Code No. | g | Pack |
| 8 | 200 | **10626** | 1361 | 12 |

## Cabinet Rasps



- Used by cabinetmakers and woodworkers
- Half-round
- Single-cut on edges
- Curved side of rasps similar to half-round rasps but has larger radius
- Boxed

| Length | | Regular (Second Cut) Code No. | | Smooth Cut Code No. | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|---|
| Inch | mm | Made in USA | Made in Brazil | Made in USA | Made in Brazil | g | Pack |
| 8 | 200 | **17615** | **0013090801** | - | - | 1361 | 12 |
| 10 | 250 | **17683** | **0013091001** | **17718** | **0013091003** | 2466 | 6 |
| 12 | 300 | **17751** | **0013091201** | **17786** | **0013091203** | 4224 | 6 |

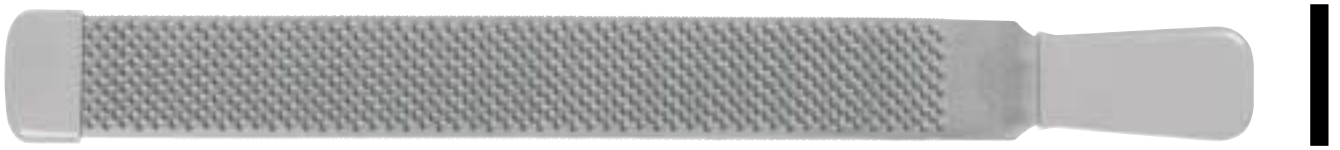
## Horse Rasp - Plain 1/2 File



- Some farriers prefer this thin fine-toothed rasp for shoeing racetrack, riding horses and ponies
- Plain horse rasps are double-ended with rasp teeth on 1 side, file teeth on opposite
- Rectangular shape
- Boxed

| Length | | | | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Type | Code No. | g | Pack |
| 14 | 350 | Regular | **17903** | 8902 | 6 |

## Farrier's Handy Rasp



- Rectangular shape
- Single-cut on edges
- Comfortable cushion grip at point and handle
- Rasp teeth on 1 side, file teeth on opposite
- Rasp cut is 6 teeth per row (other horse rasps have 5 teeth per row)
- Body is the same as the 14" Plater's Special
- Boxed

| Length | | | Weight per doz. | Shelf |
|---|---|---|---|---|
| Inch | mm | Code No. | g | Pack |
| 14 | 350 | **18155** | 8591 | 5 |

## Horse Rasps - Tanged



- Rectangular shape
- Single-cut on edges
- Tanged
- Rasp teeth on 1 side, file teeth on opposite
- Thicker than Plater's Special - ideal for hot rasping
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 12 | 300 | **18035** | 8165 | 6 |
| 14 | 350 | **18057** | 12020 | 6 |

## Farrier Rasp - Double Extra Thin



- Primarily for race track and other horses with light shoes
- Both sides are safe $^{7}/_{8}$"/22 mm at point
- Rasp teeth on 1 side, file teeth on opposite
- Rasp cut is 6 teeth per row (other horse rasps have 5 teeth per row)
- Rectangular shape
- 18" rasp is specially designed for draft horses
- Sharper than regular horse rasps
- Double extra thin
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 14 | 350 | **18156N*** | 7428 | 6 |
| 14 | 350 | **18157** | 7428 | 6 |
| 14 | 350 | **HR14** | 7428 | 6 |
| 18 | 450 | **18180** | 9639 | 6 |

* Aggressive cut – Black Diamond® Brand

## Magicut® Plater's Special Horse Rasp



- Maximum cutting surface design gives rapid removal and smoother finish
- Single-cut on edges
- Opposite side has Nicholson's® unique Magicut® file pattern of narrow chip breakers created by steep and angled serrations
- Rectangular shape
- Tooth design is cut deeper to last longer and cut much faster than conventional horse rasps
- Rasp cut is 6 teeth per row (other horse rasps have 5 teeth per row)
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 14 | 350 | **18130** | 7144 | 6 |

## Pattern Maker's Cabinet Rasp



- Used primarily by cabinetmakers
- Half-round shape
- Narrow pattern, cut edges
- Used when smooth wood finish is required
- Boxed

| Length Inch | Length mm | Type | Cut | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 10 | 250 | 49 | Second cut | **18846** | 1644 | 6 |

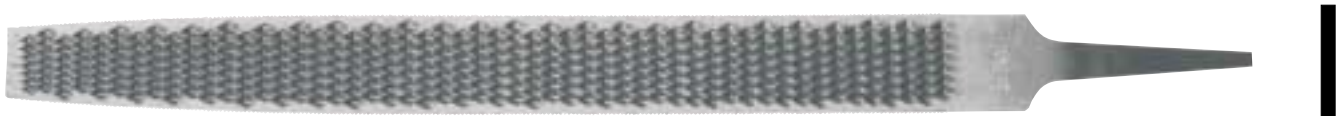
## 4-in-Hand® (Formerly Shoe Rasp)



- 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
- Boxed

| Length Inch | Length mm | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| 8 | 200 | **18924** | 1871 | 6 |

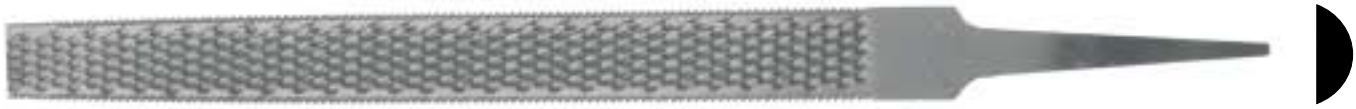
## Wood Rasps - Flat Bastard



- Flat shape
- Bastard-cut
- Boxed

| Length Inch | Length mm | Code No. Made in USA | Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 10 | 250 | **19136** | **0013151001** | 3402 | 6 |

## Wood Rasps - Half Round



- Used by woodworkers, hobbyists and plumbers
- Half-round shape
- Single-cut file teeth on edge
- For use on wood and soft metals
- Boxed

| Length Inch | Length mm | Bastard Cut Code No. Made in USA | Bastard Cut Code No. Made in Brazil | Second Cut Code No. Made in USA | Second Cut Code No. Made in Brazil | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|---|
| 8 | 200 | **19394** | **0013140801** | **19575** | **0013140802** | 1559 | 12 |
| 10 | 250 | **19427** | **0013141001** | **19593** | **0013141002** | 2948 | 6 |
| 12 | 300 | **19460** | **0013141201** | **19611** | **0013141202** | 4763 | 6 |

## Wood Rasps Round Bastard



- Used for same purpose as regular wood rasps in places for which their shapes make them particularly effective
- Round shape
- Bastard-cut
- Made from same size steel as round files
- Boxed

| Length | | Diameter | | | Weight per doz. | Shelf |
|---|---|---|---|---|---|---|
| Inch | mm | inch | mm | Code No. | g | Pack |
| 8 | 200 | 5/16 | 8 | **19846** | 624 | 12 |
| 10 | 250 | 3/8 | 10 | **19875** | 1474 | 12 |

## Nicholson® X.F® Files Swiss Pattern

- Made to more exacting measurements than American pattern files
- Made in finer cuts, which vary from No. 00 (coarsest) to No. 6 (finest)
- Used by tool and die makers, jewelers, model makers and home craftsman
- Recommended for those who do superfine precision filing

## Barrette Files



- Double-cut, wide flat sides
- Flat on 1 side, backs are beveled on edges as indicated by cross section
- Back and beveled edges are safe
- Included angle is 33°
- Boxed

| Length | | | | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Code No. | Cut No. | g | Pack |
| 4 | 100 | **35025** | 00 | 255 | 12 |
| 4 | 100 | **35031** | 0 | 255 | 12 |

## Half Round Files



- Used by tool and die makers, jewelers, model makers and home craftsman
- Half-round shape
- Double-cut on both flat and half-round sides
- Taper in thickness and width to point
- Boxed

| Length | | | | Weight per doz. | Shelf |
|---|---|---|---|---|---|
| Inch | mm | Code No. | Cut No. | g | Pack |
| 6 | 150 | **36533** | 2 | 539 | 12 |
| 6 | 150 | **36545** | 4 | 539 | 12 |

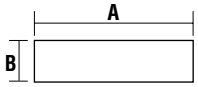
# Hand Files

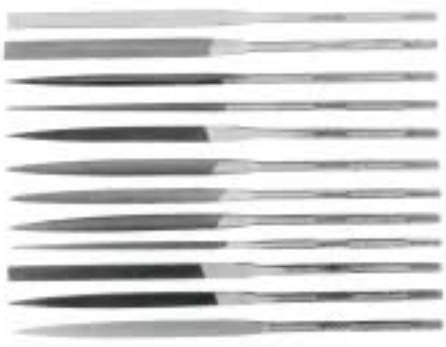


- Used by tool and die makers, jewelers, model makers and home craftsman
- Rectangular shape
- Double-cut sides
- Cut numbers 0 and 2 are single-cut on 1 edge, other is safe
- Parallel in width but taper in thickness
- Boxed

| Length Inch | Length mm | Code No. | Cut No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | **36743** | 0 | 1049 | 12 |
| 6 | 150 | **36755** | 2 | 1049 | 12 |
| 8 | 200 | **36785** | 0 | 2070 | 6 |
| 8 | 200 | **36797** | 2 | 2070 | 6 |

# Needle Files

- Used primarily by jewellers, die makers, watchmakers and fine toolmakers
- With round, knurled handles
- 

**Assortments of 12 Shapes Packed in Protective Pouch**

| Length Inch | Length mm | Code No. | Cut No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 4 | 100 | **0014470402** | 2 | 116 | 1 |
| 5 1/2 | 140 | **0014470552** | 2 | 138 | 1 |
| 6 1/4 | 160 | **0014470600** | 0 | 148 | 1 |
| 6 1/4 | 160 | **0014470602** | 2 | 150 | 1 |

| | Length mm | A x B mm |
|---|---|---|
| Pillar | 100 | 3,5 x 0,9 |
| | 140 | 4,8 x 1,1 |
| | 160 | 5,4 x 1,2 |
| Halfround | 100 | 3,8 x 1,1 |
| | 140 | 5,1 x 1,5 |
| | 160 | 5,6 x 1,7 |
| Crossing | 100 | 3,5 x 1,4 |
| | 140 | 4,4 x 1,8 |
| | 160 | 5,1 x 2,0 |

| | Length mm | A x B mm |
|---|---|---|
| Knife | 100 | 4,0 x 1,1 |
| | 140 | 5,0 x 1,4 |
| | 160 | 5,4 x 1,5 |
| Flat | 100 | 3,4 x 0,9 |
| | 140 | 4,8 x 1,1 |
| | 160 | 5,4 x 1,2 |
| Threesquare | 100 | 2,8 |
| | 140 | 3,5 |
| | 160 | 3,8 |

| | Length mm | A x B mm |
|---|---|---|
| Square | 100 | 1,7 |
| | 140 | 2,2 |
| | 160 | 2,4 |
| Round | 100 | 2,1 |
| | 140 | 2,8 |
| | 160 | 2,9 |
| Barrette | 100 | 3,7 x 1,4 |
| | 140 | 4,7 x 1,7 |
| | 160 | 5,1 x 1,8 |

| | Length mm | A x B mm |
|---|---|---|
| Slitting | 100 | 4,6 x 1,6 |
| | 140 | 5,5 x 1,9 |
| | 160 | 6,1 x 2,1 |
| Joint File round edges | 100 | 3,8 x 1,0 |
| | 140 | 4,8 x 1,2 |
| | 160 | 5,4 x 1,3 |
| Halfround, cut on back only | 100 | 3,8 x 1,2 |
| | 140 | 5,1 x 1,5 |
| | 160 | 5,6 x 1,8 |

**Assortments of 6 Shapes Packed in Protective Plastic Pouch**

| Length Inch | Length mm | Code No. | Cut No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|
| 6 1/4 | 160 | **0014471602** | 2 | 65 | 1 |

Pillar

Halfround

Flat

Threesquare

Square

Round

# Needle Files

**8 Individual Shapes, 12 Files in a Box**

| Shape | Length Inch | Length mm | Code No. | Cut No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| Pillar | 6 1/4 | 160 | **0014210600** | 0 | 108 | 12 |
| | 6 1/4 | 160 | **0014210602** | 2 | 96 | 12 |
| Flat | 6 1/4 | 160 | **0014220600** | 0 | 108 | 12 |
| | 6 1/4 | 160 | **0014220602** | 2 | 96 | 12 |
| Halfround | 6 1/4 | 160 | **0014230600** | 0 | 108 | 12 |
| | 6 1/4 | 160 | **0014230602** | 2 | 108 | 12 |
| Threesquare | 6 1/4 | 160 | **0014240600** | 0 | 96 | 12 |
| | 6 1/4 | 160 | **0014240602** | 2 | 96 | 12 |
| Square | 6 1/4 | 160 | **0014250600** | 0 | 84 | 12 |
| | 6 1/4 | 160 | **0014250602** | 2 | 84 | 12 |
| Round | 6 1/4 | 160 | **0014260600** | 0 | 84 | 12 |
| | 6 1/4 | 160 | **0014260602** | 2 | 84 | 12 |
| Knife | 6 1/4 | 160 | **0014270600** | 0 | 96 | 12 |
| | 6 1/4 | 160 | **0014270602** | 2 | 96 | 12 |
| Crossing | 6 1/4 | 160 | **0014280600** | 0 | 120 | 12 |
| | 6 1/4 | 160 | **0014280602** | 2 | 120 | 12 |

# Pillar Files



- Rectangular in shape
- Double-cut on 2 sides only
- Safe edges
- Tapered in thickness
- Similar in shape to hand files but only 2/3 as wide
- Boxed

| Length Inch | Length mm | Code No. | Cut No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | **39899** | 0 | 737 | 12 |
| 6 | 150 | **39905** | 1 | 737 | 12 |
| 6 | 150 | **39911** | 2 | 737 | 12 |
| 6 | 150 | **39923** | 4 | 737 | 12 |
| 8 | 200 | **39935** | 0 | 1588 | 6 |
| 8 | 200 | **39947** | 2 | 1588 | 6 |

# Pillar Narrow Files



- Rectangular shape
- Narrow
- Double-cut on 2 sides only
- Safe edges
- Similar to pillar files but are narrower for their length
- Boxed

| Length Inch | mm | Code No. | Cut No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | **40070** | 00 | 567 | 12 |
| 6 | 150 | **40076** | 0 | 567 | 12 |
| 6 | 150 | **40088** | 2 | 567 | 12 |
| 8 | 200 | **40127** | 2 | 1191 | 6 |

# Three Square Files



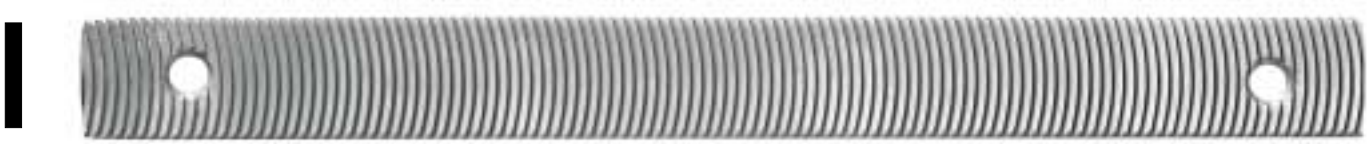
- Triangular in section with angles of 60°
- Double-cut on three sides, single-cut on edges
- Taper to point and have sharp corners
- Boxed

| Length Inch | mm | Code No. | Cut No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 6 | 150 | **41498** | 2 | 737 | 12 |
| 6 | 150 | **41506** | 4 | 737 | 12 |
| 8 | 200 | **41524** | 1 | 1191 | 12 |
| 8 | 200 | **41530** | 2 | 1191 | 12 |

# Nicholson® Curved Tooth Files

- Made on specially designed and improved Nicholson® machinery
- Fitted for smooth, rapid work on cast iron, bronze, lead, babbit, aluminum, zinc, plastics and any steel up to the hardness of annealed tool steel
- Pitch and rake designed to avoid pinning and to provide smoothest finish
- Superior® milled tooth files

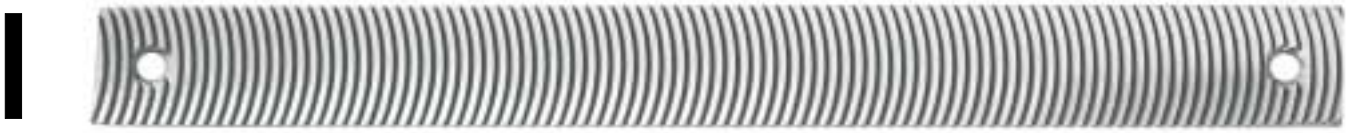
## Flexible Files (Without Tang)



- Ideal for smooth, rapid work on cast iron, bronze, lead, babbitt, aluminum, zinc, plastics and any steel up to the hardness of annealed tool steel
- Rectangular shape
- Curved-cut
- Pitch and rake designed to avoid pinning and to provide smoothest finish
- Boxed

| Length Inch | Length mm | Code No. | No. of Teeth Per Inch/Cut | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 12 | 300 | **20138** | 10/Standard | 2495 | 6 |
| 14 | 350 | **20205** | 12/Fine | 3204 | 6 |

## Milled Tooth Bodifiles



- Ideal for smooth, rapid work on cast iron, bronze, lead, babbitt, aluminum, zinc, plastics and any steel up to the hardness of annealed tool steel
- Rectangular shape
- Curved-cut
- Pitch and rake designed to avoid pinning and to provide smoothest finish
- Boxed

| Length Inch | Length mm | Type | Code No. | No. of Teeth Per Inch/Cut | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|---|
| 14 | 350 | **50-908** | **20189** | 8/Standard | 3204 | 6 |

# Flat Files - Rigid Type (With Tang)



- Ideal for smooth, rapid work on cast iron, bronze, lead, babbitt, aluminum, zinc, plastics and any steel up to the hardness of annealed tool steel
- Rectangular shape
- Curved-cut
- Rigid type with tang
- Pitch and rake designed to avoid pinning and to provide smoothest finish
- Boxed

| Length Inch | Length mm | Code No. | No. of Teeth Per Inch/Cut | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 12 | 300 | **20342** | 10/Standard | 4224 | 6 |
| 14 | 350 | **20393** | 8/Standard | 6747 | 6 |

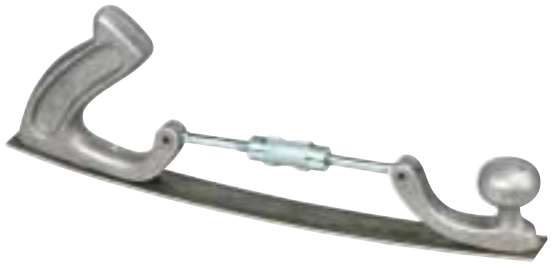
# Super Shear®



- A double purpose milled curved tooth file - different and exclusive with Nicholson®
- Rectangular shape
- Curved-cut
- Teeth cut in an off center arc to permit fast cutting
- Wide industrial usage on flat and convex surfaces of aluminum, brass, babbitt, bronze, copper, magnesium, iron, annealed steel, soft metal alloys, plastics, hard rubber and hardwood
- Smooths as it roughs
- Boxed

| Length Inch | Length mm | Code No. | No. of Teeth Per Inch/Cut | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|---|
| 10 | 250 | **21067** | 12/Standard | 2665 | 6 |
| 12 | 300 | **21118** | 10/Standard | 4224 | 6 |

# Adjustable Flexible File Holder No. 25



- For curved tooth files without tang
- Can be used with either 12" or 14" files
- Easily adjusted for curving file outward or inward
- Boxed

| No. | Code No. | Weight per doz. g | Shelf Pack |
|---|---|---|---|
| 25 | **21272** | 907 | 1 |

# Ergonomic File Handle

NEW PRODUCT



- 5 Interchangeable cushion inserts are designed to fit most popular files
- Rubber-coated ergonomic shape for better comfort and control
- Rear taper, wide middle and flared neck increases push force
- Carded

| Code No. | Description | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|
| **0010000150** | Ergonomic File handle and inserts | 350 | 6 |

# File Handles - Plastic



- Handle made of strong high-impact material, contoured to fit hand for straight, lathe and draw filing
- Non-slip textured finish for easier grip
- Bulk packed
- Suitable for file:
  No. 1: 6“ files, 8“ round and square
  No. 2: 8“ and 10“ files, 6“ threesquare and regular taper
  No. 3: 12“ files

| Type | Code No. | Description | Weight g | Shelf Pack |
|---|---|---|---|---|
| **No. 1** | **0010000116** | File handle with insert | 25 | 10 |
| **No. 2** | **0010000118** | File handle with insert | 32 | 10 |
| **No. 3** | **0010000120** | File handle with insert | 50 | 10 |

# Wooden File Handles - Metal Ferruled

- Made from close grain hardwood with strong nickel-plated metal ferrules
- Varnished finish
- Bulk packed



| Length mm | Diameter mm | Code No. | For File Length Inch | mm | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| 110 | 12 | **0010000012** | 4 | 100 | 56 | 1 |
| 111 | 14 | **0010000014** | 5 | 125 | 60 | 1 |
| 113 | 16 | **0010000016** | 6 | 150 | 64 | 1 |
| 117 | 18 | **0010000018** | 7 | 175 | 68 | 1 |
| 120 | 20 | **0010000020** | 8 | 200 | 72 | 1 |
| 134 | 22 | **0010000022** | 9 | 225 | 76 | 1 |
| 134 | 24 | **0010000024** | 10 | 250 | 80 | 1 |
| 140 | 26 | **0010000026** | 12 | 300 | 84 | 1 |
| 140 | 28 | **0010000028** | 14 | 350 | 88 | 1 |

# Sleeves for Files - Plastic

- For files without handle
- With hang hole for easy storage

| Code No. | For File Length Inch | mm | Weight per doz. g | Shelf Pack |
|---|---|---|---|---|
| **0010000204** | 4 | 100 | 24 | 12 |
| **0010000206** | 6 | 150 | 38 | 12 |
| **0010000208** | 8 | 200 | 72 | 12 |
| **0010000210** | 10 | 250 | 108 | 12 |
| **0010000212** | 12 | 300 | 156 | 12 |

# 5 Piece Ergonomic File Set

- Assortment of machinist's files
- With ergonomic, co-molded handle
- Consist of Square, Round, Halfround, Hand and Threesquare



| Type | Length Inch | mm | Cut | Code No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| **NFK1** | 8 | 200 | 2nd cut | **0012990800** | 750 | 1 |
| **NFK2** | 10 | 250 | 2nd cut | **0012991000** | 930 | 1 |

# 4“/100 mm File Assortment




- With wooden handle
- Six files in metal box or in plastic pouch
- Consist of Hand, Warding, Half Round, Square, Round and Slim Taper

| Length Inch | Length mm | Packed | Cut | Code No. | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|
| 4 | 100 | Metal Box | Bastard | **0012991410** | 150 | 1 |
| 4 | 100 | Plastic Pouch | Bastard | **0012991411** | 110 | 1 |
| 4 | 100 | Metal Box | 2nd cut | **0012991420** | 150 | 1 |
| 4 | 100 | Plastic Pouch | 2nd cut | **0012991422** | 110 | 1 |
| 4 | 100 | Metal Box | Smooth | **0012991430** | 150 | 1 |
| 4 | 100 | Plastic Pouch | Smooth | **0012991433** | 110 | 1 |

# Hobby Files




- Assortment of 6 miniature files with fine cut for intricate work
- Consist of Equaling, Half Round, Flat, Round, Square, and Threesquare
- Handy vinyl case vacuum packed on hang up card
- Ideal for handycrafts and hobbies

| Length Inch | Length mm | Description | Code No. | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| 5 $^{1}/_{2}$ | 140 | Assorted | **42030** | 340 | 3 |

Nicholson®

## MultiMax Mini

- Universal mini tool made from particularly high-grade steel
- 11 tools included:
  - Drop Point Blade
  - Needle-Nose Plier
  - Regular Plier
  - 2 Slotted Screwdrivers
  - Wire Cutter
  - Bottle Opener
  - Nail File
  - Nail Cleaner
  - Inch Ruler
  - Metric Ruler
  - Lanyard Keyring
- Carded blister pack



| Type | Code No. | Description | Length when closed Inch | Length when closed mm | Width when closed Inch | Width when closed mm | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|---|---|
| **NMP4V** | **NMP4V** | MultiMax Mini | 2 1/2 | 63 | 3/4 | 19 | 125 | 3 |

## MultiMax Pro

- 14 tools in one
- All stainless steel components
- Adjustable/replaceable tool components
- Blades open up from closed handles
- Tool comes with nylon pouch that can be used in vertical or horizontal position on belt
- 14 tools included:
  - Needle-Nose/Regular Pliers
  - Wire Cutter
  - 2 Slotted Screwdrivers
  - Phillips® Screwdriver
  - Drop Point Blade
  - Serrated Edge Blade
  - Metric/English Ruler (measures up to 8"/20 cm)
  - Lanyard Ring
  - Can/Bottle Opener
  - Metal/Wood File
- Code No. 0010020265 packed in box
- Code No. 0010020266 packed on card



| Type | Code No. | Description | Length when closed Inch | Length when closed mm | Width when closed Inch | Width when closed mm | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|---|---|
| **NMP12** | **0010020265** | MultiMax Pro | 4 | 100 | 1 3/16 | 30 | 240 | 6 |
| **NMP12** | **0010020266** | MultiMax Pro | 4 | 100 | 1 3/16 | 30 | 275 | 6 |

# MultiMax Pro XL



- 15 tools in one
- All stainless steel components
- Adjustable/replaceable tool components
- Blades open up from closed handles
- Tool comes with nylon pouch that can be used in vertical or horizontal position on belt
- 15 tools included:
  - Large Plier Head
  - Wire Cutter
  - Wire Crimper
  - Serrated Drop Point Blade
  - 3 Slotted Screwdrivers (small, medium, large)
  - Phillips® Screwdriver
  - Can/Bottle Opener
  - Lanyard Ring
  - Metal/Wood File
  - Metric/English Ruler
  - Saw
  - Awl
- Code No. 0010020268 packed in box
- Code No. 0010020269 packed on card

| Type | Code No. | Description | Length when closed Inch | Length when closed mm | Width when closed Inch | Width when closed mm | Weight g | Shelf Pack |
|---|---|---|---|---|---|---|---|---|
| **NMP15** | **0010020268** | MultiMax Pro XL | 4 1/2 | 113 | 1 3/8 | 35 | 270 | 6 |
| **NMP15** | **0010020269** | MultiMax Pro XL | 4 1/2 | 113 | 1 3/8 | 35 | 305 | 6 |

# Display for MultiMax Pro and MultiMax Pro XL



- Capacity for 12 pcs. of boxed NMP12 or NMP15 plus a demonstration model which can be attached by a chain to the anti-theft device on the display
- With a base of 15 x 13 cm and a height of 56 cm, this counter display requires only a small space
- Consist of acrylic display (unstocked), header and chain for demonstration model
- If ordering 12 pcs. of NMP12 or NMP15, display is free of charge

| Code No. | Description | Weight g | Shelf Pack |
|---|---|---|---|
| **0055627499** | Display for 12 pcs. NMP12 | 870 | 1 |
| **0055644599** | Display for 12 pcs. NMP15 | 870 | 1 |

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# Spare Parts for MultiMax NMP12 and NMP15

• All stainless steel components

| Code No. | Description | Application NMP12 | Application NMP15 | Shelf Pack |
|---|---|---|---|---|
| **237100** | Awl | | x | 1 |
| **237101** | Can/Bottle Opener | x | x | 1 |
| **237102** | File | x | x | 1 |
| **237103** | Drop Point Blade | x | | 1 |
| **237104** | Serrated Edge Blade | x | | 1 |
| **237105** | Lanyard Ring | x | x | 1 |
| **237106** | Combination Plier | x | | 1 |
| **237107** | Phillips® Screwdriver | x | x | 1 |
| **237108** | Slotted Screwdriver-Medium | x | x | 1 |
| **237109** | Slotted Screwdriver-Large | x | x | 1 |
| **237110** | Slotted Screwdriver-Small | | x | 1 |
| **237111** | Saw | | x | 1 |
| **237112** | Combination Plier | | x | 1 |
| **237113** | Serrated Edge Blade | | x | 1 |
| **E966** | Nylon Pouch | x | | 1 |
| **E972** | Nylon Pouch | | x | 1 |
| **0055643600** | Operating Instruction | | x | 1 |
| **0055618100** | Operating Instruction | x | | 1 |

# Bi-Metaloy® Holesaws

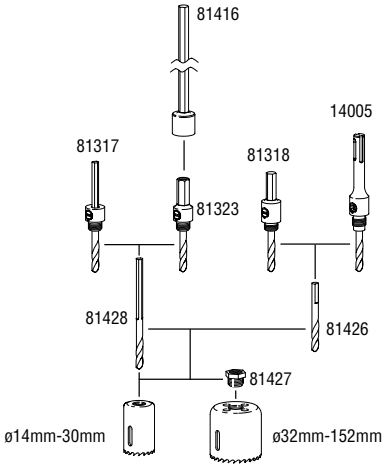


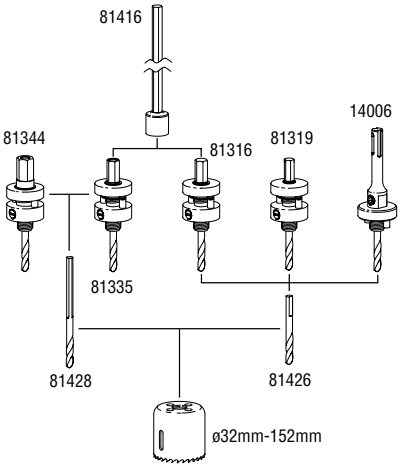

- The variable pitch design has varying numbers of teeth per inch (from 4 TPI to 6 TPI) and different gullet depths. These variations help break up the harmonics and therefore reduce vibration and noise. The teeth of the VP holesaws have a 7° positive rake angle compared to a 0° angle on the standard holesaw. The positive rake angle allows faster cutting rates. Plus the smoother cutting makes it easier to cut faster
  The reduced vibration helps increase blade life. However the main reason for the increased life is the thicker base. All VP holesaws have a stronger, thicker base
  The main cause of failure in holesaws is the failure of the pin holes in the base. The new stronger base makes this virtually impossible
  The reduced vibration and the more aggressive tooth design result in a smoother, cleaner hole
- Cuts holes from $^{9}/_{16}$"/14 mm to 6"/152 mm in diameter 1 $^{1}/_{8}$"/28 mm deep

| Type/ Code No. | Diameter Inch | mm | Shelf Pack |
|---|---|---|---|
| 81152 | $^{9}/_{16}$ | 14,3 | 1 |
| 81155 | $^{5}/_{8}$ | 15,9 | 1 |
| 81158 | $^{11}/_{16}$ | 17,5 | 1 |
| 81161 | $^{3}/_{4}$ | 19,1 | 1 |
| 81450 | $^{7}/_{9}$ | 20 | 1 |
| 81164 | $^{13}/_{16}$ | 20,6 | 1 |
| 81167 | $^{7}/_{8}$ | 22,2 | 1 |
| 81170 | $^{15}/_{16}$ | 23,8 | 1 |
| 81173 | 1 | 25,4 | 1 |
| 81176 | 1 $^{1}/_{16}$ | 27 | 1 |
| 81179 | 1 $^{1}/_{8}$ | 28,6 | 1 |
| 81182 | 1 $^{3}/_{16}$ | 30,2 | 1 |
| 81188 | 1 $^{1}/_{4}$ | 31,8 | 1 |
| 81191 | 1 $^{5}/_{16}$ | 33,3 | 1 |
| 81197 | 1 $^{3}/_{8}$ | 34,9 | 1 |
| 81200 | 1 $^{7}/_{16}$ | 36,5 | 1 |
| 81206 | 1 $^{1}/_{2}$ | 38,1 | 1 |
| 81209 | 1 $^{9}/_{16}$ | 39,7 | 1 |
| 81212 | 1 $^{5}/_{8}$ | 41,3 | 1 |
| 81215 | 1 $^{11}/_{16}$ | 42,9 | 1 |
| 81218 | 1 $^{3}/_{4}$ | 44,5 | 1 |
| 81451 | - | 45 | 1 |
| 81455 | 1 $^{3}/_{16}$ | 46 | 1 |
| 81224 | 1 $^{7}/_{8}$ | 47,6 | 1 |
| 81452 | - | 50 | 1 |
| 81227 | 2 | 50,8 | 1 |
| 81230 | 2 $^{1}/_{16}$ | 52,4 | 1 |
| 81233 | 2 $^{1}/_{8}$ | 54 | 1 |
| 81453 | - | 55 | 1 |
| 81236 | 2 $^{1}/_{4}$ | 57,2 | 1 |
| 81239 | 2 $^{5}/_{16}$ | 58,7 | 1 |

| Type/ Code No. | Diameter Inch | mm | Shelf Pack |
|---|---|---|---|
| **81242** | 2 3/8 | 60,3 | 1 |
| **81245** | 2 1/2 | 63,5 | 1 |
| **81248** | 2 9/16 | 65,1 | 1 |
| **81251** | 2 5/8 | 66,7 | 1 |
| **81460** | 2 11/16 | 68 | 1 |
| **81461** | 2 6/8 | 68,5 | 1 |
| **81254** | 2 3/4 | 69,9 | 1 |
| **81257** | 2 7/8 | 73 | 1 |
| **81260** | 3 | 76,2 | 1 |
| **81263** | 3 1/8 | 79,4 | 1 |
| **81266** | 3 1/4 | 82,6 | 1 |
| **81269** | 3 3/8 | 85,7 | 1 |
| **81272** | 3 1/2 | 88,9 | 1 |
| **81275** | 3 5/8 | 92,1 | 1 |
| **81278** | 3 3/4 | 95,3 | 1 |
| **81281** | 3 7/8 | 98,5 | 1 |
| **81284** | 4 | 101,6 | 1 |
| **81287** | 4 1/8 | 104,8 | 1 |
| **81290** | 4 1/4 | 108 | 1 |
| **81296** | 4 1/2 | 114,3 | 1 |
| **81299** | 4 3/4 | 120,7 | 1 |
| **81302** | 5 | 127 | 1 |
| **81308** | 5 1/2 | 139,7 | 1 |
| **81314** | 6 | 152,4 | 1 |
| **Pilot Drill** | | | |
| **81428** | 1/4 | 6,35 (Length 103 mm) | 1 |
| **81426** | 1/4 | 6,35 (Length 85 mm) | 1 |

# Mandrels/Arbors for Bi-Metaloy® Holesaws




| Type/ Code No. | For Holesaws Diameter mm | Shank | Shelf Pack |
|---|---|---|---|
| **81317** | 14 - 30 | 6,35 mm round | 1 |
| **81318** | 14 - 30 | 8,75 mm hexagon | 1 |
| **81323** | 14 - 30 | 11 mm hexagon | 1 |
| **81335** | 32 - 152 | 11 mm hexagon | 1 |
| **81316** | 32 - 152 | 11 mm hexagon, solid | 1 |
| **81319** | 32 - 152 | 8,75 mm hexagon, solid | 1 |
| **81344** | 32 - 152 | 16 mm hexagon | 1 |
| **81416** | Lengthening (304 mm) | 11 mm hexagon | 1 |
| **81427** | Adapter for holder 81317, 81318, 81323 | | |
| **14005/0026814005** | 14 - 30 | SDS Plus | 1 |
| **14006/0026814006** | 32 - 152 | SDS Plus | 1 |

# Hole Edge Core Drill



- For fitting cavity wall outlets with exactly flush borders
- The ideal tool for every electrician
- Resharpenable cutting edges guarantee long service life and all-purpose use
- Consist of:
  1 hole saw Bi-Metaloy® ø 68 mm
  1 mandrel / arbor 81335
  1 hole edge core drill

| For Holesaws Type | Code No. | Description | Shelf Pack |
|---|---|---|---|
| **LSS-68-3** | **0026814460** | Holesaw kit with edge core drill | 1 |

Nicholson®

# Hard Metal Holesaws - Flat-Cut

- Design:
  Hard metal-faced holesaws with ejection spring for manual- and upright drills, will cut anything. Can be used on all machinable materials. Sturdy construction guarantees high running precision. The special cut, ground axially and radially, ensures optimum cutting results along with good chip clearance. Resharpenable, long service life.
- Applications:
  Steel, stainless steel, glass fibre, aluminium etc.
- Flat-cut for material strength up to 4 mm and stainless steel up to 2 mm
- Packed in plastic box with hang-up hole



| Type | Code No. | Diameter mm | Shank Diameter mm | Tank Thread | Shelf Pack |
|---|---|---|---|---|---|
| **HM-F15,2** | **0022015200** | 15,2 | 10 | PG9 | 1 |
| **HM-F16** | **0022016000** | 16 | 10 | | 1 |
| **HM-F17** | **0022017000** | 17 | 10 | | 1 |
| **HM-F18** | **0022018000** | 18 | 10 | | 1 |
| **HM-F18,6** | **0022018600** | 18,6 | 10 | PG11 | 1 |
| **HM-F19** | **0022019000** | 19 | 10 | | 1 |
| **HM-F20** | **0022020000** | 20 | 10 | | 1 |
| **HM-F20,4** | **0022020400** | 20,4 | 10 | PG13 | 1 |
| **HM-F21** | **0022021000** | 21 | 10 | | 1 |
| **HM-F22** | **0022022000** | 22 | 10 | | 1 |
| **HM-F22,5** | **0022022500** | 22,5 | 10 | PG16 | 1 |
| **HM-F23** | **0022023000** | 23 | 10 | | 1 |
| **HM-F24** | **0022024000** | 24 | 10 | | 1 |
| **HM-F25** | **0022025000** | 25 | 10 | | 1 |
| **HM-F26** | **0022026000** | 26 | 10 | | 1 |
| **HM-F27** | **0022027000** | 27 | 10 | | 1 |
| **HM-F28** | **0022028000** | 28 | 10 | | 1 |
| **HM-F28,3** | **0022028300** | 28,3 | 10 | PG21 | 1 |
| **HM-F29** | **0022029000** | 29 | 10 | | 1 |
| **HM-F30** | **0022030000** | 30 | 10 | | 1 |
| **HM-F32** | **0022032000** | 32 | 10 | | 1 |
| **HM-F33** | **0022033000** | 33 | 10 | | 1 |
| **HM-F34** | **0022034000** | 34 | 10 | | 1 |
| **HM-F35** | **0022035000** | 35 | 10 | | 1 |
| **HM-F36** | **0022036000** | 36 | 10 | | 1 |
| **HM-F37** | **0022037000** | 37 | 10 | PG29 | 1 |
| **HM-F38** | **0022038000** | 38 | 10 | | 1 |
| **HM-F40** | **0022040000** | 40 | 10 | | 1 |
| **HM-F42** | **0022042000** | 42 | 10 | | 1 |
| **HM-F44** | **0022044000** | 44 | 10 | | 1 |
| **HM-F45** | **0022045000** | 45 | 10 | | 1 |
| **HM-F47** | **0022047000** | 47 | 10 | PG36 | 1 |
| **HM-F48** | **0022048000** | 48 | 10 | | 1 |
| **HM-F50** | **0022050000** | 50 | 10 | | 1 |
| **HM-F52** | **0022052000** | 52 | 13 | | 1 |

| Type | Code No. | Diameter mm | Shank Diameter mm | Tank Thread | Shelf Pack |
|---|---|---|---|---|---|
| HM-F55 | 0022055000 | 55 | 13 | | 1 |
| HM-F60 | 0022060000 | 60 | 13 | PG48 | 1 |
| HM-F65 | 0022065000 | 65 | 13 | | 1 |
| HM-F70 | 0022070000 | 70 | 13 | | 1 |
| HM-F75 | 0022075000 | 75 | 13 | | 1 |
| HM-F80 | 0022080000 | 80 | 13 | | 1 |
| HM-F85 | 0022085000 | 85 | 13 | | 1 |
| HM-F90 | 0022090000 | 90 | 13 | | 1 |
| HM-F95 | 0022095000 | 95 | 13 | | 1 |
| HM-F100 | 0022100000 | 100 | 13 | | 1 |
| HM-F110 | 0022110000 | 110 | 13 | | 1 |

Other diameters on request

**Replacement drill**

| Type | Code No. | For Holesaw Diameter mm | Diameter x Length mm |
|---|---|---|---|
| HSS | 0022065200 | 15 - 74 | 6 x 62 |
| HSS | 0022085200 | 75 - 150 | 8 x 52 |
| HM | 0022165200 | 15 - 74 | 6 x 62 |
| HM | 0022185200 | 75 - 150 | 8 x 52 |

# Hard Metal Holesaws - Deep-Cut



- Design:
  Hard metal-faced holesaws for manual- and upright drills, will cut anything. Can be used on all machinable materials. Sturdy construction guarantees high running precision. The special cut, ground axially and radially, ensures optimum cutting results along with good chip clearance. Resharpenable, long service life.
- Applications:
  Steel, stainless steel, glass fibre, aluminium etc.
- Deep-cut for cuts into pipes and curved surfaces, for material strength up to 4 mm and stainless steel up to 2 mm
- Packed in plastic box with hang-up hole

| Type | Code No. | Diameter mm | Shank Diameter mm | Shelf Pack |
|---|---|---|---|---|
| HM-T18 | 0022018010 | 18 | 10 | 1 |
| HM-T20 | 0022020010 | 20 | 10 | 1 |
| HM-T21 | 0022021010 | 21 | 10 | 1 |
| HM-T22 | 0022022010 | 22 | 10 | 1 |
| HM-T23 | 0022023010 | 23 | 10 | 1 |
| HM-T25 | 0022025010 | 25 | 10 | 1 |
| HM-T26 | 0022026010 | 26 | 10 | 1 |
| HM-T27 | 0022027010 | 27 | 10 | 1 |
| HM-T28 | 0022028010 | 28 | 10 | 1 |
| HM-T30 | 0022030010 | 30 | 10 | 1 |
| HM-T32 | 0022032010 | 32 | 10 | 1 |
| HM-T33 | 0022033010 | 33 | 10 | 1 |

| Type | Code No. | Diameter mm | Shank Diameter mm | Shelf Pack |
|---|---|---|---|---|
| **HM-T34** | **0022034010** | 34 | 10 | 1 |
| **HM-T35** | **0022035010** | 35 | 10 | 1 |
| **HM-T37** | **0022037010** | 37 | 10 | 1 |
| **HM-T39** | **0022039010** | 39 | 10 | 1 |
| **HM-T40** | **0022040010** | 40 | 10 | 1 |
| **HM-T42** | **0022042010** | 42 | 10 | 1 |
| **HM-T43** | **0022043010** | 43 | 10 | 1 |
| **HM-T45** | **0022045010** | 45 | 10 | 1 |
| **HM-T46** | **0022046010** | 46 | 10 | 1 |
| **HM-T48** | **0022048010** | 48 | 10 | 1 |
| **HM-T49** | **0022049010** | 49 | 10 | 1 |
| **HM-T55** | **0022055010** | 55 | 13 | 1 |
| **HM-T60** | **0022060010** | 60 | 13 | 1 |
| **HM-T65** | **0022065010** | 65 | 13 | 1 |
| **HM-T70** | **0022070010** | 70 | 13 | 1 |
| **HM-T75** | **0022075010** | 75 | 13 | 1 |
| **HM-T80** | **0022080010** | 80 | 13 | 1 |
| **HM-T85** | **0022085010** | 85 | 13 | 1 |
| **HM-T90** | **0022090010** | 90 | 13 | 1 |

Other diameters on request

**Replacement drill**

| Type | Code No. | For Holesaw Diameter mm | Diameter x Lenth mm |
|---|---|---|---|
| **HSS** | **0022067710** | 16 - 60 | 6 x 77 |
| **HSS** | **0022081040** | 61 - 100 | 8 x 104 |
| **HM** | **0022167710** | 16 - 60 | 6 x 77 |
| **HM** | **0022181040** | 61 - 100 | 8 x 104 |

# Holesaw Kits - Bi-Metaloy®

## Professional Holesaw Kit



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81433** | Professional Holesaw Kit, complete | | **0026814330** | 1 |
| **includes:** | | | | |
| **81155** | Holesaw | 15,9 | | |
| **81161** | Holesaw | 19,1 | | |
| **81167** | Holesaw | 22,2 | | |
| **81173** | Holesaw | 25,4 | | |
| **81179** | Holesaw | 28,6 | | |
| **81188** | Holesaw | 31,8 | | |
| **81197** | Holesaw | 34,9 | | |
| **81206** | Holesaw | 38,1 | | |
| **81218** | Holesaw | 44,5 | | |
| **81227** | Holesaw | 50,8 | | |
| **81245** | Holesaw | 63,5 | | |
| **81260** | Holesaw | 76,2 | | |
| **81323** | Mandrel | - | | |
| **81335** | Mandrel | - | | |
| **81428** | 3 Pilot Drills | 6,35/Length 103 mm | | |

# Journeyman's Holesaw Kit



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81429** | Journeyman's Holesaw Kit, complete | | **0026814290** | 1 |
| **includes:** | | | | |
| **81161** | Holesaw | 19,1 | | |
| **81167** | Holesaw | 22,2 | | |
| **81179** | Holesaw | 28,6 | | |
| **81197** | Holesaw | 34,9 | | |
| **81206** | Holesaw | 38,1 | | |
| **81218** | Holesaw | 44,5 | | |
| **81227** | Holesaw | 50,8 | | |
| **81236** | Holesaw | 57,2 | | |
| **81245** | Holesaw | 63,5 | | |
| **81317** | Mandrel | - | | |
| **81335** | Mandrel | - | | |
| **81427** | Adaptor | 6,35 | | |
| **81428** | Pilot Drill | 6,35/Length 103 mm | | |

# Maintenance Holesaw Kit



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81430** | Maintenance Holesaw Kit, complete | | **0026814300** | 1 |
| **includes:** | | | | |
| **81167** | Holesaw | 22,2 | | |
| **81173** | Holesaw | 25,4 | | |
| **81179** | Holesaw | 28,6 | | |
| **81188** | Holesaw | 31,8 | | |
| **81206** | Holesaw | 38,1 | | |
| **81317** | Mandrel | - | | |
| **81427** | Adaptor | - | | |

# Electrician's Holesaw Kit



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81431** | Electrician's Holesaw Kit, complete | | **0026814310** | 1 |
| **includes:** | | | | |
| **81167** | Holesaw | 22,2 | | |
| **81179** | Holesaw | 28,6 | | |
| **81197** | Holesaw | 34,9 | | |
| **81218** | Holesaw | 44,5 | | |
| **81227** | Holesaw | 50,8 | | |
| **81245** | Holesaw | 63,5 | | |
| **81323** | Mandrels | - | | |
| **81335** | Mandrels | - | | |
| **81428** | Pilot Drill | 6,35/Length 103 mm | | |

# Plumber's Holesaw Kit



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81432** | Plumber's Holesaw Kit, complete | | **0026814320** | 1 |
| **includes:** | | | | |
| **81161** | Holesaw | 19,1 | | |
| **81167** | Holesaw | 22,2 | | |
| **81179** | Holesaw | 28,6 | | |
| **81206** | Holesaw | 38,1 | | |
| **81218** | Holesaw | 44,5 | | |
| **81236** | Holesaw | 57,2 | | |
| **81317** | Mandrel | - | | |
| **81335** | Mandrel | - | | |
| **81428** | Pilot Drill | 6,35/Length 103 mm | | |

# Plumber's Holesaw Kit No. 2



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81442** | Plumber's Holesaw Kit No. 2, complete | | **0026814420** | 1 |
| **includes:** | | | | |
| **81167** | Holesaw | 22,2 | | |
| **81179** | Holesaw | 28,6 | | |
| **81206** | Holesaw | 38,1 | | |
| **81218** | Holesaw | 44,5 | | |
| **81236** | Holesaw | 57,2 | | |
| **81251** | Holesaw | 66,7 | | |
| **81323** | Mandrel | - | | |
| **81335** | Mandrel | - | | |

# Electrician's Holesaw Kit No. 1



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81443** | Electrician's Holesaw Kit No. 1, complete | | **0026814430** | 1 |
| **includes:** | | | | |
| **81197** | Holesaw | 34,9 | | |
| **81460** | Holesaw | 68 | | |
| **81257** | Holesaw | 73 | | |
| **81335** | Mandrels | - | | |
| **81428** | Pilot Drill | 6,35/Length 103 mm | | |

# Electrician's Holesaw Kit No. 2



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81444** | Electrician's Holesaw Kit No. 2, complete | | **0026814440** | 1 |
| **includes:** | | | | |
| **81167** | Holesaw | 22,2 | | |
| **81173** | Holesaw | 25,4 | | |
| **81188** | Holesaw | 31,8 | | |
| **81227** | Holesaw | 50,8 | | |
| **81460** | Holesaw | 68 | | |
| **81323** | Mandrel | - | | |
| **81335** | Mandrel | - | | |

# Electrician's Holesaw Kit No. 3



| Type | Description | Diameter mm | Code No. | Shelf Pack |
|---|---|---|---|---|
| **81445** | Electrician's Holesaw Kit No. 3, complete | | **0026814450** | 1 |
| includes: | | | | |
| **81450** | Holesaw | 20 | | |
| **81173** | Holesaw | 25,4 | | |
| **81188** | Holesaw | 31,8 | | |
| **81197** | Holesaw | 34,9 | | |
| **81227** | Holesaw | 50,8 | | |
| **81460** | Holesaw | 68 | | |
| **81257** | Holesaw | 73 | | |
| **81323** | Mandrel | - | | |
| **81335** | Mandrel | - | | |

Nicholson®

## Cushion Grip Hacksaw Frame

NEW PRODUCT

**Professional and Industrial**

- Unique cushioned rubber grip reduces slippage for better control and comfort
- Rugged, sturdy frame built for professional tool users
- High tension technology for tightening the blade to 30.000 PSI
- Blade can be positioned for 45˚ or 90˚ cutting
- Patended quick change blade design



| Code No. | Type | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80965** | Cushion Grip High Tension | 12 | 300 | 903 | 1 |

## High Tension Hacksaw Frame

- Quick changing blades
- Adjustable crank handle for tension up to 30.000 PSI torque and micro-adjustment
- Spare blades can be stored inside frame
- Blade can be positioned for 45° or 90° cutting
- End of frame can be used as a jab saw



| Code No. | Type | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80956** | High Tension Adjustable | 12 | 300 | | 1 |

## General Purpose Hacksaw Frame

- Instantly adjustable for 10"/250 mm to 12"/300 mm blades
- Adjusts 90° for vertical or horizontal cuts



| Code No. | Type | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80951** | Adjustable | 10 and 12 | 250 and 300 | 4196 | 10 |

## Economy Hacksaw Frame



- Adjustable from 10"/250 mm to 12"/300 mm
- Cuts to 2,75"/70 mm in depth
- For DIY and home use

| Code No. | Type | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80950** | Adjustable | 10 and 12 | 250 and 300 | 4196 | 10 |

## Little-Nic® Utility Hacksaw



- For professionals and homeowners
- Ergonomic cushioned handle
- Gets into small places, makes difficult cutting jobs easy
- Overall length 10"/254 mm, will fit into any tool box
- Uses any standard size hacksaw blade
- Blister packed on attractive card with suggested uses on back

| Code No. | Packed | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80968** | Carded | 10 | 250 | 652 | 6 |

## Jab Saw



- Special saw always needed for the difficult jobs: those narrow, hard-to-reach areas
- Jab saw will work with any standard size hacksaw blade
- Can replace worn blade easily: Untighten adjusting saw, remove worn blade and replace with a new Nicholson® blade, re-tighten the adjusting screw
- A must for all tool boxes

| Code No. | Packed | Blade Inch | Blade mm | Weight per Shelf Pack g | Shelf Pack |
|---|---|---|---|---|---|
| **80969** | Carded | 10 | 250 | 1701 | 12 |

Nicholson®

# Bi-Metaloy® Hand Hacksaw Blades




**Standard Packs**

- Molybdenum alloy tool steel edge
- Tough flexible high carbon steel backing
- Lasts twice as long as high-speed steel
- Lasts up to ten times longer than carbon steel
- Operates 20% to 50% faster
- High tooth hardness and shock resistance
- Boxed: 100 blades per box

| Type | Set Type | Code No. | Length Inch | Length mm | Teeth Per Inch | Width Inch | Width mm | Gauge Inch | Gauge mm | Weight per 100 Boxed kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **NF1218** | Wavy | **62723** | 12 | 304 | 18 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |
| **NF1224** | Wavy | **62749** | 12 | 304 | 24 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |
| **NF1232** | Wavy | **62776** | 12 | 304 | 32 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |

# Solid Flexible Carbon Steel




- Solid high carbon steel
- Tempered to provide hard edge with flexible back
- Specially hardened to induce toughness
- Economy blade for sawing light to medium-hard materials
- A good balance of wear resistance and mechanical shock absorbing properties
- Virtually unbreakable
- Boxed: 100 blades per box

| Type | Set Type | Code No. | Length Inch | Length mm | Teeth Per Inch | Width Inch | Width mm | Gauge Inch | Gauge mm | Weight per 100 Boxed kg |
|---|---|---|---|---|---|---|---|---|---|---|
| **MH1812** | Wavy | **0023151812** | 12 | 304 | 18 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |
| **MH2412** | Wavy | **0023152412** | 12 | 304 | 24 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |
| **MH3212** | Wavy | **0023153212** | 12 | 304 | 32 | 1/2 | 12,70 | 0,025 | 0,65 | 2,050 |

# Hand Hacksaw Blade – Care and Servicing

### Blade Breakage
1. Lack of tension. Tighten until taut.
2. Too much tension. Loosen slightly.
3. Cutting in awkward position. Use flexible type blades.
4. Jamming in cut. Hold work securely – stock should fall free after cut. In soft material teeth may be binding because they are too fine.

### Pinhole Breakage
1. Too much tension. Loosen slightly.
2. Worn pins causing pressure on eyeholes. Replace pins.

### Rounded Teeth - Premature Wear
1. Blade not cutting. Use slower stroke and apply heavier feed.
2. Dragging on return stroke. Lift saw.
3. Material too hard. Select proper blade.

### Crooked Cutting
1. Too much pressure. Reduce feed.
2. Blade out of alignment. Check frame and blade tension.
3. Blade worn out. Replace.

### Tooth Breakage
1. Teeth too coarse. Keep three teeth in the work.
2. Too much feed, teeth loading. Ease feed pressure.
3. Teeth too fine, clogging. Change to coarser tooth.
4. Starting cut on sharp corner. Reposition work.

### General Tooth Recommendations
**18 Tooth:** For general shop use, when same blade is used on several jobs.
**24 Tooth:** For cross section $^{1}/_{16}$"/1,58 mm – $^{1}/_{4}$"/6,35 mm such as pipe, angles, small drill rod.
**32 Tooth:** To cut stock up to $^{1}/_{16}$"/1,58 mm such as light tubing, sheet metal, BX.

At least three teeth should be in contact with the work at all times.

### Choose the Right Number of Teeth Per Inch
The sketches below (figure 1) show how coarseness of teeth affects blade efficiency. Speed varies according to material being cut and saw blade coarseness.

### Starting the Cut
If possible, avoid starting cut on a sharp corner. When unavoidable, begin with light pressure and use a steady forward stroke. As many teeth as possible should be in contact with the cutting area and at least three teeth must be engaged. Note cutting angles shown below (figure 2).

**Fig. 1**

Right Wrong



**Fig. 2**

Right Wrong



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гарантия бесперебойности производства и качества выпускаемой продукции

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Благодаря этому наша компания предлагает к поставке практически не ограниченный ассортимент компонентов как оптовыми, мелкооптовыми партиями, так и в розницу.

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- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование

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## Перечень производителей, продукцию которых мы поставляем на российский рынок



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С уважением,

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