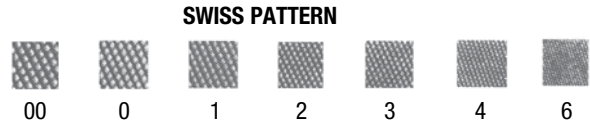


TECH INFORMATION

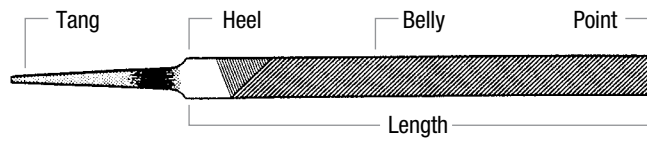
File Terminology

COARSENESS



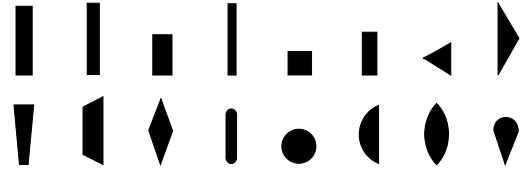
- Work to be accomplished, whether roughing or finishing, will determine type of teeth and coarseness for each application
- Most American pattern files are available with 3 grades of cut: bastard-cut, second-cut and smooth-cut
- Swiss pattern files are available in seven cuts: No. 00, 0, 1, 2, 3, 4,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

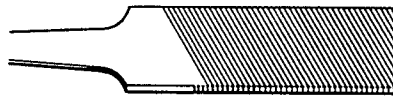
SHAPE



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

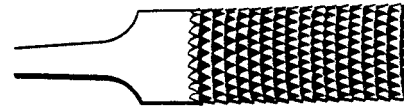
Kinds of Teeth

SINGLE-CUT



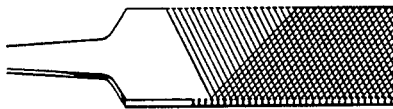
- Single set of parallel, diagonal rows of teeth
- Single-cut files are often used with light pressure to produce a smooth surface finish or to put a keen edge on knives, shears or saws

RASP-CUT



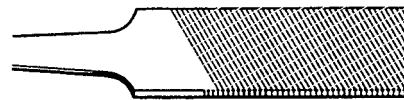
- Series of individual teeth which are formed by a single-pointed tool
- Produces a rough cut that is used primarily on wood, hooves, aluminum and lead

DOUBLE-CUT



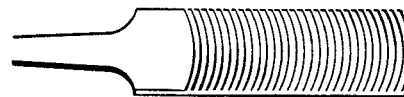
- 2 sets of diagonal rows of teeth
- Second set of teeth cut in opposite diagonal direction and on top of the first set
- First set of teeth is known as the overcut, second is known as upcut
- Upcut is finer than overcut
- Double-cut file is used with heavier pressure than the single-cut and removes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

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

Safety Information

	<b>⚠ WARNING</b>
	Wear safety goggles to protect your eyes. Never use a file without a tight fitting handle.
	<b>⚠ AVERTISSEMENT</b>
	Porter des lunettes de protection. Ne jamais utiliser une lime sans poignée bien ajustée.
	<b>⚠ ADVERTENCIA</b>
	Use gafas de seguridad para proteger sus ojos. Nunca utilice una lima con el mango suelto.

<b>⚠ WARNING</b>	<b>⚠ AVERTISSEMENT</b>	<b>⚠ ADVERTENCIA</b>
Risk Of Eye Injury Wear ANSI Approved Eye Protection	Risque de dommages d'oeil Protection d'oeil approuvée de l'usage A.N.S.I.	Riesgo de lesión del ojo Protección de ojo aprobada del desgaste ANSI

## Half Round Files



- Made to More Exacting Measurements Than American Pattern Files
- Used By Tool and Die Makers, Jewelers, Model Makers and Home Craftsman
- Double Cut on Both Flat and Half-Round Sides
- Taper in Thickness and Width to Point
- Half Round Shape
- Made in Much Finer Cuts, Which Vary From No. 00 (Coarsest) to No. 4 (Finest)

Cat. No.	UPC No.	Packaging	Length	File Cut	Product Weight	Shelf Pack Qty.
36521N	037103242006	Boxed	6 in	0	0.10 lb	12
36527N	037103242013	Boxed	6 in	1	0.10 lb	12
36533N	037103242020	Boxed	6 in	2	0.10 lb	12
36539N	037103242037	Boxed	6 in	3	0.10 lb	12
36545N	037103242044	Boxed	6 in	4	0.10 lb	12
36557N	037103242051	Boxed	8 in	00	0.20 lb	12
36563N	037103242068	Boxed	8 in	0	0.20 lb	12
36569N	037103242075	Boxed	8 in	1	0.20 lb	12

## Needle Files Round Handle



- Hot Die - Barrette Shape Only
- Same as Regular Round Handle Needle Barrette Except with Thinner Points

Cat. No.	UPC No.	Packaging	Length	File Cut	Style	Product Weight	Shelf Pack Qty.
37752	037103377524	Boxed	5-1/2 in	0	Barrette	0.01 lb	12
38115	037103381156	Boxed	6-1/4 in	0	Barrette	0.02 lb	12

## Needle Files



- Made to More Exacting Measurements Than American Pattern Files
- Used Primarily By Jewelers, Die Makers, Watchmakers and Fine Toolmakers
- Knurled Handles

Cat. No.	UPC No.	Packaging	Length	File Cut	Style	Product Weight	Shelf Pack Qty.
37277	037103372772	Boxed	4 in	0	Barrette	0.01 lb	12
37640	037103376404	Boxed	5-1/2 in	0	Barrette	0.01 lb	12
38003	037103380036	Boxed	6-1/4 in	0	Barrette	0.02 lb	12
37647	037103376473	Boxed	5-1/2 in	2	Barrette	0.01 lb	12
38010	037103380104	Boxed	6-1/4 in	2	Barrette	0.02 lb	12

## Needle Files Continued

Cat. No.	UPC No.	Packaging	Length	File Cut	Style	Product Weight	Shelf Pack Qty.
37500	037103375001	Boxed	5-1/2 in	0	Crossing	0.01 lb	12
37863	037103378637	Boxed	6-1/4 in	0	Crossing	0.02 lb	12
37870	037103378705	Boxed	6-1/4 in	2	Crossing	0.03 lb	12
37249	037103372499	Boxed	4 in	0	Equaling	0.01 lb	12
37612	037103376121	Boxed	5-1/2 in	0	Equaling	0.01 lb	12
37975	037103379757	Boxed	6-1/4 in	0	Equaling	0.02 lb	12
37256	037103372567	Boxed	4 in	2	Equaling	0.01 lb	12
37619	037103376190	Boxed	5-1/2 in	2	Equaling	0.01 lb	12
37982	037103379825	Boxed	6-1/4 in	2	Equaling	0.02 lb	12
37626	037103376268	Boxed	5-1/2 in	4	Equaling	0.01 lb	12
37989	037103379894	Boxed	6-1/4 in	4	Equaling	0.02 lb	12
37996	037103379962	Boxed	6-1/4 in	6	Equaling	0.02 lb	12
37109	037103371096	Boxed	4 in	0	Flat	0.02 lb	12
37472	037103374721	Boxed	5-1/2 in	0	Flat	0.01 lb	12
37835	037103378354	Boxed	6-1/4 in	0	Flat	0.02 lb	12
37116	037103371164	Boxed	4 in	2	Flat	0.02 lb	12
37479	037103374790	Boxed	5-1/2 in	2	Flat	0.01 lb	12
37842	037103378422	Boxed	6-1/4 in	2	Flat	0.02 lb	12
37486	037103374868	Boxed	5-1/2 in	4	Flat	0.01 lb	12
37849	037103378491	Boxed	6-1/4 in	4	Flat	0.02 lb	12
37081	037103370815	Boxed	4 in	0	Half Round	0.10 lb	12
37444	037103374448	Boxed	5-1/2 in	0	Half Round	0.01 lb	12
37807	037103378071	Boxed	6-1/4 in	0	Half Round	0.02 lb	12
37088	037103370884	Boxed	4 in	2	Half Round	0.02 lb	12
37451	037103374516	Boxed	5-1/2 in	2	Half Round	0.02 lb	12
37814	037103378149	Boxed	6-1/4 in	2	Half Round	0.02 lb	12
37458	037103374585	Boxed	5-1/2 in	4	Half Round	0.01 lb	12
37821	037103378217	Boxed	6-1/4 in	4	Half Round	0.02 lb	12
37828	037103378286	Boxed	6-1/4 in	6	Half Round	0.02 lb	12
37165	037103371652	Boxed	4 in	0	Knife	0.01 lb	12
37891	037103378910	Boxed	6-1/4 in	0	Knife	0.02 lb	12
37172	037103371720	Boxed	4 in	2	Knife	0.01 lb	12
37898	037103378989	Boxed	6-1/4 in	2	Knife	0.02 lb	12
37053	037103370532	Boxed	4 in	0	Round	0.02 lb	12
37416	037103374165	Boxed	5-1/2 in	0	Round	0.01 lb	12
37779	037103377791	Boxed	6-1/4 in	0	Round	0.01 lb	12
37060	037103370600	Boxed	4 in	2	Round	0.02 lb	12
37423	037103374233	Boxed	5-1/2 in	2	Round	0.01 lb	12
37786	037103377869	Boxed	6-1/4 in	2	Round	0.02 lb	12
37430	037103374301	Boxed	5-1/2 in	4	Round	0.01 lb	12
37793	037103377937	Boxed	6-1/4 in	4	Round	0.02 lb	12
37800	037103378002	Boxed	6-1/4 in	6	Round	0.02 lb	12
38059	037103380593	Boxed	6-1/4 in	0	Slitting	0.02 lb	12
37703	037103377036	Boxed	5-1/2 in	2	Slitting	0.02 lb	12
37193	037103371935	Boxed	4 in	0	Square	0.01 lb	12

Needle Files Continued

Cat. No.	UPC No.	Packaging	Length	File Cut	Style	Product Weight	Shelf Pack Qty.
37556	037103375568	Boxed	5-1/2 in	0	Square	0.01 lb	12
37919	037103379191	Boxed	6-1/4 in	0	Square	0.02 lb	12
37200	037103372000	Boxed	4 in	2	Square	0.01 lb	12
37563	037103375636	Boxed	5-1/2 in	2	Square	0.01 lb	12
37926	037103379269	Boxed	6-1/4 in	2	Square	0.02 lb	12
37221	037103372215	Boxed	4 in	0	Three Square	0.01 lb	12
37584	037103375841	Boxed	5-1/2 in	0	Three Square	0.01 lb	12
37947	037103379474	Boxed	6-1/4 in	0	Three Square	0.02 lb	12
37228	037103372284	Boxed	4 in	2	Three Square	0.01 lb	12
37591	037103375919	Boxed	5-1/2 in	2	Three Square	0.01 lb	12
37954	037103379542	Boxed	6-1/4 in	2	Three Square	0.02 lb	12
37598	037103375988	Boxed	5-1/2 in	4	Three Square	0.02 lb	12
37961	037103379610	Boxed	6-1/4 in	4	Three Square	0.02 lb	12

Pillar Files



- Made to More Exacting Measurements Than American Pattern 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

Cat. No.	UPC No.	Packaging	Length	File Cut	Product Weight	Shelf Pack Qty.
39855N	037103242082	Boxed	4 in	00	0.04 lb	12
39861N	037103242099	Boxed	4 in	0	0.04 lb	12
39873N	037103242105	Boxed	4 in	2	0.04 lb	12
39881N	037103242112	Boxed	4 in	4	0.04 lb	12
39893N	037103242129	Boxed	6 in	00	0.10 lb	12
39899N	037103242136	Boxed	6 in	0	0.10 lb	12
39905N	037103242143	Boxed	6 in	1	0.10 lb	12
39911N	037103242150	Boxed	6 in	2	0.10 lb	12
39923N	037103242167	Boxed	6 in	4	0.10 lb	12
39929N	037103242174	Boxed	6 in	00	0.23 lb	12
39935N	037103242181	Boxed	8 in	0	0.23 lb	12
39947N	037103242198	Boxed	8 in	2	0.23 lb	12
39965N	037103242204	Boxed	10 in	00	0.45 lb	6
39971N	037103242211	Boxed	10 in	0	0.45 lb	6
39992N	037103242228	Boxed	12 in	00	0.74 lb	6