

# METAL CUTTING TOOLS

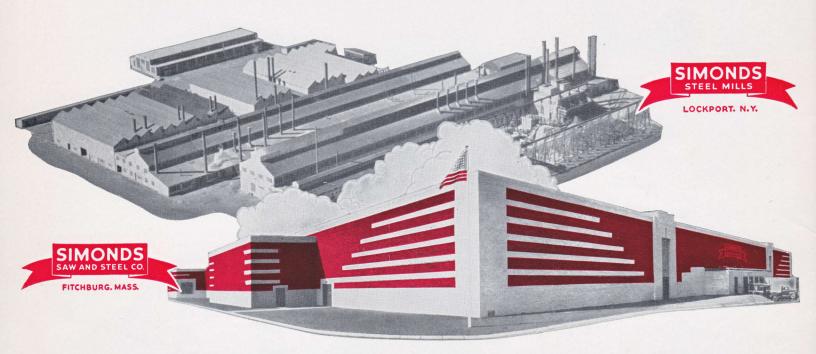
# SEATTLE HARDWARE COMPANY

501 FIRST AVENUE SOUTH

SEATTLE 14, WASHINGTON

Telephone: Main 7020

# The Top-Performance Line... because it's the Top-Quality Line



# . . . doubly insured by

# SIMONDS OWN STEEL . SIMONDS MODERN FACTORY

Simonds Quality starts with Simonds Steel...tough, electric furnace steel that is poured, rolled and forged in Simonds own mill under the close supervision of trained metallurgists...steel that must be exactly right in content, grain structure and wear-resistant qualities for the intended use.

At Simonds world-famous "controlled conditions" plant, skilled workmen using special methods and equipment for machining, heat-treating, grinding, and finishing transform this quality-proven steel into precision cutting tools that have an enviable reputation for outstanding quality, performance and dependability.

Our men, backed by Simonds factory-trained local Representatives, are "on call" whenever needed to help with your particular job...offer you the benefit of their wide experience in the metalworking field.

NOW, MORE THAN EVER BEFORE . . .

Using the best, means SIMONDS

# SIMONDS "Red End" HACK SAW BLADES

# First Quality, Precision Cutting Tools A "Right" Blade for Every Use

The consistent high quality, uniformity and cutability of Simonds famous "Red End" Hack Saw Blades stem from a combination of the right type steel and constantly improved manufacturing methods and equipment.

Simonds takes no chances . . . makes its own steel in electric arc type furnaces under the watchful eyes of experienced metallurgists and laboratory technicians. At the factory this steel is double-checked for required toughness and correct grain structure. Only then is it approved for processing into Hack Saw Blades that can be depended upon for the utmost in performance and satisfaction.

Identified by the distinctive "Red End" (Trade-mark Registered U.S. Patent Office) Simonds Hack Saw Blades offer these outstanding quality features.

# ACCURATELY MILLED TEETH

Simonds Design Tooth Shape, maintained by accurate milling, provides perfectly formed teeth of exact height. This distributes wear evenly to all teeth with resultant longer cutting life.

# PRECISION SET TEETH



Machines of advanced design set the teeth to exacting tolerances. This not only provides adequate clearance but results in straighter cuts throughout the life of the blade.

# **UNIFORM HARDNESS**

Simonds method of heat-treating produces uniform hardness throughout the length of the blade unapproached by conventional heat-treating methods. As a result, there is no variation in the grain structure of the steel and the teeth hold a cutting edge longer. This means consistently better cutting performance and low cutting costs.

# A "RIGHT" BLADE FOR EVERY NEED

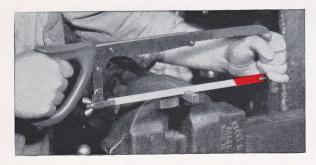
To provide the most efficient and economical means of cutting the wide variety of metals used in industry today, "Red End" Blades are "job-designed" . . . come in THREE TYPES FOR POWER USE and THREE TYPES FOR HAND USE . . . are made in standard lengths, widths, thicknesses and tooth spacings.

SEE FOLLOWING PAGES FOR COMPLETE DETAILS-



# SIMONDS "Red End" Power Hack Saw Blades

## HAND BLADES



Each of these three types is made either "Hard Edge" or "All Hard." Hard Edge Blades are heat-treated only on the tooth edge. This leaves the body of the blade tough and capable of standing the severest strains. Best suited for general-purpose cutting, Hard Edge Blades are the most widely used.

All Hard Blades are heat-treated so that they are hardened throughout. This gives added stiffness to the blade which is preferred by most skilled mechanics. Where the work is insecurely held or severe strain is encountered, All Hard Blades are not recommended.

# SIMONDS

**STANDARD STEEL BLADES** are recommended for general all-around use by machinists, mechanics, electricians, plumbers and maintenance men.



**HIGH SPEED (MOLYBDENUM) BLADES** resist breakage, are longer wearing, give greatest satisfaction where fast, dependable results are essential.



**HIGH SPEED (TUNGSTEN) BLADES** are heat resistant and best suited for cutting tough alloy steels.

# POWER BLADES HIGH SPEED—Molybdenum



For general purpose cutting, this is the recommended blade that is widely used and accepted by industry. Designed to give exceptionally long cutting life on a variety of steels, this blade is extremely tough and on many applications is more economical to use than any other type on the market. It will cut fast and straight at lowest cost.

# HIGH SPEED—Tungsten



Where maximum cutting performance is required, this is the most satisfactory blade. Its capacity to resist heat makes it especially suited for cutting the many exceptionally tough High Alloy Steels which have been developed during the past few years. On applications of this nature, this blade is the most economical type to use in the long run.

# "WELD-EDGE"—High Speed (Shatterproof)



Designed to meet all plant safety and performance requirements, this blade is extra tough—will not snap in operation regardless of abuse, neglect, worn machine condition or improper adjustment. With its electrically welded High Speed Steel cutting edge, this shatterproof blade resists wear, reduces blade changing and is adaptable for all types of cutting under all conditions.

# HAND HACK SAW BLADES

ALL HAND BLADES PACKED 100 BLADES IN A BOX

S	SPECIFICATION	ıs	Standard Steel All Hard and Hard Edge	High Speed (Molyhdenum) All Hard and Hard Edge	
$Length\ and\ Width$	Thick- ness	Teeth per Inch	Weight per 100 Blades	Weight per 100 Blades	Weight per 100 Blades
10" x ½" 12 x ½	.025" .025	18-24-32 14-18-24-32	3½ lbs. 4 lbs.	4 lbs. 4½ lbs.	$4\frac{1}{4}$ lbs. $4\frac{3}{4}$ lbs.







# POWER MACHINE BLADES

ALL POWER BLADES PACKED 10 BLADES IN A BOX

SPECIFICA	TIONS	HIGH SPEEL	O(Molybdenum)	HIGH SPE	ED (Tungsten)	"WEL	D-EDGE"
Length and Width	Thick- ness	Teeth per Inch	Weight per 100 Blades	Teeth per Inch	Weight per 100 Blades	Teeth per Inch	Weight per 100 Blades
12" x 5/8" x 1	.032"	14-18 10-14	7.5 lbs. 19 lbs.	14-18 10-14	8 lbs. 20 lbs.	14-18 10-14	8 lbs. 20 lbs.
14 x 1 x 1½ x 1½	.050 .062 .075	10-14 6-10 4-6	21 lbs. 32 lbs. 46 lbs.	10-14 6-10 4-6	23 lbs. 35 lbs. 50 lbs.	10-14 6-10 4-6	23 lbs. 35 lbs. 51 lbs.
17 x 1 x 1 <sup>1</sup> / <sub>4</sub>	.050 .062	10-14 4-6-10	25 lbs. 39 lbs.	10-14 4-6-10	27 lbs. 42 lbs.	10-14 4-6-10	28 lbs. 43 lbs.
18 x 1½ x 1½ x 1¾ x 1¾	.062 .075 .088	6-10 4-6 4-6	40 lbs. 59 lbs. 84 lbs.	6-10 4-6 4-6	44 lbs. 64 lbs. 90 lbs.	6-10 4-6 4-6	45 lbs. 64 lbs. 88 lbs.
<b>21</b> x 13/4	.088	4-6	95 lbs.	4-6	103 lbs.	4-6	104 lbs.
<b>24</b> x 1 <sup>3</sup> / <sub>4</sub> x 2	.088 .100	4-6	111 lbs. 142 lbs.	4-6	119 lbs. 152 lbs.	4-6	125 lbs. 149 lbs.
<b>30</b> x 2½	.100	4	229 lbs.	4	244 lbs.	4	231 lbs.
<b>36</b> x 4½	.125	*		$2\frac{1}{2}$	654 lbs.		

This list comprises all types, sizes, and tooth spacings that will be regularly carried in stock. Anything differing from these Hack Saws will be considered as special and will not be manufactured except in cases of urgent necessity.

# **SIMONDS Hard Edge Metal Cutting Band Saws**

Heavy, straight production cutting.

## Standard Packaging

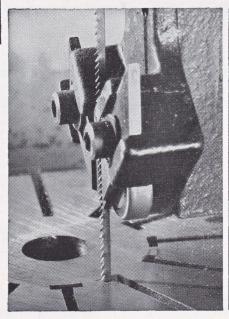


100' Coil Container

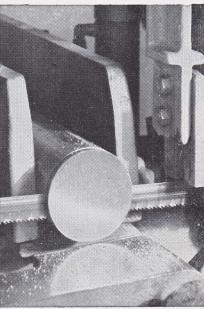
## Standard Tooth Metal Band Saws

For heavy, straight production cuts, for contour sawing of jigs, dies, etc., or for cutting of bar stock, tubing, etc., there's a Simonds Hard Edge Band Saw that will do the job quickly, smoothly, economically. Made of tough, alloy steel, Simonds Band Saws have sharp, perfectly formed teeth that are set with absolute evenness on both sides of the blade and are heat-treated along the tooth edge only, so as to give the utmost in trouble-free service.

STANDARD TOOTH BAND SAWS are recommended for cutting iron and steel and harder brass and bronze, come in a variety of widths and tooth sizes with a choice of regular or wavy set to meet different cutting conditions. Choose the right blade for the job, keeping in mind that hard materials and thin sections require finer teeth, whereas coarse teeth give best results on soft materials and large sections.



Contour or die cutting.



General purpose horizontal cutting.





Saws with 6 to 24 teeth per inch are Regular Set (left, right, raker) as shown above.



250' Coil Container

WAVY
SET
For General
Purpose
Cutting



Wavy Set Saws have groups of teeth set to provide clearance as shown above. All 32 tooth saws are wavy set for best results in cutting thin stock. Saws with 10, 12 and 14 teeth in certain widths are also furnished wavy set and are recommended for general purpose use.

# **SIMONDS Hard Edge Metal Cutting Band Saws**

#### STANDARD TOOTH-Specifications



Furnished in 100' and 250' coils or cut to length and welded ready for use

Width	Thick-					PER I	NCH-		Wavy
Inches	ness	_		— Regu	ılar Set	Only -			Set Only
1/8	.025	_	No.			14	18	24	
$\frac{3}{16}$	.025	_	_	10	_	14	18	24	32
1/4	.025	_	_	10	12	14	18	24	32
3/8	.025	_	8	10	_	14	18	24	-
1/2	.025	6	_	*10	_	*14	18	24	-
5/8	.032		8	*10	_	*14	18	24	_
3/4	.032	6	8	*10	*12	*14	18		-
1	. 035	6	8	*10	100	14		_	_

<sup>\*</sup>Also furnished Wavy Set if desired and so ordered.

## SKIP TOOTH—Specifications



Furnished in 100' and 250' coils or cut to length and welded ready for use

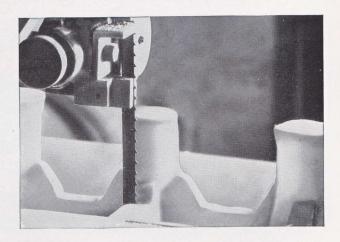
Width Inches	Thick- ness			PER INCH	
1/4	.025			4	6
3/8	.025		3	4	7/10
1/2	.025		3	4	_
3/4	.032	-	3	_	_
1	.035	2	3		-

## SABRE TOOTH—Specifications



Furnished in 100' and 250' coils or cut to length and welded ready for use

Width Inches	Thick- ness			PER INCH ar Set	
1/4	. 025	E 18 18 18 18 18 18 18 18 18 18 18 18 18		4	6
3/8	025	15 <u>- 1</u> 15	3	4	
1/2	.025		3	4	
3/4	.032		3		_
1	.035	2	3	-	



# Skip Tooth Band Saws

Especially adapted for use on soft materials such as plastics, wood, aluminum, magnesium, soft brass and other nonferrous metals, Simonds Skip Tooth Band Saws provide coarse teeth with extra gullet capacity without sacrificing maximum strength in the body of the blade, even in the narrower widths. The extra gullet room easily clears large chips from the cut, avoids clogging, permits higher cutting speeds and heavier feed with smoother results and less refinishing.

# Sabre Tooth Band Saws

For wood, plastics, plywood, and nonferrous metals, here's a new band saw with hard teeth and a flexible back designed for extra long life and fast, free cutting. Simonds new Sabre Tooth Blade cuts so easily—work practically feeds itself. Made of tough alloy steel, this specially designed tooth with a hook actually holds a keen cutting edge far longer, gives better service all along the line.

# Spring Temper Band Saws

Made of Simonds tough electric furnace steel, Simonds Spring Temper Band Saws will do a remarkable amount of cutting of the softer metals before dulling. Teeth can be easily reset and filed and the saw returned to service as good as new. These saws are especially recommended for cutting sheet aluminum, magnesium, steel, as well as light structural shapes, plastics, fibre and similar materials.

SPRING TEMPER
Specifications

Width Inches	Thickness	Teeth Per Inch
1/4	23 ga. (.025)	8-10
3/8	23 ga. (.025)	8 - 10
3/8 3/8	21 ga. (.032)	8 - 10
1/2	23 ga. (.025)	6 - 8 - 10
1/2	21 ga. (.032)	6 - 8 - 10
5/8	23 ga. (.025)	4 - 6 - 8 - 10

Width Inches	Thickness	Teeth Per Inch
5/8	21 ga. (.032)	4 - 6 - 8 - 10
	20 ga. (.035)	4 - 6 - 8 - 10
5/8 3/4	20 ga. (.035)	4 - 6 - 8
1	20 ga. (.035)	4 - 6 - 8
11/4	19 ga. (.042)	3 - 4



# SIMONDS Ground DIE STEEL

# .OIL or AIR Hardening

Toolmakers, diemakers, machinists and others using tool and die steels can eliminate "grinding to size" and save time and expense by using this high quality, preground steel to make dies, punches, jigs, templates, gauges, small tools, machine parts and 1001 other items. Made from Simonds own steel, it comes precision ground to a thickness limit of plus or minus .001", with an extra smooth surface finish of 25 to 35 micro inches and a choice of OIL or AIR Hardening in a wide range of stock sizes. (See list on opposite page.) Where high hardness is required, heattreating with uniformly excellent results is assured by the wide hardening range of Simonds special analysis steel. All sizes come individually packaged with heat-treating instructions and chart. Immediate delivery of all stock sizes. Special sizes made to order.

#### SIMONDS OIL HARDENING DIE STEEL

This non-deforming Molybdenum Type is uniformly annealed for easy machining and uniform hardening. Due to its wide hardening range (1450 to 1540) good results are assured with even the simplest heat-treating equipment. Edges and ends are square, parallel and accurate to dimension. A wide range of stock sizes is supplied in convenient 18" length bars all ready for scribing, shaping, hardening and tempering. The heavier sizes are also furnished in 36" lengths.

Carbon .85-.95 Manganese 1.30-1.50 Silicon .20-.35 Molybdenum .20-.30

#### SIMONDS AIR HARDENING DIE STEEL

This non-deforming 5% Chrome Type is spheroidize annealed for good machinability and uniform hardenability. Its wide hardening range (1700 to 1800°F.) makes it practically foolproof in heat-treating. The 5% chrome content makes this type steel more wear resistant and better suited for punches and dies where longer production runs are desired between sharpenings. Stock sizes run from 1/2" to 2" thick and 2" to 10" wide in 36" lengths only.

Carbon .95–1.05 Manganese .50-.70 Silicon .30-.50 Chrome 5.00-5.50 Molybdenum .90-1.10 Vanadium .20-.30

# SIMONDS RED STREAK FLAT GROUND DIE STEEL

EAC	CH THICKNESS IS	ARDENI S FURNISHED IN				COLUMN		HARDI 36" Le	ENING	HARDI 36" Le	ENING
kness Width	Thickness V	Width Thickne	ess Width	Thickness	Width	Thickness	Width	Thickness	Width	Thickness	Width
1/2	7 64	1/2 9 32	1/2		1		1 1/2	1 2	2	1 2	2
3/4	64	3/4	3/4	<b>H</b>	11/4	1	2	9 16	21/2	9	21/2
urnished 4" Wide	8	1 5 16	1 11/4		11/2		21/2			5 8	
11/4		11/4	174		2			<b>5</b> B	3		3
1 1/2	964	1 1/2	2	0	21/2	•	3	110	31/2	11	31/2
	5	2		34	3		3 1/2	34		34	
2 21/2	5 32	21/2	3		31/2		4	4	4	13	4
54	1164	3 3½ 13 32			4		41/2	13	41/2	4	41/2
3	64		4	13	41/2	1	5	78			
31/2	316	4 41/2 7	41/2	1.0	5		51/2	0	5	0	5
4			5		51/2			9	51/2	1	51/2
41/2	64		51/2		6	•		(H)		A	
5			6	1	7		7	<b>A</b>	6	B	6
51/2	32				8		8	B	7	1	7
6	4		8		10		10				
3 8	64	Not Furni in ½" W	ished	0	12	A	12	<b>(1)</b>	8	<b>1</b>	8
	A	14	14		14		14	A	10		10
4½ 5 5 5½ 6	15 64 14	UARE	5½ 6 7 8 10 iihed idth 12 14	of problems and	6 7 8 10 12 14		10 12 14	<b>9 9 9</b>	6 7 8 10		

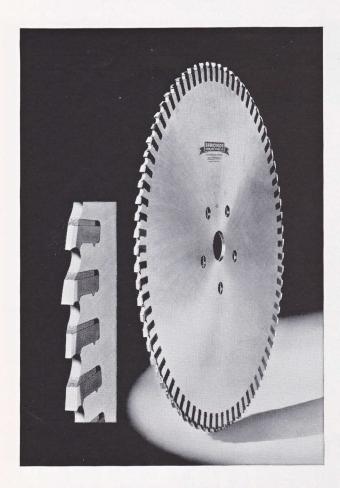


"TUNGSWELD"

# SQUARING SHEARS

Designed for shearing thin sheet steel . . . unannealed up to 16-gauge . . . annealed up to  $\frac{3}{16}$ " thick . . . Simonds "Tungsweld" Squaring Shears cut clean, stay sharp longer, reduce shearing costs. Accurately made with a single High Speed Steel cutting edge inlaid by Simonds exclusive "Tungsweld" process for long, trouble-free service. Sizes to fit all shearing machines.

# Inserted Tooth—Ferrous and Nonferrous Cutting



Primarily designed for efficient production cutting of solid ferrous and nonferrous billets, cakes, rod, heavy and medium wall tubes, structural shapes and extrusions, Simonds Inserted Tooth Saws have long been recognized as the strongest and freest cutting in the field.

This type saw consists basically of a hardened, tempered and smoothly ground plate of a special, tough saw steel. In precision milled pockets around the edge, alternating beveled and square, wear-resisting High Speed Steel cutting teeth are securely locked in place...a wedge for every tooth. These high-low teeth "Tri-Vide" the chips for fast, cool cutting with less strain on the blade or machine. Ample clearance, back and down from the cutting points make for long cutting life between sharpenings.

Standard tooth sizes and applications are described above right.

Maintenance is easily accomplished by anyone of average mechanical ability. Damaged or broken teeth, and even an entire set of worn-out teeth, are quickly and satisfactorily replaced right in your plant, eliminating the expense and delay occasioned by a trip back to the saw manufacturer's plant or repair depot. Shoulders broken by accident or abuse can be replaced by welding and the repaired saw will perform in its original outstanding manner.

#### TOOTH SIZES

No. 000 Jr. fills the need for a thin saw in the smaller sizes. It has proven to be best suited for maximum production from the smaller, lighter machines when cutting thin wall material such as angles, small I-Beams, etc.  $\frac{3}{16}$  Kerf—10" to 18" diameter.

No. 000 cuts a slightly wider kerf than No. 000 Jr. but the teeth are more closely spaced. This greater number of teeth minimizes chatter when cutting thin walls in I-Beams, Channels, and other material of similar construction. It is also furnished in diameters up to 50". ½" to 3%" Kerf—10" to 50" diameter.

**No. 00** cuts the same narrow kerf as the No. 000 Jr. but has a coarser tooth spacing with more gullet room for chips, making it better suited for cutting thicker sections.  $\frac{3}{16}$ " Kerf—10" to 18" diameter.

**No. O** cuts the same kerf as No. 000 but it has coarser tooth spacing with more gullet room for chips. It is therefore better suited for cutting heavier sections, where the amount of kerf cut is not as important as the ability to stand rough usage and at the same time work well on the lighter powered machines.  $\frac{1}{2}$ " to  $\frac{1}{16}$ " Kerf—14" to 42" diameter.

**No. 1** is for heavy-duty cutting on large machines where extra gullet capacity is required.  $\frac{3}{8}$ " or  $\frac{7}{16}$ " Kerf—18" to 50" diameter.

**No. 2** is for cutting large dimension stock requiring ample gullet capacity. It will stand up to the heaviest feeds of the larger machines.  $\frac{15}{32}$ " or  $\frac{1}{2}$ " Kerf -26" to 64" diameter.

**No. 3** is for cutting the largest billets and forgings on heavy-duty machines. This is the largest and most rugged tooth size for use in the largest diameter inserted tooth saws made.  $\frac{5}{8}$ " to  $1\frac{5}{16}$ " Kerf—50" to 100" diameter.

#### STOCK SIZES

Dia.	Plate Thickness	Kerf	No. Teeth	Tooth Size
8"	9 //	3 //	24	000 Jr.
10	9 64	$\frac{3}{16}$	32	000 Jr.
12	9 64	$\frac{3}{16}$	44	000 Jr.
12	3 16	1/4	44	000
14	9 64	$\frac{3}{16}$	52	000 Jr.
14	$\frac{3}{16}$	1/4	52	000
16	9 64	3 16	60	000 Jr.
16	3 16	1/4	60	000
18	9 64	3 16	68	000 Jr.
18	$\frac{3}{16}$	1/4	68	000
20†	$\frac{3}{16}$	1/4	36	0
20	$\frac{3}{16}$	1/4	46	0
22	$\frac{3}{16}$	1/4	50	0
22	$\frac{3}{16}$	1/4	70	000
24	$\frac{3}{16}$	1/4	54	0
24	$\frac{3}{16}$	1/4	76	000
26	$\frac{3}{16}$	1/4	82	000
28	1/4	5 16	64	0
29	$\frac{3}{16}$	1/4	64	0
30	1/4	$\frac{5}{16}$	66	0
32	1/4	5 16	70	0
34	1/4	5 16	74	0
36	1/4	5 16	78	0
423/4	$\frac{5}{16}$	.432	70	1 L.F
44	5 16	.432	70	1 L.F

<sup>\*</sup>L.F.—Long Face. †For Nonferrous Cutting only.

In addition to the above listed Stock Sizes, a complete range of saws can be furnished from 8" to 100" of Standard Specifications as listed in Catalog "J," for use on all makes of cold-sawing machines.

# Segmental Type—Ferrous and Nonferrous Cutting



Designed for efficient cutting of a wide range of ferrous and nonferrous structural shapes and extrusions, Simonds Segmental Type Saw is particularly adapted for production sawing of forging slugs or semifinished machine parts...operations calling for smooth cuts to minimize end finishing costs.

Simonds design Segmental Saw consists of a tough alloy steel saw plate with close-fitting, clearance ground High Speed Steel toothed segments firmly riveted in a carefully centered slot precision milled around its periphery. This tongue and groove construction provides freer cutting, maximum strength, because the rivet heads are spread in the tough, shock-resistant steel plate rather than in the more brittle High Speed Steel segment and produces smoother cuts due to the shoulders of the saw plate equally supporting each side of the segment out closer to the cutting edge. Coolant channels, ground on the sides of segments for saws to be used in ferrous cutting, direct coolant flow to the actual cutting points.

Alternating high-low beveled and square teeth "Tri-Vide" chips (split them into 3 separate pieces) reducing the load on the saw and the machine. Available in a wide range of tooth spacings from fine to coarser, this type saw can be furnished with exactly the right number of teeth to cut thin wall sections without tooth straddle or vibration, or to cut heavy solids without danger of gullet loading.

Simonds Segmental Saws can be sharpened on any automatic saw grinder.

#### STOCK SIZES

.201"  13 144 144 144 144 144 144 144 144 144	80 64 80 96 48 54 72 90 108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120 120 140	Nonfer Ferrou	s and "" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
	80 96 48 54 72 90 108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 180 36 54 72 90 108 126 180 36 54 72 90 108 126 180 36 54 72 90 108 126 180 190 108 126 180 190 108 108 108 108 108 108 108 10	Nonfer Ferrou		Nonferrou
	96 48 54 72 90 108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 180 36 54 72 90 108 126 60 80 100 120		"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
	48 54 72 90 108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 80 100 120		"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
	54 72 90 108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 180 36 54 72 90 108 126 60 80 100 120 160 60 80 100 120			Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	90 108 126 144 72 108 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 60 80 100 120		"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	108 126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120	Nonfer Ferrou	"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	126 144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 80 100 120	Nonfer Ferrou	"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	144 72 108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120	Nonfer Ferrou	"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	108 144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 60 80 100 120		"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	144 72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120		rous s and "" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	72 90 108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 60 80	Nonfer Ferrou	"" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	108 126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120		"" rous s and "" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	126 180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100	Nonfer Ferrou	"" rous s and "" "" "" "" "" "" "" "" "" "" "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	180 36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120	Nonfer Ferrou	rous s and "" "" ""	Nonferrou
16 4  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04	36 54 72 90 108 126 144 162 60 80 100 120 160 60 80 100 120	Ferrou	s and "" "" "" "" "" "" "" "" "" "" "" "" ""	" " " " " " " " "
	54 72 90 108 126 144 162 60 80 100 120 160 60 80 100	Ferrou	s and "" "" "" "" "" "" "" "" "" "" "" "" ""	" " " " " " " " "
	72 90 108 126 144 162 60 80 100 120 160 60 80 100		"" "" "" "" "" "" "" "" "" "" "" "" ""	" " " " " " " " "
	108 126 144 162 60 80 100 120 160 60 80 100		    	" " " " " " "
	126 144 162 60 80 100 120 160 60 80 100		** ** ** ** ** ** ** ** ** ** ** ** **	" " " " " " "
	144 162 60 80 100 120 160 60 80 100		**	" " " " "
	162 60 80 100 120 160 60 80 100		"	"
	60 80 100 120 160 60 80 100	" " " " " "	"	" " "
	100 120 160 60 80 100 120	" " " " " "	"	
	120 160 60 80 100 120	  	"	
	160 60 80 100 120	"	**	
	80 100 120			
	$\frac{100}{120}$			**
	120			.,
		**	**	**
	110	"		**
15	48	Nonfer	rous	
15 64	72			Nonferrou
64 15 64	96	4.6	**	**
15 64	120		44	"
15 64 15				
64		11		- 44
19 64	72	"	**	**
.260				**
64				
64			**	**
19 64	168		**	**
19 64	240	**	44	"
19 64	48	Nonferi	rous	
19 64	72	Ferrou	s and	Nonferrou
19 64		"	"	"
64	120		**	**
64		44	**	
	192	"	**	44
	48	Nonfer	rous	
	60			Nonferrou
	72	44	4.6	"
19 64				
64 19			4.6	4.6
64			**	**
		Nonfer	rous	
				Nonferror
64 19 64		**	**	**
19	90			**
64	120	**	**	
64		**	**	"
19	150	"	"	**
19	180	"	**	"
19 64	60	Nonfer	rous	
	90			Nonferrou
19 64	120	44	**	"
32	90	"		"
32 11				
		"		**
		Nonfer	rous	
				Nonferror
		I CITOU	- wiid	
	100 000 000 000 000 000 000 000 000 000	260 96  \$\frac{12}{12}\$ 96  \$\frac{12}{12}\$ 120  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 172  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 120  \$\frac{1}{12}\$ 168  \$\frac{1}{12}\$ 169  \$\frac{1}{12}\$ 179  \$\frac{1}{12}\$	194	144

In addition to the above listed Stock Sizes, a complete range of saws can be furnished from  $11\frac{1}{8}$ " to  $60\frac{1}{8}$ " of Standard Specifications as listed in Catalog "J" for use on all makes of cold-sawing machines.

# Solid Tooth—Nonferrous Cutting

#### SI-MALOY\* STEEL SAWS



Si-Maloy\* Steel Saws, practically without exception, provide the ultimate in nonferrous sawing economy. They are made of a patented high carbon-high chrome type saw steel especially developed for sawing nonferrous metals. Costing more than Semi-High Speed Steel Saws, their increased cost is reflected in longer cutting life between sharpenings. Costing the same as High Speed Steel Saws, they have a higher degree of toughness and resistance to breakage than the latter and in all but the most unusually abrasive alloys will hold their cutting edges equally well.

Scientific heat-treating, accurate toothing and precision grinding insure greater uniformity, perfect balance and longer life from every saw. Si-Maloy\* Saws are normally manufactured clearance ground and of a hard filing temper for nonferrous sawing on table, radial

temper for nonferrous sawing on table, radial arm, cut-off and "chop" machines. Si-Maloy\* Saws are not recommended for sawing ferrous metal.

\*Steel Analysis Patented No. 2,204,283

## SEMI-HIGH SPEED STEEL SAWS

Semi-High Speed Steel Saws are normally applied where production requirements are limited and do not warrant the extra expense of Si-Maloy\* or High Speed Steel Saws. Costing less than the latter two saws, they provide somewhat less cutting between sharpenings. They are, however, tougher and more resistant to cracking or breaking and consequently more economical to use on jobs where saws are subject to abuse.

Modern heat-treating, toothing and grinding methods provide uniform clearance, perfect balance and maximum cutting life.

For nonferrous sawing on table, radial arm and "chop" machines, they are normally manufactured clearance ground and of a hard filing temper.

For sawing heavy sections of "sticky" alloys of nonferrous metals on the same equipment, they are sometimes furnished flat ground, with teeth set and filed.

Semi-High Speed Steel Saws are also furnished in a low temper and with relatively fine teeth for friction sawing of light to medium ferrous metal sections at high rim speeds. Simonds does not manufacture High R.P.M. saws over 24 inches in diameter.



#### HIGH SPEED STEEL SAWS



High Speed Steel Saws provide the ultimate in cutting life between sharpenings. Costing more than Semi-High Speed Steel Saws, they deliver more in the way of performance. Costing the same as Si-Maloy\* Steel Saws, they possess the quality of slightly better edgeholding properties in the more abrasive nonferrous alloys, but they will not take the abuse that the latter steel will stand. High Speed Steel Saws give equally good results in cutting either ferrous or nonferrous alloys.

Edge-holding qualities, uniformity and perfect balance are assured by Simonds modern heat-treating, toothing and grinding methods. Adequate clearance and an extra smooth surface finish are additional reasons why these saws give long, trouble-free service.

For nonferrous sawing on table, radial arm, cut-off and "chop" machines, saws are usually made clearance ground and of a hard filing temper.

SIMONDS manufactures High Speed Steel Saws through 16-inch diameter only.

#### STOCK SIZES

#### SI-MALOY\* STEEL SAWS

Concave Ground for Clearance

Dia.	Thick.	Hole	No. Teeth	Collar
4"	3 //	1/6"	100	None
6	3	1/2	110	21/2"
4" 6 6 6 6 7 8 8 8 8	64	5%	150-200	$\frac{2\frac{1}{2}''}{2\frac{1}{2}}$
6	**************************************	5/8 5/8	80-110-150-200	21%
6	16	1 8	110	21/2
7	16	5/	150	$\frac{21}{2}$
0	16	5/8 5/8 5/8	150	31/2
0	64	5/8	80-100-150-200-250	
0	16	1 78	100-150-200	$\frac{31/2}{31/2}$
0	16	5/8	100-150-200	31/2
0	32	1 /8	80	31/2
0	32	5/	100-130-150-190-250-300	1/2
	16	5/8 3/4	190	1
10	16	1 14	80-100-130-150-190-300	1
10	16	5/	80-100-130-130-190-300	4
	32	5/8 3/4	80-150	1
0	32	1 4	80-100-130-150-190	1
10	32	5/	130-150	1
0	1/8	5/8	150	4
0	1/8	1		4
2	16	3/4	300	5
2	16	1	150-200	4 5 5 5 5 5 5 5
2	16 3 32 3 2 3 3 2	1	76-100-150-200-250	5
2	32	1	150 (5 exp. slots)	5
2	3 2	11/8	150	5
2	1/8	1	100-150	5
4	3 2	1	150	$\frac{5\frac{1}{2}}{5\frac{1}{2}}$
4	1/8	1	150	51/2
16	1/8	1	150 (5 exp. slots)	6

#### SEMI-HIGH SPEED STEEL SAWS

Concave Ground for Clearance

4"	34 364 116 116 32 16 32 16 .072 Skil	1/2"	100	None
6	3	1/2	110-200	21/2"
6	1	1/2	110	21/2
	16	5/8 5/8	110-150	21/2
6 6 7	3	5%	110	$   \begin{array}{c}     2\frac{1}{2} \\     2\frac{1}{2} \\     2\frac{1}{2}   \end{array} $
7	1	5/8 5/8	150	3
71/4	072 Skil	/ 0	100	3
8	1	5/8	80-100-150-200	3 3 3½
7 <sup>1</sup> / <sub>4</sub> 8 8 8 8 8 8	16	1	150-200	31/2
8	083	5/6	150	31/2
8	3	5/8 5/8	150	31/2
8	32	1 0	100-200	$3\frac{1}{2}$
0	1	5/6	80-100-130-150-190-250	4
0	10	5/8 3/4	150	4
ŏ	16	1	190	4
0	3 3 3 3	5/8	80-100-130-150-190	4
0	3 2	5/8 3/4	100-150	4
0	3	1	130-190	4
2	1	1	150	5
2	10 10 83 0 82 82 10 10 10 10 10 10 10 10 10 10 10 10 10	1	100-150-200	4 5 5 5 5 5 5 5
2	1/0	1	150	5
4	1%	1	150	51/2
6	1%	1	150 (5 exp. slots)	6

#### Flat Ground and Set for Clearance

6"	3 ''	1/2"	110	None
8	3 64	5/6	150	None
10	1	5%	150	None
12	16	1 /8	150	None
14	5 64 3 32	î	150	None

#### HIGH SPEED STEEL SAWS

Concave Ground for Clearance

4"	1//	1/2"	100	None
6	3	5%	200	21/2"
6	1	1%	110	21/2
8	16 1 16	5%	100-150-200-250	31/2
0	16	5%	130-150-250-300	4
10	16	5/0	190	5
0	$\frac{\frac{16}{3}}{32}$	5/0	130	4
0	3 2 3 3 2	5/0	80-100	5
2	3 2 1 16	1 8	200	5

# For Cutting Plastics, Fibre and Composition Materials

#### CARBIDE TIPPED SAWS



For the fastest, smoothest cutting and most wear-resistant cutting edges Simonds Carbide Tipped Saws have an unequalled on-the-job performance record. This type saw has the ability to cut virtually all types of plastic, fibre and composition materials for extremely long periods between sharpenings...with a good edge finish.

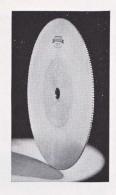
Simonds Carbide Tipped Saws consist of an Electric Furnace Saw Steel plate, heat-treated for maximum toughness and carefully ground to provide additional clearance necessary in sawing heavy sections of "sticky" compounds. Carbide tips are electronically brazed into accurately milled sockets to form the cutting edge of the teeth. These tips are ground on heavy, vibration-free grinding equipment, using diamond grit wheels and precision measuring instruments.

While Carbide Tipped Saws are normally somewhat thicker than solid type saws, a thin Carbide Tipped Saw has been designed and produced by Simonds for special applications. These saws are known as Thin Rim Carbide Tipped Saws and can be made in virtually any diameter. Simonds strategically located factory branches are equipped to resharpen and repair Carbide Tipped Saws, using factory-developed techniques.

#### SEMI-HIGH SPEED STEEL SAWS

Simonds Semi-High Speed Steel Saws are manufactured of a carefully heat-treated, special analysis Electric Furnace Saw Steel that combines exceptional edge-holding qualities with maximum plate toughness. Accurate toothing and fitting with ample clearance provided either by grinding the saw body or setting the teeth (for cutting heavy sections) insure smooth, fast cutting and dependable on-the-job results.

While Semi-High Speed Steel Saws cost somewhat less than High Speed Steel Saws and therefore have somewhat less cutting life between sharpenings, they do have a greater ability to withstand abuse than High Speed Steel Saws. By minimizing cracking or breaking on any operation where such problems exist, Semi-High Speed Steel Saws may prove to be more economical to use and will give completely satisfactory results.



#### HIGH SPEED STEEL SAWS



Simonds High Speed Steel Saws are made of a special analysis high alloy saw steel developed in Simonds own Electric Furnace Steel Mill... steel that possesses the best edge-holding properties for circular type saws.

Carefully heat-treated and precision ground with adequate clearance for free cutting, yet retaining sufficient body strength for straight cuts, these saws are accurately toothed and furnished with long-lasting keen cutting edges. Costing more than Semi-High Speed Steel Saws, they provide superior performance and find widespread application in cutting all but the most abrasive materials where only a Carbide Tipped Saw will out-perform them.

While High Speed Steel Saws will retain their cutting edges longer between sharpenings than Semi-High Speed Steel Saws, they will not stand the abuse. On applications where cracking or breaking is a factor, it

stand the abuse. On applications where cracking or breaking is a factor, it is sometimes more economical to use the lower priced Semi-High Speed Steel Saws.

#### STOCK SIZES

#### CARBIDE TIPPED SAWS

STANDARD

Dia.	Thick.	Hole	No. Teeth	Kerf	No. Exp. Slots	Collar
8"	.094''	5/8"	50	.120′′	3	31/2"
10	.109	5/8	60	.135	4	4
10	.109	5/8	80	.135	4	4
12	.120	1	80	.146	4	5
14	.130	1	90	.156	5	$5\frac{1}{2}$
16	.130	1	80	.156	5	6

#### THIN RIM

Dia. 10"	Thick.	Hole	No. Teeth	Kerf	No. Exp. Slots	Collar 6''
10"	.120''	5/8"	80	.095"	4	6"
10	.120	5/8	80	.065	4	6

## SEMI-HIGH SPEED STEEL SAWS

CLEARANCE GROUND

Dia.	Thick.	Centerhole	No. Teeth	Collar
8" 8	$\frac{\frac{1}{16}''}{\frac{1}{16}}$	5/8" 5/8	150 200	$\frac{3\frac{1}{2}}{3\frac{1}{2}}$

#### FLAT GROUND with TEETH SET for CLEARANCE

Dia.	Thick.	Centerhole	No. Teeth	Collar
6"	3 //	1/2"	110	_
8	$\begin{array}{r} \overline{64} \\ \underline{3} \\ \overline{64} \end{array}$	5/8	150	_
10	1	5/8	150	
12	5	1	150	-
14	$ \begin{array}{r} \overline{16} \\ \underline{5} \\ 6 \\ 4 \\ \underline{3} \\ 3 \\ 2 \end{array} $	1	150	The Cart

### HIGH SPEED STEEL SAWS

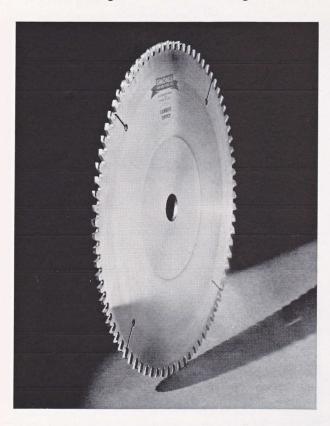
CLEARANCE GROUND

Dia.	Thick.	Centerhole.	No. Teeth	Collar
6''	1 "	1/2"	110	21/2"
6	16	5/0	110	$2\frac{1}{2}$
8	$\frac{16}{16}$	5/8	150	$3\frac{1}{2}$
8	1	5/6	200	$3\frac{1}{2}$
8	$\frac{\overline{16}}{\frac{3}{32}}$	5/8	150	$3\frac{1}{2}$
10	1	5/8	190	4
10	16	1	190	4
10	3	5/8	130	4
10	3 2	5/8	190	4
10	$\frac{32}{3}$	1°	130	4
12	3 2	1	150	5
12	$ \begin{array}{r} 16 \\ 3 \\ 3 \\ 3 \\ 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \end{array} $	11/8	150	5
12	1/8	1	150	5

Saws for special applications promptly made to order. Submit blueprint or complete saw specifications. We recommend that samples of material to be cut be submitted for test-cutting by our engineers to determine proper saw specifications.

#### CARBIDE TIPPED

For Cutting Aluminum and Magnesium



Designed for economical, trouble-free cutting of Aluminum or Magnesium solids, extrusions, plate, sheet or tubing, Simonds Carbide Tipped Saws stay sharp for exceptionally long periods, are proven money-savers.

The carbide tips, electronically brazed to a tough saw steel plate, are precision ground for concentricity and side clearance so that each tooth cuts a full chip and the saw runs true and free.

Chip breaker style teeth, with a slight negative hook or rake, cut faster and cooler, give excellent results on table, radial arm or "chop" machines.

Furnished in stock sizes or made to order for specific applications. Sharpening and repairing service is available from all Simonds Factory Branches.

#### STOCK SIZES

Dia.	Thick.	Hole	Teeth	Kerf	Collar
10"	.109"	5/8"	60 (4 exp. slots)	.135"	4"
12	.120	1	*80 (4 exp. slots)	.146	5
14	.130	1	90 (5 exp. slots)	.156	$5\frac{1}{2}$

\*Also 90 teeth (5 exp. slots) Hollow Ground.

#### SOLID TOOTH—FERROUS CUTTING

Cold cutting Solid Tooth Saws for general shop cut-off requirements, for use on smaller automatic cut-off machines and for cutting operations where kerf is an important factor, are furnished clearance ground with a choice of High Speed or Semi-High Speed Steel. High Speed Steel Saws are furnished up to 16" in diameter only. Scientific heat-treatment insures correct temper, edge-holding qualities and long, dependable, trouble-free service. Semi-High Speed Steel High R.P.M. Saws are



also furnished up to  $24^{\prime\prime}$  for cutting light wall tube, sheet and structural shapes.

#### STANDARD SIZES—COLD CUTTING SAWS

High Speed

Dia.	Thickness	No. of Teeth
8"	.086"	64-84-100
10	3 3 2	84-100-126
12	1/8	64-84-100-126-150
14	1/8	64-76-100-126-150
15	$\frac{5}{32}$	64-76-100-126-150
16	$\frac{5}{32}$	64-84-100-150

#### Semi-High Speed

Dia.	Thickness	No. of Teeth
8"	.086"	64-84-100
10	3 3 2	84-100-126
12	1/8	64-84-100-126-150
14	1/8	64-76-100-126-150
15	5 32	64-76-100-126-150
16	5 2 2	64-84-100-150
18	3 16	64-84-100-126-150
20	3	64-84-100
22	$\frac{3}{16}$	76-100-112
24	7 32	76-100-126
26	7 3 2	64-84-100-150

#### SLITTING SAWS



To insure correct slot widths and spacing, Simonds smooth cutting Slitting Saws are accurately made to specifications and are held to rigid close tolerances. Saws are clearance ground, heat treated for maximum edge-holding qualities, are especially suited to gang milling operations. Furnished in High Speed or Semi-High Speed Steel, in dividually packaged.

#### STOCK SIZES-HIGH SPEED STEEL

Dia.	Thick- ness	Hole	$No.\ Teeth$	Dia.	Thick- ness	Hole	No. $Teeth$	Dia.	Thick- ness	Hole	No. Teetl
21/2"	1/1	7/8"	28	4"	1 "	1"	36	6"	16"	1"	42
$2\frac{1}{2}$	3 64	7/8	28	4	64	1	36 36	6	16 3 32	1	42
$\frac{2\frac{1}{2}}{2\frac{1}{2}}$	$\frac{1}{16}$ $\frac{3}{32}$	7/8 7/8	28 28	4 4	$\frac{\overline{16}}{\overline{32}}$	1	36	6	1/8	1	42
$2\frac{1}{2}$	1/8	7/8	28	4	1/8	1	36 36	6	1/8	11/4	42
3	1 32	1	30	4	$\begin{array}{c} \frac{1}{32}"\\ \frac{3}{64}\\ \frac{1}{16}\\ \frac{3}{32}\\ \frac{1}{8}\\ \frac{5}{32}\\ \frac{3}{16} \end{array}$	î	36	6	3 16	1	42
3	3 64	1	30	5	16	1	40				
3	$\begin{array}{c} \frac{1}{16} \\ \frac{3}{32} \end{array}$	1	30	5	32	1	40 40	8	1/8	1	46
3		1	30	5	1/8	11/4	40	8	1/8	11/4	46
3	$\frac{1}{8}$ $\frac{5}{32}$	1	30 30	5 5 5 5	$ \begin{array}{c} 1\\ 16\\ 3\\ 32\\ 1/8\\ 1/8\\ \frac{5}{32}\\ \frac{3}{16} \end{array} $	1	40 40	8	3 16	11/4	46

Precision cut, lead bath hardened, rigidly inspected and "prover-tested" to insure uniformity and fast, smooth results, SIMONDS famous "Red Tang" FILES remove more metal with less effort, stay sharp longer, make the filer's job easier. Made in a variety of sizes and shapes for every machine shop and saw sharpening need. SIMONDS RED TANG FILES List Price per Dozen — Effective April 12, 1954

7				_		LI	ENGTH-	-Inche	s				
KIND		4	5 Pa	5½ cked On	6 Dozen t	7	8	9	10	12 ked One-	14 Half Doze	16 on to the	18 Box
Aluminum .	Flat				8.30 16.50		11.00 18.80		13.30 21.10	17.20 25.00	$22.70 \\ 31.30$		
Band Saw	Regular				7.10		10.10		,				
Blunt	Slim				5.90		8.00 18.80		21.10	25.00			
Brass Bucksaw	Half Round Special		••••		4.70		10.00			20.00			
Cant Saw					8.40		9.90		13.60				
Chain Saw	Round 3" Round 1/4"						8.80						
Jium bun	Round $\frac{16}{4}$ " Round $\frac{9}{32}$ "						8.80 9.10						:::
	Round $\frac{5}{16}''$						9.40 10.10			,			
	Square				7.50								
Cross-cut	Great American Special				5.90	6.50	$\frac{11.70}{7.30}$		14.30 10.10		::::	::::	::
Dado									11.60				
Double Ender						5.30	5.90	6.60	7.30				
Flat	Bastard Second Cut	5.80 6.80			6.80 7.50		8.30 9.50		$\frac{11.00}{12.70}$	$15.20 \\ 17.20$	20.80 24.00	$27.80 \\ 31.50$	37.
	Smooth	7.40			8.30		10.30		13.60	18.90	26.20	34.80	
Foundry	Flat		::::		::::		8.30 11.70		11.00 14.30	15.20 18.40	$20.80 \\ 24.20$		::
Gullet	Special						11.00		14.70				
Half Round .	Bastard	7.50			9.50		11.70 13.00		14.30 15.70	18.40 20.40	24.20 26.60	32.20	
	Second Cut Smooth	8.80 9.50			10.60		13.90		16.80	21.80	28.60	37.90	
Hand	Bastard Second Cut				6.80 8.00		8.40 9.80		11.70 13.60	16.80 19.20	23.50 $26.60$		::
	Smooth				8.80	0.10	10.50		14.70	21.10	28.50		
Handsaw		8.40		5.70	6.80	8.10	13.30		15.70	1			
Knife	Second Cut Smooth	9.50 9.90			11.70 12.40		14.30 14.80		18.00 19.20		::::	::::	::
Lead Float .	Flat						9.80 13.30		13.40 16.80	18.40 22.00			
Long Angle I										18,40	25 00		
Files fo	or Stainless Steel are 1 kind, shape and cut, a	made in nd add t	all shap	pes and are for	sizes as use on \$	regular Stainless	purpose Steel.	files, ar			gular lis	t prices.	. Та
Mill	Bastard Second Cut	4.60			5.30	5.90	6.50 7.30		8.40 9.50	$\frac{11.20}{12.80}$	16.00 18.20	22.00	::
	Smooth				6.80 5.90		8.10 7.20		$\frac{10.50}{9.40}$	$\frac{14.00}{12.50}$	19.60		
	Bastard—2 R.E.				6.60		8.10		10.50				
Narrow Band Saw	Special No. 2 . Special No. 3 Special No. 456 .	::::			7.10 5.90	8.40 6.80	10.10						
Pillar	Bastard				6.80		8.40		11.70	16.80			
	Second Cut Smooth				8.00 8.80		9.80 10.60		13.60 14.70				::
Round	Bastard	4.80			5.50	6.10	6.80		8.80 9.90	11.70	16.80	23.00	
	Second Cut Smooth	5.50 6.10			6.20 7.10		7.60 8.40		11.00	13.40 14.70	19.10 $20.50$		::
Saw Bit	Special						9.10						
Square	Bastard Second Cut	5.90 7.20			7.20 8.00		8.60 9.80		11.60 13.30	15.90 18.00	$21.80 \\ 25.10$	29.40	::
	Smooth	7.60			8.60		11.00		14.30 12.10	20.10	27.40	• • • •	
Taper	Regular Slim	3.40	3.80		5.10 4.70	6.50 5.70	8.10 6.80		9.50				
	Extra Slim Double Ex. Slim	3.40	3.80	4.40	4.70 4.70	5.70 5.70	6.80						
Three Square					$9.50 \\ 10.60$	::::	$11.70 \\ 13.00$	::::	$\frac{14.30}{15.70}$	20,40			
Warding	Smooth	6.20			7.60		13.90 9.90		16.80 13.60	21.80			
raiding	Second Cut Smooth	7.50 8.40			9.30 9.90				$15.70 \\ 17.20$				
RA	ASPS	- 6		8		10	ENGTH-	-Inche	14		16		18
O-1-i	Second Cod	Packed O	ne Doz. to	the Box	-		1	Packed C	ne-Half I	Pozen to	the Box		
	Second Cut Smooth	15.70 18.30		.20		7.40 2.40		.90	53.0				
Horse	Plain Half File Regular						13	.00	18.2	20	25.00		00
	Slim						17	.20	23.6	60			26.
Shoe	Half Round		10	.30	1	4.00	_		• • •				
			14	.70	2	4.00 20.10 27.40	27	.40	36.5	20	48.20	)	

Look for ... Ask for the FILE with the RED TANG

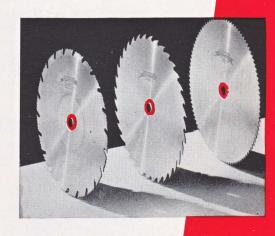
Red Color in the Tang Trade Mark Reg. U. S. Pat. Off.

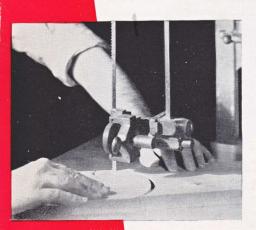


# WOOD CUTTING TOOLS

# CIRCULAR SAWS

Simonds "Red Center" circular saws are designed to cut straight and run true . . . cut fast and smooth and to stay sharp longer. Made of tough electric furnace steel from Simonds own mill, these saws are scientifically heat-treated, precision ground and expertly fitted to give the best possible cutting service. Available in all standard sizes of Rip, Cut-Off, Combination, Planer, Mitre and Dado, there is a Simonds "Red Center" Saw for every cutting purpose.





# NARROW BAND SAWS

For straight work or for cutting irregular shapes, Simonds Narrow Band Saws leave a smooth finish and give long trouble-free cutting service. Made of Simonds own special steel, these saws have large rounded gullets, a light, uniform set and are heat-treated to combine the best edge-holding qualities with maximum toughness. Available in all standard sizes in coils or welded to exact machine length.

# PLANER KNIVES

For satin smooth, top grade lumber and long uninterrupted production runs, try Simonds Planer Knives on your machine. Simonds makes all types . . . Thin High Speed and Corrugated Back Knives for round head machines . . . "Tungsweld" (with High Speed or Carbon Steel inlay) for square head machines. Made of steel from Simonds own mill, these knives are ground perfectly flat, are accurate to dimension and are heat-treated to hold their edge under the toughest operating conditions . . . come in all standard sizes.



# SIMONDS SAW AND STEEL CO. FITCHBURG, MASS.

Factory Branches in Boston, Chicago, San Francisco and Portland, Oregon