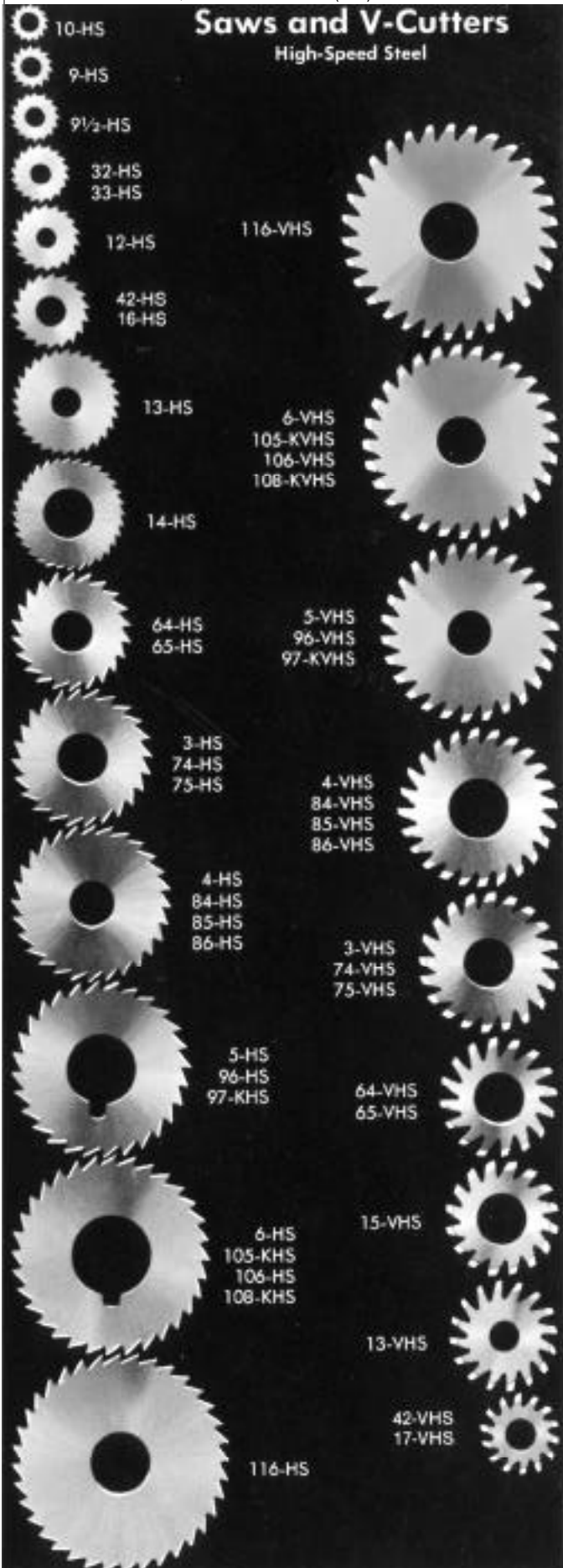


MARTINDALE ELECTRIC CO.

PO Box 430 Cleveland, OH 44107 • Phone (216) 521-8567 • Fax Local 521-9476 / USA & Canada (800) 344-9191 • E-Mail: sales@martindaleco.com



Saws and V-Cutters High-Speed Steel

Martindale Undercutting Saws

GENERAL

Martindale Undercutting Saws and V-Cutters are available in High-Speed Steel or Tungsten-Carbide. Both types are carefully designed as to tooth form, hollow grind, hardness, etc., and are manufactured to close tolerances in our own plant.

While used primarily for undercutting mica and slotting risers of commutators, Martindale Undercutting Saws and V-cutters are also used for cutting steel, aluminum, plastics, and other materials not requiring set teeth.

Undercutting differs from ordinary machining in that, instead of shearing, it is a combination of crushing, grinding, and conveying. Mica is very abrasive and varies in hardness, making necessary the very best design and production controls in the manufacture of undercutting saws.

HIGH-SPEED STEEL SAWS and V-CUTTERS

These can be used on either portable or stationary equipment with spindle speeds of 1,500 to 5,000 r.p.m.

(See Martindale Mica Undercutters for 16 Undercutters.)

SAWS ("U"-Slot)

Actual size illustrations at left; specifications and quantity discounts below. **Saws stocked in these thicknesses:**

.015" .023" .028" .035" .043" .053" .060" (Other thicknesses
.018" .025" .030" .038" .045" .055" .063" available at
.020" .026" .032" .040" .050" .058" .065" extra cost.)

Be sure to specify thicknesses.

Type Number	O.D.	Hole	No. Teeth	Catalog Number
10-HS	1/4"	1/8"	14	HSMS10
9-HS	9/32"	1/8"	14	HSMS9
9-1/2-HS	5/16"	1/8"	16	HSMS9.5
32-HS	3/8"	1/8"	18	HSMS32
33-HS	3/8"	3/16"	18	HSMS33
12-HS	7/16"	1/8"	18	HSMS12
42-HS	1/2"	1/8"	18	HSMS42
16-HS	1/2"	3/16"	18	HSMS16
13-HS	11/16"	3/16"	28	HSMS13
14-HS	23/32"	5/16"	32	HSMS14
64-HS	3/4"	1/4"	22	HSMS64
65-HS	3/4"	5/16"	22	HSMS65
74-HS	7/8"	1/4"	24	HSMS74
3-HS	7/8"	9/32"	24	HSMS3
75-HS	7/8"	5/16"	24	HSMS75
84-HS	1"	1/4"	28	HSMS84
4-HS	1"	9/32"	28	HSMS4
85-HS	1"	5/16"	28	HSMS85
86-HS	1"	3/8"	28	HSMS86
5-HS	1-1/8"	9/32"	28	HSMS5
96-HS	1-1/8"	3/8"	28	HSMS96
97-KHS	1-1/8"	7/16"	28	HSMS97K
6-HS	1-1/4"	9/32"	32	HSMS6
105-KHS	1-1/4"	5/16"	32	HSMS105K
106-HS	1-1/4"	3/8"	32	HSMS106
108-KHS	1-1/4"	1/2"	32	HSMS108K
116-HS	1-3/8"	3/8"	36	HSMS116

All Standard H.S.S. Saws & V-Cutters can be assorted for quantity pricing.

Quantity Discounts	
1 - 24 Pcs.	- Net
25 - 49 Pcs.	- 5%
50 - 99 Pcs.	- 10%
100 - 249 Pcs.	- 15%
250 Pcs. & Up	- 20%

Metric Sizes	
25 mm. O.D. x 7mm. I.D.	
Saws in stock, along with other metric sizes upon request.	

V-CUTTERS ("V"-Slot)

Actual size illustrations at left; specifications and quantity discounts below. **These cutters are all .045" thick and stocked with 40°, 50°, and 60° angles between cutting edges.** 40° V-cutters are for thin mica, 50° for medium mica, 60° for thick mica.

Be sure to specify angle 40°, 50°, or 60°.

Type Number	O.D.	Hole	No. Teeth	Catalog Number
42-VHS	1/2"	1/8"	12	HSMSV42
17-VHS	1/2"	3/16"	12	HSMSV17
13-VHS	11/16"	3/16"	14	HSMSV13
15-VHS	23/32"	5/16"	14	HSMSV15
64-VHS	3/4"	1/4"	14	HSMSV64
65-VHS	3/4"	5/16"	14	HSMSV65
74-VHS	7/8"	1/4"	18	HSMSV74
3-VHS	7/8"	9/32"	18	HSMSV3
75-VHS	7/8"	5/16"	18	HSMSV75
84-VHS	1"	1/4"	22	HSMSV84
4-VHS	1"	9/32"	22	HSMSV4
85-VHS	1"	5/16"	22	HSMSV85
86-VHS	1"	3/8"	22	HSMSV86
5-VHS	1-1/8"	9/32"	24	HSMSV5
96-VHS	1-1/8"	3/8"	24	HSMSV96
97-KVHS	1-1/8"	7/16"	24	HSMSV97K
6-VHS	1-1/4"	9/32"	24	HSMSV6
105-KVHS	1-1/4"	5/16"	24	HSMSV105K
106-VHS	1-1/4"	3/8"	24	HSMSV106
108-KVHS	1-1/4"	1/2"	24	HSMSV108K
116-VHS	1-3/8"	3/8"	26	HSMSV116

All Standard H.S.S. Saws & V-Cutters can be assorted for quantity pricing.

Quantity Discounts	
1 - 24 Pcs.	- Net
25 - 49 Pcs.	- 5%
50 - 99 Pcs.	- 10%
100 - 249 Pcs.	- 15%
250 Pcs. & Up	- 20%

Metric Sizes	
25 mm. O.D. x 7mm. I.D.	
V-Cutters in stock, along with other metric sizes upon request.	

\$20.00 Minimum Billing

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See H.S.S. Mica Saws for "General" discussion of Undercutting Saws.

TUNGSTEN-CARBIDE SAWS and V-CUTTERS

These are extremely hard and brittle and are usually used on rigid stationary equipment. The teeth of both saws and V-cutters have a slight land to give strength to the cutting edge. Saws are hollow-ground for clearance, V-cutters have ample radial relief. When Carbide Saws are used on other equipment than our undercutters, steel supporting washers are recommended to reduce breakage. Spindle speeds may vary from 3,000 to 12,000 r.p.m., depending on Saw O.D.

See Undercutters for 9 Martindale Undercutters for use with these saws: Close-Cut, Kut-Kwik, Utility, Bench-Type Model HV-3, Lathe-Type and Super Lathe-Type, Heavy-Duty Bench-Type Model H-9, Industrial Model HA-2, and Model ULLathe Mounted Automatic.

SAWS ("U"-Slot)

Actual size illustrations; specifications and **quantity discounts** below. Thickness ranges as follows:

1/4" - 9/16" O.D. from .010" to .045" thick
5/8" - 1-3/8" O.D. from .010" to .065" thick

Be sure to specify thicknesses.

Type Number	O.D.	Hole	No. Teeth	Catalog Number
10-TC	1/4"	1/8"	12	TUN510
9-1/2-TC	5/16"	1/8"	14	TUN59.5
32-TC	3/8"	1/8"	14	TUN532
33-TC	3/8"	3/16"	14	TUN533
12-TC	7/16"	1/8"	14	TUN512
42-TC	1/2"	1/8"	14	TUN542
16-TC	1/2"	3/16"	14	TUN516
18-TC	9/16"	1/4"	16	TUN518
54-TC	5/8"	1/4"	16	TUN554
64-TC	3/4"	1/4"	18	TUN564
65-TC	3/4"	5/16"	18	TUN565
75-TC	7/8"	5/16"	20	TUN575
4-TC	1"	9/32"	20	TUN54
84-TC	1"	1/4"	20	TUN584
85-TC	1"	5/16"	20	TUN585
86-TC	1"	3/8"	20	TUN586
95-TC	1-1/8"	5/16"	22	TUN595
96-TC	1-1/8"	3/8"	22	TUN596
105-TC	1-1/4"	5/16"	24	TUN5105
106-TC	1-1/4"	3/8"	24	TUN5106
108-TC	1-1/4"	1/2"	24	TUN5108
116-TC	1-3/8"	3/8"	24	TUN5116

Saws of the same type can be assorted as to thickness only, for quantity pricing.

Quantity Discounts

1 - 5 pcs. - Net
6 - 11 pcs. - 10%
12 - 49 pcs. - 25%
50 - 99 pcs. - 30%

(Prices for larger quantities on application.)

COMPOUND-LAND SAWS

The compound-land feature, sketched at right, is available on tungsten-carbide "U"-slot saws 9/16" O.D. and up (#18-TC thru #116-TC) at a 30% premium in price. Because of this feature, each tooth cuts only 50% of full slot width, resulting in better chip clearance, cooler operation and production increases of up to 60% over the square-toothed Saw. To order, add "CL" to Catalog Number. Minimum thickness .015".



V-CUTTERS ("V"-Slot)

Actual size illustrations; specifications and **quantity discounts** below. Thickness ranges as follows:

1/2" O.D. from .030" to .045" thick
3/4" - 1-3/8" O.D. from .030" to .065" thick

Angles between cutting edges can be 40°, 50°, and 60°. 40° V-cutters are for thin mica, 50° for medium mica, 60° for thick mica.

Be sure to specify thicknesses and angle, 40°, 50° or 60°.

Type Number	O.D.	Hole	No. Teeth	Catalog Number
42-VTC	1/2"	1/8"	12	TUNSV42
17-VTC	1/2"	3/16"	12	TUNSV17
65-VTC	3/4"	5/16"	14	TUNSV65
75-VTC	7/8"	5/16"	16	TUNSV75
4-VTC	1"	9/32"	18	TUNSV4
85-VTC	1"	5/16"	18	TUNSV85
86-VTC	1"	3/8"	18	TUNSV86
95-VTC	1-1/8"	5/16"	20	TUNSV95
96-VTC	1-1/8"	3/8"	20	TUNSV96
105-VTC	1-1/4"	5/16"	22	TUNSV105
106-VTC	1-1/4"	3/8"	22	TUNSV106
116-VTC	1-3/8"	3/8"	22	TUNSV116

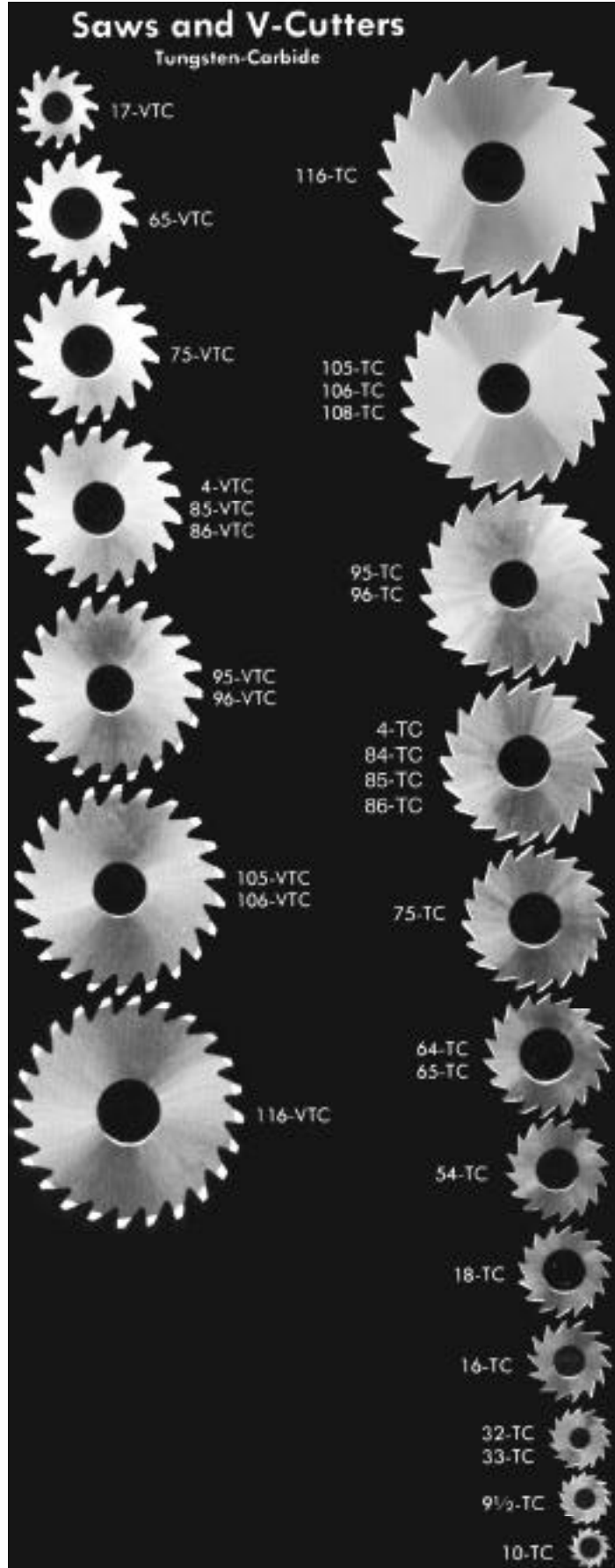
V-Cutters of the same type can be assorted as to thickness and angle only, for quantity pricing.

Quantity Discounts

1 - 5 pcs. - Net
6 - 11 pcs. - 10%
12 - 49 pcs. - 25%
50 - 99 pcs. - 30%

(Prices for larger quantities on application.)

\$20.00 Minimum Billing



SPECIALS — Your inquiries are invited for sizes not listed on the H.S.S. or Tungsten-Carbide Saw Pages.