

RELIABLE CUTTING TOOLS FOR EVERY MACHINE SHOP

# CUTTING TOOLS

INCH | 2022



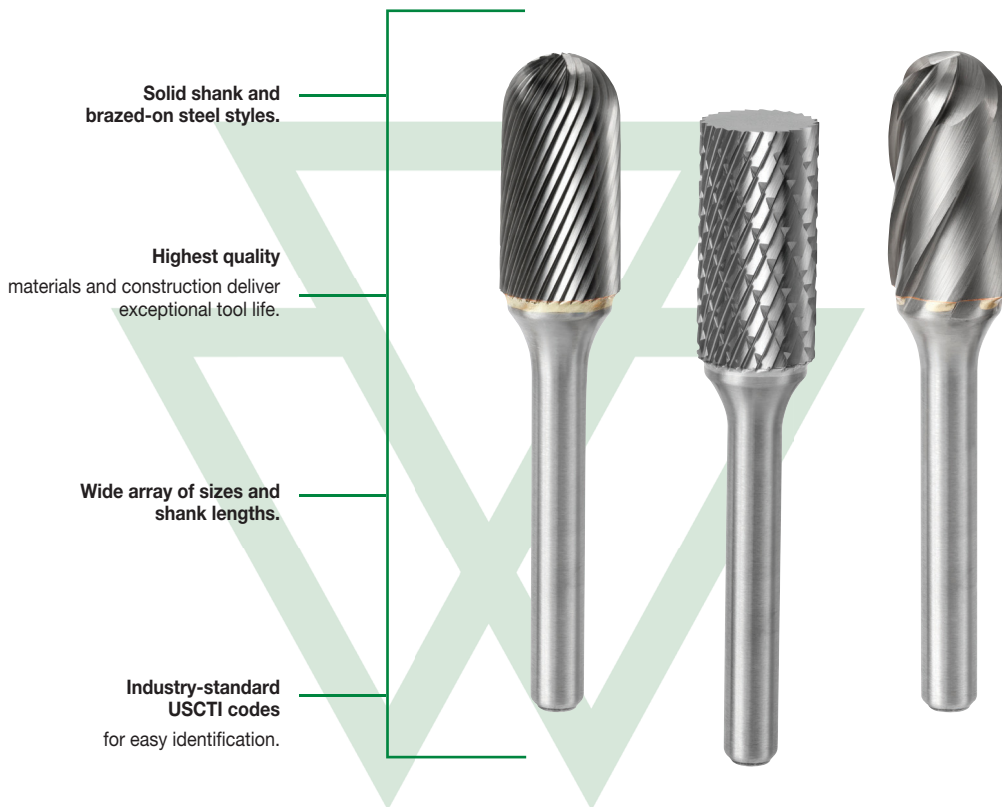
**WIDIA** 

 **HANITA**<sup>™</sup>

# Burs

## Carbide Burs

WIDIA™ carbide burs are manufactured in compliance with USCTI standards and are the highest quality in the industry, delivering excellent performance and safety. Our unique manufacturing process ensures exceptional tool life with the reliability to operate safely at high speeds. WIDIA burs offer a comprehensive portfolio of sizes and shapes for all applications and workpiece materials.



## Standard Cut Styles



### Standard Cut (Right-Hand Spiral)

The WIDIA standard (right-hand spiral) cut produces a smooth finish for general-purpose use on steel, cast iron, and other ferrous and non-ferrous materials.

Most WIDIA carbide burs are available in the right-hand spiral design.



### Master Cut (Double Cut)

The WIDIA exclusive master cut, with its chisel-type cutting edge, is a machine-ground tool built to exacting tolerances of concentricity, size, and shape. This accuracy, when combined with precision grinders, results in smooth-running, fast metal removal, and fine finishes. The right- and left-hand helical flutes combine to produce a chisel-type cutting tooth. This results in faster penetration and stock removal with minimal bounce or chatter.

The master cut design also produces an easy-to-handle granular-type chip in most metals, as opposed to the conventional sliver-type chips.

Throughout its life, the master cut gives faster stock removal and less operator fatigue, and maintains a good finish on the widest possible variety of workpiece materials.



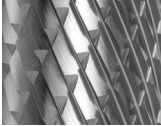


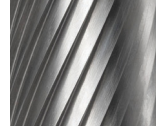

### Aluminum Cut

The WIDIA aluminum cut burs are outstanding on soft or non-ferrous type materials. Use the aluminum cut design on aluminum, magnesium, brass, lead, and most plastics.

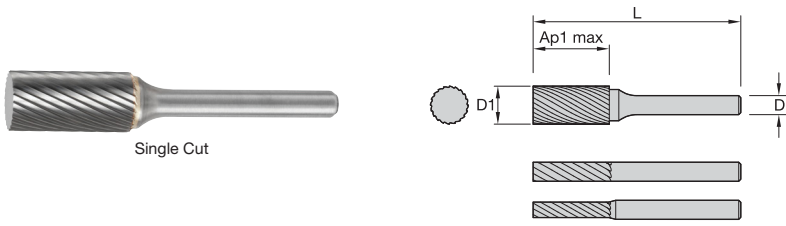
COARSE-CUT AND FINE-CUT RHS AVAILABLE AS SPECIALS.



# HOW TO SELECT A BUR

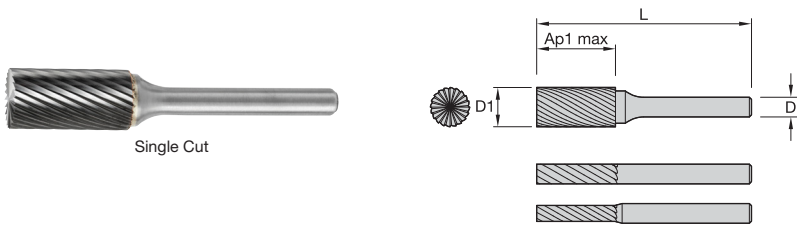
APPLICATIONS	MATERIAL	CUT	
<p><b>Efficient stock removal</b> – deburring, finishing, and cleaning.</p>	<p>Ferrous metals Non-ferrous metals</p>	<p>Double Master Cut</p>	
<p><b>Heavy stock removal</b> – deburring, milling, cleaning, and machining.</p>	<p>Non-ferrous metal: aluminum alloys  Plastics</p>	<p>Aluminum Cut</p>	
<p><b>Medium stock removal</b> – deburring, milling, cleaning, and finishing.</p>	<p>Non-ferrous metal: aluminum alloys  Plastics  Hard rubber</p>	<p>Coarse Cut Special Cut Style</p>	
<p><b>Medium stock removal</b> – deburring, milling, cleaning, and finishing.</p>	<p>Non-hardened steel &gt;45 HRC  Hardened steel &gt;45 HRC: stainless steel  High-temperature resistant metals: nickel, cobalt, titanium  Non-ferrous light metals: brass, copper, and zinc  Hardened &gt;45 HRC: cast iron</p>	<p>Single Cut</p>	
<p><b>Light stock removal</b> – fine deburring and fine finishing.</p>	<p>Hardened steel &gt;45 HRC</p>	<p>Fine Cut Special Cut Style</p>	

## Series SA Cylindrical • Single-Cut Burs • Inch



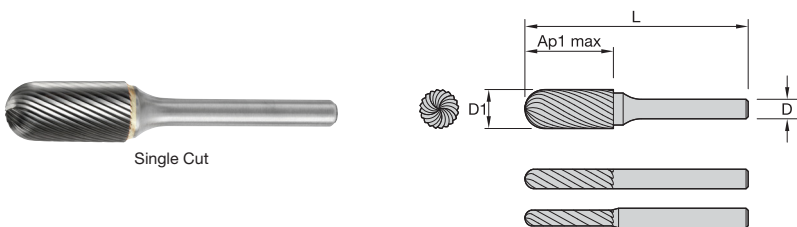
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SA-42	2736622	M40201	3/32	1/8	7/16	1 1/2	A
SA-43	2736616	M40202	1/8	1/8	9/16	1 1/2	A
SA-1	2736574	M40211	1/4	1/4	5/8	2	C
SA-3	1293725	M40214	3/8	1/4	3/4	2 1/2	C
SA-5	2736544	M40217	1/2	1/4	1	2 3/4	C
SA-6	2736534	M40219	5/8	1/4	1	2 3/4	C

## Series SB Cylindrical with End Cut • Single-Cut Burs • Inch



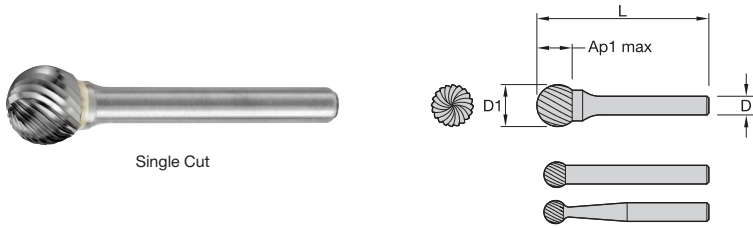
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SB-41	2736483	M40247	1/16	1/8	1/4	1 1/2	A
SB-3	2736441	M40256	3/8	1/4	3/4	2 1/2	C
SB-5	2736436	M40258	1/2	1/4	1	2 3/4	C

## Series SC Cylindrical Ball Nose • Single-Cut Burs • Inch



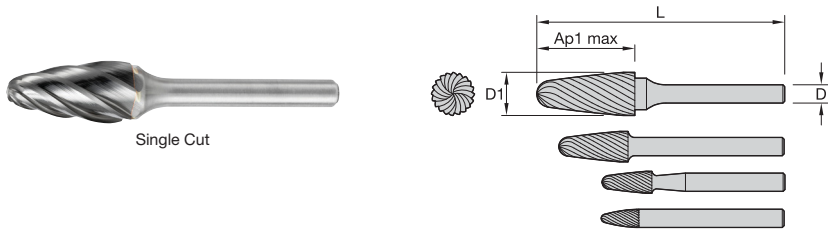
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SC-42	2736406	M40285	1/8	1/8	9/16	1 1/2	A
SC-1	2736369	M40293	1/4	1/4	5/8	2	C
SC-1L6	3043496	M40294	1/4	1/4	5/8	6 5/8	C
SC-2	2736358	M40295	5/16	1/4	3/4	2 1/2	C
SC-3	2736353	M40296	3/8	1/4	3/4	2 1/2	C
SC-5	2736339	M40299	1/2	1/4	1	2 3/4	C

Series SD Ball • Single-Cut Burs • Inch



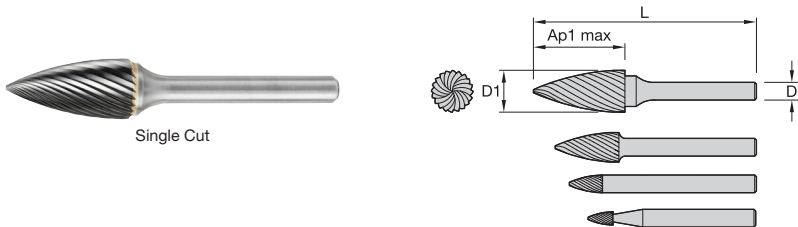
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SD40	2730676	M40322	1/16	1/8	1/16	1 1/2	A
SD-41	2730671	M40323	3/32	1/8	3/32	1 1/2	A
SD-42L2	3044078	M40325	1/8	1/8	1/8	2	A
SD-11	3043497	M40327	1/8	1/4	1/8	2	C
SD-53	2730649	M40328	3/16	1/8	3/16	1 1/2	D
SD-51	2730639	M40330	1/4	1/8	1/4	1 3/4	B
SD-1	2730634	M40331	1/4	1/4	1/4	2	C
SD-1L6	2730629	M40332	1/4	1/4	1/4	6 1/4	C
SD-3	2730619	M40334	3/8	1/4	3/8	2 5/64	C
SD-3L6	2730614	M40335	3/8	1/4	3/8	6 3/8	C
SD-5	2730603	M40337	1/2	1/4	1/2	2 13/64	C
SD-5L6	2730598	M40338	1/2	1/4	1/2	6 1/2	C
SD-6	2730593	M40339	5/8	1/4	5/8	2 5/16	C
SD-7	2730588	M40340	3/4	1/4	3/4	2 7/16	C

Series SF Round Nose Tree • Single-Cut Burs • Inch



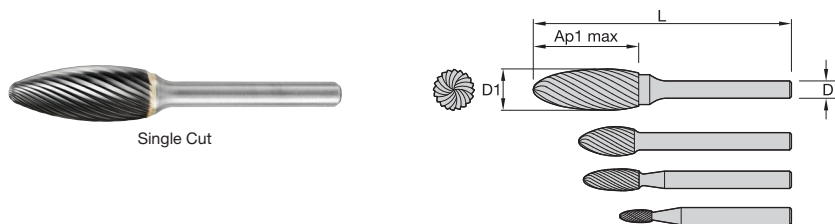
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SF-41	2730511	M40379	1/8	1/8	1/4	1 1/2	A
SF-42	2730506	M40380	1/8	1/8	1/2	1 1/2	A
SF-51	2730495	M40382	1/4	1/8	1/2	1 3/4	B
SF-3	2730481	M40385	3/8	1/4	3/4	2 1/2	C

Series SG Pointed Tree • Single-Cut Burs • Inch



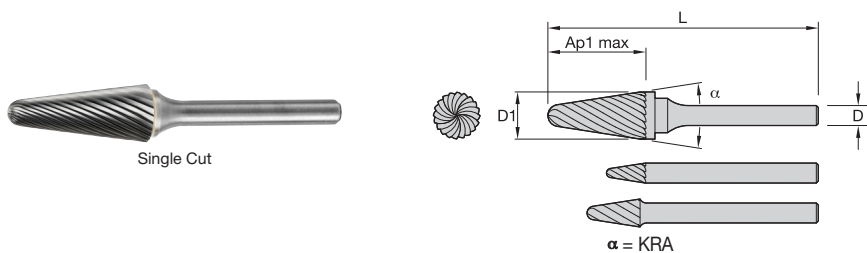
USCTI Number	Single Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SG-43	3054754	M40416	1/8	1/8	3/8	1 1/2	A
SG-44	2730385	M40417	1/8	1/8	1/2	1 1/2	A
SG-53	2730380	M40418	3/16	1/8	1/2	1 1/2	D
SG-1	2730371	M40420	1/4	1/4	5/8	2	C

## Series SH Flame • Single-Cut Burs • Inch



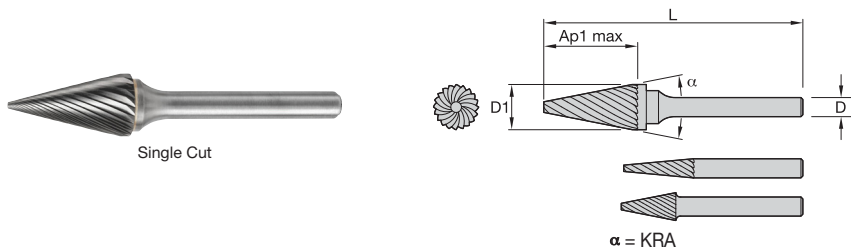
USCTI Number	Single Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SH-41	2730325	M40446	1/8	1/8	1/4	1 1/2		A
SH-53	2730320	M40447	3/16	1/8	3/8	1 1/2		D
SH-2	2730315	M40448	5/16	1/4	3/4	2 1/2		C
SH-5	2730310	M40449	1/2	1/4	1 1/4	3		C
SH-6	2730305	M40450	5/8	1/4	1 7/16	3 3/16		C

## Series SL Included Angle • Single-Cut Burs • Inch



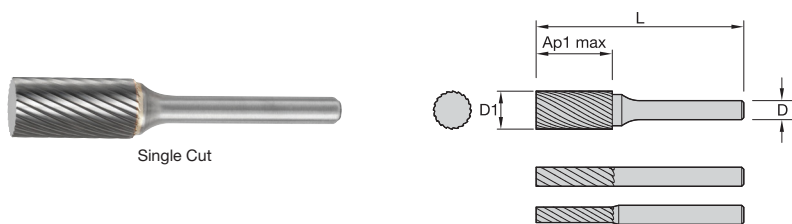
USCTI Number	Single Cut		D1	D	Ap1 max	length		shank style	KRA
	order #	catalog #				L			
SL-42	2730290	M40462	1/8	1/8	1/2	1 1/2		A	8
SL-53	2730285	M40463	3/16	1/8	1/2	1 1/2		D	14

## Series SM Pointed Cone • Single-Cut Burs • Inch



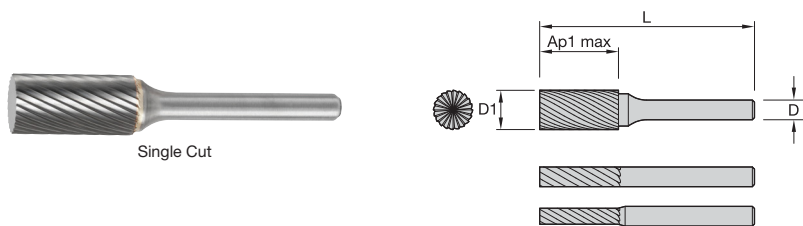
USCTI Number	Single Cut		D1	D	Ap1 max	length		shank style	KRA
	order #	catalog #				L			
SM-42	2730202	M40486	1/8	1/8	7/16	1 1/2		A	14
SM-43	2730196	M40487	1/8	1/8	5/8	1 1/2		A	7
SM-2	2730174	M40491	1/4	1/4	3/4	2		C	14
SM-5	2730159	M40494	1/2	1/4	7/8	2 3/4		C	28

**Series SA-M Cylindrical • Single-Cut Burs • Metric**



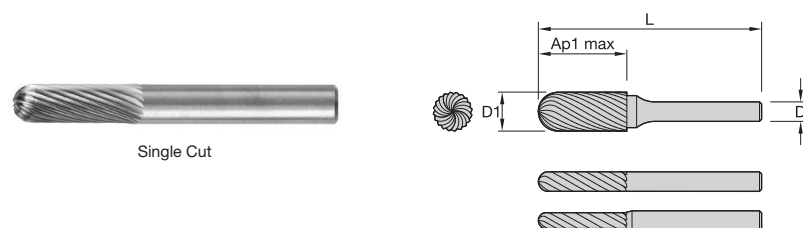
Single Cut			D1	D	Ap1 max	length L	shank style
USCTI Number	order #	catalog #					
SA-43M	2736521	M40224	3,0	3,0	14,3	38,1	A

**Series SB-M Cylindrical with End Cut • Single-Cut Burs • Metric**



Single Cut			D1	D	Ap1 max	length L	shank style
USCTI Number	order #	catalog #					
SB-1M	2986664	M40268	6,0	6,0	15,9	50,8	C

**Series SC-M Cylindrical Ball Nose • Single-Cut Burs • Metric**



Single Cut			D1	D	Ap1 max	length L	shank style
USCTI Number	order #	catalog #					
SC-42M	2736319	M40304	3,0	3,0	14,3	38,1	A

INDEXABLE MILLING

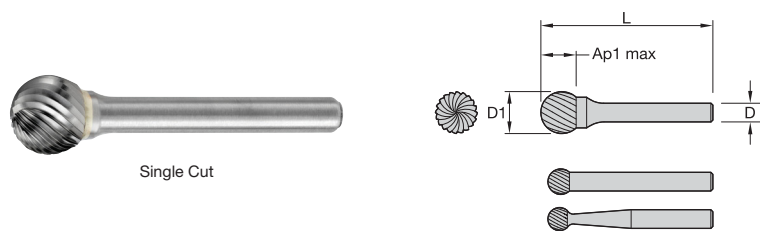
SOLID END MILLING

HOLE/MAKING

TAPPING

TURNING

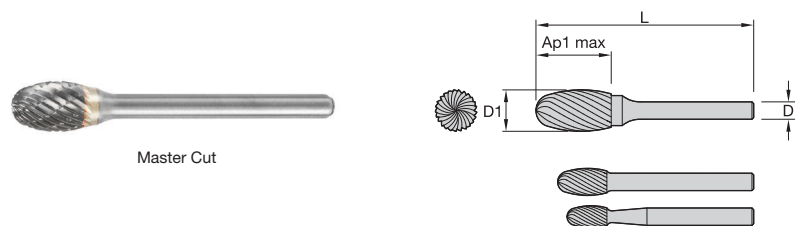
## Series SD-M Ball • Single-Cut Burs • Metric



Single Cut

USCTI Number	Single Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SD-40M	1293470	M40342	1,6	3,0	1,6	38,1		A
SD-42M	2730572	M40344	3,0	3,0	3,0	38,1		A
SD-1M	2730567	M40347	6,0	6,0	6,0	50,8		C

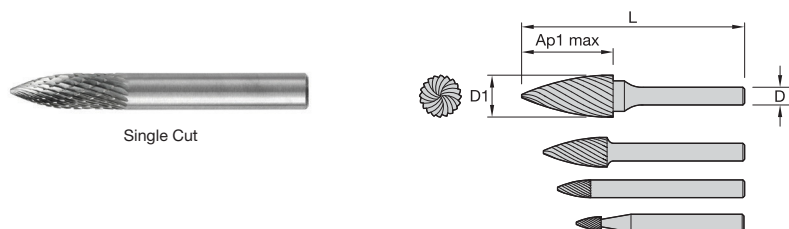
## Series SE-M Egg • Master-Cut Burs • Metric



Master Cut

USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SE-51M	2987333	M41370	6,4	3,0	9,5	41,3		B

## Series SG-M Pointed Tree • Single-Cut Burs • Metric

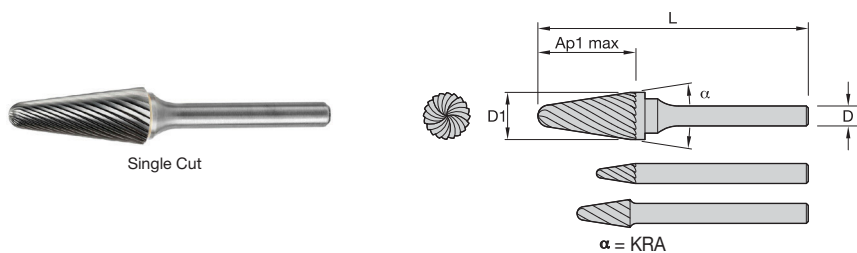


Single Cut

USCTI Number	Single Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SG-43M	2730335	M40430	3,0	3,0	9,5	38,1		A
SG-3M	2981799	M40436	9,5	6,0	19,1	63,5		C

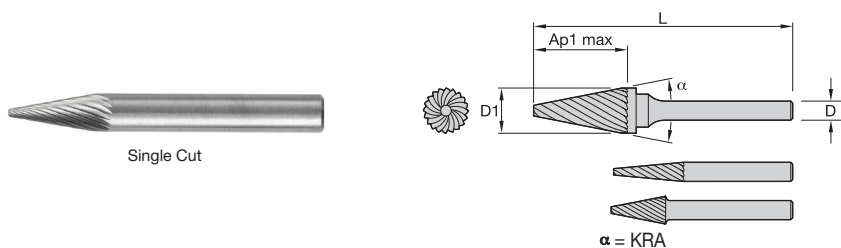


Series SL-M Included Angle • Single-Cut Burs • Metric



USCTI Number	Single Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SL-42M	2730232	M40474	3,0	3,0	12,7	38,1	A	8
SL-4M	2730217	M40479	12,7	6,0	31,8	76,2	C	14

Series SM-M Pointed Cone • Single-Cut Burs • Metric



USCTI Number	Single Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SM-42M	2987352	M40497	3,0	3,0	11,1	38,1	A	14
SM-43M	2990413	M40498	3,0	3,0	15,9	38,1	A	7

INDEXABLE MILLING

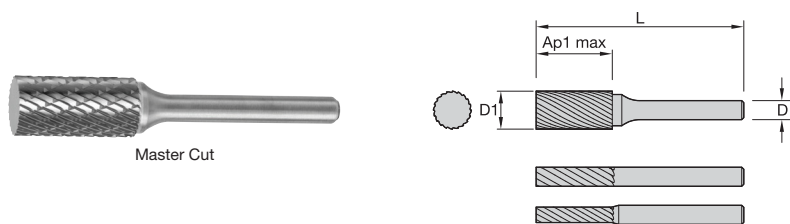
SOLID END MILLING

HOLE/MAKING

TAPPING

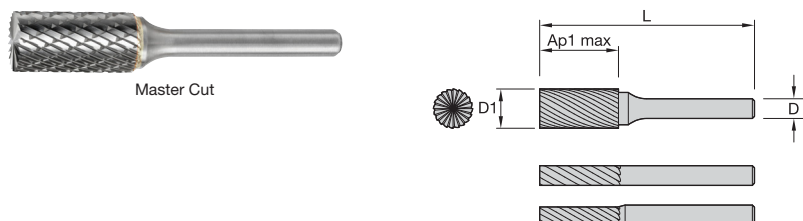
TURNING

## Series SA Cylindrical • Master-Cut Burs • Inch



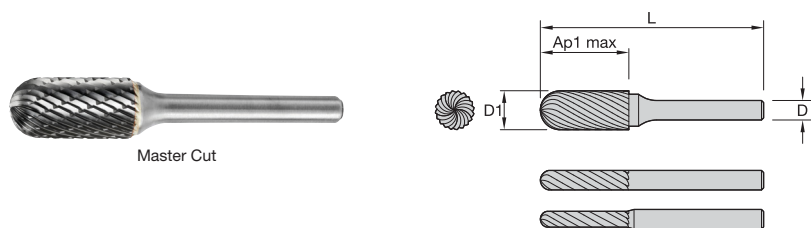
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SA-41	2735826	M41200	1/16	1/8	1/4	1 1/2	A	
SA-42	2735821	M41201	3/32	1/8	7/16	1 1/2	A	
SA-43	2735816	M41202	1/8	1/8	9/16	1 1/2	A	
SA-43L2	2735811	M41203	1/8	1/8	9/16	2	A	
SA-43L3	2735806	M41204	1/8	1/8	9/16	3	A	
SA-11	2735801	M41205	1/8	1/4	1/2	2	C	
SA-14	2735787	M41208	3/16	1/4	5/8	2	C	
SA-51	2735782	M41209	1/4	1/8	3/16	1 7/16	B	
SA-51-2	2735777	M41210	1/4	1/8	1/2	1 3/4	B	
SA-1	2735772	M41211	1/4	1/4	5/8	2	C	
SA-2	2735763	M41213	5/16	1/4	3/4	2 1/2	C	
SA-3	3063092	M41214	3/8	1/4	3/4	2 1/2	C	
SA-5	2735742	M41217	1/2	1/4	1	2 3/4	C	
SA-6	2735732	M41219	5/8	1/4	1	2 3/4	C	
SA-7	2735727	M41220	3/4	1/4	1	2 3/4	C	
SA-9	2735722	M41221	1	1/4	1	2 3/4	C	

## Series SB Cylindrical with End Cut • Master-Cut Burs • Inch



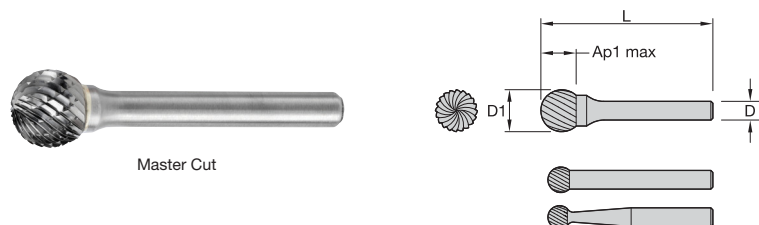
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SB-51	2735666	M41252	1/4	1/8	3/16	1 7/16	B	
SB-51-2	2735662	M41253	1/4	1/8	1/2	1 3/4	B	
SB-1	2735657	M41254	1/4	1/4	5/8	2	C	
SB-2	3055771	M41255	5/16	1/4	3/4	2 1/2	C	
SB-3	2735646	M41256	3/8	1/4	3/4	2 1/2	C	
SB-5	2735636	M41258	1/2	1/4	1	2 3/4	C	
SB-6	2735631	M41259	5/8	1/4	1	2 3/4	C	
SB-7	2735626	M41260	3/4	1/4	1	2 3/4	C	

Series SC Cylindrical Ball Nose • Master-Cut Burs • Inch



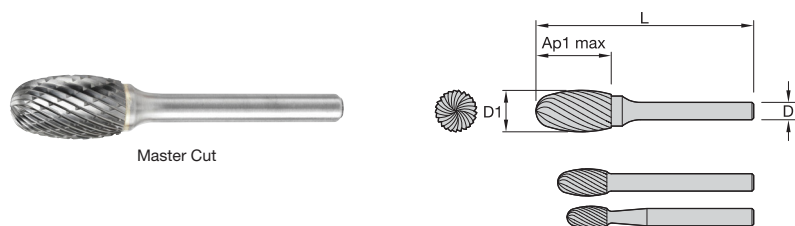
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SC-41	2735611	M41284	3/32	1/8	7/16	1 1/2		A
SC-42	2735606	M41285	1/8	1/8	9/16	1 1/2		A
SC-42L3	2735596	M41287	1/8	1/8	9/16	3		A
SC-11	2735591	M41288	1/8	1/4	1/2	2		A
SC-53	2735581	M41290	3/16	1/8	1/2	1 1/2		D
SC-51	2735571	M41292	1/4	1/8	1/2	1 3/4		B
SC-1	2735566	M41293	1/4	1/4	5/8	2		C
SC-1L6	2735561	M41294	1/4	1/4	5/8	6 5/8		C
SC-2	2735556	M41295	5/16	1/4	3/4	2 1/2		C
SC-3	2735551	M41296	3/8	1/4	3/4	2 1/2		C
SC-3L6	2735546	M41297	3/8	1/4	3/4	6 3/4		C
SC-4	3050641	M41298	7/16	1/4	1	2 3/4		C
SC-5	2735531	M41299	1/2	1/4	1	2 3/4		C
SC-5L6	2735526	M41300	1/2	1/4	1	7		C
SC-6	2735521	M41301	5/8	1/4	1	2 3/4		C
SC-7	2735516	M41302	3/4	1/4	1	2 3/4		C

Series SD Ball • Master-Cut Burs • Inch



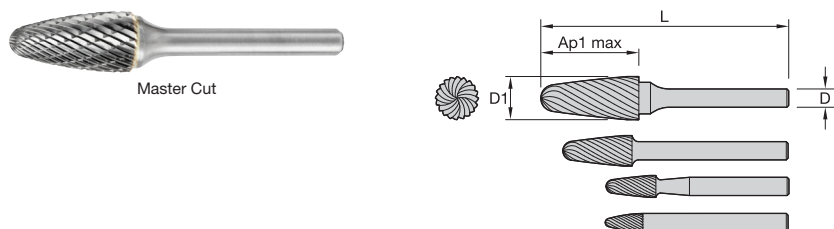
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SD-41	2729967	M41323	3/32	1/8	3/32	1 1/2		A
SD-42	2729963	M41324	1/8	1/8	1/8	1 1/2		A
SD-42L3	2729951	M41326	1/8	1/8	1/8	3		A
SD-11	2729946	M41327	1/8	1/4	1/8	2		C
SD-53	2729942	M41328	3/16	1/8	3/16	1 1/2		D
SD-14	2729936	M41329	3/16	1/4	3/16	2		C
SD-51	2729930	M41330	1/4	1/8	1/4	1 3/4		B
SD-1	2729926	M41331	1/4	1/4	1/4	2		C
SD-1L6	2729920	M41332	1/4	1/4	1/4	6 1/4		C
SD-2	2729914	M41333	5/16	1/4	5/16	2 1/32		C
SD-3	2729910	M41334	3/8	1/4	3/8	2 5/64		C
SD-3L6	2729906	M41335	3/8	1/4	3/8	6 3/8		C
SD-4	2729901	M41336	7/16	1/4	7/16	2 9/64		C
SD-5	2729895	M41337	1/2	1/4	1/2	2 13/64		C
SD-5L6	3046344	M41338	1/2	1/4	1/2	6 1/2		C
SD-7	2729880	M41340	3/4	1/4	3/4	2 7/16		C
SD-9	2729873	M41341	1	1/4	1	2 11/16		C

## Series SE Egg • Master-Cut Burs • Inch



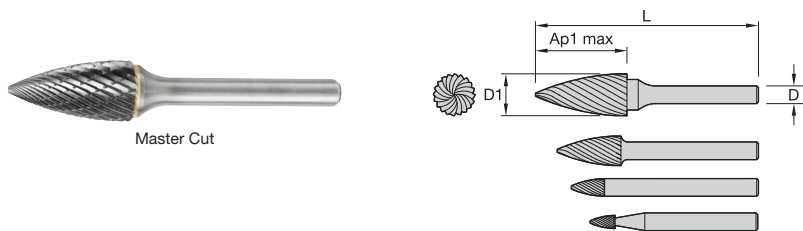
USCTI Number	Master Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SE-41	2729835	M41360	1/8	1/8	7/32	1 1/2	A
SE-53	2729830	M41361	3/16	1/8	9/32	1 1/2	D
SE-51	2729825	M41362	1/4	1/8	3/8	1 5/8	B
SE-1	2729820	M41363	1/4	1/4	3/8	2	C
SE-3	2729814	M41364	3/8	1/4	5/8	2 3/8	C
SE-5	2729808	M41365	1/2	1/4	7/8	2 5/8	C
SE-6	2729803	M41366	5/8	1/4	1	2 3/4	C

## Series SF Round Nose Tree • Master-Cut Burs • Inch



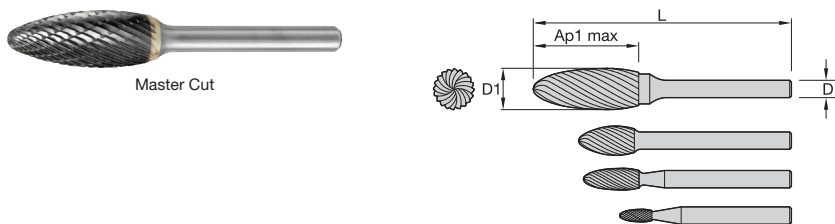
USCTI Number	Master Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SF-41	2729782	M41379	1/8	1/8	1/4	1 1/2	A
SF-42	2729778	M41380	1/8	1/8	1/2	1 1/2	A
SF-51	2729768	M41382	1/4	1/8	1/2	1 3/4	B
SF-1	1750297	M41383	1/4	1/4	5/8	2	C
SF-3	2729751	M41385	3/8	1/4	3/4	2 1/2	C
SF-3L6	2729746	M41386	3/8	1/4	3/4	6 3/4	C
SF-13	2729736	M41388	1/2	1/4	3/4	2 1/2	C
SF-5	2729731	M41389	1/2	1/4	1	2 3/4	C
SF-5L6	2729726	M41390	1/2	1/4	1	7	C
SF-6	2729721	M41391	5/8	1/4	1	2 3/4	C
SF-7	2729716	M41392	3/4	1/4	1	2 3/4	C
SF-15	2729711	M41393	3/4	1/4	1 1/2	3 1/4	C
SF-14	2729706	M41394	3/4	1/4	1 1/4	3	C

Series SG Pointed Tree • Master-Cut Burs • Inch



USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SG-41	2729675	M41414	1/8	1/8	1/4	1 1/2	A
SG-42	2729669	M41415	1/8	1/8	5/16	1 1/2	A
SG-44	2729660	M41417	1/8	1/8	1/2	1 1/2	A
SG-51	2729651	M41419	1/4	1/8	1/2	1 3/4	B
SG-1	2729646	M41420	1/4	1/4	5/8	2	C
SG-3	2729636	M41422	3/8	1/4	3/4	2 1/2	C
SG-5	2729626	M41424	1/2	1/4	1	2 3/4	C

Series SH Flame • Master-Cut Burs • Inch



USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SH-41	2729586	M41446	1/8	1/8	1/4	1 1/2	A
SH-2	2729575	M41448	5/16	1/4	3/4	2 1/2	C
SH-5	2729570	M41449	1/2	1/4	1 1/4	3	C
SH-7	2729559	M41451	3/4	1/4	1 5/8	3 3/8	C

INDEXABLE MILLING

SOLID END MILLING

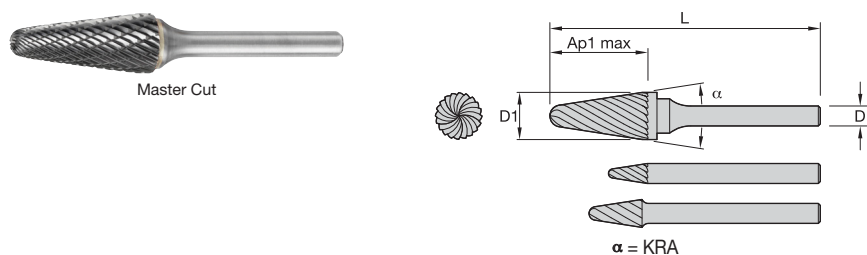
HOLE/MAKING

TAPPING

TURNING

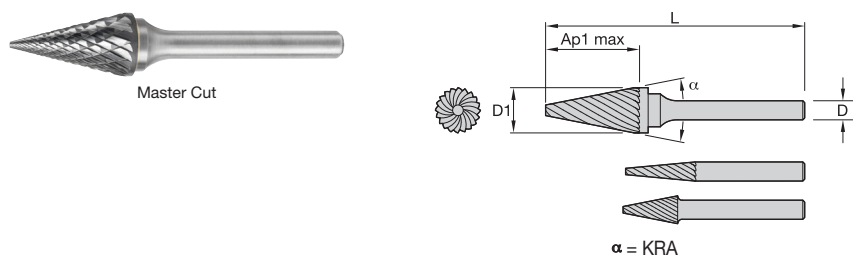


## Series SL Included Angle • Master-Cut Burs • Inch



USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style	KRA
	order #	catalog #				L			
SL-41	3046345	M41461	1/8	1/8	3/8	1 1/2		A	8
SL-42	2729539	M41462	1/8	1/8	1/2	1 1/2		A	8
SL-1	2729529	M41464	1/4	1/4	5/8	2		C	14
SL-1L6	2729523	M41465	1/4	1/4	5/8	6 5/8		C	14
SL-2	1752788	M41466	5/16	1/4	7/8	2 3/4		C	14
SL-3	2729513	M41467	3/8	1/4	1 1/16	2 15/16		C	14
SL-4	2729503	M41469	1/2	1/4	1 1/8	3		C	14
SL-6	2729493	M41471	5/8	1/4	1 5/16	3 3/16		C	14

## Series SM Pointed Cone • Master-Cut Burs • Inch

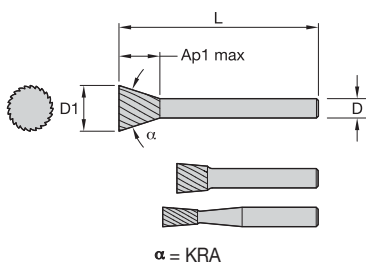


USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style	KRA
	order #	catalog #				L			
SM-41	2729447	M41485	1/8	1/8	3/8	1 1/2		A	12
SM-42	2729443	M41486	1/8	1/8	7/16	1 1/2		A	14
SM-43	2729438	M41487	1/8	1/8	5/8	1 1/2		A	7
SM-53	2729433	M41488	3/16	1/8	1/2	1 1/2		D	16
SM-51	3050060	M41489	1/4	1/8	1/2	1 7/8		B	22
SM-1	2729423	M41490	1/4	1/4	1/2	2		C	22
SM-2	2729418	M41491	1/4	1/4	3/4	2		C	14
SM-3	2729413	M41492	1/4	1/4	1	2		C	10
SM-4	2729407	M41493	3/8	1/4	5/8	2 1/2		C	28
SM-5	2729402	M41494	1/2	1/4	7/8	2 3/4		C	28
SM-6	2729397	M41495	5/8	1/4	1	2 7/8		C	31

Series SN Inverted Taper • Master-Cut Burs • Inch



Master Cut

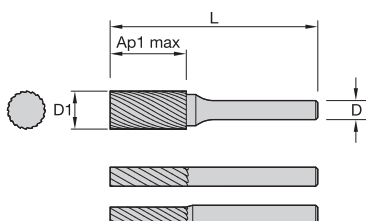


USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SN-51	3051758	M41512	1/4	1/8	1/4	1 1/2	B	10
SN-3	2729351	M41514	1/2	1/4	1/2	2 1/4	C	16

Series SA-M Cylindrical • Master-Cut Burs • Metric

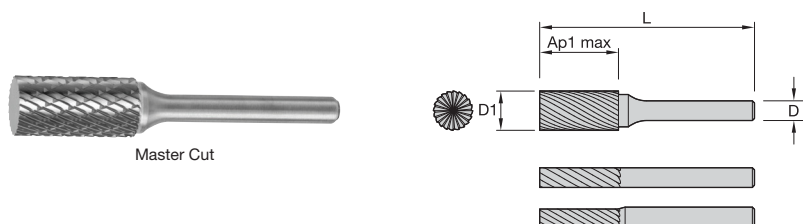


Master Cut



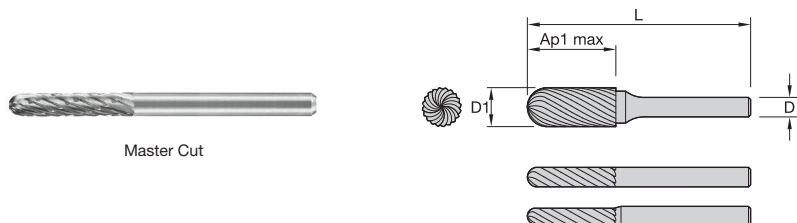
USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SA-41M	1598896	M41222	1,6	3,0	4,8	38,1	A
SA-42M	1293458	M41223	2,4	3,0	11,1	38,1	A
SA-43M	2270852	M41224	3,0	3,0	14,3	38,1	A
SA-1M	1977519	M41229	6,0	6,0	15,9	50,8	C
SA-51M-2	1977415	M41231	6,4	3,0	12,7	44,5	B
SA-2M	2735696	M41232	7,9	6,0	19,1	63,5	C
SA-3M	1293733	M41233	9,5	6,0	19,1	63,5	C
SA-5M	2219983	M41237	12,7	6,0	25,4	69,9	C

## Series SB-M Cylindrical with End Cut • Master-Cut Burs • Metric



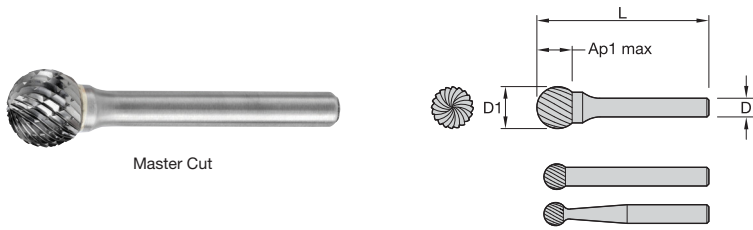
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SB-42M	2991812	M41262	2,4	3,0	11,1	38,1		A
SB-43M	2220466	M41263	3,0	3,0	14,3	38,1		A
SB-1M	2987342	M41268	6,0	6,0	15,9	50,8		C
SB-51M-2	2987340	M41270	6,4	3,0	6,4	44,5		B
SB-2M	2987339	M41271	7,9	6,0	19,1	63,5		C
SB-3M	2987338	M41272	9,5	6,0	19,1	63,5		C
SB-5M	2987337	M41274	12,7	6,0	25,4	69,9		C

## Series SC-M Cylindrical Ball Nose • Master-Cut Burs • Metric



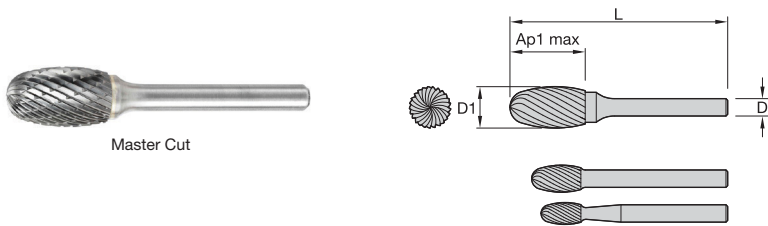
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SC-41M	2990415	M41303	2,4	3,0	11,1	38,1		A
SC-42M	1977373	M41304	3,0	3,0	14,3	38,1		A
SC-52M	2735503	M41306	4,0	3,0	12,7	38,1		D
SC-53M	2894604	M41307	4,8	3,0	12,7	38,1		D
SC-14M	2991273	M41308	4,8	6,0	15,9	50,8		C
SC-1M	1977546	M41309	6,0	6,0	15,9	50,8		C
SC-51M	2894603	M41310	6,4	3,0	12,7	44,5		B
SC-2M	2729973	M41311	7,9	6,0	19,1	63,5		C
SC-3M	1977548	M41312	9,5	6,0	19,1	63,5		C
SC-4M	2987336	M41314	11,1	6,0	25,4	69,9		C
SC-5M	1977549	M41316	12,7	6,0	25,4	69,9		C
SC-6M	2991274	M41318	15,9	6,0	25,4	69,9		C

**Series SD-M Ball • Master-Cut Burs • Metric**



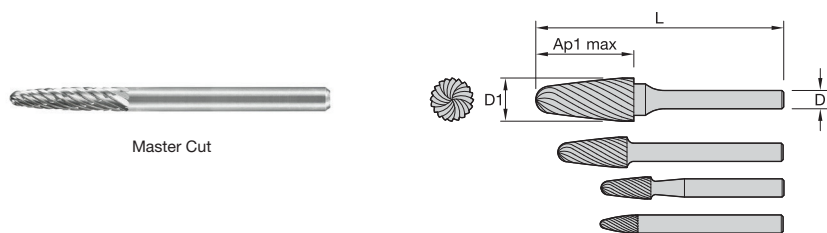
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SD-41M	2729868	M41343	2,4	3,0	2,4	38,1		A
SD-42M	2729863	M41344	3,0	3,0	3,0	38,1		A
SD-53M	2973335	M41345	4,8	3,0	4,8	38,1		D
SD-14M	2987335	M41346	4,8	6,0	4,8	50,8		C
SD-1M	2729860	M41347	6,0	6,0	6,0	50,8		C
SD-51M	2729855	M41348	6,4	3,0	6,4	38,1		B
SD-2M	2987334	M41349	7,9	6,0	7,9	51,6		C
SD-3M	2991276	M41350	9,5	6,0	9,5	52,8		C
SD-5M	2729850	M41352	12,7	6,0	12,7	56,0		C

**Series SE-M Egg • Master-Cut Burs • Metric**



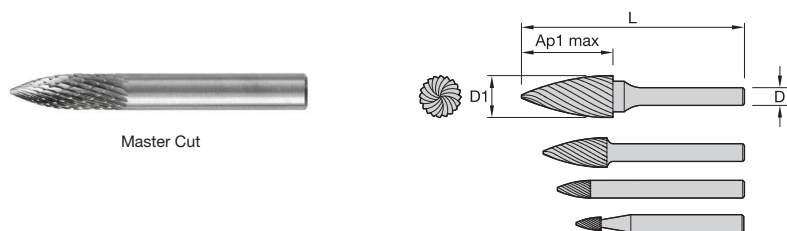
USCTI Number	Master Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SE-3M	2991277	M41371	9,5	6,0	15,9	60,3		C
SE-5M	1977570	M41373	12,7	6,0	22,2	66,7		C
SE-5M-2	3324697	M41374	12,7	8,0	22,2	73,0		C
SE-7M	2991816	M41377	19,1	6,0	25,4	69,9		C

## Series SF-M Round Nose Tree • Master-Cut Burs • Metric



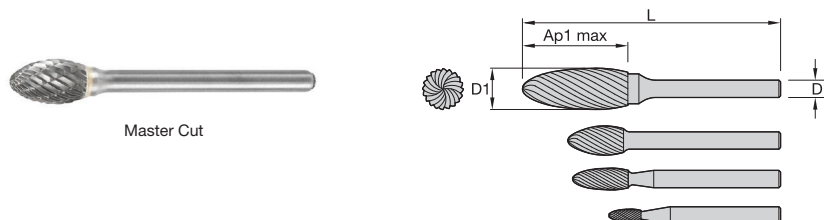
USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SF-42M	1977374	M41396	3,0	3,0	12,7	38,1	A
SF-53M	2729701	M41397	4,8	3,0	12,7	38,1	D
SF-51M	1977417	M41399	6,4	3,0	12,7	44,5	B
SF-3M	3526093	M41400	9,5	6,0	19,1	63,5	C
SF-4M	1977555	M41401	11,1	6,0	25,4	69,9	C
SF-5M	1977556	M41403	12,7	6,0	25,4	69,9	C

## Series SG-M Pointed Tree • Master-Cut Burs • Metric



USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SG-41M-2	1293463	M41428	3,0	3,0	6,4	38,1	A
SG-44M	1534016	M41431	3,0	3,0	12,7	38,1	A
SG-53M	2894601	M41432	4,8	3,0	12,7	38,1	D
SG-1M	2987329	M41433	6,0	6,0	15,9	50,8	C
SG-51M	1293476	M41434	6,4	3,0	12,7	44,5	B
SG-2M	2987327	M41435	7,9	6,0	19,1	63,5	C
SG-3M	2987326	M41436	9,5	6,0	19,1	63,5	C
SG-5M	2729591	M41439	12,7	6,0	25,4	69,9	C

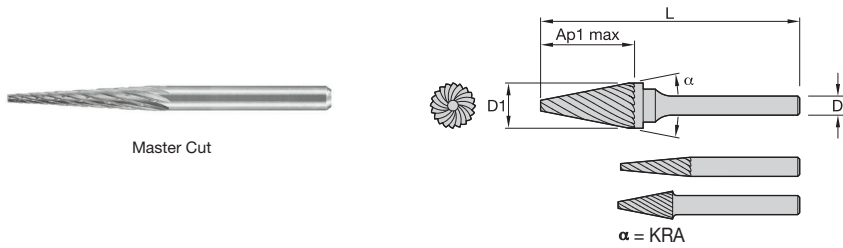
## Series SH-M Flame • Master-Cut Burs • Metric



USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SH-53M	1977429	M41453	4,8	3,0	9,5	38,1	D
SH-2M	2991284	M41454	7,9	6,0	19,1	63,5	C
SH-5M	2987323	M41455	12,7	6,0	31,8	76,2	C
SH-6M	2987322	M41457	15,9	6,0	36,5	81,0	C

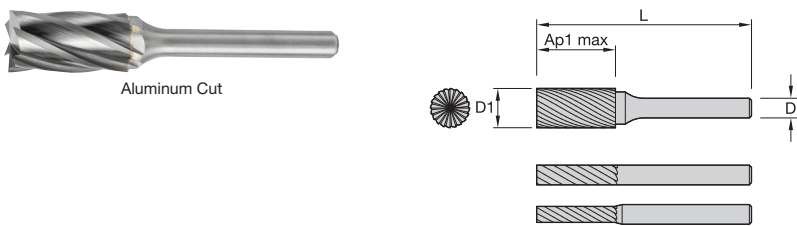


Series SM-M Pointed Cone • Master-Cut Burs • Metric



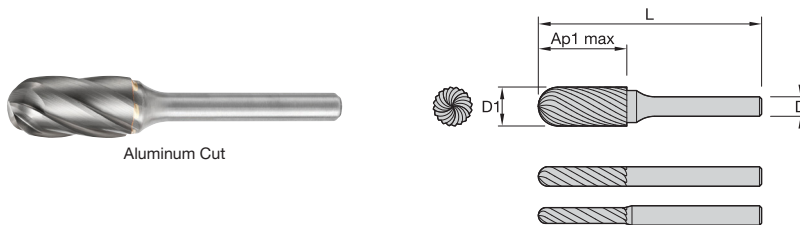
USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SM-42M	1977382	M41497	3,0	3,0	11,1	38,1	A	14
SM-43M	1293468	M41498	3,0	3,0	15,9	38,1	A	7
SM-2M	1977564	M41501	6,0	6,0	19,1	50,8	C	14
SM-5M	1977567	M41505	12,7	6,0	22,2	69,9	C	28

Series SB Cylindrical with End Cut • Aluminum-Cut Burs • Inch



USCTI Number	Aluminum Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SB-1	2736311	M40527	1/4	1/4	5/8	2	C
SB-3	2736307	M40528	3/8	1/4	3/4	2 1/2	C
SB-5	2736300	M40529	1/2	1/4	1	2 3/4	C

Series SC Cylindrical Ball Nose • Aluminum-Cut Burs • Inch



USCTI Number	Aluminum Cut		D1	D	Ap1 max	length L	shank style
	order #	catalog #					
SC-5	2736276	M40534	1/2	1/4	1	2 3/4	C

INDEXABLE MILLING

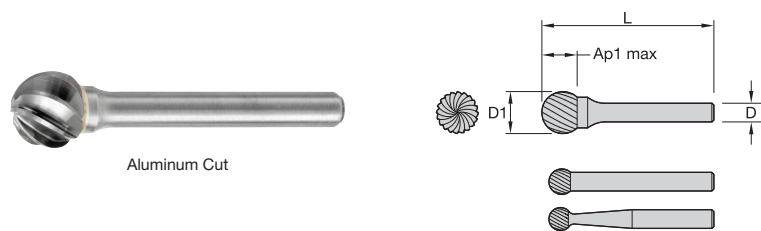
SOLID END MILLING

HOLE/MAKING

TAPPING

TURNING

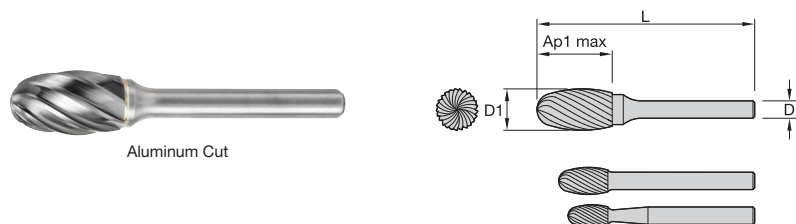
## Series SD Ball • Aluminum-Cut Burs • Inch



Aluminum Cut

USCTI Number	Aluminum Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SD-3	2730072	M40538	3/8	1/4	3/8	2 5/64	C
SD-5	2730067	M40539	1/2	1/4	1/2	2 13/64	C

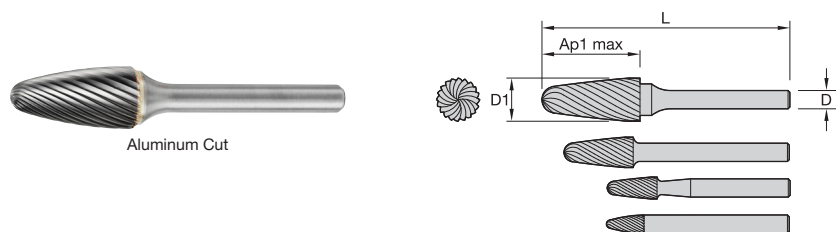
## Series SE Egg • Aluminum-Cut Burs • Inch



Aluminum Cut

USCTI Number	Aluminum Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SE-5	2730053	M40542	1/2	1/4	7/8	2 5/8	C

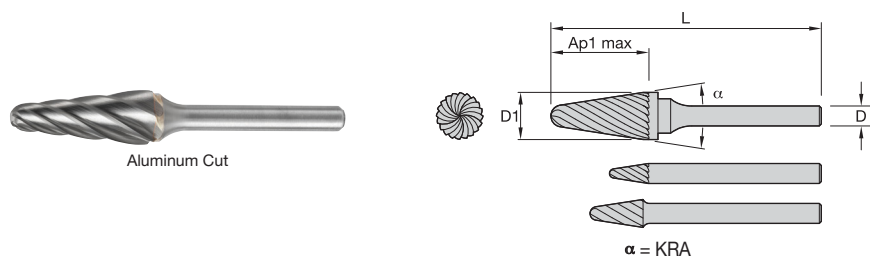
## Series SF Round Nose Tree • Aluminum-Cut Burs • Inch



Aluminum Cut

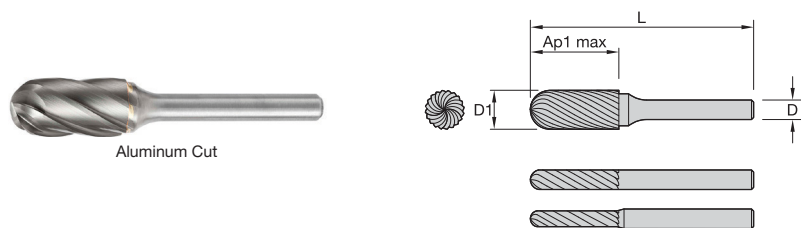
USCTI Number	Aluminum Cut		D1	D	Ap1 max	length	shank style
	order #	catalog #				L	
SF-3	2730037	M40545	3/8	1/4	3/4	2 1/2	C
SF-5	2730032	M40546	1/2	1/4	1	2 3/4	C
SF-6	2730027	M40547	5/8	1/4	1	2 3/4	C

Series SL Included Angle • Aluminum-Cut Burs • Inch



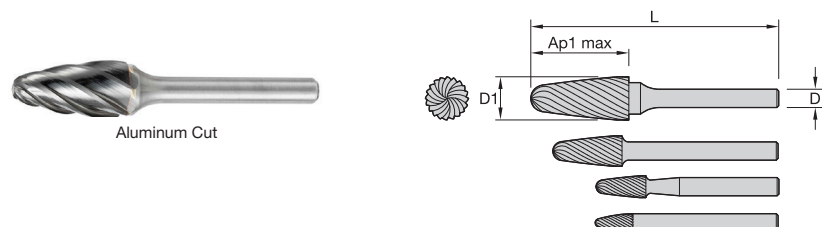
USCTI Number	Aluminum Cut		D1	D	Ap1 max	length		shank style	KRA
	order #	catalog #				L			
SL-3	2730022	M40548	3/8	1/4	1 1/16	2 15/16		C	14
SL-4	2730017	M40549	1/2	1/4	1 1/8	3		C	14

Series SC-M Cylindrical Ball Nose • Aluminum-Cut Burs • Metric



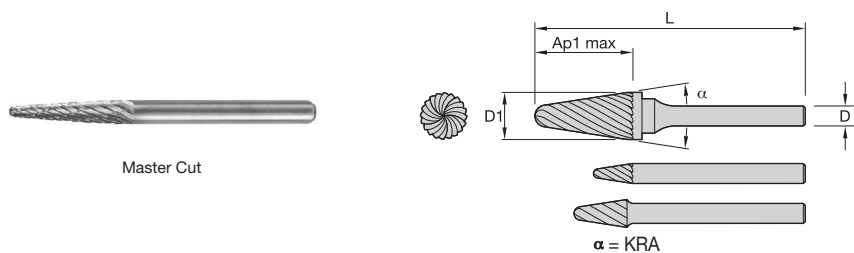
USCTI Number	Aluminum Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SC-5M	2987349	M40561	12,7	6,0	25,4	69,9		C

Series SF-M Round Nose Tree • Aluminum-Cut Burs • Metric



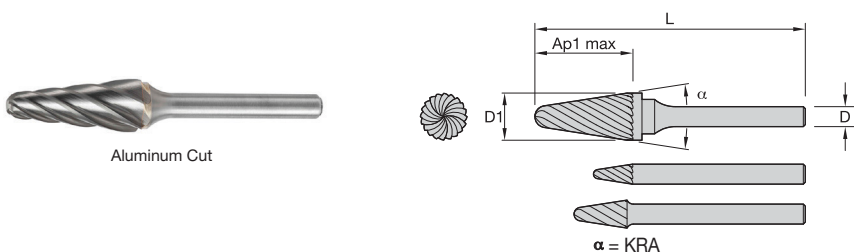
USCTI Number	Aluminum Cut		D1	D	Ap1 max	length		shank style
	order #	catalog #				L		
SF-5M	1977630	M40578	12,7	6,0	25,4	69,9		C

## Series SL-M Included Angle • Master-Cut Burs • Metric



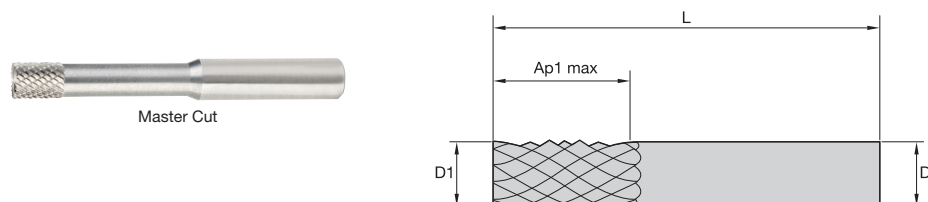
USCTI Number	Master Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SL-42M	1977385	M41474	3,0	3,0	12,7	38,1	A	8
SL-3M	1977573	M41478	9,5	6,0	27,0	74,6	C	14
SL-4M	1293770	M41479	12,7	6,0	31,8	76,2	C	14

## Series SL-M Included Angle • Aluminum-Cut Burs • Metric



USCTI Number	Aluminum Cut		D1	D	Ap1 max	length L	shank style	KRA
	order #	catalog #						
SL-3M	2978948	M40582	9,5	6,0	27,0	74,6	C	14
SL-4M	2729982	M40584	12,7	6,0	31,8	76,2	C	14

## Series IGT Internal Grinding Tool • Burs • Metric

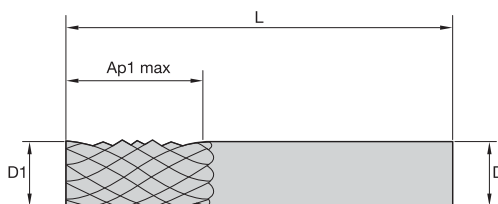


order #	catalog #	D1	D	Ap1 max	length L
					L
2735459	M42008	2,4	3,2	4,0	38,1
2735454	M42009	2,8	3,2	4,8	38,1
2735396	M42022	4,8	4,8	6,4	50,8
2735432	M42014	6,4	6,4	7,9	50,8

Series IGT-EC Internal Grinding Tool • Burs • Metric



Master Cut

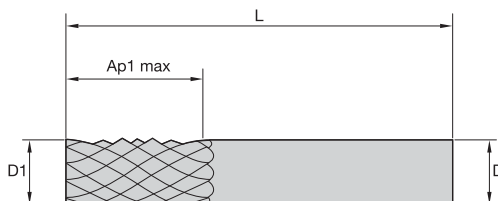


Master Cut		D1	D	Ap1 max	length L
2735391	M42023	1,6	3,2	3,2	38,1
2735381	M42025	2,4	3,2	4,0	38,1
2735371	M42027	3,2	3,2	4,8	38,1
2735320	M42037	4,0	4,8	5,6	50,8
2735310	M42039	4,8	4,8	6,4	50,8
2735361	M42029	5,6	6,4	7,1	50,8
2735352	M42031	6,4	6,4	7,9	50,8
2735346	M42032	7,1	6,4	8,7	63,5
2735341	M42033	7,9	6,4	8,7	63,5
2735331	M42035	9,5	6,4	9,5	63,5

Series CRTF-BE • Burs • Inch



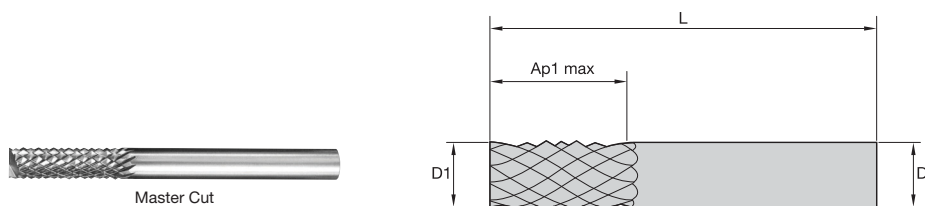
Master Cut



Master Cut		D1	D	Ap1 max	length L
2737535	M34831	1/4	1/4	3/4	2
2737530	M34832	1/4	1/4	3/4	2 1/2
2737521	M34841	3/8	3/8	1	2 1/2
3045679	M34842	1/2	1/2	1	3



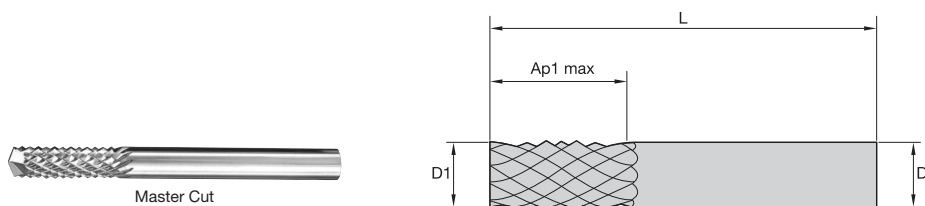
## Series CRTF-CC • Burs • Inch



Master Cut

order #	catalog #	D1	D	Ap1 max	length L
2737583	M34800	1/8	1/8	1/2	1 1/2
2737564	M34810	5/16	5/16	1	2 1/2

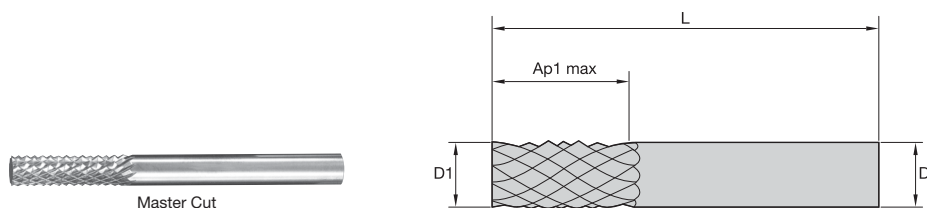
## Series CRTF-DP • Burs • Inch



Master Cut

order #	catalog #	D1	D	Ap1 max	length L
2737511	M34850	1/16	1/8	3/16	1 1/2
2737497	M34860	1/4	1/4	3/4	2
2737492	M34861	1/4	1/4	1	3

Series CRTF-NE • Burs • Inch



Master Cut		D1	D	Ap1 max	length L
order #	catalog #				
2737449	M34890	1/4	1/4	1	3

Series Bur Sets



order number	catalog number	D1	D	quantity	shank style	cut style	includes
2736246	M40588	1/8	1/8	9	A	Master	SA-42, SA-43, SC-41, SC-42, SD-42, SE-41, SF-42, SG-42, SM-43
2736236	M40591	1/4	1/8	9	B	Master	SA-51, SB-51, SC-51, SD-51, SE-51, SF-51, SG-51, SM-51, SN-51
2736227	M40593	1/4	1/4	8	C	Master	SA-1, SC-1, SD-1, SE-1, SF-1, SG-1, SL-1, SM-2
2736221	M40594	1/2	1/4	8	C	Master	SA-5, SC-5, SD-5, SE-5, SF-5, SG-5, SL-4, SM-5