

Shape A Midget Mills®

Our founder, R.M. Severance, originated these tools in 1931. Today, throughout the industry, it is the standard, accepted, rotary cutting, burring and finishing tool. The Midget Mill® is efficient and practical for finishing up molds, smooth welds, clean castings, and smooth plastic edges in job or production operations. HSS Midget Mills® have Chip Breaker tooth patterns.







H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks



We're The Originators! We've Been "Copied" But Not Surpassed.



		 H.S.S. Midget-Mill® Single Cut Chip Breakers		 H.S.S. Midget-Mill® Single Cut-EC Chip Breakers		 Carbide Midget-Mill® Single Cut		 Carbide Midget-Mill®-EC Single Cut	
Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Midget Mill® End Cut Name	EDP Order Number
1/8"	1/2"	AGA	22930	AGA-EC	22960	AGA-W	23280	AGA-EC-W	23300
1/8"	5/8"	-	-	-	-	AIA-W	23281	AIA-EC-W	23301
1/8"	3/4"	AJA	22931	AJA-EC	22961	-	-	-	-
1/8"	1"	ALA	22932	ALA-EC	22962	-	-	-	-
1/8"	1-1/4"	ANA	22933	ANA-EC	22963	-	-	-	-
1/8"	1-1/2"	APA	22934	APA-EC	22964	-	-	-	-
5/32"	5/8"	-	-	-	-	-	-	-	-
3/16"	1/2"	BGA	22935	BGA-EC	22965	BGA-W	23282	BGA-EC-W	23302
3/16"	5/8"	-	-	-	-	BIA-W	23283	BIA-EC-W	23303
3/16"	3/4"	BJA	22936	BJA-EC	22966	-	-	-	-
3/16"	1"	BLA	22937	BLA-EC	22967	-	-	-	-
1/4"	1/2"	CGA	22938	CGA-EC	22968	CGA-W	23284	CGA-EC-W	23304
1/4"	5/8"	-	-	-	-	CIA-W	23285	CIA-EC-W	23305
1/4"	3/4"	-	-	-	-	CJA-W	23286	CJA-EC-W	23306
1/4"	1"	CLA	22939	CLA-EC	22969	CLA-W	23287	CLA-EC-W	23307
1/4"	1-1/2"	CPA	22940	CPA-EC	22970	-	-	-	-
1/4"	1-3/4"	CRA	22941	CRA-EC	22971	-	-	-	-
5/16"	3/4"	-	-	-	-	DJA-W	23288	DJA-EC-W	23308
5/16"	1"	DLA	22942	DLA-EC	22972	DLA-W	23289	DLA-EC-W	23309
3/8"	3/4"	EJA	22943	EJA-EC	22973	EJA-W	23290	EJA-EC-W	23310
3/8"	1"	ELA	22944	ELA-EC	22974	ELA-W	23291	ELA-EC-W	23311
3/8"	1-1/2"	EPA	22945	EPA-EC	22975	EPA-W	23292	EPA-EC-W	23312
3/8"	2"	ESA	22946	ESA-EC	22976	-	-	-	-
7/16"	1"	FLA	22947	FLA-EC	22977	FLA-W	23293	FLA-EC-W	23313
1/2"	1/2"	GGA	22948	GGA-EC	22978	-	-	-	-
1/2"	1"	GLA	22949	GLA-EC	22979	GLA-W	23294	GLA-EC-W	23314
1/2"	1-1/4"	GNA	22950	GNA-EC	22980	-	-	-	-
1/2"	1-1/2"	GPA	22951	GPA-EC	22981	-	-	-	-
1/2"	2"	GSA	22952	GSA-EC	22982	-	-	-	-
5/8"	1"	ILA	22953	ILA-EC	22983	ILA-W	23295	ILA-EC-W	23315
3/4"	1/2"	JGA	22954	JGA-EC	22984	JGA-W	23296	JGA-EC-W	23316
3/4"	3/4"	JJA	22955	JJA-EC	22985	JJA-W	23297	JJA-EC-W	23317
3/4"	1"	JLA	22956	JLA-EC	22986	JLA-W	23298	JLA-EC-W	23318
3/4"	1-1/4"	JNA	22957	JNA-EC	22987	-	-	-	-
7/8"	1"	-	-	-	-	-	-	-	-
1"	1/4"	LCA	22958	LCA-EC	22988	-	-	-	-
1"	1"	LLA	22959	LLA-EC	22989	LLA-W	23299	LLA-EC-W	23319

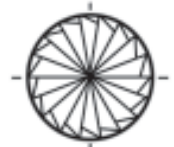
Shape A Midget Mills®

Carbide Midget Mills® are for operations in rigid environments where chatter is minimized and tool control is high. Severance uses special grades of carbide, which are formulated by custom suppliers and sintered at the Severance plant. The carbide is a special blend of Tungsten and Cobalt. These custom grades have been selected because they hold a fine cutting edge, which can be reground many times before the tool is used up. Carbide may be operated at many times the speed of steel tools and generally yields as much as five to ten times the service life. Carbide Midget Mills® have a Spiral tooth pattern; Carbo-Mills™ have a Double Cut tooth pattern; and carbide Sever-Cuts™ have a Super Coarse tooth Pattern.

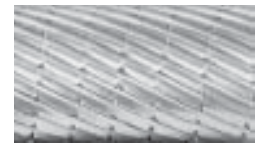


H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

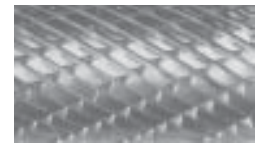
Head Dia.	Flute Length	Carbide Carbo-Mill™ Double Cut		Carbide Carbo-Mill™-EC Double Cut		Carbide Sever-Cut™ Super Coarse	
		Carbo-Mill™ Name	EDP Order Number	Carbo-Mill™ End Cut Name	EDP Order Number	Sever-Cut™ Name	EDP Order Number
1/8"	1/2"	8A4-W	22380	8A4-EC-W	22386	-	-
1/8"	5/8"	8A14L-W	22381	8A14L-EC-W	22387	-	-
1/8"	3/4"	-	-	-	-	-	-
1/8"	1"	-	-	-	-	-	-
1/8"	1-1/4"	-	-	-	-	-	-
1/8"	1-1/2"	-	-	-	-	-	-
5/32"	5/8"	8A5-W	22382	8A5-EC-W	22388	-	-
3/16"	1/2"	-	-	-	-	-	-
3/16"	5/8"	8A6-W	22383	8A6-EC-W	22389	-	-
3/16"	3/4"	-	-	-	-	-	-
3/16"	1"	-	-	-	-	-	-
1/4"	1/2"	-	-	-	-	-	-
1/4"	5/8"	8A-W	22384	8A-EC-W	22390	-	-
1/4"	3/4"	-	-	-	-	CJA-W-4F	23680
1/4"	1"	8AL-W	22385	8AL-EC-W	22391	-	-
1/4"	1-1/2"	-	-	-	-	-	-
1/4"	1-3/4"	-	-	-	-	-	-
5/16"	3/4"	10A8-W	22480	10A8-EC-W	22496	-	-
5/16"	1"	10LA8-W	22481	10LA8-EC-W	22497	-	-
3/8"	3/4"	12A8-W	22482	12A8-EC-W	22498	EJA-W-6F	23681
3/8"	1"	12LA8-W	22483	12LA8-EC-W	22499	-	-
3/8"	1-1/2"	12XA8-W	22484	12XLA8-EC-W	22500	-	-
3/8"	2"	-	-	-	-	-	-
7/16"	1"	14A8-W	22485	14A8-EC-W	22501	-	-
1/2"	1/2"	-	-	-	-	-	-
1/2"	1"	16A8-W	22486	16A8-EC-W	22502	GLA-W-8F	23682
1/2"	1-1/4"	-	-	-	-	-	-
1/2"	1-1/2"	-	-	-	-	-	-
1/2"	2"	-	-	-	-	-	-
5/8"	1"	20A8-W	22487	20A8-EC-W	22503	ILA-W-8F	23683
3/4"	1/2"	24GA8-W	22488	24GA8-EC-W	22504	-	-
3/4"	3/4"	24JA8-W	22489	24JA8-EC-W	22505	-	-
3/4"	1"	24A8-W	22490	24A8-EC-W	22506	JLA-W-8F	23684
3/4"	1-1/4"	-	-	-	-	-	-
7/8"	1"	28A8-W	22492	28A8-EC-W	22508	-	-
1"	1/4"	-	-	-	-	-	-
1"	1"	32A8-W	22494	32A8-EC-W	22510	-	-



End Cut View
Available as an option
on many shapes.



Chip breaker used on HSS
Midget Mills®



Double cut used on
Carbo-Mills™



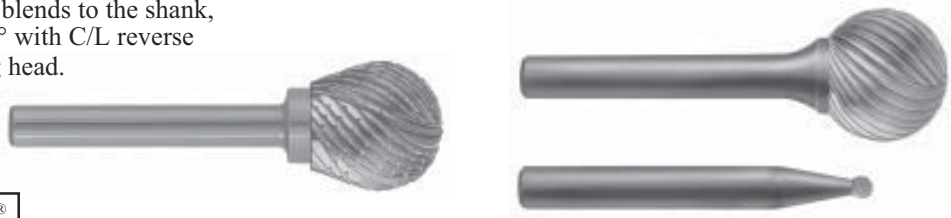
Spiral used on carbide
Midget Mills® and
Ecarbo-Mills™



Super coarse cut used on
Sever-Cuts™

Shape B Midget Mills®

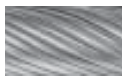
Carbide tools have a full radius that blends to the shank, where as the H.S.S. tools have a 20° with C/L reverse angle on the back side of the cutting head.



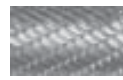
H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Carbide
Midget-Mill®
Single Cut



Carbide
Carbo-Mill™
Double Cut



Carbide
Sever-Cut™
Super Coarse

Head Dia.	Flute Length
1/8"	3/32"
3/16"	11/64"
1/4"	3/16"
5/16"	1/4"
3/8"	5/16"
7/16"	3/8"
1/2"	7/16"
9/16"	1/2"
5/8"	9/16"
3/4"	11/16"
7/8"	13/16"
1"	15/16"
1-1/4"	1-3/16"

Midget Mill® Name	EDP Order Number
AAB	22990
BBB	22991
CCB	22992
DDB	22993
EEB	22994
FFB	22995
GGB	22996
HHB	22997
IIB	22998
JJB	22999
KKB	23000
LLB	23001
NNB	23002

Midget Mill® Name	EDP Order Number
AAB-W	23320
BBB-W	23321
CCB-W	23322
DDB-W	23323
EEB-W	23324
FFB-W	23325
GGB-W	23326
-	-
IIB-W	23327
JJB-W	23328
-	-
LLB-W	23329
-	-

Carbo-Mill™ Name	EDP Order Number
8B4-W	22392
8B6-W	22393
8B-W	22394
10B8-W	22512
12B8-W	22513
14B8-W	22514
16B8-W	22515
-	-
20B8-W	22516
24B8-W	22517
-	-
32B8-W	22519
-	-

Sever-Cut™ Name	EDP Order Number
-	-
-	-
CCB-W-4F	23685
-	-
EEB-W-6F	23686
-	-
GGB-W-8F	23687
-	-
IIB-W-8F	23688
JJB-W-8F	23689
-	-
-	-

Flex-Shank Midget Mills®



Many cases of puzzling, inside, blind, interrupted, winding, and around the corner; cleaning and deburring problems have been solved with Severance FLEX-SHANK Midget Mills®. We would like to help you! Submit details - sample parts if feasible. See pages 91-96 for more on special tools.



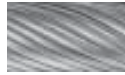
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Shape C Midget Mills®

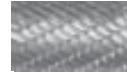
Cylindrical shape mills with full radius end.
Radius on end is one-half of tool diameter.



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Carbide
Midget-Mill®
Single Cut

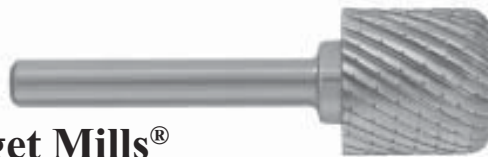


Carbide
Carbo-Mill™
Double Cut



Carbide
Sever-Cut™
Super Coarse

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number	Sever-Cut™ Name	EDP Order Number
1/8"	1/2"	AGC	23003	AGC-W	23330	8C4-W	22395	-	-
1/8"	5/8"	-	-	AIC-W	23331	8CI4L-W	22396	-	-
5/32"	5/8"	-	-	-	-	8C5-W	22413	-	-
3/16"	1/2"	BGC	23004	-	-	-	-	-	-
3/16"	5/8"	-	-	BIC-W	23332	8C6-W	22397	-	-
1/4"	1/2"	-	-	CGC-W	23333	-	-	-	-
1/4"	5/8"	-	-	CIC-W	23334	8C-W	22414	-	-
1/4"	3/4"	-	-	-	-	-	-	CJC-W-4F	23690
1/4"	1"	CLC	23005	CLC-W	23335	8LC-W	22398	-	-
1/4"	1-1/2"	CPC	23006	-	-	-	-	-	-
1/4"	2-1/2"	CUC	23007	-	-	-	-	-	-
5/16"	3/4"	-	-	DJC-W	23336	10C8-W	22521	-	-
5/16"	1"	DLC	23008	DLC-W	23337	10LC8-W	22522	-	-
3/8"	3/4"	-	-	EJC-W	23338	12C8-W	22523	EJC-W-6F	23691
3/8"	1"	ELC	23009	ELC-W	23339	12MC8-W	22524	-	-
3/8"	1-1/2"	EPC	23010	EPC-W	23340	12LC8-W	22525	-	-
7/16"	1"	FLC	23011	FLC-W	23341	14C8-W	22526	-	-
1/2"	1"	GLC	23012	GLC-W	23342	16C8-W	22527	GLC-W-8F	23692
1/2"	1-1/2"	GPC	23013	-	-	-	-	-	-
5/8"	1"	ILC	23014	ILC-W	23343	20C8-W	22528	ILC-W-8F	23693
3/4"	1/2"	-	-	-	-	24GC8-W	22529	-	-
3/4"	3/4"	-	-	-	-	24MC8-W	22531	-	-
3/4"	1"	JLC	23015	JLC-W	23344	24C8-W	22533	JLC-W-8F	23694
3/4"	1-1/4"	JNC	23016	-	-	-	-	-	-
3/4"	1-1/2"	JPC	23017	-	-	-	-	-	-
1"	1"	-	-	-	-	32C8-W	22535	-	-
1"	1-3/8"	LOC	23018	-	-	-	-	-	-



Shape D Midget Mills®

Cylindrical shape mills with corner radius.



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number
1/2"	1/2"	GGD-1/32R	23019
1/2"	1/2"	GGD-1/16R	23020
1/2"	1/2"	GGD-3/32R	23021
1/2"	1/2"	GGD-1/8 R.	23022
3/4"	3/4"	JJD-1/16R	23023
3/4"	3/4"	JJD-1/8R	23024
3/4"	3/4"	JJD-3/16R	23025
3/4"	3/4"	JJD-1/4R	23026



Shape E Midget Mills®

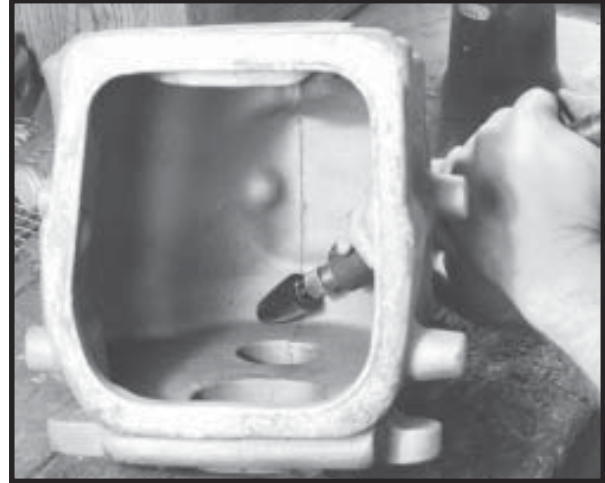
Cone shape mills having
20° C/L angle.



 H.S.S.
Midget-Mill®
Single Cut
Chip Breakers

Head Dia.	Flute Length	Nose Pointed (P) or Radius
1/8"	3/16"	P
3/16"	3/16"	1/32"
1/4"	5/16"	P
3/8"	1/2"	P
1/2"	3/8"	5/32"
1/2"	1/2"	3/32"
3/4"	3/4"	9/64

Midget Mill® Name	EDP Order Number
ABE	23080
BBE	23081
CDE	23082
EGE	23083
GEE	23084
GGE	23085
JJE	23086



Shape F Midget Mills®

Cone shape mills having
18° C/L angle.



H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

 H.S.S.
Midget-Mill®
Single Cut
Chip Breakers

 Carbide
Midget-Mill®
Single Cut

 Carbide
Carbo-Mill™
Double Cut

Head Dia.	Flute Length
5/16"	3/8"
3/8"	3/8"
3/8"	9/16"
1/2"	7/16"
1/2"	5/8"
5/8"	3/4"
5/8"	7/8"
3/4"	7/8"
3/4"	1"
1"	1"
1"	1-3/8"

Midget Mill® Name	EDP Order Number
DEF	23087
EEF	23088
EHF	23089
GFF	23090
GIF	23091
IJF	23092
IKF	23093
JKF	23094
JLF	23095
LLF	23096
LOF	23097

Midget Mill® Name	EDP Order Number
—	—
—	—
—	—
—	—
—	—
—	—
IKF-W	23410
—	—
—	—
—	—

Carbo-Mill™ Name	EDP Order Number
—	—
—	—
—	—
—	—
—	—
—	—
20F8-W	22583
—	—
—	—
—	—



Shape G Midget Mills®

Cone shape mills having
16° C/L angle.



Head Dia.	Flute Length	Nose Pointed (P) or Radius
1/8"	3/16"	P
5/16"	3/8"	1/16"
3/8"	7/16"	5/64"
3/8"	5/8"	1/64"
1/2"	1/2"	5/32"
5/8"	3/4"	1/8"
3/4"	3/4"	7/32"

Midget Mill® Name	EDP Order Number
ABG	23098
DEG	23099
EFG	23100
EIG	23101
GGG	23102
IJG	23103
JJG	23104

REF. # 55339

Midget Mills® with Special Guides

Midget Mills® are available in different Shapes, Sizes, and lengths of cut.

Shape H Midget Mills®

Cone shape mills having
14° C/L angle.



Head Dia.	Flute Length	Nose Pointed (P) or Radius
3/16"	5/16"	P
1/4"	3/8"	P
1/4"	1/2"	P
5/16"	5/8"	P
3/8"	1/2"	5/64"
3/8"	5/8"	.073 FLAT
3/8"	3/4"	P
1/2"	9/16"	9/64"
1/2"	7/8"	1/32"
5/8"	3/4"	5/32"

Midget Mill® Name	EDP Order Number
BDH	23105
—	—
CGH	23107
DIH	23106
EGH	23108
—	—
EJH	23109
GHH	23110
GKH	23111
IJH	23112

Midget Mill® Name	EDP Order Number
—	—
CEH-W	23400
—	—
—	—
—	—
—	—
EJH-W	23407
—	—
GKH-W	23408
—	—

Carbo-Mill™ Name	EDP Order Number
—	—
—	—
8H-W	22405
—	—
—	—
12H8-W	22581
—	—
—	—
16H8-W	22582
—	—

Sever-Cut™ Name	EDP Order Number
—	—
—	—
—	—
—	—
—	—
—	—
GKH-W-8F	23710
—	—



Shape I Midget Mills®

Cone shape mills having
12° C/L angle.



Head Dia.	Flute Length	Nose Pointed (P) or Radius
1/4"	5/16"	1/16"
3/8"	1/2"	3/32"
3/8"	3/4"	1/32"
1/2"	5/8"	9/64"
1/2"	1"	3/64"
5/8"	3/4"	3/16"
3/4"	9/16"	5/16"

Midget Mill® Name	EDP Order Number
CDI	23113
EGI	23114
EJI	23115
GII	23116
GLI	23117
IJI	23118
JHI	23119

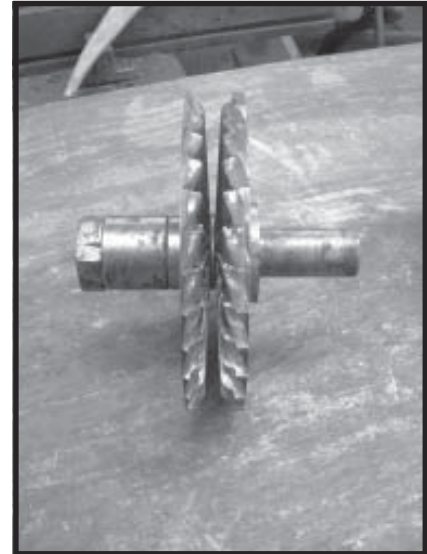
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Extra Large Midget Mills

Midget Mills® are available in different shapes, sizes, and lengths of cut. Such as this large 4" diameter by 8" long Midget Mill®.

Shape J Midget Mills®

Cone shape mills having 10° C/L angle.



REF. # 55493

Here is an example of a larger milling cutter made by Severance to use in our milling department to put a special form on a standard tool.

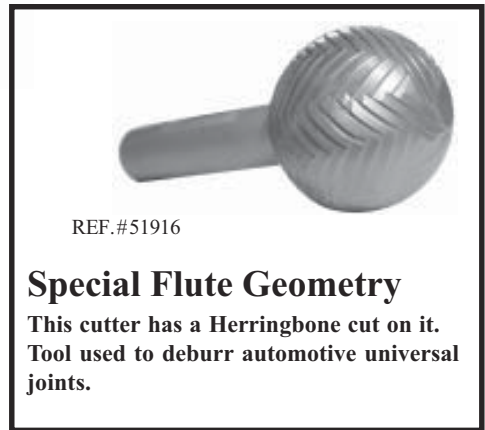
Head Dia.	Flute Length	Nose Pointed (P) or Radius	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number
3/16"	3/8"	1/32"	BEJ	23120	—	—
1/4"	5/16"	5/64"	CDJ	23121	—	—
1/4"	1/2"	3/64"	CGJ	23122	CGJ-W	23401
5/16"	3/4"	1/32"	DJJ	23123	—	—
3/8"	1/2"	1/8"	EGJ	23124	—	—
3/4"	5/8"	5/16"	JIJ	23125	—	—
3/4"	1"	7/32"	JLJ	23126	—	—
1"	3/4"	7/16"	LJJ	23128	—	—
1"	2-5/8"	1/16"	LUJ	23127	—	—

Shape K Midget Mills®

Cone shape mills having 8-1/2° C/L angle.



Head Dia.	Flute Length	Nose Pointed (P) or Radius	Midget Mill® Name	EDP Order Number
1/8"	3/8"	P	AEK	23129
1/4"	3/8"	5/64"	CEK	23130
1/4"	5/8"	1/32"	CIK	23132
1/4"	3/4"	P	CJK	23131
5/16"	3/4"	3/64"	DJK	23133
3/8"	1"	3/64"	ELK	23134
1/2"	1-1/4"	1/16"	GNK	23135



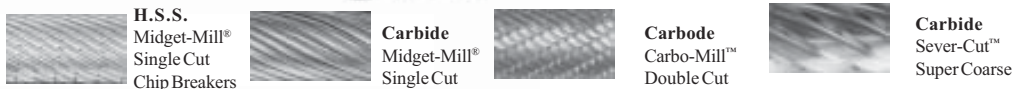
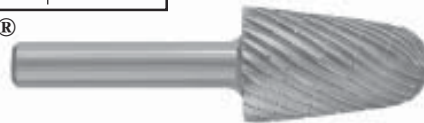
REF.#51916

Special Flute Geometry

This cutter has a Herringbone cut on it. Tool used to deburr automotive universal joints.

Shape L Midget Mills®

Cone shape mills having 7° C/L angle.



Head Dia.	Flute Length	Nose Pointed (P) or Radius	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number	Sever-Cut™ Name	EDP Order Number
3/16"	5/8"	1/64"	BIL	23136	—	—	—	—	—	—
1/4"	3/8"	.089"	—	—	—	—	8PL-W	22406	—	—
1/4"	5/8"	.055"	—	—	—	—	8LR-W	22408	—	—
1/4"	3/4"	1/32"	CJL	23137	CJL-W	23402	—	—	—	—
5/16"	3/4"	1/16"	DJL	23138	—	—	—	—	—	—
5/16"	7/8"	.055"	—	—	DKL-W	23405	10L8-W	22574	—	—
3/8"	1"	1/16"	ELL	23139	ELL-W	23406	12L8-W	22575	ELL-W-6F	23705
1/2"	1-1/8"	1/8"	—	—	—	—	16L8-W	22576	GML-W-8F	23706
1/2"	1-1/4"	3/32"	GNL	23140	GNL-W	23409	—	—	—	—
5/8"	3/4"	15/64"	IJL	23141	—	—	—	—	—	—
5/8"	7/8"	7/32"	IKL	23142	—	—	—	—	—	—
5/8"	1"	7/32"	—	—	—	—	20L8-W	22580	—	—
5/8"	1-3/16"	3/16"	—	—	—	—	20SL8-W	22577	INL-W-8F	23707
5/8"	1-5/16"	.171	—	—	—	—	20LL8-W	22578	IOL-W-8F	23708
3/4"	1-1/2"	7/32"	—	—	—	—	24L8-W	22579	JPL-W-8F	23709



Shape M Midget Mills®

Cone shape mills having 5° C/L angle.



H.S.S. Midget-Mill® Single Cut Chip Breakers



Carbide Midget-Mill® Single Cut

Head Dia.	Flute Length	Nose Pointed (P) or Radius	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number
1/8"	1/2"	P	AGM	23143	—	—
3/16"	3/4"	1/32"	BJM	23144	—	—
1/4"	7/8"	3/64"	CKM	23145	CKM-W	23403
1/4"	1-1/4"	1/64"	CNM	23146	CNM-W	23404
3/8"	1"	7/64"	ELM	23147	—	—
3/8"	1-3/4"	1/32"	ERM	23148	—	—
1/2"	3/4"	13/64"	GJM	23149	—	—
1/2"	1"	5/32"	GLM	23150	—	—
1/2"	1-1/4"	5/32"	GNM	23151	—	—



REF. # 55494

Here is an example of a larger milling cutter made by Severance to use in our milling department to put a special form on a standard tool.

H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

REF. # 50656

Special Finning Cutters

These cutters originally designed to deburr the fins on aircraft motor heads during World War II
Cutters used for stator and armature slots of electric motors and generators. Used for deburring in confined areas that are hard to reach.

Shape N Midget Mills®

Inverted Cone shape mills having 5° to 18° C/L angle. Most commonly used without optional end cut.



Here is an example of a larger inverted cone milling cutter also made by Severance to use in our milling department to put flutes in a standard tool.

REF.#55523



H.S.S. Midget-Mill® Single Cut Chip Breakers



H.S.S. Midget-Mill® Single Cut-EC Chip Breakers



Carbide Midget-Mill® Single Cut



Carbide Midget-Mill®-EC Single Cut

Head Dia.	Flute Length	Included Angle	Midget Mill® Name	EDP Order Number	Midget Mill® End Cutting Name	EDP Order Number	Midget Mill® End Cutting Name	EDP Order Number	Midget Mill® End Cutting Name	EDP Order Number
1/4"	1/8"	36°	CAN	23152	CAN-EC	23169	-	-	-	-
1/4"	3/16"	28°	CBN	23153	CBN-EC	23170	-	-	-	-
1/4"	1/4"	20°	CCN	23154	CCN-EC	23171	-	-	-	-
1/4"	3/8"	14°	CEN	23155	CEN-EC	23172	-	-	-	-
1/4"	3/8"	20°	-	-	-	-	CEN-W	23411	CEN-W-EC	23416
1/4"	1/2"	10°	CGN	23156	CGN-EC	23173	-	-	-	-
3/8"	3/16"	36°	EBN	23157	EBN-EC	23174	-	-	-	-
3/8"	1/4"	28°	ECN	23158	ECN-EC	23175	-	-	-	-
3/8"	5/16"	20°	EDN	23159	EDN-EC	23176	EDN-W	23412	EDN-W-EC	23417
3/8"	3/8"	13°	-	-	-	-	-	-	-	-
3/8"	1/2"	10°	EGN	23160	EGN-EC	23177	-	-	-	-
1/2"	3/8"	20°	GEN	23161	GEN-EC	23178	-	-	-	-
1/2"	1/2"	14°	GGN	23162	GGN-EC	23179	-	-	-	-
1/2"	1/2"	16°	-	-	-	-	GGN-W	23413	GGN-W-EC	23418
1/2"	1/2"	28°	-	-	-	-	-	-	-	-
1/2"	1"	14°	GLN	23163	GLN-EC	23180	-	-	-	-
1/2"	1-1/8"	10°	GMN	23164	GMN-EC	23181	-	-	-	-
5/8"	3/8"	36°	IEN	23165	IEN-EC	23182	IEN-W	23414	IEN-W-EC	23419
5/8"	1/2"	28°	IGN	23166	IGN-EC	23183	-	-	-	-
5/8"	3/4"	18°	-	-	-	-	-	-	-	-
3/4"	1/2"	36°	JGN	23167	JGN-EC	23184	JGN-W	23415	JGN-W-EC	23420
3/4"	5/8"	30°	-	-	-	-	-	-	-	-
3/4"	5/8"	36°	JIN	23168	JIN-EC	23185	-	-	-	-
3/4"	3/4"	21°	-	-	-	-	-	-	-	-



REF. # 55373

Here is an example of a larger milling cutter made by Severance. The tool was 3" diameter by 4" length of cut.



REF. # 55354

Special Extra Length Midget Mills

Midget Mills® are available in different shapes, sizes, and lengths of cut.

Shape N Midget Mills®

Inverted Cone shape mills having 5° to 18° C/L angle. Most commonly used without optional end cut.



Carbo-Mill™
Double Cut



Carbo-Mill™
Double Cut-EC

Head Dia.	Flute Length	Included Angle	Carbo-Mill™ Double Cut Name	EDP Order Number	Carbo-Mill™ Double Cut-EC Name	EDP Order Number
1/4"	1/8"	36°	-	-	-	-
1/4"	3/16"	28°	8N-W	22409	8N-W-EC	22410
1/4"	1/4"	20°	-	-	-	-
1/4"	3/8"	14°	-	-	-	-
1/4"	3/8"	20°	-	-	-	-
1/4"	1/2"	10°	-	-	-	-
3/8"	3/16"	36°	-	-	-	-
3/8"	1/4"	28°	-	-	-	-
3/8"	5/16"	20°	-	-	-	-
3/8"	3/8"	13°	12N8-W	22584	12N8-W-EC	22588
3/8"	1/2"	10°	-	-	-	-
1/2"	3/8"	20°	-	-	-	-
1/2"	1/2"	14°	-	-	-	-
1/2"	1/2"	16°	-	-	-	-
1/2"	1/2"	28°	16N8-W	22585	16N8-W-EC	22589
1/2"	1"	14°	-	-	-	-
1/2"	1-1/8"	10°	-	-	-	-
5/8"	3/8"	36°	-	-	-	-
5/8"	1/2"	28°	-	-	-	-
5/8"	3/4"	18°	20N8-W	22586	20N8-W-EC	22590
3/4"	1/2"	36°	-	-	-	-
3/4"	5/8"	30°	24N8-W	22587	24N8-W-EC	22591
3/4"	5/8"	36°	-	-	-	-
3/4"	3/4"	21°	24JN8-W	22545	24JN8-W-EC	22592

H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

Inside Hole Deburring Cutters

Inside Hole - Place cutter head inside hole, bring back against inner wall edge; follow around inner contour of hole letting the shank act as a guide.



High Speed Steel

Inside Style

Cutting Dia.	Neck Dia.	Shank Dia.	Severance Tool Name	EDP Order Number
7/32"	.109"	1/4"	7/32-IAD	35660
1/4"	.125"	1/4"	1/4-IAD	35661
5/16"	.156"	1/4"	5/16-IAD	35662
3/8"	.187"	1/4"	3/8-IAD	35663
7/16"	.250"	1/4"	7/16-IAD	35664
1/2"	.250"	1/4"	1/2-IAD	35665

Tangent/Hole Deburring Cutters

Outside Hole -Place cutter in hole at right angle to tubing length. Geometrically (for any size hole) the diameter of the tool and the outside diameter of the part should be equal.



High Speed Steel

Outside Style

Cutting Dia.	Cutting Length	Shank Dia.	Severance Tool Name	EDP Order Number
5/16"	1"	1/4"	DLA-LHS	35666
3/8"	1"	1/4"	ELA-LHS	35667
1/2"	1/2"	1/4"	GGA-LHS	35668
5/8"	1"	1/4"	ILA-LHS	35669
3/4"	3/4"	1/4"	JJA-LHS	35670
1"	1"	1/4"	LLA-LHS	35671

Special Flute Geometry

Special flute geometry is used on this cutter to cut wafered cardboard.



REF. # 51926

Shape P Midget Mills®

Pear shape mills with small end forward.



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number
1/4"	5/16"	CDP	23027
5/16"	3/8"	DEP	23028
3/8"	7/16"	EFP	23029
1/2"	5/8"	GIP	23030
5/8"	1"	ILP	23031



H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

Shape Q Midget Mills®

The very useful olive-shaped mills.



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



REF.#55382



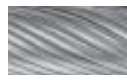
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Special Shaped Midget Mills

Midget Mills® are available in different shapes, sizes, and lengths of cut.

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number
3/16"	5/16"	BDQ	23032
1/4"	3/8"	—	—
1/4"	7/16"	CFQ	23033
5/16"	1/2"	DGQ	23034
3/8"	5/8"	EIQ	23035
3/8"	3/4"	EJQ	23036
7/16"	1"	—	—
1/2"	7/8"	GKQ	23037
5/8"	1"	ILQ	23038
3/4"	1"	JLQ	23039
1"	1-3/8"	LOQ	23040



Carbide
Midget-Mill®
Single Cut

Midget Mill® Name	EDP Order Number
BDQ-W	23372
CEQ-W	23373
—	—
—	—
EIQ-W	23374
—	—
—	—
GKQ-W	23375
ILQ-W	23376
JLQ-W	23377
—	—



Carbide
Carbo-Mill™
Double Cut

Carbo-Mill™ Name	EDP Order Number
8Q6-W	22399
8Q-W	22400
—	—
—	—
12Q8-W	22537
—	—
14Q8-W	22538
16Q8-W	22540
20Q8-W	22541
24Q8-W	22542
32Q8-W	22544



Carbide
Sever-Cut™
Super Coarse

Sever-Cut™ Name	EDP Order Number
—	—
—	—
—	—
—	—
EIQ-W-6F	23695
—	—
—	—
GKQ-W-8F	23696
ILQ-W-8F	23697
JLQ-W-8F	23698
—	—

Shape R Midget Mills®

Tree-shape mills with rounded noses.



H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks

Head Dia.	Flute Length	H.S.S. Midget-Mill® Single Cut Chip Breakers		Carbide Midget-Mill® Single Cut		Carbide Carbo-Mill™ Double Cut		Carbide Sever-Cut™ Super Coarse	
		Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number	Sever-Cut™ Name	EDP Order Number
1/8"	7/16"	AFR	23041	AFR-W	23345	-	-	-	-
1/8"	1/2"	-	-	-	-	8R4-W	22401	-	-
3/16"	5/16"	BDR	23042	-	-	-	-	-	-
3/16"	1/2"	BGR	23043	-	-	-	-	-	-
1/4"	3/8"	CER	23044	-	-	-	-	-	-
1/4"	1/2"	-	-	CGR-W	23346	-	-	-	-
1/4"	5/8"	-	-	CIR-W	23347	8R-W	22402	-	-
1/4"	3/4"	CJR	23045	CJR-W	23348	-	-	CJR-W-4F	23699
1/4"	1"	CLR	23046	-	-	-	-	-	-
5/16"	1"	-	-	DLR-W	23350	-	-	-	-
3/8"	7/16"	EFR	23047	-	-	-	-	-	-
3/8"	3/4"	EJR	23048	EJR-W	23349	12R8-W	22546	EJR-W-6F	23700
3/8"	1"	ELR	23049	-	-	-	-	-	-
7/16"	1"	-	-	-	-	14R8-W	22547	-	-
1/2"	3/4"	GJR	23078	GJR-W	23351	16JR8-W	22548	-	-
1/2"	1"	GLR	23050	GLR-W	23352	16R8-W	22549	GLR-W-8F	23701
1/2"	1-1/8"	GMR	23051	-	-	-	-	-	-
5/8"	5/8"	IIR	23052	-	-	-	-	-	-
5/8"	1"	-	-	ILR-W	23353	20R8-W	22550	ILR-W-8F	23702
5/8"	1-1/8"	IMR	23053	-	-	-	-	IMR-W-8F	23703
3/4"	3/4"	JJR	23054	-	-	-	-	-	-
3/4"	1"	JLR	23055	JLR-W	23354	24R8-W	22551	-	-
3/4"	1-1/4"	JNR	23056	JNR-W	23355	24NR8-W	22553	JNR-W-8F	23704
3/4"	1-1/2"	-	-	JPR-W	23356	24PR8-W	22554	-	-
3/4"	1-5/8"	JQR	23057	-	-	-	-	-	-
1"	1-3/8"	-	-	-	-	32R8-W	22555	-	-
1-1/8"	1-3/4"	MRR	23058	-	-	-	-	-	-
1-1/4"	2"	NSR	23059	-	-	-	-	-	-

Shape S Midget Mills®

Tree shape mills with a small radius nose.



H.S.S. Midget-Mill® Single Cut Chip Breakers

Head Dia.	Flute Length	Severance Tool Name	EDP Order Number
1/8"	3/8"	AES	23060
3/16"	1/2"	BGS	23061
1/4"	3/4"	CJS	23062
3/8"	3/4"	EJS	23063
1/2"	1"	GLS	23064
5/8"	1-1/8"	IMS	23065
3/4"	1-1/4"	JNS	23066
1"	1-5/8"	LQS	23067
1-1/4"	2"	NSS	23068



Shape T Midget Mills®

Tree-shape mills with a pointed noses.



H.S.S. and Carbide Midget Mills®
Come with 1/4" shanks



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Carbide
Midget-Mill®
Single Cut



Carbide
Carbo-Mill™
Double Cut

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number
1/8"	1/2"	—	—	—	—	8T4-W	22403
1/4"	1/2"	CGT	23069	CGT-W	23357	—	—
1/4"	5/8"	—	—	CIT-W	23358	8T-W	22404
1/4"	3/4"	CJT	23070	CJT-W	23359	—	—
5/16"	3/4"	—	—	DJT-W	23360	10T8-W	22557
3/8"	5/8"	EIT	23701	—	—	—	—
3/8"	3/4"	EJT	23702	EJT-W	23361	12T8-W	22558
7/16"	1"	—	—	—	—	14T8-W	22559
1/2"	3/4"	GJT	23073	GJT-W	23362	16JT8-W	22560
1/2"	1"	GLT	23074	GLT-W	23363	16T8-W	22561
1/2"	1-1/8"	GMT	23075	—	—	—	—
5/8"	1"	ILT	23076	ILT-W	23364	20T8-W	22562
3/4"	1"	JLT	23077	JLT-W	23365	24T8-W	22563
3/4"	1-1/2"	—	—	JPT-W	23366	24PT8-W	22565
1"	1-3/8"	—	—	—	—	32T8-W	22567

REF.#55352

Coarse Cut Midget Mills®

Midget Mill® tools can be made in coarse cut for a variety of non-ferrous materials such as wood, aluminum, and certain plastics.. Also see Sever-Cut™ Midget Mills® for non-ferrous materials.

Shape U Midget Mills®

Concave radius mills with cutting teeth on radius only.



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Carbide
Midget-Mill®
Single Cut

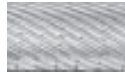


Carbide
Carbo-Mill™
Double Cut

Head Dia.	Flute Length	Radius	Midget Mill® Name	EDP Order Number	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number
1/4"	1/8"	3/32"	CAU	23186	—	—	—	—
1/4"	3/16"	3/16"	CBU	23187	—	—	—	—
1/4"	1/8"	1/16"x4 PL	CZU	23188	—	—	—	—
5/16"	3/16"	3/32"	DBU	23189	—	—	—	—
3/8"	1/8"	1/16"	EAU	23190	—	—	—	—
3/8"	3/16"	1/8"	EBU	23191	—	—	—	—
3/8"	1/4"	3/16"	ECU	23192	—	—	—	—
3/8"	5/16"	1/4"	EDU	23193	—	—	—	—
7/16"	1/4"	5/32"	FCU	23194	—	—	—	—
1/2"	1/4"	3/16"	GCU	23195	GCU-W	23421	—	—
1/2"	5/16"	1/4"	GDU	23196	GDU-W	23422	—	—
1/2"	3/8"	5/16"	GEU	23197	GEU-W	23423	16U8-W	22556
1/2"	7/16"	3/8"	GFU	23198	GFU-W	23424	—	—
5/8"	1/2"	7/16"	IGU	23199	—	—	—	—
3/4"	3/8"	1/4"	JEU	23200	—	—	—	—
3/4"	7/16"	5/16"	JFU	23201	—	—	—	—
3/4"	1/2"	3/8"	JGU	23202	—	—	—	—
3/4"	5/8"	1/2"	JIU	23203	—	—	—	—
7/8"	5/8"	7/16"	KIU	23204	—	—	—	—
7/8"	3/4"	5/8"	KJU	23205	—	—	—	—



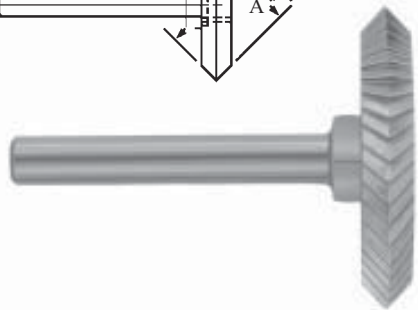
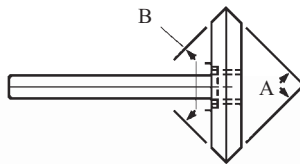
H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Shape V Midget Mills®

Convex with cutting teeth on the radius only.

Head Dia.	Flute Length	Radius	Severance Tool Name	EDP Order Number
1/4"	3/8"	1/4"	CEV	23206
5/8"	7/16"	1/4"	IFV	23207
3/4"	1/2"	1/2"	JGV	23208
1"	3/16"	3/32"	LBV	23209
1-1/4"	7/8"	5/8"	NKV	23210



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Shape X Midget Mill®

Convex shape mills. This shape combines forward and reverse angles as listed in the "Included Angle" column. Forward angle is given first, followed by reverse angle. Angles are given with C/L. Special angles may be obtained at a nominal extra charge.

Head Dia.	Head Length	Centerline Angles		Severance Tool Name	EDP Order Number
		A	B		
1/4"	1/4"	20°	20°	CCX	23221
1/4"	3/8"	80°	10°	CEX	23217
5/16"	1/4"	30°	30°	DCX	23222
3/8"	1/4"	60°	60°	ECX	23223
1/2"	1/4"	50°	50°	GCX	23224
5/8"	1/4"	60°	60°	ICX	23225
5/8"	5/8"	40°	20°	IIX	23218
3/4"	1/2"	120°	60°	JGX	23219
1"	1/4"	90°	90°	LCX	23226
1"	3/4"	90°	30°	LJX	23220
1-1/2"	1/4"	60°	60°	PCX-30	23227
1-1/2"	1/4"	90°	90°	PCX-45	23228
1-1/2"	1/4"	120°	120°	PCX-60	23229



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Shape W Midget Mills®

Cylindrical shape mills with cutting teeth on the end radius only. They feature a non-fluted (safe) area at the center of the end face and on the straight cylindrical sides adjacent to the radius. Use for finishing fillets and many other similar applications.

Head Dia.	Flute Length	Radius	Severance Tool Name	EDP Order Number
1/4"	1/8"	1/16"	CAW	23211
5/16"	1/4"	1/16"	DCW	23212
3/8"	5/16"	3/32"	ECW	23213
1/2"	3/8"	5/32"	GEW	23214
7/8"	1/2"	1/4"	KGW	23215
1"	1/2"	5/16"	LGW	23216



H.S.S.
Midget-Mill®
Single Cut
Chip Breakers



Shape BI Midget Mills®

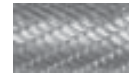
Convex with cutting teeth on the radius only.

Head Dia.	Flute Length	Radius	Severance Tool Name	EDP Order Number
3/16"	5/8"	5/16" x 1/2"	BIRU	23230
1/4"	3/4"	1-1/2" x 1/2"	CJCU	23231
1/4"	1"	3/4" x 3/4"	CLRU	23232
1/4"	1"	1" x 1/2"	CLTU	23233
5/16"	1-1/8"	1" x 1"	DMRU	23234
3/8"	1"	3/16" x 1-1/4"	ELCU	23235
3/8"	1"	1/2" x 3/4"	ELTU	23236
1/2"	7/8"	1/4" x 3/8"	GKCU	23237



Shape FL Midget Mills®

A very handy shape for blending operations.



Carbide
Carbo-Mill™
Double Cut

Head Dia.	Flute Length	Midget Mill® Name	EDP Order Number	Carbo-Mill™ Name	EDP Order Number
1/4"	5/8"	CIFL-W	23367	8GN-W	22415
5/16"	3/4"	DJFL-W	23368	10FL8-W	22569
1/2"	1-1/4"	GNFL-W	23369	16FL8-W	22570
5/8"	1-7/16"	IOFL-W	23370	20FL8-W	22571
3/4"	1-5/8"	JQFL-W	23371	24FL8-W	22572

Long Shank Midget Mills®

1/4" Shank Diameter – 8" Shank Length

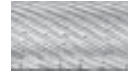
Other shank lengths available upon request



Special Flute Geometry

Special flute geometry is used on this cutter to deburr part.

REF.#51926



H.S.S. Midget-Mill®



Carbide Midget-Mill®

Head Dia.	Flute Length	Nose Point, Flat, or Radius
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Midget-Mill® Name	EDP Order Number
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Midget-Mill® Name	EDP Order Number
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Cylindrical, Plain Nose, Shape "A"

1/4"	1"	-
3/8"	1"	-
1/2"	1"	-

CLAx8	23730
ELAx8	23731
GLAx8	23732

CLAx8	23780
ELAx8	23781
GLAx8	23782

Cylindrical, End Cutting, Shape "A"

1/4"	1"	-
3/8"	1"	-
1/2"	1"	-

CLA-ECx8	23733
ELA-ECx8	23734
GLA-ECx8	23735

CLA-EC-Wx8	23783
ELA-EC-Wx8	23784
GLA-EC-Wx8	23785

Ball, Shape "B"

1/4"	3/16"	-
3/8"	5/16"	-
1/2"	7/16"	-

CCBx8	23736
EEBx8	23737
GGBx8	23738

CCB-Wx8	23786
EEB-Wx8	23787
GGB-Wx8	23788

Cylindrical, Ball Nose, Shape "C"

1/4"	1"	-
3/8"	1"	-
1/2"	1"	-

CLCx8	23739
ELCx8	23740
GLCx8	23741

CLC-Wx8	23789
ELC-Wx8	23790
GLC-Wx8	23791

Tree, Radius Nose, Shape "R"

1/4"	1/2"	-
3/8"	3/4"	-
1/2"	1"	-

CJRx8	23742
EJRx8	23743
GLRx8	23744

CJR-Wx8	23792
EJR-Wx8	23793
GLR-Wx8	23794

Tree, Pointed Nose, Shape "T"

1/4"	3/4"	P
3/8"	3/4"	P
1/2"	1"	P

CJTx8	23745
EJTx8	23746
GLTx8	23747

CJT-Wx8	23795
EJT-Wx8	23796
GLT-Wx8	23797

Flame, Shape "FL"

5/16"	3/4"	-
1/2"	1-1/4"	-

DJFLx8	23748
GNFLx8	23749

DJFL-Wx8	23798
GNFL-Wx8	23799

Olive, Shape "Q"

1/4"	7/16"	-
3/8"	5/8"	-
1/2"	7/8"	-

CFQx8	23750
EIQx8	23751
GKQx8	23752

CFQ-Wx8	23800
EIQ-Wx8	23801
GKQ-Wx8	23802

Cone, 14° Included, Shape "L"

3/8"	1"	.063"
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ELLx8	23755
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ELL-Wx8	23805
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Cone, 20° Included, Shape "J"

5/16"	3/4"	.031"
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DJJx8	23754
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DJJ-Wx8	23804
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Cone, 28° Included, Shape "H"

1/4"	1/2"	P
1/2"	1"	F

CGHx8	23753
GLHx8	23756

CGH-Wx8	23803
GLH-Wx8	23806