

# STERLING EDGE

CUTTING **EDGE** CARBIDE MILLING TOOLS

2023/24 PRODUCT CATALOG **NEW HIGH PERFORMANCE TOOLS INSIDE** →



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# STERLING EDGE

## STERLING EDGE MISSION

At Sterling Edge, our goal is to outperform the competition in both performance and pricing. By utilizing the latest technology in manufacturing, software, and automation, with a highly skilled staff, we are able to produce complex geometry, high performance tooling, at extremely competitive pricing.

## QUALITY AND CUSTOMER SERVICE

All of our tools are made with premium grade submicron carbide to ensure quality and consistency and ground using in-process checks and compensations to ensure the last tool is ground the same as the first. Everything we make meets the H6 shank tolerance for use in shrink fit and hydraulic Holders. We stand behind each and every tool we produce.

## GUARANTEED TESTING WITH OFF THE SHELF TOOLS

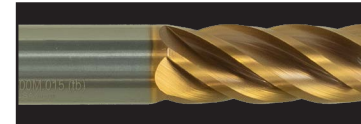
Hesitant to change, and the risk of spending money to try something new? Contact us to setup a test with one of our *off the shelf tools* to be tested against what you're currently using. If our tool doesn't offer a better value to your business, in performance or cost, you don't pay for the tool tested, simple as that!

## REGRIND SERVICES

Contact us about our regrind services! Many of our tools qualify for our regrind program. Have the same tool that gets used often in your shop? Rather than tossing them out when dull, send them to us to be resharpened and restored to like new condition. (min. quantities apply).

# SHORTCUTS

PAGE  
4



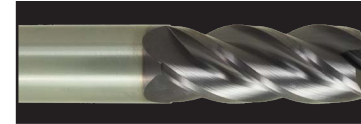
HIGH PERFORMANCE  
END MILLS

15



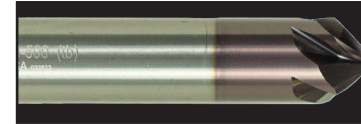
HIGH FEED  
END MILLS

17



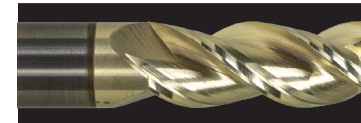
GENERAL PURPOSE  
END MILLS - STEEL

23



CHAMFER  
END MILLS

24



ALUMINIUM  
END MILLS

25



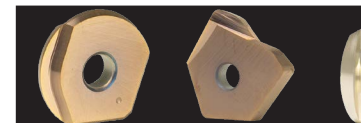
GRAPHITE  
END MILLS

27



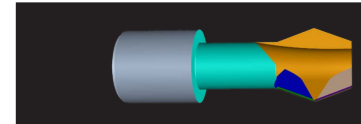
MOLD AND DIE  
BALLNOSE END MILLS

29



CARBIDE INSERT AND  
MODULAR TOOLS

50



SPECIALS

# COATINGS

Z / ZRN



X / CTX



S / CTS



H / CTH



D / CTD



CTXR



**CTX / X** - Greatly increased tool life and wear resistance in the machining of a broad range of steels. Standard on our *GP - Steel* Line of end mills.

**CTS / S** - The most versatile coating for wet and dry machining with increased hardness and temperate resistance. Can be used in many different steels, stainless, Titanium & nickel Alloys. Offered on our *High Performance* End Mills.

**CTH / H** - The toughest coating for the most demanding machining applications and tool paths where heat is an issue. Best used in hardened materials and exotic/difficult to machine metals, but has also been proven versatile in many steel applications. Used on our *High Performance, High Feed, and Carbide Insert* line of tools.

**CTXR** - Exclusive to our *Carbide Insert* line of tools, its proven to greatly increase insert life in tool steels and stainless over our previously offered CTX coating.

**ZRN / Z** - Used for machining Aluminium and other non-ferrous materials.

**CTD / D** - A DLC type coating for use in milling highly abrasive materials such as Graphite. Standard on our GPE and GPB series end mills. Can also be offered on Inserts.

*\*Color can vary with each coating between different batches of tools. This does not have an effect on the performance of the tool.*

## HIGH PERFORMANCE END MILLS

Sterling Edge High Performance end mills use a combination of unique geometries and premium coatings to deliver end mills that cut exceptionally well and out last the competition. This can include variable pitch flutes, multiple helix angles, unique hook angles, tapered cores for added rigidity and eccentric reliefs for max edge strength.

### SVE4 SERIES 4 FLUTE END MILLS

PAGE 5



### SVE5 SERIES 5 FLUTE END MILLS

PAGE 9



### HCM6E SERIES 6 FLUTE END MILLS

PAGE 11



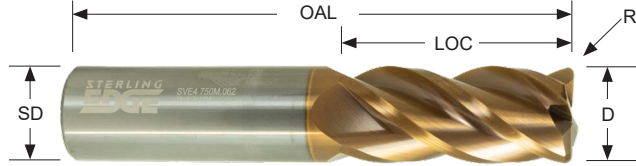
### XB4 SERIES 4 FLUTE BALLNOSE END MILLS

PAGE 12



# SVE4 SERIES END MILLS

- 4 Flute
- Variable Pitch for reduced chatter
- Multiple Helix angles for improved surface finish
- Center Cutting
- Eccentric relief for increased edge-strength
- Can be used for roughing or finishing
- Available with CTH and CTS coatings
- H6 Tolerance shank



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
1/8	SQ	1/2	2	1/8	05060	SVE4 125M
	.005	1/2	2	1/8	05061	SVE4 125M.005
	.015	1/2	2	1/8	05063	SVE4 125M.015
	SQ	1	3	1/8	05070	SVE4 125L
	.010	1	3	1/8	05072	SVE4 125L.010
3/16	.015	1	3	1/8	05073	SVE4 125L.015
	SQ	1/2	2	3/16	05090	SVE4 187S
	.015	1/2	2	3/16	05093	SVE4 187S.015
	SQ	5/8	2	3/16	05100	SVE4 187M
1/4	.005	5/8	2	3/16	05102	SVE4 187M.005
	SQ	3/4	2.5	1/4	05140	SVE4 250S
	.005	3/4	2.5	1/4	05142	SVE4 250S.005
	.015	3/4	2.5	1/4	05146	SVE4 250S.015
	.031	3/4	2.5	1/4	05150	SVE4 250S.031
	SQ	1	3	1/4	05152	SVE4 250M
	.005	1	3	1/4	05154	SVE4 250M.005
	.015	1	3	1/4	05158	SVE4 250M.015
	.031	1	3	1/4	05162	SVE4 250M.031
	SQ	1-1/2	4	1/4	05164	SVE4 250L
	.005	1-1/2	4	1/4	05166	SVE4 250L.005
	.031	1-1/2	4	1/4	05174	SVE4 250L.031
5/16	SQ	3/4	2.5	5/16	05180	SVE4 312S
	.015	3/4	2.5	5/16	05183	SVE4 312S.015
	SQ	1	3	5/16	05186	SVE4 312M
	.005	1	3	5/16	05187	SVE4 312M.005
	.015	1-1/4	4	5/16	05195	SVE4 312ML.015
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

Other radius available upon request.

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# SVE4 SERIES END MILLS

Continued...

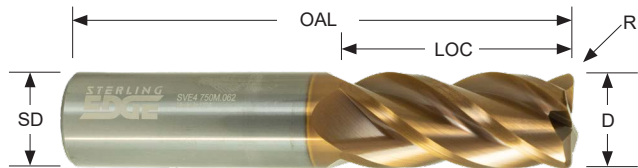
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/8	SQ	7/8	2.5	3/8	05200	SVE4 375S
	.005	7/8	2.5	3/8	05202	SVE4 375S.005
	.015	7/8	2.5	3/8	05206	SVE4 375S.015
	.031	7/8	2.5	3/8	05210	SVE4 375S.031
	.078	7/8	2.5	3/8	05214	SVE4 375S.078
	SQ	1-1/4	3	3/8	05220	SVE4 375M
	.005	1-1/4	3	3/8	05222	SVE4 375M.005
	.010	1-1/4	3	3/8	05224	SVE4 375M.010
	.031	1-1/4	3	3/8	05230	SVE4 375M.031
	SQ	2	4	3/8	05240	SVE4 375L
	.031	2	4	3/8	05250	SVE4 375L.031
	.062	2	4	3/8	05252	SVE4 375L.062
	SQ	3	6	3/8	05260	SVE4 375XL
	1/2	SQ	5/8	3	1/2	05280
.020		5/8	3	1/2	05288	SVE4 500S.020
SQ		1-1/4	3	1/2	05300	SVE4 500M
.005		1-1/4	3	1/2	05302	SVE4 500M.005
.015		1-1/4	3	1/2	05304	SVE4 500M.015
.020		1-1/4	3	1/2	05306	SVE4 500M.020
.031		1-1/4	3	1/2	05308	SVE4 500M.031
.062		1-1/4	3	1/2	05312	SVE4 500M.062
SQ		2	4	1/2	05320	SVE4 500L
.031		2	4	1/2	05330	SVE4 500L.031
.125		2	4	1/2	05336	SVE4 500L.125
SQ		3	6	1/2	05342	SVE4 500XL.005
.031		3	6	1/2	05350	SVE4 500XL.031
.062		3	6	1/2	05352	SVE4 500XL.062
5/8	SQ	1-1/2	4	5/8	05380	SVE4 625M
	.005	1-1/2	4	5/8	05382	SVE4 625M.005
	.031	1-1/2	4	5/8	05390	SVE4 625M.031
	.031	2-1/2	5	5/8	05410	SVE4 625L.031
	.005	3-1/4	6	5/8	05422	SVE4 625XL.005
	.031	3-1/4	6	5/8	05430	SVE4 625XL.031
3/4	SQ	1-3/4	4	3/4	05440	SVE4 750M
	.005	1-3/4	4	3/4	05442	SVE4 750M.005
	.015	1-3/4	4	3/4	05446	SVE4 750M.015
	.031	1-3/4	4	3/4	05450	SVE4 750M.031
	.062	1-3/4	4	3/4	05452	SVE4 750M.062
	.125	1-3/4	4	3/4	05456	SVE4 750M.125
.031	1-3/4	4	3/4	05470	SVE4 750ML.031	
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

Other radius available upon request.

Continued on next page

# SVE4 SERIES END MILLS Continued...

- 4 Flute
- Variable Pitch for reduced chatter
- Multiple Helix angles for improved surface finish
- Center Cutting
- Eccentric relief for increased edge-strength
- Can be used for roughing or finishing
- Available with CTH and CTS coatings
- H6 Tolerance shank



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/4	SQ	1-3/4	4	3/4	05440	SVE4 750M
	.005	1-3/4	4	3/4	05442	SVE4 750M.005
	.015	1-3/4	4	3/4	05446	SVE4 750M.015
	.031	1-3/4	4	3/4	05450	SVE4 750M.031
	.062	1-3/4	4	3/4	05452	SVE4 750M.062
	.125	1-3/4	4	3/4	05456	SVE4 750M.125
	.031	1-3/4	4	3/4	05470	SVE4 750ML.031
	SQ	2-1/2	5	3/4	05480	SVE4 750L
	.031	2-1/2	5	3/4	05490	SVE4 750L.031
	SQ	3	6	3/4	05500	SVE4 750XL
	.031	3	6	3/4	05510	SVE4 750XL.031
	.125	3	6	3/4	05516	SVE4 750XL.125
SQ	4	7	3/4	05520	SVE4 750XXL	
1	SQ	2-1/4	5	1	05650	SVE4 1000M
	.031	2-1/4	5	1	05660	SVE4 1000M.031
	SQ	4	7	1	05620	SVE4 1000-7XXL
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

Other radius available upon request.

# SVE4 SERIES END MILL SPEEDS AND FEEDS

Profile Milling						
Material	P Steels			M Stainless Steels		
	Carbon <36HRc	Alloy <36HRc	Tool <36HRc	Free Machining <34HRc	Difficult <34HRc	PH <34HRc
SFM	250-450	250-350	100-225	250-350	150-250	80-250
1/8	.0005	.0004	.0003	.0005	.0004	.0004
3/16	.0008	.0007	.0006	.0008	.0007	.0007
1/4	.0012	.0011	.001	.0012	.001	.001
3/8	.002	.0017	.0016	.002	.0016	.0016
1/2	.0028	.0025	.0025	.0028	.0025	.0025
5/8	.0035	.0032	.0032	.0035	.0032	.0032
3/4	.004	.0035	.0035	.004	.0035	.0035
1	.005	.0045	.0045	.005	.0045	.0045

- 10xx, 11xx, 12xx, 13xx, 15xx
- 40xx, 41xx, 43xx, 44xx, 51xx, 86xx
- A2, H1, H13, L6, P20, S7
- 303, 416, 420F, 430F, 440F
- 304, 304L, 316, 316L
- 13-8PH, 15-4PH, 16-6PH, 17-4PH Carpenter 450/468

Profile Milling				
Material	K Cast Iron		S High Temp Alloy	
	Gray <34 HRc	Ductile <34HRc	Pure Ti <34HRc	Alloys <34HRc
SFM	250-400	150-300	140-300	70-150
1/8	.0006	.0004	.0005	.0004
3/16	.0009	.0007	.0008	.0006
1/4	.0014	.0011	.0012	.001
3/8	.002	.0017	.0018	.0016
1/2	.0028	.0025	.0026	.0024
5/8	.0036	.0032	.0033	.0032
3/4	.0040	.0035	.0036	.0035
1	.0047	.0045	.0046	.0045

- Inconel, Monel, Waspaloy, Haynes
- Grade 1, 2, 3, 4, 7, 12

For materials harder than listed HRc reduce SFM 20-35%.

**Slotting:**  
Take 75-125% of the Diameter to determine your ADOC, (use the lower-end for long cutters) and slightly reduce SFM and IPT. For Harder Materials use 60-75% Diameter.

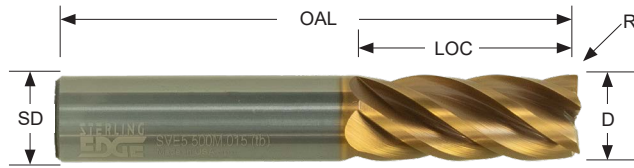
**Finishing:**  
Take 4-6% of the Diameter to determine RDOC, and reduce feed slightly.

High Performance End Mills

High Performance End Mills

# SVE5 SERIES END MILLS

- 5 Flute
- Multiple Helix angles for improved surface finish and reduced chatter
- Center Cutting
- Eccentric relief for increased edge Strength
- Can be used for roughing or finishing
- Available with CTH and CTS coatings
- H6 Tolerance shank



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
1/4	SQ	1	3	1/4	06020	SVE5 250M
	.020	1	3	1/4	06028	SVE5 250M.020
	.031	1	3	1/4	06030	SVE5 250M.031
	.020	1-1/4	3	1/4	06048	SVE5 250ML.020
3/8	SQ	7/8	2.5	3/8	06060	SVE5 375S
	.020	7/8	2.5	3/8	06068	SVE5 375S.020
	SQ	1-1/4	3	3/8	06080	SVE5 375M
	.020	1-1/4	3	3/8	06088	SVE5 375M.020
	.031	1-1/4	3	3/8	06090	SVE5 375M.031
	SQ	1-1/2	4	3/8	06100	SVE5 375ML
1/2	SQ	1-1/4	3	1/2	06180	SVE5 500M
	.015	1-1/4	3	1/2	06186	SVE5 500M.015
	.031	1-1/4	3	1/2	06192	SVE5 500M.031
	.062	1-1/4	3	1/2	06196	SVE5 500M.062
	.125	1-1/4	3	1/2	06200	SVE5 500M.125
	SQ	1-1/2	4	1/2	06240	SVE5 500ML
	.031	1-1/2	4	1/2	06250	SVE5 500ML.031
	SQ	2	4	1/2	06220	SVE5 500L
	.031	2	4	1/2	06230	SVE5 500L.031
5/8	.005	1-1/2	4	5/8	06282	SVE5 625M.005
	.062	1-1/2	4	5/8	06292	SVE5 625M.062
	.120	2-1/2	5	5/8	06320	SVE5 625L.120
3/4	SQ	1-3/4	4	3/4	06360	SVE5 750M
	.005	1-3/4	4	3/4	06362	SVE5 750M.005
	.031	1-3/4	4	3/4	06370	SVE5 750M.031
	.062	1-3/4	4	3/4	06372	SVE5 750M.062
	.125	1-3/4	4	3/4	06376	SVE5 750M.125
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

Other radius available upon request.

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# SVE5 SERIES END MILLS

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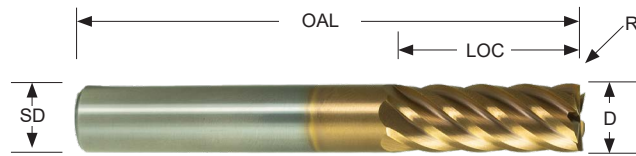
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/4	SQ	2-1/4	5	3/4	06380	SVE5 750L
	.031	2-1/4	5	3/4	06390	SVE5 750L.031
	SQ	3	6	3/4	06400	SVE5 750XL
	.005	3	6	3/4	06402	SVE5 750XL.005
	.031	3	6	3/4	06410	SVE5 750XL.031
1	.031	1-1/2	4	1	06470	SVE5 1000S.031
	.031	2-1/4	5	1	06490	SVE5 1000M.031
	.031	3	6	1	06510	SVE5 1000L.031
	.031	4	7	1	06530	SVE5 1000XL.031
1-1/4	.031	4	7	1-1/4	06570	SVE5 1250M.031
	.031	5	8	1-1/4	06590	SVE5 1250L.031
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

**NO MATTER WHAT THE JOB, STERLING EDGE HAS A SOLUTION FOR YOU.**



# HCM6E SERIES END MILLS

- 6 Flute
- Center Cutting
- Eccentric relief for increased edge Strength
- Stronger core provides excellent rigidity when milling deep walls
- Standard with CTH coating
- H6 Tolerance shank

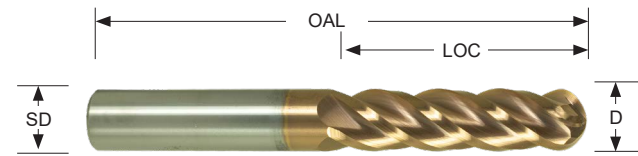


Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/16	SQ	5/8	2.5	3/16	04110	HCM6E 187S
1/4	SQ	3/4	2.5	1/4	04130	HCM6E 250S
	SQ	1-1/8	3	1/4	04140	HCM6E 250M
	SQ	2	4	1/4	04150	HCM6E 250L
	SQ	3	6	1/4	04160	HCM6E 250XL
5/16	SQ	7/8	2.5	5/16	04170	HCM6E 312S
	SQ	1-1/8	3	5/16	04180	HCM6E 312M
	SQ	2	4	5/16	04190	HCM6E 312L
3/8	SQ	1	2.5	3/8	04210	HCM6E 375S
	SQ	1-1/8	3	3/8	04220	HCM6E 375M
	.031	1-1/8	3	3/8	04230	HCM6E 375M.031
	SQ	1-1/2	3	3/8	04250	HCM6E 375L
1/2	SQ	3	6	3/8	04260	HCM6E 375XL
	SQ	1-1/4	3	1/2	04270	HCM6E 500S
	SQ	2	4	1/2	04290	HCM6E 500M
5/8	SQ	3	6	1/2	04300	HCM6E 500XL
	SQ	1-5/8	3.5	5/8	04310	HCM6E 625S
	SQ	2-1/4	5	5/8	04320	HCM6E 625M
3/4	SQ	3-1/2	6	5/8	04330	HCM6E 625XL
	SQ	1-3/4	4	3/4	04340	HCM6E 750S
	SQ	2-1/2	5	3/4	04350	HCM6E 750M
	SQ	3	6	3/4	04360	HCM6E 750L
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

Other radius available upon request.

# XB4 SERIES BALLNOSE END MILLS

- 4 Flute
- Center Cutting
- Eccentric relief for increased edge Strength
- Variable Pitch for reduced chatter
- Multiple Helix angle Design for improved finish
- H6 Tolerance shank
- Available in CTS or CTH Coatings



Diameter (D)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
1/8	1/2	2	1/8	04502	XB4 125S
	3/4	3	1/8	04504	XB4 125M
3/16	1/2	2	3/16	04508	XB4 187S
	5/8	2.5	3/16	04510	XB4 187M
	1	3	3/16	04508	XB4 187L
1/4	5/8	2.5	1/4	04516	XB4 250S
	7/8	3	1/4	04518	XB4 250M
	1-1/4	4	1/4	04520	XB4 250L
5/16	5/8	2.5	5/16	04522	XB4 312S
	1	3	5/16	04524	XB4 312M
	1-1/4	4	5/16	04526	XB4 312L
3/8	3/4	2.5	3/8	04528	XB4 375S
	1-1/4	3	3/8	04530	XB4 375M
	1-1/2	4	3/8	04526	XB4 375L
1/2	1-1/4	3	1/2	04534	XB4 500S
	2	4	1/2	04536	XB4 500M
	3	6	1/2	04538	XB4 500L
5/8	1-1/4	3.5	5/8	04542	XB4 625M
	2-1/4	5	5/8	04544	XB4 625L
3/4	1-1/2	4	3/4	04546	XB4 750S
	2-1/4	5	3/4	04548	XB4 750M
	3	6	3/4	04552	XB4 750L
Diameter (D)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number

### Notes


Profile Milling						
Material	P Steels			M Stainless Steels		
	Carbon <36HRc	Alloy <36HRc	Tool <36HRc	Free Machining <34HRc	Difficult <34HRc	PH <34HRc
<b>SFM</b>	250-450	250-350	100-225	250-350	150-250	80-250
<b>1/8</b>	.0005	.0004	.0003	.0005	.0004	.0004
<b>3/16</b>	.0008	.0007	.0006	.0008	.0007	.0007
<b>1/4</b>	.0012	.0011	.001	.0012	.001	.001
<b>3/8</b>	.002	.0017	.0016	.002	.0016	.0016
<b>1/2</b>	.0028	.0025	.0025	.0028	.0025	.0025
<b>5/8</b>	.0035	.0032	.0032	.0035	.0032	.0032
<b>3/4</b>	.004	.0035	.0035	.004	.0035	.0035
<b>1</b>	.005	.0045	.0045	.005	.0045	.0045

10xx, 11xx, 12xx, 13xx, 15xx,	40xx, 41xx, 43xx, 44xx, 51xx, 86xx,	A2, H1, H13, L6, P20, S7	303, 416, 420F, 430F, 440F	304, 304L, 316, 316L	13-8PH, 15-4PH, 16-6PH, 17-4PH Carpenter 450/468
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Profile Milling				
Material	K Cast Iron		S High Temp Alloy	
	Gray <34 HRc	Ductile <34HRc	Pure Ti <34HRc	Alloys <34HRc
<b>SFM</b>	250-400	150-300	140-300	70-150
<b>1/8</b>	.0006	.0004	.0005	.0004
<b>3/16</b>	.0009	.0007	.0008	.0006
<b>1/4</b>	.0014	.0011	.0012	.001
<b>3/8</b>	.002	.0017	.0018	.0016
<b>1/2</b>	.0028	.0025	.0026	.0024
<b>5/8</b>	.0036	.0032	.0033	.0032
<b>3/4</b>	.0040	.0035	.0036	.0035
<b>1</b>	.0047	.0045	.0046	.0045

Inconel, Monel, Waspaloy, Haynes	Grade 1, 2, 3, 4, 7, 12
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For materials harder than listed HRC reduce SFM 20-35%.

**Slotting:**  
Take 75-125% of the Diameter to determine your ADOC, (use the lower-end for long cutters) and slightly reduce SFM and IPT. For Harder Materials use 60-75% Diameter.

**Finishing:**  
Take 4-6% of the Diameter to determine RDOC, and reduce feed slightly.

High Performance End Mills

High Performance End Mills

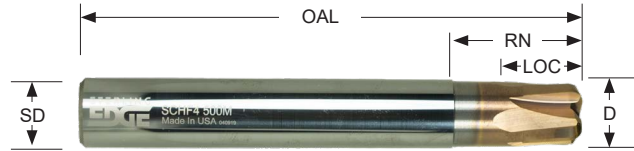


# HIGH FEED END MILLS

High Feed end mills use an end cutting geometry designed to hold up under increased feed rates. By putting most of the cutting forces axially through the tool rather than radially, you're able to dramatically increase your feed rates. Comes standard with our CTH coating for the toughest cutting conditions.

## SCHF4 SERIES 4 FLUTE END MILLS

- 4 Flute
- Negative cutting geometry for maximum strength in Hardened Die Steels
- H6 Tolerance shank
- Standard in CTH Coating



Diameter (D)	Radius	Length of Cut (LOC)	Reach (RN)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/16	.047	1/8	5/8	2.5	3/16	04614	SCHF 187M
	.047	1/8	1	3	3/16	04615	SCHF4 187L
1/4	.062	1/4	1	3	1/4	04602	SCHF4 250M
3/8	.093	3/8	1-1/2	4	3/8	04605	SCHF4 375M
1/2	.125	1/2	1/2	3	1/2	04606	SCHF4 500S
	.125	1/2	1	4	1/2	04607	SCHF4 500M

custom OAL / DOC available upon request.



## SCHF6 SERIES 6 FLUTE END MILLS

- 6 Flute
- Negative cutting geometry for maximum strength in Hardened Die Steels
- H6 Tolerance shank
- Standard in CTH Coating

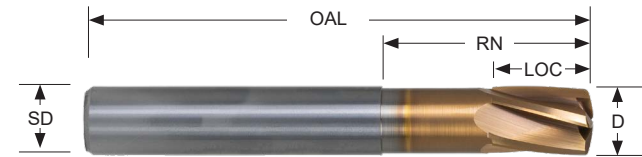
Diameter (D)	Radius	Length of Cut (LOC)	Reach (RN)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
3/8	.093	3/8	3/8	3	3/8	04608	SCHF6 375S
	<b>.093</b>	<b>3/8</b>	3/8	4	3/8	04609	SCHF6 375M
1/2	.125	1/2	1/2	3	1/2	04610	SCHF6 500S
	.125	1/2	1/2	4	1/2	04611	SCHF6 500M
3/4	.187	3/4	3/4	4	3/4	04612	SCHF6 750S
	.187	3/4	3/4	5	3/4	04613	SCHF6 750M

custom OAL / DOC available upon request.

# HIGH FEED END MILLS

## HFM5 SERIES 5 FLUTE END MILLS

- 5 Flute
- Variable Pitch for reduced chatter
- H6 Tolerance shank
- Standard in CTH Coating
- Relieved shank for reach in deep pockets



Diameter (D)	Program Radius	Length of Cut (LOC)	Reach (RN)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTH)	Part Number
1/4	.031	3/8	1	3	1/4	04705	HFM5 250S
	.031	3/8	2	4	1/4	04707	HFM5 250M
3/8	.047	5/8	1-1/2	4	3/8	04710	HFM5 375S
	.047	5/8	1-1/2	5	3/8	04712	HFM5 375SM
	.047	5/8	3	5	3/8	04714	HFM5 375M
	.047	5/8	2	6	3/8	04716	HFM5 375ML
	.047	5/8	4	6	3/8	04718	HFM5 375L
1/2	.062	3/4	1-1/2	4	1/2	04720	HFM5 500S
	.062	3/4	1-1/2	5	1/2	04722	HFM5 500SM
	.062	3/4	3	5	1/2	04724	HFM5 500M
	.062	3/4	2-1/2	6	1/2	04726	HFM5 500ML
	.062	3/4	4	6	1/2	04728	HFM5 500L

custom Diameter, OAL, and DOC available upon request.

Profile Milling				
Material	P Steels	Stainless Steel	K Cast Iron	S High Temp Alloy
Hardness	<50HRc	<50HRc	<50HRc	<50HRc
SFM	350-800	350-700	400-600	80-500
1/4	.004-.011	.004-.011	.004-.011	.004-.011
3/8	.006-.014	.006-.014	.006-.014	.006-.014
1/2	.008-.018	.008-.018	.008-.018	.008-.018

Use the lower end of SFM and IPT for harder, more difficult materials to machine.

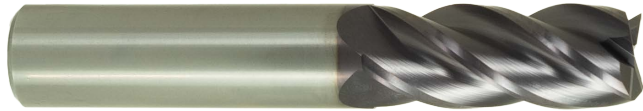
ADOC = 2.5-4% of the Diameter (use lower % for Harder materials)

# GENERAL PURPOSE END MILLS FOR STEEL

Sterling Edge general purpose end mills use a simple but highly effective geometry that's easier to produce allowing us to provide them at a more *easy on the wallet* price. We still use premium carbide substrates and coating though giving you a "general purpose" end mill that can often times outperform competitors more costly end mills.

## EM4 SERIES END MILLS

PAGE 18



## SCE2 SERIES EXTENDED REACH END MILLS

PAGE 19



## BN4 SERIES BALLNOSE END MILLS

PAGE 20



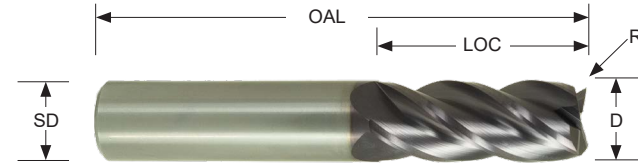
## SCE5 SERIES EXTENDED REACH END MILLS

PAGE 21



# EM4 SERIES END MILLS

- 4 Flute
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Standard with CTX coating
- Keep all square end variants in stock as well as popular radius
- Other Radius Available upon request



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number
1/16	SQ	1/4	2	1/8	00028	EMM4 062
5/64	SQ	1/4	2	1/8	00044	EMM4 078
3/32	SQ	3/8	2	1/8	00052	EMM4 093
1/8	SQ	1/2	2	1/8	00065	EMM4 125
	SQ	1	3	1/8	00075	EML4 125
5/32	SQ	1/2	2	3/16	00085	EMM4 157
3/16	SQ	1/2	2	3/16	00096	EMM4 187
	SQ	1	3	3/16	00105	EML4 187
1/4	SQ	3/4	2.5	1/4	00130	EMM4 250
	.062	3/4	2.5	1/4	00137	EMM4 250.062
	SQ	1	3	1/4	00140	EMML4 250
	.031	1	3	1/4	00136	EMML4 250.031
	SQ	1-1/2	4	1/4	00150	EML4 250
5/16	SQ	7/8	2.5	5/16	00180	EMM4 312
	SQ	1	3	5/16	00190	EMML4 312
	SQ	1-1/2	4	5/16	00200	EML4 312
3/8	SQ	1	2.5	3/8	00220	EMM4 375
	.031	1	2.5	3/8	00226	EMM4 375.031
	.062	1	2.5	3/8	00227	EMM4 375.062
	SQ	1-1/4	3	3/8	00230	EMML4 375
	.031	1-1/4	3	3/8	00236	EMML4 375.031
	SQ	2	4	3/8	00240	EML4 375
	.031	2	4	3/8	00246	EML4 375.031
1/2	SQ	1-1/4	3	1/2	00280	EMM4 500
	.031	1-1/4	3	1/2	00286	EMM4 500.031
	.062	1-1/4	3	1/2	00287	EMM4 500.062
	SQ	2	4	1/2	00290	EML4 500
	.031	2	4	1/2	00296	EML4 500.031
	SQ	3	6	1/2	00300	EMXL4 500
	.031	3	6	1/2	00306	EMXL4 500.031
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number

Continued on next page

## EM4 SERIES END MILLS

Continued...

Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number
5/8	SQ	1-1/2	4	5/8	00320	EMM4 625
	.031	1-1/2	4	5/8	00326	EMM4 625.031
	SQ	2-1/2	5	5/8	00330	EML4 625
	SQ	3	6	5/8	00340	EMXL4 625
	.031	3	6	5/8	00346	EMXL4 625.031
3/4	SQ	1-1/2	4	3/4	00360	EMM4 750
	SQ	2-1/4	5	3/4	00370	EML4 750
	SQ	3	6	3/4	00380	EMXL4 750
1	SQ	2	4	1	00410	EMM4 1000
	SQ	2.5	5	1	00420	EML4 1000
	SQ	3	6	1	00430	EMXL4 1000
Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number

## SCE2 SERIES EXTENDED REACH END MILLS

- 2 Flute
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Request a relief length for reach in deep pockets
- Standard with CTX and CTH coatings



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number -Coating (H / X)
1/32	SQ	3/16	2	1/8	02300	SCE2 031S-X
1/16	SQ	3/16	2	1/8	02310	SCE2 062S-X
	.010	3/16	2	1/8	02320	SCE2 062S.010-X
5/64	.010	3/16	2	1/8	02330	SCE2 078S.010-X
3/32	.010	3/16	2	1/8	02340	SCE2 093S.010-X
1/8	SQ	1/4	4	1/8	02350	SCE2 125L-X
	.010	1/4	4	1/8	02360	SCE2 125L.010-X
3/16	SQ	3/8	4	3/16	02390	SCE2 187L-X
	.020	3/8	4	3/16	02400	SCE2 187L.020-X
	.030	3/8	4	3/16	02420	SCE2 187L.030-X
1/4	SQ	1/2	4	1/4	02450	SCE2 250L-X
	.020	3/4	4	1/4	02460	SCE2 250L.020-H
	.020	3/4	4	1/4	02470	SCE2 250L.020-X
	.030	3/4	4	1/4	02490	SCE2 250L.030-H
	.030	3/4	4	1/4	02500	SCE2 250L.030-X
5/16	SQ	5/8	4	5/16	02510	SCE2 312L-X
	.030	5/8	4	5/16	02520	SCE2 312L.030-X
3/8	SQ	3/4	4	3/8	02530	SCE2 375L-X
	.030	3/4	4	3/8	02550	SCE2 375L.030-X
1/2	SQ	3/4	4	1/2	02560	SCE2 500L-X
	.030	3/4	4	1/2	02570	SCE2 500L.030-X

custom Diameter, OAL, and DOC available upon request.

## BN4 SERIES END MILLS

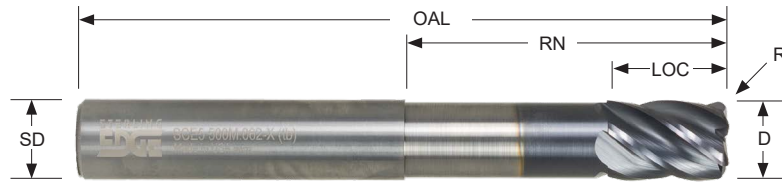
- 4 Flute Ballnose
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Standard with CTX coating
- Keep all variants in stock



Diameter (D)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number
1/16	1/8	2	1/8	01020	BNXS4 062
	1/4	2	1/8	01030	BNS4 062
	1/2	2	1/8	01040	BNM4 062
5/64	1/2	2	1/8	01050	BNM4 078
3/32	1/8	2	1/8	01060	BNS4 093
	1/2	2	1/8	01070	BNM4 093
1/8	1/2	2	1/8	01080	BNM4 125
	3/4	2.5	1/8	01090	BNL4 125
	1	3	1/8	01100	BNXL4 125
5/32	1/2	2	3/16	01110	BNM4 157
3/16	1/2	2	3/16	01120	BNM4 187
	3/4	2.5	3/16	01130	BNL4 187
	1-1/8	3	3/16	01140	BNXL4 187
1/4	3/4	2.5	1/4	01150	BNM4 250
	1	3	1/4	01160	BNML4 250
	1-1/8	3	1/4	01170	BNL4 250
5/16	1-1/2	4	1/4	01180	BNXL4 250
	7/8	2.5	5/16	01200	BNM4 312
3/8	1-1/2	4	5/16	01210	BNL4 312
	7/8	2.5	3/8	01220	BNM4 375
	1-1/4	3	3/8	01230	BNML4 375
1/2	1-1/2	4	3/8	01240	BNL4 375
	1-1/4	3	1/2	01260	BNM4 500
	2	4	1/2	01270	BNL4 500
5/8	3	6	1/2	01280	BNXL4 500
	1-1/4	3.5	5/8	01290	BNM4 625
Diameter (D)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP (CTX)	Part Number

# SCE5 SERIES EXTENDED REACH END MILLS

- 5 Flute
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Short LOC with Relieved Shank for increased strength reaching in deep pockets
- Standard with CTX and CTH coatings



Diameter (D)	Radius (R)	Length of Cut (LOC)	Reach (RN)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number-Coating H=CTH X=CTX
1/4	.031	5/8	5/8	2.5	1/4	02660	SCE5 250S.031-H
	.031	5/8	5/8	2.5	1/4	02670	SCE5 250S.031-X
	.031	5/8	1-1/2	3.5	1/4	02665	SCE5 250M.031-H
	.031	5/8	1-1/2	3.5	1/4	02675	SCE5 250M.031-X
	.031	5/8	2	4	1/4	02690	SCE5 250L.031-H
	.031	5/8	2	4	1/4	02700	SCE5 250L.031-X
3/8	.062	5/8	2	4	1/4	02710	SCE5 250L.062-X
	.031	3/4	3/4	3	3/8	02720	SCE5 375S.031-H
	.031	3/4	3/4	3	3/8	02730	SCE5 375S.031-X
	.062	3/4	3/4	3	3/8	02740	SCE5 375S.062-H
	.062	3/4	3/4	3	3/8	02750	SCE5 375S.062-X
	.031	3/4	2	4	3/8	02760	SCE5 375L.031-H
	.031	3/4	2	4	3/8	02770	SCE5 375L.031-X
	.062	3/4	2	4	3/8	02780	SCE5 375L.062-H
	.062	3/4	2	4	3/8	02790	SCE5 375L.062-X
	.031	3/4	3	6	3/8	02800	SCE5 375XL.031-H
1/2	.031	3/4	3	6	3/8	02810	SCE5 375XL.031-X
	.062	3/4	3	6	3/8	02820	SCE5 375XL.062-H
	.062	5/8	4	6	3/8	02830	SCE5 375XL.062-X
	.031	3/4	3/4	3	1/2	02840	SCE5 500S.031-H
	.031	3/4	3/4	3	1/2	02850	SCE5 500S.031-X
	.062	3/4	3/4	3	1/2	02860	SCE5 500S.062-H
	.062	3/4	3/4	3	1/2	02870	SCE5 500S.062-X
	.031	3/4	2	4	1/2	02880	SCE5 500M.031-H
	.031	3/4	2	4	1/2	02890	SCE5 500M.031-X
	.062	3/4	2	4	1/2	02900	SCE5 500M.062-H
	.062	3/4	2	4	1/2	02910	SCE5 500M.062-X
	.031	3/4	3	6	1/2	02930	SCE5 500XL.031-H
	.031	3/4	3	6	1/2	02940	SCE5 500XL.031-X
	.062	3/4	3	6	1/2	02950	SCE5 500XL.062-H
.062	3/4	3	6	1/2	02960	SCE5 500XL.062-X	

custom Diameter, OAL, and DOC available upon request.

# GENERAL PURPOSE END MILL SPEEDS AND FEEDS

Material	Profile Milling					
	P Steels			M Stainless Steels		
Type	Carbon <36HRc	Alloy <36HRc	Tool <36HRc	Free Machining <34HRc	Difficult <34HRc	PH <34HRc
SFM	250-400	250-300	100-175	250-300	150-200	80-200
1/8	.0005	.0004	.0003	.0005	.0004	.0004
3/16	.0008	.0007	.0006	.0008	.0007	.0007
1/4	.0012	.0011	.001	.0012	.001	.001
3/8	.002	.0017	.0016	.002	.0016	.0016
1/2	.0028	.0025	.0025	.0028	.0025	.0025
5/8	.0035	.0032	.0032	.0035	.0032	.0032
3/4	.004	.0035	.0035	.004	.0035	.0035
1	.005	.0045	.0045	.005	.0045	.0045

10xx, 11xx, 12xx, 13xx, 15xx, 40xx, 41xx, 43xx, 44xx, 51xx, 86xx, A2, H1, H13, L6, P20, S7, 303, 416, 420F, 430F, 440F, 304, 304L, 316, 316L, 13-8PH, 15-4PH, 16-6PH, 17-4PH Carpenter 450/468

Material	Profile Milling			
	K Cast Iron		S High Temp Alloy	
Type	Gray <34 HRc	Ductile <34HRc	Pure Ti <34HRc	Alloys <34HRc
SFM	250-350	150-250	120-250	50-100
1/8	.0006	.0004	.0005	.0004
3/16	.0009	.0007	.0008	.0006
1/4	.0014	.0011	.0012	.001
3/8	.002	.0017	.0018	.0016
1/2	.0028	.0025	.0026	.0024
5/8	.0036	.0032	.0033	.0032
3/4	.0040	.0035	.0036	.0035
1	.0047	.0045	.0046	.0045

Inconel, Monel, Waspaloy, Haynes, Grade 1, 2, 3, 4, 7, 12

For materials harder than listed HRC reduce SFM 20-35%.

**Slotting:**  
Take 75-125% of the Diameter to determine your ADOC, (use the lower-end for long cutters) and slightly reduce SFM and IPT. For Harder Materials use 60-75% Diameter.

**Finishing:**  
Take 4-6% of the Diameter to determine RDOC, and reduce feed slightly.

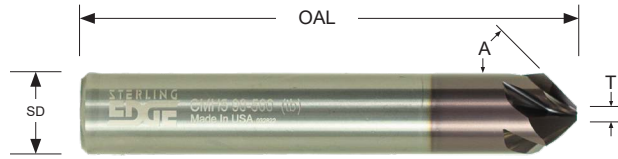
General Purpose - Steel

General Purpose - Steel

# CHAMFER END MILLS

## CMH5 SERIES END MILLS

- 5 Flute (Helix type)
- Superior finish compared to straight flute
- H6 Tolerance shank
- Standard with CTX coating, available with CTH
- Custom OAL made upon request



Angle (A)	Tip Diameter (T)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number
30	.060	2.5	1/4	07100	CMH5 60-250
	.070	3	3/8	07110	CMH5 60-375
	.080	3	1/2	07120	CMH5 60-500
45	.060	2.5	1/4	07140	CMH5 90-250
	.070	3	3/8	07150	CMH5 90-375
	.080	3	1/2	07160	CMH5 90-500
60	.060	2.5	1/4	07180	CMH5 120-250
	.070	3	3/8	07190	CMH5 120-375
	.080	3	1/2	07200	CMH5 120-500

## CMH5 SERIES SPEEDS AND FEEDS

Profile Milling				
Material	P Steels	Stainless Steel	K Cast Iron	S High Temp Alloy
Hardness	<36HRc	<36HRc	<36HRc	<36HRc
SFM	250-400	200-300	250-400	150-350
1/4	.0015	.0015	.002	.0012
3/8	.0025	.0025	.003	.0022
1/2	.003	.003	.0035	.0027

IPT values given for Effective Cutting Diameter near max of tool diameter. Reduce IPT equal to percent reduction in the Effective Cutting Diameter.

Ex. 1/2" Chamfer Mill cutting at the mid point (1/4" Eff. Cut Dia.) should reduce IPT by 50% giving you .0015" IPT in P steels

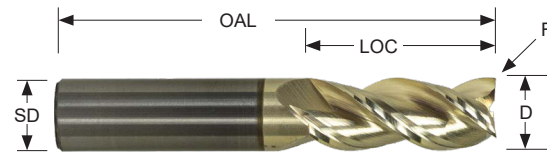
Materials Harder than 36HRc should reduce SFM by up to 40%

# EA3 SERIES END MILLS FOR ALUMINIUM

- 3 Flute 40 Deg. Helix
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Standard with ZRN coating
- Keep all square end variants in stock as well as popular radius
- Other Radius Available upon request

## EA3 SERIES SPEEDS AND FEEDS

Profile Milling		
Material	Wrought Aluminum	Cast Aluminum
SFM	1500-2000	800-1400
1/8	.0012-.0016	.002-.0024
3/16	.0019-.0023	.002-.0024
1/4	.0025-.0032	.0035-.0045
3/8	.0035-.0045	.0058-.0068
1/2	.005-.006	.007-.008
5/8	.006-.007	.0085-.0095
3/4	.007-.008	.010-.012



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number
1/8	SQ	1/4	2	1/8	07000	EA3 125S-Z
	SQ	1/2	2	1/8	07020	EA3 125SE-Z
	SQ	3/8	2.5	1/8	07040	EA3 125M-Z
	SQ	3/4	2.5	1/8	07060	EA3 125ME-Z
3/16	SQ	1/4	2	3/16	07100	EA3 187S-Z
	SQ	1/2	2	3/16	07120	EA3 187SE-Z
	SQ	3/8	2.5	3/16	07140	EA3 187M-Z
1/4	SQ	3/4	2.5	3/16	07160	EA3 187ME-Z
	SQ	3/8	2.5	1/4	07200	EA3 250S-Z
	SQ	3/4	2.5	1/4	07220	EA3 250SE-Z
3/8	SQ	1/2	3	1/4	07240	EA3 250M-Z
	SQ	1	3	1/4	07260	EA3 250ME-Z
	SQ	1/2	2.5	3/8	07300	EA3 375S-Z
	SQ	3/4	2.5	3/8	07320	EA3 375SE-Z
1/2	SQ	3/4	3	3/8	07340	EA3 375M-Z
	SQ	1-1/8	3	3/8	07360	EA3 375ME-Z
	SQ	3/4	3	1/2	07400	EA3 500S-Z
	SQ	1-1/4	3	1/2	07420	EA3 500SE-Z
5/8	SQ	1-1/8	4	1/2	07440	EA3 500M-Z
	SQ	1-5/8	4	1/2	07460	EA3 500ME-Z
	SQ	1-1/2	5	1/2	07480	EA3 500L-Z
	SQ	2-1/4	5	1/2	07500	EA3 500LE-Z
3/4	SQ	1-1/4	3.5	5/8	07600	EA3 625S-Z
	SQ	1-5/8	4	5/8	07640	EA3 625M-Z
	SQ	2-1/4	5	5/8	07680	EA3 625L-Z
Diameter (D)	SQ	1-5/8	4	3/4	07700	EA3 750S-Z
	SQ	2-1/4	5	3/4	07740	EA3 750M-Z
	SQ	3	6	3/4	07780	EA3 750L-Z

# GENERAL PURPOSE END MILLS FOR GRAPHITE

## GPE4 SERIES END MILLS

- 4 Flute
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Standard with CTD coating to hold up against highly abrasive materials
- Custom sizes made to fit your needs



Diameter (D)	Radius (R)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number
1/32	SQ	1/8	3	1/8	02045	GPE4 031L
1/16	SQ	1/2	3	1/8	02070	GPE4 062L
	.005	1/2	3	1/8	02110	GPE4 062L.005
1/8	SQ	1	3	1/8	02140	GPE4 125M
	.010	1	3	1/8	02150	GPE4 125M.010
	SQ	1	4	1/8	02120	GPE4 125L
1/4	SQ	1-1/2	4	1/4	02180	GPE4 250L
	.020	1-1/2	4	1/4	02185	GPE4 250L.020
	.031	1-1/2	4	1/4	02190	GPE4 250L.031
	.062	1-1/2	4	1/4	02200	GPE4 250L.062

Many of our customers using the GP series end mills require a relief after the flutes to reach into deep pockets. We can add custom reliefs to any of our GP series end mills to meet your requirements, typically in 1/4 inch increments. Examples to the right.



# GENERAL PURPOSE END MILLS FOR GRAPHITE

## GPB4 SERIES BALLNOSE END MILLS

- 4 Flute
- Center Cutting
- Faceted Relief
- H6 Tolerance shank
- Standard with CTD coating to hold up against highly abrasive materials
- Custom sizes made to fit your needs



Diameter (D)	Length of Cut (LOC)	Overall Length (OAL)	Shank Diameter (SD)	EDP	Part Number
1/32	1/8	3	1/8	02000	GPB4 031L
3/64	1/8	3	1/8	02008	GPB4 047L
1/16	1/2	3	1/8	02014	GPB4 062L
	1	3	1/8	02024	GPB4 125M
1/8	1	4	1/8	02022	GPB4 125L
	1	3	3/16	02026	GPB4 187M
3/16	1	3	3/16	02026	GPB4 187M
1/4	1-1/2	4	1/4	02028	GPB4 250L

## GPB4 SERIES SPEEDS AND FEEDS

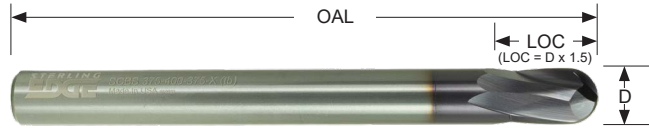
Profile Milling			
Material	Graphite		
Diameter	RPM	SFM	IPT (finish)
1/32	18k-50k	150-400	.0005-.001
1/16	12k-50k	200-1000	.0005-.001
1/8	6k-50k	200-2000	.0005-.001
3/16	4k-50k	200-2500	.0005-.001
1/4	3k-45k	200-3000	.001-.002
5/16	2.5k-37k	200-3000	.001-.002
3/8	2k-31k	200-3000	.001-.003
1/2	1.5k-23k	200-3000	.001-.003

1/16" and bigger cutters increase IPT x2 when roughing

# BALLNOSE END MILLS - MOLD AND DIE

## SCBS SERIES BALLNOSE END MILLS - STRAIGHT SHANK

- 2 Flute Ball
- Cutter geometry specifically designed for use in the Mold & Die industry
- H6 Tolerance shank
- Stocked with CTX and CTH coatings (Specify with "-X" or "-H" after Part Number)
- **Typical Length of Cut is 1.5x Diameter**



Diameter (D)	Overall Length (OAL)	EDP CTH	EDP CTX	Part Number -H for CTH/-X for CTX
1/8	2.5	00620	00622	SCBS 125-250-125-H/X
	4	00640	00642	SCBS 125-400-125-H/X
3/16	2.5	00654	00656	SCBS 187-250-187-H/X
	3	00664	00666	SCBS 187-300-187-H/X
	4	00676	00678	SCBS 187-400-187-H/X
	6	00688	00690	SCBS 187-600-187-H/X
1/4	2.5	00698	00700	SCBS 250-250-250-H/X
	3	00702	00704	SCBS 250-300-250-H/X
	4	00708	00710	SCBS 250-400-250-H/X
	6	00720	00722	SCBS 250-600-250-H/X
5/16	3	00734	00736	SCBS 312-300-312-H/X
	4	00738	00740	SCBS 312-400-312-H/X
	6	00752	00754	SCBS 312-600-312-H/X
3/8	2.5	00756	00758	SCBS 375-250-375-H/X
	4	00760	00762	SCBS 375-400-375-H/X
	6	00772	00774	SCBS 375-600-375-H/X
1/2	4	00786	00788	SCBS 500-400-500-H/X
	6	00794	00798	SCBS 500-600-500-H/X

## SCBS SERIES CUTTING CONDITIONS

Material	Hardened Steel 45-55HRc @ ≤ 15 deg		Hardened Steel 45-55HRc @ > 15 deg		Hardened Steel 55-62HRc @ ≤ 15 deg		Hardened Steel 55-62HRc @ > 15 deg		Depth of Cut
	RPM	IPM	RPM	IPM	RPM	IPM	RPM	IPM	
1/32	40K	250	40K	95	40k	155	40k	60	.002
1/16	40K	375	40K	155	40k	315	30k	90	.004
1/8	38K	425	25k	155	30k	280	15k	80	.005
3/16	27K	380	17k	120	20k	220	10k	70	.0065
1/4	20K	315	13k	100	15k	175	7500	60	.010
5/16	16K	250	10k	75	12k	140	6000	45	.012
3/8	13K	200	8400	65t	10k	115	5000	40	.020
1/2	8500	130	5700	45	6500	80	3400	25	.020

Up to 10% of Diameter Step Over

# SCBS SERIES BALLNOSE END MILLS - TAPER SHANK

- 2 Flute Ball
- Cutter geometry specifically designed for use in the Mold & Die industry
- H6 Tolerance shank
- Stocked with CTX and CTH coatings (Specify with "-X" or "-H" after Part Number)
- Tapered shanks for increased rigidity
- **Typical Length of Cut is 1.5x Diameter**



Diameter (D)	Overall Length (OAL)	Taper (T)	Shank Diameter (SD)	EDP CTH	EDP CTX	Part Number -H for CTH/-X for CTX
1/32	2	3	1/8	00516	-	SCBS 031-200-125-H
	2.5	3	1/4	00520	-	SCBS 031-250-250-H
3/64	2	3	1/8	-	00532	SCBS 047-200-125-X
1/16	2	3	1/8	00544	00546	SCBS 062-200-125-H/X
	2.5	3	1/4	00554	00556	SCBS 062-250-250-H/X
	3	5	1/4	00562	-	SCBS 062-300-250-H-T5
5/64	4	3	1/4	00564	00566	SCBS 062-400-250-H/X
	2	3	1/8	-	00568	SCBS 078-200-125-X
3/32	2	3	1/8	-	00572	SCBS 078-200-187-X
	2.5	3	1/4	00576	-	SCBS 078-250-250-H
	4	3	1/4	00584	00586	SCBS 093-200-125-H/X
1/8	2	3	1/4	00606	00608	SCBS 093-400-250-H
	2.5	3	1/4	00628	00630	SCBS 125-250-250-H
	3	3	1/4	00634	-	SCBS 125-300-250-H
	4	3	1/4	00646	00650	SCBS 125-400-250-H/X
3/16	4	3	3/8	00652	-	SCBS 125-400-375-H
	3	3	1/4	00668	-	SCBS 187-300-250-H
	3	5	1/4	00670	00672	SCBS 187-300-250-H-T5
	4	3	1/4	00680	00682	SCBS 187-400-250-H/X
	4	3	3/8	00684	00686	SCBS 187-400-375-H/X
1/4	6	3	3/8	00692	-	SCBS 187-600-375-H
	4	3	3/8	00712	00714	SCBS 250-400-375-H/X
	6	3	3/8	00724	00726	SCBS 250-600-375-H/X
5/16	4	3	3/8	-	00742	SCBS 312-400-375-X
3/8	4	3	1/2	00764	00766	SCBS 375-400-500-H/X
	6	3	1/2	00776	00778	SCBS 375-600-500-H/X
Diameter (D)	Overall Length (OAL)	Overall Length (OAL)	Overall Length (OAL)	EDP CTH	EDP CTX	Part Number -H for CTH/-X for CTX

## CARBIDE INSERT AND MODULAR TOOLING

We have developed our own in house line of inserts as well as offer various industry standard inserts. All our Sterling Edge designed inserts use premium carbide and coatings and are ground to the highest levels of precision to insure every insert swapped runs as true as the last one. We also have modular tooling to easily swap between different styles of insert quickly and easily during a job.

### BALLNOSE INSERT LINES

PAGE 30



### FLAT BOTTOM / BULLNOSE INSERT LINES

PAGE 33



### CARBIDE SHANK TOOL BODIES

PAGE 37



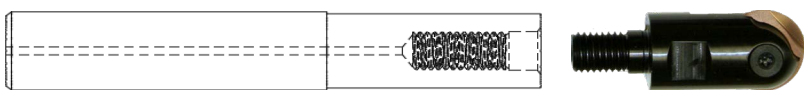
### STEEL SHANK TOOL BODIES

PAGE 39



### MODULAR TOOLING

PAGE 42



### BUTTON CUTTER AND SHELL MILL TOOLS

PAGE 46



## BALLNOSE INSERTS

### SEFIN - SERIES BALLNOSE INSERT

The workhorse of the family. Used from roughing to finishing. Its unique geometry allows for aggressive roughing passes and leaves behind a great surface after finishing. Stocked with both CTXR and CTH premium coatings, CTD available upon request.



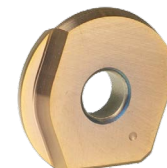
Diameter Inch	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
3/8	SEFIN 375-CTXR	30084	SEFIN 375-CTH	30080
1/2	SEFIN 500-CTXR	30096	SEFIN 500-CTH	30090
5/8	SEFIN 625-CTXR	30114	SEFIN 625-CTH	30110
3/4	SEFIN 750-CTXR	30132	SEFIN 750-CTH	30128
7/8	SEFIN 875-CTXR	30152	SEFIN 875-CTH	30148
1	SEFIN 100-CTXR	30014	SEFIN 100-CTH	30008
1-1/4	SEFIN 125-CTXR	30040	SEFIN 125-CTH	30036

Diameter Metric	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
10	SEFIN 10-CTXR	30004	SEFIN 10-CTH	30002
12	SEFIN 12-CTXR	30032	SEFIN 12-CTH	30030
16	SEFIN 16-CTXR	30056	SEFIN 16-CTH	30052
20	SEFIN 20-CTXR	30066	SEFIN 20-CTH	30062
25	SEFIN 25-CTXR	30070	SEFIN 25-CTH	30068
30	SEFIN 30-CTXR	30076	SEFIN 30-CTH	30072

Use in the following series of holders: SEF steel bodies (page 39), SEFSC carbide shank bodies (page 37), SESHF Modular heads (page 42).

### SEFHSIN - SERIES BALLNOSE INSERT

The SEFHSIN or *High Speed* series was designed for light finish cuts, with high RPM's and feed rates. With its neutral rake angle and center cutting geometry, you get the best possible finish. Stocked with both CTXR and CTH premium coatings.



Diameter Inch	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
3/8	SEFHSIN 375-CTXR	30832	SEFHSIN 375-CTH	30830
1/2	SEFHSIN 500-CTXR	30836	SEFHSIN 500-CTH	30834
5/8	SEFHSIN 625-CTXR	30840	SEFHSIN 625-CTH	30838
3/4	SEFHSIN 750-CTXR	30844	SEFHSIN 750-CTH	30842
1	SEFHSIN 100-CTXR	30804	SEFHSIN 100-CTH	30802

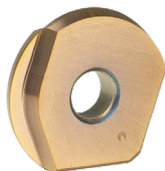
Use in the following series of holders: SEF steel bodies (page 39), SEFSC carbide shank bodies (page 37), SESHF Modular heads (page 42).



## BALLNOSE INSERTS

### SEFHSIN - SERIES BALLNOSE INSERT Continued...

The SEFHSIN or *High Speed* series was designed for light finish cuts, with high RPM's and feed rates. With its neutral rake angle and center cutting geometry, you get the best possible finish. Stocked with both CTRX and CTH premium coatings.

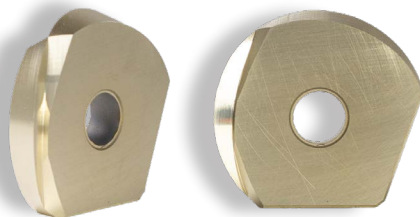


Diameter Metric	Part Number (CTRX)	EDP (CTRX)	Part Number (CTH)	EDP (CTH)
10	SEFHSIN 10-CTRX	30800	SEFHSIN 10-CTH	30801
12	SEFHSIN 12-CTRX	30808	SEFHSIN 12-CTH	30806
16	SEFHSIN 16-CTRX	30816	SEFHSIN 16-CTH	30814
20	SEFHSIN 20-CTRX	30822	SEFHSIN 20-CTH	30820
25	SEFHSIN 25-CTRX	30826	SEFHSIN 25-CTH	30824

Use in the following series of holders: SEF steel bodies (page 39), SEFSC carbide shank bodies (page 37), SESHF Modular heads (page 42).

### SECIN - SERIES BALLNOSE INSERT

The SECIN or *Curve* insert series was designed for use in aluminium and other non ferrous materials. Its Helical style cutting edge and positive rake angle provide a superior finish. Standard with our ZRN coating.



Diameter Inch	Part Number (ZRN)	EDP (ZRN)	Diameter Metric	Part Number (ZRN)	EDP (ZRN)
3/8	SECIN 375-ZRN	30684	10	SECIN 10-ZRN	30649
1/2	SECIN 500-ZRN	30692	12	SECIN 12-ZRN	30666
5/8	SECIN 625-ZRN	30698	16	SECIN 16-ZRN	30667
3/4	SECIN 750-ZRN	30708	20	SECIN 20-ZRN	30676
1	SECIN 100-ZRN	30662	25	SECIN 25-ZRN	30677

Use in the following series of holders: SEF steel bodies (page 39), SEFSC carbide shank bodies (page 37), SESHF Modular heads (page 42).

## BALLNOSE INSERTS SPEEDS AND FEEDS

Material	P Steels 1018, 1020, 4140, 4150, P-20			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	4000-5000	40-60	.012-.032	.012-.020
1/2 - 12mm	3000-4000	40-60	.020-.040	.012-.020
5/8 - 16mm	3000-4000	40-60	.020-.040	.012-.032
3/4 - 20mm	2800-3400	60-80	.020-.040	.012-.032
1 - 25mm	2800-3400	60-100	.020-.060	.012-.040
1-1/4 - 32mm	2000-3000	60-100	.032-.060	.012-.064

Material	P Steels Tool Steel: A2, D2, S7, GM190			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	3500-4500	40-60	.010-.020	.010-.015
1/2 - 12mm	2600-3200	60-80	.010-.024	.010-.020
5/8 - 16mm	2200-2800	60-80	.010-.030	.010-.030
3/4 - 20mm	2200-2800	60-100	.015-.040	.010-.030
1 - 25mm	2200-2800	60-150	.020-.060	.020-.050
1-1/4 - 32mm	2000-2600	60-200	.020-.080	.020-.100

Material	K Steels Cast, Nodular, Ductile			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	4500-5500	60-100	.012-.032	.012-.020
1/2 - 12mm	2400-3600	60-100	.020-.040	.012-.032
5/8 - 16mm	2400-3600	80-150	.020-.045	.012-.032
3/4 - 20mm	2000-3200	80-150	.020-.080	.012-.040
1 - 25mm	2000-3200	80-200	.020-.120	.020-.060
1-1/4 - 32mm	2000-3000	80-200	.020-.200	.020-.100

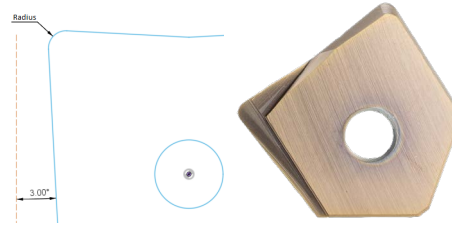
**Hardened Material:** Reduce parameters by 30% for a starting point.

Profile Milling				
Material	Aluminium			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	20000	400	.025	.012-.020
1/2 - 12mm	15000	300	.030	.012-.032
5/8 - 16mm	12000	240	.035	.012-.032
3/4 - 20mm	10000	200	.035	.012-.040
1 - 25mm	7500	150	.04	.020-.060

## FLAT BOTTOM / BULLNOSE INSERTS

### SEFBDIN - SERIES FLAT BOTTOM INSERT

The SEFBDIN or *Backdraft* insert series gets its name from having a 3 degree clearance or “backdraft” along the side of the insert. This creates less drag and spindle load when pocketing or profile milling up to a wall. CTD coating available upon request.



Diameter Inch	Radius	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
3/8	.031	SEFBDIN 375-CTXR.031	30534	SEFBDIN 375-CTH.031	30524
	.062	SEFBDIN 375-CTXR.062	30536	SEFBDIN 375-CTH.062	30526
1/2	.031	SEFBDIN 500-CTXR.031	30560	SEFBDIN 500-CTH.031	30550
	.062	SEFBDIN 500-CTXR.062	30562	SEFBDIN 500-CTH.062	30552
	.125	SEFBDIN 500-CTXR.125	30564	SEFBDIN 500-CTH.125	30554
5/8	.031	SEFBDIN 625-CTXR.031	30576	SEFBDIN 625-CTH.031	30570
	.062	SEFBDIN 625-CTXR.062	30578	SEFBDIN 625-CTH.062	30572
	.125	SEFBDIN 625-CTXR.125	30579	SEFBDIN 625-CTH.125	30574
3/4	.031	SEFBDIN 750-CTXR.031	30592	SEFBDIN 750-CTH.031	30584
	.062	SEFBDIN 750-CTXR.062	30594	SEFBDIN 750-CTH.062	30586
	.125	SEFBDIN 750-CTXR.125	30596	SEFBDIN 750-CTH.125	30588
1	.031	SEFBDIN 100-CTXR.031	30422	SEFBDIN 100-CTH.031	30412
	.062	SEFBDIN 100-CTXR.062	30424	SEFBDIN 100-CTH.062	30414
	.125	SEFBDIN 100-CTXR.125	30426	SEFBDIN 100-CTH.125	30416
1-1/4	.062	SEFBDIN 125-CTXR.062	30460	SEFBDIN 125-CTH.062	30452
	.125	SEFBDIN 125-CTXR.125	30462	SEFBDIN 125-CTH.125	30454

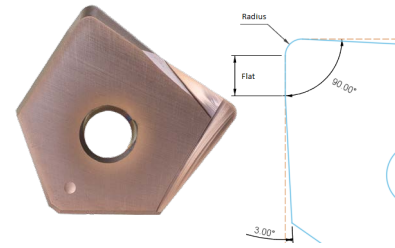
Diameter Metric	Radius	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
10	1.0	SEFBDIN 10-CTXR-1.0	30406	SEFBDIN 10-CTH-1.0	30402
	1.5	SEFBDIN 10-CTXR-1.5	30408	SEFBDIN 10-CTH-1.5	30404
12	1.0	SEFBDIN 12-CTXR-1.0	30444	SEFBDIN 12-CTH-1.0	30438
	1.5	SEFBDIN 12-CTXR-1.5	30446	SEFBDIN 12-CTH-1.5	30440
	2.0	SEFBDIN 12-CTXR-2.0	30448	SEFBDIN 12-CTH-2.0	30442
16	1.0	SEFBDIN 16-CTXR-1.0	30474	SEFBDIN 16-CTH-1.0	30466
	1.5	SEFBDIN 16-CTXR-1.5	30476	SEFBDIN 16-CTH-1.5	30468
	2.0	SEFBDIN 16-CTXR-2.0	30478	SEFBDIN 16-CTH-2.0	30470
20	1.0	SEFBDIN 20-CTXR-1.0	30494	SEFBDIN 20-CTH-1.0	30486
	1.5	SEFBDIN 20-CTXR-1.5	30496	SEFBDIN 20-CTH-1.5	30488
	2.0	SEFBDIN 20-CTXR-2.0	30498	SEFBDIN 20-CTH-2.0	30506
25	1.0	SEFBDIN 25-CTXR-1.0	30508	SEFBDIN 25-CTH-1.0	30502
	1.5	SEFBDIN 25-CTXR-1.5	30510	SEFBDIN 25-CTH-1.5	30504
	2.0	SEFBDIN 25-CTXR-2.0	30512	SEFBDIN 25-CTH-2.0	30506

Use in the following series of holders: SEFB steel bodies (page 41), SEFBSC carbide shank bodies (page 38), SESHFB Modular heads (page 42).

## FLAT BOTTOM / BULLNOSE INSERTS

### SESWEEP - SERIES FLAT BOTTOM INSERT

The SESWEEP or *sweep* insert series gets its name from having a small 90 degree side “wiper” tangent to the radius before going into a 3 degree backdraft. This creates incredibly smooth side walls when pocketing by reducing chatter compared to a non-backdraft style insert. CTD coating available upon request.



Diameter Inch	Radius	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
3/8	.031	SESWEEP 375-CTXR.031	31244	SESWEEP 375-CTH.031	31236
	.062	SESWEEP 375-CTXR.062	31246	SESWEEP 375-CTH.062	31238
1/2	.031	SESWEEP 500-CTXR.031	31272	SESWEEP 500-CTH.031	31262
	.062	SESWEEP 500-CTXR.062	31274	SESWEEP 500-CTH.062	31264
	.125	SESWEEP 500-CTXR.125	31276	SESWEEP 500-CTH.125	31266
5/8	.031	SESWEEP 625-CTXR.031	31298	SESWEEP 625-CTH.031	31292
	.062	SESWEEP 625-CTXR.062	31300	SESWEEP 625-CTH.062	31294
	.125	SESWEEP 625-CTXR.125	31302	SESWEEP 625-CTH.125	31296
3/4	.031	SESWEEP 750-CTXR.031	31318	SESWEEP 750-CTH.031	31312
	.062	SESWEEP 750-CTXR.062	31320	SESWEEP 750-CTH.062	31314
	.125	SESWEEP 750-CTXR.125	31322	SESWEEP 750-CTH.125	31316
1	.031	SESWEEP 100-CTXR.031	31170	SESWEEP 100-CTH.031	31164
	.062	SESWEEP 100-CTXR.062	31172	SESWEEP 100-CTH.062	31166
	.125	SESWEEP 100-CTXR.125	31174	SESWEEP 100-CTH.125	31168
1-1/4	.125	SESWEEP 125-CTXR.125	31200	SESWEEP 125-CTH.125	31198

Diameter Metric	Radius	Part Number (CTXR)	EDP (CTXR)	Part Number (CTH)	EDP (CTH)
10	1.0	SESWEEP 10-CTXR-1.0	31156	SESWEEP 10-CTH-1.0	31152
	1.5	SESWEEP 10-CTXR-1.5	31192	SESWEEP 10-CTH-1.5	31186
12	1.0	SESWEEP 12-CTXR-1.0	31192	SESWEEP 12-CTH-1.0	31186
	1.5	SESWEEP 12-CTXR-1.5	31194	SESWEEP 12-CTH-1.5	31188
16	1.0	SESWEEP 16-CTXR-1.0	31206	SESWEEP 16-CTH-1.0	31202
	1.5	SESWEEP 16-CTXR-1.5	31208	SESWEEP 16-CTH-1.5	31204
20	1.0	SESWEEP 20-CTXR-1.0	31218	SESWEEP 20-CTH-1.0	31212
	1.5	SESWEEP 20-CTXR-1.5	31220	SESWEEP 20-CTH-1.5	31214
	2.0	SESWEEP 20-CTXR-2.0	31222	SESWEEP 20-CTH-2.0	31216
25	2.0	SESWEEP 25-CTXR-2.0	31228	SESWEEP 25-CTH-2.0	31226

Use in the following series of holders: SEFB steel bodies (page 41), SEFBSC carbide shank bodies (page 38), SESHFB Modular heads (page 42).

## FLAT BOTTOM / BULLNOSE INSERTS

### SESWEEP - PCD DIAMOND TIPPED

Sweep series Insert with a PCD Diamond corner braised on. For use on highly abrasive materials. Significantly outperforms CTD coating.



Diameter	Radius	Part Number	EDP (PCD)
3/8	.031	SESWEEP 375-PCD.031	31248
	.062	SESWEEP 375-PCD.062	31250
1/2	.031	SESWEEP 500-PCD.031	31278
	.062	SESWEEP 500-PCD.062	31282
3/4	.031	SESWEEP 750-PCD.031	31324
	.062	SESWEEP 750-PCD.062	31326
1	.062	SESWEEP 100-PCD.062	31176

Use in the following series of holders: SEFB steel bodies (page 41), SEFBSC carbide shank bodies (page 38), SESHFB Modular heads (page 42).

## FLAT BOTTOM / BULLNOSE INSERTS

### SEFMIN - SERIES HIGH FEED MILL INSERT

The SEFMIN or *Feed Mill* insert series is designed for today's demand for high feed machining. Its unique corner design creates an incredibly strong insert to hold up in tool steels as hard as 65HRC. Stocked with our CTH coating to hold up to the increased heat generated in high feed machining.



Diameter	Corner Radius	Program Radius	Part Number	EDP (CTH)
3/8	.015	.030	SEFMIN 375-CTH	30924
1/2	.035	.055	SEFMIN 500-CTH	30932
5/8	.045	.070	SEFMIN 625-CTH	30938
3/4	.060	.085	SEFMIN 750-CTH	30942
1	.075	.110	SEFMIN 100-CTH	30904

Use in the following series of holders: SEF steel bodies (page 39), SEFSC carbide shank bodies (page 37), SESHF Modular heads (page 42).

### FLAT BOTTOM INSERT SPEEDS AND FEEDS

Material	P Steels 1018, 1020, 4140, 4150, P-20			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	6000	60-90	.015-.020	.020-.030
1/2 - 12mm	5000	60-110	.015-.025	.020-.030
5/8 - 16mm	4000	60-110	.020-.030	.020-.030
3/4 - 20mm	3500	70-140	.020-.030	.020-.030
1 - 25mm	3000	70-150	.030-.040	.020-.030
1-1/4 - 32mm	2400	70-150	.030-.040	.020-.030

Material	P Steels Tool Steel: A2, D2, S7, GM190			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	5000	40-60	.015-.020	.020-.030
1/2 - 12mm	4000	40-60	.020-.030	.020-.030
5/8 - 16mm	3600	40-70	.030-.040	.020-.030
3/4 - 20mm	3000	40-70	.030-.050	.020-.030
1 - 25mm	2400	50-80	.030-.060	.020-.030
1-1/4 - 32mm	2000	50-80	.030-.060	.020-.030

Material	K Steels Cast, Nodular, Ductile			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	7000	70-90	.015-.020	.020-.030
1/2 - 12mm	6500	70-90	.015-.025	.020-.030
5/8 - 16mm	6000	70-100	.020-.030	.020-.030
3/4 - 20mm	6000	80-110	.020-.040	.020-.030
1 - 25mm	4500	80-130	.030-.060	.020-.030
1-1/4 - 32mm	3000	80-130	.030-.080	.020-.030

Hardened Material: Reduce parameters by 30% for a starting point.

### HIGH FEED MILL INSERT SPEEDS AND FEEDS

Material	P Steels 1018, 1020, 4140, 4150, P-20			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	6000	150	.015	.050
1/2 - 12mm	5000	150	.015-.020	.070
5/8 - 16mm	4500	150	.020-.025	.080
3/4 - 20mm	3000	170	.020-.040	.100
1 - 25mm	2800	170	.025-.040	.125
1-1/4 - 32mm	2400	180	.030-.050	.150

Material	P Steels Tool Steel: A2, D2, S7, GM190			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	5000	120	.015	.050
1/2 - 12mm	4000	120	.015-.020	.070
5/8 - 16mm	3500	130	.015-.025	.080
3/4 - 20mm	2800	150	.020-.030	.100
1 - 25mm	2400	160	.025-.040	.125
1-1/4 - 32mm	2200	160	.030-.050	.150

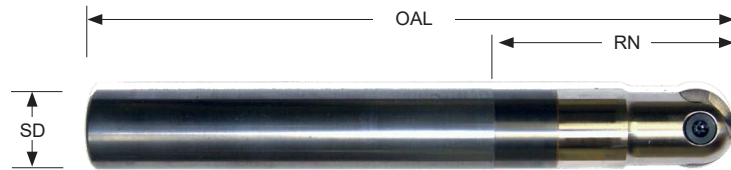
Material	K Steels Cast, Nodular, Ductile			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	6000	150	.015	.050
1/2 - 12mm	5000	150	.020-.025	.070
5/8 - 16mm	4500	150	.020-.030	.080
3/4 - 20mm	3000	180	.020-.045	.125
1 - 25mm	3000	180	.030-.050	.150
1-1/4 - 32mm	2800	190	.030-.050	.170

Hardened Material: Reduce parameters by 30% for a starting point.

## CARBIDE SHANK TOOL BODIES

Our carbide shank tool bodies for our proprietary inserts use a solid carbide shank with a braised on steel head for maximum rigidity when milling hard materials or when reaching into deep pockets. H6 tolerance shank for use in shrink fit and hydraulic holders. Custom Relief lengths upon request.

### SEFSC - BALLNOSE CARBIDE SHANK TOOL BODIES



Insert Diameter	RN*	OAL		SD		Part Number	EDP
		Inch	Metric	Inch	Metric		
3/8 & 10mm	1	4	100	-	10	SEFSC 10-400-10	60300
	1	6	150	-	10	SEFSC 10-600-10	60302
	1	4	100	3/8	-	SEFSC 375-400-375	60332
	1	6	150	3/8	-	SEFSC 375-600-375	60334
1/2 & 12mm	1.5	4	100	-	12	SEFSC 12-400-12	60310
	1.5	6	150	-	12	SEFSC 12-600-12	60312
	1.5	8	200	-	12	SEFSC 12-800-12	60314
	1.5	4	100	1/2	-	SEFSC 500-400-500	60336
	1.5	6	150	1/2	-	SEFSC 500-600-500	60338
	1.5	8	200	1/2	-	SEFSC 500-800-500	60340
5/8 & 16mm	1.5	6	150	-	16	SEFSC 16-600-16	60316
	1.5	8	200	-	16	SEFSC 16-800-16	60318
	1.5	6	150	5/8	-	SEFSC 625-600-625	60342
	1.5	8	200	5/8	-	SEFSC 625-800-625	60344
3/4	1.5	6	150	-	18	SEFSC 750-600-18	60348
	1.5	8	200	-	18	SEFSC 750-800-18	60352
	1.5	4	100	3/4	-	SEFSC 750-400-750	60346
	1.5	6	150	3/4	-	SEFSC 750-600-750	60350
20mm	1.5	4	100	-	20	SEFSC 20-400-20	60320
	1.5	6	150	-	20	SEFSC 20-600-20	60322
	1.5	8	200	-	20	SEFSC 20-800-20	60326
1 & 25mm	2	6	150	-	25	SEFSC 25-600-25	60328
	2	8	200	-	25	SEFSC 25-800-25	60330
	2	6	150	1	-	SEFSC 100-600-100	60306
	2	8	200	1	-	SEFSC 100-800-100	60308
	2	10	250	1	-	SEFSC 100-1000-100	60304

\* Specify custom RN lengths when ordering, RN lengths up to 4" free of charge.

## CARBIDE SHANK TOOL BODIES

### SEFBSC - FLAT BOTTOM INSERT CARBIDE SHANK TOOL BODIES



Insert Diameter	RN*	OAL		SD		Part Number	EDP
		Inch	Metric	Inch	Metric		
3/8 & 10mm	1	4	100	-	10	SEFBSC 10-400-10	60400
	1	6	150	-	10	SEFBSC 10-600-10	60402
	1	4	100	3/8	-	SEFBSC 375-400-375	60438
	1	6	150	3/8	-	SEFBSC 375-600-375	60440
1/2 & 12mm	1.5	4	100	-	12	SEFBSC 12-400-12	60410
	1.5	6	150	-	12	SEFBSC 12-600-12	60412
	1.5	8	200	-	12	SEFBSC 12-800-12	60414
	1.5	4	100	1/2	-	SEFBSC 500-400-500	60444
	1.5	6	150	1/2	-	SEFBSC 500-600-500	60446
	1.5	8	200	1/2	-	SEFBSC 500-800-500	60448
5/8 & 16mm	1.5	4	100	-	16	SEFBSC 16-400-16	60416
	1.5	6	150	-	16	SEFBSC 16-600-16	60420
	1.5	4	100	5/8	-	SEFBSC 625-400-625	60450
	1.5	6	150	5/8	-	SEFBSC 625-600-625	60452
	1.5	8	200	5/8	-	SEFBSC 625-800-625	60456
	1.5	8	200	-	15	SEFBSC 625-800-15	60454
3/4	1.5	6	150	-	18	SEFBSC 750-600-18	60460
	1.5	8	200	-	18	SEFBSC 750-800-18	60464
	1.5	4	100	3/4	-	SEFBSC 750-400-750	60458
	1.5	6	150	3/4	-	SEFBSC 750-600-750	60462
	1.5	8	200	3/4	-	SEFBSC 750-800-750	60466
1 & 25mm	2	6	150	-	25	SEFBSC 25-600-25	60434
	2	8	200	-	25	SEFBSC 25-800-25	60436
	2	6	150	1	-	SEFBSC 100-600-100	60406
	2	8	200	1	-	SEFBSC 100-800-100	60408
	2	10	250	1	-	SEFBSC 100-1000-100	60404

\* Specify custom RN lengths when ordering, RN lengths up to 4" free of charge.

## STEEL SHANK TOOL BODIES

Our steel shank tool bodies are a highly accurate, lower cost option for our proprietary insert line. H6 tolerance shank for use in shrink fit and hydraulic holders as well as weldon flat options on certain sizes.

### SEF - BALLNOSE STEEL SHANK TOOL BODIES



Insert Diameter	RN	OAL Inch	SD Inch	SD Metric	Weldon Flat	Part Number	EDP
3/8 & 10mm	3/4	4	3/8	-	W	SEF 375-400-375	60084
	2	4	3/8	-	-	SEF 375-400-375-LR	60086
	1/2	4	1/2	-	-	SEF 375-400-500	60088
	3/4	6	3/8	-	W	SEF 375-600-375	60090
	5/8	6	1/2	-	W	SEF 375-600-500 ST	60092
	1/2 & 12mm	3/4	4	-	12	-	SEF 12-100-12
1		6	-	12	-	SEF 12-150-12	60044
1		4	1/2	-	W	SEF 500-400-500	60100
2		4	1/2	-	-	SEF 500-400-500-LR	60102
3-1/4		5-1/4	1/2	-	-	SEF 500-525-500-LR	60106
2		6	1/2	-	W	SEF 500-600-500	60110
3/4		4	5/8	-	W	SEF 500-400-625	60104
3/4		6	5/8	-	W	SEF 500-600-625 ST	60114
3/4		6	5/8	-	W	SEF 500-600-625 LT	60112
3/4		6	3/4	-	W	SEF 500-600-750-ST	60118
5/8 & 16mm	1	6	3/4	-	W	SEF 500-600-750-LT	60116
	3/4	4	-	16	-	SEF 16-100-16	60060
	2-1/4	6	-	16	-	SEF 16-150-16	60064
	3-1/4	8	-	16	-	SEF 16-200-16	60066
	2	6	5/8	-	W	SEF 625-600-625	60128
1	8	3/4	-	W	SEF 625-800-750	60134	
Insert Diameter	RN	OAL Inch	SD Inch	SD Metric	Weldon Flat	Part Number	EDP

Continued on next page...

## STEEL SHANK TOOL BODIES

### SEF - BALLNOSE STEEL SHANK TOOL BODIES



Continued...

Insert Diameter	RN	OAL Inch	SD Inch	SD Metric	Weldon Flat	Part Number	EDP
3/4	1	4	3/4	-	W	SEF 750-400-750	60136
	2-1/2	4.5	3/4	-	-	SEF 750-451-750	60138
	1-3/4	6	3/4	-	W	SEF 750-600-750	60150
	1-1/4	6	-	18	-	SEF 750-600-18mm	60148
	2	8	-	18	-	SEF 750-800-18mm	60160
	3-1/4	6-1/4	3/4	-	-	SEF 750-626-750	60152
	1	6.5	1	-	W	SEF 750-650-100	60154
	2-1/2	8	3/4	-	W	SEF 750-800-750	60162
	1-1/4	9	1	-	W	SEF 750-900-100	60164
	1 & 25mm	1-1/4	6	-	25	-	SEF 100-600-25mm
2-3/4		8	-	25	-	SEF 100-800-25mm	60036
2		10	-	25	-	SEF 100-1000-25mm	60012
3-1/4		12	-	25	-	SEF 100-1200-25mm	60016
1		4	1	-	-	SEF 100-400-100	60018
3		5-1/4	1	-	W	SEF 100-525-100	60022
2-3/4		6	1	-	W	SEF 100-600-100	60024
2-3/4		8	1	-	W	SEF 100-800-100	60034
2		10	1	-	-	SEF 100-1000-100	60010
3-1/4		12	1	-	W	SEF 100-1200-100	60014
1-1/4 & 30mm & 32mm	4.5	8	-	32	-	SEF 32-200-32	60080
	3.5	10	-	32	-	SEF 32-250-32	60082
	3	6	1-1/4	-	W	SEF 125-600-125	60054
	4	7.5	1-1/4	-	W	SEF 125-750-125	60056
	5-3/4	9	1-1/4	-	W	SEF 125-900-125	60058
	5	12	1-1/4	-	W	SEF 125-1200-125	60052
Insert Diameter	RN	OAL Inch	SD Inch	SD Metric	Weldon Flat	Part Number	EDP

# STEEL SHANK TOOL BODIES

## SEFB - FLAT BOTTOM STEEL SHANK TOOL BODIES



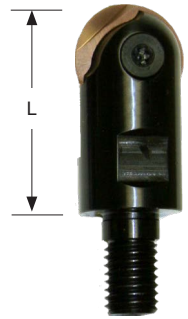
Insert Diameter	RN	OAL Inch	Inch	SD Metric	Weldon Flat	Part Number	EDP
3/8 & 10mm	1	4	3/8	-	W	SEFB 375-400-375	60250
	1	6	3/8	-	W	SEFB 375-600-375	60254
	1	6	-	9	-	SEFB 375-600-9mm	60256
1/2 & 12mm	1	4.5	-	12	-	SEFB 12-100-12	60218
	1	6	-	12	-	SEFB 12-150-12	60220
	1	6	-	16	-	SEFB 12-150-16	60222
	1	4	1/2	-	W	SEFB 500-400-500	60260
5/8 & 16mm	2	6	1/2	-	W	SEFB 500-600-500	60264
	1	6	5/8	-	W	SEFB 500-600-625	60266
	2	6	-	16	-	SEFB 16-150-16	60232
	3.5	8	-	16	-	SEFB 16-200-16	60234
	2.5	6	5/8	-	W	SEFB 625-600-625	60270
	2.5	8	5/8	-	W	SEFB 625-800-625	60274
3/4	1	6	-	15	-	SEFB 625-600-15mm	60268
	2.5	8	-	15	-	SEFB 625-800-15mm	60272
	1	4	3/4	-	W	SEFB 750-400-750	60278
	2.5	6	3/4	-	W	SEFB 750-600-750	60284
	2.5	8	3/4	-	W	SEFB 750-800-750	60290
	1-1/4	6	-	18	-	SEFB 750-600-18mm	60282
1 & 25mm	1-1/4	8	-	18	-	SEFB 750-800-18mm	60288
	1-1/4	6	1	-	-	SEFB 750-600-100	60280
	1-1/4	8	1	-	W	SEFB 750-800-100	60286
	2	6	1	-	W	SEFB 100-600-100	60208
1-1/4 & 32mm	2.5	8	1	-	W	SEFB 100-800-100	60214
	2.5	10	1	-	W	SEFB 100-1000-100	60204
	2	6	-	25	-	SEFB 100-600-25mm	60212
	2.5	8	-	25	-	SEFB 100-800-25mm	60216
	3.5	10	-	25	-	SEFB 100-1000-25mm	60206
1-1/4 & 32mm	3-1/4	6	1-1/4	-	W	SEFB 125-600-125	60224
	3-1/4	7.5	1-1/4	-	W	SEFB 125-750-125	60226
	4.5	9	1-1/4	-	W	SEFB 125-900-125	60228
Insert Diameter	RN	OAL Inch	Inch	SD Metric	Weldon Flat	Part Number	EDP

# MODULAR TOOLING

Sterling Edge's modular line of tools offer flexibility in cutting head styles and the benefit of extending out where reach is critical. We have screw-on heads for our proprietary line of inserts as well as some button cutter and high feed mill inserts. Paired with one of our extensions, you get flexibility without sacrificing precision and quality.

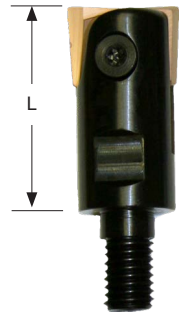
## SESHF - BALL NOSE INSERT SCREW-ON HEADS

Insert Diameter	Thread	Length (L)	Part Number	EDP
1/2-12mm	M6	1	SESHF 500-M6	60936
5/8-16mm	M8	1-1/4	SESHF 625-M8	60938
3/4	M10	1-1/2	SESHF 750-M10	60940
20mm	M10	1-1/2	SESHF 20mm-M10	60932
1-25mm	M12	1-3/4	SESHF 100-M12	60926
1-1/4-32mm	M16	2	SESHF 125-M16	60928



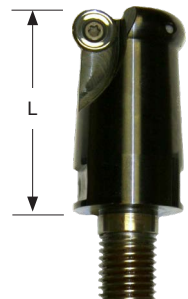
## SESHFB - FLAT BOTTOM INSERT SCREW-ON HEADS

Insert Diameter	Thread	Length (L)	Part Number	EDP
1/2-12mm	M6	1	SESHFB 500-M6	60950
5/8-16mm	M8	1-1/4	SESHFB 625-M8	60952
3/4	M10	1-1/2	SESHFB 750-M10	60954
20mm	M10	1-1/2	SESHFB 20mm-M10	60946
1-25mm	M12	1-3/4	SESHFB 100-M12	60942
1-1/4-32mm	M16	2	SESHFB 125-M16	60944



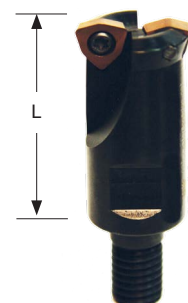
## SESBC - BUTTON INSERT SCREW-ON HEADS

Button Insert Diameter	Thread	Length (L)	Flutes	Part Number	EDP
8mm	M10	1-1/2	2	SESBC 750	60924
12mm	M10	1-3/4	2	SESBC 100	60910
	M16	2	2	SESBC 125	60912
	M16	2	3	SESBC 125-3	60914



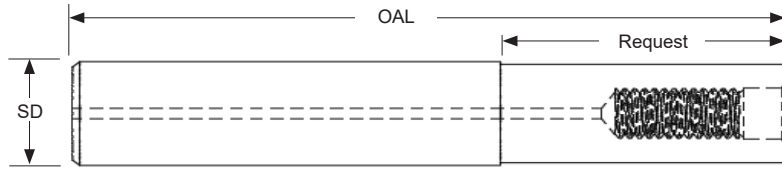
## SESHFM - HIGH FEED INSERT SCREW-ON HEADS

High Feed Insert	Thread	Length (L)	Flutes	Part Number	EDP
SEFM10	M12	1-3/4	2	SESHFM 100-M12	60956
	M16	2	3	SESHFM 125-M16	60958



**SOLID CARBIDE MODULAR EXTENSIONS**

- 100% carbide for maximum strength
- H6 Shank Tolerance
- Industry standard pilots and threads for the most flexibility
- Custom reliefs available to fit your projects needs
- Coolant thru standard



Thread	SD		Length (OAL)		Part Number	EDP
	Inch	Metric	Inch	Metric		
M6	-	12	4	100	SEFSCEXT M6-100-12mm	60864
	-	12	6	150	SEFSCEXT M6-150-12mm	60866
	1/2	-	4	100	SEFSCEXT M6-400-500	60868
	1/2	-	6	150	SEFSCEXT M6-600-500	60870
	-	16	4	100	SEFSCEXT M8-100-16mm	60872
M8	-	16	6	150	SEFSCEXT M8-150-16mm	60876
	5/8	-	4	100	SEFSCEXT M8-400-625	60878
	5/8	-	6	150	SEFSCEXT M8-600-625	60880
	5/8	-	8	200	SEFSCEXT M8-800-625	60884
	-	15	8	200	SEFSCEXT M8-800-15mm	60882
M10	-	18	4	100	SEFSCEXT M10-100-18mm	60800
	-	18	6	150	SEFSCEXT M10-150-18mm	60806
	-	18	8	200	SEFSCEXT M10-200-18mm	60810
	-	18	10	250	SEFSCEXT M10-250-18mm	60814
	3/4	-	4	100	SEFSCEXT M10-400-750	60816
	3/4	-	6	150	SEFSCEXT M10-600-750	60818
	3/4	-	8	200	SEFSCEXT M10-800-750	60820
	3/4	-	10	250	SEFSCEXT M10-1000-750	60802
	3/4	-	12	300	SEFSCEXT M10-1200-750	60804
	-	25	4	100	SEFSCEXT M12-100-25mm	60822
M12	-	25	6	150	SEFSCEXT M12-150-25mm	60830
	-	25	8	200	SEFSCEXT M12-200-25mm	60834
	-	25	12	300	SEFSCEXT M12-1200-25mm	60828
	1	-	4	100	SEFSCEXT M12-400-100	60836
	1	-	6	150	SEFSCEXT M12-600-100	60838
	1	-	8	200	SEFSCEXT M12-800-100	60840
	1	-	10	250	SEFSCEXT M12-1000-100	60824
	1	-	12	300	SEFSCEXT M12-1200-100	60826

**HEAVY-METAL MODULAR EXTENSIONS**

- Tungsten Heavy Metal
- H6 Shank Tolerance
- Industry standard pilots and threads for the most flexibility
- Custom reliefs available to fit your projects needs
- Coolant thru EXTRA



Thread	SD		Reach (RN)	Length (OAL)		Part Number	EDP	
	Inch	Metric		Inch	Metric			
M6	-	12	-	4	100	SEFHMEXT M6-400-12	60676	
	-	12	-	5	125	SEFHMEXT M6-500-12	60679	
	-	12	-	6	150	SEFHMEXT M6-600-12	60680	
	-	12	-	7	175	SEFHMEXT M6-700-12	60681	
	-	12	-	8	200	SEFHMEXT M6-800-12	60684	
	1/2	-	2	4	100	SEFHMEXT M6-400-500	60678	
	1/2	-	2	6	150	SEFHMEXT M6-600-500	60682	
M8	1/2	-	2	8	200	SEFHMEXT M6-800-500	60686	
	5/8	-	2	4	100	SEFHMEXT M8-400-625	60692	
	5/8	-	2	6	150	SEFHMEXT M8-600-625	60696	
M8	5/8	-	2	8	200	SEFHMEXT M8-800-625	60698	
	-	18	-	4	100	SEFHMEXT M10-400-18mm	60610	
	-	18	-	6	150	SEFHMEXT M10-600-18mm	60616	
M10	-	18	-	8	200	SEFHMEXT M10-800-18mm	60622	
	-	18	-	10	250	SEFHMEXT M10-1000-18mm	60600	
	-	18	-	12	300	SEFHMEXT M10-1200-18mm	60604	
	3/4	-	2	4	100	SEFHMEXT M10-400-750	60612	
	3/4	-	2	5	125	SEFHMEXT M10-500-750	60614	
	3/4	-	2	6	150	SEFHMEXT M10-600-750	60618	
	3/4	-	2	7	175	SEFHMEXT M10-700-750	60619	
	3/4	-	2	8	200	SEFHMEXT M10-800-750	60624	
	3/4	-	2	10	250	SEFHMEXT M10-1000-750	60602	
	3/4	-	2	12	300	SEFHMEXT M10-1200-750	60606	
	M12	-	25	-	4	100	SEFHMEXT M12-400-25mm	60636
		-	25	-	5	125	SEFHMEXT M12-500-25mm	60642
		-	25	-	6	150	SEFHMEXT M12-600-25mm	60646
-		25	-	7	175	SEFHMEXT M12-700-25mm	60650	
-		25	-	8	200	SEFHMEXT M12-800-25mm	60654	
-		25	-	10	250	SEFHMEXT M12-1000-25mm	60628	
-		25	-	12	300	SEFHMEXT M12-1200-25mm	60632	

Continued on next page.

## MODULAR TOOLING

### HEAVY-METAL MODULAR EXTENSIONS

Continued...

Thread	SD		Reach (RN)	Length (OAL)		Part Number	EDP
	Inch	Metric		Inch	Metric		
M12	1	-	2	4	100	SEFHMEXT M12-400-100	60634
	1	-	2	5	125	SEFHMEXT M12-500-100	60638
	1	-	2	6	150	SEFHMEXT M12-600-100	60644
	1	-	2	7	175	SEFHMEXT M12-700-100	60648
	1	-	2	8	200	SEFHMEXT M12-800-100	60652
	1	-	2	10	250	SEFHMEXT M12-1000-100	60626
	1	-	2	12	300	SEFHMEXT M12-1200-100	60630
M16	1-1/4	-	2	4	100	SEFHMEXT M16-400-125	60660
	1-1/4	-	2	6	150	SEFHMEXT M16-600-125	60664
	1-1/4	-	2	8	200	SEFHMEXT M16-800-125	60668
	1-1/4	-	2	10	250	SEFHMEXT M16-1000-125	60656
	1-1/4	-	2	12	300	SEFHMEXT M16-1200-125	60658
Thread	SD		Reach (RN)	Length (OAL)		Part Number	EDP
	Inch	Metric		Inch	Metric		

\* Specify custom RN lengths when ordering.  
Delayed shipping on custom RN.

### STEEL MODULAR EXTENSIONS

- Steel Shank
- H6 Shank Tolerance
- Industry standard pilots and threads for the most flexibility
- Custom reliefs available to fit your projects needs
- Coolant thru EXTRA

Thread	SD		Reach (RN)	Length (OAL)		Part Number	EDP
	Inch	Metric		Inch	Metric		
M10	3/4	-	1	4	-	SEFEXT M10-400-750	60504
	3/4	-	2	6	-	SEFEXT M10-600-750	60506
	3/4	-	2	8	-	SEFEXT M10-800-750	60508
M12	-	25	2	6	150	SEFEXT M12-600-25mm	60522
	-	25	2	8	200	SEFEXT M12-800-25mm	60528
	1	-	2	4	-	SEFEXT M12-400-100	60518
	1	-	2	5	-	SEFEXT M12-600-100	60520
	1	-	2	8	-	SEFEXT M12-800-100	60524
	1	-	4	10	-	SEFEXT M12-1000-100	60510
	1-1/4	-	3 Deg	8	-	SEFEXT M12-800-125	60526
M16	1-1/4	-	2	4	-	SEFEXT M16-400-125	60538
	1-1/4	-	2	6	-	SEFEXT M16-600-125	60542
	1-1/4	-	2	8	-	SEFEXT M16-800-125	60546
	1-1/4	-	4	12	-	SEFEXT M16-1200-125	60534
	1-1/4	-	10	12	-	SEFEXT M16-1200-125-LR	60535
Thread	SD		Reach (RN)	Length (OAL)		Part Number	EDP
	Inch	Metric		Inch	Metric		

## BUTTON CUTTER AND SHELL MILL TOOLS

### HIGH FEED MILLING TOOLS

Sterling Edge's High Feed milling tools are designed to satisfy today's demand for high feed machining paths. The geometry of our insert combined with the specific design of our tool bodies / shell mills, along with our premium CTH coating, allow high speed machining of steels up to 65 HRC.



### HIGH FEED SHELL MILLS

High Feed Insert	Diameter	Flutes	Part Number	EDP
SEFMTIN 625	1-3/4	3	SEFM 175-3-SM	61201
	2	4	SEFM 200-4-SM	61202
	3	5	SEFM 300-5-SM	61204

### HIGH FEED TOOL BODY

High Feed Insert	Diameter	OAL	Flutes	Part Number	EDP
SEFMTIN 10	1	6	2	SEFM 100-600-100	61200

### ROUND BUTTON CUTTER STEEL SHANK TOOL BODIES

- Steel shank
- H6 Shank Tolerance
- For longer reach applications



Button Insert Diameter	Cutting Diameter (D)	Reach (RN)	OAL	SD	Flutes	Part Number	EDP
8mm	3/4	3-1/4	6	3/4	2	SEBC 750-600-750	61066
12mm	1	2-3/8	4.5	1	2	SEBC 100-450-100	61000
	1	3-1/4	6	1	2	SEBC 100-600-100	61002
	1	3-1/4	8	1	2	SEBC 100-800-100	61006
	1-1/4	2	6	1-1/4	2	SEBC 125-600-125	61010
	1-1/4	4	8	1-1/4	2	SEBC 125-800-125	61012
	1-1/4	4	8	1-1/4	3	SEBC 125-800-125-3	61014





## BUTTON CUTTER AND SHELL MILL TOOLS


### BUTTON CUTTER MILLING TOOLS

Sterling Edge offers button cutter options for steel and aluminium applications. These are ideal for roughing and face milling applications.

### ROUND BUTTON CUTTER INSERTS FOR STEEL APPLICATIONS

	Button Type	Diameter	Part Number	Coatings	EDP
 (Flat Face)	RPMW	12mm	RPMW 12-CTH	CTH	31512
		12mm	RPMW 12-CTX	CTX	31514
		1/2	RPMW 500-CTH	CTH	31522
		1/2	RPMW 500-CTX	CTX	31524
	RDHW	16mm	RDHW 16-CTH	CTH	31462
		20mm	RDHW 20-CTH	CTH	31470
 (Chip breaker)	RPMT	8mm	RPMT 8-CTH	CTH	31502
		8mm	RPMT 8-CTX	CTX	31504
		12mm	RPMT 12-CTH	CTH	31490
		12mm	RPMT 12-CTX	CTX	31492
		12mm	RPMT 12-CTXR	CTXR	31494

### ROUND BUTTON CUTTER INSERTS FOR NON FERROUS METALS

	Button Type	Diameter	Part Number	Coatings	EDP
 (Polished)	RPGT	8mm	RPGT 08	Polished	31480
		12mm	RPGT 12	Polished	31482
	RDHT	16mm	RDHT 16	Polished	31454

### ROUND BUTTON CUTTER SHELL MILLS



Button Insert Diameter	Cutting Diameter	Flutes	Part Number	EDP
12mm	2	4	SEBC 200-12-4 SM	61022
	2	5	SEBC 200-12-5 SM	61026
	2.5	5	SEBC 250-12-5 SM	61040
	3	6	SEBC 300-12-6 SM	61046
	4	7	SEBC 400-12-7 SM	61052
1/2	1-3/4	4	SEBC 175-500-4 SM	61017
	2	4	SEBC 200-500-4 SM	61038
16mm	2	3	SEBC 200-16-3 SM	61032
	2	5	SEBC 200-16-5 SM	61036
	4	7	SEBC 400-16-7 SM1.25	61054
20mm	3	5	SEBC 300-20-5 SM	61050

## BUTTON CUTTER AND SHELL MILL SPEEDS AND FEEDS

Material	P Steels 1018, 1020, 4140, 4150, P-20			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	6000	60-90	.015-.020	.020-.030
1/2 - 12mm	5000	60-110	.015-.025	.020-.030
5/8 - 16mm	4000	60-110	.020-.030	.020-.030
3/4 - 20mm	3500	70-140	.020-.030	.020-.030
1 - 25mm	3000	70-150	.030-.040	.020-.030
1-1/4 - 32mm	2400	70-150	.030-.040	.020-.030

Material	P Steels Tool Steel: A2, D2, S7, GM190			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	5000	40-60	.015-.020	.020-.030
1/2 - 12mm	4000	40-60	.020-.030	.020-.030
5/8 - 16mm	3600	40-70	.030-.040	.020-.030
3/4 - 20mm	3000	40-70	.030-.050	.020-.030
1 - 25mm	2400	50-80	.030-.060	.020-.030
1-1/4 - 32mm	2000	50-80	.030-.060	.020-.030

Material	K Steels Cast, Nodular, Ductile			
	Diameter	RPM	Feed (IPM)	DoC
3/8 - 10mm	7000	70-90	.015-.020	.020-.030
1/2 - 12mm	6500	70-90	.015-.025	.020-.030
5/8 - 16mm	6000	70-100	.020-.030	.020-.030
3/4 - 20mm	6000	80-110	.020-.040	.020-.030
1 - 25mm	4500	80-130	.030-.060	.020-.030
1-1/4 - 32mm	3000	80-130	.030-.080	.020-.030

Hardened Material: Reduce parameters by 30% for a starting point.

### ROUND BUTTON CUTTER ACCESSORIES

Part Number	Description
SEBCS 8	8mm button screw
SEBCS 12-4	12mm button screw
SEBCS 12-4L	12mm button screw (long)
SEBCS 16	16mm button screw
SEBC CW	16mm shell mill Clamping washer

# REGRIND SERVICES



We offer regrind services for many of our own and our competitors end mills. We sharpen our tools to like new condition giving you more bang for your buck. We also re-coat the sharpened tools giving you a premium coating to keep your tools lasting longer.

Below are some popular tools we offer regrind services for.

## SCBS SERIES BALLNOSE END MILLS

### EM4 SERIES END MILLS

### BN4 SERIES END MILLS

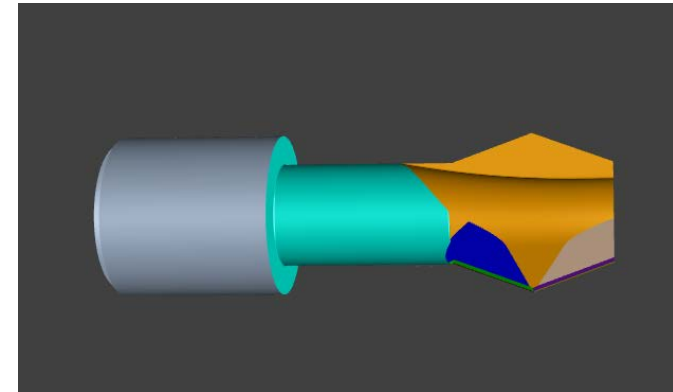
### SVE4 SERIES END MILLS

### SVE5 SERIES END MILLS

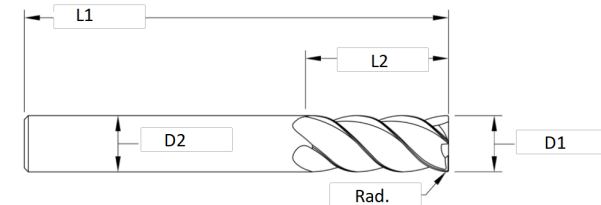
### HIGH FEEL END MILLS

Contact us or a Sterling Edge distributor for questions and quotes.

# SPECIALS



At Sterling Edge, we have the ability to design and make end mills to fit your needs. If you have a special form that needs to be cut, we may be able to make a single tool to get the job done rather than using multiple tools. If you like one of our off the shelf tools but need it longer, a specific radius, or length of cut, just contact us and we will get you a quote. Most special made end mills are shipped withing 2 weeks of ordering, getting you out of a pinch with minimal down time.



#### Tool Information

CUTTER DIAMETER (D1) <input type="text"/>	SHANK DIAMETER (D2) <input type="text"/>	NUMBER OF FLUTES <input type="text"/>	LENGTH OF CUT (L2) <input type="text"/>
OVERALL LENGTH (L1) <input type="text"/>	COATING CTH CTX Uncoated	CUTTER RADIUS (R) <input type="text"/>	Weldon Flat YES NO
Quantity <input type="text"/>	CHIPBREAKERS YES NO		

# STERLING EDGE

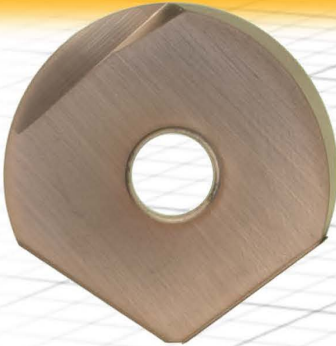
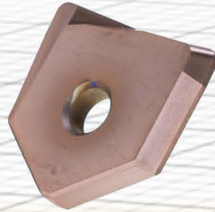
Sales@SterlingEdge.net

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