



STERLING
INC
EDGE

PRODUCT CATALOG
Version 3.0



MADE IN USA

HIGH QUALITY AMERICAN MADE 3-D PROFILE MILLING TOOLS

INSERTABLE CARBIDE END MILLS - COPY MILLS -
CARBIDE END MILLS - MODULAR TOOLING



WWW.STERLINGEDGE.NET
1.800.403.0808

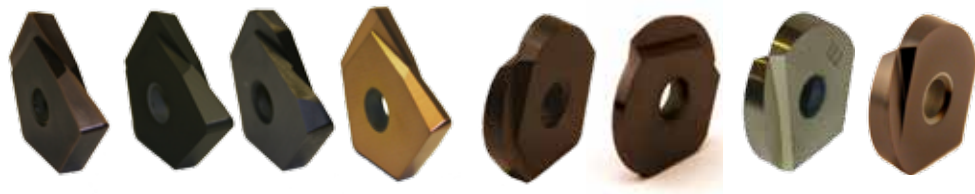


» **STERLING EDGE TOOLING IS MANUFACTURED TO EXCEPTIONALLY HIGH STANDARDS USING THE LATEST TECHNOLOGY IN DESIGN, MANUFACTURE AND INSPECTION, THUS ENSURING OUR CUSTOMERS OF THE FINEST PRODUCTS AVAILABLE.**

We are manufacturers of highly accurate, competitively priced profile milling tooling for 3-D applications. Whether your needs are for Ball Nose, Backdraft, or Copy Mills, Sterling Edge has many configurations from which to choose. For extra reach requirements, select tooling is available in carbide shanks, tapered steel shanks for improved rigidity and minimal deflection.

These shanks also perform well in heat shrink holders for high RPM and feed. In addition to a large selection of cutter bodies, we offer a wide variety of carbide insert grinds and coatings to fit your specific needs. (Refer to charts listed under body style for available insert styles and coatings).

For your next 3-D milling application, try Sterling Edge. Our quality products, timely delivery and exceptional service are sure to please the most discerning user.



STERLING EDGE, INC.

50228 DENNIS COURT
WIXOM, MI 48393

PHONE 248.438.6034 FAX 248.438.6754

WWW.STERLINGEDGE.NET SALES@STERLINGEDGE.NET

1.800.403.0808

QUICK REFERENCE GUIDE

- 3** BALL NOSE FINISHING TOOL BODIES
INCH AND METRIC 
- 8** INSERTS FOR BALL NOSE BODIES - HOG NOSE,
HIGH SPEED, BALL NOSE AND CURVE
INCH AND METRIC 
- 13** FLAT BOTTOM/BACKDRAFT/SWEEP TOOL BODIES
INCH AND METRIC 
- 17** FLAT BOTTOM/BACKDRAFT/FEEDMILL/SWEEP
INSERTS
INCH AND METRIC 
- 22** BALL NOSE ROUGHING BODIES AND INSERTS
INCH & METRIC 
- 23** SOLID CARBIDE PROFILING CUTTERS
INCH AND METRIC 
- 27** BUTTON CUTTERS, SHELL MILLS AND RELATED
INSERTS 
- 29** MODULAR TOOLING- SCREW ON HEADS AND
EXTENSIONS 
- 32** HIGH FEED SHELL MILL- BODIES AND INSERTS 
- 33** SPEED AND FEED PARAMETERS

BALL NOSE TOOL BODIES

BALL NOSE TOOL BODIES - INCH

**BALL NOSE FINISHER
FEATURES:**

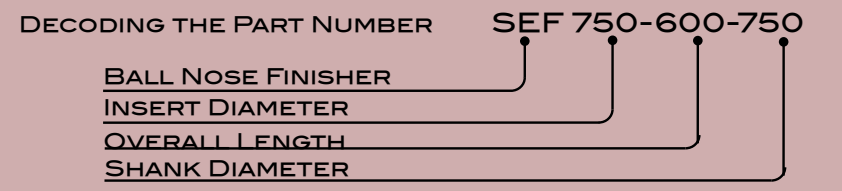
- » A highly accurate, low cost finishing tool that is the industry standard for profiling applications.
- » Ramping/Plunging cuts are made more efficient with two cutting edges to center.
- » Full radius inserts allow for smooth cutting action in all Rise & Fall and Z Level cut applications.
- » From light finishing to light roughing.
- » Insert repeatability to .0005 for consistent finish throughout workpiece.
- » Standard Weldon shanks or Solid shanks for better balance at high RPMs.
- » Offered in various lengths to accomodate most applications.
- » Specials available upon request.



(SL) SHANK LENGTH (OL) OVERALL LENGTH
(EL) END LENGTH (SD) SHANK DIAMETER
(D) CUTTING DIAMETER

3/8" THROUGH 7/8" BALL NOSE BODIES

PART NUMBER	D	EL	OL	SL	SD
SEF 375-400-375	.375	.750	4.00	3.25	.375
SEF 375-600-375	.375	.750	6.00	5.25	.375
SEF 375-400-500	.375	.500	4.00	2.00	.500
SEF 375-600-500	.375	.625	5.50	3.00	.500
SEF 500-400-12MM	.500	1.00	4.00	3.00	12MM
SEF 500-600-12MM	.500	1.00	6.00	5.00	12MM
SEF 500-400-500	.500	1.00	4.00	3.00	.500
SEF 500-600-500	.500	2.00	6.00	4.00	.500
SEF 500-400-625	.500	.750	4.00	2.00	.625
SEF 500-600-625	.500	.750	6.00	4.00	.625
SEF 500-600-750	.500	.750	6.00	4.00	.750
SEF 500-900-100	.500	1.00	9.00	3.00	1.00
SEF 500-1200-100	.500	1.00	12.00	3.00	1.00
SEF 625-600-15MM	.625	1.00	6.00	5.00	15MM
SEF 625-600-625	.625	2.00	6.00	4.00	.625
SEF 625-400-750	.625	1.00	4.00	1.75	.750
SEF 625-600-750	.625	1.00	6.00	3.25	.750
SEF 625-800-750	.625	1.00	8.00	4.00	.750
SEF 750-600-18MM	.750	1.25	6.00	4.75	18MM
SEF 750-800-18MM	.750	2.00	8.00	6.00	18MM
SEF 750-400-750	.750	1.00	4.00	3.00	.750
SEF 750-600-750	.750	1.75	6.00	4.25	.750
SEF 750-800-750	.750	2.50	8.00	5.50	.750
SEF 750-475-100	.750	1.25	4.75	2.50	1.00
SEF 750-650-100	.750	1.00	6.50	3.75	1.00
SEF 750-800-100	.750	1.25	8.00	4.00	1.00
SEF 875-600-875	.875	1.00	6.00	5.00	.875
SEF 875-800-875	.875	2.00	8.00	6.00	.875





1" - 1 1/4" STEEL BALL NOSE BODIES

PART NUMBER	D	EL	OL	SL	SD
SEF 100-600-25MM	1.00	1.25	6.00	4.75	25MM
SEF 100-800-25MM	1.00	2.25	8.00	5.75	25MM
SEF 100-400-100	1.00	1.00	4.00	3.00	1.00
SEF 100-600-100	1.00	2.75	6.00	3.25	1.00
SEF 100-800-100	1.00	2.75	8.00	5.75	1.00
SEF 100-1000-100	1.00	2.00	10.00	8.00	1.00
SEF 100-1200-100	1.00	3.25	12.00	8.75	1.00
SEF 100-450-125	1.00	1.50	4.50	2.50	1.25
SEF 100-600-125	1.00	1.50	6.00	2.50	1.25
SEF 100-750-125	1.00	1.50	7.50	3.50	1.25
SEF 100-900-125	1.00	1.50	9.00	4.00	1.25
SEF 125-600-125	1.25	3.00	6.00	3.00	1.25
SEF 125-750-125	1.25	4.00	7.50	3.50	1.25
SEF 125-900-125	1.25	5.75	9.00	3.25	1.25
SEF 125-1200-125	1.25	5.00	12.00	7.00	1.25

CUSTOM SIZES AND CLEARANCE LENGTHS (EL) AVAILABLE UPON REQUEST!

INSERT SCREWS - INCH/METRIC

INSERT SIZE	SCREW CODE	TORX BIT
.375"/10MM	FS 375-10	T10
.500"/12MM	FS 500-12	T15
.625"/16MM	FS 625-16	T20
.750"/20MM	FS 750-20	T20
.875"	FS 875	T25
1.00"/25MM	FS 100-25	T25
1.25"/30MM/32MM	FS 125-32	T30

SOLID CARBIDE BALL NOSE FINISHER FEATURES:

- » Sterling Edge's solid carbide shanked Ball Nose bodies offer the ultimate in cutter stability.
- » Designed for those special applications where rigidity is of the utmost importance and chatter and cutter deflection must be eliminated.
- » Ideal for collet holders and for shrink fit holder systems.
- » Specials available upon request including tapered extensions, and special clearance lengths (EL).

3/8" - 1" SOLID CARBIDE SHANK BALL NOSE BODIES

PART NUMBER	D	EL	OL	SL	SD
SEFSC 375-400-375	.375	1.00	4.00	3.00	.375
SEFSC 375-600-375	.375	2.00	6.00	4.50	.375
SEFSC 500-400-500	.500	2.00	4.00	2.50	.500
SEFSC 500-600-500	.500	2.00	6.00	4.50	.500
SEFSC 500-800-500	.500	2.00	8.00	6.00	.500
SEFSC 625-400-625	.625	2.00	4.00	2.00	.625
SEFSC 625-600-625	.625	2.00	6.00	4.50	.625
SEFSC 625-800-625	.625	2.00	8.00	6.00	.625
SEFSC 750-400-750	.750	2.00	4.00	2.00	.750
SEFSC 750-600-750	.750	2.00	6.00	4.50	.750
SEFSC 750-800-750	.750	2.00	8.00	6.00	.750
SEFSC 100-600-100	1.00	2.00	6.00	4.00	1.00
SEFSC 100-800-100	1.00	2.00	8.00	6.00	1.00
SEFSC 100-1000-100	1.00	3.00	10.00	7.00	1.00



BALL NOSE TOOL BODIES - INCH

BALL NOSE TOOL BODIES - INCH



**10MM - 25MM STEEL
METRIC BALL NOSE BODIES**

PART NUMBER	D	EL	OL	SL	SD
SEF 10-400-10	10MM	1.80"	4.00"	3.20"	10MM
SEF 10-550-12	10MM	2.00"	5.50"	3.50"	12MM
SEF 12-400-12	12MM	0.75"	4.00"	3.25"	12MM
SEF 12-600-12	12MM	1.00"	6.00"	5.00"	12MM
SEF 16-600-16	16MM	2.00"	6.00"	4.00"	16MM
SEF 16-800-16	16MM	2.50"	8.00"	5.50"	16MM
SEF 20-600-20	20MM	2.50"	6.00"	3.50"	20MM
SEF 20-800-20	20MM	2.50"	8.00"	5.50"	20MM
SEF 25-600-25	25MM	1.50"	6.00"	4.50"	25MM
SEF 25-800-25	25MM	2.25"	8.00"	5.75"	25MM
SEF 25-1000-25*	25MM	3.50"	10.00"	6.50"	25MM

**10MM - 25MM CARBIDE SHANK
METRIC BALL NOSE BODIES**

PART NUMBER	D	EL	OL	SL	SD
SEFSC 10-400-10	10MM	2.00"	4.00"	2.00"	10MM
SEFSC 10-600-10	10MM	2.00"	6.00"	4.00"	10MM
SEFSC 12-400-12	12MM	2.00"	4.00"	2.00"	12MM
SEFSC 12-600-12	12MM	2.00"	6.00"	4.00"	12MM
SEFSC 16-600-16	16MM	2.00"	6.00"	4.00"	16MM
SEFSC 16-800-16	16MM	2.00"	8.00"	6.00"	16MM
SEFSC 20-600-20	20MM	2.00"	6.00"	4.00"	20MM
SEFSC 20-800-20	20MM	2.00"	8.00"	6.00"	20MM
SEFSC 25-600-25	25MM	2.00"	6.00"	4.00"	25MM
SEFSC 25-800-25	25MM	2.00"	8.00"	6.00"	25MM

* CUSTOM SIZES AND CLEARANCE LENGTHS (EL) AVAILABLE.

**BALL NOSE INSERT
FEATURES:**

- » Sterling Edge's insert family is designed to provide effective cutting characteristics in a wide variety of materials. Premium carbide is used to ensure the best possible performance. Application specific coatings are available to maximize insert life.
- » The various styles of insert grinds have identical locating features to ensure accuracy and consistency in Sterling Edge tool bodies.
- » Additional coatings available upon request



**STANDARD GRIND
CODE: SEFIN**

The workhorse of the family. It withstands aggressive use and performs effectively with heavier cuts during the roughing and semi-finishing phase of profile milling. During the finishing phase, the geometry of the grind allows the insert to "cut to center" resulting in a smoother finish.



**HOG NOSE*
CODE: SEHOG**

Designed for hard material applications, Allows you to cut off-center like a 5-axis mill. The geometry increase the velocity at the cutting points of the insert. Increased stepover reduces machine time significantly.

*Patent Pending



**HIGH SPEED GRIND
CODE: SEFHSIN**

Designed for light finish cuts with high RPMs and high feed rates, producing a superior finish.



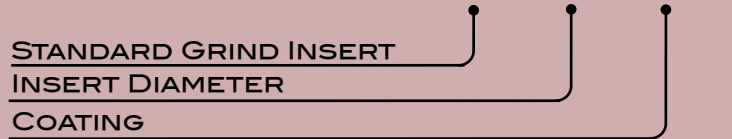
**HIGH HELIX STYLE: THE CURVE
CODE: SECIN**

Designed to provide a superior finish when machining Aluminum, Kurksite, Brass and other non-ferrous material

COATINGS AVAILABLE:

- CTXR** Our Rose coating is a premium TiAlCN coating that has high heat resistance. Used for cutting tool steels and stainless steels.
- CTX** Multilayer AlTiN recommended for general purpose machining
- CTH** Used in hard machining applications of 50-70 RC for abrasive materials where heat is an issue.
- CTD** Diamond coatings are used when milling graphite.
- ZRN** Used for Aluminum and other non-ferrous materials

DECODING THE PART NUMBER SEFIN 750-CTXR



STANDARD GRIND BALL NOSE INSERTS-INCH		
GRIND/SIZE CODE	STANDARD COATING	
SEFIN 375	CTXR	CTH
SEFIN 500	CTXR	CTH
SEFIN 625	CTXR	CTH
SEFIN 750	CTXR	CTH
SEFIN 875	CTXR	CTH
SEFIN 100	CTXR	CTH
SEFIN 125	CTXR	CTH

STANDARD GRIND BALL NOSE INSERTS-METRIC		
GRIND/SIZE CODE	STANDARD COATING	
SEFIN 10	CTXR	CTH
SEFIN 12	CTXR	CTH
SEFIN 16	CTXR	CTH
SEFIN 20	CTXR	CTH
SEFIN 25	CTXR	CTH
SEFIN 30	CTXR	CTH

HIGH SPEED BALL NOSE INSERTS-INCH		
GRIND/SIZE CODE	STANDARD COATING	
SEFHSIN 375	CTXR	CTH
SEFHSIN 500	CTXR	CTH
SEFHSIN 625	CTXR	CTH
SEFHSIN 750	CTXR	CTH
SEFHSIN 875	CTXR	CTH
SEFHSIN 100	CTXR	CTH
SEFHSIN 125	CTXR	CTH

HIGH SPEED BALL NOSE INSERTS-METRIC		
GRIND/SIZE CODE	STANDARD COATING	
SEFHSIN 10	CTXR	CTH
SEFHSIN 12	CTXR	CTH
SEFHSIN 16	CTXR	CTH
SEFHSIN 20	CTXR	CTH
SEFHSIN 25	CTXR	CTH
SEFHSIN 30	CTXR	CTH

CURVE INSERTS-INCH		
GRIND/SIZE CODE	STANDARD COATING	
SECIN 375	CTXR	ZRN
SECIN 500	CTXR	ZRN
SECIN 625	CTXR	ZRN
SECIN 750	CTXR	ZRN
SECIN 875	CTXR	ZRN
SECIN 100	CTXR	ZRN
SECIN 125	CTXR	ZRN

CURVE INSERTS-METRIC		
GRIND/SIZE CODE	STANDARD COATING	
SECIN 10	CTXR	ZRN
SECIN 12	CTXR	ZRN
SECIN 16	CTXR	ZRN
SECIN 20	CTXR	ZRN
SECIN 25	CTXR	ZRN
SECIN 30	CTXR	ZRN

*SPEED AND FEED CHARTS ON PAGE 32

BALL NOSE INSERTS

BALL NOSE INSERTS



STERLING EDGE'S NEW HOG NOSE INSERT

- » Allows you to cut off the tip like a 5-axis mill
- » Geometry that increases the velocity of the insert at the cutting points.
- » Excellent for hardened steel applications.
- » Coatings and grinds available for ferrous and non-ferrous applications.
- » Uses our standard ball nose bodies.



DON'T PUT YOUR NOSE
TO THE GRINDSTONE!

**LARGER STEPOVER MEANS UP
TO 90% DECREASED CYCLE
TIME!**



HOG NOSE INSERT RUNNING IN S7

NEUTRAL GEOMETRY
FINISHING HOG COMING IN
2014!



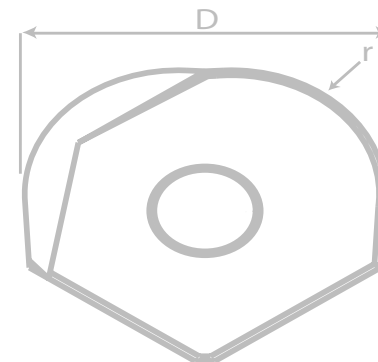
HOG NOSE INSERTS-INCH
AVAILABLE IN CTRX & CTH COATINGS

GRIND/SIZE CODE	RADIUS	SWING	RADIAL TANGENCY*
SEHOG 375	.153	.1200	.0023
SEHOG 500	.206	.1440	.0031
SEHOG 625	.260	.1670	.0025
SEHOG 750	.313	.1900	.0030
SEHOG 100	.419	.2370	.0041
SEHOG 125	.526	.2700	.0051

HOG NOSE INSERTS-METRIC
AVAILABLE IN CTRX & CTH COATINGS

GRIND/SIZE CODE	RADIUS	SWING	RADIAL TANGENCY*
SEHOG 10	.161"	.1200	.0024
SEHOG 12	.194"	.1420	.0029
SEHOG 16	.227"	.1670	.0025
SEHOG 20	.329"	.1930	.0032
SEHOG 25	.412"	.2360	.0040
SEHOG 32	.531"	.2700	.0051

*RADIAL TANGENCY: THE DISTANCE/LENGTH BELOW THE BOTTOM OF THE RADIUS AND MUST BE ACCOUNTED FOR WHEN PROGRAMMING



HOG NOSE INSERTS

HOG NOSE INSERTS



FLAT BOTTOM/BACKDRAFT/SWEEP FINISHING TOOL BODIES

FEATURES:

- » Made to the same high standards as our ball nose bodies.
- » Bodies accept Flat Bottom, Backdraft and Sweep without any modifications.
- » Insert repeatability of .0005 for consistent finish of work piece.
- » Standard Weldon shanks or Solid shanks for better balance at high RPMs.
- » Offered in various lengths to accomodate most applications.
- » Specials available upon request.



(SL) SHANK LENGTH (OL) OVERALL LENGTH
 (EL) END LENGTH (SD) SHANK DIAMETER
 (D) CUTTING DIAMETER

3/8" - 1 1/4" STEEL FLAT BOTTOM/BACKDRAFT/SWEEP BODIES

PART NUMBER	D	EL	OL	SL	SD
SEFB 375-400-375	.375	1.90	4.00	3.10	.375
SEFB 375-600-375	.375	1.00	6.00	5.00	.375
SEFB 500-400-12MM	.500	1.00	4.00	3.00	12MM
SEFB 500-600-12MM	.500	1.00	6.00	5.00	12MM
SEFB 500-600-500	.500	1.00	6.00	5.00	12MM
SEFB 500-600-500	.500	1.00	6.00	5.00	.500
SEFB 500-600-625	.500	1.00	6.00	4.00	.625
SEFB 625-600-15MM	.625	1.00	6.00	5.00	15MM
SEFB 625-600-625	.625	2.50	6.00	3.50	.625
SEFB 750-600-18MM	.750	1.25	6.00	3.50	18MM
SEFB 750-800-18MM	.750	1.25	8.00	5.50	18MM
SEFB 750-600-750	.750	2.50	6.00	3.50	.750
SEFB 750-800-750	.750	2.50	8.00	5.50	.750
SEFB 750-600-100	.750	1.25	6.00	2.75	1.00
SEFB 875-600-875	.875	2.50	6.00	3.50	.875
SEFB 875-800-875	.875	2.50	8.00	5.50	.875
SEFB 100-600-25MM	1.00	2.00	6.00	4.00	25MM
SEFB 100-800-25MM	1.00	2.50	8.00	5.50	25MM
SEFB 100-600-100	1.00	2.00	6.00	4.00	1.00
SEFB 100-800-100	1.00	2.50	8.00	5.50	1.00
SEFB 100-1000-100	1.00	3.75	10.00	6.25	1.00
SEFB 100-600-125	1.00	1.75	6.00	2.50	1.25
SEFB 125-600-125	1.25	3.50	6.00	2.50	1.25
SEFB 125-750-125	1.25	3.50	7.50	4.00	1.25
SEFB 125-900-125	1.25	5.00	9.00	4.00	1.25

CUSTOM SIZES AND CLEARANCE LENGTHS (EL) AVAILABLE UPON REQUEST!

FLAT BOTTOM/BACKDRAFT/SWEEP TOOL BODIES

FLAT BOTTOM/BACKDRAFT/SWEEP TOOL BODIES-INCH



**CARBIDE SHANK FLAT BOTTOM FINISHER
FEATURES:**

- » Sterling Edge's solid carbide shanked Flat Bottom/Backdraft/Sweep bodies offer the ultimate in cutter stability.
- » Designed for those special applications where rigidity is of the utmost importance while chatter and cutter deflection must be eliminated.
- » Ideal for collet holders and for shrink fit holder systems.
- » Specials available upon request including tapered.

**3/8" - 1" CARBIDE SHANK FLAT BOTTOM/
BACKDRAFT/SWEEP BODIES**

PART NUMBER	D	EL	OL	SL	SD
SEFBSC 375-400-375	.375	1.00	4.00	3.00	.375
SEFBSC 375-600-375	.375	1.50	6.00	4.50	.375
SEFBSC 500-400-500	.500	2.00	4.00	2.00	.500
SEFBSC 500-600-500	.500	2.00	6.00	4.00	.500
SEFBSC 500-800-500	.500	2.00	8.00	6.00	.500
SEFBSC 625-400-625	.625	2.00	4.00	2.00	.625
SEFBSC 625-600-625	.625	2.00	6.00	4.00	.625
SEFBSC 625-800-625	.625	2.00	8.00	6.00	.625
SEFBSC 750-400-750	.750	2.00	4.00	4.00	.750
SEFBSC 750-600-750	.750	2.00	6.00	4.00	.750
SEFBSC 750-800-750	.750	2.00	8.00	6.00	.750
SEFBSC 100-600-100	1.00	2.00	6.00	4.00	1.00
SEFBSC 100-800-100	1.00	2.00	8.00	6.00	1.00
SEFBSC 100-1000-100	1.00	3.00	10.00	7.00	1.00

**10MM - 25MM FLAT BOTTOM/BACKDRAFT/
SWEEP BODIES**

PART NUMBER	D	EL	OL	SL	SD
SEFB 10-400-10	10MM	.750"	4.00"	3.25"	10MM
SEFB 12-600-12	12MM	1.00"	6.00"	5.00"	12MM
SEFB 12-600-16	12MM	2.00"	6.00"	4.00"	16MM
SEFB 16-600-16	16MM	2.00"	6.00"	4.00"	16MM
SEFB 16-800-16	16MM	3.50"	8.00"	4.50"	16MM
SEFB 20-600-20	20MM	2.50"	6.00"	3.50"	20MM
SEFB 20-800-20	20MM	2.50"	8.00"	5.50"	20MM
SEFB 25-600-25	25MM	1.50"	6.00"	4.50"	25MM
SEFB 25-800-25	25MM	2.25"	8.00"	5.75"	25MM

**10MM - 25MM SOLID CARBIDE FLAT BOTTOM/
BACKDRAFT/SWEEP BODIES**

PART NUMBER	D	EL	OL	SL	SD
SEFBSC 10-400-10	10MM	1.00"	4.00"	4.00"	10MM
SEFBSC 12-400-12	12MM	2.00"	4.00"	2.00"	12MM
SEFBSC 12-600-12	12MM	2.00"	6.00"	4.00"	12MM
SEFBSC 16-600-16	16MM	2.00"	6.00"	4.00"	16MM
SEFBSC 16-800-16	16MM	2.00"	8.00"	6.00"	16MM
SEFBSC 20-600-20	20MM	2.00"	6.00"	4.00"	20MM
SEFBSC 20-800-20	20MM	2.00"	8.00"	6.00"	20MM
SEFBSC 25-600-25	25MM	2.00"	6.00"	4.00"	25MM
SEFBSC 25-800-25	25MM	2.00"	8.00"	6.00"	25MM

*CUSTOM SIZES AND CLEARANCE LENGTHS (EL) AVAILABLE.



7/8" AVAILABLE UPON REQUEST!

FLAT BOTTOM/BACKDRAFT/SWEEP
TOOL BODIES - INCH

FLAT BOTTOM/BACKDRAFT/SWEEP
TOOL BODIES - METRIC



**FLAT BOTTOM/BACKDRAFT/SWEEP
INSERT FEATURES:**

- » Sterling Edge's Flat Bottom inserts are designed to provide effective Z-level and plunge milling. These inserts are also available in a backdraft form where the application requires chip clearance, a Sweep version that blends the clearance of a backdraft with the straight wall cleanup of a 90° flat bottom, as well as a feed mill form for high feed machining.
- » Premium carbide is used to ensure the best possible performance. Only coatings that maximize insert life are used.
- » The most popular radii for these inserts are stocked. Special corner radii can be ordered to suit your application.

**FLAT BOTTOM
CODE: SEFBIN**

Sterling Edge's Flat Bottom style inserts provide an efficient way of slot milling, pocket milling or similar applications where the finish of the vertical wall is critical. We stock all of the standard sizes and corner radii in our CTXR and CTH coatings. Other sizes, corner radii and coatings are available upon request

**BACKDRAFT
CODE: SEFBDIN**

Sterling Edge's Backdraft style inserts come with a standard taper of 3°, however other taper angles are available upon request. We stock all of the standard sizes and radii in our CTXR, CTH and CTD coatings. Other sizes, corner radii and coatings are available upon request.

**SWEEP
CODE: SESWEEP**

Designed to blend the clearance of the Backdraft insert with the cleanup "sweep" of the Flat Bottom insert while minimizing chatter. Now standard with cleanup flat on bottom of insert as well.

**FEED MILL
CODE: SEFMIN**

Designed to satisfy today's demand for high feed machining. The geometry of our insert combined with premium coatings for high speed machining of tool steels up to 65 HRC. Recommended to be used in our Ball Nose body for added chip clearance.

CHAMFER STYLE INSERTS CAN ALSO BE MADE TO ORDER.

COATINGS AVAILABLE:

- CTXR** Our Extreme Rose coating is a premium TiAlCN coating that has high heat resistance. Used for cutting tool steels and Stainless Steels.
- CTX** Multilayer AlTiN recommended for general purpose machining
- CTH** Used in hard machining applications of 50-70 RC for abrasive materials where heat is an issue.
- CTD** Diamond coatings are used when milling graphite.
- ZRN** Used for Aluminum and other non-ferrous materials



FLAT BOTTOM INSERTS - INCH			
GRIND/SIZE CODE	CORNER RADIUS		
SEFBIN 375	.031	.062	
SEFBIN 500	.031	.062	
SEFBIN 625	.031	.062	
SEFBIN 750	.031	.062	
SEFBIN 100	.031	.062	.125
SEFBIN 125		.062	.125

ALL STANDARD SIZES ARE STOCKED IN CTXR AND CTH COATINGS.

DECODING THE PART NUMBER SEFBIN 750-CTH .031

- FLAT BOTTOM INSERT
- INSERT DIAMETER
- COATING
- CORNER RADIUS

FLAT/BACKDRAFT/FEED MILL/
SWEEP INSERTS

FLAT/BACKDRAFT/FEED MILL/
SWEEP INSERTS



FLAT BOTTOM INSERTS-METRIC

GRIND/SIZE CODE	CORNER RADIUS			
SEFBIN 10	1MM			
SEFBIN 12	1MM	1.5MM		
SEFBIN 16	1MM	1.5MM	2MM	
SEFBIN 20	1MM	1.5MM	2MM	
SEFBIN 25		1.5MM	2MM	2.5MM
SEFBIN 32		1.5MM	2MM	2.5MM

STOCKED IN CTXR AND CTH COATINGS.

BACKDRAFT INSERTS - INCH

GRIND/SIZE CODE	CORNER RADIUS		
SEFBDIN 375	.031	.062	.125
SEFBDIN 500	.031	.062	.125
SEFBDIN 625	.031	.062	.125
SEFBDIN 750	.031	.062	.125
SEFBDIN 100	.031	.062	.125
SEFBDIN 125		.062	.125

STOCKED IN CTXR AND CTH COATINGS.
ZRN AND CTD COATINGS UPON REQUEST.

BACKDRAFT INSERTS-METRIC

GRIND/SIZE CODE	CORNER RADIUS			
SEFBDIN 10	1MM	1.5MM		
SEFBDIN 12	1MM	1.5MM	2MM	
SEFBDIN 16	1MM	1.5MM	2MM	
SEFBDIN 20	1MM	1.5MM	2MM	
SEFBDIN 25		1.5MM	2MM	2.5MM
SEFBDIN 32		1.5MM	2MM	2.5MM

STOCKED IN CTXR AND CTH COATINGS.
ZRN AND CTD COATINGS UPON REQUEST.

CUSTOM RADIUSSES AVAILABLE UPON REQUEST!

FEED MILL INSERTS - INCH

GRIND/SIZE CODE	CORNER RADIUS	PROGRAM RADIUS
SEFMIN 375	.015	.030
SEFMIN 500	.031	.050
SEFMIN 625	.047	.070
SEFMIN 750	.062	.095
SEFMIN 100	.075	.110
SEFMIN 125	.094	.125

STOCKED IN CTXR, CTH AND ZRN COATINGS.

FEED MILL INSERTS-METRIC

GRIND/SIZE CODE	CORNER RADIUS	PROGRAM RADIUS
SEFMIN 10	.015"	.030"
SEFMIN 12	.031"	.050"
SEFMIN 16	.047"	.070"
SEFMIN 20	.062"	.095"
SEFMIN 25	.075"	.110"

STOCKED IN CTXR AND CTH COATINGS.

SWEEP INSERTS - INCH

GRIND/SIZE CODE	CORNER RADIUS		
SESWEAP 375	.031	.062	
SESWEAP 500	.031	.062	.125
SESWEAP 625	.031	.062	.125
SESWEAP 750	.031	.062	.125
SESWEAP 100	.031	.062	.125
SESWEAP 125		.062	.125

STOCKED IN CTXR, CTH AND ZRN COATINGS.

FLAT/BACKDRAFT/ SWEEP /FEED-
MILL INSERTS

FLAT/BACKDRAFT/ SWEEP/FEED-
MILL INSERTS



SWEEP INSERTS - METRIC

GRIND/SIZE CODE	CORNER RADIUS		
SESWEEP 10	1MM	1.5MM	
SESWEEP 12	1MM	1.5MM	
SESWEEP 16	1MM	1.5MM	2MM
SESWEEP 20	1MM	1.5MM	2MM
SESWEEP 25		1.5MM	2MM 2.5MM

ALL STANDARD SIZES ARE STOCKED IN CTRX AND CTH COATINGS.

DECODING THE PART NUMBER SESWEEP 20-CTH-1.0

- SWEEP INSERT
- INSERT DIAMETER
- COATING
- CORNER RADIUS

INSERT SCREWS INCH/METRIC

INSERT SIZE	SCREW CODE	TORX BIT
.375"/10MM	SEFS 375-10	T10
.500"/12MM	SEFS 500-12	T15
.625"/16MM	SEFS 625-16	T20
.750"/20MM	SEFS 750-20	T20
1.00"/25MM	SEFS 100-25	T25
1.25"/30MM/32MM	SEFS 125-32	T30



BALL NOSE ROUGHERS

FEATURES:

- » Two flutes to center to maximize strength in plunging and roughing.
- » Identical Inserts at the nose provide a true flat radius, which helps maximize stock removal, when compared to other single flute cutters.
- » Precision edge prep to extend edge life.

APPLICATIONS:

- » From heavy roughing to medium finishing cuts, full radius inserts allow for smooth action in all rise & fall and Z applications.



OUR INCH ROUGHERS ARE AVAILABLE IN DIAMETERS OF 1", 1¼", 1½", AND 2". ALL SIZES COME IN LENGTHS OF 4", 6" AND 8".

OUR METRIC ROUGHERS ARE AVAILABLE IN 25MM, 32MM, 40MM AND 50MM. ALL SIZES COME IN LENGTHS OF 160MM, 180MM, 200MM, 250MM WITH MORSE TAPPERS AVAILABLE IN LENGTHS OF 100MM, 150MM, AND 200MM.

PLEASE CALL US FOR MORE DETAILS ABOUT YOUR SPECIFIC SIZE AND APPLICATIONS



- » Sterling Edge's solid carbide slow spiral profiling cutters provide added durability over a standard straight shank style especially in die and mold applications.
- » With tapered shanks for higher rigidity, cutter edge life is increased, work part finish is superior, lowering your tooling costs.
- » Cutters available coated with our premium AlTiN coating for ultimate edge life. Other coatings available upon request.



SOLID CARBIDE BALL NOSE STRAIGHT- INCH

ALL STANDARD SIZES ARE STOCKED IN CTX COATING,
OTHER COATINGS AVAILABLE UPON REQUEST

GRIND/SIZE CODE	D	OL	SD	FL
SCBS 093-250-093	.093	2.50	.093	1X
SCBS 125-250-125	.125	2.50	.125	1X
SCBS 125-400-125	.125	4.00	.125	1X
SCBS 187-250-187	.187	2.50	.187	1X
SCBS 187-400-187	.187	4.00	.187	1X
SCBS 187-600-187	.187	6.00	.187	1X
SCBS 250-250-250	.250	2.50	.250	1X
SCBS 250-300-250	.250	3.00	.250	1X
SCBS 250-400-250	.250	4.00	.250	1X
SCBS 250-600-250	.250	6.00	.250	1X
SCBS 312-600-312	.312	6.00	.312	1X
SCBS 312-300-312	.312	3.00	.312	1X
SCBS 312-400-312	.312	4.00	.312	1X
SCBS 375-250-375	.375	2.50	.375	1X
SCBS 375-400-375	.375	4.00	.375	1X
SCBS 375-600-375	.375	6.00	.375	1X
SCBS 500-400-500	.500	4.00	.500	1X

SOLID CARBIDE BALL NOSE TAPERED- INCH

ALL STANDARD SIZES ARE STOCKED IN CTX COATING,
OTHER COATINGS AVAILABLE UPON REQUEST

GRIND/SIZE CODE	D	OL	SD	FL
SCBS 040-400-250	.040	4.00	.250	1X
SCBS 062-150-125	.062	1.50	.125	1X
SCBS 062-250-250	.062	2.50	.250	1X
SCBS 062-400-250	.062	4.00	.250	1X
SCBS 093-250-125	.093	2.50	.125	1X
SCBS 093-250-187	.093	2.50	.187	1X
SCBS 093-250-250	.093	2.50	.250	1X
SCBS 093-400-250	.093	4.00	.250	1X
SCBS 125-250-187	.125	2.50	.187	1X
SCBS 125-250-250	.125	2.50	.250	1X
SCBS 125-400-250	.125	4.00	.250	1X
SCBS 187-250-250	.187	2.50	.250	1X
SCBS 187-400-250	.187	4.00	.250	1X
SCBS 187-400-375	.187	4.00	.375	1X
SCBS 250-400-375	.250	4.00	.375	1X
SCBS 250-600-375	.250	6.00	.375	1X
SCBS 250-600-500	.250	6.00	.500	1X
SCBS 312-400-500	.312	4.00	.500	1X



ASK ABOUT OUR RESHARPENING PROGRAM
TO SAVE MONEY AND GET THE MOST OUT OF
YOUR TOOLS!

SOLID CARBIDE PROFILE CUTTERS
INCH/METRIC

SOLID CARBIDE PROFILE CUTTERS
INCH/METRIC



SOLID CARBIDE BALL NOSE STRAIGHT- METRIC

ALL STANDARD SIZES ARE STOCKED IN CTX COATING,
OTHER COATINGS AVAILABLE UPON REQUEST

GRIND/SIZE CODE	D	OL	SD	FL
SCBS 4-100-4	4MM	100MM	4MM	1X
SCBS 4-150-4	4MM	150MM	4MM	1X
SCBS 6-100-6	6MM	100MM	6MM	1X
SCBS 6-150-6	6MM	150MM	6MM	1X
SCBS 8-100-8	8MM	100MM	8MM	1X
SCBS 8-150-8	8MM	150MM	8MM	1X
SCBS 10-100-10	10MM	100MM	10MM	1X
SCBS 10-150-10	10MM	150MM	10MM	1X
SCBS 12-100-12	12MM	100MM	12MM	1X
SCBS 12-150-12	12MM	150MM	12MM	1X



SOLID CARBIDE END MILLS- INCH

ALL STANDARD SIZES ARE STOCKED IN CTX COATING,
OTHER COATINGS AVAILABLE UPON REQUEST

GRIND/SIZE CODE	D	OL	SD	FL	FLUTES
SCE 250-250-250	.250	2.50	.250	3X	4
SCE 375-250-375	.375	2.50	.375	2X	4
SCE 375-400-375-5-.062	.375	4.00	.375	5/8"	5
SCE 375-600-375-5-.062	.375	6.00	.375	5/8"	5
SCE 500-300-500	.500	3.00	.500	2X	4
SCE 500-400-500-5-.062	.500	4.00	.500	5/8"	5
SCE 500-600-500-5-.062	.500	6.00	.500	5/8"	5
SCE 625-400-625-5-.062	.625	4.00	.625	5/8"	5
SCE 750-400-750	.750	4.00	.750	2X	4
SCE 100-400-100	1.00	4.00	1.00	2X	4
SCE45H 375-250-375 45 DEGREE HELIX	.375	2.50	.375	2X	2
SCE45H 500-300-500 45 DEGREE HELIX	.500	3.00	.500	2X	2



**WE SPECIALIZE IN CUSTOM SIZES,
GRINDS, CORNER RADIUS AND COAT-
INGS FOR YOUR SPECIFIC APPLICATION!
CALL FOR PRICE AND DELIVERY!**

SOLID CARBIDE PROFILE CUTTERS
INCH/METRIC

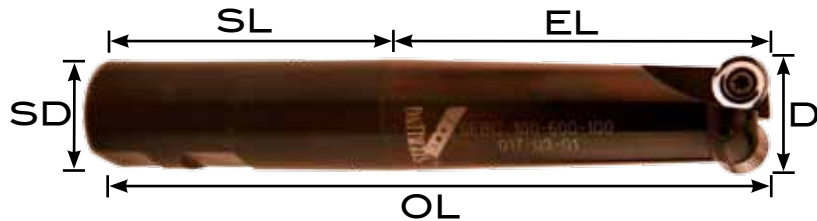
SOLID CARBIDE PROFILE CUTTERS
INCH/METRIC



BUTTON CUTTER & INSERTS

FEATURES:

- » Ideal for roughing applications in 40 taper and 50 taper CNC mills.
- » Offers positive cutting geometry for minimal spindle load.
- » 12mm insert produces .236 radius
- » RPMT-12 and RDHW-16 styles for most applications in steel and other ferrous materials.
- » RPGT style for aluminum and other non ferrous material.



(SL) SHANK LENGTH (OL) OVERALL LENGTH
(EL) END LENGTH (SD) SHANK DIAMETER
(D) CUTTING DIAMETER

BUTTON CUTTER TOOL BODIES

GRIND/SIZE CODE	D	EL	OL	SL	SD
SEBC 750-600-750	.75	3.25	6.00	2.75	.75
SEBC 100-450-100	1.00	2.40	4.50	2.10	1.00
SEBC 100-600-100	1.00	3.25	6.00	2.75	1.00
SEBC 100-800-100	1.00	3.25	8.00	4.75	1.00
SEBC 100-600-125	1.00	3.25	6.00	2.75	1.25
SEBC 125-600-125	1.25	2.00	6.00	4.00	1.25
SEBC 125-800-125	1.25	4.00	8.00	4.00	1.25

BUTTON CUTTER ACCESORIES

CODE	DESCRIPTION
SEBCS-8	8MM INSERT SCREW
SEBCS-12	12MM INSERT SCREW
SEBCS-16	16MM INSERT SCREW
SEBC CW	16MM CLAMPING WASHER



ROUND BUTTON CUTTER INSERTS

GRIND/SIZE CODE	DESCRIPTION	COATINGS
RPMT 8	8MM INSERT - W/CHIPBREAKER	CTX/CTXR/CTH
RPMT 12	12MM INSERT - W/CHIPBREAKER	CTX/CTXR/CTH
RPMW 12	12MM INSERT - FLAT FACED	CTX/CTXR/CTH
RPMW 500	1/2" INSERT - FLAT FACED	CTX/CTXR/CTH
RDHW 16	16MM INSERT - FLAT FACED	CTX/CTXR/CTH
RPGT 8	8MM INSERT - NON-FERROUS	POLISHED
RPGT 12	12MM INSERT - NON-FERROUS	POLISHED
RPGT 16	16MM INSERT - NON-FERROUS	POLISHED



BUTTON CUTTER SHELL MILLS

PART NUMBER	DIA.	INSERT	FLUTES
SEBC 200-12-SM	2.00	12MM	3,4 OR 5
SEBC 200-12-4-CH (CAP HEAD STYLE)	2.00	12MM	4
SEBC 300-12-6-SM	3.00	12MM	6
SEBC 200-500-4-SM	2.00	.500	4
SEBC 200-16-SM	2.00	16MM	3 OR 5
SEBC 200-16-3-CH (CAP HEAD STYLE)	2.00	16MM	3
SEBC 400-16-7-SM	4.00	16MM	7
SEBC 600-16-9-SM	6.00	16MM	9

BUTTON CUTTERS & RELATED INSERTS

BUTTON CUTTERS AND RELATED INSERTS



EXTENSION AND SCREW-ON HEAD FEATURES:

- » Sterling Edge's modular system combines both extra reach and flexibility in cutter head styles.
- » Designed for those special applications where reach is critical.
- » Utilizes our standard ballnose, flat bottom, button cutter head and feed mill styles with the flexibility to switch head styles without removing the holder from the spindle.
- » Our new line of Tungsten Heavy Metal Extensions combines the strength and rigidity of carbide without the brittleness, providing a superior product for your high performance needs.
- » Specials available upon request.



BALL NOSE BUTTON CUTTER FLAT BOTTOM FEED MILL

MODULAR SCREW-ON HEADS

PART NUMBER	DESCRIPTION
SESHF 500-27-M6	1/2" BALL NOSE SCREW-ON HEAD
SESHF 625-32-M8	5/8" BALL NOSE SCREW-ON HEAD
SESHF 750-36-M10	3/4" BALL NOSE SCREW-ON HEAD
SESHF 100-44-M12	1" BALL NOSE SCREW-ON HEAD
SESHF 125-52-M16	1 1/4" BALL NOSE SCREW-ON HEAD
SESHFB 500-27-M6	1/2" FLAT BOTTOM SCREW-ON HEAD
SESHFB 625-32-M8	5/8" FLAT BOTTOM SCREW-ON HEAD
SESHFB 750-36-M10	3/4" FLAT BOTTOM SCREW-ON HEAD
SESHFB 100-44-M12	1" FLAT BOTTOM SCREW-ON HEAD
SESHFB 125-52-M16	1 1/4" FLAT BOTTOM SCREW-ON HEAD
SESBC 750-36-M10	3/4" BUTTON CUTTER SCREW-ON HEAD
SESBC 100-44-M12	1" BUTTON CUTTER SCREW-ON HEAD
SESBC 125-52-M16	1 1/4" BUTTON CUTTER SCREW-ON HEAD
SESM 100-44-M12	1" FEED MILL SCREW-ON HEAD

STEEL MODULAR EXTENSIONS

2.0" CLEARANCE STANDARD - CUSTOM CLEARANCE AVAILABLE UPON REQUEST

PART NUMBER	DIA.	OAL	THREAD
SEFEXT 500-400-500	.500	4.00	M6
SEFEXT 500-600-500	.500	6.00	M6
SEFEXT 625-400-625	.625	4.00	M8
SEFEXT 625-600-625	.625	6.00	M8
SEFEXT 750-400-750	.750	4.00	M10
SEFEXT 750-600-750	.750	6.00	M10
SEFEXT 750-800-750	.750	8.00	M10
SEFEXT 100-400-100	1.00	4.00	M12
SEFEXT 100-600-100	1.00	6.00	M12
SEFEXT 100-800-100	1.00	8.00	M12
SEFEXT 125-400-125	1.25	4.00	M16
SEFEXT 125-600-125	1.25	6.00	M16
SEFEXT 125-800-125	1.25	8.00	M16
SEFEXT 125-1200-125	1.25	12.00	M16

HEAVY METAL MODULAR EXTENSIONS

2.0" CLEARANCE STANDARD - CUSTOM CLEARANCE AVAILABLE UPON REQUEST

PART NUMBER	DIA.	OAL	THREAD
SEFHMENT 500-400-500	.500	4.00	M6
SEFHMENT 500-600-500	.500	6.00	M6
SEFHMENT 625-400-625	.625	4.00	M8
SEFHMENT 625-600-625	.625	6.00	M8
SEFHMENT 750-400-750	.750	4.00	M10
SEFHMENT 750-600-750	.750	6.00	M10
SEFHMENT 750-800-750	.750	8.00	M10
SEFHMENT 100-400-100	1.00	4.00	M12
SEFHMENT 100-600-100	1.00	6.00	M12
SEFHMENT 100-800-100	1.00	8.00	M12
SEFHMENT 100-1200-100	1.00	12.00	M12
SEFHMENT 125-400-125	1.25	4.00	M16
SEFHMENT 125-600-125	1.25	6.00	M16
SEFHMENT 125-800-125	1.25	8.00	M16
SEFHMENT 125-1200-125	1.25	12.00	M16

EXTENSIONS & SCREW-ON HEADS

EXTENSIONS & SCREW-ON HEADS



SOLID CARBIDE MODULAR EXTENSIONS

FEATURES:

- » Sterling Edge's Solid Carbide Modular Extensions are manufactured to the highest quality for ultimate in rigidity and cutting performance.
- » Our entire extension is carbide unlike many other companies offering a brazed threaded section.
- » Tolerances to within .0005" for maximum repeatability.
- » Custom relief grinds available for vertical profiling where clearance is needed to eliminate rubbing.
- » Industry standard pilots and threads for flexibility throughout your entire project.
- » Metric shanks available upon request.

HIGH FEED SHELL MILL

FEATURES:

- » Sterling Edge's High Feed Shell Mills are designed to satisfy today's demand for high feed machining. The geometry of our insert combined with the specific design of our tool bodies and our premium coatings allows for high speed machining of tool steels up to 65 HRC
- » Our Trigon indexable insert allows for 3 indexes for added savings.



CARBIDE EXTENSIONS

HIGH FEED SHELL MILL BODIES AND INSERTS

SOLID CARBIDE MODULAR EXTENSIONS
2.0" CLEARANCE STANDARD - CUSTOM CLEARANCE AVAILABLE UPON REQUEST

PART NUMBER	DIA.	OAL	THREAD
SEFSCEXT 500-400-500	.500	4.00	M6
SEFSCEXT 500-600-500	.500	6.00	M6
SEFSCEXT 625-400-625	.625	4.00	M8
SEFSCEXT 625-600-625	.625	6.00	M8
SEFSCEXT 750-400-750	.750	4.00	M10
SEFSCEXT 750-600-750	.750	6.00	M10
SEFSCEXT 750-800-750	.750	8.00	M10
SEFSCEXT 100-400-100	1.00	4.00	M12
SEFSCEXT 100-600-100	1.00	6.00	M12
SEFSCEXT 100-800-100	1.00	8.00	M12
SEFSCEXT 100-1000-100*	1.00	10.00	M12



HIGH FEED SHELL MILLS

PART NUMBER	DIA.	INSERT	FLUTES
SEFM 175-3-SM	1-3/4"	SEFMTIN 625	3
SEFM 200-4-SM	2"	SEFMTIN 625	4
SEFM 300-5-SM	3"	SEFMTIN 625	5
SEFM 400-7-SM	4"	SEFMTIN 625	7

HIGH FEED TOOL BODY

PART NUMBER	DIA.	OAL	INSERT	FLUTES
SEFM 100-600-100	1"	6"	SEFMTIN 10	2

HIGH FEED TRIGON INSERTS

GRIND/SIZE CODE	DESCRIPTION
SEFMTIN 625-CTXR	.625 TRIGON INSERT COATED ROSE- USE WITH SHELL MILL
SEFMTIN 10-CTXR	10MM TRIGON INSERT COATED ROSE- USE WITH 1" INDEXABLE SCREW-ON HEAD AND BODY





BUTTON CUTTER SPEED AND FEED

MEDIUM STEEL: 1018, 1020, 4140, 4150, P-20

TOOL DIAMETER	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.750	3500	80	.015-.030	.300
1.00	3000	90	.020-.040	.500
1.25	2800	90	.020-.045	.750
2.00 (12MM)	900	80	.020-.040	1.250
2.00 (16MM)	900	80	.020-.060	1.500
4.00 (16MM)	400	60	.020-.060	2.500

TOOL STEEL: A2, D2, S7, GM190

TOOL DIAMETER	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.750	3200	70	.015-.030	.300
1.00	3000	80	.020-.040	.500
1.25	2800	80	.020-.045	.750
2.00 (12MM)	800	70	.020-.040	1.250
2.00 (16MM)	800	70	.020-.050	1.500
4.00 (16MM)	400	50	.020-.050	2.500

IRON: CAST, NODULAR, DUCTILE

TOOL DIAMETER	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.750	3800	80	.015-.030	.300
1.00	3200	90	.020-.045	.500
1.25	3100	110	.020-.050	.750
2.00 (12MM)	1200	120	.020-.50	1.250
2.00 (16MM)	1200	120	.020-.060	1.500
4.00 (16MM)	550	80	.020-.070	2.500

IF MATERIAL HAS BEEN HARDENED, ADJUST DOWN PARAMETERS BY 30% FOR STARTING POINT.

FEED MILL SPEED AND FEED

MEDIUM STEEL: 1018, 1020, 4140, 4150, P-20

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	6000	150	.015	.050
.500/12MM	5000	150	.015-.020	.070
.625/16MM	4500	150	.020-.025	.080
.750/20MM	3000	170	.020-.040	.100
1.00/25MM	2800	170	.025-.040	.125
1.25/32MM	2400	180	.030-.050	.150

TOOL STEEL: A2, D2, S7, GM190

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	5000	120	.015	.050
.500/12MM	4000	120	.015-.020	.070
.625/16MM	3500	130	.015-.025	.080
.750/20MM	2800	150	.020-.030	.100
1.00/25MM	2400	160	.025-.040	.125
1.25/32MM	2200	160	.030-.050	.150

IRON: CAST, NODULAR, DUCTILE

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	6000	150	.015	.050
.500/12MM	5000	150	.020-.025	.070
.625/16MM	4500	150	.020-.030	.080
.750/20MM	3000	180	.020-.045	.125
1.00/25MM	3000	180	.030-.050	.150
1.25/32MM	2800	190	.030-.050	.170

IF MATERIAL HAS BEEN HARDENED, ADJUST DOWN PARAMETERS BY 30% FOR STARTING POINT.

FEED MILL SPEED AND FEED



**FLAT BOTTOM/BACKDRAFT
SPEED AND FEED**

MEDIUM STEEL: 1018, 1020, 4140, 4150, P-20

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER*
.375/10MM	6000	60-90	.015-.020	.020-.030
.500/12MM	5000	60-110	.015-.025	.020-.030
.625/16MM	4000	60-110	.020-.030	.020-.030
.750/20MM	3500	70-140	.020-.030	.020-.030
1.00/25MM	3000	70-150	.030-.040	.020-.030
1.25/32MM	2400	70-150	.030-.040	.020-.030

*DEPENDS ON CORNER RADIUS. CAN INCREASE WITH LARGER RADIUS.

TOOL STEEL: A2, D2, S7, GM190

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	5000	40-60	.015-.020	.020-.030
.500/12MM	4000	40-60	.020-.030	.020-.030
.625/16MM	3600	40-70	.030-.040	.020-.030
.750/20MM	3000	40-70	.030-.050	.020-.030
1.00/25MM	2400	50-80	.030-.060	.020-.030
1.25/32MM	2000	50-80	.030-.060	.020-.030

IRON: CAST, NODULAR, DUCTILE

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	7000	70-90	.015-.020	.020-.030
.500/12MM	6500	70-90	.015-.025	.020-.030
.625/16MM	6000	70-100	.020-.030	.020-.030
.750/20MM	6000	80-110	.020-.040	.020-.030
1.00/25MM	4500	80-130	.030-.060	.020-.030
1.25/32MM	3000	80-130	.030-.080	.020-.030

IF MATERIAL HAS BEEN HARDENED, ADJUST DOWN PARAMETERS BY 30% FOR STARTING POINT.

**BALL NOSE FINISHERS
SPEED AND FEED**

MEDIUM STEEL: 1018, 1020, 4140, 4150, P-20

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	4000-5000	40-60	.012-.032	.012-.020
.500/12MM	3000-4000	40-60	.020-.040	.012-.020
.625/16MM	3000-4000	40-60	.020-.040	.012-.032
.750/20MM	2800-3400	60-80	.020-.040	.012-.032
1.00/25MM	2800-3400	60-100	.020-.060	.012-.040
1.25/32MM	2000-3000	60-100	.032-.060	.012-.064

TOOL STEEL: A2, D2, S7, GM190

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	3500-4500	40-60	.010-.020	.010-.015
.500/12MM	2600-3200	60-80	.010-.024	.010-.020
.625/16MM	2200-2800	60-80	.010-.030	.010-.030
.750/20MM	2200-2800	60-100	.015-.040	.010-.030
1.00/25MM	2200-2800	60-150	.020-.060	.020-.050
1.25/32MM	2000-2600	60-200	.020-.080	.020-.100

IRON: CAST, NODULAR, DUCTILE

SIZE	RPMS	FEED RATE (IPM)	DEPTH OF CUT	STEPOVER
.375/10MM	4500-5500	60-100	.012-.032	.012-.020
.500/12MM	2400-3600	60-100	.020-.040	.012-.032
.625/16MM	2400-3600	80-150	.020-.045	.012-.032
.750/20MM	2000-3200	80-150	.020-.080	.012-.040
1.00/25MM	2000-3200	80-200	.020-.120	.020-.060
1.25/32MM	2000-3000	80-200	.020-.200	.020-.100

IF MATERIAL HAS BEEN HARDENED, ADJUST DOWN PARAMETERS BY 30% FOR STARTING POINT.

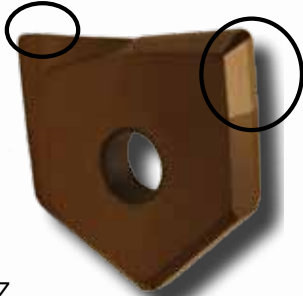
FLAT BOTTOM/BACKDRAFT
SPEED AND FEED

BALL NOSE SPEED AND FEED

NEW INNOVATIONS FROM STERLING EDGE!

SWEEP INSERT

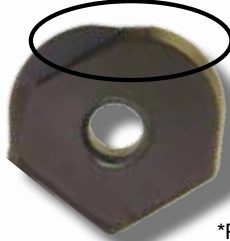
Our new Sweep Insert has a 90° Section for cleanup behind the radius and then transitions to a 3° Backdraft. This provides a superior finish while reducing chatter. Now standard with bottom cleanup as well!



PAGE 17

HOG NOSE* INSERT

Our new Hog Nose Insert allows you to cut off the tip like a 5-axis mill. The geometry increases the velocity of the insert at the cutting points. Excellent for hardened steel applications. Uses standard ball nose bodies.



PAGE 9

*Patent Pending

STERLING
INC.
EDGE

STERLING EDGE, INC

50228 DENNIS COURT

WIXOM, MI 48393

PHONE 800.403.0808 FAX 248.438 6754

SALES@STERLINGEDGE.NET

HIGH FEED SHELL MILL AND INSERTS

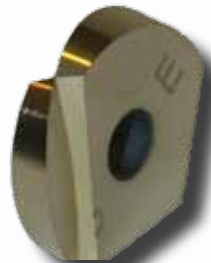
Our new High Feed shell mill and custom engineered indexable trigon inserts offers precision and performance for your high speed machining applications.



PAGE 31

HIGH HELIX STYLE: THE CURVE

Our Curve Insert has a high helical cutting edge designed to provide a superior finish when machining Aluminum, Kirksite, Brass and other non-ferrous material.



PAGE 9



Check out our new selection of Solid Carbide and Heavy Metal tool body extensions on page 30!

WWW.STERLINGEDGE.NET