

SUPERBEE

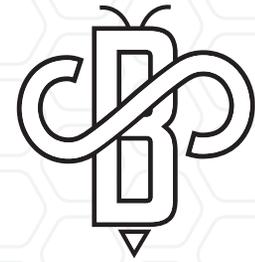
Indexable Carbide Form Cutters

IFS

2026



SUPERBEE



Recommended Cutting Conditions

Material	ISO	Hardness	Grade	Cutting Speed Feet/ Min	Feed In/Tooth
Non-Alloy Steel	P	< 25 HRC	T5700 / 520	500-800	.003-.006
Low Alloy Steel	P	~30 HRC	T5700 / 520	400-650	.003-.005
Die & Mold Steel	P	< 33 HRC	T5700 / 520	400-500	.003-.005
Stainless Steel (PH)	M	< 33 HRC	T5700 / 520	400-500	.003-.004
Stainless Steel (AS)	M	< 35 HRC	T5700 / 520	350-450	.003-.004
Cast Iron	K	~30 HRC	T5700 / 520	400-500	.003-.005
Aluminum - Low Si	N	B60	NT33	900-2500	.003-.007
Aluminum - High Si	N	B80	NT33	900-2500	.003-.006
Titanium Alloy	S	< 38 HRC	T5700 / 520	300-400	.003-.004
High Temp Alloy	S	< 44 HRC	T5700 / 520	80-120	.003-.004
Hardened Steel	H	> 50 HRC	T5700 / 520	150-250	.003-.004

E T5700

The T5700 proprietary **MDC** coating on NT56 is the ultimate in heat and wear resistance and lubricity. The T5700 outperforms all other coatings in steel, stainless steel and exotics. Upgrading to T5700 from AlTiN will increase SFPM by at least 15%, feeds & speeds increased up to 30%, and tool life increased up to 200%.

E T520

The T520 **AlTiN** coating on NT56 is a high performance coating which excels machining abrasive and hard to machine materials such as cast iron, aluminum alloys, tool steels and nickel alloys. Its superior oxidation resistance provides unparalleled performance in high temp machining. This coating is best for applications that generate the high heat at the tools cutting edge.

E NT5T

The NT5T **TiCN-TiN** coating on NT56 is designed for added wear resistance when milling steel, stainless steel and cast iron.

F NT33

The NT33 **Uncoated** grade for general purpose milling of aluminum, brass, cast iron and all non-ferrous materials. It has excellent strength and wear resistance.

E NT56

The NT56 **Uncoated** carbide with extreme edge strength is designed for general purpose milling of steel and cast iron. It is ideal for stainless steel and difficult machining conditions such as interrupted cutting.

E = Honed **F** = Sharp

Tips for BC large concave corner rounders:

- For best insert life use a 45 degree chamfer mill for the first pass leaving around .025 of material from the center of the finish radius, then do a final pass with the BC large concave corner rounder.
- It is important when setting feed rate to remember that the BC series are single flute effective, with each insert cutting a segment of the finish radius.

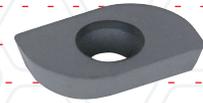


SwiftCARB

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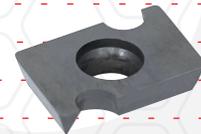
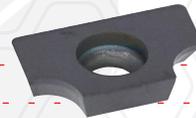
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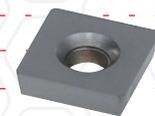
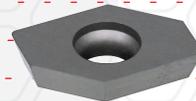
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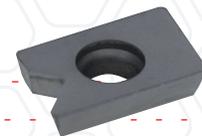
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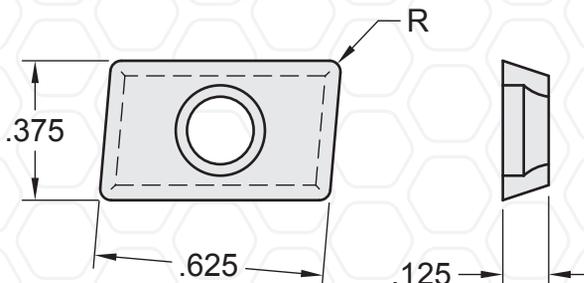
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SUPERBEE

EM15 CONVEX FILLET RADIUS SERIES

Convex fillet radii range from .007" to .375", available in both fractional and metric sizes. Choose from either integral shank or shell mill cutter bodies, each designed for optimal performance. Both feature positive geometry for enhanced cutting speeds and a proprietary pocket design that ensures unmatched repeatability.

- Superbee inserts are precision ground on all surfaces ensuring the tightest tolerances possible. This provides a stronger edge with better wear characteristics than a pressed insert.
- The T5700 grade provides superior lubricity and heat resistance, delivering up to 30% higher SFM and up to 70% longer tool life in steel, stainless and exotic materials.



To build your insert, choose a Part Number in **Red** from each column. Example: **EM15007ET5700**

Range	Part Number	Radius	Fraction/Metric
R1	EM15007	0.007	
	EM15015	0.015	1/64
	EM15020	0.020	
	EM15030	0.030	1/32
	EM15040	0.040	1MM
	EM15050	0.050	
R2	EM15060	0.060	1/16
	EM15070	0.070	
	EM15080	0.080	
	EM15090	0.090	
	EM15100	0.100	
	EM15110	0.110	7/64
R3	EM15120	0.120	3MM
	EM15125	0.125	1/8
	EM15130	0.130	
	EM15140	0.140	9/64
	EM15150	0.150	
	EM15156	0.156	5/32, 4MM
R4	EM15160	0.160	
	EM15170	0.170	
	EM15187	0.187	3/16
	EM15190	0.190	
R5	EM15200	0.200	
	EM15210	0.210	
	EM15220	0.220	
R6	EM15250	0.250	1/4
	EM15312	0.312	5/16
R6	EM15375	0.375	3/8

Double Corner

*

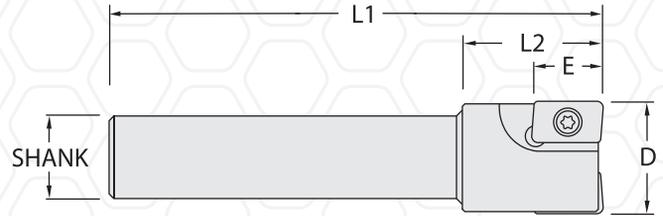
Single Corner

Edge Prep + Coating + Substrate					
Honed MDC	Honed C5	Honed C5	Honed C5	Honed C2	Sharp None
ET5700	ET520	ENT5T	ENT56	ENT33	FNT33
RECOMMENDED INSERTS BY MATERIAL TYPE					
	P		Non-Alloy Steel, Non Alloy Cast Steel		
	P		Low Alloy Steel, Low Alloy Cast Steel		
	P		High Alloy Steel, High Alloy Cast Steel		
	M		Austenitic Stainless Steel		
	M		Super Austenitic, Duplex Stainless Steel		
	K		Cast Iron		
	K		Wrought Alloy, Cast Alloyed Aluminum		
	N		Copper Alloys, Non Metallic Materials		
	S		High Temp Alloys Fe, Ni, or Co Based		
	S		Titanium and Ti Alloys		
	H		Hardened Steel, Chilled/ Hardened Cast Iron		

Special shapes, forms and sizes are available upon request.

BE CONVEX FILLET RADIUS CUTTER

End mill style integral shank indexable cutter body with positive geometry for more aggressive cutting action, proprietary pocket design provides unmatched repeatability and better finishes.



EM15 Convex Radius .007-.375

Refer to page 1 for the full range of EM15 convex radius inserts

Begin by choosing a cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE4011540	0.625	0.625	3.375	1.000	1	0.625	EM15
BE4411548	0.687	0.750	4.000	1.250	1		
BE4811548	0.750	0.750	4.000	1.250	1		
BE6421548	1.000	0.750	4.500	1.250	2		
BE6421564	1.000	1.000	4.500	1.250	2		
BE8031580	1.250	1.250	5.000	1.750	3		
BE9631580	1.500	1.250	5.000	1.750	3		

Then choose a radius Example: BE4011540R1

.007-.060	.070-.130	.140-.190	.200-.250	.312	.375
R1	R2	R3	R4	R5	R6

Double Corner

EM19 Convex Radius .007-.500

Refer to page 2 for the full range of EM19 convex radius inserts

Begin by choosing a cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE5611948	0.875	0.750	4.500	1.250	1	0.750	EM19
BE5611964	0.875	1.000	4.500	1.250	1		
BE6411948	1.000	0.750	4.500	1.250	1		
BE6411964	1.000	1.000	4.500	1.250	1		
BE8021980	1.250	1.250	5.000	1.750	2		
BE9621980	1.500	1.250	5.000	1.750	2		

Then choose a radius Example: BE5611948R1

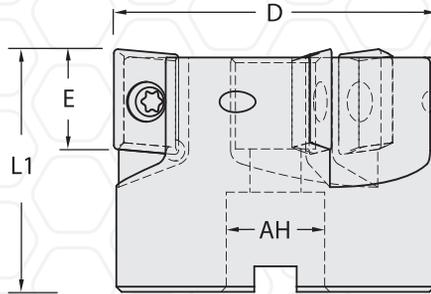
.007-.060	.070-.130	.140-.190	.200-.250	.312	.375	.437	.500
R1	R2	R3	R4	R5	R6	R7	R8

Double Corner

Single Corner

SUPERBEE

BE SHELL MILL CONVEX FILLET RADIUS CUTTER



Shell mill-style cutter bodies feature positive geometry for more aggressive cutting action. The proprietary pocket design ensures unmatched repeatability, minimizing runout and delivering superior surface finishes.

EM15 Convex Radius .007-.375

Refer to page 1 for the full range of EM15 convex radius inserts

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12851548	2.000	0.750	1.825	5	0.625	EM15
BE14451548	2.250	0.750		5		
BE16051548	2.500	0.750		5		
BE19261564	3.000	1.000		6		
BE22461580	3.500	1.250		6		

Then choose a radius Example: BE12851548R1

.007-.060	.070-.130	.140-.190	.200-.250	.312	.375
R1	R2	R3	R4	R5	R6

Double Corner

EM19 Convex Radius .007-.500

Refer to page 2 for the full range of EM19 convex radius inserts

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12831948	2.000	0.750	1.825	3	0.625	EM19
BE16031948	2.500				0.750	

Then choose a radius Example: BE12831948R1

.007-.060	.070-.130	.140-.190	.200-.250	.312	.375	.437	.500
R1	R2	R3	R4	R5	R6	R7	R8

Double Corner

Single Corner

Spare Parts:

- EM15 Screw: BS15
- EM19 Screw: BS19
- EM15 Wrench: BW15
- EM19 Wrench: BW19

Special shapes, forms and sizes are available upon request.



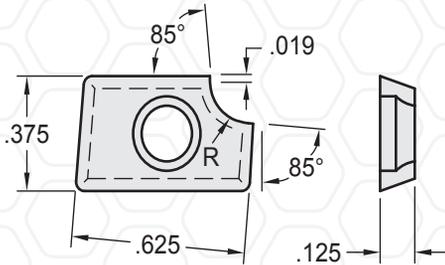
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EM15 CONCAVE CORNER ROUNDING RADIUS SERIES

Concave corner rounding radii stocked between .010" - .125" including fractional and metric sizes. Choose from either integral shank or shell mill cutter bodies, each designed for optimal performance. Featuring positive geometry for enhanced cutting speeds and a proprietary pocket design that ensures unmatched repeatability.

- SUPERBEE inserts are precision ground on all surfaces ensuring the tightest tolerances possible. This provides a stronger edge with better wear characteristics than a pressed insert.
- The T5700 grade provides superior lubricity and heat resistance, delivering up to 30% higher SFM and up to 70% longer tool life in steel, stainless and exotic materials.



To build your insert, choose a Part Number in **Red** from each column. Example: **EM15C010ET5700**

Range	Part Number	Radius	Fraction/ Metric
C1	EM15C010	0.010	
	EM15C015	0.015	1/64
	EM15C020	0.020	
	EM15C030	0.030	1/32
	EM15C0393	0.039	1MM
	EM15C040	0.040	1MM
	EM15C050	0.050	
	EM15C060	0.060	1/16
C2	EM15C070	0.070	
	EM15C0787	0.079	5/64, 2MM
	EM15C080	0.080	
	EM15C090	0.090	
	EM15C100	0.100	
	EM15C110	0.110	7/64
	EM15C118	0.118	3MM
	EM15C120	0.120	3MM
	EM15C125	0.125	1/8

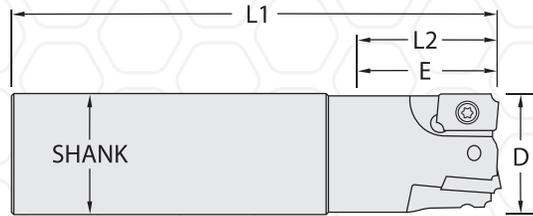
Edge Prep + Coating + Substrate					
Honed	Honed	Honed	Honed	Honed	Sharp
MDC	AITIN	TiCN-TiN	None	None	None
C5	C5	C5	C5	C2	C2
ET5700	ET520	ENT5T	ENT56	ENT33	FNT33
RECOMMENDED INSERTS BY MATERIAL TYPE					

	P		Non-Alloy Steel, Non Alloy Cast Steel	
	P		Low Alloy Steel, Low Alloy Cast Steel	
	P		High Alloy Steel, High Alloy Cast Steel	
	M		Austenitic Stainless Steel	
	M		Super Austenitic, Duplex Stainless Steel	
	K		Cast Iron	
	N		Wrought Alloy, Cast Alloyed Aluminum	
	N		Copper Alloys, Non Metallic Materials	
	S		High Temp Alloys Fe, Ni, or Co Based	
	S		Titanium and Ti Alloys	
	H		Hardened Steel, Chilled/ Hardened Cast Iron	

Special shapes, forms and sizes are available upon request.

BE CONCAVE CORNER ROUNDING CUTTER

End mill style integral shank indexable cutter bodies relieved for EM15 or EM19 concave corner rounding inserts. Designed with positive geometry for more aggressive cutting action and a proprietary pocket design providing unmatched repeatability and quality finishes.



EM15 Concave Radius .010-.125

Refer to page 4 for the full range of EM15 convex radii inserts

Begin by choosing a cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE4011540	0.625	0.625	3.375	1.000	1	0.625	EM15
BE4411548	0.687	0.750	4.000	1.250	1		
BE4811548	0.750	0.750	4.000	1.250	1		
BE6421548	1.000	0.750	4.500	0.750	2		
BE6421564	1.000	1.000	4.500	1.000	2		
BE8031580	1.250	1.250	5.000	1.750	3		
BE9631580	1.500	1.250	5.000	1.750	3		

Then choose a radius Example: BE4011540C1

.010-.060 .070-.125

C1

C2

Double Corner

EM19 Concave Radius .010-.250

Refer to page 5 for the full range of EM19 concave radii inserts

Begin by choosing a cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE5611948	0.875	0.750	4.500	1.250	1	0.750	EM19
BE5611964	0.875	1.000	4.500	1.250	1		
BE6411948	1.000	0.750	4.500	1.250	1		
BE6411964	1.000	1.000	4.500	1.250	1		
BE8021980	1.250	1.250	5.000	1.750	2		
BE9621980	1.500	1.250	5.000	1.750	2		

Then choose a radius Example: BE5611948C1

.010-.060 .070-.125 .130-.160 .170-.190 .197-.220 .236-.250

C1

C2

C3

C4

C5

C6

Double Corner

Single Corner

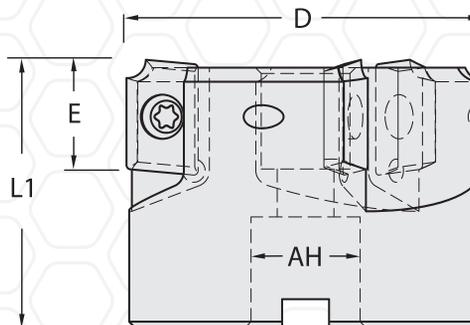
Spare Parts:

- EM15 Screw: BS15
- EM19 Screw: BS19
- EM15 Wrench: BW15
- EM19 Wrench: BW19

SUPERBEE

BE SHELL MILL CONCAVE CORNER ROUNDING CUTTER

Shell mill-style indexable cutter bodies precision-relieved for EM15 or EM19 concave corner rounding inserts. Designed with positive geometry for more aggressive cutting action, they feature a proprietary pocket design that ensures unmatched repeatability and superior surface finishes.



EM15 Concave Radius .010-.125

Refer to page 4 for the full range of EM15 concave radii inserts

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12851548	2.000	0.750	1.825	5	0.550	EM15
BE14451548	2.250	0.750		5		
BE16051548	2.500	0.750		5		
BE19261564	3.000	1.000		6		
BE22461580	3.500	1.250		6		

Then choose a radius Example: BE12851548R3

.010-.060 .070-.125

R3

R4

Double Corner

EM19 Concave Radius .010-.250

Refer to page 5 for the full range of EM19 concave radii inserts

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12831948	2.000	0.750	1.825	3	0.650	EM19
BE16031948	2.500					

Then choose a radius Example: BE12831948C1

.010-.060 .070-.125 .130-.160 .170-.190 .197-.220 .236-.250

C1

C2

C3

C4

C5

C6

Double Corner

Single Corner

Special shapes, forms and sizes are available upon request.

BC LARGE CONCAVE CORNER ROUNDING RADIUS CUTTER

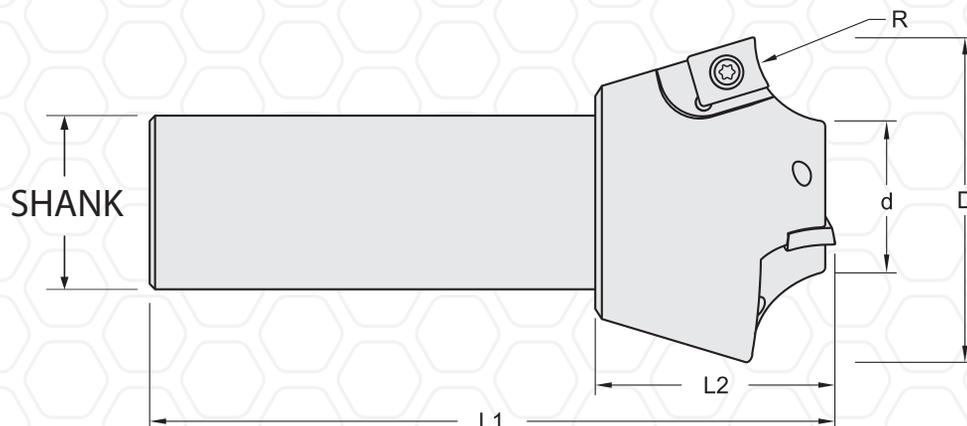
Integral shank large concave cutter bodies offer the fastest way to cut large radii. Our design segments the cut, reducing tool pressure and minimizing chatter, allowing for higher feed rates and improved performance.

Spare Parts:

EM15 Screw: BS15
EM19 Screw: BS19
EM15 Wrench: BW15
EM19 Wrench: BW19



.250-1.000 Radius Cutter Body							
Part Number	Radius Range	D	d	Shank	L1	L2	FL
BC4821564C250	.250 -.280	1.409	0.748			0.850	EC15
BC4821564C281	.281 -.311	1.454	0.745			0.910	
BC4821564C312	.312 -.342	1.480	0.745	1.000	4.500	1.000	
BC4821564C343	.343 -.374	1.522	0.748			1.000	
BC4821564C375	.375 -.405	1.550	0.748			1.100	EC19
BC5621980C406	.406 -.436	1.846	0.883			1.250	
BC5621980C437	.437 -.467	1.883	0.872	1.250	5.000	1.346	
BC5621980C468	.468 -.499	1.812	0.776			1.750	
BC5621980C500	.500 -.530	1.957	0.876			1.465	EC15
BC8031580C531	.531 -.561	2.399	1.249			1.800	
BC8031580C562	.562 -.592	2.375	1.200	1.250	5.000	1.750	
BC8031580C625	.625 -.655	2.538	1.245			1.814	
BC9631980C656	.656 -.686	2.943	1.496			1.800	EC19
BC9631980C687	.687 -.717	2.877	1.386			1.750	
BC9631980C718	.718 -.749	3.023	1.494	1.250	5.000	1.805	
BC9631980C750	.750 -.780	3.059	1.500			1.800	
BC9631980C781	.781 -.811	3.130	1.491			1.800	
BC9631980C812	.812 -.842	3.164	1.498			1.790	
BC11241980C875	.875 -.905	3.601	1.750			2.066	
BC11241980C906	.906 -.936	3.687	1.751	1.250	5.250	2.051	
BC11241980C968	.968 -.999	3.756	1.697			2.026	
BC11241980C1.000	1.000	3.800	1.800			2.000	



CALL 800-227-9876 FOR YOUR NEAREST DISTRIBUTOR

SUPERBEE

8

BE TOP & BOTTOM 90° CORNER ROUNDING CUTTER

End mill style indexable cutter body for 90° top and bottom corner rounding, cuts a radius on the top, bottom, or both corners of your part. Positive geometry for more aggressive cutting action, and proprietary pocket design provides unmatched repeatability, reducing runout and producing far better finishes.



Spare Parts:

- EM15 Screw: BS15
- EM19 Screw: BS19
- EM15 Wrench: BW15
- EM19 Wrench: BW19

EM15 .030-.125 Radius Cutter Body

Begin by choosing a Top & Bottom cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE6421548TB	1.000	0.750	4.500	1.250	2		EM15
BE6421564TB	1.000	1.000	4.500	1.250	2	0.625	EM15
BE8031580TB	1.250	1.250	5.000	1.750	3		EM15

Then choose a radius range Example: BE6421548TBC1

Radius Range	Example
.030-.060	.079-.125
C1	C2

EM19 .156-.250 Radius Cutter Body

Begin by choosing a Top & Bottom cutter body

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE8021980TB	1.250	1.250	5.000	1.750	2	0.750	EM19

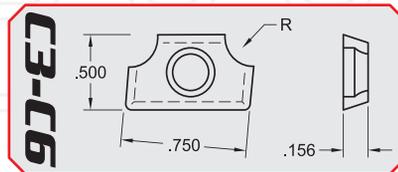
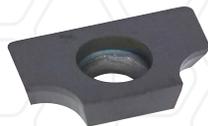
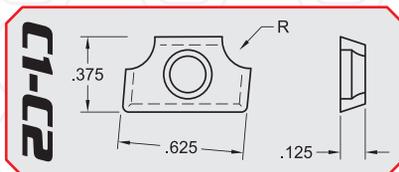
Then choose a radius range Example: BE8021980TBC3

Radius Range	Example
.156-.157	.187
C3	C4
C5	C6

EM TOP & BOTTOM 90° CORNER ROUNDING SERIES

The EM top and bottom corner rounding inserts effortlessly cut a 90° radius on the top, bottom, or both corners of your part. Available from .030" - .250".

P	Non-Alloy Steel
P	Low Alloy Steel
P	High Alloy Steel
M	Stainless Steel (PH)
M	Stainless Steel (AS)
K	Cast Irons
N	Aluminum - Low Si
N	Copper Alloy, Plastic
S	High Temp Alloys
S	Titanium Alloys
H	Hardened Steels



To build your insert, choose a Part Number in **Red** from each column. Example: **EM15C030TBET5700**

Range	Part Number	Radius	Fraction/Metric
C1	EM15C030TB	0.030	1/32
	EM15C0393TB	0.039	1MM
	EM15C060TB	0.060	1/16
C2	EM15C0787TB	0.079	5/64, 2MM
	EM15C090TB	0.090	
	EM15C118TB	0.118	3MM
	EM15C120TB	0.120	3MM
C3	EM15C125TB	0.125	1/8
	EM19C156TB	0.156	5/32, 4MM
C4	EM19C157TB	0.157	5/32, 4MM
C5	EM19C187TB	0.187	3/16
C6	EM19C197TB	0.197	5MM
C6	EM19C236TB	0.236	15/64, 6MM
	EM19C250TB	0.250	1/4

Edge Prep + Coating + Substrate					
Honed	Honed	Honed	Honed	Honed	Sharp
MDC	AITIN	TiCN-TiN	None	None	None
C5	C5	C5	C5	C2	C2
ET5700	ET520	ENT5T	ENT56	ENT33	FNT33
RECOMMENDED INSERTS BY MATERIAL TYPE					

Special shapes, forms and sizes are available upon request.

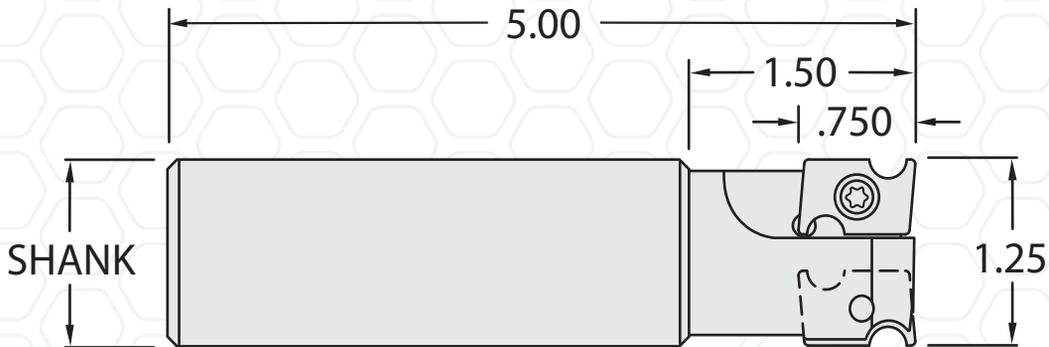


SwiftCARB

WWW.SWIFTCARB.COM

180° CORNER ROUNDING CUTTER

The 180° corner rounding series. All surfaces are precision ground for excellent repeatability from insert to insert. Incredible time savings for all applications requiring a 180 degree radius. Sizes not listed in the table between .031-.125 radius can be quoted upon request.



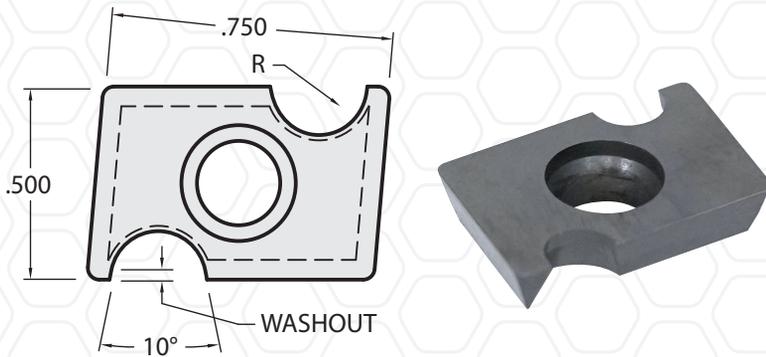
Cutter Body Part Number	Radius Range	DIA	Shank DIA	OAL	Flutes
BE8021980180DEGC1	.031-.062	1.250	1.250	5.000	2
BE8021980180DEGC2	.079-.125	1.250	1.250	5.000	2

Spare Parts:

EM19 Screw: BS19
EM19 Wrench: BW19

SUPERBEE

180° CORNER ROUNDING INSERTS



P	Non-Alloy Steel, Non Alloy Cast Steel
P	Low Alloy Steel, Low Alloy Cast Steel
P	High Alloy Steel, High Alloy Cast Steel
M	Austenitic Stainless Steel
M	Super Austenitic, Duplex Stainless Steel
K	Cast Iron
N	Wrought Alloy, Cast Alloyed Aluminum
N	Copper Alloys, Non Metallic Materials
S	High Temp Alloys Fe, Ni, or Co Based
S	Titanium and Ti Alloys
H	Hardened Steel, Chilled/ Hardened Cast Iron

Insert Part Number	R	Washout
EM19180DEGC031	0.031	0.015
EM19180DEGC039	0.039	0.015
EM19180DEGC047	0.047	0.015
EM19180DEGC062	0.062	0.015
EM19180DEGC079	0.079	0.015
EM19180DEGC093	0.093	0.015
EM19180DEGC099	0.099	0.015
EM19180DEGC118	0.118	0.015
EM19180DEGC125	0.125	0.005

Edge Prep + Coating + Substrate

Honed	Honed	Honed	Sharp
MDC	AlTiN	None	None
C5	C5	C5	C2
ET5700	ET520	ENT56	FNT33

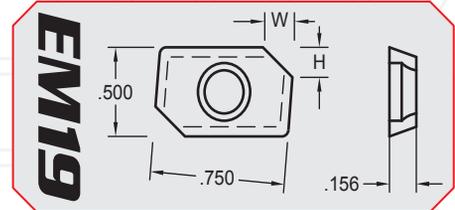
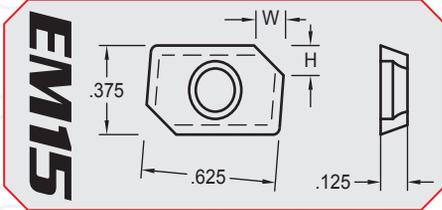
CALL 800-227-9876 FOR YOUR NEAREST DISTRIBUTOR

SUPERBEE 10

EM CHAMFER SERIES

Available in 9 different chamfer angles. Choose from either integral shank or shell mill cutter bodies, each designed for optimal performance. Positive geometry for more aggressive cutting action.

- SUPERBEE inserts are precision ground on all surfaces ensuring the tightest tolerances possible. This provides a stronger edge with better wear characteristics than a pressed insert.
- T5700 grade provides superior lubricity and heat resistance, delivering up to 30% higher SFM and up to 70% longer tool life in steel, stainless and exotic materials.



To build your insert, choose a Part Number in **Red** from each column. Example: **EM1510250ET5700**

EM15 CHAMFER WIDTH UP TO .200

Part Number	Angle	H	W
EM1510250	10°	0.044	0.250
EM1515250	15°	0.067	0.250
EM1520250	20°	0.091	0.250
EM1525250	25°	0.117	0.250
EM1530200	30°	0.115	0.200
EM1541200	41°	0.174	0.200
EM1545200	45°	0.200	0.200
EM1550200	50°	0.200	0.168
EM1560200	60°	0.200	0.115

EM19 CHAMFER WIDTH UP TO .250

Part Number	Angle	H	W
EM1910300	10°	0.052	0.300
EM1915300	15°	0.080	0.300
EM1920300	20°	0.109	0.300
EM1925300	25°	0.140	0.300
EM1930250	30°	0.144	0.250
EM1941250	41°	0.217	0.250
EM1945250	45°	0.250	0.250
EM1950250	50°	0.250	0.210
EM1960250	60°	0.250	0.144

Edge Prep + Coating + Substrate

Honed MDC	Honed AITiN	Honed TiCN-TiN	Honed None	Honed None	Sharp None
C5	C5	C5	C5	C2	C2
ET5700	ET520	ENT5T	ENT56	ENT33	FNT33

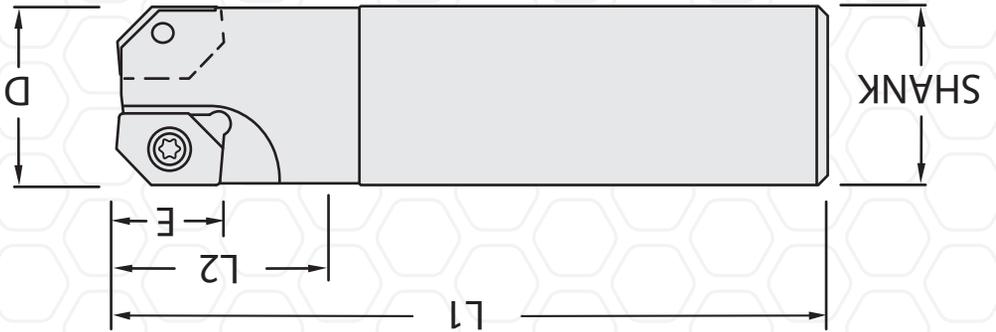
RECOMMENDED INSERTS BY MATERIAL TYPE

	P		Non-Alloy Steel, Non Alloy Cast Steel	
	P		Low Alloy Steel, Low Alloy Cast Steel	
	P		High Alloy Steel, High Alloy Cast Steel	
	M		Austenitic Stainless Steel	
	M		Super Austenitic, Duplex Stainless Steel	
	K		Cast Iron	
	N		Wrought Alloy, Cast Alloyed Aluminum	
	N		Copper Alloys, Non Metallic Materials	
	S		High Temp Alloys Fe, Ni, or Co Based	
	S		Titanium and Ti Alloys	
	H		Hardened Steel, Chilled/ Hardened Cast Iron	

Special shapes, forms and sizes are available upon request.

Special shapes, forms and sizes are available upon request.

Spare Parts:
 EM15 Screw: BS15
 EM19 Screw: BS19
 EM15 Wrench: BW15
 EM19 Wrench: BW19



The end mill-style integral shank indexable cutter body features positive geometry for more aggressive cutting action. Its proprietary pocket design ensures unmatched repeatability, delivering superior finishes on chamfered corners.

BE CHAMFER CUTTER

EM15 CHAMFER WIDTH UP TO .200
 Refer to page 10 for the full range of chamfer widths

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE4011540	0.625	0.625	3.375	1.000	1	1	EM15
BE411548	0.687	0.750	4.000	1.250	1	1	EM15
BE4811548	0.750	0.750	4.000	1.250	1	1	EM15
BE421548	1.000	0.750	4.500	1.250	2	2	EM15
BE6421564	1.000	1.000	4.500	1.250	2	2	EM15
BE8031580	1.250	1.250	5.000	1.750	3	3	EM15
BE9631580	1.500	1.250	5.000	1.750	3	3	EM15

Then choose an angle Example: BE4011540A10

A10	A15	A20	A25	A30	A41	A45	A50	A60
10°	15°	20°	25°	30°	41°	45°	50°	60°

EM19 CHAMFER WIDTH UP TO .250
 Refer to page 10 for the full range of chamfer widths

Part Number	D	Shank	L1	L2	FL	E	Insert Type
BE5611948	0.875	0.750	4.500	1.250	1	1	EM19
BE5611964	0.875	1.000	4.500	1.250	1	1	EM19
BE6411948	1.000	0.750	4.500	1.250	1	1	EM19
BE6411964	1.000	1.000	4.500	1.250	1	1	EM19
BE8021980	1.250	1.250	5.000	1.750	2	2	EM19
BE9621980	1.500	1.250	5.000	1.750	2	2	EM19

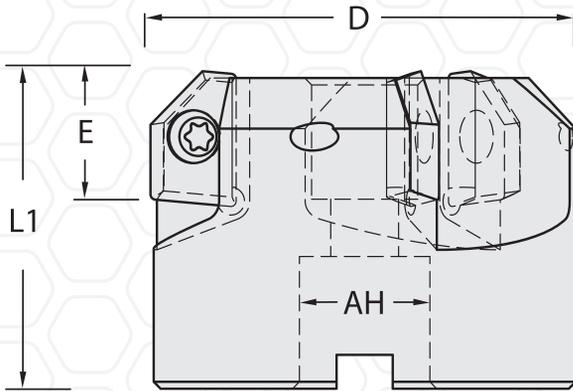
Then choose an angle Example: BE5611948A10

A10	A15	A20	A25	A30	A41	A45	A50	A60
10°	15°	20°	25°	30°	41°	45°	50°	60°

BE SHELL MILL CHAMFER CUTTER



Shell mill-style indexable cutter body features positive geometry for more aggressive cutting action. Its proprietary pocket design ensures unmatched repeatability, delivering superior finishes on chamfered corners.



EM15 CHAMFER WIDTH UP TO .200

Refer to page 10 for the full range of chamfer widths

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12851548	2.000	0.750		5		EM15
BE14451548	2.250	0.750		5		
BE16051548	2.500	0.750	1.825	5	0.625	
BE19261564	3.000	1.000		6		
BE22461580	3.500	1.250		6		

Then choose an angle Example: BE12851548A10

10°	15°	20°	25°	30°	41°	45°	50°	60°
A10	A15	A20	A25	A30	A41	A45	A50	A60

EM19 CHAMFER WIDTH UP TO .250

Refer to page 10 for the full range of chamfer widths

Begin by choosing a shell mill

Part Number	D	AH	L1	FL	E	Insert Type
BE12831948	2.000	0.750	1.825	3	0.750	EM19
BE16031948	2.500	0.750				

Then choose an angle Example: BE12831948A10

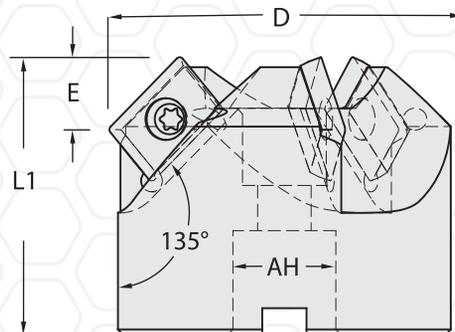
10°	15°	20°	25°	30°	41°	45°	50°	60°
A10	A15	A20	A25	A30	A41	A45	A50	A60

Spare Parts:
 EM15 Screw: BS15
 EM19 Screw: BS19
 EM15 Wrench: BW15
 EM19 Wrench: BW19

SUPERBEE

BE 45° SHELL MILL CHAMFER CUTTER

The ideal choice for larger 45° chamfers. This cutter body holds a standard EM15 or EM19 insert at a 45° angle, delivering a longer length of cut than the BE Chamfer series.



EM15 CHAMFER .400 WIDTH

Part Number	Angle	D	d	L1	AH	FL	E	Insert
CM963154845	45°	2.352	1.500	1.825	0.750	3	0.400	EM15

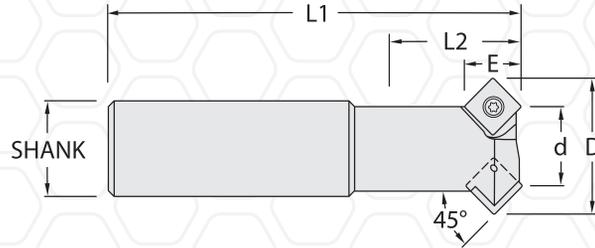
EM19 CHAMFER .490 WIDTH

Part Number	Angle	D	d	L1	AH	FL	E	Insert
CM963194845	45°	2.530	1.500	1.825	0.750	3	0.400	EM19



CMS 45° TOP & BOTTOM CHAMFER CUTTER

Ideal for cutting a 45° on the top or bottom of a part, utilizing a square 4 cornered insert, and stocked with 5 different radii. The positive geometry allows for more aggressive cutting action, while the proprietary pocket design provides unmatched repeatability and reduced runoff.

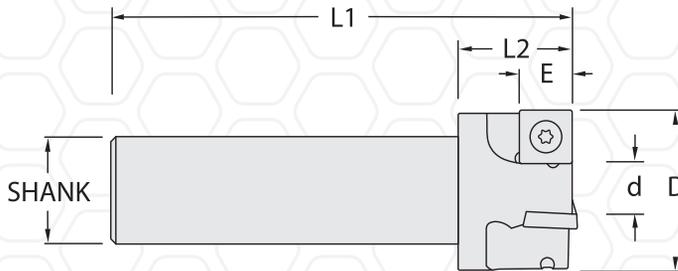


CMS Chamfer .375-.400 WIDTH								
Refer to page 13 for the full range of insert sizes								
Part Number	D	d	Shank	L1	L2	FL	E	Insert
CMS4014264A45	0.989	0.312	1.000	5.000	1.750	1	0.500	SP42
CMS4814264A45	1.304	0.625	1.000	5.250	2.000	1	0.500	SP42
CMS6433280A45	1.504	1.000	1.250	5.500	2.250	3	0.375	SP32
CMS6424280A45	1.680	1.000	1.250	5.500	2.250	2	0.500	SP42
CMS8034280A45	1.931	1.250	1.250	5.500	2.250	3	0.500	SP42
CMS9634280A45	2.056	1.375	1.250	5.500	2.250	3	0.500	SP42

SUPERBEE

CB COUNTERBORE CUTTER BODY

Designed for efficient counterboring, this cutter delivers a precise flat-bottom cut utilizing the SP Series square, four-cornered insert, available in five different radii.



Spare Parts:

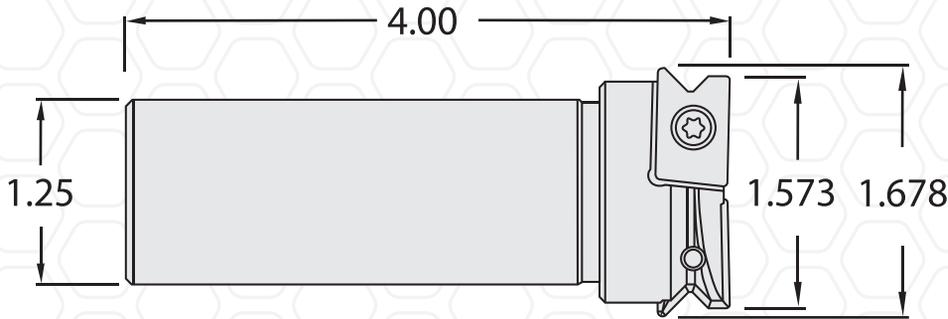
- SP3 Screw: CS5
- SP4 Screw: CS6
- SP3 Wrench: NT9
- SP4 Wrench: NT15

Counterbore .594-1.50 Diameter									
Refer to page 13 for the full range of insert sizes									
Part Number	D	d	Shank	L1	L2	FL	E	Insert	
CB3813240	0.594	0.125	0.625	3.250		1	0.370	SP32	
CB4013240	0.625	0.125	0.625	3.250		1	0.370	SP32	
CB4413248	0.687	0.125	0.750	3.250		1	0.370	SP32	
CB5013248	0.781	0.125	0.750	3.250		1	0.370	SP32	
CB6423248	1.000	0.290	0.750	3.250	1.000	2	0.370	SP32	
CB6823248	1.062	0.352	0.750	3.250	1.000	2	0.370	SP32	
CB7633264	1.187	0.477	1.000	4.250	1.000	3	0.370	SP32	
CB8033264	1.250	0.540	1.000	4.250	1.000	3	0.370	SP32	
CB8834264	1.375	0.415	1.000	4.250	1.000	3	0.495	SP42	
CB9634264	1.500	0.540	1.000	4.250	1.000	3	0.495	SP42	



PICATINNY / NATO RAIL CUTTER

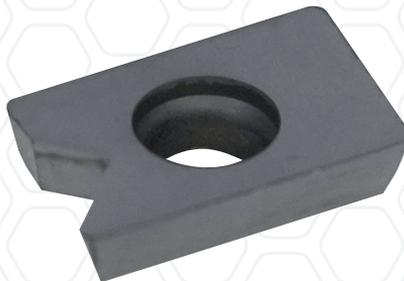
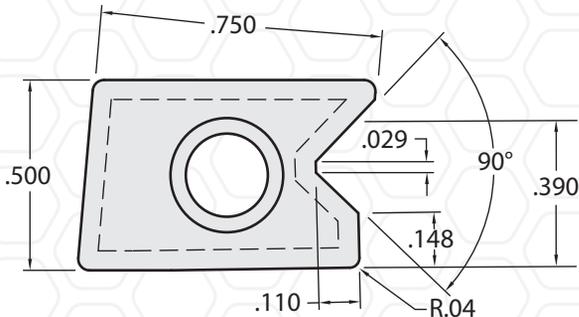
Introducing the new Picatinny / NATO accessory rail indexable milling cutter. It is designed in accordance with the STANAG 4694 standardization agreement. Each surface is precision ground to ensure exceptional repeatability from insert to insert, delivering incredible time and cost savings for any application requiring a Picatinny / NATO accessory rail.



Cutter Body Part Number	DIA	Shank DIA	OAL	Flutes
BESTANAG4694	1.573	1.250	4.000	2

SUPERBEE

PICATINNY / NATO RAIL CUTTING INSERTS



Spare Parts:

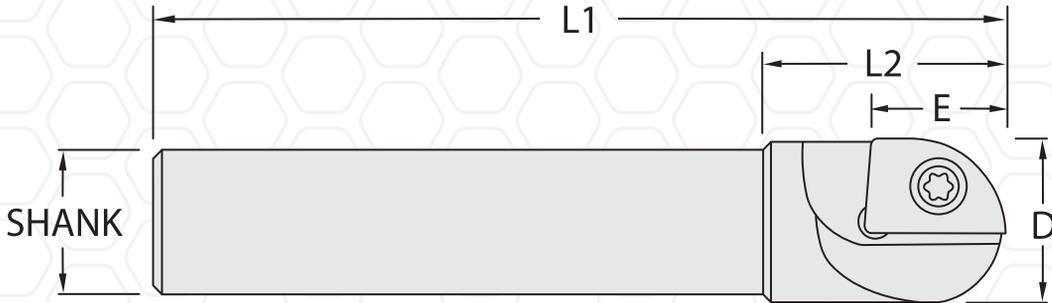
EM19 Screw: BS19
EM19 Wrench: BW19

P	Non-Alloy Steel, Non Alloy Cast Steel
P	Low Alloy Steel, Low Alloy Cast Steel
P	High Alloy Steel, High Alloy Cast Steel
M	Austenitic Stainless Steel
M	Super Austenitic, Duplex Stainless Steel
K	Cast Iron
N	Wrought Alloy, Cast Alloyed Aluminum
N	Copper Alloys, Non Metallic Materials
S	High Temp Alloys Fe, Ni, or Co Based
S	Titanium and Ti Alloys
H	Hardened Steel, Chilled/ Hardened Cast Iron

Insert Part Number	
EM19STANAG4694	
Edge Prep, Coating, Substrate	
Honed	Sharp
MDC	None
C5	C2
ET5700	FNT33

BB BALL END CUTTER BODY

Positive geometry for more aggressive cutting action. The proprietary pocket design provides unmatched repeatability reducing runout and producing far better finishes.



Ball End .375-.500 Radius

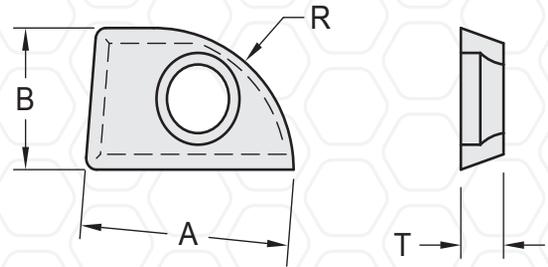
Part Number	Ball Size	D	Shank	L1	L2	FL	E	Insert
BB4011440	5/8	0.625	0.625	3.375	1.000		0.625	EB14
BB4811548	3/4	0.750	0.750	4.000	1.250		0.625	EB15
BB5611948	7/8	0.875	0.750	4.500	1.250	1	0.750	EB19
BB5611964	7/8	0.875	1.000	4.500	1.250		0.750	EB19
BB6411948	1	1.000	0.750	4.500	1.250		0.750	EB19
BB6411964	1	1.000	1.000	4.500	1.250		0.750	EB19

SUPERBEE

P	Non-Alloy Steel
P	Low Alloy Steel
P	High Alloy Steel
M	Stainless Steel (PH)
M	Stainless Steel (AS)
K	Cast Irons
N	Aluminum - Low Si
N	Copper Alloy, Plastic
S	High Temp Alloys
S	Titanium Alloys
H	Hardened Steels

EM BALL END SERIES

Positive geometry for more aggressive cutting action, while the proprietary pocket design provides unmatched repeatability reducing runout and producing far better finishes.



To build your insert, choose a Part Number in **Red** from each column. Example: **EB1458ET5700**

Part Number	R	Fraction	A	B	T
EB1458	0.625	5/8	0.625	0.375	0.125
EB1534	0.750	3/4	0.625	0.375	0.125
EB1978	0.875	7/8	0.750	0.500	0.156
EB191	1.000	1	0.750	0.500	0.156

Edge Prep + Coating + Substrate					
Honed	Honed	Honed	Honed	Honed	Sharp
MDC	AITiN	TiCN-TiN	None	None	None
C5	C5	C5	C5	C2	C2
ET5700	ET520	ENT5T	ENT56	ENT33	FNT33
RECOMMENDED INSERTS BY MATERIAL TYPE					

Spare Parts:

EB14 Screw: **BS15** EB14 Wrench: **BW15**
 EB15 Screw: **BS15** EM15 Wrench: **BW15**
 EB19 Screw: **BS19** EB19 Wrench: **BW19**

Special shapes, forms and sizes are available upon request.

DE SERIES 3/4 X 3/4 TURNING HOLDER

Indexable .750 X .750 turning holder for fillet, corner round & angle. Square fits all EM 19 inserts. Can be used with chamfers, convex and concave radii.



EM19 Concave Insert Holder		
Part Number	R Range	Shank
DEMCLNR1219C1	C1	0.750
DEMCLNR1219C2	C2	
DEMCLNR1219C3	C3	
DEMCLNR1219C4	C4	
DEMCLNR1219C5	C5	
DEMCLNR1219C6	C6	



EM19 Chamfer Insert Holder		
Part Number	R Range	Shank
DEMCLNR1219A10	A10	0.750
DEMCLNR1219A15	A15	
DEMCLNR1219A20	A20	
DEMCLNR1219A25	A25	
DEMCLNR1219A30	A30	
DEMCLNR1219A41	A41	
DEMCLNR1219A45	A45	
DEMCLNR1219A50	A50	
DEMCLNR1219A60	A60	



EM19 Convex Insert Holder		
Part Number	R Range	Shank
DEMCLNR1219R1	R1	0.750
DEMCLNR1219R2	R2	
DEMCLNR1219R3	R3	
DEMCLNR1219R4	R4	
DEMCLNR1219R5	R5	
DEMCLNR1219R6	R6	
DEMCLNR1219R7	R7	
DEMCLNR1219R8	R8	

T19 SUPERBEE TOOLS & SCREWS



Cutter Body
Screwdriver:
BW15 (T15)
BW19 (T19)



Cutter Body
Flag Wrench:
NT8 (T8)
NT9 (T9)
NT15 (T15)
NT19 (T19)



Screws:
BS15
BS19
CS5
CS6