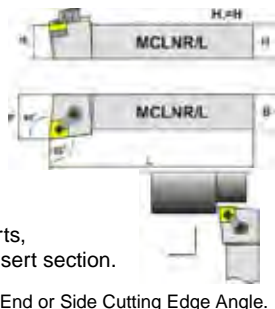


CARBIDE INSERT TOOLHOLDERS

SERIES 804:

MCLN R/L TOOLHOLDER SYSTEM M & C FOR NEGATIVE 80° DIAMOND CNM... INSERTS

Sets include
RH HOLDER
&
10 TiN Coated Inserts

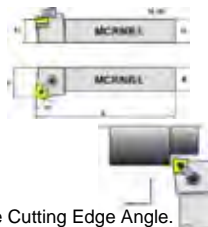


For a full list of available inserts,
please refer to our Carbide Insert section.

5° End or Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	CNM Insert	Order No.		Price	Order No. RH Sets	Price
					RH	LH			
MCLNR/L 12-4B	3/4	4 1/2	1.0	432	7100121	7100122		7105121	
MCLNR/L 16-4D	1	6	1.25		7100161	7100162			
MCLNR/L 20-4D	1-1/4	6	1.50		7100201	7100202			
MCLNR/L 24-4D	1-1/2	6	2		7100241	7100242			
MCLNR/L 16-5D	1	6	1.25	543	7101161	7101162		-	
MCLNR/L 20-5D	1-1/4	6	1.50		7101201	7101202			
MCLNR/L 24-5D	1-1/2	6	2	643	7101241	7101242		-	
MCLNR/L 16-6D	1	6	1.25		7102161	7102162			
MCLNR/L 20-6D	1-1/4	6	1.50		7102201	7102202			
MCLNR/L 24-6E	1-1/2	7	2		7102241	7102242			

MCRN R/L TOOLHOLDERS SYSTEM M & C FOR NEGATIVE 80° DIAMOND CNM... INSERTS

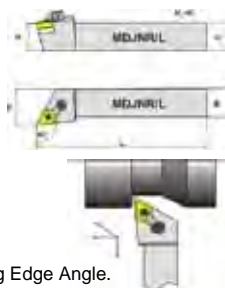


For a full list of available inserts,
please refer to our Carbide Insert section.

15° Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	CNM Insert	Order Number		Price
					RH	LH	
MCRNR/L 16-4D	1	6	1.25	432	7120161	7120162	
MCRNR/L 20-5D	1-1/4		1.50	543	7121201	7121202	
MCRNR/L 20-6D	1-1/4		1.50	643	7122201	7122202	

MDJN R/L TOOLHOLDERS SYSTEM M & C FOR NEGATIVE 55° DIAMOND DNM... INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.

3° Side Cutting Edge Angle.

Description	Shank		OAL L	Head F	DNM Insert	Order Number		Price
	H	B				RH	LH	
MDJNR/L 12-4B	3/4	3/4	4 1/2	1	432	7151241	7151242	
MDJNR/L 16-4D	1	1	6	1-1/4		7151651	7151652	
MDJNR/L 20-4D	1-1/4	1-1/4	6	1-1/2		7152041	7152042	
MDJNR/L 24-4D	1-1/2	1-1/2	6	2		7152441	7152442	
MDJNR/L 85-4D	1-1/4	1	6	1-1/4	543	7152851	7152852	
MDJNR/L 16-5D	1	1	6	1-1/4		7154161	7154162	
MDJNR/L 20-5D	1-1/4	1-1/4	6	1-1/2		7154201	7154202	
MDJNR/L 24-5D	1-1/2	1-1/2	6	2		7154241	7154242	
MDJNR/L 86-5E	1-1/2	1	7	1-1/4		7154861	7154862	

MDPNN TOOLHOLDERS System M & C for negative 55° Diamond DNM... INSERTS

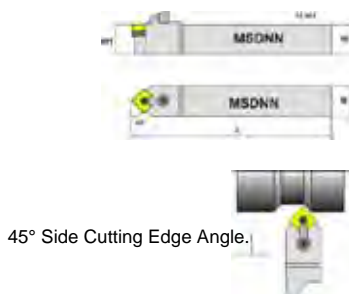


For a full list of available inserts,
please refer to our Carbide Insert section.

27.5° Side Cutting Edge Angle.

Description	Shank H = B	OAL L	DNM Insert	Order No.	Price
MDPNN 16-4D	1	6	432	6714165	
MDPNN 20-4D	1-1/4			6714204	
MDPNN 20-5D	1-1/4	6	543	6714320	
MDPNN 24-5D	1-1/2			6714324	

MSDNN TOOLHOLDERS SYSTEM M & C FOR NEGATIVE SQUARE SNM... INSERTS

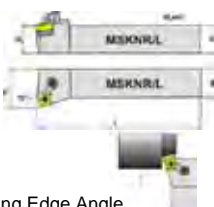


For a full list of available inserts,
please refer to our Carbide Insert section.

45° Side Cutting Edge Angle.

Description	Shank		OAL L	SNM... Insert	Order No.	Price
	B	H				
MSDNN 12-4B	3/4	3/4	4-1/2	432	6734412	
MSDNN 16-4D	1	1	6		6734416	
MSDNN 85-4D	1	1-1/4	6		6734485	
MSDNN 16-5D	1	1	6	543	6734516	
MSDNN 20-5D	1-1/4	1-1/4	6		6734520	
MSDNN 85-5D	1	1-1/4	6		6734585	
MSDNN 86-5E	1	1-1/2	7	643	6734586	
MSDNN 16-6D	1	1	6		6734616	
MSDNN 20-6D	1-1/4	1-1/4	6		6734620	
MSDNN 24-6E	1-1/2	1-1/2	7		6734624	
MSDNN 85-6D	1	1-1/4	6		6734685	
MSDNN 86-6E	1	1-1/2	7		6734686	

MSKN R/L TOOLHOLDERS SYSTEM M & C FOR NEGATIVE SQUARE SNM... INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.

15° End Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	SNM... Insert	Order Number		Price
					RH	LH	
MSKNR/L 12-4B	3/4	4-1/2	1	432	7370121	7370122	
MSKNR/L 16-4D	1	6	1-1/4		7370161	7370162	
MSKNR/L 16-5D	1	6	1-1/4	543	7371161	7371162	
MSKNR/L 20-5D	1-1/4	6	1-1/2		7371201	7371202	
MSKNR/L 20-6D	1-1/4	6	1-1/2	643	7372201	9372202	
MSKNR/L 24-6E	1-1/2	7	2		7372241	9372242	

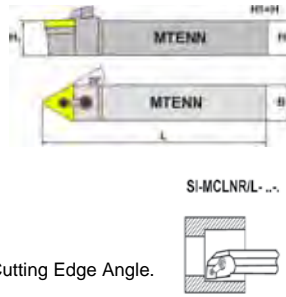
CARBIDE INSERT TOOLHOLDERS
SERIES 804:



MTENN TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 60°
TRIANGLE **TNM...** INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.



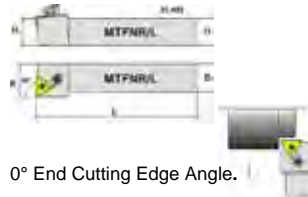
30° Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	TNM Insert	RH	Price
MTENN 10-3B	5/8	5/8	4-1/2		6741310	
MTENN 12-3B	3/4	3/4	4-1/2	332	6741312	
MTENN 64-3D	3/4	1	6		6741364	
MTENN 12-4B	3/4	3/4	4-1/2		6741412	
MTENN 16-4D	1	1	6	432	6741416	
MTENN 85-4D	1	1-1/4	6		6741485	
MTENN 86-4E	1	1-1/2	7		6741486	
MTENN 16-5D	1	1	6		6741516	
MTENN 20-5D	1-1/4	1-1/4	6	543	6741520	
MTENN 24-5E	1-1/2	1-1/2	7		6741524	
MTENN 86-5E	1	1-1/2	7		6741585	

MTFNR R/L TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 60°
TRIANGLE **TNM...** INSERTS.



For a full list of available inserts,
please refer to our Carbide Insert section.



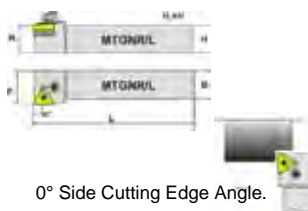
0° End Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	TNM Insert	Order Number		Price
					RH	LH	
MTFNR/L 12-3B	3/4	4-1/2	1	332	7460121	7460122	
MTFNR/L 16-3D	1	6	1-1/4		7460161	7460162	
MTFNR/L 16-4D	1	6	1-1/4	432	7462161	7462162	
MTFNR/L 20-4D	1-1/4	6	1-1/2		7462201	7462202	
MTFNR/L 20-5D	1-1/4	6	1-1/2	543	7463201	7463202	

MTGNR R/L TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 60°
TRIANGLE **TNM...** INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.



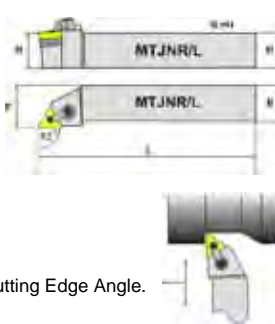
0° Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	TNM Insert	Order Number		Price
					RH	LH	
MTGNR/L 12-3B	3/4	4-1/2	1	332	7420121	7420122	
MTGNR/L 16-3D	1	6	1-1/4		7420161	7420162	
MTGNR/L 16-4D	1	6	1-1/4	432	7422161	7422162	
MTGNR/L 20-4D	1-1/4	6	1-1/2		7422201	7422202	
MTGNR/L 20-5D	1-1/4	6	1-1/2	543	7423201	7423202	

MTJNR R/L TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 60°
TRIANGLE **TNM...** INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.



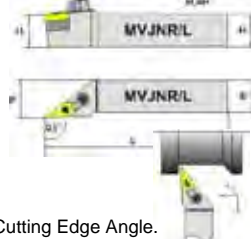
3° Side Cutting Edge Angle.

Description	Shank		OAL L	Head F	TNM Insert	Order Number		Price
	H	B				RH	LH	
MTJNR/L 10-3B	5/8	5/8	4-1/2	5/8		7400101	7400102	
MTJNR/L 12-3B	3/4	3/4	4-1/2	1	332	7400121	7400122	
MTJNR/L 16-3D	1	1	6	1-1/4		7400161	7400162	
MTJNR/L 16-4D	1	1	6	1-1/4	432	7401161	7401162	
MTJNR/L 20-4D	1-1/4	1-1/4	6	1-1/4		7401201	7401202	
MTJNR/L 16-5D	1	1	6	1-1/4		7402161	7402162	
MTJNR/L 20-5D	1-1/4	1-1/4	6	1-1/2		7402201	7402202	
MTJNR/L 24-5D	1-1/2	1-1/2	6	2	543	7402241	7402242	
MTJNR/L 24-5E	1-1/2	1-1/2	7	2		7402261	7402262	
MTJNR/L 85-5D	1	1-1/4	6	1-1/4		7402301	7402302	
MTJNR/L 86-5E	1	1-1/2	7	1-1/4		7402351	7402352	

MVJNR R/L TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 35°
DIAMOND **VNM...** INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.



3° Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	TNM Insert	Order Number		Price
					RH	LH	
MVJNR/L 12-3B	3/4	4-1/2	1		7550121	7550122	
MVJNR/L 16-3D	1	6	1-1/4	332	7550161	7550162	
MVJNR/L 20-3D	1-1/4	6	1-1/2		7550201	7550202	
MVJNR/L 16-4D	1	6	1-1/4		7551161	7551162	
MVJNR/L 20-4D	1-1/4	6	1-1/2	432	7552201	7552202	
MVJNR/L 24-4E	1-1/2	7	2		7552241	7552242	

MWLN R/L TOOLHOLDERS
SYSTEM M & C FOR NEGATIVE 80°
TRIGON **WNM...** INSERTS

*Sets include
RH HOLDER
and 10 TiN Coated
Inserts.



For a full list of available inserts,
please refer to our Carbide Insert section.



5° End or Side Cutting Edge Angle.

Description	Shank H=B	OAL L	Head F	WNM Insert	Order No.		Price	Ord. No RH Set	Price
					RH	LH			
MWLN/R 12-3B	3/4	4-1/2	1	332	7500121	7500122		-	
MWLN/R 12-4B	3/4	4-1/2	1		7501121	7501122		7505121	
MWLN/R 16-4D	1	6	1-1/4	432	9551161	7501162		7505161	
MWLN/R 20-4D	1-1/4	6	1-1/2		7501201	7501202		-	
MWLN/R 24-4E	1-1/2	7	2		7501241	7501242		-	
MWLN/R 16-5D	1	6	1-1/4		7502161	7502162		-	
MWLN/R 20-5D	1-1/4	6	1-1/2	543	7502201	7502202		-	
MWLN/R 24-5E	1-1/2	7	2		7502241	7502242		-	

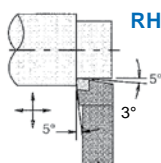
5-PC MINI TOOLHOLDER AND BORING BAR SET

(ALSO AVAILABLE INDIVIDUALLY)

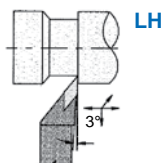
SERIES 530:

CUTTING TOOLS - INDEXABLE

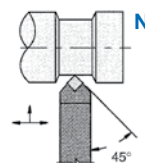
Ideal for precision turning and boring.



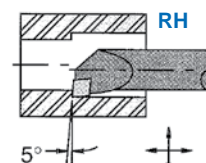
6800042



8050422



6810042



8700421



Toolholder Style	Square Shank	Lgth.	Insert Style	Right Hand Order No.	Left Hand Order No.	Neutral Order No.	Price
SCLCR 4-2	.315	2.36	CCMT 21.51	6800042	-	-	
SDJCR/L 4-2	.315	2.36	DCMT 21.51	8050421	8050422	-	
SSDCN 4-2	.315	2.36	SCMT 21.51	-	-	6810042	

Complete Set

Order No.	Description	Price
6890500	Without inserts	
6890510	10 Inserts included	

Boring Bar Style	Dia.	Min. Bore	Lgth.	Insert Style	Boring Bar Order No.	Price
SI-SCLCR 4-2	.315	.354	3.98	CCMT 21.51	8700421	

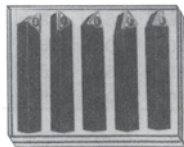
Quality storage case includes 1 wrench and 2 spare screws.

INDEXABLE TOOL BITS AND SETS

SERIES 619:

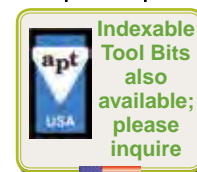
Hardened and ground steel shanks for maximum rigidity. Sets include inserts and wrenches in a fitted case.

Individual tools are supplied without wrenches or inserts.



Usage Applications:
Right Hand cuts from right to left.
Left Hand cuts from left to right.

MEGA
Superior Import



Style AR

Right Hand suitable for machining to a 90° square shoulder.



Style BR

Right Hand 15° Lead Angle for rough turning where a square shoulder is not required.



Style E

Neutral Threading Tool 60° included angle; used for U.S. Standard universal threading, V-grooving, Chamfering, turning, boring and facing.



Style AL

Left Hand suitable for facing to a square shoulder.



Style BL

Left Hand 15° Lead Angle for rough facing to center or where no shoulder is needed.



Replacement Screw



For Size	Order No.	Price
3/8	6190005	
1/2, 5/8, 3/4	6190010	

SIZE : 3/8 Square x 2-1/2 OL
INSERT I.C. : 1/4

Style	Order Number	Price
AR-6	6190061	
AL-6	6190062	
BR-6	6190063	
BL-6	6190064	
E-6	6190067	
5 pc. 3/8 Sk. Set	6190060	

SIZE : 1/2 Square x 3-1/2 OL
INSERT I.C. : 3/8

Style	Order Number	Price
AR-8	6190081	
AL-8	6190082	
BR-8	6190083	
BL-8	6190084	
E-8	6190087	
5 pc. 1/2 Sk. Set	6190080	

SIZE : 5/8 Square x 4 OL
INSERT I.C. : 3/8

Style	Order Number	Price
AR-10	6190101	
AL-10	6190102	
BR-10	6190103	
BL-10	6190104	
E-10	6190107	
5 pc. 5/8 Sk. Set	6190100	

SIZE : 3/4 Square x 4-1/2 OL
INSERT I.C. : 3/8

Style	Order Number	Price
AR-12	6190121	
AL-12	6190122	
BR-12	6190123	
BL-12	6190124	
E-12	6190127	
5 pc. 3/4 Sk. Set	6190120	

INSERTS FOR INDEXABLE TOOL BITS

Style of Insert	Insert I.C.	General Purpose		Steel		Gold (TN) Coated	
		Order No.	Price	Order No.	Price	Order No.	Price
TBI-221	1/4	6190150		6190151		6190152	
TBI-222	1/4	6190160		6190161		6190162	
TBI-321	3/8	6190230		6190231		6190232	
TBI-322	3/8	6190240		6190241		6190242	



MEGA
Superior Import

INDEXABLE BORING BARS

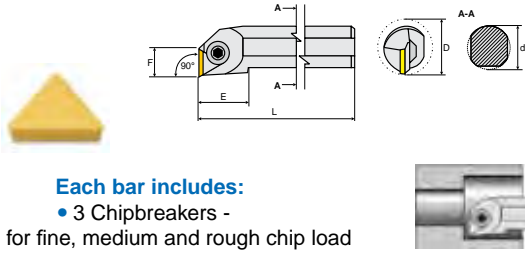
SERIES 804:



• EUROPEAN MADE •

SI-CTFPR

SYSTEM C FOR POSITIVE
TRIANGLE TP_INSERTS



Each bar includes:

- 3 Chipbreakers -

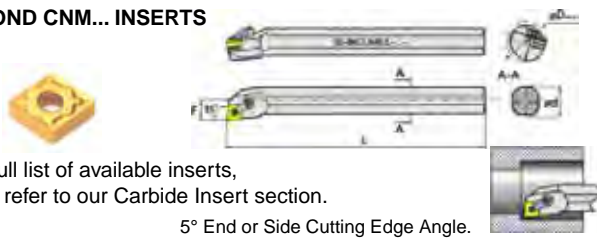
1 each for fine, medium and rough chip load

d	D	L	C	E	Inserts	Right Hand Order No.	Price
5/8	.827	8-1/4	.709	1.181	TP_-21	6939172	
3/4	1.063	9-7/8	.925	1.378	TP_-32	6939173	
1	1.339	11-3/4	1.201	1.575		6939174	
1-1/4	1.693	14	1.516	1.772		6939175	
1-1/2	2.086	15	1.889	1.968	TP_-43	6939176	
2	2.559	16	2.362	1.968		6939178	

Boring bars with coolant hole available. See our website or inquire.

SI-MCLN R/L

SYSTEM M & C FOR NEGATIVE 80°
DIAMOND CNM... INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.

5° End or Side Cutting Edge Angle.

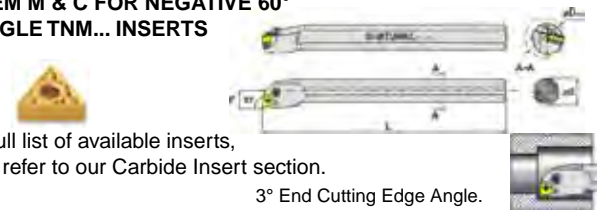
Positive, 2° End Cutting Edge Angle

Description	Shank Size	Min. Bore	OAL L	Center Line F	CNM_ Insert	Order Number		Price
						RH	LH	
SI-MCLNR/L 16-4	1	1.401	12	.640	432	7601641	7601642	
SI-MCLNR/L 20-4	1-1/4	1.530	14	.765		7602041	7602042	
SI-MCLNR/L 24-4	1-1/2	1.780	14	.890		7602441	7602442	
SI-MCLNR/L 28-4	1-3/4	2.030	14	1.015	543	7602841	7602842	
SI-MCLNR/L 32-4	2	2.562	16	1.281		7602941	7602942	
SI-MCLNR/L 24-5	1-1/2	2.374	14	1.187	643	7603151	7603152	
SI-MCLNR/L 32-6	2	2.562	18	1.281		7603261	7603262	

Boring bars with coolant hole available. See our website or inquire.

SI-MTUN R/L

SYSTEM M & C FOR NEGATIVE 60°
TRIANGLE TNM... INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.

3° End Cutting Edge Angle.

Description	Shank Size	Min. Bore	OAL L	Center Line F	TNM_ Insert	Order Number		Price
						RH	LH	
SI-MTUNR/L 12-3	3/4	1	10	0.5	332	7830121	7830122	
SI-MTUNR/L 16-3	1	1.280	12	.640	332	7830161	7830162	
SI-MTUNR/L 20-3	1-1/4	1.530	14	.765		7830201	7830202	
SI-MTUNR/L 24-3	1-1/2	2.060	14	.890		7830241	7830242	
SI-MTUNR/L 20-4	1-1/4	1.530	14	.765	432	7831201	7831202	
SI-MTUNR/L 24-4	1-1/2	2.060	14	.890		7831241	7831242	
SI-MTUNR/L 32-4	2	2.562	14	1.281		7831321	7831322	

SI-MWLN R/L

SYSTEM M & C FOR NEGATIVE 80°
TRIGON WNM... INSERTS



For a full list of available inserts,
please refer to our Carbide Insert section.

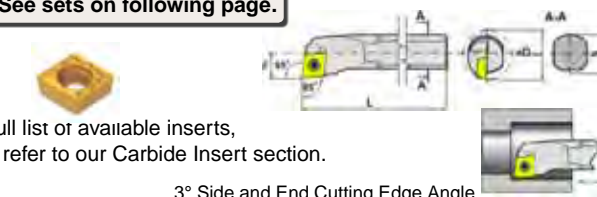
3° Side and End Cutting Edge Angle.

Description	Shank Size	Min. Bore	OAL L	Center Line F	WNM_ Insert	Order Number		Price
						RH	LH	
SI-MWLN R/L 12-3	3/4	.93	10	.500	332	7651231	7651232	
SI-MWLN R/L 12-4	3/4	1.083	10	.500	432	7651241	7651242	
SI-MWLN R/L 16-4	1	1.280	12	.640		7651641	7651642	
SI-MWLN R/L 20-4	1-1/4	1.530	14	.765		7652041	7652042	
SI-MWLN R/L 24-4	1-1/2	1.780	14	.890		7652441	7652442	

SI-SCLC R/L

SYSTEM S FOR POSITIVE 80° DIAMOND
CCMT OR CCGT INSERTS

See sets on following page.



For a full list of available inserts,
please refer to our Carbide Insert section.

3° Side and End Cutting Edge Angle.

Description	Shank Size	Min. Bore	OAL L	Center Line F	CC_T Insert	Order Number		Price
						RH	LH	
SI-SCLCR/L 4-2	.315	.354	4	.1875	- 21.51	8700421	8700422	
SI-SCLCR/L 6-2	.375	.468	6	.2500		8700621	8700622	
SI-SCLCR/L 8-2	.500	.560	7	.290		8700821	8700822	
SI-SCLCR/L 10-2	.625	.850	8	.405	- 32.52	8700851	8700852	
SI-SCLCR/L 8-3	.500	.625	7	.312		8700931	8700932	
SI-SCLCR/L 10-3	.625	.812	8	.4060		8701031	8701032	
SI-SCLCR/L 12-3	.750	1.000	10	.5000		8701231	8701232	
SI-SCLCR/L 16-3	1.000	1.250	12	.6094		8701631	8701632	

Boring bars with coolant hole available. See our website or inquire.

INDEXABLE BORING BARS

SERIES 804:



• EUROPEAN MADE •

(Continued)

SI-SCLC R/L

SYSTEM S FOR POSITIVE 80° DIAMOND CCMT OR CCGT INSERTS

Includes:

- 3/8", 1/2" & 5/8" RH Boring Bars
- 2 pcs CCMT-21.51, TiN
- 4 pcs CCMT-32.52, TiN
- 2 Torx Keys
- 2 Spare Screws

3 Pc. Boring Bar Set

Order No. 6870515

Price



Includes:

- 1/2", 5/8" & 3/4" RH Boring Bars
- 6 pcs CCMT-32.52, TiN
- 1 Torx Key
- 1 Spare Screw

3 Pc. Boring Bar Set

Order No. 6870510

Price



Includes:

- .315", 3/8", 1/2", 5/8" & 3/4" RH Boring Bars
- 4 pcs CCMT-21.51, TiN
- 6 pcs CCMT-32.52, TiN
- 2 Torx Keys
- 2 Spare Screws

5 Pc. Boring Bar Set

Order No. 6870505

Price



CUTTING TOOLS - INDEXABLE

MINI SI-SCLC RH KIT

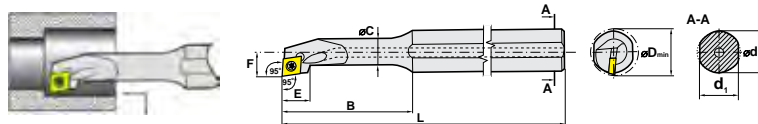
SYSTEM S FOR POSITIVE 80° DIAMOND CCMT, CCGT INSERTS.

SET - 4 PC. INCLUDES:

- Boring Bars .315, .375, .500, & .625
- 10 pcs CCMT-21.51, 1 Torx Key

Order No. 6871524

Price



3° End & Side Cutting Edge Angle.

Boring Bar Style	Shank Size	Min. Bore	Length L	Center Line F	B	E	C	d1	Insert CC_T
SI-0608H-SCLCR-02	.315	.315	4.00	.1575	1.000	.3150	.2362	.2756	21.51
SI-0810J-SCLCR-02	.375	.433	4.500	.2362	1.260	.4134	.3150	.3543	
SI-1012K-SCLCR-02	.500	.512	5.000	.2756	1.496	.4528	.3937	.4331	
SI-1216M-SCLCR-02	.625	.669	6.000	.3543	1.969	.3937	.4724	.5901	

Boring bars with coolant hole available. See our website or inquire.

SI-SDUC R/L 3 PIECE KIT

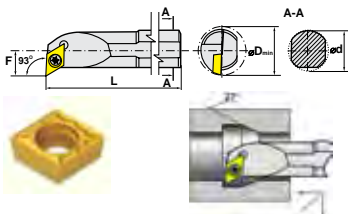
SYSTEM S FOR NEGATIVE 55° DIAMOND DCMT OR DCGT INSERTS.

SET - 3 PC. INCLUDES:

- RH Boring Bars 3/8", 1/2" & 5/8"
- 6 pcs DCMT-21.51 TiN,
- 1 Torx Key & 1 Spare Screw

Order No. 6875500

Price



3° End Cutting Edge Angle.

Description	Shank Size	Min. Bore	OAL L	Center Line F	DC_T Insert	Order Number		Price
						RH	LH	
SI-SDUCR/L 06-2	3/8	.625	6.0	.375	21.5	8750061	8750062	
SI-SDUCR/L 08-2	1/2	.780	6.0	.437		8750081	8750082	
SI-SDUCR/L 10-2	5/8	.840	8.0	.500		8750101	8750102	
SI-SDUCR/L 12-3	3/4	1.125	10.0	.562	32.5	8750121	8750122	
SI-SDUCR/L 16-3	1	1.500	12.0	.750		8750161	8750162	
SI-SDUCR/L 20-3	1-1/4	1.750	14.0	.875		8750201	8750202	

Boring bars with coolant hole available; please inquire.

SI-STUC R/L

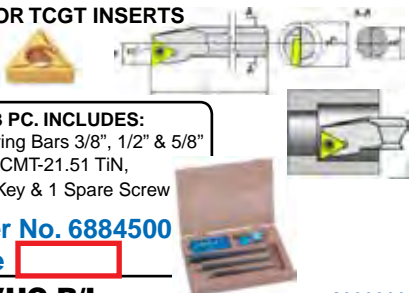
SYSTEM S FOR POSITIVE 60° TRIANGLE TCMT OR TCGT INSERTS

SET - 3 PC. INCLUDES:

- RH Boring Bars 3/8", 1/2" & 5/8"
- 6 pcs TCMT-21.51 TiN,
- 1 Torx Key & 1 Spare Screw

Order No. 6884500

Price



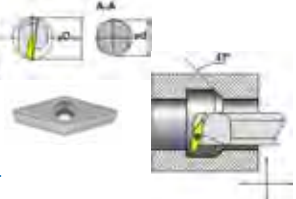
3° End Cutting Edge Angle.

Boring Bar Style	Shank Dia	Min. Bore	OAL L	Center Line F	TC...T Inserts	Order No.		Price
						RH	LH	
SI-STUCR 06-2	3/8	0.500	5	.208	21.51	8840061	8840062	
SI-STUCR 08-2	1/2	0.625	6	.287		8840081	8840082	
SI-STUCR 10-2	5/8	0.750	8	.350		8840101	8840102	
SI-STUCR 12-3	3/4	0.845	10	.422	32.52	8840121	8840122	
SI-STUCR 16-3	1	1.115	12	.555		8840161	8840162	
SI-STUCR 20-3	1-1/4	1.370	12	.682		8840201	8840202	
SI-STUCR 24-3	1-1/2	1.680	12	.840		8840241	8840242	

SI-SVUC R/L

SYSTEM S FOR POSITIVE 35° DIAMOND VCMT OR VCGT INSERTS.

For a full list of available inserts, please refer to our Carbide Insert section.

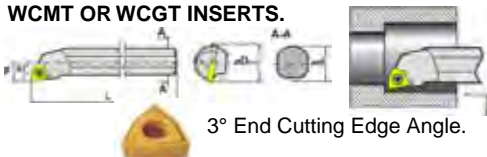


3° End Cutting Edge Angle.

Boring Bar Style	Shank Dia	Min. Bore	OAL L	Center Line F	VC...T Inserts	Order No.		Price
						RH	LH	
SI-SVUCR/L 12-2	3/4	1-1/4	10	.625	221	8871221	8871222	
SI-SVUCR/L 16-2	1	1-1/2	12	.750		8871621	8871622	
SI-SVUCR/L 16-3	1	2	12	.750	332	8871631	8871632	
SI-SVUCR/L 20-3	1-1/4	2-1/4	14	1.000		8872031	8872032	

SI-SWUC R / L

SYSTEM S FOR POSITIVE 80° TRIGON WCMT OR WCGT INSERTS.



3° End Cutting Edge Angle.

Boring Bar Style	Shank Dia.	Min. Bore	OAL L	Center Line F	WC...T Inserts	Order No.		Price
						RH	LH	
SI-SWUCR/L 08-3	1/2	.625	6	.311	32.52	8890831	8890832	
SI-SWUCR/L 10-3	5/8	.812	8	.405		8891031	8891032	
SI-SWUCR/L 12-3	3/4	1.000	10	.500		8891231	8891232	

INDEXABLE BORING BARS - "MB" STYLE

SERIES 530:



MBN 8 TYPE 1



MBN 8-2 TYPE 2



MBS 12-3 TYPE 2

Tool No.	Type	Shank Dia.	Overall Length	Entry Angle	Minimum Bore	Style of Insert	Insert I.C.	Order No.	Price
MBN 6-2	2	1/2	5	95°	0.435	TPGB-221,222 TPGC-221,222	1/4	5300062	
MBS 6-2	2	1/2	5	91°	0.435			5300162	
MBN 8-2	2	1/2	6	95°	0.590			5300082	
MBS 8-2	2	1/2	6	91°	0.590			5300182	
MBN 10-2	2	5/8	8	95°	0.710			5300012	
MBS 10-2	2	5/8	8	91°	0.710			5300112	
MBN 12-3	2	3/4	10	95°	0.850	TPGB-321,322 TPGC-321,322	3/8	5300033	
MBS 12-3	2	3/4	10	91°	0.850			5300133	
MBN 8	1	1/2	6	95°	0.590			5300079	
MBS 8	1	1/2	6	91°	0.590			5300180	
MBL 8	1	1/2	6	85°	0.590			5300280	
MBN10	1	5/8	7	95°	0.710			5300010	
MBS10	1	5/8	7	91°	0.710			5300110	
MBL10	1	5/8	7	85°	0.710			5300210	

"MB" STYLE BORING BAR SET
SERIES 530:



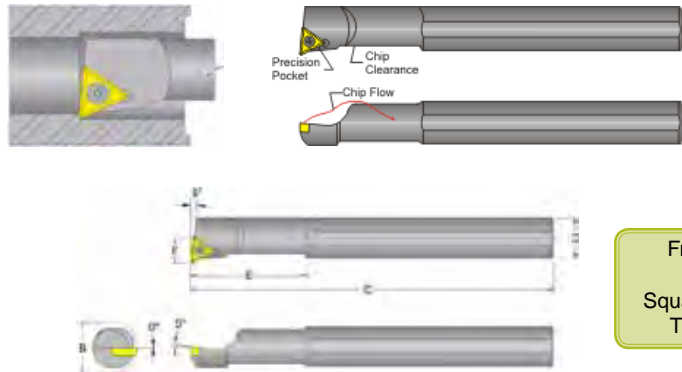
Set No.	Consisting of	Order No.	Price
IBBS4	MBN 6-2, 8, 10 & 12-3	5305004	

Set includes (15) inserts, wrenches, and screws in a fitted case.



INDEXABLE BORING BARS - TPBN
SERIES 915 :

- For 11° positive triangle TPGH or TPGB inserts



From Roughing to Finishing,
Square Shoulders to Through Bores

- Small Hole Capacity- to a minimum of .430
- High Performance- Positive rake for fast material removal, as well as finishing
- Rigidity-Bar made of heat treated, precision ground alloy steel
- Insert Locking- The insert is securely held with the Torx screw to reduce tool slipping
- Chip Control- Advanced precision chip clearance allows for maximum boring capacity
- Inserts - TiN coated with added chip breaker

Description	Order No.	Price	Min. Bore B	Gage C	Insert D	Torx E	F	TPG Insert	TorxScrew	Key
TPBN06-2	6155658		.430	5.00	0.500	1.25	.166			
TPBN08-2	6155660		.590	6.00	0.500	1.50	.287	21.51	TS-25.45-6M1	T-7
TPBN10-2	6155662		.682	8.00	0.625	2.25	.350			
TPBN12-3	6155664		.845	10.0	0.750	2.50	.422			
TPBN16-3	6155666		1.115	12.0	1.000	3.00	.555	322	TS-44-3-M	T-15
TPBN20-3	6155668		1.370	12.0	1.250	3.50	.682			
TPBN20-4	6155670		1.370	12.0	1.250	3.50	.682	432	TS-83-4M1	T-20

INSERTS FOR MEDA "MB" STYLE BORING BARS
SERIES 530:



TPGB

TPGC

Insert	Grade	Order No.	Price
TPGB 221	Gen. Purp. Steel	5302210	
TPGB 221	Steel	5302211	
TPGB 221	TN Coated	5302212	
TPGB 222	Gen. Purp. Steel	5302220	
TPGB 222	Steel	5302221	
TPGB 222	TN Coated	5302222	
TPGB 321	Gen. Purp. Steel	5303210	
TPGB 321	Steel	5303211	
TPGB 321	TN Coated	5303212	
TPGB 322	Gen. Purp. Steel	5303220	
TPGB 322	Steel	5303221	
TPGB 322	TN Coated	5303222	
TPGC 221	Gen. Purp. Steel	5342210	
TPGC 221	Steel	5342211	
TPGC 221	TN Coated	5342212	
TPGC 222	Gen. Purp. Steel	5342220	
TPGC 222	Steel	5342221	
TPGC 222	TN Coated	5342222	
TPGC 321	Gen. Purp. Steel	5343210	
TPGC 321	Steel	5343211	
TPGC 321	TN Coated	5343212	
TPGC 322	Gen. Purp. Steel	5343220	
TPGC 322	Steel	5343221	
TPGC 322	TN Coated	5343222	

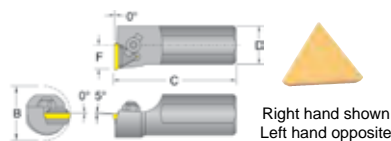
CUTTING TOOLS - INDEXABLE



CUTTING TOOLS - INDEXABLE

S-CTFP R

Style F - 0° End Cutting Edge Angle for positive triangle TPG inserts



Description	Order No.		Price	Min. Bore B	C	D	F	TPG Gage Insert	Seat	Seat Screw	Clamp	Clamp Clip	Clamp Screw
	RH	LH											
S12S-CTFPR/L-3	6155360	6155360		1.00	10.0	0.75	.500	322	-	-	HC-12	CLP-12	CS-126
S16T-CTFPR/L-3	6155364	6155364		1.28	12.0	1.00	.640	322	SM-41	S-4			
S20U-CTFPR/L-3	6155368	6155368		1.53	14.0	1.25	.765						
S20U-CTFPR/L-4	6155380	6155380		1.53	14.0	1.25	.765	432	SM-37	S-6	HC-12	CLP-12	CS-1

S-MCLN R/L

Style L - Negative 5° Side & End Cutting Edge Angle for negative 80° diamond CNMG inserts



Description	Order No.		Price	Min. Bore B	C	D	F	K	CNM Gage Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
	RH	LH												
S16T-MCLNR/L-4	6155010	6155011		1.28	12.0	1.00	.640	14°	432	—	NL-44	CL-20	XNS-47	—
S20U-MCLNR/L-4	6155014	6155015		1.53	14.0	1.25	.765	14°	432	CSN-433	NL-46	CL-20	XNS-47	S-46
S24U-MCLNR/L-4	6155018	6155019		1.78	14.0	1.50	.890	11°						

S-MTUN R/L

Style U - Negative 3° End Cutting Edge Angle for negative triangle TNMG inserts



Description	Order No.		Price	Min. Bore B	C	D	F	K	TNM Gage Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
	RH	LH												
S12S-MTUNR/L-3	6155204	6155205		1.00	10.0	0.75	.500	14°	322	—	NL-33	CL-7	XNS-35	—
S16T-MTUNR/L-3	6155208	6155209		1.28	12.0	1.00	.640	14°	322	ITSN-333			XNS-35	S-34
S20U-MTUNR/L-3	6155212	6155213		1.53	14.0	1.25	.765	14°	332	ITSN-322	NL-34L	CL-7	XNS-35	S-34
S20U-MTUNR/L-4	6155220	6155221		1.53	14.0	1.25	.765	14°	432	ITSN-432	NL-46	CL-9	XNS-59	S-46

S-MWLN R/L

Style L - Negative 5° Side & End Cutting Edge Angle for negative 80° trigon WNMG inserts



Description	Order No.		Price	Min. Bore B	C	D	F	K	WNM Gage Insert	Seat	Lock Pin	Clamp	Clamp Screw
	RH	LH											
S12S-MWLN R/L-3	6155318	6155319		0.93	10.0	0.75	.500	14°	332	—	NL-33L	HC-7	SHC-7
S16T-MWLN R/L-4	6155322	6155323		1.28	12.0	1.00	.640	14°	432	—	NL-44	CL-20	XNS-47
S20U-MWLN R/L-4	6155326	6155327		1.53	14.0	1.25	.765	14°	432	IWSN-432	NL-46	CL-20	XNS-47

S-SCLC R/L

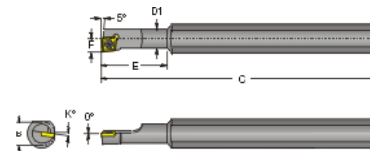
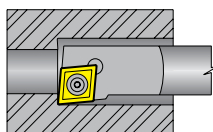
Style L - Negative 5° Side & End Cutting Edge Angle for 7° positive 80° diamond CCMT or CCGT inserts



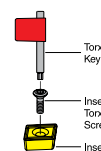
Description	Order No.		Price	Min. Bore B	C	D	F	K	CC_T Gage Insert	Insert Torx Screw	Torx Key
	RH	LH									
S06M-SCLCR/L-2	6155470	6155471		0.500	6.00	0.375	.250	-11°	21.51	TS-25.45-6M1	T-7
S08M-SCLCR/L-2	6155474	6155475		0.625	6.00	0.500	.312	-9°			
S10R-SCLCR/L-2	6155478	6155479		0.812	8.00	0.625	.406	-7°			
S12S-SCLCR/L-3	6155490	6155491		1.000	10.0	0.750	.500	-10°	32.52	TS-4.7-10M1	T-15
S16T-SCLCR/L-3	6155494	6155495		1.250	12.0	1.000	.625	-5°			

MINI S-SCLC R/L MINIATURE BORING

Style L - Negative 5° End and Side Cutting Edge Angle for 7° positive 80° diamond CC_T inserts.

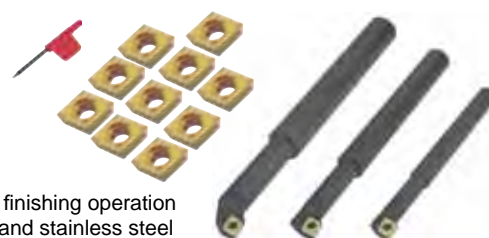
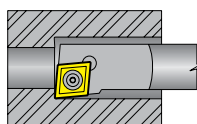


Description	Order No.		Price	Min. Bore B	C	D	E	F	F1	K°	DC_T Gage Insert	Torx Screw	Torx Key
	RH	LH											
S06H-SCLCR/L-2	6155450	6155451		.394	4.0	.375	.315	1.25	.236	-11°		TS-25.45-	T-7
S08K-SCLCR/L-2	6155454	6155455		.550	5.0	.500	.390	1.50	.275	-9°	21.51	25.45-	T-7
S010M-SCLCR	6155458	-		.708	6.0	.625	.472	2.00	.354	-7°	6M1		



SCLCR SET MINIATURE BORING SET

Negative 5° End Cutting Edge Angle for 7° Positive 80° Diamond Inserts



Order No.	Price	Shank Size	Min. Bore	15 pc. Set Includes		(10) Key	Torx (1)
				(3) Boring Boring Bars	Inserts		
6185064		.375 .500 .625	.394 .550 .708	S06H-SCLCR-2 S08K-SCLCR-2 S10M-SCLCR-2	CCMT-21.51-UF-DHCP25	T-7	Storage Box

- Precision finishing operation
- For steel and stainless steel
- Sharp cutting edge
- Good chip control



INDEXABLE BORING BARS

SERIES 915:



STCMB



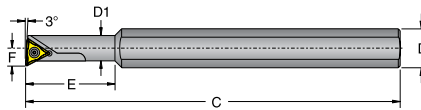
From Roughing to Finishing,
Square Shoulders to Through Bores

• For 7° Positive Triangle TCMT Inserts.

Description	Order No.	Price	Min. Bore B	Gage C	D	Insert E	Torx F	TC_T Insert	Torx Screw	Key
STCMB06-2	6155738		.500	5.00	.500	1.25	.208			
STCMB08-2	6155740		.590	6.00	.500	1.50	.287	21.51	TS-25.45-6M1	T-7
STCMB10-2	6155742		.750	8.00	.625	2.25	.350			
STCMB12-3	6155744		.845	10.0	.750	2.50	.422	32.52	TS-4.7-10M1	T-15
STCMB16-3	6155746		1.115	12.0	1.000	3.00	.555			
STCMB20-4	6155748		1.370	12.0	1.250	3.50	.682	432	TS-5.8-	T-20

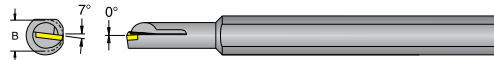
- Small Hole Capacity - to a minimum of .500
- High Tech- Insert pocket has been scientifically designed to eliminate vibration and maximize the depth of cut.
- Rigidity-Bar made of heat treated, precision ground alloy steel
- Insert Locking- The insert is securely held with the Torx screw to reduce tool slipping
- Better Finish-The clearance angle of the insert, in relation to the cutting edge, gives the best micro finish
- Fast Material Removal-The positive insert with advanced chip breaker design allows for heavier cuts.

MINI S-STUCR MINIATURE BORING

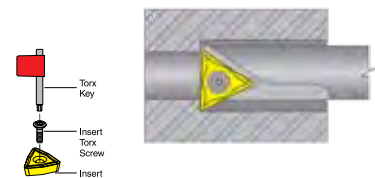


STYLE U

Negative 3° End Cutting Edge Angle for 7° positive triangle TC_T inserts

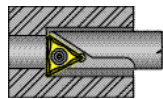


Description	Order No.	Price	Min. Bore B	C	D	D1	E	F	Gage Insert	TC_T Torx Screw	Torx Key
S08H-STUCR-1.2-2	6155724		.286	4.0	.50	.265	1.125	.143			
S08H-STUCR-1.2-3	6155726		.313	4.0	.50	.300	1.125	.157	52.50	TS-06M	T-6
S08H-STUCR-1.2-4	6155728		.374	4.0	.50	.358	1.125	.189			



STUCR SET MINIATURE BORING

Negative 3° End Cutting Edge Angle for 7° Positive 60° Triangle Inserts



Order No.	Price	Shank Size	Min. Bore	15 pc. Set Includes		(1) Torx Key	(1)
				(3) Boring Bars	(10) Inserts		
6185076		.500	.286	S08H-STUCR-1.2-2	TCMT-	T-6	Storage Box
		.500	.313	S08H-STUCR-1.2-3	520-UF-		
		.500	.374	S08H-STUCR-1.2-4	DHCP25		

- Small hole boring without the use of reamers
- Greater productivity through better tool utilization
- Close tolerances
- Eliminates reamers
- Better surface finish
- Alloy steel boring bar



MINI S-SWUCR MINIATURE BORING

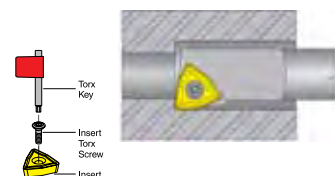


STYLE U

Negative 3° End Cutting Edge Angle for 7° Positive 60° Triangle Inserts



Description	Order No.	Min. Price	Bore B	C	D	D1	E	F	Gage Insert	WC_T Torx Screw	Torx Key
S08H-SWUCR-1.2-2	6155900		0.228	4.0	.50	.197	0.750	.114			
S08H-SWUCR-1.2-3	6155902		0.308	4.0	.50	.236	1.000	.154	520	TS-06	T-6
S08H-SWUCR-1.2-4	6155904		0.374	4.0	.50	.300	1.125	.189			



PRECISION S-WUCR BORING SET MINIATURE BORING

Order No.	Price	Shank Size	Min Bore	(3) Boring Bars	(10) Inserts	(1) Torx Key	(1)
6185070		.500	.228	S08H-SWUCR-1.2-2	WCMT-520-	T-6	Box
		.308	.500	S08H-SWUCR-1.2-3	UF-DHCP25		
		.500	.374	S08H-SWUCR-1.2-4	-		

- Precision finishing operation
- For steel & stainless steel
- Sharp cutting edge
- Good chip control



CARBIDE INDEXABLE END MILLS & SETS

SERIES 622:

Features :

- Positive rake 90° right hand cut.
- Uses standard triangular inserts.
- Cutting rake angle 0°.
- Adaptable for N.C. machining.
- Axial rake angle 0°
- Setting angle 90°.
- Inserts included.

3 Piece Sets

Each Set Includes

- 3 Indexable end mills.
- Two hex wrenches.
- Attractive hardwood block.
- Packed in a specially designed box for protection in transit.



Indexable End Mill Sets:

Shank	Includes Sizes	Order No.	Price
Weldon Shank			
3/4"	3/4", 7/8", 1"	6224700	
3/4"	1-1/4", 1-1/2", 2"	6224800	
1	1-1/4", 1-1/2", 2"	6226400	
R8 Bridgeport Shank			
R8	1-1/4", 1-1/2", 2"	6220801	
R8	2", 2-1/2", 3"	6220802	

Indexable End Mills:

Shank	Cut Dia.	No. of Inserts	Insert Style	Order No.	Price
Weldon 3/4"	3/4	2	TPG/TPU-21	6224848	
	1	2	TPG/TPU-22	6224864	
	1-1/4	2	TPG/TPU-32	6224880	
	1-1/2	3	TPC-32	6224896	
	1-3/4	3	TPC-32	6221484	
R8 Bridgeport Type	2	3	TPG/TPU-43	2248200	
	1-1/4	2	TPG/TPU-32	6220880	
	1-1/2	3	TPC-32	6220896	
	2	3	TPC-32	2208200	
	2-1/2	4	TPG/TPU-43	2208232	
3	5	TPC-43	2208300		



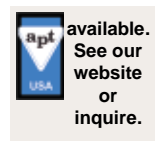
INDEXABLE COUNTERSINK & CHAMFERING TOOLS

SERIES 798:



Features :

- Overall length 2-3/8".
- Positive rake for smooth cutting without chatter.
- Uses standard inserts.



Sets - 3 Piece:

Description	Order No.	Price
60° with Stand	7980060	
82° with Stand	7980082	
90° with Stand	7980090	

Individual Pieces:

Cutter Body	Shank	Insert	60° Order No.	82° Order No.	90° Order No.	Price
1/4 - 3/4	1/2"	TPGH321	9816480	9816481	9816482	
1/2 - 1-3/4	1/2"	SPGH433	8321480	8321481	8321482	
1-1/4 - 2-1/2	3/4"	SPGH433	8802960	8802961	8802962	

Insert:

Style	Radius	I.C.	Thick-ness	Grade C5		Grade C5 (Tin) Ctd.	
				Order No.	Price	Order No.	Price
TPGH321	1/64"	3/8"	1/8"	7983211		7983212	
SPGH433	3/64"	1/2"	3/16"	7984331		7984332	

Replacement Hold Down Screw:	Price
Order No. 7980000	

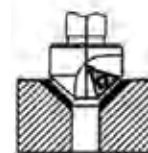
When ordering replacement screws, please specify size of countersink.

INDEXABLE COUNTERSINK END MILLS, TGDW INSERTS

SERIES 798:



Cutter Body		Shank Dia. d	L	L ₁	a	Angle	No. of Inserts	Insert Style	Order No.	Price
D Min.	D ₁ Min.									
1/4	9/16	3/8	2-1/4	1	.355	45°	1	TDGW-21.51	6945410	
1/2	31/32	1/2	2-1/2	1	.559		1	TDGW-321	6945415	
3/4	1-15/64	3/4	3-1/2	1-1/4	.559		1		6945420	
1/4	21/32	3/8	2-1/4	1	.335	60°	1	TDGW-21.51	6945610	
1/2	1-1/8	1/2	2-1/2	1	.524		1	TDGW-321	6945615	
3/4	1-3/8	3/4	3-1/2	1-1/4	.524		3		6945620	
1/4	51/64	3/8	2-1/4	1	.291	82°	1	TDGW-21.51	6945810	
1/2	1-11/32	1/2	2-1/2	1	.453		1	TDGW-321	6945815	
3/4	1-9/16	3/4	3-1/2	1-1/4	.453		3		6945820	
1/4	53/64	3/8	2-1/4	1	.272	90°	1	TDGW-21.51	6945910	
1/2	1-25/64	1/2	2-1/2	1	.425		1	TDGW-321	6945915	
3/4	1-41/64	3/4	3-1/2	1-1/4	.425		3		6945920	



45, 60, 82 & 90°, RH Cut with Weldon Shanks

Tool Angles:
Cutting Rake Angle: +15°
Radial Rake Angle: 0°
Axial Rake Angle: 0°

NOTE: End mills are furnished without cutting inserts.
For a full listing of available inserts, please refer to our Carbide Insert section.



• EUROPEAN MADE •

INDEXABLE END MILLS, TP_ INSERTS

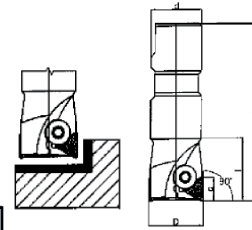
SERIES 148:

RH Cut with Weldon, R8 and NST Shanks

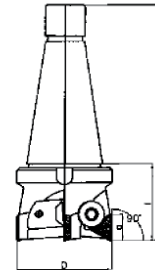
Tool Angles:

• Standard triangular utility lock-down inserts make this cutter a good, economical, general purpose choice.

Cutting Rake Angle: 0°
Axial Rake Angle: 0°
Setting Angle: 90°



Weldon shank



NST shank



Dia. D	OAL L	Cutting Length I	Shank Type	a	No. of Inserts	Insert Style	Order No.	Price
WELDON SHANK								
1/2	2-25/32	1	1/2	7/16	1	TPG/TPU-21	6901002	
3/4	3-1/4	1-7/32	3/4	21/32	1	TPG/TPU/TPC-32	6901004*	
3/4	3-1/4	1-7/32	3/4	7/16	2	TPG/TPU-21	9901005	
1	3-1/4	1-7/32	3/4	7/16	2	TPG/TPU-22	9901010	
1-1/4	3-1/4	1-7/32	3/4	21/32	2	TPG/TPU/TPC-32	6901015	
1-3/8	3-1/4	1-7/32	3/4	21/32	2	TPG/TPU/TPC-32	6901017*	
1-1/2	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	9901020	
1-5/8	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	9901023*	
1-3/4	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	9901025*	
2	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	9901030	
1	3-31/64	1-13/64	1	7/16	2	TPG/TPU-22	6901060*	
1-1/4	3-11/16	1-13/32	1	21/32	2	TPG/TPU/TPC-32	6901065*	
1-3/8	3-11/16	1-13/32	1	21/32	2	TPG/TPU/TPC-32	6901067*	
1-1/2	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	6901070	
1-5/8	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	6901073*	
1-3/4	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	6901075*	
2	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	6901080	
3	3-11/16	1-13/32	1-1/4	21/32	3	TPG/TPU/TPC-32	6901090*	
NST SHANK								
2	5	2-19/64	NST-30	21/32	3	TPG/TPU/TPC-32	6901330*	
2	5-63/64	2-9/32	NST-40	21/32	3	TPG/TPU/TPC-32	6901430*	
2-1/2	5-63/64	2-9/32	NST-40	21/32	4	TPG/TPU/TPC-32	6901435*	
3	5-63/64	2-9/32	NST-40	21/32	5	TPG/TPU/TPC-32	6901440*	
R8 SHANK								
1	5-3/8	1-21/64	R8	7/16	2	TPG/TPU-22	6901510	
1-1/4	5-37/64	1-33/64	R8	21/32	2	TPG/TPU/TPC-32	6901515	
1-3/8	5-37/64	1-33/64	R8	21/32	2	TPG/TPU/TPC-32	6901517*	
1-1/2	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901520	
1-5/8	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901523*	
1-3/4	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901525	
2	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901530	
2-1/2	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901535	
3	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	6901540	

SETS

Shank	Consists of Sizes	Order No.	Price
3/4"	3/4", 7/8", 1"	9910500	
3/4"	1-1/4", 1-1/2", 2"	9910501	
3/4"	1", 1-1/4", 1-1/2"	9010502	
R-8	1", 1-1/4", 1-1/2"	9015500	
R-8	1-1/4", 1-1/2", 2"	9015501	
R-8	2", 2-1/2", 3"	9015505	

*Limited quantity available.

INDEXABLE END MILLS,

APKT & CCMT INSERTS

SERIES 148:

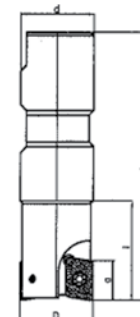
RH Cut with R8 Shank

Tool Angles:

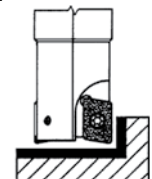
Cutting, Radial and Axial Angles:
Setting angle: 90°

- 90° multi-purpose end mill for low horsepower machines.
- Rigid, chatterless performance on CNC and conventional milling machines.

R8 shank



Weldon shank



Dia. D	OAL L	Cutting Length I	Shank Dia. d	a	No. of Insert	Cutting Rake Angle	Axial Rake Angle	Radial Rake Angle	Order No.	Price
R8 SHANK: INSERT APKT 1604; TORX KEY 6998015										
1	5-27/32	1-43/64	R8	5/8	2	-11°	4°, 6°	-11°	6941105	
1-1/4	5-27/32	1-43/64	R8	5/8	3	-10°	6°, 8°, 6°	-10°	6941110	
1-1/2	6-1/8	1-61/64	R8	5/8	4	-12°	6°, 8°, 6°, 8°	-12°	6941115	
2	6-1/8	1-61/64	R8	5/8	5	-10°	6°, 8°, 6°, 8°, 6°	-10°	6941120	
2-1/2	6-1/8	1-61/64	R8	5/8	6	-8°	6°, 8°, 6°, 8°, 6°, 8°	-8°	6941125	

CUTTING TOOLS - INDEXABLE

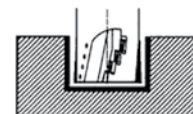


MAXI-MIZER LONG EDGE END MILLS, APKT INSERTS

SERIES 198:

RH, Heavy Duty with Weldon, NST and CAT Shanks

- 90° heavy duty deep slotting
- Side milling and flush pocketing
- Ideal for high speed machining with low power consumption



NST shank



Dia. D	OAL L	Cutting Length I	Projection Length L1	Shank Dia. d	No. of Flutes	No. of Inserts	Insert Style	Order No.	Price
WELDON SHANK									
3/4	3-1/2	1-5/32	1-15/32	3/4	1	4	APKT 1003	6958010	
1	4-1/4	1-15/32	1-31/32	1	2	8		6958015	
1-1/4	4-1/2	1-53/64	2-7/32	1-1/4	3	15	6958025		
1-1/2	5	2-13/64	2-23/32	1-1/4	4	24	6958035		
1-1/4	4	1	1-23/32	1-1/4	2	4	6958040		
1-1/2	4-1/2	1-1/2	2-7/32	1-1/4	2	6	6958045		
1-3/4	5-5/32	2	2-15/32	1-1/2	2	8	6958050		
2	5-13/32	2-9/32	2-23/32	1-1/2	3	12	6958055		
2	5-15/16	2-13/16	3-1/4	1-1/2	3	15	6958060		
2	6-1/2	2-13/16	3-1/4	2	3	15	6958065		
2-1/2	6-15/32	3-11/32	3-25/32	1-1/2	4	24	6958070		
CAT SHANK									
2	7-7/16	2-9/32	4-3/4	CAT-40	3	12	APKT 1604	6958220	
2	9-1/2	2-13/16	5-1/2	CAT-50	3	15		6958320	
2-1/2	10-1/2	3-11/32	6-1/2	CAT-50	4	24		6958325	
3	11-1/16	3-29/32	7-1/16	CAT-50	5	35		6958330	

NOTE: End Mills are furnished without cutting inserts.

- For a full listing of available inserts, please refer to our Carbide Insert section.

CUTTING TOOLS - INDEXABLE



MADE IN USA - EXCLUSIVELY BY A.P.T.

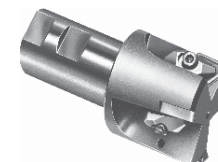
DYNA-MILL INDEXABLE END MILLS & FACEMILL - HEAVY DUTY

SERIES 978 :

TRIANGLE INSERTED — NEGATIVE RAKE — 90° CUT



- For use in heavy duty milling application
- Higher metal removal rates
- Both styles use standard 1/2" I.C. inserts
- Unique clamping mechanism, one clamp fits all sizes



FACE MILLS						
Cutting Diameter	Length of Cut	Hole Size	No. of Inserts	Tool Number	Order No.	Price
4	2-3/4	1-1/4	6	DM24	9785017	
5	2-3/4	1-1/2	7	DM25	9785018	
6	2-3/4	2	8	DM26	9785019	
8	2-3/4	2-1/2	10	DM28	9785020	

Inserts sold separately.

END MILLS						
Cutting Diameter	Length of Cut	Shank Diameter	No. of Inserts	Tool Number	Order No.	Price
1-1/4	2-1/8	1-1/4	2	DM19	9785011	
1-1/2	2-1/8	1-1/4	2	DM20	9785012	
1-3/4	2-1/8	1-1/4	3	DM21	9785013	
2	2-1/8	1-1/4	3	DM22	9785014	
2-1/2	2-1/8	1-1/4	3	DM22.5	9785015	
3	2-1/8	1-1/4	5	DM23	9785016	

Inserts sold separately.

TNMG TRIANGLE Negative rake with chip control									
CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TNMG-431	1/64	1/2	3/16	9785021		9785022		9785023	
TNMG-432	1/32	1/2	3/16	9785024		9785025		9785026	
TNMG-433	3/64	1/2	3/16	9785027		9785028		9785029	
TNMG-434	1/16	1/2	3/16	9785030		9785031		9785032	
TNMG-438	18	1/2	3/16	9785033		9785034		9785035	

*C-5 & C-6 Grade TiN Coated.

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CDM	Hold Down Clamp	9785036	
CB1032-12	Clamp Screw for DM19 only	9785037	
CS1032-58	Clamp Screw	9784829	
AS5818-2	Arbor Screw for DM24 only	9785038	



MADE IN USA - EXCLUSIVELY BY A.P.T.

TRI-DEX INDEXABLE END MILLS REGULAR LENGTH

SERIES 978:

TRIANGLE INSERTED — POSITIVE RAKE — 90° CUT



Sets supplied in wood block.

- Low cost
- Finest quality and workmanship
- A large range of standard diameters available
- A wide variety of shanks to choose from
- All sizes use standard 3/8" I.C. triangle inserts
- One clamp fits all tool sizes
- Used effectively on low horsepower milling machines
- Simple, rugged clamp design
- Versatile - can be used for many different types of cuts
- Can be used with inserts with wiping flats for improved finish



TRI-DEX SET				
Shank Styles	Cutting Diameter	Set No.	Order No.	Price
3/4	3/4, 7/8, 1"	EM34	9784907	
3/4	1-1/4, 1-1/2, 2"	EM750	9784908	
1	1-1/4, 1-1/2, 2"	EM1000	9784909	
R-8	1, 1-1/4, 1-1/2"	EM8R1	9784910	
R-8	2, 2-1/2, 3"	EM8R2	9784911	
R-8	2, 2-1/4, 2-1/2"	EM8R3	9784912	
R-8	2-3/4, 3, 3-1/2"	EM8R4	9784913	
V-Flange	1-1/4, 1-1/2, 3"	EMV1000	9785932	

END MILLS					
Cutting Diameter	Shank Dia. or Style	No. of Inserts	Tool Number	Order No.	Price
3/4	1/2	1	EM075-50	9784866	
3/4	3/4	1	EM075-34	9784867	
3/4	R-8	1	EM075-R8	9784868	
7/8	3/4	1	EM087-34	9784869	
1	1	1	EM100-1	9784871	
1	3/4	1	EM100-34	9784870	
1	R-8	1	EM100-R8	9784872	
1-1/4	1	2	EM125-1	9784873	
1-1/4	3/4	2	EM125-34	9784874	
1-1/4	R8	2	EM125-R8	9784875	
1-1/4	40V-Flange	2	EM125-V40	9784876	
1-3/8	1	2	EM137-1	9784877	
1-3/8	3/4	2	EM137-34	9784878	
1-3/8	R-8	2	EM137-R8	9784879	
1-1/2	1	3	EM150-1	9784880	
1-1/2	3/4	3	EM150-34	9784881	
1-1/2	R-8	3	EM150-R8	9784882	
1-1/2	40V-Flange	3	EM150-V40	9784883	
1-5/8	3/4	3	EM162-34	9784884	
1-5/8	1	3	EM162-1	9784885	
1-5/8	R-8	3	EM162-R8	9784886	
1-3/4	1	3	EM175-1	9784887	
1-3/4	3/4	3	EM175-34	9784888	
1-3/4	R-8	3	EM175-R8	9784889	
2	1	3	EM20-1	9784890	
2	3/4	3	EM20-34	9784891	
2	R-8	3	EM20-R8	9784892	
2	30 NST	3	EM20-S30	9784893	
2	40 NST	3	EM20-S40	9784894	
2	40V-Flange	3	EM20-V40	9784895	
2-1/4	R-8	4	EM225-R8	9784896	
2-1/2	1-1/4	5	EM250-125	9784897	
2-1/2	R-8	5	EM250-R8	9784898	
2-3/4	R-8	5	EM275-R8	9784899	
3	1-1/4	5	EM300-125	9784900	
3	R-8	5	EM300-R8	9784901	
3	40 NST	5	EM300-S40	9784902	
3	40V-Flange	5	EM300-V40	9784903	
3-1/2	R-8	5	EM350-R8	9784904	
4	R-8	6	EM400-R8	9784905	

Inserts sold separately. Cutter body length 1-5/8".

TPG TRIANGLE — Positive rake — Ground all over									
CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPG-321	1/64	3/8	1/8	9784823		9784824		9784826	
TPG-322	1/32	3/8	1/8	9784925		9784926		9784927	
TPG-323	3/64	3/8	1/8	9784929		9784930		9784931	
TPG-324	1/16	3/8	1/8	9784933		9784934		9784935	

*C-5 & C-6 Grade TiN Coated

TPC TRIANGLE — Positive rake ground all over with wiping flats on three corners									
CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPC 32ZR	-	3/8	1/8	9784937		9784938		9784939	

*C-5 & C-6 Grade TiN Coated

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CTD-2	Hold Down Clamp	9784940	
CS832-12	Clamp Screw	9784941	
CSW	9/64 Allen Wrench for 8-32 Screw	9784942	



MADE IN USA - EXCLUSIVELY BY A.P.T.

TRI-DEX INDEXABLE END MILLS - MINIATURE SERIES

SERIES 978:

TRIANGLE INSERTED — POSITIVE RAKE — 90° CUT



- One clamp fits all sizes
- Uses standard 1/4" I.C.
- Triangle inserts
- Fine surface finishes



END MILLS						
Cutting Diameter	Shank Diameter	Body Length	Overall Length	Tool Number	Order No.	Price
STANDARD						
1/2	1/2	1	3	EMM500-5	9784971	
9/16	1/2	1	3	EMM562-5	9784972	
5/8	1/2	1	3	EMM625-5	9784973	
METRIC						
12mm	1/2	1	3	EMM12M5	9784974	
15mm	1/2	1	3	EMM15M-5	9784975	
18mm	1/2	1	3	EMM18M-5	9784976	

SETS	
STANDARD Contains 1 piece of each: 1/2, 9/16, 5/8 Set No. EMM500	
Order No. 9784978	Price
METRIC Contains 1 piece of each: 12mm, 15mm, 18mm Set No. EMM500A	
Order No. 9784977	Price

*Torx® wrench included. Set supplied in wood block. Inserts sold separately.



TPG TRIANGLE — Positive rake ground all over

CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thick-ness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPG-221	1/64	1/4	1/8	9784820		9784821		9784822	
TPG-222	1/32	1/4	4/8	9785589		9785590		9785838	
TPG-223	3/64	1/4	1/8	9785591		9785592		9785839	

*C-5 & C-6 Grade TiN Coated

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CTM	Hold Down Clamp	9784979	
CB632-38	Torx® Clamp Screw	9784980	
CTW-10	T-10 Torx® Wrench for 6-32 Screw	9784743	

MADE IN USA - EXCLUSIVELY BY A.P.T.

TRI-DEX INDEXABLE END MILLS - EXTRA LONG LENGTH

TRIANGLE INSERTED — POSITIVE RAKE — 90° CUT
CUTTER BODY LENGTH 4"



- Used where extra long reach is required
- Available in a wide range of diameters
- A large variety of shank styles
- Uses standard 3/8" I.C. triangle inserts
- One clamp fits all size

END MILLS						
Cutting Diameter	Shank Dia. or Style	Overall Length	No. of Inserts	Tool Number	Order No.	Price
3/4	3/4	6-1/4	3	EML075-34	9784943	
1	3/4	6-1/4	1	EML100-34	9784944	
1-1/4	1	6-1/4	2	EML125-1	9784945	
1-1/4	R-8	8-1/4	2	EML125-R8	9784946	
1-1/2	1	6-1/4	3	EML150-1	9784947	
1-1/2	R-8	8-1/4	3	EML150-R8	9784948	
2	1	6 1/4	3	EML20-1	9784949	
2	1-1/4	6-1/4	3	EML20-125	9784950	
2	R-8	8-1/4	3	EML20-R8	9784951	
2-1/2	1-1/4	6-1/4	5	EML250-125	9784952	
2-1/2	R-8	8-1/4	5	EML250-R8	9784953	
3	1-1/4	6-1/4	5	EML300-125	9784954	
3	R-8	8-1/4	5	EML300-R8	9784955	

Inserts sold separately.

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CTD-2	Hold Down Clamp	9784940	
CS832-12	Clamp Screw	9784941	
CSW	9/64 Allen Wrench for 8-32 Screw	9784942	

*Inserts sold separately.

SETS	
R-8 SHANK Contains 1 piece of each: 2, 2-1/2, 3 Supplied in wood block. Set No. EML8R2	1-1/4" SHANK Contains 1 piece of each: 2, 2-1/2, 3 Supplied in wood block. Set No. EML12500
Order No. 9784956	Order No. 9784957
Price	Price



TPG TRIANGLE — Positive rake — Ground all over

CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPG-321	1/64	3/8	1/8	9784823		9784824		9784826	
TPG-322	1/32	3/8	1/8	9784925		9784926		9784927	
TPG-323	3/64	3/8	1/8	9784929		9784930		9784931	
TPG-324	1/16	3/8	1/8	9784933		9784934		9784935	

*C-5 & C-6 Grade TiN Coated



TPC TRIANGLE — Positive rake ground all over with wiping flats on three corners

CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPC 32ZR	-	3/8	1/8	9784937		9784938		9784939	

*C-5 & C-6 Grade TiN Coated



MADE IN USA - EXCLUSIVELY BY A.P.T.
QUAD-MILL INDEXABLE END MILLS

SERIES 978:

SQUARE INSERTED — POSITIVE RAKE — 15° AND 45° LEADS



- Finest quality and workmanship
- Uses standard 1/2" I.C. square inserts
- One clamp fits all tools
- Easy stock removal on low horsepower equipment
- Higher metal removal rates
- Fine surface finishes



END MILLS					
Cutting Diameter	Shank Dia. or Style	No. of Inserts	Tool Number	Order No.	Price
15° LEAD**					
1	3/4	1	QM100-34	9784981	
1	R-8	1	QM100-R8	9784982	
2	1	3	QM20-100	9784983	
2	R-8	3	QM20-R8	9784984	
2	1-1/4	3	QM20-125	9784985	
2-1/2	R-8	5	QM250-R8	9784986	
2-1/2	1-1/4	5	QM250-125	9784987	
3	R-8	5	QM30-R8	9784988	

END MILLS					
Cutting Diameter	Shank Dia. or Style	No. of Inserts	Tool Number	Order No.	Price
45° LEAD					
3/4	3/4	1	QMD075-34	9784990	
1	3/4	1	QMD100-34	9784991	
1	R-8	1	QMD100-R8	9784992	
1-1/4	3/4	1	QMD125-34	9784993	
1-1/4	R-8	1	QMD125-R8	9784994	
1-1/2	3/4	1	QMD150-34	9784995	
1-1/2	R-8	1	QMD150-R8	9784996	
2	3/4	3	QMD20-34	9784997	
2	R-8	3	QMD20-R8	9784998	
2	1-1/4	3	QMD20-125	9784999	
2-1/2	R-8	4	QMD250-R8	9785000	
3	R-8	5	QMD30-R8	9785001	

Inserts sold separately.
 ** Note: Do Not Use SPG-424 — 1/16 Radius on 15° Lead End Mills

	SPG	SQUARE Positive rake — Ground all over
	SPU	SQUARE Positive rake — Ground top and bottom

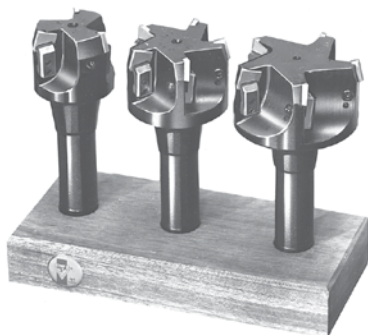
CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
SPG-422	1/32	1/2	1/8	9785433		9785434		9785757	
SPG-423	3/64	1/2	1/8	9785435		9785436		9785758	
**SPG-424	1/16	1/2	1/8	9785437		9785438		9785759	
SPU-422	1/32	1/2	1/8	9785457		9785458		9785769	
SPU-423	3/64	1/2	1/8	9785459		9785460		9785770	

*C-5 & C-6 Grade TiN Coated
 ** Note: Do Not Use SPG-424 — 1/16 Radius on 15° Lead End Mills

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CTD-2	Hold Down Clamp	9784940	
CS832-12	Clamp Screw	9784941	
CSW	9/64 Allen Wrench for 8-32 Screw	9784942	

	SPC	SQUARE — Positive rake ground all over with wiping flats on four corners.							
CARBIDE INSERTS WITH WIPIN G FLATS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
SPC-42ZR	-	1/2	1/8	9785008		9785009		9785010	

*C-5 & C-6 Grade TiN Coated



QUAD-MILLS SETS				
Shank Dia. or Style	Cutting Diameter	Set Number	Order No.	Price
15° LEAD				
R-8	2, 2-1/2, 3	QMS15-R82	9785003	
1-1/4	2, 2-1/2, 3	QMS15-125	9785004	
45° LEAD				
R-8	1, 1-1/4, 11/2	QMS45-R81	9785005	
R-8	2, 2-1/2, 3	QMS45-R82	9785006	
3/4	1, 1-1/4, 1-1/2	QMS45-34	9785007	

Inserts sold separately.





90° END MILL

High Positive

Cutting Rake - 20° for 11°
for positive 85° parallelogram
AP__ inserts
(Sold separately)



- 90° end mill
- Torx screw locking system
- Easy to index
- Two cutting edges
- Square shoulder & slotting
- Increase productivity & quality

Description	Order No.	Price	C	D	Shank Size	F	H	No. Inserts	APKT Gage Inserts
E90-100-AP16-075	6165646		4.000	1.00	0.75	.618	1.625	2	1604
E90-100-AP16-100	6165648		4.500	1.00	1.00	.618	1.750	2	
E90-125-AP16-100	6165650		4.500	1.25	1.00	.618	1.625	3	
E90-150-AP16-100	6165652		4.500	1.50	1.00	.618	1.625	3	
E90-150-AP16-125	6165654		4.500	1.50	1.25	.618	1.625	3	
E90-200-AP16-125	6165656		4.500	2.00	1.25	.618	1.625	4	
E90-200-AP16-R8	6165658		5.625	2.00	R 8	.618	1.640	4	

T-SLOT CUTTER

SERIES 915:

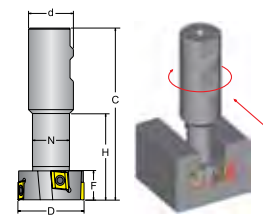
CUTTING RAKE - 20° / FOR 20° POSITIVE CEHW INSERTS

(Sold separately)

In order for the T-Slot cutter to be properly used, a 90° slot must first be cut into the material. This first cut allows clearance for the neck of the T-Slot cutter during the final cut.

- Cutting Rake.....20°
- Axial Rake.....+/- 6°
- Radial Rake.....-14°

Description	Order No.	Price	C	D	d	F	H	N	No. of Inserts R/L	Gage Insert	Insert Torx Screw	Torx Key
SLOT-056-TE06-050	6165171		2.594	0.563	0.50	0.234	0.69	0.266	2	TEHW-0602	TS-06	T-6
SLOT-066-TE06-050	6165172		2.688	0.656	0.50	0.266	0.81	0.328	2	CEHW-0602	TS-25.45-6M1	T-15
SLOT-078-CE06-075	6165173		3.250	0.781	0.75	0.328	1.04	0.406	2/2	CEHW-0602	TS-25.45-6M1	T-15
SLOT-097-CE06-075	6165174		3.438	0.969	0.75	0.390	1.30	0.531	2/2	CEHW-1204	TS-5.8-10M1	T-20
SLOT-125-CE06-100	6165175		3.938	1.250	1.00	0.484	1.48	0.656	3/2	CEHW-1204	TS-5.8-10M1	T-20
SLOT-147-CE12-100	6165176		4.438	1.469	1.00	0.625	2.01	0.781	2/2	CEHW-1204	TS-5.8-10M1	T-20
SLOT-184-CE12-125	6165177		4.813	1.844	1.25	0.828	2.42	1.031	2/2	CEHW-1204	TS-5.8-10M1	T-20
SLOT-222-CE12-125	6165178		5.375	2.219	1.25	1.094	3.08	1.281	3/3	CEHW-1204	TS-5.8-10M1	T-20
SLOT-266-CE12-125	6165179		5.906	2.656	1.25	1.344	3.48	1.531	4/4	CEHW-1204	TS-5.8-10M1	T-20



SLOT-000-CE00-000

- Available in 12mm, 16mm, 25mm, & 32mm Weldon shank sizes
- Industry standard sizes
- High rate of material removal
- Staggered tooth design
- Torx screw locking system
- Two cutting edges

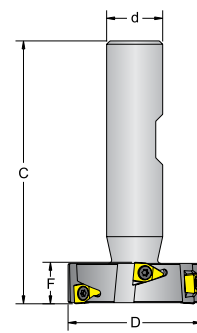
WOODRUFF KEY SEAT CUTTER

SERIES 915:

CUTTING RAKE - 20° / FOR 20° POSITIVE TEHW INSERTS

(Sold separately)

Description	Order No.	Price	C	D	d	F	No. Inserts	TEHW Gage Insert	Insert Torx Screw	Torx Key
DWKC-606-TE06-050	6165140		2.188	.750	.500	.188	2	0602	TS-06	T-6
DWKC-806-TE06-050	6165141		2.250	.750	.500	.250	2	0602	TS-06	T-6
DWKC-807-TE06-050	6165142		2.188	.875	.500	.188	2	0602	TS-06	T-6
DWKC-707-TE06-050	6165143		2.219	.875	.500	.219	2	0602	TS-06	T-6
DWKC-807-TE06-050	6165144		2.250	.875	.500	.250	2	0602	TS-06	T-6
DWKC-608-TE06-050	6165145		2.188	1.000	.500	.188	3	0602	TS-06	T-6
DWKC-708-TE06-050	6165146		2.219	1.000	.500	.219	3	0602	TS-06	T-6
DWKC-808-TE06-050	6165147		2.250	1.000	.500	.250	3	0602	TS-06	T-6
DWKC-1008-TE06-050	6165148		2.313	1.000	.500	.313	3	0602	TS-06	T-6
DWKC-1208-TE06-050	6165149		2.375	1.000	.500	.375	3	0602	TS-06	T-6
DWKC-609-TE06-050	6165150		2.188	1.125	.500	.188	4	0602	TS-06	T-6
DWKC-709-TE06-050	6165151		2.219	1.125	.500	.219	4	0602	TS-06	T-6
DWKC-809-TE06-050	6165152		2.250	1.125	.500	.250	4	0602	TS-06	T-6
DWKC-1009-TE06-050	6165153		2.313	1.125	.500	.313	4	0602	TS-06	T-6
DWKC-610-TE06-050	6165154		2.188	1.125	.500	.188	6	0602	TS-06	T-6
DWKC-710-TE06-050	6165155		2.219	1.125	.500	.219	6	0602	TS-06	T-6
DWKC-810-TE06-050	6165156		2.250	1.125	.500	.250	6	0602	TS-06	T-6
DWKC-1010-TE06-050	6165157		2.313	1.125	.500	.313	6	0602	TS-06	T-6
DWKC-1210-TE06-050	6165158		2.375	1.125	.500	.375	6	0602	TS-06	T-6
DWKC-811-TE06-050	6165159		2.250	1.125	.500	.250	6	0602	TS-06	T-6
DWKC-1011-TE06-050	6165160		2.313	1.375	.500	.313	6	0602	TS-06	T-6
DWKC-1211-TE06-050	6165161		2.375	1.375	.500	.375	6	0602	TS-06	T-6
DWKC-812-TE06-050	6165162		2.250	1.375	.500	.250	6	0602	TS-06	T-6
DWKC-1012-TE06-050	6165163		2.313	1.500	.500	.131	6	0602	TS-06	T-6
DWKC-1212-TE06-050	6165164		2.375	1.500	.500	.313	6	0602	TS-06	T-6



DWKC-0000-TE06-000

- Cutting Rake 20°
- Axial Rake +/- 6°
- Radial Rake -10°

- Available in 10mm & 12mm Weldon shank size
- High rate of material removal
- Staggered tooth design
- Torx screw locking system

INDEXABLE TOOLING

SERIES 915:

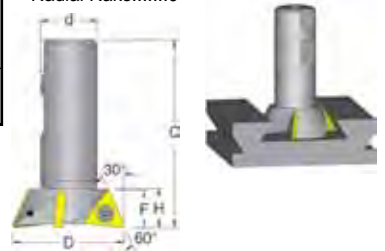


45° DOVETAIL CUTTER

Cutting Rake 11° for 11 positive TDEX inserts (Sold separately)

Description	Order No.	Price	C	D	d	F	H	No. Inserts	Gage Inserts	Insert Torx Screw	Torx Key
D45X-050-TD09-037	6165233		2.390	0.500	0.375	.247	.125	1			
D45X-075-TD09-037	6165234		2.390	0.750	0.375	.247	.214	2	090202	TS-25.45-6M1	T-7
D45X-100-TD09-050	6165235		2.390	1.000	0.500	.250	.244	3			
D45X-137-TD17-062	6165236		2.940	1.375	0.625	.375	.320	2	17T304	TS-4.7-8M1	T-15
D45X-187-TD17-075	6165237		2.940	1.875	0.750	.468	.444	3			
D45X-225-TD25-100	6165238		3.500	2.250	1.000	.700	.696	2	250404	TS-5.8-10M1	T-20
D45X-250-TD25-100	6165239		3.500	2.500	1.000	.700	.700	3			

- Cutting Rake...+11°
- Axial Rake.....0°
- Radial Rake.....0°



60° DOVETAIL CUTTER

Cutting Rake 15° for 15° positive TDEX inserts (Sold separately)

Description	Order No.	Price	C	D	d	F	H	No. Inserts	Gage Insert	Insert Torx Screw	Torx Key
D60X-050-TD11-037	6165244		2.390	0.500	0.375	.325	.142	1			
D60X-075-TD11-037	6165245		2.390	0.750	0.375	.325	.282	2	110204	TS-25.45-6M1	T-7
D60X-100-TD11-050	6165246		2.390	1.000	0.500	.325	.375	3			
D60X-137-TD16-062	6165247		2.862	1.375	0.625	.510	.550	3	160308	TS-4.7-8M1	
D60X-187-TD16-075	6165248		3.000	1.875	0.750	.510	.550	3	160308	TS-4.7-10M1	
D60X-225-TD22-100	6165249		3.500	2.250	1.000	.700	.750	3	220408	TS-5.8-1-M1	T-20
D60X-250-TD22-100	6165250		3.500	2.500	1.000	.700	.750	3			

- Cutting Rake.... +15°
- Axial Rake.....10°
- Radial Rake.....14°

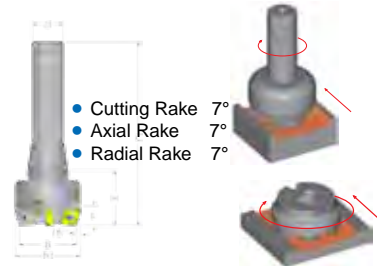
15° CNMG "RECYCLE" MILLING CUTTERS

Cutting rake - Negative 7°
For Negative 80° Diamond
CN__ inserts (Sold separately)

After the cutting edges are used on your turning toolholder, do not throw the insert away. It can be used in this milling cutter to utilize two more cutting edges that were not used in your lathe work.

End Mill

Description	Order No.	Price	C	D	D1	d	F	H	No. of Inserts	CNMG Gage Insert	Insert Torx Screw	Torx Key
REC15-200-CN4-075	6165850		3.750	2.0	2.25	.75	.45	1.50	3	432	TS-1032-5M1	T-20
REC15-200-CN4-100	6165852		4.000	2.0	2.25	1.0	.45	1.50				
REC15-200-CN4-R8	6165854		5.625	2.0	2.25	R8	.45	1.75				



- Available in 3/4" & 1.0" Weldon & R8 shank sizes
- Recycles negative 80° diamond inserts
- High rate of material removal
- Torx screw locking system
- Two cutting edges

15° CNMG "RECYCLE" MILLING CUTTERS

Cutting Rake - Negative 7°
for negative 80° diamond
CN__ inserts (Sold separately)

After the cutting edges are used on your turning toolholder, do not throw the insert away. It can be used in this milling cutter to utilize two more cutting edges that were not used in your lathe work.

Face Mill

Description	Order No.	Price	C	D	D1	d	F	H	No. of Inserts	CNMG Gage Insert	Insert Torx Screw	Torx Key
REC15A-300-CN4-100	6165856		1.750	3.0	3.23	1.0	.45	.250	4	432	TS-1032-5M1	T-20
REC15A-400-CN4-150	6165858		2.000	4.0	4.23	1.5	.45	.375	6			
REC15A-500-CN4-150	6165860		2.000	5.0	5.23	1.5	.45	.375	8			



- Cutting Rake 7°
- Axial Rake 7°
- Radial Rake 7°

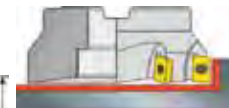
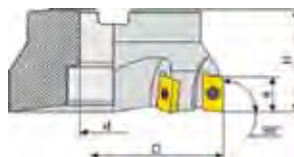
"TURBO" FACE MILLING CUTTERS - APKT

SERIES 150:

Inserts sold separately

Tool Angles:

Cutting Rake Angle:..... -11°, -8°-6°
Radial Rake Angle:..... -11°, -8°-6°
Axial Rake Angle:.....7°, 9°
Setting Angle:..... 90°



Dia.	Arbor Hole	Height H	Cutting Depth	No. of Inserts	Insert Style	Order No.	Price
2"	3/4	1.57	5/8	5	APKT 1604	6955020	
3"	1	1.97	5/8	6	APKT 1604	6955030	
4"	1-1/4	1.97	5/8	8	APKT 1604	6955040	
4"	1-1/2	1.97	5/8	8	APKT 1604	6955045	

- 90° APKT 1604 inserts compliment this cutter's unique geometry.
- Irregularly spaced flutes allow faster stock removal, reduced harmonics and chattering, thus minimizing heat and friction.
- The most efficient milling cutter body in our offering

INDEXABLE FACE MILLING CUTTERS, APKT INSERTS

SERIES 150:

RH Cut

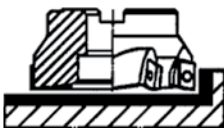
Tool Angles:

Radial Rake Angle: -12° to -6°

Cutting Rake Angle: -12° to -6°

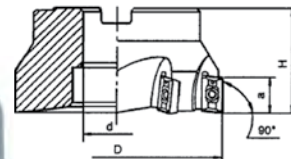
Axial Rake Angle: 7° to 10°

Setting Angle: 90°



• Wide flutes allow for excellent chip removal.

Dia. D	Arbor Hole d	Height H	a	No. of Inserts	Inserts	Order No.	Price
1-1/2	1/2	1-37/64		4		6954015	
2	3/4	1-37/64		5		6954020	
2-1/2	1	1-37/64		6		6954025	
3	1	1-31/32	5/8	6	APKT	6954030	
4	1-1/4	1-31/32		8	1604	6954040	
5	1-1/2	2-31/64		9		6954050	
6	2	2-31/64		10		6954060	
8	2-1/2	2-31/64		12		6954080	



NOTE: Milling Cutters are furnished without cutting inserts. For a full listing of available inserts, please refer to our Carbide Insert section.

INDEXABLE SQUARE SHOULDER MILLING CUTTERS

TP_ INSERTS

SERIES 149:

RH Cut

Tool Angles:

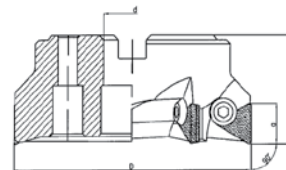
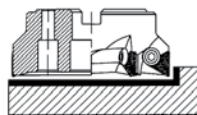
Radial Rake Angle: 0°

Cutting Rake Angle: 0°

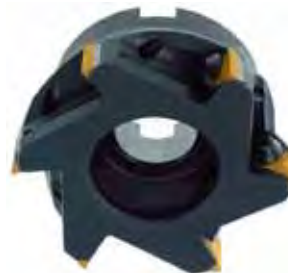
Axial Rake Angle: 0°

Setting Angle: 90°

• 90° square shoulder cutter body



Dia. D	Arbor Hole d	a	Height H	No. of Inserts	Insert	Order No.	Price
1-1/2	1/2	21/32	1-37/64	3	TPC-32	6902156	
2	3/4	21/32	1-21/32	3	TPU-32	6902157	
2-1/2	1	55/64	1-27/32	3	TPG-32	6902158	
3	1	55/64	1-31/32	4	TPC-43	6902159	
4	1-1/2	55/64	1-25/32	5		6902160	
5	1-1/2	55/64	2-31/64	6	TPN-43	6902161	
6	2	55/64	2-31/64	7		6902162	
8	2-1/2	55/64	2-31/64	8	TPU-43	6902163	



NOTE: Milling Cutters are furnished without cutting inserts. For a full listing of available inserts, please refer to our Carbide Insert section.

MAXI-MIZER FACE MILLING CUTTERS, SEHT INSERTS

SERIES 198:

45° Lead Angle

RH Cut, 1/2" Square Insert

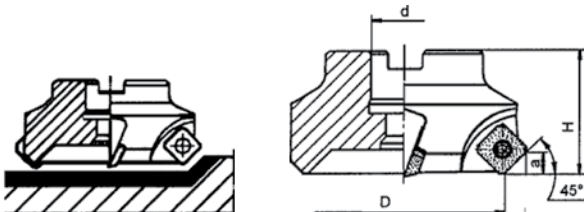
Tool Angles:

Radial Rake Angle: -9°

Cutting Rake Angle: $+10^{\circ}$

Axial Rake Angle: $+20^{\circ}$

Setting Angle: 45°



Dia. D	Arbor Hole d	a	Height H	No. of Inserts	Insert	Order No.	Price
2	3/4		1-37/64	4		6963020	
2-1/2	3/4		1-37/64	5		6963025	
3	1	15/64	1-31/32	5	SEHT	6963030	
4	1-1/4		1-31/32	6	1204	6963040	
5	1-1/2		2-31/64	7		6963050	
6	2		2-31/64	8		6963060	



• Multi-purpose, high speed, face mill and 45° chamfer cutter for difficult machining conditions.

NOTE: Milling Cutters are furnished without cutting inserts. For a full listing of available inserts, please refer to our Carbide Insert section.

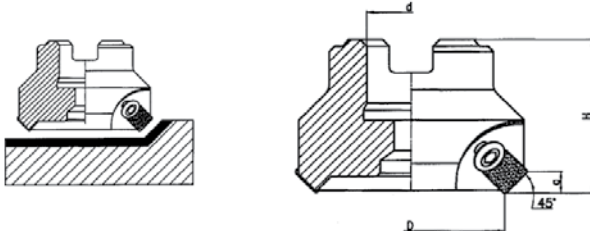


NOTE: Cutters are furnished without cutting inserts.
For a full listing of available inserts, please refer to our Carbide Insert section.



MAXI-MIZER FACE MILLING CUTTERS, SE_N INSERTS

SERIES 198:



RH Cut

Tool Angles:

- Radial Rake Angle: -9°
- Cutting Rake Angle: 10°
- Axial Rake Angle: 20°
- Setting Angle: 45°

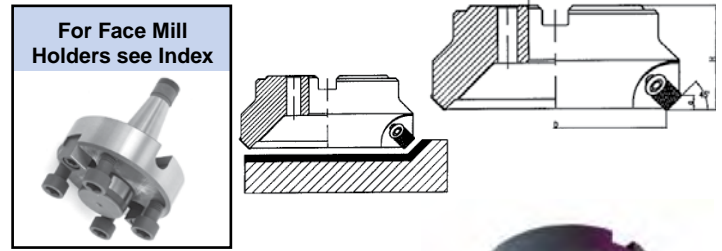


- 45° setting angle, shim supported 1/2" IC square utility inserts account for this cutter's stability and free cutting.

Dia. D	Arbor Hole d	a	Height H	No. of Inserts	Insert	Order No.	Price
1-1/2	3/4		2-3/32	3	SEAN-42AFN	6923001	
2	3/4		1-57/64	4	SEKN-42AFN	6923002	
2-1/2	3/4	15/64	1-37/64	5	SECN-A42AFN	6923003	
3	1		1-31/32	6	SECN-A42AFN	6923004	
4	1-1/4		1-31/32	6	SECN-A42AFN	6923005	

MAXI-MIZER FACE MILLING CUTTERS, SE_N INSERTS - HEAVY DUTY

SERIES 198:



Heavy Duty, RH

Tool Angles:

- Radial Rake Angle: -9°
- Cutting Rake Angle: 10°
- Axial Rake Angle: 20°
- Setting Angle: 45°



- 45° setting angle, shim supported 1/2" IC square utility inserts account for this cutter's stability and free cutting.

Dia. D	Arbor Hole d	a	Height H	No. of Inserts	Insert	Order No.	Price
2-1/2	3/4		1-37/64	5	SEAN-42AFN	6924001	
3	1		1-31/32	6	SEAN-42AFN	6924002	
4	1-1/4		1-31/32	6	SEAN-42AFN	6924003	
5	1-1/2	15/64	2-31/64	7	SEKN-42AFN	6924004	
6	2		2-31/64	7	SEKN-42AFN	6924005	
8	2-1/2		2-31/64	8	SECN-A42AFN	6924006	
10	2-1/2		2-31/64	9	SECN-A42AFN	6924010	



MADE IN USA - EXCLUSIVELY BY A.P.T.

TRI-DEX INDEXABLE FACE MILLS

SERIES 978 :

TRIANGLE INSERTED — POSITIVE RAKE — 90° CUT

MADE IN USA



- Achieve face milling cuts at higher R.P.M.'s
- Use in low horse power milling machines
- Results in finer finishes

- One clamp fits all sizes
- Uses standard 3/8" I.C. triangle inserts
- Use with standard shell end mill adapters



TPG TRIANGLE — Positive rake — Ground all over									
CARBIDE INSERTS									
Insert Number	Radius	I.C.	Thickness	C-2		C-5 & C-6		TiN Coated*	
				Order No.	Price	Order No.	Price	Order No.	Price
TPG-320	0	3/8	1/8	9785887		9785888		9785046	
TPG-321	1/64	3/8	1/8	9784823		9784824		9784826	
TPG-322	1/32	3/8	1/8	9784925		9784926		9784927	
TPG-323	3/64	3/8	1/8	9784929		9784930		9784931	
TPG-324	1/16	3/8	1/8	9784933		9784934		9784935	

*C-5 & C-6 Grade TiN Coated

FACE MILLS						
Cutting Diameter	Length of Cut	Hole Size	No. of Inserts	Tool Number	Order No.	Price
2	1-3/4	3/4	3	EMS200	9785043	
2-1/2	2	3/4	5	EMS250	9785044	
3	2	1	5	EMS300	9785045	

Inserts sold separately.

REPLACEMENT PARTS LIST			
Part No.	Description	Order No.	Price
CTD-2	Hold Down Clamp	9784940	
CSW	9/64 Allen Wrench for 8-32 Screw	9784942	
CS832-12	Clamp Screw	9784941	
AS3824-114	Shell Mill Arbor Screw EMS200	9785041	
AS3824-112	Shell Mill Arbor Screw EMS250	9785040	
AS1220-112	Shell Mill Arbor Screw EMS300	9785039	

CUTTING TOOLS - INDEXABLE

MADE IN USA

SELF LOCKING CUT-OFF AND GROOVING TOOL SYSTEM

SERIES 559:

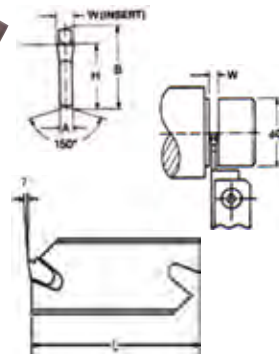
Interchangeable with other brands of Cut-off and Grooving Tool Systems.



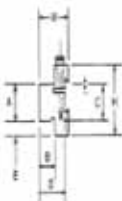
Insert extractor supplied with each blade.

CUT-OFF AND GROOVING BLADES

Dimensions					Insert Width	Tool Number	Order No.	Price Each
A	L	H	B	D-Max				
1/16	3-3/8	39/64	3/4	1-1/2	.087 & .094	GIH19-2	5591192	
1/16	4-5/16	53/64	1-1/32	2	.087 & .094	GIH26-2	5591262	
3/32	4-5/16	53/64	1-1/32	3	.120	GIH26-3	5591263	
1/8	4-5/16	53/64	1-1/32	3	.160	GIH26-4	5591264	
5/32	4-5/16	53/64	1-1/32	3	.187 & .200	GIH26-5	5591265	
13/64	4-5/16	53/64	1-1/32	3	.250	GIH26-6	5591266	
1/16*	5-7/8	63/64	1-1/4	2	.087 & .094	GIH32-2	5591322	
3/32	5-7/8	63/64	1-1/4	4	.120	GIH32-3	5591323	
1/8	5-7/8	63/64	1-1/4	4	.160	GIH32-4	5591324	
5/32	5-7/8	63/64	1-1/4	5	.187 & .200	GIH32-5	5591325	
13/64	5-7/8	63/64	1-1/4	5	.250	GIH32-6	5591326	
17/64	5-7/8	63/64	1-1/4	5.5	.315	GIH32-8	5591358	
5/16	5-7/8	63/64	1-1/4	5.5	.375	GIH32-9	5591329	



CUTTING TOOLS - INDEXABLE

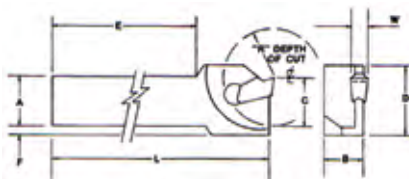
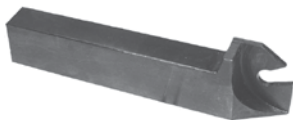
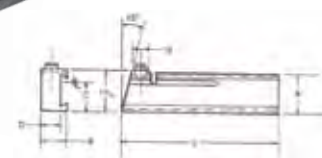


TOOL BLOCKS — NEUTRAL

Dimensions									Use Blade Number	Tool Number	Order No.	Price Each
A	B	C	D	E	F	L	R					
5/8	5/8	5/8	31/32	11/64	1-3/16	1-1/16	3	GIH19-2	GTBN16-2	5591162		
5/8	5/8	5/8	1-1/32	7/16	1-1/2	1-3/16	3	GIH26-2,3,4,5,6	GTBN16-5	5591165		
3/4	3/4	3/4	1-1/8	21/64	1-17/32	1-5/16	3-3/8	GIH26-2,3,4,5,6	GTBN19-5	5591195		
3/4	3/4	3/4	1-1/8	1/2	1-1/8	1-7/8	4	GIH32-2,3,4,5,6,8,9	GTBN19-6	5591196		
1	1	1	1-13/32	5/16	1-7/8	1-5/8	4-3/8	GIH32-2,3,4,5,6,8,9	GTBN25-6	5593256		
1-1/4	1-1/4	1-1/4	1-11/16	1/8	1-7/8	1-7/8	4-11/16	GIH32-2,3,4,5,6,8,9	GTBN32-6	5590326		

TOOL BLOCKS — LEFT AND RIGHT HAND

Dimensions					Use Blade Number	Tool Number	Order No.	Price Each
A	B	C	D	L				
1	3/4	3/4	43/64	4	GIH19-2	GTBR19-2	5592192	
1	3/4	3/4	43/64	4	GIH19-2	GTBL19-2	5593192	
1-1/4	25/32	1	19/32	4-3/4	GIH26-2,3,4,5,6	GTBR25-6	5592256	
1-1/4	25/32	1	19/32	4-3/4	GIH26-2,3,4,5,6	GTBL25-6	5593256	



TOOL HOLDERS

Dimensions										Insert Number	Tool Number				Price
A	B	C	D	E	F	L	R	Width	Left Hand		Order No.	Right Hand	Order No.		
3/8	3/8	3/8	3/4	2-3/4	3/16	3-3/8	1/2	.087, .094	ANN/R/L-2,2.4	GTHL10-2	5593102	GTHR10-2	5592102		
12mm	3/8	15/32	3/4	3-37/64	5/32	4-5/16	19/32	.087, .094	ANN/R/L-2,2.4	GTHL12-2	5593122	GTHR12-2	5592122		
1/2	3/8	1/2	3/4	3-37/64	5/32	4-5/16	19/32	.087, .094	ANN/R/L-2,2.4	GTHL12.7-2	5593124	GTHR12.7-2	5592124		
1/2	3/8	1/2	3/4	3-37/64	5/32	4-5/16	5/8	.120	ANN/R/L-3	GTHL12.7-3	5593125	GTHR12.7-3	5592125		
5/8	3/8	5/8	3/4	3-37/64	0	4-5/16	19/32	.087, .094	ANN/R/L-2,2.4	GTHL16-2	5593162	GTHR16-2	5592162		
5/8	1/2	5/8	1	3-29/64	11/64	4-5/16	5/8	.120	ANN/R/L-3	GTHL16-3	5593163	GTHR16-3	5592163		
5/8	1/2	5/8	1	3-29/64	11/64	4-5/16	5/8	.160	ANN/R/L-4	GTHL16-4	5593164	GTHR16-4	5592164		
3/4	1/2	3/4	1	3-29/64	0	4-5/16	5/8	.087, .094	ANN/R/L-2,2.4	GTHL19-2	5594192	GTHR19-2	5590192		
3/4	1/2	3/4	1	3-29/64	0	4-5/16	5/8	.120	ANN/R/L-3	GTHL19-3	5593193	GTHR19-3	5592193		
3/4	1/2	3/4	1	3-29/64	1/16	4-5/16	3/4	.160	ANN/R/L-4	GTHL19-4	5593194	GTHR19-4	5592194		
3/4	1/2	3/4	1	4-7/16	3/64	4-5/16	3/4	.187, .200	ANN/R/L-4.8,5	GTHL19-5	5593195	GTHR19-5	5592195		



SELF LOCKING CUT-OFF AND GROOVING TOOL SYSTEM

SERIES 559:
(Continued)



Inserts are held securely by a tapered locking system. The unique design of inserts reduces machining forces, permits maximum speeds and feeds, thus resulting in greater productivity. Inserts are available in Standard and Coated carbide grades. Inserts can be used directly with tool holders but when used with a tool block, it is necessary to purchase an adjustable blade. One tool block accepts different adjustable blades for cutting different thicknesses.



CARBIDE INSERTS

N = Neutral R = Right Hand L = Left Hand

Insert No.	Lead Angle	Width	Gen. Purpose		Steel		TiN Coated*	
			Order No.	Price	Order No.	Price	Order No.	Price
MGTN-2	0°	.087	5592001		5592011		5592021	
MGTR-2	0°	.087	5592002		5592012		5592022	
MGTL-2	8°	.087	5592003		5592013		5592023	
MGTN-2.4	0°	.094	5592401		5592411		5592421	
MGTR-2.4	8°	.094	5592402		5592412		5592422	
MGTL-2.4	8°	.094	5592403		5592413		5592423	
MGTN-3	0°	.120	5593001		5593011		5593021	
MGTR-3	8°	.120	5593002		5593012		5593022	
MGTL-3	8°	.120	5593003		5593013		5593023	
MGTN-4	0°	.160	5594001		5594011		5594021	
MGTR-4	8°	.160	5594002		5594012		5594022	
MGTL-4	8°	.160	5594003		5594013		5594023	
MGTN-4.8	0°	.187	5594801		5594811		5594821	
MGTR-4.8	8°	.187	5594802		5594812		5594822	
MGTL-4.8	8°	.187	5594803		5594813		5594823	
MGTN-5	0°	.200	5595001		5595011		5595021	
MGTR-5	8°	.200	5595002		5595012		5595022	
MGTL-5	8°	.200	5595003		5595013		5595023	
MGTN-6	0°	.250	5596001		5596011		5596021	
MGTR-6	8°	.250	5596002		5596012		5596022	
MGTL-6	8°	.250	5596003		5596013		5596023	
MGTN-9	0°	.375	5599001		5599011		5599021	

*All TiN Coated inserts are C5/C6 grade unless otherwise specified.

CUTTING TOOLS - INDEXABLE



CUT-OFF SETS

SERIES 559:



Includes: Tool Block, Adjustable Blade & 10 TiN Coated Inserts

Includes: Adjustable Blade & 10 TiN Coated Inserts

Set No. 3	Set No. 4	Set No. 5
Tool Blade 26-3 Tool Block 19-5 10 Inserts MGTN-3	Tool Blade 26-4 Tool Block 19-5 10 Inserts MGTN-4	Tool Blade 26-5 Tool Block 19-5 10 Inserts MGTN-5
Order No. 6895903	Order No. 6895904	Order No. 6895905
Price: <input type="text"/>	Price: <input type="text"/>	Price: <input type="text"/>

Description	Order No.	Price
26-2 Blade + 10 MGTN-2TN Inserts	6895722	
26-3 Blade + 10 MGTN-3TN Inserts	6895723	
32-4 Blade + 10 MGTN-4TN Inserts	6895734	
32-5 Blade + 10 MGTN-5TN Inserts	6895735	
32-6 Blade + 10 MGTN-6TN Inserts	6895736	

QUALITY INDEXABLE TOOLS



The Choice Is Yours!!!



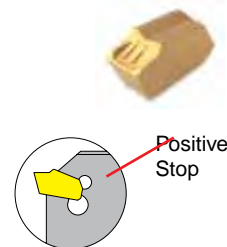
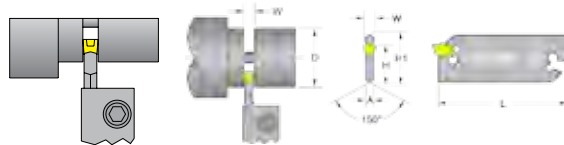
Made in U.S.A.

SELF LOCKING CUT-OFF AND GROOVING TOOL SYSTEM

SERIES 915:
(Continued)



SGIH SLOT GRIP CUT-OFF BLADES FOR CUT-OFF SGTN INSERTS



CUTTING TOOLS - INDEXABLE

Description	Order No.	Price	Insert Use	W		D Max	A	L	H	H1
				Inches	Metric					
SGIH19-2	6162950		SGT(N/R/L)-2	.087	2	1.57"	.063	3.38	.618	0.75
SGIH26-2	6162951		SGT(N/R/L)-2	.087	2	2.0"	.063			
SGIH26-3	6162952		SGT(N/R/L)-3	.122	3	3.0"	.094			
SGIH26-4	6162953		SGT(N/R/L)-4	.161	4	3.15"	.125	4.33	.842	1.02
SGIH32-3	6162956		SGT(N/R/L)-3	.122	3	3.94"	.094			
SGIH32-4	6162957		SGT(N/R/L)-4	.161	4	3.94"	.125			
SGIH32-5	6162958		SGT(N/R/L)-5	.201	5	4.71"	.156	5.90	.984	1.25
SGIH32-6	6162959		SGT(N/R/L)-6	.252	6	4.72"	.203			

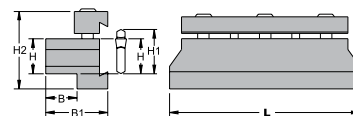
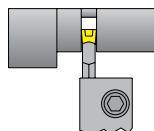
SLOT GRIP POSITIVE STOP BLADE

Improved blade design featuring a "Positive Stop". Inserts are securely held in Slot Grip Blades by a tapered locking system featuring a "Positive Stop" that prevents insert drift and the blade pocket from spreading once the insert is firmly in place.

The inserts' cutting edge location repeats accurately and, as a result, prevents insert splitting under heavy feed and shock loads. The blade and insert geometry permits free chip flow, minimizing insert breakage due to chip build-up. Clearance angle ranges from 4° to 7°.

SGTBN NEUTRAL CUT-OFF TOOLHOLDERS

Neutral Hand Cut-Off Toolholder
for Cut-Off SGIH blades



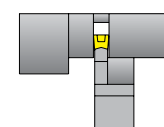
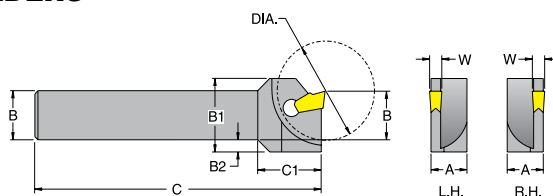
Description	Order No.	Price	H	H1	H2	B	B1	L	Used Blade
SGTBN12,7-2	6162970		0.500	0.75	1.375	0.500	1.000	3.0	SGIH19-2
SGTBN19-5	6162973		0.625	1.02	1.375	0.750	1.375	3.5	SGIH26-6
SGTBN19-6	6162974		0.625	1.25	1.750	0.750	1.375	4.5	SGIH32-3
SGTBN25,4-6	6162975		0.750	1.25	2.000	0.875	1.500	4.5	thru
SGTBN31,8-6	6162976		0.750	1.25	2.000	1.125	1.750	4.5	SGIH32-9

NEUTRAL CUT-OFF TOOLHOLDER

The two piece clamp style of this tool provides precise and rigid blade locking and easy mounting of the tool into CNC turrets. Simple block design accommodates Slot Grip and competitive blade systems. Slot Grip Cut-Off toolholders come in a broad selection of shank sizes.

SGTHR R CUT-OFF TOOLHOLDERS

TOOLHOLDER FOR
CUT-OFF SGTN INSERTS



Description	Order No. RH	Price	A	B	Max. Dia.	B1	B2	C1	C	W	Insert Used
SGTHR 9,5-2	6163000		.375	0.375	1.109	0.750	.187	0.703	3.375		
SGTHR 12,7-2	6163002		.391	0.500	1.172	0.828	.156	0.703	4.328	.087 & .093	SGTN/R/L-2-2,4
SGTHR 16-2	9163004		.391	0.625	1.172	0.750	-	0.703	4.328		
SGTHR 19-2	9163006		.469	0.750	1.266	0.937	-	0.781	4.328		
SGTHR 12,7-3	9163010		.391	0.500	1.266	0.828	.234	0.828	4.328		
SGTHR 16-3	9163012		.469	0.625	1.406	0.937	.156	0.781	4.328	.120	SGTN/R/L-3
SGTHR 19-3	9163014		.469	0.750	2.062	0.937	-	0.828	4.328		
SGTHR 25,4-3	9163016		.984	1.000	1.328	1.187	-	0.984	5.875		
SGTHR 19-5	9163024		.469	0.750	1.531	0.937	-	0.906	4.328	.187 & .200	SGTN/R/L-4,8-5
SGTHR 25,4-5	6163026		.984	1.000	3.000	1.187	-	1.328	5.875		

The square shank design of the Cut-Off toolholder ensures a precise center line of the insert with respect to the center of the working part, when the toolholder is mounted directly on the CNC turret.

Inserts are securely held in Slot Grip blades by a tapered locking system. No additional clamping devices are required. Slot Grip Cut-Off toolholders come in a broad selection of shank sizes.



CUT-OFF SYSTEM

SERIES 915:
(Continued)



SGT SLOT GRIP CUT-OFF AND GROOVING SETS

POSITIVE STOP

Blade Set



Description	Order No.	Price	Max. Dia	Insert Width	Lgth	12 pc. Set Includes		(1)
						(1) Blade	(10) Inserts	
SGIH26-3S	6185360		3.0	.120	4.312	SGIH26-3	SGTN-3-DC656	Storage Box
SGIH32-3S	6185364		4.0	.120	5.875	SGIH32-3	SGTN-3-DC656	

Inserts are securely held in slot grip positive stop blades by a tapered locking system featuring a "Positive Stop" that prevents insert drift and the blade pocket from spreading once the insert is firmly in place.



NEUTRAL

Cut-Off and Grooving

Toolholder Set for SGIH blades.



Description	Order	Price	Shank	Insert	13 pc. Set Includes			(1)
					(1) Toolholder	(1) Blade	(10) Inserts	
SGTBN19-5S	6185326		.750	.120	SGTBN19-5	SGIH26-3	SGTN-3-	Storage Box
SGTBN25,4-6S	6185330		1.00	.120	SGTBN25,4-6	SGIH32-3	DC-656	

- Includes:**
- 1 Toolholder
 - 1 Blade
 - 10 Inserts



CUTTING TOOLS - INDEXABLE



INDEXABLE THREADING & GROOVING TOOLHOLDERS

SERIES 915:



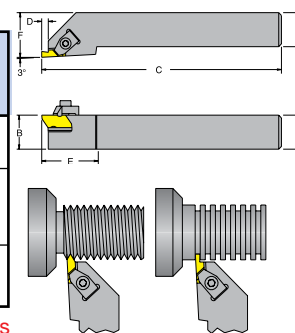
NS R/L THREADING & GROOVING TOOLHOLDER

External DorNotch Toolholder

for Threading and Grooving DorNotch Inserts

Description	Order Number		Price	A	B	C	D	E	F	Gage Insert	Seat	Seat Screw	Clamp	Clamp Screw
	RH	LH												
NSR/L12-2B	6158782	6158783		0.750	0.750	4.5	.138	0.75	1.000	NG-2R*	-		CM-74*	S-310
NSR/L16-2C	6158786	6158787		1.000	1.000	5.0	.138	0.75	1.250	NG-2L*	-		CM-75*	
NSR/L12-3B	6158794	6158795		0.750	0.750	4.5	.210	1.25	1.000	NG-3R*			CM-72*	
NSR/L16-3D	6158802	6158803		1.000	1.000	6.0	.210	1.25	1.250	NG-3L*			CM-73*	S-412
NSR/L20-3D	6158806	6158807		1.250	1.250	6.0	.210	1.25	1.500					
NSR/L16-4D	6158814	6158815		1.000	1.000	6.0	.294	1.38	1.250	NG-4R*	SM-420	SL-344	CM-72*	S-412
NSR/L20-4D	6158822	6158823		1.250	1.250	6.0	.294	1.38	1.500	NG-4L*			CM-73*	

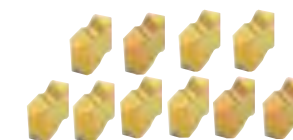
* For right hand tools * For left hand tools



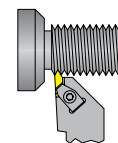
NSR THREADING TOOLHOLDER SET

- DorNotch locking system
- For O.D. threading
- The insert nested in the holder is held extremely secure with a top clamp

Order No.	Price	Shank Size	Tool Lgth	TPI	12 pc. Set Includes		(1)
					(1) Toolholder	(10) Inserts	
6185316		0.75	4.50	6-20	NSR12-3B	NT-3R-DC656	Storage Box
6185320		1.00	6.00	6-20	NSR16-3D	NT-3R-DC656	



- Two cutting edges
- Clamp locking system
- General tooth form to handle a variety of sizes
- 60° "V" threading





INDEXABLE THREADING & GROOVING TOOLHOLDERS

SERIES 915:
(Continued)

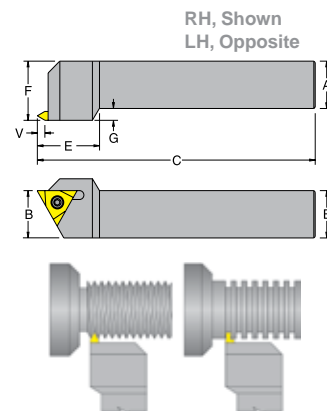


STVO R/L THREADING

TOOLHOLDERS

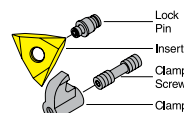
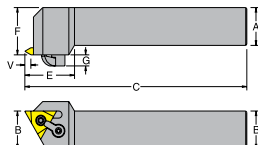
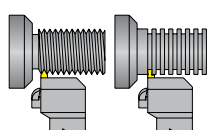
Style V - O.D. threading and shallow grooving for triangle TNMA inserts

Description	Order Number		Price	A	B	C	E	F	G	Max. Grv. Dpth V	Gage Insert	Insert Torx Screw
	RH	LH										
STVOR/L08-3A	6158070	6158071		0.500	0.500	4.0	1.00	0.625	.125	.150	322	GTS-1
STVOR/L10-3B	6158074	6158075		0.625	0.625	4.5	1.00	0.750	.125	.150		
STVOR/L12-3B	6158078	6158079		0.750	0.750	4.5	1.00	0.875	.125	.150		
STVOR/L16-3D	6158082	6158083		1.000	1.000	6.0	1.25	1.250	.250	.150		
STVOR/L12-4B	6158086	6158087		0.750	0.750	4.5	1.25	0.875	.125	.230	432	GTS-2
STVOR/L16-4D	6158090	6158091		1.000	1.000	6.0	1.43	1.250	.250	.230		
STVOR/L20-4D	6158094	6158095		1.250	1.250	6.0	1.25	1.500	.250	.230		
STVOR/L16-5D	6158102	6158103		1.000	1.000	6.0	1.50	1.250	.250	.292	543	GTS-3
STVOR/L20-5D	6158106	6158107		1.250	1.250	6.0	1.50	1.500	.250	.292		



STVOR THREADING TOOLHOLDER SET available. See our website or inquire.

MTVO-A R/L THREADING TOOLHOLDERS



Description	Order No.		Price	A	B	C	E	F	G	Max. Grv. Dpth V	Gage Insert	Lock Pin	Clamp	Lock Screw
	RH	LH												
MTVOR/L08-3B-A	6158126	6158127		0.500	0.500	4.5	1.020	0.625	.250	.150	322	NL-33		XNS-35
MTVOR/L16-3D-A	6158138	6158139		1.000	1.000	6.0	1.155	1.250	.250	.150	322	NL-33		
MTVOR/L12-4B-A	6158142	6158143		0.750	0.750	4.5	1.250	0.875	.250	.230	432	NL-44	CL-6	XNS-36
MTVOR/L16-4D-A	6158146	6158147		1.000	1.000	6.0	1.250	1.250	.250	.230				
MTVOR/L20-4D-A	6158150	6158151		1.250	1.250	6.0	1.250	1.500	.250	.230				
MTVOR/L16-5D-A	6158158	6158159		1.000	1.000	6.0	1.500	1.250	.250	.292	543	NL-56		
MTVOR/L20-5D-A	6158162	6158163		1.250	1.250	6.0	1.500	1.500	.250	.292				

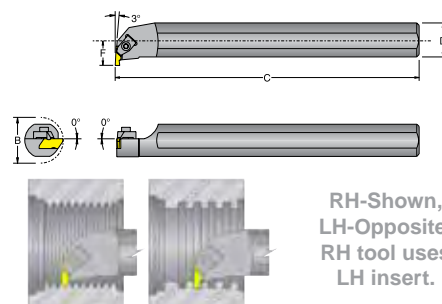
Style V - O.D. threading and shallow grooving for triangle TNMA inserts

S-NE R/L THREADING & GROOVING BORING BAR

Internal DorNotch Boring Bar

for Threading and Grooving DorNotch Inserts

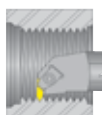
Description	Order Number		Price	Min. Bore B	C	D	F	Gage Insert	Clamp	Clamp Screw
	RH	LH								
S10S-NER/L-2	6158970	6158971		1.000	10.0	0.625	0.500	NG-2L*	CM-75*	S-310
S16T-NER/L-3	6158978	6158979		1.375	12.0	1.000	0.688	NG-3L*	CM-73*	S-412
S20U-NER/L-3	6158982	6158983		1.750	14.0	1.250	0.875			
S24U-NER/L-3	6158986	6158987		2.000	14.0	1.500	1.000			



RH-Shown, LH-Opposite. RH tool uses LH insert.

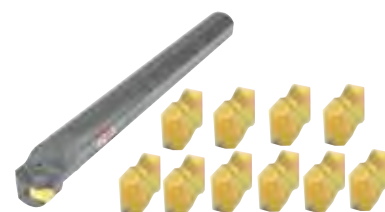
NER THREADING BAR SET

- DorNotch locking system
- For I.D. threading
- The insert nested in the holder is held extremely secure with a top clamp



Order No.	Price	Shank Size	Min. Bore	TPI	12 pc. Set Includes		(1)
					(1) Boring Bar	(10) Inserts	
6185284		0.75	1.125	7-20	S12S-NER-2	NT-2L-DC656	Storage
6185288		1.00	1.375	5-12	S16T-NER-3	NT-3L-DC656	Box

- Two cutting edges
- Clamp locking system
- Compact insert allows for threading smaller bores
- General tooth form to handle a variety of sizes
- 60° "V" threading





THREADING TOOL SYSTEM
SERIES 359:



INSERT GRADE SELECTION

- P25C** For treated and hard Alloy Steels (25HRC & up) at medium to low cutting speeds.
- MXC** Coated Micrograin, for Free Cutting untreated Alloy Steels (Below 30HRC). For Stainless Steels and Cast Iron.
- BXC** For low cutting speed. Works well with wide range of Stainless Steels.



A 10% surcharge will apply when ordering less than 5 inserts per Order No.

Materials	Coated Grades		
	MXC	P25C	BXC
Low & Medium Carbon Steels	100-250 330-830	100-200 330-660	20-100 70-330
High Carbon Steels	80-180 260-590	80-160 260-530	30-80 100-260
Alloy Steels Treated Steels	90-120 300-390	50-120 160-400	40-90 130-300
Stainless Steels	90-160 300-520		30-90 100-300
Cast Steels	130-170 430-560	90-150 300-500	40-90 130-300
Cast Iron	70-150 230-500		40-90 130-300
Non Ferrous & Aluminium	150-300 490-980		20-120 70-400

THREAD TURNING SPEED SELECTION

After selecting a suitable grade, please refer to the speed selection chart to select a recommended cutting speed. Top number is Meters/Min, bottom number is Feet/Min.

PARTIAL PROFILES 60°

L mm	I.C. inch	Pitch Range		EXTERNAL Right Hand*				INTERNAL Right Hand*			
		mm	TPI	Model No.	Order No. P25C	Order No. MXC	Price	Model No.	Order No. P25C	Order No. MXC	Price
11	1/4	0.5-1.5	48-16	11 ER A60	1110150	9110151		11 IR A60	9120150	9120151	
		0.5-1.5	48-16	16 ER A60	1610150	9610151		16 IR A60	9620150	9920151	
16	3/8	1.75-3.0	14-8	16 ER G60	1610100	9610161		16 IR G60	9620160	9620161	
		0.5-3.0	48-8	16 ER AG60	1610170	9610171		16 IR AG60	9620170	9620171	
22	1/2	3.5-5.0	7-5	22 ER N60	2210180	2210181		22 IR N60	2220180	2220181	
27	5/8	5.5-6.0	4.5-4	27 ER Q60	2710190	2710191		27 IR Q 60	2720190	2720191	



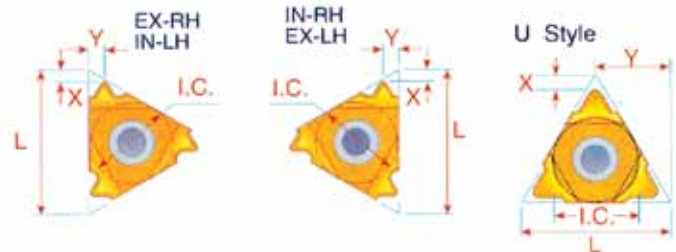
* Left Hand available. See our website or inquire.

PARTIAL PROFILES 60°

INTERNAL, RIGHT HAND*
ULTRA MINIATURE AND MINIATURE THREADING

L mm	I.C. inch	Pitch Range		Model	Order No.	BXC	Price
		mm	TPI				
6	5/32	0.5-1.25	48-20	061RA60	0620152		
8	3/16	0.5-1.5	48-16	081RA60	0820152		

* Left Hand available. See our website or inquire.



NPT

Pitch TPI	L mm	I.C. inch	External Right Hand				Internal Right Hand			
			Model No.	Order No. P25C	Order No. MXC	Price	Model No.	P25C Order No.	Order No. MXC	Price
27 18 14	11	1/4	11 ER 27 NPT	9110270	9110271		11 IR 27 NPT	9120270	9120271	
			11 ER 18 NPT	1110180	9110181		11 IR 18 NPT	9120180	9120181	
			11 ER 14 NPT	1110140	9110141		11 IR 14 NPT	9120140	9120141	
27 18 14 11.5 8	16	3/8	16 ER 27 NPT	1610270	9610271		16 IR 27 NPT	9620270	9620271	
			16 ER 18 NPT	1610180	9610181		16 IR 18 NPT	9620180	9620181	
			16 ER 14 NPT	1610140	9610141		16 IR 14 NPT	9620140	9620141	
			16 ER 11.5 NPT	1610110	9610111		16 IR 11.5 NP	9620110	9620011	
			16 ER 8 NPT	1610080	9610081		6 IR 8 NPT	9620080	9620081	



NPT - INTERNAL, RIGHT HAND

ULTRA MINIATURE AND MINIATURE THREADING

Pitch TPI	L mm	I.C. inch	Model No.	Order No. BXC	Price
27	8	3/16	081R27NPT	0820271	
18	8	3/16	081R18NPT	0820181	



MACHINE SHOP DISCOUNT SUPPLY

THREADING TOOL SYSTEM



SERIES 359:
(Continued)

UN(UNIFIED)

UNC / UNF / UNEF / UNS

Pitch TPI	L mm	I.C. in	EXTERNAL RIGHT HAND*				INTERNAL RIGHT HAND*			
			Model No.	Order No. P25C	Order No. MXC	Price	Model No.	Order No. P25C	Order No. MXC	Price
40	11	1/4	11 ER 40 UN	1110400	9110401		11 IR 40 UN	1120400	1120401	
36	11	1/4	11 ER 36 UN	1110360	1110361		11 IR 36 UN	1120360	1120361	
32	11	1/4	11 ER 32 UN	1110320	1110321		11 IR 32 UN	1120320	1120321	
28	11	1/4	11 ER 28 UN	1110280	1110281		11 IR 28 UN	1120280	1120281	
27	11	1/4	11 ER 27 UN	1110270	1110271		11 IR 27 UN	1120270	1120271	
24	11	1/4	11 ER 24 UN	1110240	1110241		11 IR 24 UN	1120240	1120241	
20	11	1/4	11 ER 20 UN	1110200	1110201		11 IR 20 UN	9920200	1120201	
18	11	1/4	11 ER 18 UN	9110180	1110181		11 IR 18 UN	1120180	1120181	
16	11	1/4	11 ER 16 UN	1110160	1110161		11 IR 16 UN	1120160	1120161	
14	11	1/4	11 ER 14 UN	9110140	1110141		11 IR 14 UN	1120140	1120141	
13	11	1/4	-	-	-		11 IR 13 UN	1120130	1120131	
12	11	1/4	-	-	-		11 IR 12 UN	9120120	9120121	
11	11	1/4	-	-	-		11 IR 11 UN	1120110	1120111	
40	16	3/8	16 ER 40 UN	1610400	1610401		16 IR 40 UN	1620400	1620401	
36	16	3/8	16 ER 36 UN	1610360	1610361		16 IR 36 UN	1620360	1620361	
32	16	3/8	16 ER 32 UN	1610320	1610321		16 IR 32 UN	1620320	1620321	
28	16	3/8	16 ER 28 UN	1610280	1610281		16 IR 28 UN	1620280	1620281	
27	16	3/8	16 ER 27 UN	9610270	1610271		16 IR 27 UN	1620270	1620271	
24	16	3/8	16 ER 24 UN	1610240	1610241		16 IR 24 UN	1622240	1622241	
20	16	3/8	16 ER 20 UN	1610200	9610201		16 IR 20 UN	9990200	9920201	
18	16	3/8	16 ER 18 UN	9610180	1610181		16 IR 18 UN	1620180	1620181	
16	16	3/8	16 ER 16 UN	1610160	1610161		16 IR 16 UN	1620160	1620161	
14	16	3/8	16 ER 14 UN	9610140	1610141		16 IR 14 UN	1620140	1620141	
13	16	3/8	16 ER 13 UN	1610130	1610131		16 IR 13 UN	1620130	1620131	
12	16	3/8	16 ER 12 UN	1610120	9910121		16 IR 12 UN	9620120	9620121	
11.5	16	3/8	16 ER 11.5 UN	1611150	1611151		16 IR 11.5 UN	1621150	1621151	
11	16	3/8	16 ER 11 UN	9910110	1610111		16 IR 11 UN	9921150	1620111	
10	16	3/8	16 ER 10 UN	9900100	1620101		16 IR 10 UN	3620110	9620101	
9	16	3/8	16 ER 9 UN	1610090	1620091		16 IR 9 UN	1620090	9620091	
8	16	3/8	16 ER 8 UN	6100801	1620081		16 IR 8 UN	6200801	9990081	
7	22	1/2	22 ER 7 UN	2210070	2220071		22 IR 7 UN	2220070	9220071	
6	22	1/2	22 ER 6 UN	2210060	2220061		22 IR 6 UN	2220060	9220061	
5	22	1/2	22 ER 5 UN	2210050	2220051		22 IR 5 UN	2220050	9220051	
4.5	27	5/8	27 ER 4.5 UN	2710450	2720451		27 IR 4.5 UN	2720450	9720451	
4	27	5/8	27 ER 4 UN	2710040	2720041		27 IR 4 UN	2720040	9720041	

* Left Hand available. See our website or inquire.



UN (UNIFIED) - INTERNAL, RIGHT HAND* ULTRA MINIATURE AND MINIATURE THREADING

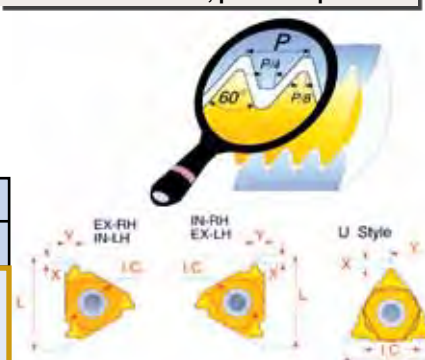
Pitch TPI	L mm	I.C. inch	Model No.	Order No. BXC	Price
32	6	5/32	06IR32UN	0620322	
28	6	5/32	06IR28UN	0620282	
24	6	5/32	06IR24UN	9620242	
20	6	5/32	06IR20UN	0620202	
18	6	5/32	06IR18UN	9620182	
32	8	3/16	08IR32UN	0820332	
28	8	3/16	08IR28UN	0820282	
24	8	3/16	08IR24UN	0820242	
20	8	3/16	08IR20UN	0820202	
18	8	3/16	08IR18UN	9920182	
16	8	3/16	08IR16UN	9820162	
14	8	3/16	08IR14UN	0820142	

* Left Hand available; please inquire.

ISO (Metric)

Pitch mm	L mm	I.C. in	EXTERNAL RIGHT HAND*				INTERNAL RIGHTHAND*			
			Model No.	Order No. P25C	Order No. MXC	Price	Model No.	Order No. P25C	Order No. MXC	Price
0.5	11	1/4	11 ER 0.5 ISO	9110051	1110051	\$16.00	11 IR 0.5 ISO	1200501	1120051	
0.75	11	1/4	11 ER 0.75 ISO	1110070	1110071	\$16.00	11 IR 0.75 ISO	1120070	1120071	
0.8	11	1/4	11 ER 0.8 ISO	9110080	1101011	\$16.00	11 IR 0.8 ISO	1200809	1120081	
1.0	11	1/4	11 ER 1.0 ISO	1110100	1010111	\$16.00	11 IR 1.0 ISO	1120100	1120101	
1.25	11	1/4	11 ER 1.25 ISO	1110120	1110121	\$16.00	11 IR 1.25 ISO	1120120	1120121	
1.50	11	1/4	11 ER 1.5 ISO	9110150	1110151	\$16.00	11 IR 1.5 ISO	1120150	1120151	
1.75	11	1/4	11 ER 1.75 ISO	1110170	1110171	\$16.00	11 IR 1.75 ISO	1120170	1120171	
2.0	11	1/4	-	-	-		11 IR 2.0 ISO	1120200	9120200	
0.5	16	3/8	16 ER 0.5 ISO	1610050	1610051	\$16.00	16 IR 0.5 ISO	1620050	1620051	
0.75	16	3/8	16 ER 0.75 ISO	1610070	1610071	\$16.00	16 IR 0.75 ISO	1620070	1620071	
0.8	16	3/8	16 ER 0.8 ISO	9610080	1610081	\$16.00	16 IR 0.8 ISO	9990080	9920081	
1.0	16	3/8	16 ER 1.0 ISO	9610100	1610101	\$16.00	16 IR 1.0 ISO	1620100	9920101	
1.25	16	3/8	16 ER 1.25 ISO	9610120	1610121	\$16.00	16 IR 1.25 ISO	1620120	1620121	
1.5	16	3/8	16 ER 1.5 ISO	9610150	1610151	\$16.00	16 IR 1.5 ISO	1620150	1620151	
1.75	16	3/8	16 ER 1.75 ISO	9610170	1610171	\$16.00	16 IR 1.75 ISO	1620170	1620171	
2.0	16	3/8	16 ER 2.0 ISO	9610200	1610201	\$16.00	16 IR 2.0 ISO	9620200	1620201	
2.5	16	3/8	16 ER 2.5 ISO	1610250	1610251	\$16.00	16 IR 2.5 ISO	1620250	1620251	
3.0	16	3/8	16 ER 3.0 ISO	1610300	1610301	\$16.00	16 IR 3.0 ISO	9220300	1620301	
3.5	22	1/2	22 ER 3.5 ISO	2210350	2210351	\$19.00	22 IR 3.5 ISO	1620350	2220351	
4.0	22	1/2	22 ER 4.0 ISO	2210400	2210401	\$19.00	22 IR 4.0 ISO	2220400	2220401	
4.5	22	1/2	22 ER 4.5 ISO	2210450	2210451	\$19.00	22 IR 4.5 ISO	2220450	2220451	
5.0	22	1/2	22 ER 5.0 ISO	2210500	2210501	\$19.00	22 IR 5.0 ISO	2220500	2220501	
5.5	27	5/8	27 ER 5.5 ISO	2710550	2710551	\$30.00	27 IR 5.5 ISO	2720550	2720551	
6.0	27	5/8	27 ER 6.0 ISO	2710600	2710601	\$30.00	27 IR 6.0 ISO	2720600	2720601	

* Left Hand available. See our website or inquire.



ISO (Metric) - INTERNAL, RIGHT HAND* ULTRA MINIATURE AND MINIATURE THREADING. GRADE: BXC

Pitch mm	L mm	I.C. Inch	Model No.	Order No.	Price
0.5	6	5/32	061R0.5ISO	0620052	
0.75	6	5/32	061R0.75ISO	0620072	
1.0	6	5/32	061R1.0ISO	0620102	
1.25	6	5/32	061R1.25ISO	0620122	
0.5	8	3/16	081R0.5ISO	0820052	
0.75	8	3/16	081R0.75ISO	0820072	
1.0	8	3/16	081R1.0ISO	0820102	
1.25	8	3/16	081R1.25ISO	0820122	
1.5	8	3/16	081R1.5ISO	0920152	
1.75	8	3/16	081R1.75ISO	9820172	

* Left Hand available; please inquire.

CUTTING TOOLS - INDEXABLE



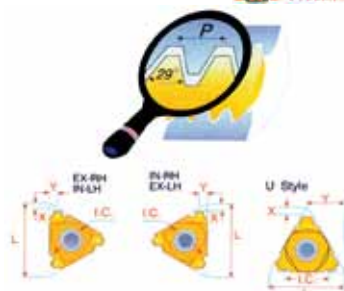
THREADING TOOL SYSTEM

SERIES 359:
(Continued)



ACME

Pitch TPI	L mm	I.C. in	External Right Hand*				Internal Right Hand			
			Model No.	Order No. P25C	Order No. MXC	Price	Model No.	Order No. P25C	Order No. MXC	Price
16	11	1/4	11ER16 ACME	9110160	9110161		-	-	-	
16	16	3/8	16ER 16 ACME	9610160	9910161		-	-	-	
14	16	3/8	16ER 14 ACME	9990140	9910141		16 IR 14 ACME	9920140	9920141	
12	16	3/8	16ER 12 ACME	9990120	9610121		16 IR 12 ACME	9920120	9920121	
10	16	3/8	16ER 10 ACME	9990100	9610101		16 IR 10 ACME	1620110	9620111	
8	16	3/8	16ER 8 ACME	6100811	9910081		16 IR 8 ACME	2008016	6200811	
6	22	1/2	22 ER 6 ACME	9210060	2210061		22 IR 6 ACME	9220060	9920061	
5	22	1/2	22 ER 5 ACME	2100501	2210051		22 IR 5 ACME	9220050	9920051	
4	27	5/8	27 ER 4 ACME	9710040	2710041		27 IR 4 ACME	9720040	9920041	



ACME INTERNAL, RIGHT HAND MINIATURE THREADING

Grade: BXC

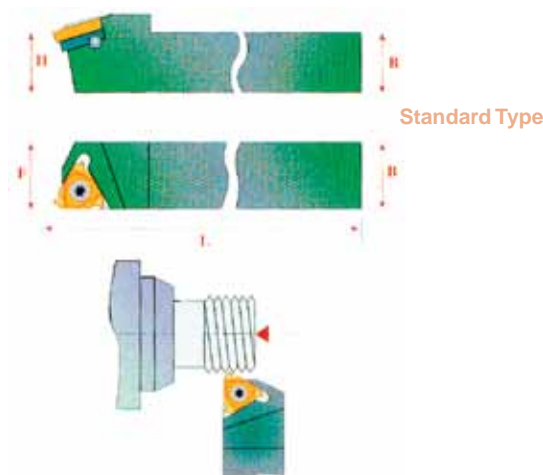
Pitch TPI	L mm	I.C. Inch	Model No.	Order No.	Price
16	8	3/16	08IR16 ACME*	0820162	

*One Cutting Edge

* One Cutting Edge

EXTERNAL TOOLHOLDERS, RIGHT HAND LEFT HAND AND METRIC TOOLHOLDERS AVAILABLE; PLEASE INQUIRE

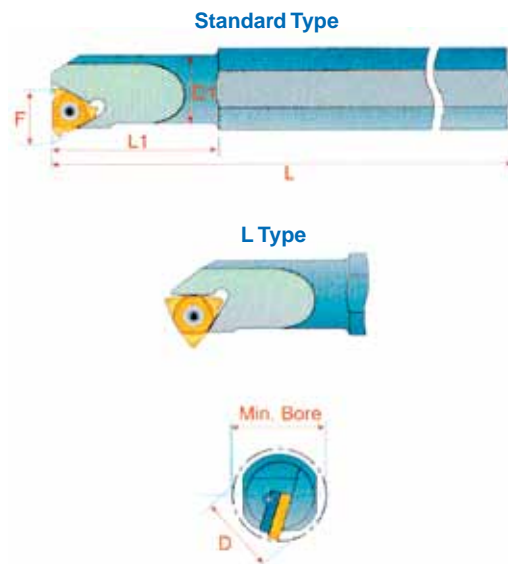
Model No.	Insert IC.	B = H Inch	L Inch	F Inch	Order No.	Price
*SER 0310 H11	1/4	0.31	4.00	0.43	1610310	
*SER 0375 H11	1/4	0.38	4.00	0.43	1610375	
SER 0375 D16	1/4	0.38	2.50	0.63	1611375	
SER 0500 F16	3/8	0.50	3.25	0.63	9990500	
SER 0625 H 16	3/8	0.63	4.00	0.63	9910625	
SER 0750 K16	3/8	0.75	5.00	0.75	2410750	
SER 1000 M16	3/8	1.00	6.00	1.00	2411000	
SER 1250 P16	3/8	1.25	7.00	1.25	2411250	
SER 1000 M22	1/2	1.00	6.00	1.00	3211000	
SER 1250 P22	1/2	1.25	7.00	1.25	3211250	
SER 1500 R22	1/2	1.50	8.00	1.50	3211500	
SER 1000 M27	5/8	1.00	6.00	1.25	4011000	
SER 1250 P27	5/8	1.25	7.00	1.25	4011250	
SER 1500 R27	5/8	1.50	8.00	1.50	4011500	



*Toolholders without anvil

INTERNAL TOOLHOLDERS, RIGHT HAND LEFT HAND AND METRIC TOOLHOLDERS AVAILABLE; PLEASE INQUIRE

Model No.	Insert IC.	D Inch	Min Bore Dia.	L Inch	F Inch	Order No.	Price
*SIR 0205 H06	5/32	0.50	0.24	4.0	0.17	1020205	
*SIR 0265 K08	3/16	0.62	0.31	5.0	0.21	1220265	
*SIR 0375 H11	1/4	0.38	0.47	4.0	0.28	1620375	
*SIR 0375 K11	1/4	0.62	0.47	5.0	0.28	1621375	
*SIR 0500 L11	1/4	0.62	0.58	5.5	0.34	1620500	
*SIR 0500 M16	3/8	0.62	0.64	6.0	0.39	2420500	
*SIR 0625 P16	3/8	0.75	0.75	7.0	0.45	2420625	
SIR 0750 P16	3/8	0.75	0.90	7.0	0.51	2420750	
SIR 1000R16	3/8	1.00	1.16	8.0	0.65	2421000	
SIR 1250 S16	3/8	1.25	1.40	10	0.77	2421250	
SIR 1500 T16	3/8	1.50	1.65	12	0.90	2421500	
*SIR 0750 P22	1/2	0.75	0.90	7.0	0.59	3220750	
SIR 1000 R22	1/2	1.00	1.16	8.0	0.71	3221000	
SIR 1250 S22	1/2	1.25	1.50	10	0.85	3221250	
SIR 1500 T22	1/2	1.50	1.75	12	0.98	3221500	
SIR 1250 S27	5/8	1.25	1.56	10	0.88	4021250	
SIR 1500 T27	5/8	1.50	1.80	12	1.00	4021500	
SIR 2000 U27	5/8	2.00	2.30	14	1.25	4022000	
SIR 2500 V27	5/8	2.50	2.80	16	1.50	4022500	



*Toolholders without anvil



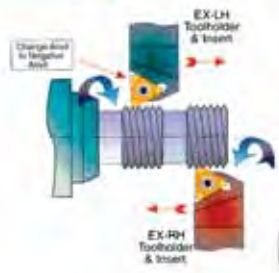
THREADING TOOL SYSTEM



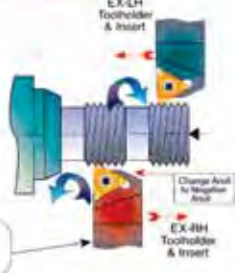
SERIES 359:
(Continued)

THREAD TURNING METHODS

EX-RH Thread

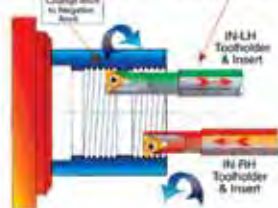


EX-LH Thread



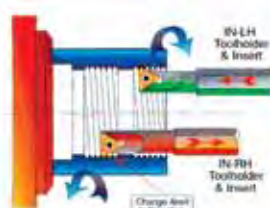
If you want to turn an EX-LH Thread and you only have EX-RH Insert & Toolholder.

IN-RH Thread



If you want to turn an IN-RH Thread but you prefer to pull the metal chips, while Thread Turning outwards, then you should use an IN-LH Insert & Toolholder.

IN-LH Thread



THREADING KITS

Threading Kits are a versatile solution for those who cut a variety of thread types in limited quantity and do not want to sacrifice thread quality. Kits Includes: 10 inserts, toolholder, screw, wrench and fitted case. Metric kits available; please inquire.



UN EXTERNAL KIT

MODEL NO: KEU

Order No. 3590001

Price

Kit includes:

INSERTS

- 16 ER A60 P25C
- 16 ER G60 P25C
- 16 ER AG60 P25C
- 16 ER 8 UN P25C
- 16 ER 12 UN P25C
- 16 ER 14 UN P25C
- 16 ER 16 UN P25C
- 16 ER 18 UN P25C
- 16 ER 20 UN P25C
- 16 ER 24 UN P25C
- TOOLHOLDER SER 0750 K16

UN INTERNAL KIT

MODEL NO: KIU

Order No. 3590002

Price

Kit includes:

INSERTS

- 16 IR A60 P25C
- 16 IR G60 P25C
- 16 IR AG60 P25C
- 16 IR 8 UN P25C
- 16 IR 12 UN P25C
- 16 IR 14 UN P25C
- 16 IR 16 UN P25C
- 16 IR 18 UN P25C
- 16 IR 20 UN P25C
- 16 IR 24 UN P25C
- TOOLHOLDER SIR 0750 P16

MINIATURE & ULTRA MINIATURE THREADING KITS

TYPE	Model No.	No. of Inserts	Inserts	Boring Bars	Order No.	Price
ULTRA	KU601-BXC	10	06 IR A60 BXC	SIR 0205 H06	3590102	<input type="text"/>
MINI	KM601-BXC	10	08 IR A60 BXC	SIR 0265 K08	3590202	



Other thread types available. See our website or inquire

- Partial Profiles 55°
- Whitworth 55°
- NPTF
- BSPT
- Stub ACME and Coarse Thread ACME
- Trapez (DIN 103)
- Round (DIN 405)
- UNJ
- American Buttress
- Oil Thread