



INSERTS CATALOG

GENERAL PURPOSE & HIGH-PERFORMANCE
CARBIDE INSERTS AND TOOL HOLDERS

2021 EDITION

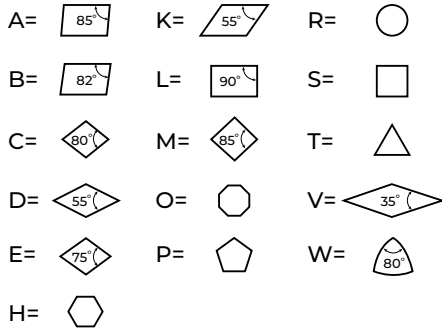
COBRA



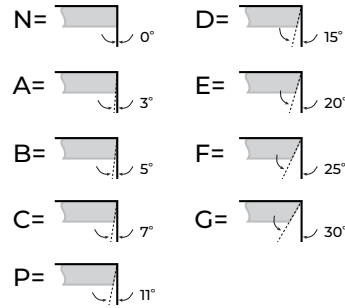
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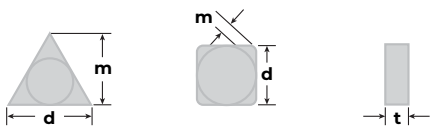
Shape



Clearance

DCMT 431

Tolerance (in)

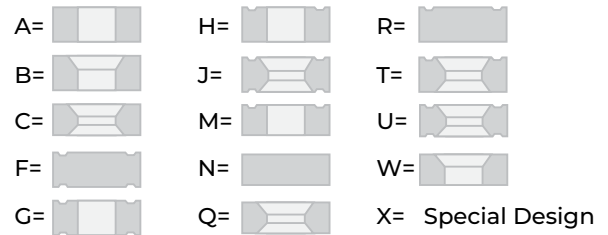


d	m	t
A = ± .0010	± .0002	± .001
F = ± .0005	± .0002	± .001
C = ± .0010	± .0005	± .001
H = ± .0005	± .0005	± .001
E = ± .0010	± .0010	± .001
G = ± .0010	± .0010	± .005
**J = ± .002 to ± .006	± .0002	± .001
**K = ± .002 to ± .006	± .0005	± .001
**L = ± .002 to ± .006	± .0010	± .001
**M = ± .002 to ± .006	± .003 to ± .008	± .005
**N = ± .002 to ± .006	± .003 to ± .008	± .001
**U = ± .003 to ± .010	± .005 to ± .015	± .005

* Smaller than 1/4" I.C.

** Exact tolerance is determined by the size of the insert

Geometry



B, C, H, J - countersink is between 70 - 90 degrees
Q, T, U, W - countersink is between 40 - 60 degrees

Number of 1/16's on inserts less than 1/4" I.C.
Number of 1/8's on inserts 1/4" I.C. and over

Rectangle and parallelogram inserts require two digits :

1st, Number of 1/8's in width
2nd, Number of 1/4's in length

1.8 = 7/32"	5 = 5/8"
2 = 1/4"	6 = 3/4"
3 = 3/8"	8 = 1"
4 = 1/2"	

Inscribed Circle

Number of 1/32's on inserts less than 1/4" I.C.

Number of 1/16's on inserts 1/4" I.C. and over

1.8 = 7/32"	3 = 3/16"
1.5 = 3/32"	4 = 1/4"
2 = 1/8"	5 = 5/16"
2.5 = 5/32"	6 = 3/8"

Thickness

DCMT 4 3 1

Corner Radius

0 = Sharp Corner	2 = 1/32" radius	6 = 3/32" radius
.5 = 0.008" radius	3 = 3/64" radius	8 = 1/8" radius
1 = 1/16" radius	4 = 1/16" radius	12 = 3/16" radius

- A** = Square w/45° chamfer
- D** = Square w/30° chamfer
- E** = Square w/15° chamfer
- K** = Square w/15° double chamfer
- N** = Truncated triangle insert
- P** = Flattened corner triangle

INSERT DESIGNATION

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INSERTS CATALOG

2021 EDITION

TURNING INSERTS

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

CM-14 (C-5)

Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

X-Treme (C-5)

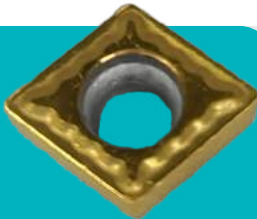
Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
CCGT 21.50	CCGT 06 02 02	1/4	3/32	0.008	0.110	40008	40010	40012	40014	-
CCGT 21.51	CCGT 06 02 04	1/4	3/32	1/64	0.110	40016	40018	40020	40022	-
CCGT 21.52	CCGT 06 02 08	1/4	3/32	1/32	0.110	40024	40026	40028	40030	-
CCGT 32.50	CCGT 09 T3 02	3/8	5/32	0.008	0.173	40032	40034	40036	40038	40037
CCGT 32.51	CCGT 09 T3 04	3/8	5/32	1/64	0.173	40040	40042	40044	40046	-
CCGT 32.52	CCGT 09 T3 08	3/8	5/32	1/32	0.173	40048	40050	40052	40054	-
CCGT 431	CCGT 12 04 04	1/2	3/16	1/64	0.217	40056	40058	40060	40062	-
CCGT 432	CCGT 12 04 08	1/2	3/16	1/32	0.217	40064	40066	40068	40070	-



Style CCGT

- Screw-On Style Insert.
- Used for semi-finishing and finishing on a wide range of materials.
- Chipbreaker for shallow depths of cuts and low feed rates



Style CCMT

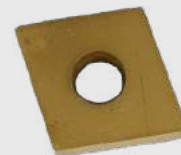
- Screw-On Style Insert.
- Used for semi-finishing and finishing on a wide range of materials.
- 80° Diamond Single Sided insert with molded chipbreaker.

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
CCMT 21.50	CCMT 06 02 02	1/4	3/32	0.008	0.110	40088	40092	40094	40096	40095
CCMT 21.51	CCMT 06 02 04	1/4	3/32	1/64	0.110	40100	40104	40106	40108	-
CCMT 21.52	CCMT 06 02 08	1/4	3/32	1/32	0.110	40112	40116	40118	40120	40119
CCMT 32.50	CCMT 09 T3 02	3/8	5/32	0.008	0.173	40121	40122	40123	40125	-
CCMT 32.51	CCMT 09 T3 04	3/8	5/32	1/64	0.173	40124	40128	40130	40132	40131
CCMT 32.52	CCMT 09 T3 08	3/8	5/32	1/32	0.173	40136	40140	40142	40144	40143
CCMT 431	CCMT 12 04 04	1/2	3/16	1/64	0.217	40146	40148	40149	40150	-
CCMT 432	CCMT 12 04 08	1/2	3/16	1/32	0.217	40152	40154	40155	40156	40153

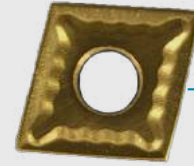
Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
CNMA 431	CNMA 12 04 04	1/2	3/16	1/64	0.203	44100	44104	44108		
CNMA 432	CNMA 12 04 08	1/2	3/16	1/32	0.203	44112	44116	44120		
CNMA 433	CNMA 12 04 12	1/2	3/16	3/64	0.203	44124	44128	44132		
CNMA 542	CNMA 16 06 08	5/8	1/4	1/32	0.250	44109	44110	44111		
CNMA 543	CNMA 16 06 12	5/8	1/4	3/64	0.250	44121	44122	44123		
CNMA 544	CNMA 16 06 16	5/8	1/4	1/16	0.250	44133	44134	44135		
CNMA 642	CNMA 19 06 08	3/4	1/4	1/32	0.312	44136	44140	44144		
CNMA 643	CNMA 19 06 12	3/4	1/4	3/64	0.312	44148	44152	44156		
CNMA 644	CNMA 19 06 16	3/4	1/4	1/16	0.312	44157	44158	44159		

Style CNMA

- 80° Diamond Double sided without chipbreaker
- 0° Relief Angle - Combo Pin and Clamp Insert
- Used for turning facing and boring
- Feed Range .003 to .020 IPR

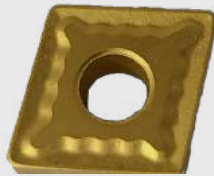


Insert Type		Dimensions				Uncoated Grade			Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme			
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #	
CNMG 321	CNMG 09 03 04	1/2	1/8	1/64	0.150	***	40197	***	40159	-	
CNMG 431	CNMG 12 04 04	1/2	3/16	1/64	0.203	40160	40164	40166	40168	40169	
CNMG 432	CNMG 12 04 08	1/2	3/16	1/32	0.203	40172	40176	40178	40180	40179	
CNMG 433	CNMG 12 04 12	1/2	3/16	3/64	0.203	40184	40188	40190	40192	-	
CNMG 434	CNMG 12 04 16	1/2	3/16	1/16	0.203	40196	40200	40202	40204	40205	
CNMG 542	CNMG 16 06 08	5/8	1/4	1/32	0.250	40208	40212	40214	40216	-	
CNMG 543	CNMG 16 06 12	5/8	1/4	3/64	0.250	40220	40224	40226	40228	-	
CNMG 544	CNMG 16 06 16	5/8	1/4	1/16	0.250	40229	40230	40231	40233	-	
CNMG 642	CNMG 19 06 08	3/4	1/4	1/32	0.312	40232	40236	40238	40240	-	
CNMG 643	CNMG 19 06 12	3/4	1/4	3/64	0.312	40244	40248	40250	40252	-	
CNMG 644	CNMG 19 06 16	3/4	1/4	1/16	0.312	40256	40260	40262	40264	-	



Style
CNMG

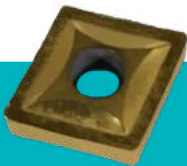
- Can be used for roughing, semi-finishing and finishing
- Proportionate to the size and the nose radius of the insert.
- Combo Pin and Clamp Insert. - 0° Relief Angle
- Double Sided used for medium to heavy cuts.
- 80° Diamond with Chipbreaker - Feed Range .007 to .028 IPR



Style
CNMM

- Screw-On Style Insert
- Used for semi-finishing and finishing on a wide range of materials
- 80° Diamond Single Sided insert with molded chipbreaker.

Insert Type		Dimensions				Uncoated Grade			Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme			
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #	
CNMM 432	CNMM 12 04 08	1/2	3/16	1/32	0.203	44288	44292	44294	44296		
CNMM 433	CNMM 12 04 12	1/2	3/16	3/64	0.203	44300	44304	44306	44308		
CNMM 642	CNMM 19 06 08	3/4	1/4	1/32	0.312	44312	44316	44318	44320		
CNMM 643	CNMM 19 06 12	3/4	1/4	3/64	0.312	44324	44328	44330	44332		



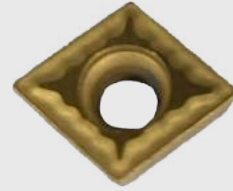
Style
CNMP

- 80° Diamond with Chipbreaker.
- Combo Pin and Clamp Insert.
- Extra Positive rake cutting edge when compared to CNMG.
- Can be used to machine materials like
- Stainless Steel and Low carbon steels

Insert Type		Dimensions				Uncoated Grade			Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme			
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #	
CNMP 431	CNMP 12 04 04	1/2	3/16	1/64	0.203	44650	44652	44654	44656	-	
CNMP 432	CNMP 12 04 08	1/2	3/16	1/32	0.203	44658	44660	44662	44664	44661	
CNMP 433	CNMP 12 04 12	1/2	3/16	3/64	0.203	44666	44668	44670	44672	-	
CNMP 642	CNMP 19 06 08	3/4	1/4	1/32	0.312	44674	44676	44678	44680	-	
CNMP 643	CNMP 19 06 12	3/4	1/4	3/64	0.312	44682	44684	44686	44688	-	

Style CPGM

- Single sided with molded chip breaker - Screw-On insert
- For a wide range of materials, soft materials and exotic alloys
- 11° Relief Angle - 80° Diamond with Chipbreaker - Feed range .005 to .015 per rev.



Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
CPGM 21.50	CPGM 06 02 02	1/4	3/32	0.008	0.110	40316	40320	40322	40324	
CPGM 21.51	CPGM 06 02 04	1/4	3/32	1/64	0.110	40328	40332	40334	40336	
CPGM 21.52	CPGM 06 02 08	1/4	3/32	1/32	0.110	40340	40344	40346	40348	
CPGM 32.51	CPGM 09 T3 04	3/8	3/8	1/64	0.173	40352	40356	40358	40360	

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
CPGT 21.50	CPGT 06 02 02	1/4	3/32	0.008	0.110	44336	44340	44342	44344	
CPGT 21.51	CPGT 06 02 04	1/4	3/32	1/64	0.110	44348	44352	44354	44356	
CPGT 21.52	CPGT 06 02 08	1/4	3/32	1/32	0.110	44360	44364	44366	44368	
CPGT 32.51	CPGT 09 T3 04	3/8	3/8	1/64	0.173	44372	44376	44378	44380	
CPGT 32.52	CPGT 09 T3 08	3/8	3/8	1/32	0.173	44384	44388	44390	44392	

Style CPGT

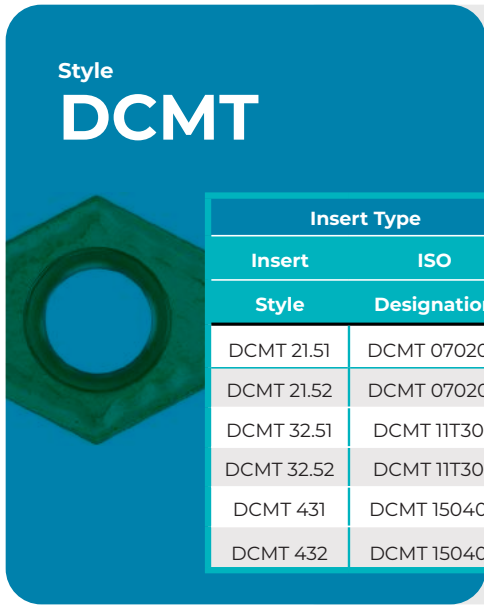
- Chip Breaker Type CF-Finishing - Screw on insert
- 80° Diamond with Chipbreaker
- 11° Relief Angle Ideal for Heavy Duty Finishing - Single sided with chip breaker



Style CPMT

- ChipBreaker Type CF-Finishing - 11° Relief Angle
- Screw-On Style Inserts - 80° Diamond with Chipbreaker
- Single Sided insert with molded chip breaker
- Used for turning and finishing on a wide range of materials
- Feed range .005 to .015 IPR / 0.1-0.4 mm/rev

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
CPMT 21.505	CPMT 06 02 02	1/4	3/32	0.008	0.110	40376	40380	40382	40384	
CPMT 21.51	CPMT 06 02 04	1/4	3/32	1/64	0.110	40388	40392	40394	40396	
CPMT 32.505	CPMT 09 T3 02	3/8	5/32	0.008	0.173	40400	40404	40406	40408	
CPMT 32.51	CPMT 09 T3 04	3/8	5/32	1/64	0.173	40412	40416	40418	40420	
CPMT 32.52	CPMT 09 T3 08	3/8	5/32	1/32	0.173	40424	40428	40430	40432	



Style
DCMT

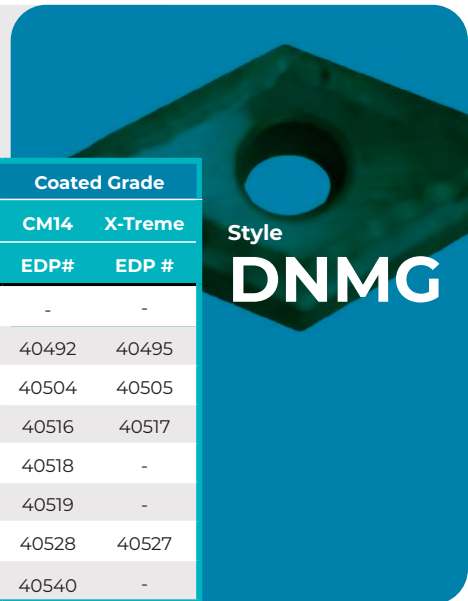
- ChipBreaker Type CM-Medium - Screw-On style insert
- 7° Relief Angle - 55° Diamond with Chipbreaker
- Single Sided insert With molded chipbreaker.
- For semi-finishing and finishing cuts
- Feed range .003 to .012 IPR / 0.1-0.3 mm/rev



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
DCMT 21.51	DCMT 070204	1/4	3/32	1/64	0.110	40436	40440	40442	40444	-
DCMT 21.52	DCMT 070208	1/4	3/32	1/32	0.110	40448	40452	40454	40456	40455
DCMT 32.51	DCMT 11T304	3/8	5/32	1/64	0.173	40460	40464	40466	40468	-
DCMT 32.52	DCMT 11T308	3/8	5/32	1/32	0.173	40472	40476	40478	40480	40477
DCMT 431	DCMT 150404	1/2	3/16	1/64	0.203	40467	40469	40470	40471	-
DCMT 432	DCMT 150408	1/2	3/16	1/32	0.203	40479	40481	40482	40483	-



- Combo Pin and Clamp Insert - 0° Relief Angle
- 55° Diamond with Chipbreaker
- Double sided used for medium to heavy cuts
- Used in a wide range of materials and applications



Style
DNMG

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
DNMG 331	DNMG 16 04 04	3/8	3/16	1/64	0.150	40497	-	40498	-	-
DNMG 431	DNMG 15 04 04	1/2	3/16	1/64	0.203	40484	40488	40490	40492	40495
DNMG 432	DNMG 15 04 08	1/2	3/16	1/32	0.203	40496	40500	40502	40504	40505
DNMG 433	DNMG 15 04 12	1/2	3/16	3/64	0.203	40508	40512	40510	40516	40517
DNMG 441	DNMG 15 06 04	1/2	1/4	1/64	0.203	-	-	-	40518	-
DNMG 442	DNMG 15 06 08	1/2	1/4	1/32	0.203	-	-	-	40519	-
DNMG 542	DNMG 19 06 08	5/8	1/4	1/32	0.250	40520	40524	40526	40528	40527
DNMG 543	DNMG 19 06 12	5/8	1/4	3/64	0.250	40532	40536	40538	40540	-



Style
DNMP

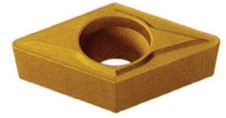
- Screw-On Style insert - 55° Relief Angle
- Diamond - 5° Positive cutting action double sided for semi-finishing and finishing
- Low cutting forces for machining soft materials, exotic alloys and stainless steel
- Feed Range 0.2-0.5mm/min.

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
DNMP 431	DNMP 15 04 04	1/2	3/16	1/64	0.203	44690	44692	****	44696	
DNMP 432	DNMP 15 04 08	1/2	3/16	1/32	0.203	44698	44700	****	44704	



Style

DPMT



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
DPMT 21.505	DPMT 07 02 02	1/4	3/32	0.008	0.110	***	***	44710	44712	-
DPMT 21.51	DPMT 07 02 04	1/4	3/32	1/64	0.110	***	***	44718	44720	-
DPMT 32.505	DPMT 11 T3 02	3/8	5/32	0.008	0.173	***	44719	44726	44728	-
DPMT 32.51	DPMT 11 T3 04	3/8	5/32	1/64	0.173	***	44735	44734	44736	44737
DPMT 32.52	DPMT 11 T3 08	3/8	5/32	1/32	0.173	***	44743	44742	44744	-

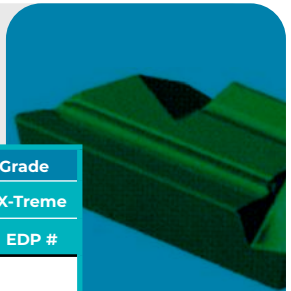
- Screw-On style insert - 55° Diamond with Chipbreaker
- 11 Relief Angle
- Single Sided insert with molded chipbreaker.
- For semi-finishing and finishing cuts
- Feed Range .003 to .012 IPR / 0.1-0.3 mm/rev

Style

KNUX



- 55° Parallelogram - Clamp On Insert
- 0° Relief Angle
- 12° Positive cutting action



Insert Type		Dimensions			Uncoated Grade			Coated Grade	
Insert	Corner	Chipbreaker	C520	C550	CM02	CM14	X-Treme		
Style	Thickness	Radius	Width	EDP#	EDP#	EDP#	EDP#	EDP #	
Right Hand									
KNUX 160405 R11	.188	.020	.086 X 12°	***	44418	70560	44420		
KNUX 160410 R11	.188	.040	.086 X 12°	***	***	70576	44424		
Left Hand									
KNUX 160405 L11	.188	.020	.086 X 12°	***	44427	70572	44428		
KNUX 160410 L11	.188	.040	.086 X 12°	***	44423	70564	44432		



Style

RNG

Round Clamp-On Insert

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
RNG 32	RNGN 09 03 00	3/8	1/8	***	***	44826	44828	***	44832	-
RNG 42	RNGN 12 03 00	1/2	1/8	***	***	44834	44836	***	44840	44841
RNG 43	RNGN 12 04 00	1/2	3/16	***	***	44842	44844	***	44848	-
RNG 63	RNGN 19 04 00	3/4	3/4	***	***	44850	44852	***	44856	-



Style

RCMT

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
RCMT 325	RCMT 32.50	3/8	5/32	***	0.173	44972	44976	***	44980	44981

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
RNMA 32	RNMA 09 03 00	3/8	1/8	***	0.150	44794	44796	***	44800	
RNMA 43	RNMA 12 04 00	1/2	3/16	***	0.203	44802	44804	***	44808	
RNMA 54	RNMA 15 06 00	5/8	1/4	***	0.250	44810	44812	***	44816	
RNMA 64	RNMA 19 06 00	3/4	3/16	***	0.313	44818	44820	***	44824	
RNMA 84	RNMA 2506 00	1"	1/4	***	0.359	44821	44825	***	44822	
RNMA 86	RNMA 2509 00	1"	3/8	***	0.359	44817	44819	***	44823	



Style
RNMA

- Use for turning and facing on the outside of part
- 0° Relief Angle



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
RNMG 32	RNMG 09 03 00	3/8	1/8	***	0.150	44858	44860	***	44864	-
RNMG 43	RNMG 12 04 00	1/2	3/16	***	0.203	44866	44868	***	44872	44873
RNMG 54	RNMG 15 06 00	5/8	1/4	***	0.250	44874	44876	***	44880	-
RNMG 64	RNMG 19 06 00	3/4	1/4	***	0.312	44882	44884	***	44888	-
RNMG 84	RNMG 2506 00	1"	1/4	***	0.359	44881	44883	***	44885	-
RNMG 86	RNMG 2509 00	1"	3/8	***	0.359	44886	44887	***	44889	-

Style
RNMG

- Use for turning and facing on the outside of part
- 0° Relief Angle - Round Clamp-On Insert

Style
RPG

- Round Clamp-On Insert - 11° Relief Angle
- Use for turning and facing on the outside of part

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
RPG 32	RPGN 09 03 00	3/8	1/8	***	***	44890	44892	***	44896	
RPG 42	RPGN 12 03 00	1/2	1/8	***	***	44898	44900	***	44904	
RPG 43	RPGN 12 04 00	1/2	3/16	***	***	44906	44908	***	44912	
RPG 54	RPGN 15 06 00	5/8	1/4	***	***	44899	44901	***	44905	
RPG 64	RPGN 19 06 00	3/4	1/4	***	***	44907	44909	***	44910	



Style
SCMT



- Screw-On Style Insert - 7° Relief Angle
- Single Sided insert with molded chipbreaker.
- Used for turning and finishing on a wide range of materials

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
SCMT 32.51	SCMT 09 T3 04	3/8	5/32	1/64	0.173	40544	40548	40550	40552	
SCMT 32.52	SCMT 09 T3 08	3/8	5/32	1/32	0.173	40556	40560	40562	40564	
SCMT 431	SCMT 12 04 04	1/2	3/16	1/64	0.216	40568	40572	40574	40576	
SCMT 432	SCMT 12 04 08	1/2	3/16	1/32	0.216	40580	40584	40586	40588	



Style
SNG

- Clamp Style Insert - 0° Relief Angle
- Square Negative ground on all sides
- Used for difficult to cut materials - Feed Range .003 to .020 I.P.R

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SNG 322	SNGN 09 03 08	3/8	1/8	1/32	***	44913	***	***	***	-
SNG 421	SNGN 12 03 04	1/2	1/8	0.016	***	44914	44916	***	44920	-
SNG 422	SNGN 12 03 08	1/2	1/8	0.031	***	44922	44924	***	44928	-
SNG 432	SNGN 12 04 08	1/2	3/16	1/32	***	***	44927	***	44929	-
SNG 433	SNGN 12 04 12	1/2	3/16	0.047	***	44930	44932	***	44936	44937
SNG 434	SNGN 12 04 16	1/2	3/16	0.063	***	44938	44940	***	44944	-
SNG 632	SNGN 19 04 08	3/4	3/16	0.031	***	44946	44948	***	44952	-
SNG 633	SNGN 19 04 12	3/4	3/16	0.047	***	44954	44956	***	44960	-
SNG 634	SNGN 19 04 16	3/4	3/16	0.063	***	44962	44964	***	44968	-

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SNMG 321	SNMG 09 03 04	3/8	1/8	1/64	0.150	40589	40590	***	40591	-
SNMG 322	SNMG 09 03 08	3/8	1/8	1/32	0.150	40592	40596	***	40600	-
SNMG 323	SNMG 16 03 12	3/8	1/8	3/64	0.150	40601	40602	***	***	-
SNMG 333	SNMG 09 04 12	3/8	3/16	3/64	0.150	40605	40606	***	40607	-
SNMG 431	SNMG 12 04 04	1/2	3/16	1/64	0.203	40604	40608	***	40612	-
SNMG 432	SNMG 12 04 08	1/2	3/16	1/32	0.203	40616	40620	40617	40624	40627
SNMG 433	SNMG 12 04 12	1/2	3/16	3/64	0.203	40628	40632	***	40636	-
SNMG 434	SNMG 12 04 16	1/2	3/16	3/64	0.203	40640	40644	***	40648	-
SNMG 542	SNMG 15 06 08	5/8	1/4	5/32	0.250	40652	40656	***	40660	-
SNMG 543	SNMG 15 06 12	5/8	1/4	3/64	0.250	40664	40668	***	40672	40669
SNMG 544	SNMG 15 06 16	5/8	1/4	1/16	0.250	40641	40642	***	40643	-
SNMG 642	SNMG 19 06 08	3/4	1/4	1/32	0.312	40653	40654	***	40655	-
SNMG 643	SNMG 19 06 12	3/4	1/4	3/64	0.312	40657	40658	***	40659	40663
SNMG 644	SNMG 19 06 16	3/4	1/4	1/16	0.312	40673	40674	40671	40675	-



Style
SNMG

- Combo Pin and Clamp Insert
- Square with Chipbreaker
- Double sided for medium to heavy cuts
- Feed Range .007 to .028 I.P.R - 0° Relief Angle
- Used on a wide range of materials and applications



Style
SDEB

- Screw-On Style Insert
- 15° Relief Angle
- Single Sided for semi-finishing and finishing
- For Cast Iron and Non-ferrous materials

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SDEB 21.51	SDEB 06 02 04	1/4	1/8	1/64	0.143	46432	46434	46436	46438	

Style
SDEH

- Screw-On Style Insert
- 15° Relief Angle
- Single Sided for semi-finishing and finishing
- For Cast Iron and Non-ferrous materials



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SDEH 2.522	SDEH 07 03 08	5/16	1/8	1/32	0.115	46441	46443	46445	46447	

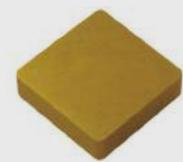
Style
SNMA



- Combo Pin and Clamp Insert
- Square without Chipbreaker
- Double sided for medium to heavy cuts
- Feed Range .007 to .028 I.P.R
- - Used on a wide range of materials and applications - 0° Relief Angle

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SNMA 322	SNMA 09 03 08	3/8	1/8	1/32	0.150	***	42498	***	***	
SNMA 432	SNMA 12 04 08	1/2	3/16	1/32	0.203	42500	42502	***	42506	
SNMA 433	SNMA 12 04 12	1/2	3/16	3/64	0.203	42508	42510	***	42514	
SNMA 434	SNMA 12 04 16	1/2	3/16	3/64	0.203	42516	42518	***	42522	
SNMA 542	SNMA 15 06 08	5/8	1/4	5/32	0.250	42524	42526	***	42530	
SNMA 543	SNMA 15 06 12	5/8	1/4	3/64	0.250	42532	42534	***	42538	
SNMA 544	SNMA 15 06 16	5/8	1/4	1/16	0.312	42540	42542	***	42546	
SNMA 643	SNMA 19 06 12	3/4	1/4	3/64	0.312	42548	42550	***	42554	
SNMA 644	SNMA 19 06 16	3/4	1/4	1/16	0.312	42556	42558	***	42562	

Style
SNU



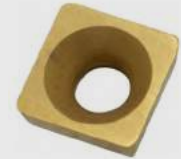
- Clamp Style Insert
- Square Ground top and bottom
- Double sided without chipbreaker - 0° Relief Angle
- Suited for problem free chip forming materials
- Feed Range .003 to .030 IPR

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner		Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP #	
SNU 422	SNUN 12 03 08	1/2	1/8	1/32	***	40677	40678	***	40679	
SNU 432	SNUN 12 04 08	1/2	1/8	1/32	***	40681	40682	***	40683	
SNU 433	SNUN 12 04 12	1/2	3/16	3/64	***	40676	40680	***	40684	
SNU 632	SNUN 19 04 08	3/4	3/16	1/32	***	40685	40686	***	40687	
SNU 633	SNUN 19 04 12	3/4	3/16	3/64	***	40688	40692	***	40696	
SNU 634	SNUN 19 04 16	3/4	3/16	1/16	***	40697	40698	***	40699	
SNU 644	SNUN 19 06 16	3/4	1/4	1/16	***	***	40701	***	40702	

Style SPEB



- Screw-On style insert - 11° Relief Angle
- Single sided for semi-finishing and finishing
- For Cast iron and non-ferrous materials



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPEB 222	SPEB 06 03 08	1/4	1/8	1/32	0.115	***	***	***	46407	
SPEB 322	SPEB 09 03 08	3/8	1/8	1/32	0.207	46410	46412	46414	46416	
SPEB 422	SPEB 12 03 08	1/2	1/8	1/32	0.178	***	46420	***	46425	



- Screw-On style insert - 11° Relief Angle
- Single sided for semi-finishing and finishing
- For Cast iron and non-ferrous materials

Style SPEH



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPEH 222	SPEH 06 03 08	1/4	1/8	1/32	0.115	46459	46461	46463	46465	
SPEH 2.522	SPEH 07 03 08	5/16	1/8	1/32	0.115	46450	46452	46454	46456	
SPEH 322	SPEH 09 03 08	3/8	1/8	1/32	0.156	46468	46470	46472	46474	
SPEH 332	SPEH 09 04 08	3/8	3/16	1/32	0.150	46477	46479	46481	46483	
SPEH 422	SPEH 12 03 08	1/2	1/8	1/32	0.178	46419	46421	46423	46427	
SPEH 432	SPEH 12 04 08	1/2	3/16	1/32	0.215	46485	46487	46489	46491	
SPEH 433	SPEH 12 04 12	1/2	3/16	3/64	0.215	46493	46495	46497	46498	

Style SPGH



- For difficult to machine material, long or thin wallet parts
- Screw-On style Insert
- Single sided with Chip Control - Square fully Ground
- 11° Relief Angle - Feed Range .003 to .030 IPR

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPGH 322	SPGH 09 03 08	3/8	1/8	1/32	0.156	40853	40854	***	40855	
SPGH 432	SPGH 12 04 08	1/2	3/16	1/32	0.215	40865	40866	***	40867	
SPGH 433	SPGH 12 04 12	1/2	3/16	3/64	0.175	40856	40860	***	40864	



Style
SPG



- Clamp Style Insert - 11° Relief Angle
- Square Ground Top and Bottom
- Single sided without chipbreaker
- Suited for problem free chip forming materials
- Feed Range .003 to .030 IPR / 0.075-0.75 mm/rev

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO		Corner	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPG 321	SPGN 09 03 04	3/8	1/8	1/64	***	40700	40704	***	40708	-
SPG 322	SPGN 09 03 08	3/8	1/8	1/32	***	40712	40716	***	40720	-
SPG 421	SPGN 12 03 04	1/2	1/8	1/64	***	40724	40728	***	40732	-
SPG 422	SPGN 12 03 08	1/2	1/8	1/32	***	40736	40740	***	40744	-
SPG 423	SPGN 12 03 12	1/2	1/8	3/64	***	40748	40752	***	40756	-
SPG 424	SPGN 12 03 16	1/2	1/8	1/16	***	40760	40764	***	40768	-
SPG 432	SPGN 12 04 08	1/2	3/16	1/32	***	40772	40776	***	40780	-
SPG 433	SPGN 12 04 12	1/2	3/16	3/64	***	40784	40788	***	40792	-
SPG 434	SPGN 12 04 16	1/2	3/16	1/16	***	40796	40800	***	40804	-
SPG 533	SPGN 15 04 12	5/8	3/16	3/64	***	40808	40812	***	40816	-
SPG 631	SPGN 19 04 04	3/4	3/16	1/64	***	-	40819	***	40818	-
SPG 632	SPGN 19 04 08	3/4	3/16	1/32	***	40820	40824	***	40828	-
SPG 633	SPGN 19 04 12	3/4	3/16	3/64	***	40832	40836	***	40840	40837
SPG 634	SPGN 19 04 16	3/4	3/16	1/16	***	40844	40848	***	40852	-
SPG 638	SPGN 19 04 32	3/4	3/16	1/8	***	-	-	-	40842	-

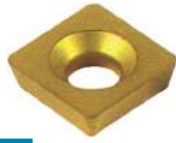


Style
SPMR



- - Single sided with chip control
- - Clamp on insert
- - 11° Relief Angle

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO		Corner	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPMR 321	SPMR 09 03 04	3/8	1/8	1/64	***	44436	44440	***	44444	
SPMR 322	SPMR 09 03 08	3/8	1/8	1/32	***	44448	44452	***	44456	
SPMR 421	SPMR 12 03 04	1/2	1/8	1/64	***	44460	44464	***	44468	
SPMR 422	SPMR 12 03 08	1/2	1/8	1/32	***	44472	44476	***	44480	
SPMR 423	SPMR 12 03 12	1/2	1/8	3/64	***	***	44482	***	44481	



Style SPMT

- Screw-On Style Insert
- Square Ground top and bottom
- Single Sided Without Chipbreaker
- 11° Relief Angle Single Sided
- Suited for problem free chip forming materials
- Feed Range .003 to .030 IPR

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPMT 32.51	SPMT 09 T3 04	3/8	5/32	1/64	0.173	42564	42566	42568	42570	
SPMT 32.52	SPMT 09 T3 08	3/8	5/32	1/32	0.173	42572	42574	42576	42578	
SPMT 431	SPMT 12 04 04	1/2	3/16	1/64	0.216	42580	42582	42584	42586	
SPMT 432	SPMT 12 04 08	1/2	3/16	1/32	0.216	42588	42590	42592	42594	

- Clamp Style Insert
- Square Ground Top and Bottom
- Single sided without chipbreaker
- Used for difficult to materials
- 11° Relief Angle

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
SPU 422	SPUN 12 03 08	1/2	1/8	1/32	***	40868	40872	***	40876	40875
SPU 423	SPUN 12 03 12	1/2	1/8	3/64	***	40869	40870	***	40871	-
SPU 432	SPUN 12 04 08	1/2	3/16	1/32	***	40877	40878	***	40879	40882
SPU 433	SPUN 12 04 12	1/2	3/16	3/64	***	***	40883	***	40881	-
SPU 533	SPUN 15 04 12	5/8	3/16	3/64	***	40886	40887	***	40885	-
SPU 632	SPUN 19 04 08	3/4	3/16	1/32	***	40880	40884	***	40888	-
SPU 633	SPUN 19 04 12	3/4	3/16	3/64	***	40892	40896	***	40900	40897
SPU 634	SPUN 19 04 16	3/4	3/16	1/16	***	40901	40899	***	40902	-

Style SPU



Style TCGT



- Screw-On style Insert
- Single sided for semi-finishing and finishing
- 7° Relief Angle
- Used on a wide range of materials

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TCGT 21.51	TCGT 11 02 04	1/4	3/32	1/64	0.110	42319	42321	42323	42325	-
TCGT 21.52	TCGT 11 02 08	1/4	3/32	1/32	0.110	42327	42329	42331	42333	40937
TCGT 321	TCGT 16 03 04	3/8	1/8	1/64	0.173	42302	42304	42306	42308	-
TCGT 322	TCGT 16 06 08	3/8	1/8	1/32	0.173	42311	42313	42315	42317	-
TCGT 32.51	TCGT 16 T3 04	3/8	5/32	1/64	0.173	42335	42337	42339	42341	-

Style TCMT



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TCMT 21.505	TCMT 11 02 02	1/4	3/32	0.008	0.110	40905	40906	40922	40924	-
TCMT 21.51	TCMT 11 02 04	1/4	3/32	1/64	0.110	40927	40931	40933	40935	40929
TCMT 21.52	TCMT 11 02 08	1/4	3/32	1/32	0.110	40928	40932	40934	40936	40937
TCMT 32.505	TCMT 16 T3 02	3/8	5/32	0.008	0.173	40940	40944	40946	40948	-
TCMT 32.51	TCMT 16 T3 04	3/8	5/32	1/64	0.173	40952	40956	40958	40960	40963
TCMT 32.52	TCMT 16 T3 08	3/8	5/32	1/32	0.173	40953	40957	40959	40961	40962
TCMT 431	TCMT 22 04 04	1/2	3/16	1/64	0.216	40965	40966	40967	40969	-
TCMT 432	TCMT 22 04 08	1/2	3/16	1/32	0.216	40970	40971	40973	40974	40914

- Screw-On style insert
- 7° Relief Angle
- Single sided for semi-finishing and finishing
- Used on wide range of materials
- Triangle with Chip-breaker
- Used for turning and finishing on a wide range of materials



- Triangle with chipbreaker
- 0° Relief Angle
- Combo Pin and Clamp Insert

Style TNMG

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMG 221	TNMG 11 03 04	1/4	1/8	1/64	0.093	40964	40968	***	40972	-
TNMG 222	TNMG 11 03 08	1/4	1/8	1/32	0.093	40976	40980	***	40984	-
TNMG 321	TNMG 16 03 04	3/8	1/8	1/64	0.150	40988	40992	***	40996	-
TNMG 322	TNMG 16 03 08	3/8	1/8	1/32	0.150	41000	41004	41007	41008	41006
TNMG 323	TNMG 16 03 12	3/8	1/8	3/64	0.150	41012	41016	***	41020	-
TNMG 324	TNMG 16 03 16	3/8	1/8	1/16	0.150	41024	41028	***	41032	-
TNMG 331	TNMG 16 04 04	3/8	3/16	1/64	0.150	41036	41040	***	41044	41037
TNMG 332	TNMG 16 04 08	3/8	3/16	1/32	0.150	41048	41052	***	41056	41057
TNMG 333	TNMG 16 04 12	3/8	3/16	3/64	0.150	41060	41064	***	41068	-
TNMG 431	TNMG 22 04 04	1/2	3/16	1/64	0.203	41072	41076	***	41080	41083
TNMG 432	TNMG 22 04 08	1/2	3/16	1/32	0.203	41084	41088	***	41092	41094
TNMG 433	TNMG 22 04 12	1/2	3/16	3/64	0.203	41096	41100	***	41104	-
TNMG 434	TNMG 22 04 16	1/2	3/16	1/16	0.203	41108	41112	***	41116	-
TNMG 542	TNMG 27 06 08	5/8	1/4	1/32	0.250	41120	41124	***	41128	41129
TNMG 543	TNMG 27 06 12	5/8	1/4	3/64	0.250	41132	41136	***	41140	-
TNMG 544	TNMG 27 06 16	5/8	1/4	1/16	0.250	41144	41148	41154	41152	-
TNMG 666	TNMG 33 09 24	3/4	3/8	3/32	0.312	41156	41160	***	41164	-

Style
TNG



- Clamp Style Insert
- 0° Relief Angle
- Precision Ground all over

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNG 221		1/4	1/8	1/64	***	42104	42108	***	***	
TNG 222		1/4	1/8	1/32	***	42113	42114	***	42115	
TNG 322		3/8	1/8	1/32	***	42116	42120	***	42124	
TNG 544		5/8	1/4	1/16	***	42184	42188	***	***	

Style
TNMP



- Combo Pin and Clamp Insert
- 5° Positive Cutting Action double sided for semi-finishing and finishing.
- Low cutting forces for machining soft materials and exotic alloys
- Feed Range .003 to .020 IPR

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMP 321	TNMP 16 03 04	3/8	1/8	1/64	0.150	42596	42598	***	42602	
TNMP 322	TNMP 16 03 08	3/8	1/8	1/32	0.150	42604	42606	42605	42610	
TNMP 323	TNMP 16 03 12	3/8	1/8	3/64	0.150	42612	42614	***	42618	
TNMP 324	TNMP 16 03 16	3/8	1/8	1/16	0.150	42620	42622	***	42626	
TNMP 331	TNMP 16 04 04	3/8	3/16	1/64	0.150	42628	42630	***	42634	
TNMP 332	TNMP 16 04 08	3/8	3/16	1/32	0.150	42636	42638	***	42642	
TNMP 333	TNMP 16 04 12	3/8	3/16	3/64	0.150	42644	42646	***	42650	
TNMP 431	TNMP 22 04 04	1/2	3/16	1/64	0.203	42652	42654	***	42658	
TNMP 432	TNMP 22 04 08	1/2	3/16	1/32	0.203	42660	42662	***	42666	
TNMP 433	TNMP 22 04 12	1/2	3/16	3/64	0.203	42668	42670	***	42674	
TNMP 434	TNMP 22 04 16	1/2	3/16	1/16	0.203	42676	42678	***	42682	
TNMP 542	TNMP 27 06 08	5/8	1/4	1/32	0.250	42684	42686	***	42690	
TNMP 543	TNMP 27 06 12	5/8	1/4	3/64	0.250	42692	42694	***	42698	
TNMP 544	TNMP 27 06 16	5/8	1/4	1/16	0.250	42700	42702	***	42706	



Style
TPEE



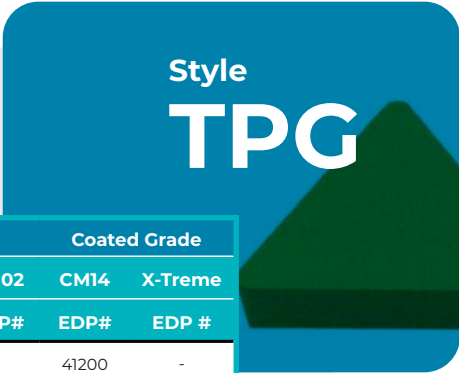
- Triangle Positive Precision Ground
- Single sided without chipbreaker
- 11° Relief Angle
- Feed Range .003 to .018 IPR / 0.07-0.45 mm/rev



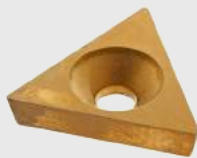
Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPEE 730	TPEE 09 02 02	7/32	3/32	0.008	***	41168	41172	***	41176	
TPEE 731	TPEE 09 02 04	7/32	3/32	1/64	***	41180	41184	***	41188	



- Triangle with chipbreaker
- 0° Relief Angle
- Combo Pin and Clamp Insert



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPG 220	TPGN 11 03 01	1/4	1/8	0.004	***	41192	41196		41200	-
TPG 221	TPGN 11 03 04	1/4	1/8	1/64	***	41204	41208	***	41212	41213
TPG 222	TPGN 11 03 08	1/4	1/8	1/32	***	41216	41220	***	41224	-
TPG 320	TPGN 16 03 01	3/8	1/8	0.004	***	41228	41232	***	41236	-
TPG 321	TPGN 16 03 04	3/8	1/8	1/64	***	41240	41244	41245	41248	41249
TPG 322	TPGN 16 03 08	3/8	1/8	1/32	***	41252	41256	41261	41260	41262
TPG 323	TPGN 16 03 12	3/8	1/8	3/64	***	41264	41268	41265	41272	-
TPG 324	TPGN 16 04 16	3/8	1/8	1/16	***	41276	41280	41277	41284	-
TPG 430	TPGN 22 04 01	1/2	3/16	0.004	***	41285	41286	***	41287	-
TPG 431	TPGN 22 04 04	1/2	3/16	1/64	***	41288	41292	***	41296	41299
TPG 432	TPGN 22 04 08	1/2	3/16	1/32	***	41300	41304	***	41308	41309
TPG 433	TPGN 22 04 12	1/2	3/16	3/32	***	41312	41316	***	41320	-
TPG 434	TPGN 22 04 16	1/2	3/16	1/16	***	41324	41328	***	41332	-
TPG 436	TPGN 22 04 24	1/2	3/16	3/32	***	41317	41318	***	41319	-
TPG 438	TPGN 22 04 32	1/2	3/16	1/8	***	41321	41322	***	41323	-
TPG 542	TPGN 27 06 08	5/8	1/4	1/32	***	41325	41326	***	41327	-
TPG 543	TPGN 27 06 12	5/8	1/4	3/64	***	41329	41330	41337	41331	-
TPG 544	TPGN 27 06 16	5/8	1/4	1/16	***	41333	41334	***	41335	-



Style **TPGB**

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPGB 221	TPGB 11 03 04	1/4	1/8	1/64	0.118	41336	41340	***	41344	
TPGB 222	TPGB 11 03 08	1/4	1/8	1/32	0.118	41348	41352	***	41356	
TPGB 321	TPGB 16 03 04	3/8	1/8	1/64	0.125	41360	41364	***	41368	
TPGB 322	TPGB 16 03 08	3/8	1/8	1/32	0.125	41372	41376	***	41380	

- Screw-On style insert
- 11° Relief Angle
- Single sided without chipbreaker
- Suitable for materials that create a short chip
- Triangle Positive Fully Ground with Countersunk Hole
- Feed Range .003 to .012 IPR / 0.075-0.3 mm/rev



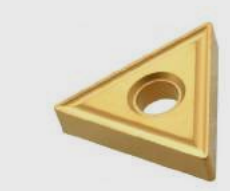
Style
TPGC

- Screw-On style insert - 11° Relief Angle
- Single sided with chipbreaker
- Suitable for materials that create a short chip
- Triangle Positive Fully Ground with Countersunk Hole
- Feed Range .003 to .012 IPR / 0.075-0.3 mm/rev



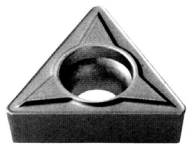
Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPGC 221	TPGC 11 03 04	1/4	3/32	1/64	0.118	41384	41388	***	41392	
TPGC 222	TPGC 11 03 08	1/4	3/32	1/32	0.118	41396	41400	***	41404	
TPGC 321	TPGC 16 03 04	3/8	1/8	1/64	0.125	41408	41412	***	41416	
TPGC 322	TPGC 16 03 08	3/8	1/8	1/32	0.125	41420	41424	***	41428	

Style
TPGH



- Screw-On style insert - Triangle with Chip-breaker
- Single sided insert with chipbreaker
- 11° Relief Angle
- Suitable for turning facing and boring
- Feed range .005 to .015 IPR / 0.1-0.4 mm/rev

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPGH 21.50.5	TPGH 11 02 02	1/4	3/32	1/64	0.110	41430	41432	41434	41436	
TPGH 21.51	TPGH 11 02 04	1/4	3/32	1/64	0.110	41444	41448	41450	41452	
TPGH 21.52	TPGH 11 02 08	1/4	3/32	1/32	0.110	***	41429	***	41449	
TPGH 320.5	TPGH 16 03 02	3/8	1/8	0.008	0.173	41451	41453	41454	41455	
TPGH 321	TPGH 16 03 04	3/8	1/8	1/64	0.173	41456	41460	41462	41464	
TPGH 322	TPGH 16 03 08	3/8	1/8	1/32	0.173	41468	41472	41474	41476	
TPGH 431	TPGH 22 04 04	1/2	3/16	1/64	0.217	41477	41478	***	41479	
TPGH 432	TPGH 22 04 08	1/2	3/16	1/32	0.217	41475	41481	***	41482	



Style
TPGM



- Screw-On style insert
- Triangle with Chipbreaker
- 11° Relief Angle
- Single sided with Chipbreaker
- For semi-finishing and finishing
- Feed range .005 to .015 IPR/0.1-0.4 mm/rev

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPGM 21.50.5	TPGM 11 02 02	1/4	3/32	0.008	0.110	41480	41484	41486	41488	
TPGM 21.51	TPGM 11 02 04	1/4	3/32	1/64	0.110	41492	41496	41498	41500	
TPGM 21.52	TPGM 11 02 08	1/4	3/32	1/32	0.110	41504	41508	41510	41512	
TPGM 32.51	TPGM 16 T3 04	3/8	5/32	1/64	0.173	41516	41520	41422	41524	
TPGM 32.52	TPGM 16 T3 08	3/8	5/32	1/32	0.173	41528	41532	41534	41536	



- Screw-On Style Insert
- Single sided for semi-finishing and finishing
- 7° Relief Angle
- Used on a wide range of materials
- Aluminum Chipbreaker

Style TPMT

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPMT 21.51	TPMT 11 02 04	1/4	3/32	1/64	0.110	42220	42222	42224	42226	
TPMT 21.52	TPMT 11 02 08	1/4	3/32	1/32	0.110	42229	42231	42233	42235	
TPMT 32.51	TPMT 16 T3 04	3/8	5/32	1/64	0.173	42242	42244	42246	42248	
TPMT 32.52	TPMT 16 T3 08	3/8	5/32	1/32	0.173	42251	42253	42255	42257	
TPMT 321	TPMT 16 T3 04	3/8	1/8	1/64	0.173	42260	42262	42264	42266	
TPMT 431	TPMT 22 04 04	1/2	3/16	1/64	0.217	42272	42274	42276	42278	
TPMT 432	TPMT 22 04 08	1/2	3/16	1/32	0.217	42281	42283	42285	42287	



- Screw-On Style Insert
- 11° Relief Angle
- Single Sided for Semi-finishing and Finishing
- For Cast Iron and Non-Ferrous Materials



Style TPGW

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPGW 322	TPGW 16 03 08	3/8	1/8	1/32	0.173	42293	42295	42297	42299	



- Chipbreaker Type
- 11° Relief Angle
- Clamp Insert
- Single sided insert with chipbreaker
- Use for semi finish cuts where chip control is required

Style TPMT

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPMT 730	TPMT 09 02 02	7/32	3/32	0.008	***	41576	41580	***	41584	-
TPMT 731	TPMT 09 02 04	7/32	3/32	1/64	***	41588	41592	***	41596	-
TPMT 221	TPMT 11 03 04	1/4	1/8	1/64	***	41540	41544	***	41548	-
TPMT 222	TPMT 11 03 08	1/4	1/8	1/32	***	41549	41551	***	41550	-
TPMT 321	TPMT 16 03 04	3/8	1/8	1/64	***	41552	41556	***	41560	41562
TPMT 322	TPMT 16 03 08	3/8	1/8	1/32	***	41564	41568	41575	41572	41574
TPMT 323	TPMT 16 03 12	3/8	1/8	3/64	***	***	41573	41697	41577	-

Style TPU

- Clamp Style Insert
- 11° Relief Angle
- Triangle Ground Top and Bottom
- Single sided without chipbreaker
- Used for difficult to cut materials



Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO		Corner	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TPU 221	TPUN 11 03 04	1/4	1/8	1/64	***	41648	41652	***	41656	-
TPU 222	TPUN 11 03 08	1/4	1/8	1/32	***	41660	41664	***	41668	-
TPU 321	TPUN 16 03 04	3/8	1/8	1/64	***	41672	41676	***	41680	-
TPU 322	TPUN 16 03 08	3/8	1/8	1/32	***	41684	41688	***	41692	41694
TPU 323	TPUN 16 03 12	3/8	1/8	3/64	***	41696	41700	***	41704	-
TPU 324	TPUN 16 04 16	3/8	1/8	1/16	***	41708	41712	***	41716	-
TPU 431	TPUN 22 04 04	1/2	3/16	1/64	***	***	***	***	41718	-
TPU 432	TPUN 22 04 08	1/2	3/16	1/32	***	41732	41736	41738	41740	41741
TPU 433	TPUN 22 04 12	1/2	3/16	3/64	***	41744	41748	***	41752	-
TPU 434	TPUN 22 04 16	1/2	3/16	1/16	***	41756	41760	***	41764	-

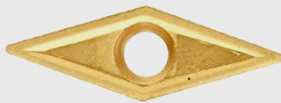
Style TT



- Screw-On style insert - Triangle with Chipbreaker
- Single sided insert with chipbreaker
- 11° Relief Angle - Used for turning, facing, and boring.

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO		Corner	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TT 221	TT 11 03 04	1/4	1/8	1/64	0.090	41768	41772	***	41776	
TT 222	TT 11 03 08	1/4	1/8	1/32	0.090	41780	41784	***	41788	
TT 321	TT 16 03 04	3/8	1/8	1/64	0.150	41792	41796	***	41800	
TT 322	TT 16 03 08	3/8	1/8	1/32	0.150	41804	41808	***	41812	
TT 323	TT 16 03 12	3/8	1/8	3/64	0.150	41816	41820	***	41824	
TT 431	TT 22 04 04	1/2	3/16	1/64	0.203	41828	41832	***	41836	
TT 432	TT 22 04 08	1/2	3/16	1/32	0.203	41840	41844	***	41848	
TT 433	TT 22 04 12	1/2	3/16	3/64	0.203	41852	41856	***	41860	

Style VBMT



- Screw on insert - 5° Relief Angle
- Used for finishing and profile cuts
- Single sided with chipbreaker

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO		Corner	Thru	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
VBMT 221CF	VBMT 11 03 04	1/4	1/8	1/64	0.110	***	***	44570	44572	
VBMT 222CF	VBMT 11 03 08	1/4	1/8	1/32	0.110	***	***	44574	44576	
VBMT 331CF	VBMT 16 04 04	3/8	3/16	1/64	0.173	44577	44579	44578	44580	
VBMT 332CF	VBMT 16 04 08	3/8	3/16	1/32	0.173	44581	44583	44582	44584	

Style

VNMG



- 0° Relief Angle -35° Diamond with Chipbreaker
- Combo Pin and Clamp Insert
- Double sided insert with chip-breaker
- For medium to rough cuts
- Used for turning and finishing on a wide range of materials

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
VNMG 331	VNMG 16 04 04	3/8	3/16	1/64	0.150	41864	41868	41870	41872	41873
VNMG 332	VNMG 16 04 08	3/8	3/16	1/32	0.150	41876	41880	41882	41884	41885
VNMG 431	VNMG 22 04 04	1/2	3/16	1/64	0.203	41888	41892	41894	41896	41899
VNMG 432	VNMG 22 04 08	1/2	3/16	1/32	0.203	41900	41904	41906	41908	41911
VNMG 433	VNMG 22 04 12	1/2	3/16	3/64	0.203	41912	41916	41918	41920	-

Style

VNMP

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
VNMP 331	VNMP 16 04 04	3/8	3/16	1/64	0.150	42054	42058	***	42062	
VNMP 332	VNMP 16 04 08	3/8	3/16	1/32	0.150	42066	42070	***	42074	

- Chipbreaker for Finishing
- Use for turning and boring
- Single sided insert with chip control



Style

WCMT

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
WCMT 21.51	WCMT 04 02 04	1/4	3/32	1/64	0.110	***	***	44586	44588	
WCMT 32.52	WCMT 06 T3 08	3/8	5/32	1/32	0.173	***	***	44590	44592	

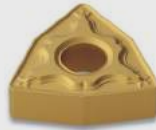
Style

WNMA

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru			C520	C550	CM02	CM14	X-Treme
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
WNMA 432	WNMA 08 04 08	1/2	3/16	0.031	0.203	***	***	42050	***	

Style

WNMG



- 80° Trigon with Chipbreaker - 0° Relief Angle
- Combo Pin and Clamp Insert
- Style Chipbreaker: All Purpose chipbreaker: Medium machining
- Stainless, steel, Cast Iron, and High Temp Alloys

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru			C520	C550	CM02	CM14	X-Treme
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
WNMG 331	WNMG 06 04 04	3/8	3/16	1/64	0.150	41921	41922	41923	41931	-
WNMG 332	WNMG 06 04 08	3/8	3/16	1/32	0.150	41925	41926	41927	41929	-
WNMG 431	WNMG 08 04 04	1/2	3/16	1/64	0.203	41924	41928	41930	41932	41934
WNMG 432	WNMG 08 04 08	1/2	3/16	1/32	0.203	41936	41940	41942	41944	41946
WNMG 433	WNMG 22 04 12	1/2	3/16	3/64	0.203	***	***	***	41945	-



HELETRONIC MINI AUTOMATION

MILLING INSERTS

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

CM-14 (C-5)

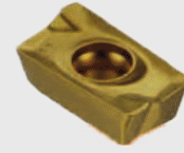
Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

X-Treme (C-5)

Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Style ADKT

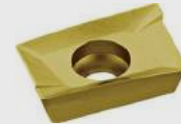
- Chipbreaker for Finishing
- Single sided Insert with chip control
- Use for Turning and boring
- Screw on Insert



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO	Corner	Thru	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
ADKT 1505 PDSR-MM		3/8	3/16	1/32	0.173	***	42796	***	42798	

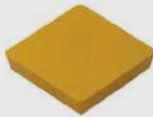
Style APKT

- 85 Deg Parallelogram Milling Insert
- For Light Cutting of Steel and Cast Iron at Elevated Speeds



Insert Type			Dimensions			Uncoated Grade			Coated Grade	
Insert	ISO		Radius	Hole	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	I.W.	(r)	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
APKT 1003 PDR-HM		0.441	0.264	0.020	0.110	42732	42734	42738	42736	42735
APKT 1505 PDR-HM		0.625	0.375	0.0315	0.175	42740	42742	42744	42746	42747
APKT 1604 PDR-HM		0.625	0.375	0.0315	0.175	42748	42750	42752	42754	42753

Note: TiAIN Available at special request



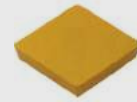
- Use for Slotting, and Slab or Straddle Milling
- 87° Parallelogram
- Fully Ground

Style CTA

Insert Type			Dimensions			Uncoated Grade			Coated Grade	
Insert	ISO		Radius	Hole	C520	C550	CM02	CM14	X-Treme	
Style	Designation	I.C.	I.W.	(r)	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
CTA-2		0.355	5/32	1/64	***	42350	42352	***	42354	
CTA-2		0.355	5/32	1/32	***	42356	42358	***	42360	
CTA-2		0.355	5/32	3/32	***	42362	42364	***	42366	
CTA-2		0.355	5/32	1/8	***	42368	42370	***	42372	
CTA-4		0.460	3/16	1/32	***	42374	42376	***	42378	
CTA-4		0.460	3/16	3/32	***	42380	42382	***	42384	
CTA-4		0.460	3/16	1/8	***	42386	42388	***	42390	
CTA-6		0.685	3/16	1/32	***	42392	42394	***	42396	
CTA-6		0.685	3/16	3/32	***	42398	42400	***	42402	
CTA-6		0.685	3/16	1/8	***	42404	42406	***	42408	
CTA-8		0.750	3/16	1/32	***	42410	42412	***	42414	
CTA-8		0.750	3/16	3/32	***	42416	42418	***	42420	
CTA-8		0.750	3/16	1/8	***	42422	42424	***	42426	

Note: X-Treme coating available on request.

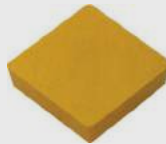
Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Hole	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Flat	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
SEAN-42 AFTN	SEAN 12 03 AFTN	1/2	1/8	0.097 X 45°		42446	42446	***	42450	
SEAN-43 AFTN	SEAN 12 04 AFTN	1/2	3/16	0.097 X 45°		42451	42451	***	42455	
SEAN-53 AFTN	SEAN 15 04 AFTN	5/8	3/16	0.097 X 45°		42452	42452	***	42456	
SEAN-42 AFN	SEAN 12 03 AFN	1/2	1/8	0.097 X 45°		42457	42457	***	42459	
SEAN-43 AFN	SEAN 12 04 AFN	1/2	3/16	0.097 X 45°		42756	42756	***	42762	
SEAN-53 AFN	SEAN 15 04 AFN	5/8	3/16	0.097 X 45°		42764	42764	***	42770	



Style SEAN

- Square 20° Positive Milling Insert
- Use for endmilling and face milling

Style SEC



- Square 20° Positive Milling Insert
- Clamp Style Insert
- Single sided for wide range of milling applications

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Hole	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Flat	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
SEC 422	SECN 12 03 08	1/2	1/8	1/32		42458	42460	***	42462	
SEC 424	SECN 12 03 16	1/2	1/8	1/16		42464	42466	***	42468	
SEC 533	SECN 15 04 12	5/8	3/16	3/64		42463	42465	***	42467	
SEC 633	SECN 19 04 12	3/4	3/16	3/64		42469	42471	***	42473	
SEC 634	SECN 19 04 16	3/4	3/16	1/16		42470	42472	***	42474	

Style SEKN

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert	ISO	Corner	Hole	C520	C550	CM02	CM14	X-Treme		
Style	Designation	I.C.	Width	Flat	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
SEKN-42AFN	SEKN 12 03 AFN	1/2	1/8	3/32 X 45°		46500	46501	***	46502	
SEKN-42AFTN	SEKN 12 03 AFTN	1/2	1/8	3/32 X 45°		46504	46505	***	46506	
SEKN-42AFSN	SEKN 12 03 AFSN	1/2	1/8	3/32 X 45°		46508	46509	***	46510	
SEKN-43AFN	SEKN 12 04 AFN	1/2	3/16	3/32 X 45°		46512	46513	***	46514	
SEKN-43AFTN	SEKN 12 04 AFTN	1/2	3/16	3/32 X 45°		46516	46517	***	46518	
SEKN-53AFN	SEKN 15 04 AFN	5/8	3/16	1/8 X 45°		46520	46521	***	46522	
SEKN-53AFTN	SEKN 16 04 AFTN	5/8	3/16	1/8 X 45°		46524	46525	***	46526	

Style

SEKR



Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO			Corner	Hole	C520	C550	CM02	CM14	X-Treme
Style	Designation	I.C.	Width	Flat	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
SEKR-42 AFTN	SEKR 12 03 AFTN	1/2	1/8	0.097 X 45°		42772	42774	42776	42778	
SEKR-43 AFTN	SEKR 12 04 AFTN	1/2	3/16	0.097 X 45°		42780	42782	42784	42786	
SEKR-53 AFTN	SEKR 15 04 AFTN	5/8	3/16	0.097 X 45°		42788	42790	42792	42794	

Style

SPKN

Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	ISO			Corner	Hole	C520	C550	CM02	CM14	X-Treme
Style	Designation	I.C.	Width	Flat	Size (d)	EDP#	EDP#	EDP#	EDP#	EDP #
SPKN-42 EDR		1/2	1/8	0.056	****	46580	46581	***	46582	
SPKN-42 EDTR		1/2	1/8	0.056	****	46585	46584	***	46586	
SPKN-43 EDR		1/2	3/16	0.056	****	46588	46589	***	46590	
SPKN-53 EDR		5/8	3/16	0.056	****	46592	46593	***	46594	
SPKN-53 EDTR		5/8	3/16	0.056	****	46596	46597	***	46598	



THREADING INSERTS

Notched Style Carbide Threading Inserts

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

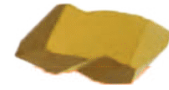
CM-14 (C-5)

Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

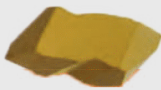
X-Treme (C-5)

Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Style NT - Left Hand



Insert Type		Dimensions			Uncoated Grade			Coated Grade	
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
NT-2L	2 LH	8-36	7-20		43472	43474	43475	43476	
NT-3L	3 LH	6-20	5-12		43496	43498	43499	43500	
NT-4L	4 LH	4-20	4-12		43520	43522	43523	43524	



Style NT - Right Hand

Insert Type		Dimensions			Uncoated Grade			Coated Grade	
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
NT-2R	2 RH	8-36	7-20		43480	43484	43486	43488	
NT-3R	3 RH	6-20	5-12		43504	43508	43510	43512	
NT-4R	4 RH	4-20	4-12		43528	43532	43534	43536	

Style NTP - Left Hand

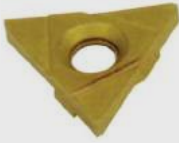


Insert Type		Dimensions			Uncoated Grade			Coated Grade	
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
NTP-2L	2 LH	8-36	7-20		43544	43546	43547	43548	
NTP-3L	3 LH	6-20	5-12		43564	43568	43570	43572	
NTP-4L	4 LH	4-20	4-12		43590	43592	43594	43596	



Style NTP - Right Hand

Insert Type		Dimensions			Uncoated Grade			Coated Grade	
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
NTP-2R	2 RH	8-36	7-20		43556	43558	43559	43560	
NTP-3R	3 RH	6-20	5-12		43580	43582	43583	43584	
NTP-4R	4 RH	4-20	4-12		43604	43606	43607	43608	



is a neutral rake insert with a through hole

Style
TNMA

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert			Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	I.C.	width	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMA 32NV	3/8	1/8	8-36	8-20		43612	43616	43618	43620	
TNMA 43NV	1/2	3/16	6-20	6-12		43624	43628	43630	43632	
TNMA 54NV	5/8	1/4	4-20	4-12		43636	43640	43642	43644	
TNMA 64NV	3/4	1/4	4-20	***		43637	43638	43641	43639	
TNMA 66NV	3/4	3/8	3-12	***		43643	43645	43646	43647	

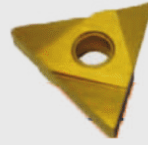
Style
TNMA RIGHT HAND



• 0° Precision Ground with a straight through hole

Insert Type		Dimensions				Uncoated Grade		Coated Grade		
Insert		Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMA 32NGR 031	3/8	1/8	1/32	0.075		43923	43927	43929	43931	
TNMA 32NGR 062	3/8	1/8	1/16	0.150		43924	43928	43930	43932	
TNMA 32NGR 094	3/8	1/8	3/32	0.150		43936	43940	43942	43944	
TNMA 32NGR 125	3/8	1/8	1/8	0.150		43948	43952	43954	43956	
TNMA 43NGR 062	1/2	3/16	1/16	0.125		43949	43953	43955	43957	
TNMA 43NGR 094	1/2	3/16	3/32	0.150		43958	43959	43961	43963	
TNMA 43NGR 125	1/2	3/16	1/8	0.210		43960	43964	43966	43968	
TNMA 43NGR 156	1/2	3/16	5/32	0.210		43972	43976	43978	43980	
TNMA 43NGR 187	1/2	3/16	3/16	0.210		43984	43988	43990	43992	
TNMA 54NGR 250	5/8	1/4	1/4	0.270		43996	44000	44002	44004	

Style **TNMA** LEFT HAND



- 0° Precision Ground with a straight through hole

Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMA 32NGL 031	3/8	1/8	0.031	0.075		44007	44011	44013	44015	
TNMA 32NGL 062	3/8	1/8	0.062	0.150		44008	44012	44014	44016	
TNMA 32NGL 094	3/8	1/8	0.094	0.150		44020	44024	44026	44028	
TNMA 43NGL 062	1/2	3/16	0.062	0.125		44029	44030	44031	44033	
TNMA 43NGL 094	1/2	3/16	0.094	0.150		44034	44035	44037	44039	
TNMA 43NGL 125	1/2	3/16	0.125	0.210		44032	44036	44038	44040	
TNMA 43NGL 156	1/2	3/16	0.156	0.210		44044	44048	44050	44052	
TNMA 43NGL 187	1/2	3/16	0.187	0.210		44056	44058	44060	44062	

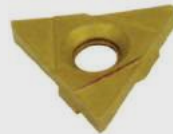


Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMC 32NV	3/8	1/8	8-36	8-20		43648	43652	43654	43656	
TNMC 43NV	1/2	3/16	6-20	6-12		43660	43664	43666	43668	
TNMC 54NV	5/8	1/4	4-20	4-12		43672	43676	43678	43680	

Style **TNMC**

- Is a neutral rake insert with through hole
- Countersunk on two sides

Style **TNMC** LEFT HAND



A Neutral rake insert with a through hole countersun on two sides.

Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMA 32NGL 031	3/8	1/8	0.031	0.075		44007	44011	44013	44015	
TNMA 32NGL 062	3/8	1/8	0.062	0.150		44008	44012	44014	44016	
TNMA 32NGL 094	3/8	1/8	0.094	0.150		44020	44024	44026	44028	
TNMA 43NGL 062	1/2	3/16	0.062	0.125		44029	44030	44031	44033	
TNMA 43NGL 094	1/2	3/16	0.094	0.150		44034	44035	44037	44039	
TNMA 43NGL 125	1/2	3/16	0.125	0.210		44032	44036	44038	44040	
TNMA 43NGL 156	1/2	3/16	0.156	0.210		44044	44048	44050	44052	
TNMA 43NGL 187	1/2	3/16	0.187	0.210		44056	44058	44060	44062	



A Neutral rake insert with a through hole countersunk on two sides Right Hand

Style **TNMC** **RIGHT HAND**

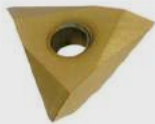
Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme	
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #
TNMC 32NGR 031	3/8	1/8	0.031	0.075		43753	43754	43755	43757	
TNMC 32NGR 062	3/8	1/8	0.062	0.150		43756	43760	43762	43764	
TNMC 32NGR 094	3/8	1/8	0.094	0.150		43768	43772	43774	43776	
TNMC 32NGR 125	3/8	1/8	0.125	0.150		43780	43784	43786	43788	
TNMC 43NGR 062	1/2	3/16	0.062	0.125		43789	43790	43791	43793	
TNMC 43NGR 094	1/2	3/16	0.094	0.150		43794	43795	43797	43799	
TNMC 43NGR 125	1/2	3/16	0.125	0.210		43792	43796	43798	43800	
TNMC 43NGR 156	1/2	3/16	0.156	0.210		43804	43808	43810	43812	
TNMC 43NGR 187	1/2	3/16	0.187	0.210		43816	43820	43822	43824	
TNMC 54NGR 250	1/2	1/4	0.250	0.270		43826	43828	43829	43830	

Style **TPMA**



Is a 10° Positive Rake insert with a straight through hole Positive rake insert is ideal for internal threading

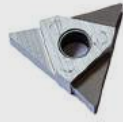
Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme	
Style	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP#	EDP #	
TPMA-32NV	3/8	1/8	8-36	8-20		43684	43688	43690	43692	
TPMA-43NV	1/2	3/16	6-20	6-12		43696	43700	43702	43704	
TPMA-54NV	5/8	1/4	4-20	4-12		43708	43712	43714	43716	



10° Positive Rake Precision Ground with straight through hole

Style **TPMA** **RIGHT HAND**

Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme	
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP #	
TPMA-32NGR 062	3/8	1/8	1/16	0.150		43874	43875	43876	43878	
TPMA-32NGR 125	3/8	1/8	1/8	0.125		43880	43882	43883	43884	
TPMA 43NGR 125	1/2	3/16	1/8	0.210		43885	43886	43887	43888	
TPMA-43NGR 187	1/2	3/16	3/16	0.187		43892	43894	43895	43896	
TPMA-54NGR 250	5/8	1/4	1/4	0.254		43900	43902	43903	43904	



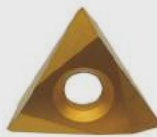
Style **TPMA** LEFT HAND

Insert Type		Dimensions			Uncoated Grade		Coated Grade		
Insert					C520	C550	CM02	CM14	X-Treme
Style	I.C.	Thickness	Groove Width	"Depth of Cut"	EDP#	EDP#	EDP#	EDP#	EDP #
TPMA 32NGL 062	3/8	1/8	1/16	0.150	44064	44066	44068	44070	
TPMA 43NGL 125	1/2	3/16	1/8	0.210	44072	44074	44076	44078	

Style **TPMC**

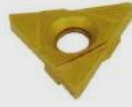


Insert Type			Dimensions			Uncoated Grade		Coated Grade		
Insert	Insert	Threads Per Inch	Threads Per Inch	Thru	C520	C550	CM02	CM14	X-Treme	
Style	width	No.	External	Internal	Hole	EDP#	EDP#	EDP#	EDP #	
TPMC-32NV	3/8	1/8	8-20			43720	43724	43726	43728	
TPMC-43NV	1/2	3/16	6-12			43732	43736	43738	43740	
TPMC-54NV	5/8	1/4	4-12			43744	43748	43750	43752	



Style **TPMC** RIGHT HAND

Insert Type		Dimensions			Uncoated Grade		Coated Grade		
Insert					C520	C550	CM02	CM14	X-Treme
Style	I.C.	Thick-ness	Groove Width	"Depth of Cut"	EDP#	EDP#	EDP#	EDP#	EDP #
TPMC 32NGR 062	3/8	1/8	1/16	0.150	42980	42982	42984	42986	
TPMC 32NGR 125	3/8	1/8	1/8	0.125	43906	43907	43909	42987	
TPMC 43NGR 125	1/2	3/16	1/8	0.210	42988	42990	42992	42994	
TPMC 43NGR 187	1/2	3/16	3/16	0.187	43910	43912	-	43920	
TPMC 54NGR 250	5/8	1/4	1/4	0.254	43916	43918	43921	43922	

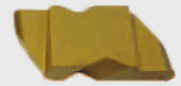


Style
TPMC LEFT HAND

Insert Type		Dimensions			Uncoated Grade		Coated Grade		
Insert					C520	C550	CM02	CM14	X-Treme
Style	I.C.	Thickness	Groove Width	"Depth of Cut"	EDP#	EDP#	EDP#	EDP#	EDP #
TPMC 32NGL 062	3/8	1/8	1/16	0.150	44080	44082	44084	44086	
TPMC 43NGL 125	1/2	3/16	1/8	0.210	44088	44090	44092	44094	

Insert Type		Dimensions			Uncoated Grade		Coated Grade		
Insert					C520	C550	CM02	CM14	X-Treme
Style	I.C.	Groove Width	"Depth of Cut"	"Insert Radius"	EDP#	EDP#	EDP#	EDP#	EDP #
NR 3031L	3LH	0.062	0.094	0.031	43250	43251	43252	43254	
NR 3047L	3LH	0.094	0.150	0.047	43256	43257	43258	43260	
NR 3062L	3LH	0.125	0.150	0.062	43262	43263	43264	43266	
NR 3078L	3LH	0.156	0.150	0.078	43268	43269	43270	43272	
NR 3094L	3LH	0.188	0.150	0.094	43274	43275	43276	43278	
NR 4062L	4LH	0.125	0.250	0.062	43280	43281	43282	43284	
NR 4094L	4LH	0.188	0.250	0.094	43286	43287	43288	43290	
NR 4125L	4LH	0.250	0.250	0.125	43292	43293	43294	43296	

Style
NR LEFT HAND

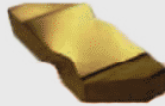


Style
NR RIGHT HAND



Insert Type		Dimensions			Uncoated Grade		Coated Grade		
Insert					C520	C550	CM02	CM14	X-Treme
Style	I.C.	Groove Width	"Depth of Cut"	"Insert Radius"	EDP#	EDP#	EDP#	EDP#	EDP #
NR 3031R	3RH	0.062	0.094	0.031	43400	43401	43402	43404	
NR 3047R	3RH	0.094	0.150	0.047	43406	43407	43408	43410	
NR 3062R	3RH	0.125	0.150	0.062	43412	43413	43414	43416	
NR 3078R	3RH	0.156	0.150	0.078	43418	43419	43420	43422	
NR 3094R	3RH	0.188	0.150	0.094	43424	43425	43426	43428	
NR 4062R	4RH	0.125	0.250	0.062	43430	43431	43432	43434	
NR 4094R	4RH	0.188	0.250	0.094	43436	43437	43438	43440	
NR 4125R	4RH	0.250	0.250	0.125	43442	43443	43444	43446	

Style
**NG LEFT
HAND**



Insert Type		Dimensions			Uncoated Grade			Coated Grade		
Insert	Insert				C520	C550	CM02	CM14	X-Treme	
Style	Size	I.C.	Groove Width	"Depth of Cut"	"Insert Radius"	EDP#	EDP#	EDP#	EDP#	EDP #
NG2031L	2LH		0.031	0.050		46884	46886	46888	46890	
NG2041L	2LH		0.041	0.050		46892	46894	46896	46898	
NG2047L	2LH		0.047	0.050		46900	46902	46904	46906	
NG2056L	2LH		0.056	0.050		46908	46910	46912	46914	
NG2062L	2LH		0.062	0.050		46916	46918	46920	46922	
NG2094L	2LH		0.094	0.110		46924	46926	46928	46930	
NG2125L	2LH		0.125	0.110		46932	46934	46936	46938	
NG3031L	3LH		0.031	0.075		46940	46942	46944	46946	
NG3047L	3LH		0.047	0.075		46948	46950	46952	46954	
NG3062L	3LH		0.062	0.094		46956	46958	46960	46962	
NG3072L	3LH		0.072	0.094		46964	46966	46968	46970	
NG3088L	3LH		0.088	0.094		46972	46974	46976	46978	
NG3094L	3LH		0.094	0.150		46980	46982	46984	46986	
NG3097L	3LH		0.097	0.150		46988	46990	46992	46994	
NG3105L	3LH		0.105	0.150		46996	46998	47000	47002	
NG3125L	3LH		0.125	0.150		47004	47006	47008	47010	
NG3142L	3LH		0.142	0.150		47012	47014	47016	47018	
NG3156L	3LH		0.156	0.150		47020	47022	47024	47026	
NG3178L	3LH		0.178	0.150		47028	47030	47032	47034	
NG3189L	3LH		0.189	0.150		47036	47038	47040	47042	
NG4125L	4LH		0.125	0.250		47044	47046	47048	47050	
NG4189L	4LH		0.189	0.250		47052	47054	47056	47058	
NG4250L	4LH		0.250	0.250		47060	47062	47064	47066	

Style
NG RIGHT HAND



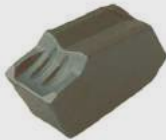
Insert Type		Dimensions				Uncoated Grade			Coated Grade	
Insert	Insert					C520	C550	CM02	CM14	X-Treme
Style	Size	I.C.	Groove Width	"Depth of Cut"	"Insert Radius"	EDP#	EDP#	EDP#	EDP#	EDP #
NG 2031R	2RH		0.031	0.050		46700	46702	46704	46706	
NG 2041R	2RH		0.041	0.050		46708	46710	46712	46714	
NG 2047R	2RH		0.047	0.050		46716	46718	46720	46722	
NG 2056R	2RH		0.056	0.050		46724	46726	46728	46730	
NG 2062R	2RH		0.062	0.050		46732	46734	46736	46738	
NG 2094R	2RH		0.094	0.110		46740	46742	46744	46746	
NG 2125R	2RH		0.125	0.110		46748	46750	46752	46754	
NG 3031R	3RH		0.031	0.075		46756	46758	46760	46762	
NG 3047R	3RH		0.047	0.075		46764	46766	46768	46770	
NG 3062R	3RH		0.062	0.094		46772	46774	46776	46778	
NG 3072R	3RH		0.072	0.094		46780	46782	46784	46786	
NG 3088R	3RH		0.088	0.094		46788	46790	46792	46794	
NG 3094R	3RH		0.094	0.150		46796	46798	46800	46802	
NG 3097R	3RH		0.097	0.150		46804	46806	46808	46810	
NG 3105R	3RH		0.105	0.150		46812	46814	46816	46818	
NG 3125R	3RH		0.125	0.150		46820	46822	46824	46826	
NG 3142R	3RH		0.142	0.150		46828	46830	46832	46834	
NG 3156R	3RH		0.156	0.150		46836	46838	46840	46842	
NG 3178R	3RH		0.178	0.150		46844	46846	46848	46850	
NG 3189R	3RH		0.189	0.150		46852	46854	46856	46858	
NG 4125R	4RH		0.125	0.250		46860	46862	46864	46866	
NG 4189R	4RH		0.189	0.250		46868	46870	46872	46874	
NG 4250R	4RH		0.250	0.250		46876	46878	46880	46882	

Style
GTN



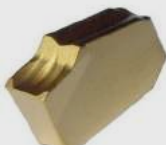
Insert	Lead	"w"	C520	C550	CM02	CM14	X-Treme
Style	Angle	Width	EDP#	EDP#	EDP#	EDP#	EDP #
GTN-2	0°	0.087	43000	43004	***	43008	
GTN-2.4	0°	0.094	43012	43016	***	43020	
GTN-3	0°	0.120	43024	43028	***	43032	
GTN-4	0°	0.160	43036	43040	***	43044	
GTN-4.8	0°	0.187	43048	43052	***	43056	
GTN-5	0°	0.200	43060	43064	***	43068	
GTN-6	0°	0.250	43072	43076	***	43080	

Style
GTR



Insert	Lead	"w"	C520	C550	CM02	CM14	X-Treme
Style	Angle	Width	EDP#	EDP#	EDP#	EDP#	EDP #
GTR-2	8°	0.087	43096	43100	***	43104	
GTR-2.4	8°	0.094	43108	43112	***	43116	
GTR-3	8°	0.120	43120	43124	***	43128	
GTR-4	8°	0.160	43132	43136	***	43140	
GTR-4.8	8°	0.187	43144	43148	***	43152	
GTR-5	8°	0.200	43160	46162	***	43164	
GTR-6	8°	0.250	43170	43172	***	43174	

Style
GTL



Insert	Lead	"w"	C520	C550	CM02	CM14	X-Treme
Style	Angle	Width	EDP#	EDP#	EDP#	EDP#	EDP #
GTL-2	8°	0.087	43178	43182	***	43186	
GTL-3	8°	0.120	42190	43194	***	43176	
GTL-4	8°	0.160	43202	43206	***	43210	
GTL-5	8°	0.200	43214	43218	***	43200	
GTL-6	8°	0.250	43226	43230	***	43234	



HI-POLISH ALUMINUM INSERTS

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

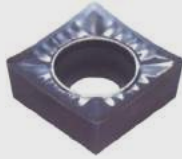
CM-14 (C-5)

Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

X-Treme (C-5)

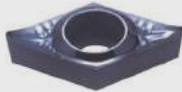
Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Style
CCGX



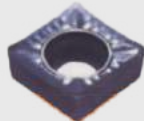
Insert Type		Dimensions				Aluminum Grade
Insert	ISO			Corner	Thru	C2
Style	Designation	I.C.	Width	Radius	Hole	EDP#
CCGX 21.505	CCGX 06 02 02	1/4	3/32	0.008	0.110	71097
CCGX 21.51	CCGX 06 02 04	1/4	3/32	1/64	0.110	72000
CCGX 32.50	CCGX 09 T3 02	3/8	5/32	0.008	0.173	72003
CCGX 32.51	CCGX 09 T3 04	3/8	5/32	1/64	0.173	72006
CCGX 32.52	CCGX 09 T3 08	3/8	5/32	1/32	0.173	72012
CCGX 431	CCGX 12 04 04	1/2	3/16	1/64	0.203	72018
CCGX 432	CCGX 12 04 08	1/2	3/16	1/32	0.203	72024

Style
DCGX



Insert Type		Dimensions				Aluminum Grade
Insert	ISO			Corner	Thru	C2
Style	Designation	I.C.	Width	Radius	Hole	EDP#
DCGX 21.505	DCGX 07 02 02	1/4	3/32	0.008	0.110	72039
DCGX 21.51	DCGX 07 02 04	1/4	3/32	1/64	0.110	72042
DCGX 32.50	DCGX 11 T3 02	3/8	5/32	0.008	0.173	72045
DCGX 32.51	DCGX 11 T3 04	3/8	5/32	1/64	0.173	72048
DCGX 32.52	DCGX 11 T3 08	3/8	5/32	1/32	0.173	72054

Style
SCGX



Insert Type		Dimensions				Aluminum Grade
Insert	ISO			Corner	Thru	C2
Style	Designation	I.C.	Width	Radius	Hole	EDP#
SCGX 32.51	SCGX 09 T3 04	3/8	5/32	1/64	0.173	72080
SCGX 32.52	SCGX 09 T3 08	3/8	5/32	1/32	0.173	72086
SCGX 432	SCGX 12 04 08	1/2	3/16	1/32	0.216	72092

Style
TCGX



Insert Type		Dimensions				Aluminum Grade
Insert	ISO			Corner	Thru	C2
Style	Designation	I.C.	Width	Radius	Hole	EDP#
TCGX 21.505	TCGX 11 02 02	1/4	3/32	0.008	0.110	72057
TCGX 21.51	TCGX 11 02 04	1/4	3/32	1/64	0.110	72060
TCGX 32.50	TCGX 16 T3 02	3/8	5/32	0.008	0.173	72063
TCGX 32.51	TCGX 16 T3 04	3/8	5/32	1/64	0.173	72066
TCGX 32.52	TCGX 16 T3 08	3/8	5/32	1/32	0.173	72072

Style
VCGX



Insert Type		Dimensions				Aluminum Grade
Insert	ISO			Corner	Thru	C2
Style	Designation	I.C.	Width	Radius	Hole	EDP#
VCGX 220	VCGX 11 03 02	1/4	1/8	0.008	0.110	72100
VCGX 221	VCGX 11 03 04	1/4	1/8	1/64	0.110	72106
VCGX 222	VCGX 11 03 08	1/4	1/8	1/32	0.110	72112
VCGX 331	VCGX 16 04 04	3/8	3/16	1/64	0.173	72118
VCGX 332	VCGX 16 04 08	3/8	3/16	1/32	0.173	72124
VCGX 333	VCGX 16 04 12	3/8	3/16	3/64	0.173	72130

CERAMIC INSERTS

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

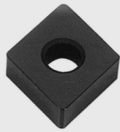
CM-14 (C-5)

Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

X-Treme (C-5)

Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Style
CNGA



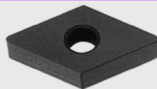
Insert Type		Dimensions				Aluminum Grade	
Insert	ISO	I.C.	Width	Corner	Thru	CC20	CC30
Style	Designation			Radius	Hole	EDP#	EDP#
CNGA-431	CNGA 12 04 04	1/2	3/16	1/64	0.203	49000	49003
CNGA-432	CNGA 12 04 08	1/2	3/16	1/32	0.203	49012	49015
CNGA-433	CNGA 12 04 12	1/2	3/16	3/64	0.203	49024	49027
CNGA 434	CNGA 12 04 16	1/2	3/16	1/16	0.203	49037	49038

Style
CNGN



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO	I.C.	Width	Corner	Thru	CC20	CC30
Style	Designation			Radius	Hole	EDP#	EDP#
CNGN-431	CNGN 12 04 04	1/2	3/16	1/64	0.203	49034	
CNGN-432	CNGN 12 04 08	1/2	3/16	1/32	0.203	***	
CNGN-433	CNGN 12 04 12	1/2	3/16	3/64	0.203	49036	

Style
DNGA



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO	I.C.	Width	Corner	Thru	CC20	CC30
Style	Designation			Radius	Hole	EDP#	EDP#
DNGA 431	DNGA 15 04 04	1/2	3/16	1/64	0.203	49048	***
DNGA 432	DNGA 15 04 08	1/2	3/16	1/32	0.203	49060	49064
DNGA 433	DNGA 15 04 12	1/2	3/16	3/64	0.203	49061	***
DNGA 434	DNGA 15 04 16	1/2	3/16	1/16	0.203	49062	***

Style
RNG



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO	I.C.	Width	Corner	Thru	CC20	CC30
Style	Designation			Radius	Hole	EDP#	EDP#
RNG 32	RNG 09 03 00	3/8	1/8	***	***	49070	49073
RNG 33	RNG 09 04 00	3/8	3/16	***	***	49071	49074
RNG 43	RNG 12 04 00	1/2	3/16	***	***	49072	49075
RNG 43	RNG 12 07 00	1/2	5/16	***	***	49084	49087

Style

SNGA



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO			Corner	Thru	CC20	CC30
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#
SNGA 432	SNGA 12 04 08	1/2	3/16	1/32	***	49108	49112
SNGA 433	SNGA 12 04 12	1/2	3/16	3/64	***	49120	49124

Style

SNGN



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO			Corner	Thru	CC20	CC30
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#
SNGN 321	SNGN 09 03 04	3/8	1/8	1/64	***	49130	49131
SNGN 322	SNGN 09 03 08	3/8	1/8	1/32	***	49132	49135
SNGN 431	SNGN 12 04 04	1/2	3/16	1/64	***	49143	49146
SNGN 432	SNGN 12 04 08	1/2	3/16	1/32	***	49144	49147
SNGN 433	SNGN 12 04 12	1/2	3/16	3/64	***	49156	49159

Style

TPGN



Insert Type		Dimensions				Aluminum Grade	
Insert	ISO			Corner	Thru	CC20	CC30
Style	Designation	I.C.	Width	Radius	Hole	EDP#	EDP#
TPGN 321	TPGN 16 03 04	3/8	1/8	1/64	***	49168	49171
TPGN 322	TPGN 16 03 08	3/8	1/8	1/32	***	49180	49183
TPGN 431	TPGN 22 04 04	1/2	3/16	1/64	***	49187	49189
TPGN 432	TPGN 22 04 08	1/2	3/16	1/32	***	49192	49195

Style
TNGA



Insert Type		Dimensions				Aluminum Grade	
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Thru Hole	CC20 EDP#	CC30 EDP#
TNGA 322	TNGA 16 03 08	3/8	1/8	1/32	0.203	***	49197
TNGA 332	TNGA 16 04 08	3/8	3/16	1/32	0.203	***	49221
TNGA 432	TNGA 12 04 08	1/2	3/16	1/32	0.203	***	49224
TNGA 433	TNGA 12 04 12	1/2	3/16	3/64	0.203	49220	***

Style
VNGA



Insert Type		Dimensions				Aluminum Grade	
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Thru Hole	CC20 EDP#	CC30 EDP#
VNGA 331	VNGA 16 04 04	3/8	3/16	1/64	0.150	49203	49206
VNGA 332	VNGA 16 04 08	3/8	3/16	1/32	0.150	49204	49207
VNGA 333	VNGA 22 04 12	1/2	3/16	3/64	0.150	49216	49219
VNGA 431	VNGA 22 04 04	1/2	3/16	1/64	0.203	49208	49210
VNGA 432	VNGA 22 04 08	1/2	3/16	1/32	0.203	49212	49214

Style
WNGA



Insert Type		Dimensions				Aluminum Grade	
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Thru Hole	CC20 EDP#	CC30 EDP#
WNGA 431	WNGA 08 04 04	1/2	3/16	1/64	0.203	49250	49252
WNGA 432	WNGA 08 04 08	1/2	3/16	1/32	0.203	49255	49257

PCD INSERTS

UNCOATED GRADE

C520 (C-2)

General purpose grade designed for cast iron and non-ferrous materials. Can also be used for machining 200 and 300 series stainless steel. Provides excellent wear resistance.

C550 (C-5)

Designed for heavy roughing to semi-finishing of all steels

COATED GRADE

CM02 (C-2)

Multi Layer coating TiC/Al₂O₃/TiN. Good toughness, high strength in use and versatility for roughing, medium roughing of steel, alloy steel and cast-iron, especially for high speed and quick cutting. Aluminum oxide coating for machining 200 and 300 series stainless steel.

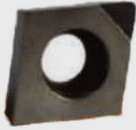
CM-14 (C-5)

Multi Layer coating TiN/TiC/TiCN/TiN for turning and milling carbon and alloy steels and tools steel. Provides longer tool life than uncoated grades.

X-Treme (C-5)

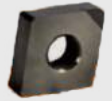
Layer coating TiAlN for turning and milling carbon alloy steels, steel and stainless steel. Provides longer tool life perfect for dry machining due to its good corrosion resistance, high hardness, high heat resistance (800 C-1475 F) and its self lubricating properties.

Style
CCMT



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
CCMT 21.51	06 02 04	1/4	3/32	1/64	0.110	48002
CCMT 21.52	06 02 08	1/4	3/32	1/32	0.110	48004
CCMT 32.51	09 T3 04	3/8	5/32	1/64	0.173	48006
CCMT 32.52	03 T3 08	3/8	5/32	1/32	0.173	48008
CCMT 431	12 04 04	1/2	3/16	1/64	0.217	48010
CCMT 432	12 04 08	1/2	3/16	1/32	0.217	48012

Style
CNMA



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
CNMA 431	12 04 04	1/2	3/16	1/64	0.217	48014
CNMA 432	12 04 08	1/2	3/16	1/32	0.217	48016

Style
CPMT



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
CPMT 21.51	06 02 04	1/4	3/32	1/64	0.110	48018
CPMT 21.52	06 02 08	1/4	3/32	1/32	0.110	48020
CPMT 32.51	09 T3 04	3/8	5/32	1/64	0.173	48022
CPMT 32.52	09 T3 08	3/8	5/32	1/32	0.173	48024

Style
DCMT

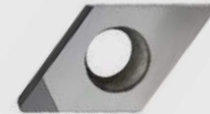


			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
DCMT 21.51	07 02 04	1/4	3/32	1/64	0.110	48026
DCMT 21.52	07 02 08	1/4	3/32	1/32	0.110	48028
DCMT 32.51	11 T3 04	3/8	5/32	1/64	0.173	48030
DCMT 32.52	11 T3 08	3/8	5/32	1/32	0.173	48032

Style

DNMA

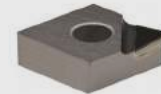
			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
DNMA 431	15 04 04	1/2	3/16	1/64	0.203	48034
DNMA 432	15 04 08	1/2	3/16	1/32	0.203	48036
DNMA 433	15 04 12	1/2	3/16	3/64	0.203	48038



Style

SCMT

			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
SCMT 32.51	09 T3 04	3/8	5/32	1/64	0.173	48040
SCMT 32.52	09 T3 08	3/8	5/32	1/32	0.173	48042
SCMT 431	12 04 04	1/2	3/16	1/64	0.216	48044
SCMT 432	12 04 08	1/2	3/16	1/32	0.216	48046



Style

SNMA

			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
SNMA 431	12 04 04	1/2	3/16	1/64	0.203	48048
SNMA 432	12 04 08	1/2	3/16	1/32	0.203	48050



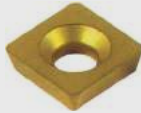
Style

SPGN

			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
SPGN 321	09 03 04	3/8	1/8	1/64	***	48052
SPGN 322	09 03 08	3/8	1/8	1/32	***	48054
SPGN 431	12 04 04	1/2	3/16	1/64	***	48056
SPGN 422	12 04 08	1/2	3/16	1/32	***	48058



Style
SPMT



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
SPMT 32.51	09 T3 04	3/8	5/32	1/64	0.173	48060
SPMT 32.52	09 T3 08	3/8	5/32	1/32	0.173	48062
SPMT 431	12 04 04	1/2	3/16	1/64	0.216	48064
SPMT 432	12 04 08	1/2	3/16	1/32	0.216	48066

Style
TPGA

			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
TPGA 221	11 03 04	1/4	1/8	1/64	0.134	48076
TPGA 222	11 03 08	1/4	1/8	1/32	0.134	48078

Style
TPGN



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
TPGN 221	11 03 04	1/4	1/8	1/64	***	48080
TPGN 222	11 03 08	1/4	1/8	1/32	***	48082
TPGN 321	16 03 04	3/8	1/8	1/64	***	48084
TPGN 322	16 03 08	3/8	1/8	1/32	***	48086

Style
VBMT



			Thickness	Radius	Hole	PCD
ANSI	ISO	I.C.	(S)	(r)	Size (d)	EDP#
VBMT 21.51	11 03 04	1/4	1/8	1/64	0.110	48088
VBMT 21.52	11 03 08	1/4	1/8	1/32	0.110	48090
VBMT 331	16 04 04	3/8	3/16	1/64	0.173	48092
VBMT 332	16 04 08	3/8	3/16	1/32	0.173	48094



KING COBRA

Selection of Chipbreaker & Grade

	Operation	Chipbreaker	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Type (Steel)	Finishing	PF	CP4010	180-460	0.10 - 0.30
	Semi Finishing	PM	CP4020	160-440	0.10 - 0.50
	Roughing	PR	CP4030	130-380	0.20 - 0.65
M Type (Stainless Steel)	Finishing	MF	CM2010		0.05 - 0.20
	Semi Finishing	MM	CM2020	110-250	0.10 - 0.50
	Roughing	MR	CM2030		0.15 - 0.60
K Type (Cast Iron)	Finishing	KM	CK3015	200-500	0.15 - 0.40
	Semi Finishing			180-450	0.20 - 0.50
	Roughing		CK3035	150-380	0.25 - 0.60

Grade for P-Type Materials

Grade	Application Range	Recommended Applications
CP4010	P05 - P10	The combination of substrate with excellent wear resistance and coating composed of MT-TiCN, thick layer of Al ₂ O ₃ and TiN makes this suitable for finishing steel
CP4020	P15 - P25	The substrate with good toughness and high security of cutting edge, in optimal combination with coating composed of MT-TiCN, thick layer of Al ₂ O ₃ and TiN makes this suitable for steel semifinishing
CP4030	P30 - P40	Super fine MT-TiCN, thick Al ₂ O ₃ and TiN coating with smooth surface in combination with rich cobalt layer cemented carbide substrate with good anti tipping and toughness. It's suitable for rough turning of steel and alloy steel under unstable condition

Grade for
M-Type Materials

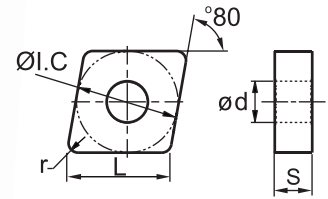
Grade	Application Range	Recommended Applications
CM2010	M05 - M10	Substrate with special structure, in combination with coating composed of TiCN, thin Al ₂ O ₃ layer and TiN, with excellent resistance against diffusive wear and plastic deformation makes this suitable for finishing of stainless steel
CM2020	M15 - M25	Combination of substrate with good toughness, strength, and coating composed of TiCN, thin Al ₂ O ₃ layer and TiN makes this suitable for semi-finishing of stainless steel
CM2030	M30 - M40	With advanced ultra-fine grain nano coating technology, the grade uses gradient alloy substrate with high toughness. It demonstrates excellent capacity at cutting with high cutting depth, high feed rate, and high speed. This is suitable for roughing of stainless steel

Grade for
K-Type Materials

Grade	Application Range	Recommended Applications
CK3015	K10 - K20	The combination of hard substrate and coating (medium thick Al ₂ O ₃ + thick TiCN) has good flaking resistance. It's suitable for finishing & semi-finishing of cast iron at high speed. Light intermittent cutting can be supported even at moderate speed
CK3035	K30 - K40	The combination of hard substrate and coating (medium thick Al ₂ O ₃ + thick TiCN) achieves the balance between wear resistance and toughness. It's suitable for wet milling of cast iron that requires toughness (such as nodular cast iron) at moderate or low speed. It's also suitable for rough & intermittent turning

Style
CNMG

Finishing



Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
CNMG 431	CNMG 12 04 04	1/2	3/16	1/64	0.203	73004	73304	73604
CNMG 432	CNMG 12 04 08	1/2	3/16	1/32	0.203	73006	73306	73606

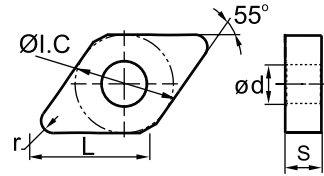
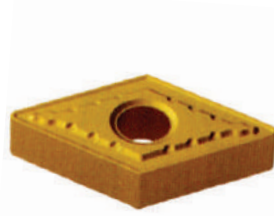
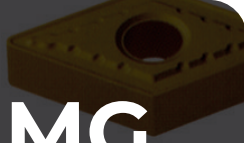
Semi-Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
CNMG 431	CNMG 12 04 04	1/2	3/16	1/64	0.203	73104	73404	
CNMG 432	CNMG 12 04 08	1/2	3/16	1/32	0.203	73106	73406	
CNMG 433	CNMG 12 04 12	1/2	3/16	3/64	0.203	73108	73408	73616
CNMG 542	CNMG 16 06 08	5/8	1/4	1/32	0.2500	73112	73412	73620
CNMG 543	CNMG 16 06 12	5/8	1/4	3/64	0.2500	73114	73414	73622
CNMG 642	CNMG 19 06 08	3/4	1/4	1/32	0.3130	73116	73416	73624
CNMG 643	CNMG 19 06 12	3/4	1/4	3/64	0.3130	73118	73418	73626
CNMG 644	CNMG 19 06 16	3/4	1/4	1/16	0.3130	73120	73420	73628

Roughing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
CNMG 432	CNMG 12 04 08	1/2	3/16	1/32	0.203	73200	73500	
CNMG 433	CNMG 12 04 12	1/2	3/16	3/64	0.203	73202	73502	73616
CNMG 434	CNMG 12 04 16	1/2	3/16	1/16	0.203	73204	73504	73620
CNMG 542	CNMG 16 06 08	5/8	1/4	1/32	0.2500	73206	73506	73622
CNMG 543	CNMG 16 06 12	5/8	1/4	3/64	0.2500	73208	73508	73624
CNMG 643	CNMG 19 06 12	3/4	1/4	3/64	0.3130	73210	73510	73626
CNMG 644	CNMG 19 06 16	3/4	1/4	1/16	0.3130	73212	73512	73628

Style
DNMG



Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner	Hole	PF CP4010	MF CM2010	KM CK3015
				Radius	Size	EDP#	EDP#	EDP#
DNMG 431	DNMG 15 04 04	1/2	3/16	1/64	0.203	73010	73310	73632

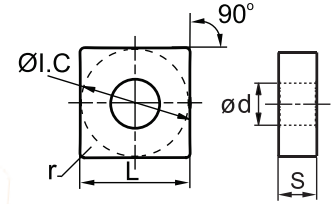
Semi-Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner	Hole	PF CP4010	MF CM2010	KM CK3015
				Radius	Size	EDP#	EDP#	EDP#
DNMG 432	DNMG 15 04 08	1/2	3/16	1/32	0.203	73128	73428	73644
DNMG 433	DNMG 15 04 12	1/2	3/16	3/64	0.203	73130	73430	73646

Roughing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner	Hole	PF CP4010	MF CM2010	KM CK3015
				Radius	Size	EDP#	EDP#	EDP#
DNMG 432	DNMG 15 04 08	1/2	3/16	1/32	0.203	73214	73514	73814

Style
SNMG



Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010	MF CM2010	KM CK3015
						EDP#	EDP#	EDP#
SNMG 321	SNMG 09 03 04	3/8	1/8	1/64	0.1500	73016	73316	73652
SNMG 322	SNMG 09 03 08	3/8	1/8	1/32	0.1500	73018	73318	73654
SNMG 431	SNMG 12 04 04	1/2	3/16	1/64	0.203	73020	73320	73656
SNMG 432	SNMG 12 04 08	1/2	3/16	1/32	0.203	73022	73322	73658

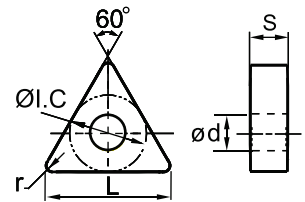
Semi-Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010	MF CM2010	KM CK3015
						EDP#	EDP#	EDP#
SNMG 321	SNMG 09 03 04	3/8	1/8	1/64	0.1500	73136	73436	
SNMG 322	SNMG 09 03 08	3/8	1/8	1/32	0.1500	73138	73438	
SNMG 431	SNMG 12 04 04	1/2	3/16	1/64	0.203	73140	73440	
SNMG 432	SNMG 12 04 08	1/2	3/16	1/32	0.203	73142	73442	
SNMG 433	SNMG 12 04 12	1/2	3/16	3/64	0.203	73144	73444	73668
SNMG 434	SNMG 12 04 16	1/2	3/16	1/16	0.203	73146	73446	73670
SNMG 542	SNMG 15 06 08	5/8	1/4	1/32	0.2500	73148	73448	73672
SNMG 543	SNMG 15 06 12	5/8	1/4	3/64	0.2500	73150	73450	73674
SNMG 544	SNMG 15 06 16	5/8	1/4	1/16	0.2500	73152	73452	73676
SNMG 642	SNMG 19 06 08	3/4	1/4	1/32	0.3130	73154	73454	73678
SNMG 643	SNMG 19 06 12	3/4	1/4	3/64	0.3130	73156	73456	73680
SNMG 644	SNMG 19 06 16	3/4	1/4	1/16	0.3130	73158	73458	73682

Roughing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010	MF CM2010	KM CK3015
						EDP#	EDP#	EDP#
SNMG 432	SNMG 12 04 08	1/2	3/16	1/32	0.203	73218	73518	73818
SNMG 433	SNMG 12 04 12	1/2	3/16	3/64	0.203	73220	73520	73820
SNMG 434	SNMG 12 04 16	1/2	3/16	1/16	0.203	73222	73522	73822
SNMG 542	SNMG 15 06 08	5/8	1/4	1/32	0.2500	73224	73524	73824
SNMG 543	SNMG 15 06 12	5/8	1/4	3/64	0.2500	73226	73526	73826
SNMG 544	SNMG 15 06 16	5/8	1/4	1/16	0.2500	73228	73528	73828
SNMG 643	SNMG 19 06 12	3/4	1/4	3/64	0.3130	73230	73530	73830
SNMG 644	SNMG 19 06 16	3/4	1/4	3/64	0.3130	73232	73532	73832

Style
TNMG



Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
TNMG 331	TNMG 16 04 04	3/8	3/16	1/64	0.1500	73024	73324	73684
TNMG 332	TNMG 16 04 08	3/8	3/16	1/32	0.1500	73026	73326	73686
TNMG 431	TNMG 22 04 04	1/2	3/16	1/64	0.203	73028	73328	73688
TNMG 432	TNMG 22 04 08	1/2	3/16	1/32	0.203	73030	73330	73690

Semi-Finishing

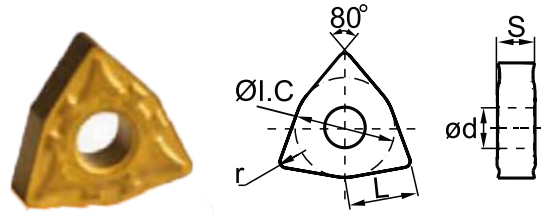
Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
TNMG 322	TNMG 16 03 08	3/8	1/8	1/32	0.1500	73160	73460	73692
TNMG 323	TNMG 16 03 12	3/8	1/8	3/64	0.1500	73162	73462	73694
TNMG 332	TNMG 16 04 08	3/8	3/16	1/32	0.1500	73164	73464	
TNMG 333	TNMG 16 04 12	3/8	3/16	3/64	0.1500	73166	73466	73698
TNMG 432	TNMG 22 04 08	1/2	3/16	1/32	0.203	73168	73468	
TNMG 433	TNMG 22 04 12	1/2	3/16	3/64	0.203	73170	73470	73702
TNMG 542	TNMG 27 06 08	5/8	1/4	1/32	0.2500	73172	73472	73704
TNMG 543	TNMG 27 06 12	5/8	1/4	3/64	0.2500	73174	73474	73706
TNMG 544	TNMG 27 06 16	5/8	1/4	1/16	0.2500	73176	73476	73708

Roughing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
TNMG 332	TNMG 16 04 08	3/8	3/16	1/32	0.1500	73234	73534	73834
TNMG 333	TNMG 16 04 12	3/8	3/16	3/64	0.1500	73236	73536	73836
TNMG 432	TNMG 22 04 08	1/2	3/16	1/32	0.203	73238	73538	73838
TNMG 433	TNMG 22 04 12	1/2	3/16	3/64	0.203	73240	73540	73840
TNMG 542	TNMG 27 06 08	5/8	1/4	1/32	0.2500	73241	73541	73841
TNMG 543	TNMG 27 06 12	5/8	1/4	3/64	0.2500	73242	73542	73842
TNMG 544	TNMG 27 06 16	5/8	1/4	1/16	0.2500	73244	73544	73844

Style
WNMG

Finishing



Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
WNMG 331	WNMG 06 04 04	3/8	3/16	1/64	0.1500	73032	73332	73710
WNMG 332	WNMG 06 04 08	3/8	3/16	1/32	0.1500	73034	73334	73712
WNMG 431	WNMG 08 04 04	1/2	3/16	1/64	0.203	73036	73336	73714
WNMG 432	WNMG 08 04 08	1/2	3/16	1/32	0.203	73038	73338	73716

Semi-Finishing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
WNMG 331	WNMG 06 04 04	3/8	3/16	1/64	0.1500	73178	73478	
WNMG 332	WNMG 06 04 08	3/8	3/16	1/32	0.1500	73180	73480	
WNMG 432	WNMG 08 04 08	1/2	3/16	1/32	0.203	73184	73484	
WNMG 433	WNMG 08 04 12	1/2	3/16	3/64	0.203	73186	73486	73726

Roughing

Insert Type		Dimensions				Coated Grades		
Insert Style	ISO Designation	I.C.	Width	Corner Radius	Hole Size	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
WNMG 332	WNMG 06 04 08	3/8	3/16	1/32	0.1500	73246	73546	73846
WNMG 432	WNMG 08 04 08	1/2	3/16	1/32	0.203	73250	73550	73850
WNMG 433	WNMG 08 04 12	1/2	3/16	3/64	0.203	73252	73552	73852

Style
APKT



Finishing

Insert Type	Dimensions				Coated Grades		
Insert Style	(L)	(I.W)	Radius (r)	Hole Size (d)	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
APKT 1003	0.441	0.264	0.020	0.110	73078	73358	73746
APKT 1505	0.650	0.375	0.031	0.175	73080	73360	73748
APKT 1604	0.650	0.375	0.031	0.175	73082	73362	73750

Semi-Finishing

Insert Type	Dimensions				Coated Grades		
Insert Style	(L)	(I.W)	Radius (r)	Hole Size (d)	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
APKT 1003	0.441	0.264	0.020	0.110	73215	75028	
APKT 1505	0.650	0.375	0.031	0.175	73217	75030	
APKT 1604	0.650	0.375	0.031	0.175	73219	75032	

Roughing

Insert Type	Dimensions				Coated Grades		
Insert Style	(L)	(I.W)	Radius (r)	Hole Size (d)	PF CP4010 EDP#	MF CM2010 EDP#	KM CK3015 EDP#
APKT 1003	0.441	0.264	0.020	0.110	73292	73592	73892
APKT 1505	0.650	0.375	0.031	0.175	73294	73594	73894
APKT 1604	0.650	0.375	0.031	0.175	73296	73596	73896



INSERT TOOL HOLDERS



MCLN R/L



Description:
MC Tool Holder
For Negative 80° Diamond CNM Insert
5° End or Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
MCLNR/L 12-4B	3/4	4-1/2	1	80000	80006	CNM 43	ICSN 433	NL-46	CL-20	XNS-48	S-46
MCLNR/L 16-4D	1	6	1-1/4	80012	80018	CNM 43	ICSN 433	NL-46	CL-20	XNS-48	S-46
MCLNR/L 20-4D	1-1/4	6	1-1/2	80024	80030	CNM 43	ICSN 433	NL-46	CL-20	XNS-48	S-46
MCLNR/L 24-4D	1-1/2	6	2	80036	80042	CNM 43	ICSN 433	NL-46	CL-20	XNS-48	S-46

MDJN R/L



Description:
MD Tool Holder
For Negative 55° Diamond DNM Insert
3° Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
MDJNR/L 12-4B	3/4	4-1/2	1	80048	80054	DNM 43	IDSN 433	NL-46	CL-7	XNS-36	S-46
MDJNR/L 16-4D	1	6	1-1/4	80060	80066	DNM 43	IDSN 433	NL-46	CL-20	XNS-48	S-46
MDJNR/L 20-4D	1-1/4	6	1-1/2	80072	80078	DNM 43	IDSN 433	NL-46	CL-20	XNS-48	S-46
MDJNR/L 24-4D	1-1/2	6	2	80084	80090	DNM 43	IDSN 433	NL-46	CL-20	XNS-48	S-46

MTGN R/L

Description:
MT Tool Holder
For Negative 60° Triangular TN Insert
0° Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
MTGNR/L 12-3B	3/4	4-1/2	1	80096	80102	TNM 33	ITSN 322	NL-34L	CL-6	XNS-36	S-34
MTGNR/L 16-3D	1	6	1-1/4	80108	80114	TNM 33	ITSN 322	NL-34L	CL-6	XNS-36	S-34
MTGNR/L 16-4D	1	6	1-1/4	80120	80126	TNM 43	ITSN 433	NL-46	CL-9	XNS-510	S-46
MTGNR/L 20-4D	1-1/4	6	1-1/2	80132	80138	TNM 43	ITSN 433	NL-46	CL-9	XNS-510	S-46

MVJN R/L



Description:
MV Tool Holder
For Negative 35° Diamond VNM Insert
0° End or Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
MVJNR/L 12-3B	3/4	4-1/2	1	80144	80150	VNM 33	IVSN 322	NL-34L	CL-30	XNS-510	S-34
MVJNR/L 16-3D	1	6	1-1/4	80156	80162	VNM 33	IVSN 322	NL-34L	CL-30	XNS-510	S-34
MVJNR/L 20-3D	1-1/4	6	1-1/2	80168	80174	VNM 43	IVSN 322	NL-34L	CL-30	XNS-510	S-46

MWLN R/L



Description:
MW Tool Holder
For Negative 80° Trigon WNM Insert
5° End or Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
MWLN R/L 12-3B	3/4	4-1/2	1	80180	80186	WNM 33	IWSN 322	NL-34L	CL-6	XNS-36	S-34
MWLN R/L 12-4B	3/4	4-1/2	1	80192	80198	WNM 43	IWSN 433	NL-46	CL-9	XNS-59	S-46
MWLN R/L 16-4D	1	6	1-1/4	80204	80210	WNM 43	IWSN 433	NL-46	CL-9	XNS-59	S-46
MWLN R/L 20-4D	1-1/4	6	1-1/2	80216	80222	WNM 43	IWSN 433	NL-46	CL-9	XNS-59	S-46
MWLN R/L 24-4E	1-1/2	7	2	80228	80234	WNM 43	IWSN 433	NL-46	CL-9	XNS-59	S-46

SCLC R/L



Description:
SC Tool Holder
For Positive 80° Diamond CCMT Insert
5° End or Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Torx Key
SCLCR 04-2	0.315	2.36	0.394	80240	80246	CCMT 21.5				99599	T-7
SCLCR/L 06-2J	3/8	3-1/2	1/2	80252	80258	CCMT 21.5				99599	T-7
SCLCR 08-03A	1/2	4	5/8	80264	80270	CCMT 32.5				99596	T-15
SCLCR 10-3B	5/8	4-1/2	3/4	80276	80282	CCMT 32.5				99596	T-15
SCLCR 12-3B	3/4	4-1/2	1	80288	80294	CCMT 32.5				99596	T-15

SDJC R/L



Description:

SD Tool Holder
For Negative 55° Diamond DCMT Insert
3° End or Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Torx Key
SDJCR/L 04-2	0.315	2.36	0.394	80300	80306	DCMT 21.5				99599	T-7
SDJCR/L 06-2J	3/8	3-1/2	1/2	80312	80318	DCMT 21.5				99599	T-7
SDJCR/L 08-02A	1/2	4	5/8	80324	80330	DCMT 21.5				99596	T-15
SDJCR/L 08-03A	1/2	4	5/8	80336	80342	DCMT 32.5				99596	T-15
SDJCR/L 10-3B	5/8	4-1/2	3/4	80348	80354	DCMT 32.5				99596	T-15
SDJCR/L 12-3B	3/4	4-1/2	1	80360	80366	DCMT 32.5				99596	T-15

SSDCN



Description:

SS Tool Holder
For Positive Square SCMT Insert
45° Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Torx Key	
SSDCN 04-2	0.315	2.36		80372	SCMT 21.5				99599	T-7	
SSDCN 08-03A	1/2	4		80384	SCMT 32.5				99596	T-15	
SSDCN 10-3B	5/8	4-1/2		80396	SCMT 32.5				99596	T-15	
SSDCN 12-3B	3/4	4-1/2		80408	SCMT 32.5				99596	T-15	

STFC R/L



Description:

ST Tool Holder
For Positive 60° Triangular TCMT or TCGT Insert
0° Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Torx Key
STFCR/L 06-2	3/8	2-1/2	1/2	80420	80426	TCMT 21.5				99599	T-7
STFCR/L 08-2J	1/2	3-1/2	5/8	80432	80438	TCMT 21.5				99599	T-7
STFCR/L 10-2A	5/8	4	3/4	80444	80450	TCMT 21.5				99599	T-7
STFCR/L 10-3B	5/8	4-1/2	3/4	80456	80462	TCMT 32.5				99596	T-15
STFCR/L 12-3B	3/4	4-1/2	1	80468	80474	TCMT 32.5				99596	T-15

STJC R/L

Description:

ST Tool Holders
For Positive 60° Triangular TCMT or TCGT Insert
3° End or Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Key
STJCR/L 08-2J	1/2	3-1/2	5/8	80486	80480	TCMT 21.5				99599	T-7
STJCR/L 12-3B	3/4	4-1/2	1	80492	80498	TCMT 32.5				99596	T-15

SVJC R/L



Description:

SV Tool Holders
For Positive 35° Diamond VCMT or VCGT Insert
3° Side Cutting Edge Angle

Insert Type	Dimensions			Item Number		Parts					
Insert Style	Square B-H	Length (L)	Head (F)	RH EDP #	LH EDP #	Insert	Seat	Lock Pin	Clamp	Clamp Screw	Seat Screw
SVJCR/L 12-3B	3/4	4-1/2	1	80504	80510	VCMT 33				99596	T-15
SVJCR/L 16-3C	1	5	1-1/4	80516	80522	VCMT 33				99596	T-15
SVJCR/L 16-3D	1	6	1-1/4	80528	80534	VCMT 33				99596	T-15



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