

The logo for UNITEC, featuring the word "UNITEC" in a bold, orange, sans-serif font. Above the letters "I" and "T" are two parallel diagonal lines, one blue and one orange, extending from the top right towards the center of the image.

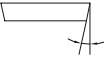
UNITEC

The title "TURNING INSERTS" is displayed in a large, bold, sans-serif font. "TURNING" is in white and "INSERTS" is in orange. To the left of the text are two parallel diagonal lines, one orange and one blue, extending from the top left towards the center of the image.

TURNING INSERTS



ISO Turning Insert Identification System

Symbol	Shape	Comer Angle	Figure	Symbol	Relief Angle	Tolerance (mm)			Tolerance (inch)												
H	Hexagon	120°		A	3°		Symbol	Corner Height (m)	Thickness (s)	I.C. Size (d)	Corner Height (m)	Thickness (s)	I.C. Size (d)								
O	Octagon	135°		B	5°																
P	Pentagon	108°		C	7°																
S	Square	90°		D	15°																
T	Triangle	60°		E	20°																
C	Rhombic	80°		F	25°																
D		55°		G	30°																
E		75°		N	0°																
F		50°		P	11°																
M		86°		O	Others																
V		35°																			
W	Trigon	80°																			
L	Rectangle	90°																			
A	Parellelogram	85°																			
B		82°																			
K		55°																			
R	Round	-																			
1. Shape Symbol				3. Tolerance Symbol																	

1

2

3

4

5

T
T

N
N

M
M

G
G

22
22

1

2

3

4

5

4. Chipbreaker / Hole Symbol

Symbol	Hole	Hole Shape	Chipbreaker	Shape
N	Without	-	Without	
R			Single sided	
F			Double sided	
A	With	With Hole	Without	
M			Single sided	
G			Double sided	
W		With Hole & one countersink 40° - 60°	Without	
T			Single sided	
Q		With Hole & two countersink 40° - 60°	Without	
U			Double sided	
B		With Hole & one countersink 70° - 90°	Without	
H			Double sided	
C		With Hole & one countersink 70° - 90°	Without	
J			Double sided	
X	-	-	-	

5. Cutting Edge Length Symbol (ISO) (mm)

Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	Symbol	Length	I.C. Size (mm)
		03	3.97	03	4.0			06	6.9	4	4.8					3.97
		04	4.76	04	4.8			08	8.2	5	5.8					4.76
05	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
		05	5.56	05	5.6	03	3.8	09	9.6	6	6.8					5.56
06	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		06	6.35	06	6.5	04	4.3	11	11	7	7.8	11	11.2			6.35
		07	7.94	08	8.1	05	5.4	13	13.8	9	9.7					7.94
08	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
09	9.525	09	9.525	09	9.7	06	6.5	16	16.5	11	11.6	16	16.6	16	19.7	9.525
10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
12	12.7	12	12.7	12	12.9	08	8.7	22	22	15	15.5	22	22.1			12.7
15	15.875	15	15.875	16	16.1	10	10.9	27	27.5	19	19.4					15.875
16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
19	19.05	19	19.05	19	19.3	13	13	33	33	23	23.3					19.05
20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
		22	22.225	22	22.6			38	38.5	27	27.1					22.225
25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
25	25.4	25	25.4	25	25.8			44	44	31	31					25.4
31	31.75	31	31.75	32	32.2			55	55	38	38.8					31.75
31	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32

ISO Turning Insert Identification System

Insert Shape : H, O, P, S, T, C, E, M, W, R

I.C. Size (mm)	Tolerane of I.C. Size (ϕd) (mm)		Tolerane of Corner Height (mm)		I.C. Size (inch)	Tolerane of I.C. Size (ϕd) (mm)		Tolerane of Corner Height (mm)	
	J, K, L, M, N	U	M, N	U		Class J, K, L, M, N	Class U	Class J, K, L, M, N	Class U
6.35	± 0.05	± 0.08	± 0.08	± 0.13	0.250	± 0.002	± 0.003	± 0.003	± 0.005
9.525					0.375				
12.7					0.500				
15.875	± 0.1	± 0.18	± 0.15	± 0.27	0.625	± 0.004	± 0.007	± 0.006	± 0.011
19.05					0.750				
25.4					1.000				
31.75	± 0.15	± 0.25	± 0.2	± 0.38	1.250	± 0.006	± 0.010	± 0.008	± 0.015
32					1.260				

Insert Shape : D						Insert Shape : V						Symbol	Thickness (mm)
Inscribed Circle Size		Tolerance of I.C. Size		Tolerance of Corner Height		Inscribed Circle Size		Tolerance of I.C. Size		Tolerance of Corner Height			
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in		
6.35	0.250	± 0.05	± 0.002	± 0.11	± 0.004	6.35	0.250	± 0.05	± 0.002	± 0.15	± 0.006	01	1.59
9.525	0.375	± 0.05	± 0.002	± 0.11	± 0.004	9.525	0.375	± 0.05	± 0.002	± 0.15	± 0.006	02	2.38
12.7	0.500	± 0.08	± 0.003	± 0.15	± 0.006	12.7	0.500	± 0.08	± 0.003	± 0.20	± 0.008	T2	2.78
15.875	0.625	± 0.10	± 0.004	± 0.18	± 0.007	15.875	0.625	± 0.10	± 0.004	± 0.27	± 0.011	03	3.18
19.05	0.750	± 0.10	± 0.004	± 0.18	± 0.007	19.05	0.750	± 0.10	± 0.004	± 0.27	± 0.011	T3	3.97
												04	4.76
												05	5.56
												06	6.35
												07	7.94
												09	9.52
													6. Thickness Symbol

6

7

8

04
04

-
-

08
08

-
-

GK
GK

6

7

8

Inscribed Circle Size (mm)
Insert thickness (S)
Corner Height (m)

7. Corner Ro Symbol	
Symbol	Corner Re (mm)
00	0.03
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2.0
24	2.4
28	2.8
32	3.2

8. Chipbreaker Symbol
Indicates the cutting properties & chipbreakers

Turning Geometry

NEGATIVE

Geometry	Features	Application Range	Cross Section Geometry
M35	- M35 for semi-finishing of general steel and alloy steel. - Strong flat cutting edge with good strength.		
M10	- M10 for finishing of stainless steel (mild steel). - Sharp edge reduces cutting force, enables high quality surface. - Low feed, small cutting depth.		
F05	- F05 for finishing of general steel and alloy steel. - Curved edge, sharp cutting edge, good chip control and fine surface finish due to curved edge.		
M25	- M25 for stainless steel and Heat Resistance Super Alloy HRSA - Sharp edge due to results in low cutting forces particularly for thin wall structures and extended shafts.		
M20	- M20 for semi-finishing of stainless steel and high temperature alloy - Variable rake angle and cutting edge width to ensure its sharpness and strength - Heart-shaped chip breaker with good chip breaking.		

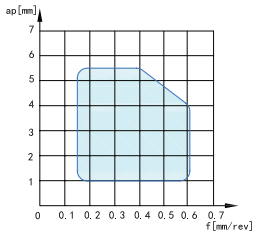
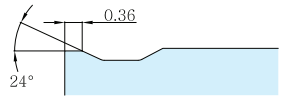
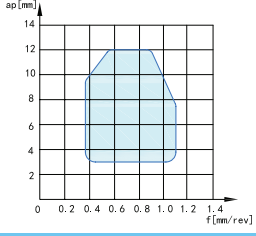
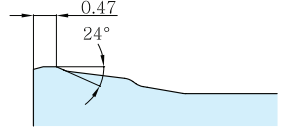
Turning Geometry

NEGATIVE

Geometry	Features	Application Range	Cross Section Geometry
M05	- M05 for semi-finishing of general steel and alloy steel. - Gradient and waved hump wide applicable geometry range.		
M45	- M45 for semi-finishing of general steel and alloy steel. - Big rake angle lower cutting force - Variable groove depth design, with super chip removal.		
M30	- M30 for medium cutting of stainless steel and mild steel. - Sharp cutting edge.		

Turning Geometry

NEGATIVE

Geometry	Features	Application Range	Cross Section Geometry
R15	• R15 for cast iron heavy cutting. • Strong cutting edge, big chip pocket, good at big cutting depth and width.		
R25	• R25 for heavy cutting action of carbon steel, cast steel and alloy steel. • Variable land and progressive chip breaker space, generating lower cutting force. • Straight edge line with reinforcement balances strength and cutting action.		

Turning Geometry

POSITIVE

Geometry	Features	Application Range	Cross Section Geometry
R35	• R35 for light cutting of general steel, alloy steel and cast iron • Dual rake angle and big cutting edge width design to promote its strength • Overall pattern design, table and reliable installation		
F16	• F16 for aluminum alloy cutting. • Sharp tool nose due to large rake angle.		

Turning Geometry

POSITIVE

Geometry	Features	Application Range	Cross Section Geometry
M35	• M35 for Semi-finishing and roughing of general steel, alloy steel and cast iron. • Variable land design, combine sharpness with fracture resistance.		
M15	• M15 for light cutting of general steel, alloy steel, stainless steel and cast iron. • Strong tool nose due to flat cutting edge • Sharp cutting edge due to double rake angle.		
M45	• M45 for Semi-finishing and roughing of general steel, alloy steel and cast iron. • Variable land design, combine sharpness with fracture resistance.		
F08	• F08 for light cutting of general steel, alloy steel and stainless steel. • Sharp cutting edge, enables high surface quality.		

Application of Turning Grade

Workpiece Material	ISO	Coated		Uncoated	Cermet
		CVD	PVD		
P Steel	01				
	10				
	20	UP1225		UC70	UC90
	30	UP1325	UP1625		
	40	UP1425			
	50				
M Stainless Steel	01		UM5625		
	10				
	20		UM5725		
	30		UM5825		
	40		UM5830		
	50		UH724		
K Cast Iron	01				
	10	UK3030			
	20	UK3015			
	30				
	40				
N Nonferrous Metal	01				
	10				
	20			UN07	
	30				
	40				
S HRSA	01				
	10		US5125		
	20		US5225		
	30		UH724		
	40				
H Hardened Material	01				
	10				
	20		UH724		
	30				

Turning - Grades

UP SERIES - COATED CARBIDE FOR STEEL MACHINING

UP1225	General use	CVD
UP1425	Continuous to light interrupted machining	CVD
UP1625	High speed and long tool life	PVD
UP1325	Heavy interrupted and high feed rate machining	CVD

UM SERIES - COATED CARBIDE FOR SS MACHINING

UM5625	Stable machining performance in low speed, continuous to heavily interrupted machining operations	PVD
UM5825	TiAlN coating with excellent fracture toughness and machining stability	PVD
UM5725	Sharp cutting performance due to the ground edge periphery	PVD
UM5830	Low cutting resistance and reduced adhesion and edge buildup	PVD

US SERIES - COATED CARBIDE HARDENED STEEL FOR INCONEL

US5125	High reliability in interrupted cutting with good stability during low to middle speed machining operations	PVD
	High bonding strength of MEGACOAT technology provides the coating stability required in small parts (Swiss) machining	
US5225	Sharp cutting performance due to the ground edge periphery	PVD
	Mirror polished inserts provide improved adhesion resistance and an improved surface finish	

UC SERIES - CERMET

UC70	UC70 for general use and quality surface finishes with balanced wear and fracture resistance	UNCOATED
	Excellent fracture resistance with surface-hardened layer using gradient composition technology	
	Continuously-varied hardness provides wear and fracture resistance	
	Combining the conventional cermet bonded phase (nickel, cobalt) and the special high melting point metallic bonded phase improves adhesion resistance and provides a better surface finish with a higher thermal resistance of the bonded phase	
UC90	Improved strength with uniform micro grain hard phase and superior compressive stress with high melting point bonded phase with a resulting combination that yields greater fracture resistance	COATED
Excellent surface finish		

UK SERIES - COATED CARBIDE FOR CAST IRON

UK3015	Advanced CVD coating technology for wear and fracture resistance in cast iron machining	CVD
	Capable of continuous, light-interrupted, and heavy-interrupted cutting	
UK3030	Machining of gray and nodular cast iron	CVD
	Perfect for parts such as brake discs, flywheels, camshafts, and gear housings	

UK SERIES - CERMET

UK07	Excellent surface finish with aluminum welding resistance	UNCOATED-ALUMINIUM
	Stable machining due to DLC coating layer with excellent peeling resistance and improved chip evacuation with high lubrication	
	Wide range of applications including turning, milling, and cut-off operations	

New Grades

UH724

FOR ISO: S05-S15 .ISO:H05-H15

- Low cobalt, Fine-grained wear – resistant and heat resistant matrix.
- Activate the sintering process to reduce alloy defects and improve the solid solubility of hard phased in the bonding phase , thereby enhancing the strength and toughness of the matrix.
- High aluminum matrix nano-composite PVD coating with the addition of rare earth elements to enhance the wear resistance and the oxidation resistance of the coating.
 1. Suitable for turning high-temperature alloys and titanium alloys, continuous or light intermittent processing.
 2. Universal machining, turning, milling and rough-finishing of hardened materials up to hrc65.

UH744

FOR ISO: S15-S25 .ISO:H15-H25

- The optimal combination of medium cobalt , fine grain matrix, alloy composition, and additive content .
- Good comprehensive properties such as hardness, strength, and toughness.
- High aluminum matrix nano-composite PVD coating with the addition of rare earth elements to enhance the wear resistance and the oxidation resistance of the coating.
 1. Suitable for universal processing of high-temperature alloys and titanium alloys, and heat-resistant stainless steels.
 2. 2) Semi-finishing and roughing turning and milling under non harsh working conditions.

★ **New launch UH744 - FOR INCONAL
AND SS MACHINING**

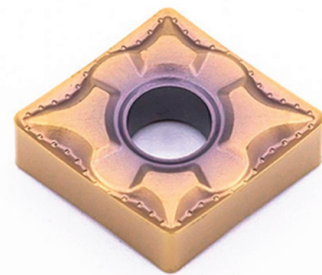
New Chip Breakers

F09



- The primary function of the F09 chip breaker is to effectively control and break chips into smaller, more manageable pieces, preventing them from becoming long and tangled. This is particularly important with ductile and high-temperature alloys, which typically form continuous chips.

F14



- Double large positive rake angle , fully ensure sharpness of the edge.
- Small protrusions are more conducive to chip breaks.
- Large cutting edge inclination can guide the chipflow very well.
- Low cutting resistance, high surface finish of machine parts

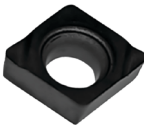
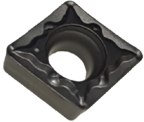
M14



- The M14 chip breaker incorporates a positive land, which creates a sharper and stronger cutting edge. This provides superior strength, particularly for the cutting edge.
- The stronger cutting edge is more resistant to damage, especially from impacts like those encountered when machining into a shoulder or during wall shouldering.
- This design makes the M14 chip breaker well-suited for specific operations, such as light interrupted cutting and roughing of heat-resistant alloys.

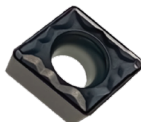
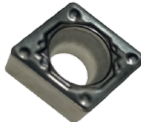
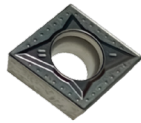
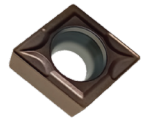
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POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	CCGT120408-F12															●	
	CCGT120404-F12															●	
	CCGT120402-F12															●	
	CCGT09T308-F12															●	
	CCGT09T304-F12															●	
	CCGT09T302-F12															●	
	CCGT09T301-F12															●	
	CCGT060208-F12															●	
	CCGT060204-F12															●	
	CCGT060202-F12															●	
	CCGT060201-F12															●	
	CCGT120408-F16															●	
	CCGT120404-F16															●	
	CCGT120402-F16															●	
	CCGT09T308-F16															●	
	CCGT09T304-F16															●	
	CCGT09T302-F16															●	
	CCGT060208-F16															●	
	CCGT060204-F16															●	
	CCGT060202-F16															●	
	CCGT040104-L-F	●															
	CCGT030104-L-F	●															
	CCGT030102-L-F	●															
	CCGT040104-R-F	●															
	CCGT040102-R-F	●															
	CCGT030104-R-F	●															
	CCGT030102-R-F	●															
	CCMT09T308-F05	●															
	CCMT09T304 -F05	●															
	CCMT060204-F05	●															

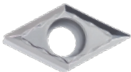
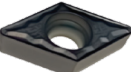
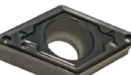
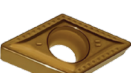
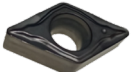
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POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	CCMT09T308-M25								●								
	CCMT09T304 -M25								●								
	CCMT060204 -M25								●								
	CCMT060208 -M25								●								
	CCMT09T308-F08	●			●												
	CCMT09T304-F08	●			●												
	CCMT09T302-F08	●															
	CCMT060208-F08				●												
	CCMT060204-F08	●			●												
	CCMT09T308-M15	●			●												
	CCMT09T304-M15	●			●												
	CCMT060208-M15				●												
	CCMT060204-M15	●			●												
	CCMT120408-M45							●				●					
	CCMT120404-M45											●					
	CCMT09T308-M45							●									
	CCMT09T304-M45							●									
	CCMT060208-M45							●									
	CCMT060204-M45							●									
	DCGT070202-F12															●	
	DCGT070204-F12															●	
	DCGT070208-F12															●	
	DCGT11T301-F12															●	
	DCGT11T302-F12															●	
	DCGT11T304-F12															●	
	DCGT11T308-F12															●	

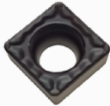
DC □ □

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
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	DCGT070204-F16															●	
	DCGT070208-F16															●	
	DCGT11T302-F16															●	
	DCGT11T304-F16															●	
	DCGT11T308-F16															●	
	DCMT11T304-M25								●								
	DCMT11T308-M25								●								
	DCMT070204-M25								●								
	DCMT11T304-M25								●								
	DCMT070204-F08	●			●												
	DCMT070208-F08	●			●												
	DCMT11T302-F08	●															
	DCMT11T304-F08	●			●												
	DCMT11T308-F08	●			●												
	DCMT11T304-M15	●			●												
	DCMT11T308-M15	●			●												
	DCMT070204-M45							●									
	DCMT070208-M45							●									
	DCMT11T304-M45							●									
	DCMT11T308-M45							●									
	DCMT070204-F05	●															
	DCMT11T304-F05	●															
	DCMT11T308-F05	●															

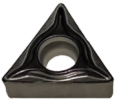
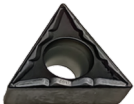
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POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UPI425	UPI225	UPI625	UPI325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	SCGT09T304-F12															●	
	SCGT09T308-F12															●	
	SCGT120404-F12															●	
	SCGT120408-F12															●	
	SCMT120408-M25							●									

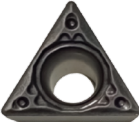
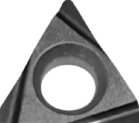
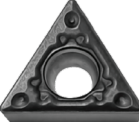
TC ☐ ☐

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	TCGT090204-F12															●	
	TCGT090202-F12															●	
	TCGT090208-F12															●	
	TCGT110202-F12															●	
	TCGT110204-F12															●	
	TCGT110208-F12															●	
	TCGT16T302-F12															●	
	TCGT16T304-F12															●	
	TCGT16T308-F12															●	
	TCMT110204-F05	●															
	TCMT16T304-M25								●								
	TCMT16T308-M25								●								

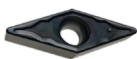
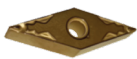
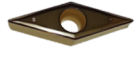
TN

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	TCMT090204-F08	●			●												
	TCMT110204-F08	●			●												
	TCMT110208-F08	●			●												
	TCMT16T304-F08	●			●												
	TCMT16T308-F08				●												
	TCMT090204-M15	●															
	TCMT110204-M15	●			●												
	TCMT110208-M15				●												
	TCMT16T304-M15				●												
	TCMT16T308-M15				●												
	TCMT110204-M25							●									
	TCMT110208-M25							●									
	TCMT16T304-M25							●									
	TCMT16T308-M25							●									
	TPGX060102-L	●															
	TPGX060104-L	●															
	TPGX080202-L	●															
	TPGX080204-L	●															
	TPGX090202-L	●															
	TPGX090204-L	●															
	TPGX110302-L	●															
	TPGX110304-L	●															
	TPMT110304-F08	●							●								
	TPMT110308-F08	●							●								

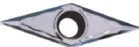
VB ☐ ☐

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	VBMT160404-M25								●								
	VBMT160408-M25								●								
	VBMT110304-F08								●								
	VBMT160404-F08	●			●												
	VBMT160408-F08	●			●												
	VBMT160404-M15	●			●												
	VBMT160408-M15	●			●												
	VBMT110304-M45							●									
	VBMT110308-M45							●									
	VBMT110304-M30							●									
	VBMT110308-M30							●									
	VBMT160404-F05	●															
	VBMT160408-F05	●															
	VCGT110302-F12															●	
	VCGT110304-F12															●	
	VCGT110308-F12															●	
	VCGT160402-F12															●	
	VCGT160404-F12															●	
	VCGT160408-F12															●	

VC ☐ ☐

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	VCGT080202-F16															●	
	VCGT080204-F16															●	
	VCGT110302-F16															●	
	VCGT110304-F16															●	
	VCGT110308-F16															●	
	VCGT160402-F16															●	
	VCGT160404-F16															●	
	VCGT160408-F16															●	
	VNMG160404											●					
	VNMG160408											●					

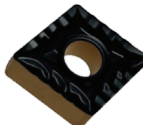
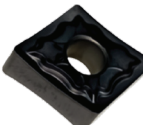
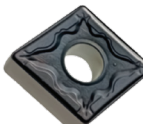
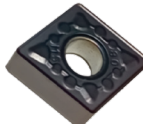
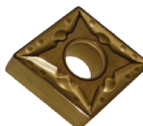
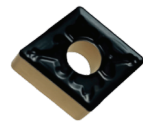
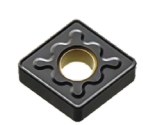
WB ☐ ☐

POSITIVE

INSERTS	DESIGNATION	CERMET		COATED											NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225
	WBMT060102-L-DP	●						●							
	WBMT060104-L-DP	●						●							

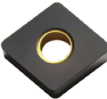
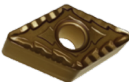
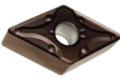
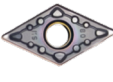
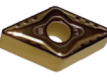
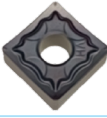
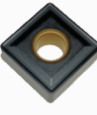
CN

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UPI425	UPI225	UPI625	UPI325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	CNMG120404-M05			●	●												
	CNMG120408-M05			●	●												
	CNMG120412-M05			●	●												
	CNMG120402-M10															●	
	CNMG120404-M10							●								●	
	CNMG120408-M10							●								●	
	CNMG120404-M20							●									
	CNMG120408-M20							●									
	CNMG120412-M20							●									
	CNMG120408-M18							●									
	CNMG120404-M13							●									
	CNMG120408-M13							●									
	CNMG120412-M13							●									
	CNMG120404-M40							●									
	CNMG120408-M40							●									
	CNMG120412-M40							●									
	CNMG120404-M15	●			●												
	CNMG120408-M15	●			●												
	CNMG120412-M15				●												
	CNMG120404-M35			●	●												
	CNMG120408-M35			●	●												
	CNMG120412-M35			●	●												
	CNMG120404-R15											●					
	CNMG120408-R15											●					
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	CNMG120404											●					
	CNMG120408											●					
	CNMG120412											●					

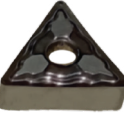
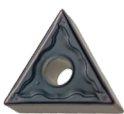
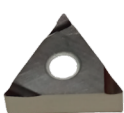
CN ☐ ☐

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	CNMA120404											•					
	CNMA120408											•					
	CNMA120412											•					
	DNMG150604-M05			•	•												
	DNMG150608-M05			•	•												
	DNMG150612-M05			•	•												
	DNMG150604-M10															•	
	DNMG150608-M10															•	
	DNMG150604-M20					•			•								
	DNMG150608-M20					•			•								
	DNMG150612-M20					•			•								
	DNMG150604-M13							•									
	DNMG150608-M13							•									
	DNMG150604-M40							•									
	DNMG150608-M40							•									
	DNMG150604-M15				•												
	DNMG150608-M15				•												
	SNMG120404-M10								•								
	SNMG120404-M20								•								
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	SNMG120408-M30							•									
	SNMG120408											•					

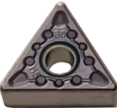
TN

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED												NON COATED	
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	YC1125	UK3015	US5125	US5225	UN07
	TNMG160404-M05			•	•												
	TNMG160408-M05			•	•												
	TNMG160412-M05			•	•												
	TNMG160404-F05	•															
	TNMG160408-F05	•															
	TNMG220408-R25				•												
	TNMG220412-R35											•					
	TNMG160402-M10								•								•
	TNMG160404-M10								• F08								•
	TNMG160408-M10								•								•
	TNMG160412-M10								•								•
	TNMG160404-M20								•								
	TNMG160408-M20								•								
	TNMG160412-M20								•								
	TNMG160404-F08	•															
	TNMG160408-F08	•															
	TNMG160412-F08	•															
	TNMG160402-L-S	•															
	TNMG160404-L-S	•															
	TNMG160404-L-ST				•												
	TNMG160404-M30							•									
	TNMG160408-M30							•									
	TNMG160412-M30							•									

TN ☐ ☐

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UPI425	UPI225	UPI625	UPI325	UM5625	UM5825	UM5725	UM5830	UK3030	YC1125	UK3015	US5125	US5225	UN07
	TNMG160404-M40							•									
	TNMG160408-M40							•									
	TNMG160412-M40							•									
	TNMG160404-M15	•			•												
	TNMG160408-M15	•			•												
	TNMG160412-M15	•			•												
	TNMG160404-R-S	•															
	TNMG160408-R-ST	•															
	TNMG160404-M35			•	•												
	TNMG160408-M35			•	•												
	TNMG160412-M35			•	•												
	TNMG160404-R15											•					
	TNMG160408-R15											•					
	TNMG160412-R15											•					
	TNMA160404											•					
	TNMA160408											•					
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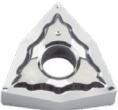
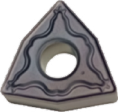
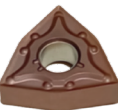
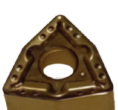
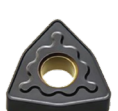
VN □ □

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED													NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07	
	VNMG160404-M10															●	
	VNMG160402-M10															●	
	VNMG160408-M10															●	
	VNMG160404-M20							●									
	VNMG160408-M20							●									
	VNMG160412-M20							●									
	VNMG160404-F08	●			●												
	VNMG160408-F08	●			●												
	VNMG160404-M30							●									
	VNMG160408-M30							●									
	VNMG160412-M30							●									
	VNMG160404-M40							●									
	VNMG160408-M40							●									
	VNMG160404-M15	●			●												
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	VNMG160408-M35			●	●												
	VNMG160408-M35			●	●												
	VNMG160404											●					
	VNMG160408											●					

WN ☐ ☐

NEGATIVE

INSERTS	DESIGNATION	CERMET		COATED												NON COATED
		UC70	UC90	UP1425	UP1225	UP1625	UP1325	UM5625	UM5825	UM5725	UM5830	UK3030	UK3015	US5125	US5225	UN07
	WNGM080404-M10								●							●
	WNGM080408-M10								●							●
	WNGM080404-M20								●							
	WNGM080408-M20								●							
	WNGM080412-M20								●							
	WNGM080404-M30							●								
	WNGM080408-M30							●								
	WNGM080412-M30							●								
	WNGM080404-M40							●								
	WNGM080408-M40							●								
	WNGM080412-M40							●								
	WNGM060404-M15				●											
	WNGM060408-M15				●											
	WNGM080412-M15				●											
	WNGM080404-M35			●	●											
	WNGM080408-M35			●	●											
	WNGM080412-M35			●	●											
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