

Leading edge technology for high efficiency steel turning

2 in 1 technology ensures longer tool life.



2
IN **>** **1**
TECHNOLOGY

New CVD Coated Grade for Steel Turning

UE6105/UE6110

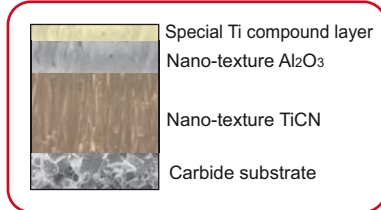
Features

Superior machining performance achieved using 2 in 1 technology

High Crater Wear Resistance

The gold Ti compound coating on the rake face exhibits exceptionally high crater wear resistance. This outer coating layer further enhances crater wear resistance of the nano-texture Al₂O₃ layer, making it suitable for high-speed, high performance machining.

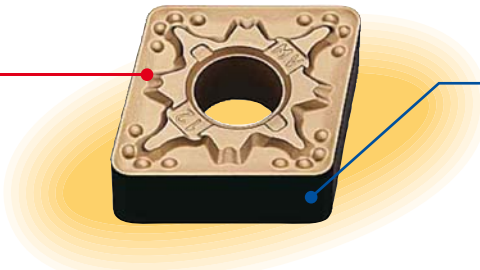
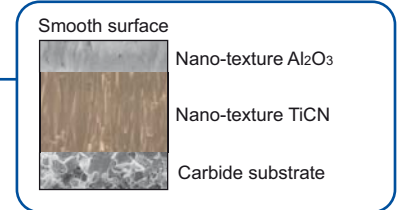
Coating structure of the rake face



High Flank Wear Resistance

The black coating on the flank face has an extremely smooth surface that prevents abnormal wear and weld chipping. Combined with the nano-texture coating, improved surface finishes and stable tool life can be achieved.

Coating structure of the flank face



Crater Wear Comparison

Insert : CNMG120408-MA
 Workpiece : Alloy steel
 Cutting Conditions: Cutting speed 250m/min, Feed 0.3mm/rev, Depth of cut 1.5mm, Dry cutting, Cutting time 7min

With a Ti compound layer



Less crater wear

Without a Ti compound layer



Large crater wear

Flank Wear Comparison

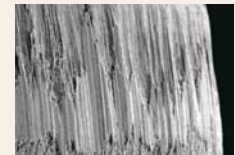
Insert : CNMG120408-00
 Workpiece : Alloy steel
 Cutting Conditions: Cutting speed 200m/min, Feed 0.3mm/rev, Depth of cut 1.5mm, Dry cutting, Cutting time 2min

Smooth surface of UE6110



Smooth, stable wear

Competitor's



Rough, uneven wear

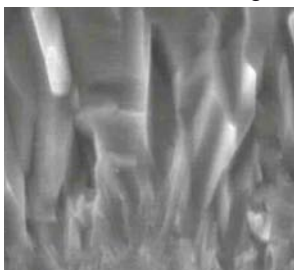
State-of-the-art coating featuring 2 in 1 technology

1 Newly developed "Nano-texture coating"

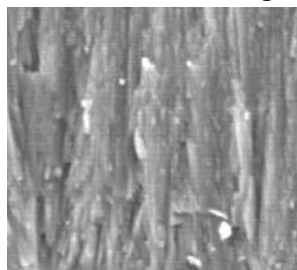
Mitsubishi Materials unique, new coating technology consisting of nano-texture TiCN and Al₂O₃ offers a coating that has both high fracture and wear resistance.

Comparison of crystalline microstructure

Conventional coating



Nano-texture coating



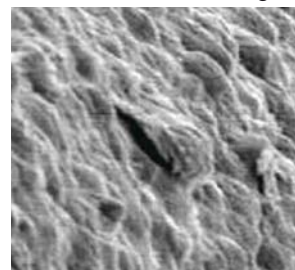
Even at the nano-level, the grains are refined.

2 Newly developed "Black super-even coating"

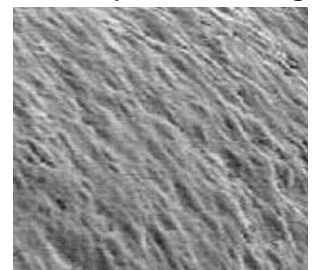
An extremely smooth coating surface inhibits wear propagation during machining, this achieves high quality surface finishes and prevents welding and chipping.

Comparison of coating surface

Conventional coating



Black super-even coating



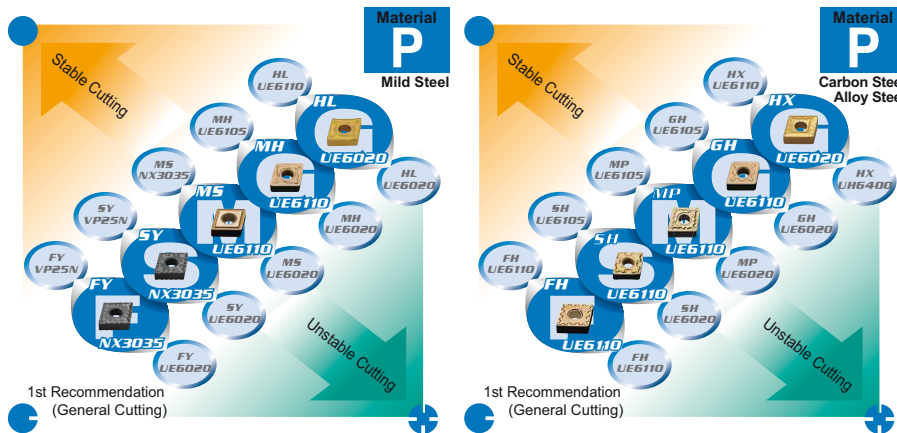
2 in 1 technology for high fracture and wear resistance and stable cutting

Application Range and Recommended Cutting Conditions

- **UE6110** is the first recommendation for steel turning.
Suitable for mild, carbon, alloy, bearing and lead free steel.

Application Range	
ISO	Steel
P01	UE6105
P10	UE6110
P20	UE6020
P30	UE6035
P40	UE6035

Recommended Cutting Conditions				
Workpiece	Hardness	Cutting Mode	Recommended Cutting Speed (UE6105) (m/min)	Recommended Cutting Speed (UE6110) (m/min)
Mild steel	≤180HB	General Cutting	300 (300–450)	300 (250–400)
Carbon steel Alloy steel	≥180HB	General Cutting	300 (200–400)	200 (150–300)



Cutting Conditions

- Stable Cutting** (Green circle): Continuous Cutting, Constant depth cutting, Pre-machined, Securely clamped component cutting
- General Cutting** (Green circle with cross):
- Unstable Cutting** (Green circle with plus): Heavy interrupted cutting, Irregular depth cutting, Low clamping rigidity cutting

Cutting Area

- F** Finish Cutting (ap≤0.5mm)
- S** Light Cutting (ap=0.5–1.5mm)
- M** Medium Cutting (ap=1.5–4.0mm)
- G** Semi-heavy cutting (ap=4.0–7.0mm)

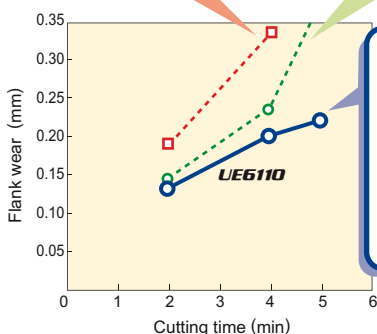
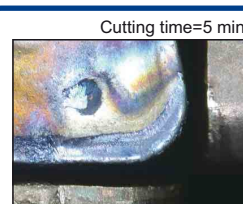
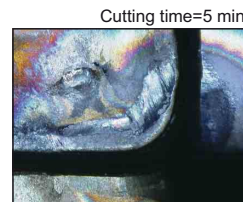
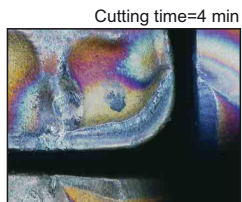
Cutting Performance

Wear Resistance

Continuous cutting of alloy steel

UE6110 displays excellent wear resistance!

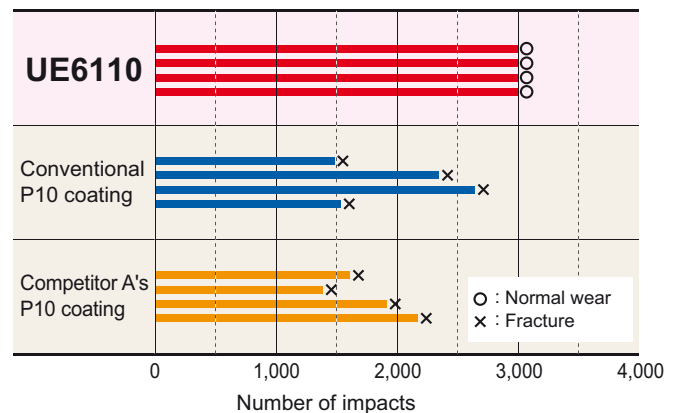
<Cutting Conditions>
 Insert : CNMG120408-○○○
 Tool : PCLNL2525M12
 Cutting speed : 250m/min
 Feed : 0.3mm/rev
 Depth of cut : 1.5mm
 Coolant : Dry cutting
 External continuous cutting
 ○○○ indicates types of general-purpose chipbreakers



Fracture Resistance

Interrupted cutting of alloy steel

UE6110 displays exceptional fracture and chipping resistance, providing a highly reliable cutting edge!


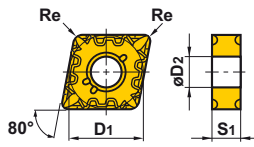

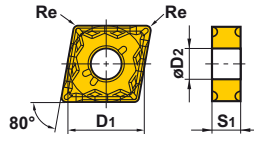

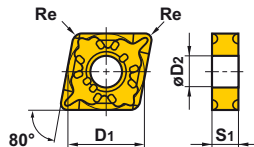

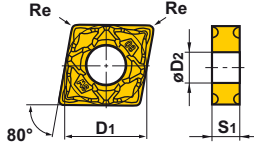

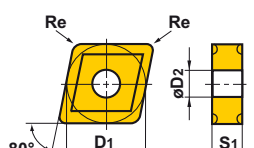

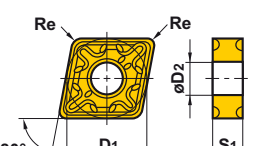


<Cutting Conditions>
 Insert : CNMG120408-○○○
 Tool : PCLNR2525M12
 Cutting speed : 200m/min
 Feed : 0.25mm/rev
 Depth of cut : 1.5mm
 Coolant : Wet cutting
 Interrupt cutting
 ○○○ indicates types of general-purpose chipbreakers.


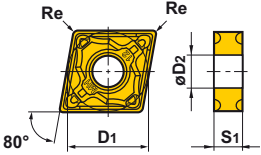

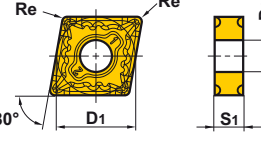

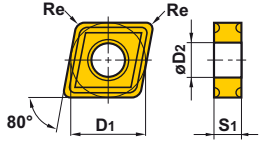

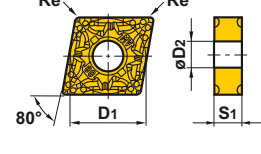

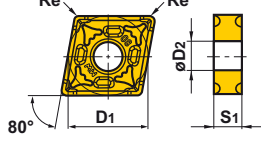

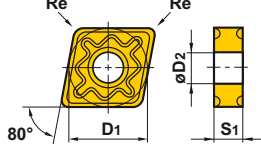
UE6105/UE6110

Inserts

● Negative Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
FH Breaker 	CNMG120404-FH		●	12.7	4.76	0.4	5.16	
	120408-FH		●	12.7	4.76	0.8	5.16	
Finish Cutting								
SA Breaker 	CNMG120404-SA	●	●	12.7	4.76	0.4	5.16	
	120408-SA	●	●	12.7	4.76	0.8	5.16	
	120412-SA	●	●	12.7	4.76	1.2	5.16	
	160612-SA		●	15.875	6.35	1.2	6.35	
Light Cutting								
SH Breaker 	CNMG09T304-SH		●	9.525	3.97	0.4	3.81	
	09T308-SH		●	9.525	3.97	0.8	3.81	
	120404-SH	●	●	12.7	4.76	0.4	5.16	
	120408-SH	●	●	12.7	4.76	0.8	5.16	
	120412-SH	●	●	12.7	4.76	1.2	5.16	
Light Cutting								
SW Breaker 	CNMG120404-SW	●	●	12.7	4.76	0.4	5.16	
	120408-SW	●	●	12.7	4.76	0.8	5.16	
	120412-SW	●		12.7	4.76	1.2	5.16	
Light Cutting (Wiper)								
Standard Breaker 	CNMG090308		★	9.525	3.18	0.8	3.81	
	09T304		●	9.525	3.97	0.4	3.81	
	09T308		●	9.525	3.97	0.8	3.81	
	120404	●	●	12.7	4.76	0.4	5.16	
	120408	●	●	12.7	4.76	0.8	5.16	
	120412	●	●	12.7	4.76	1.2	5.16	
	120416	●	●	12.7	4.76	1.6	5.16	
	160608	●	●	15.875	6.35	0.8	6.35	
	160612	●	●	15.875	6.35	1.2	6.35	
	160616	●	●	15.875	6.35	1.6	6.35	
	190608	●	●	19.05	6.35	0.8	7.93	
	190612	●	●	19.05	6.35	1.2	7.93	
190616	●	●	19.05	6.35	1.6	7.93		
Medium Cutting								
MA Breaker 	CNMG120404-MA	●	●	12.7	4.76	0.4	5.16	
	120408-MA	●	●	12.7	4.76	0.8	5.16	
	120412-MA	●	●	12.7	4.76	1.2	5.16	
	120416-MA	●	●	12.7	4.76	1.6	5.16	
	160608-MA	●	●	15.875	6.35	0.8	6.35	
	160612-MA	●	●	15.875	6.35	1.2	6.35	
	160616-MA	●	●	15.875	6.35	1.6	6.35	
	190612-MA	●	●	19.05	6.35	1.2	7.93	
190616-MA		●	19.05	6.35	1.6	7.93		
Medium Cutting								


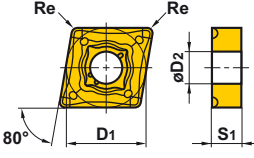

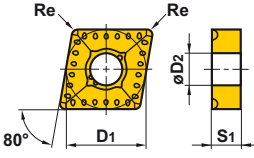

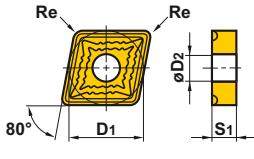

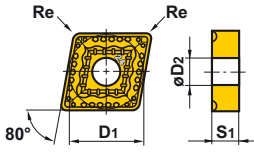

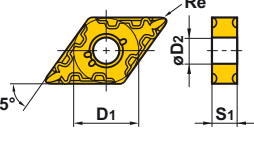

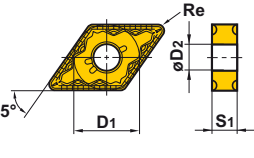

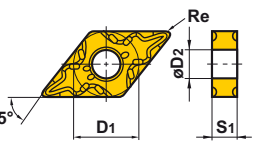
● : Inventory maintained. ★ : Inventory maintained in Japan.

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
MH Breaker  Medium Cutting	CNMG120404-MH	●	●	12.7	4.76	0.4	5.16	
	120408-MH	●	●	12.7	4.76	0.8	5.16	
	120412-MH	●	●	12.7	4.76	1.2	5.16	
	120416-MH	●	●	12.7	4.76	1.6	5.16	
	160608-MH	●	●	15.875	6.35	0.8	6.35	
	160612-MH	●	●	15.875	6.35	1.2	6.35	
	160616-MH	●	●	15.875	6.35	1.6	6.35	
	190612-MH	●	●	19.05	6.35	1.2	7.93	
190616-MH	●	★	19.05	6.35	1.6	7.93		
MP Breaker  Medium Cutting	CNMG120404-MP	●	●	12.7	4.76	0.4	5.16	
	120408-MP	●	●	12.7	4.76	0.8	5.16	
	120612-MP	●	●	12.7	4.76	1.2	5.16	
	120616-MP	●	●	12.7	4.76	1.6	5.16	
	160608-MP	●	●	15.875	6.35	0.8	6.35	
	160612-MP	●	●	15.875	6.35	1.2	6.35	
160616-MP	●	●	15.875	6.35	1.6	6.35		
MS Breaker  Medium Cutting	CNMG090308-MS		★	9.525	3.18	0.8	3.81	
	09T308-MS		●	9.525	3.97	0.8	3.81	
	120404-MS		★	12.7	4.76	0.4	5.16	
	120408-MS		●	12.7	4.76	0.8	5.16	
	120412-MS		★	12.7	4.76	1.2	5.16	
120416-MS		★	12.7	4.76	1.6	5.16		
MV Breaker  Medium Cutting	CNMG120404-MV	●	●	12.7	4.76	0.4	5.16	
	120408-MV	●	●	12.7	4.76	0.8	5.16	
	120412-MV	●	●	12.7	4.76	1.2	5.16	
	120416-MV	●	●	12.7	4.76	1.6	5.16	
MW Breaker  Medium Cutting (Wiper)	CNMG120408-MW	●	●	12.7	4.76	0.8	5.16	
	120412-MW	●	●	12.7	4.76	1.2	5.16	
GH Breaker  Semi-Heavy Cutting	CNMG120408-GH	●	●	12.7	4.76	0.8	5.16	
	120412-GH	●	●	12.7	4.76	1.2	5.16	
	120416-GH	●	●	12.7	4.76	1.6	5.16	
	160612-GH	●	●	15.875	6.35	1.2	6.35	
	160616-GH	●	●	15.875	6.35	1.6	6.35	
	190612-GH	●	●	19.05	6.35	1.2	7.93	
190616-GH	●	●	19.05	6.35	1.6	7.93		


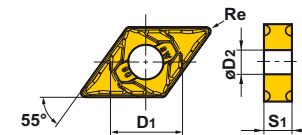

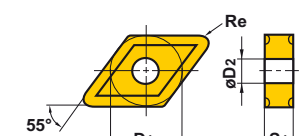

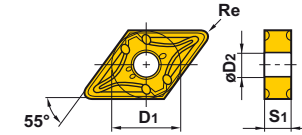

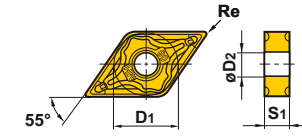

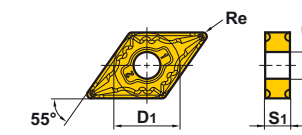

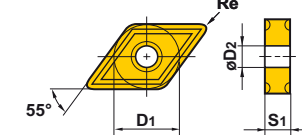
UE6105/UE6110

Inserts

● Negative Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
HL Breaker  Heavy Cutting	CNMM120408-HL	●	●	12.7	4.76	0.8	5.16	
	120412-HL	●	●	12.7	4.76	1.2	5.16	
	120416-HL	●	●	12.7	4.76	1.6	5.16	
	160612-HL	●	●	15.875	6.35	1.2	6.35	
	160616-HL	●	●	15.875	6.35	1.6	6.35	
	190612-HL	●	●	19.05	6.35	1.2	7.93	
	190616-HL	●	●	19.05	6.35	1.6	7.93	
HM Breaker  Heavy Cutting	CNMM160612-HM	●	●	15.875	6.35	1.2	6.35	
	160616-HM	●	●	15.875	6.35	1.6	6.35	
	190612-HM	●	●	19.05	6.35	1.2	7.93	
	190616-HM	●	●	19.05	6.35	1.6	7.93	
	190624-HM	●	●	19.05	6.35	2.4	7.93	
HV Breaker  Heavy Cutting	CNMM190616-HV	●	●	19.05	6.35	1.6	7.93	
	190624-HV	●	●	19.05	6.35	2.4	7.93	
	250924-HV	●	●	25.4	9.52	2.4	9.12	
HX Breaker  Heavy Cutting	CNMM160612-HX	●	●	15.875	6.35	1.2	6.35	
	160616-HX	●	●	15.875	6.35	1.6	6.35	
	190612-HX	●	●	19.05	6.35	1.2	7.93	
	190616-HX	●	●	19.05	6.35	1.6	7.93	
	190624-HX	●	●	19.05	6.35	2.4	7.93	
FH Breaker  Finish Cutting	DNMG150402-FH	●	★	12.7	4.76	0.2	5.16	
	150404-FH	●	●	12.7	4.76	0.4	5.16	
	150408-FH	●	●	12.7	4.76	0.8	5.16	
	150602-FH	●	★	12.7	4.76	0.2	5.16	
	150604-FH	●	●	12.7	6.35	0.4	5.16	
	150608-FH	●	●	12.7	6.35	0.8	5.16	
SA Breaker  Light Cutting	DNMG150404-SA	●	●	12.7	4.76	0.4	5.16	
	150408-SA	●	●	12.7	4.76	0.8	5.16	
	150412-SA	●	●	12.7	4.76	1.2	5.16	
	150604-SA	●	●	12.7	6.35	0.4	5.16	
	150608-SA	●	●	12.7	6.35	0.8	5.16	
	150612-SA	●	●	12.7	6.35	1.2	5.16	
SH Breaker  Light Cutting	DNMG110404-SH	●	●	9.525	4.76	0.4	3.81	
	110408-SH	●	●	9.525	4.76	0.8	3.81	
	150404-SH	●	●	12.7	4.76	0.4	5.16	
	150408-SH	●	●	12.7	4.76	0.8	5.16	
	150412-SH	●	●	12.7	4.76	1.2	5.16	
	150604-SH	●	●	12.7	6.35	0.4	5.16	
	150608-SH	●	●	12.7	6.35	0.8	5.16	
150612-SH	●	●	12.7	6.35	1.2	5.16		


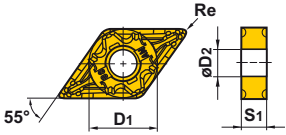

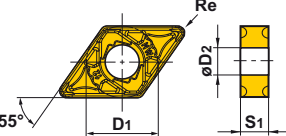

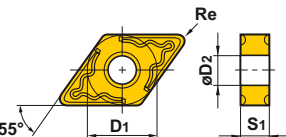

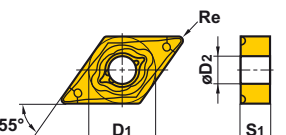

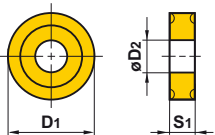

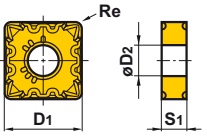

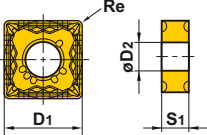
● : Inventory maintained. ★ : Inventory maintained in Japan.

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
SW Breaker  Light Cutting (Wiper)	DNMX150404-SW	●	●	12.7	4.76	0.4	5.16	
	150408-SW	●	●	12.7	4.76	0.8	5.16	
	150412-SW	●	●	12.7	4.76	1.2	5.16	
	150604-SW	●	●	12.7	6.35	0.4	5.16	
	150608-SW	●	●	12.7	6.35	0.8	5.16	
	150612-SW	●	●	12.7	6.35	1.2	5.16	
Standard Breaker  Medium Cutting	DNMG110408		●	9.525	4.76	0.8	3.81	
	150404	●	●	12.7	4.76	0.4	5.16	
	150408	●	●	12.7	4.76	0.8	5.16	
	150412	●	●	12.7	4.76	1.2	5.16	
	150416		★	12.7	4.76	1.6	5.16	
	150604	●	●	12.7	6.35	0.4	5.16	
	150608	●	●	12.7	6.35	0.8	5.16	
	150612	●	●	12.7	6.35	1.2	5.16	
MA Breaker  Medium Cutting	DNMG110404-MA	●	●	9.525	4.76	0.4	3.81	
	110408-MA	●	●	9.525	4.76	0.8	3.81	
	110412-MA	●	●	9.525	4.76	1.2	3.81	
	150404-MA	●	●	12.7	4.76	0.4	5.16	
	150408-MA	●	●	12.7	4.76	0.8	5.16	
	150412-MA	●	●	12.7	4.76	1.2	5.16	
	150416-MA		★	12.7	4.76	1.6	5.16	
	150604-MA	●	●	12.7	6.35	0.4	5.16	
	150608-MA	●	●	12.7	6.35	0.8	5.16	
	150612-MA	●	●	12.7	6.35	1.2	5.16	
MH Breaker  Medium Cutting	DNMG150404-MH	●	●	12.7	4.76	0.4	5.16	
	150408-MH	●	●	12.7	4.76	0.8	5.16	
	150412-MH	●	●	12.7	4.76	1.2	5.16	
	150604-MH	●	●	12.7	6.35	0.4	5.16	
	150608-MH	●	●	12.7	6.35	0.8	5.16	
	150612-MH	●	●	12.7	6.35	1.2	5.16	
MP Breaker  Medium Cutting	DNMG150404-MP	●	●	12.7	4.76	0.4	5.16	
	150408-MP	●	●	12.7	4.76	0.8	5.16	
	150412-MP	●	●	12.7	4.76	1.2	5.16	
	150416-MP	★	★	12.7	4.76	1.6	5.16	
	150604-MP	●	●	12.7	6.35	0.4	5.16	
	150608-MP	●	●	12.7	6.35	0.8	5.16	
	150612-MP	●	●	12.7	6.35	1.2	5.16	
MS Breaker  Medium Cutting	DNMG110408-MS		●	9.525	4.76	0.8	3.81	
	150404-MS		●	12.7	4.76	0.4	5.16	
	150408-MS		●	12.7	4.76	0.8	5.16	
	150412-MS		★	12.7	4.76	1.2	5.16	
	150604-MS		●	12.7	6.35	0.4	5.16	
	150608-MS		★	12.7	6.35	0.8	5.16	
150612-MS		★	12.7	6.35	1.2	5.16		


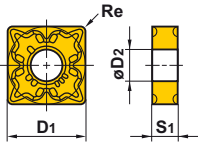

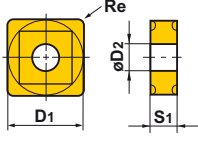

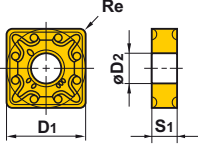

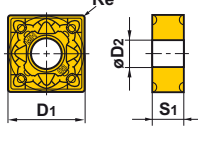

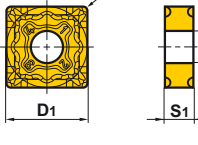

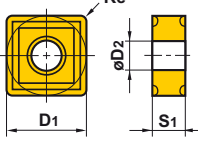

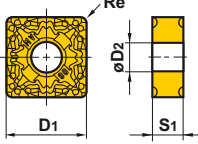
UE6105/UE6110

Inserts

● Negative Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
MV Breaker  Medium Cutting	DNMG150404-MV	●	●	12.7	4.76	0.4	5.16	
	150408-MV	●	●	12.7	4.76	0.8	5.16	
	150412-MV	●	★	12.7	4.76	1.2	5.16	
	150416-MV		★	12.7	4.76	1.6	5.16	
	150604-MV	●	●	12.7	6.35	0.4	5.16	
	150608-MV	●	●	12.7	6.35	0.8	5.16	
	150612-MV	●	●	12.7	6.35	1.2	5.16	
	150616-MV		●	12.7	6.35	1.6	5.16	
MW Breaker  Medium Cutting (Wiper)	DNMX150408-MW	●	●	12.7	4.76	0.8	5.16	
	150412-MW	●	●	12.7	4.76	1.2	5.16	
	150608-MW	●	●	12.7	6.35	0.8	5.16	
	150612-MW	●	●	12.7	6.35	1.2	5.16	
GH Breaker  Semi-Heavy Cutting	DNMG150408-GH	●	●	12.7	4.76	0.8	5.16	
	150412-GH	●	●	12.7	4.76	1.2	5.16	
	150608-GH	●	●	12.7	6.35	0.8	5.16	
	150612-GH	●	●	12.7	6.35	1.2	5.16	
HL Breaker  Heavy Cutting	DNMM150608-HL		●	12.7	6.35	0.8	5.16	
	150612-HL		●	12.7	6.35	1.2	5.16	
Standard Breaker  Medium Cutting	RNMG090300		★	9.525	3.18	—	3.81	
	120400		★	12.7	4.76	—	5.16	
	150600		★	15.875	6.35	—	6.35	
	190600		★	19.05	6.35	—	7.93	
	250900	NEW	★	25.4	9.52	—	9.12	
	310900	NEW	★	31.75	9.52	—	12.7	
FH Breaker  Finish Cutting	SNMG120404-FH		★	12.7	4.76	0.4	5.16	
	120408-FH		★	12.7	4.76	0.8	5.16	
SA Breaker  Light Cutting	SNMG120404-SA		●	12.7	4.76	0.4	5.16	
	120408-SA	●	●	12.7	4.76	0.8	5.16	
	120412-SA		●	12.7	4.76	1.2	5.16	


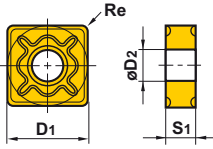

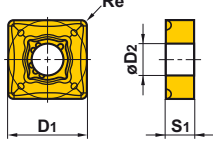

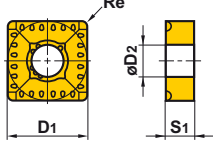

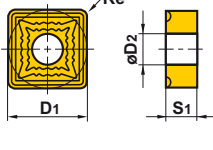

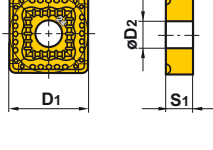

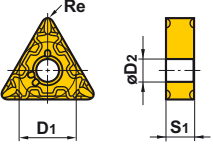
● : Inventory maintained. ★ : Inventory maintained in Japan.


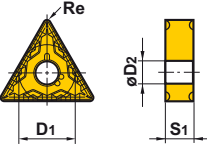

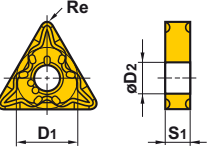

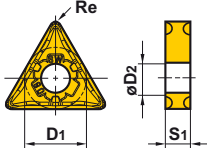

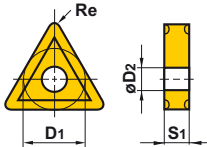

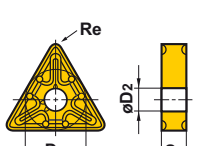
Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
SH Breaker 	SNMG120404-SH		●	12.7	4.76	0.4	5.16	
	120408-SH	●	●	12.7	4.76	0.8	5.16	
	120412-SH		★		12.7	4.76	1.2	
Light Cutting								
Standard Breaker 	SNMG090304	★	●	9.525	3.18	0.4	3.81	
	090308	★	●	9.525	3.18	0.8	3.81	
	120404	●	●	12.7	4.76	0.4	5.16	
	120408	●	●	12.7	4.76	0.8	5.16	
	120412	●	●	12.7	4.76	1.2	5.16	
	120416		●	12.7	4.76	1.6	5.16	
	150412		●	15.875	4.76	1.2	6.35	
	150612	●	●	15.875	6.35	1.2	6.35	
	190612	●	●	19.05	6.35	1.2	7.93	
Medium Cutting	190616	●	●	19.05	6.35	1.6	7.93	
MA Breaker 	SNMG120404-MA	●	●	12.7	4.76	0.4	5.16	
	120408-MA	●	●	12.7	4.76	0.8	5.16	
	120412-MA	●	●	12.7	4.76	1.2	5.16	
	150608-MA	●	●	15.875	6.35	0.8	6.35	
	150612-MA	●	●	15.875	6.35	1.2	6.35	
	150616-MA		●	15.875	6.35	1.6	6.35	
	190612-MA	●	●	19.05	6.35	1.2	7.93	
Medium Cutting	190616-MA	●	●	19.05	6.35	1.6	7.93	
MH Breaker 	SNMG120404-MH		★	12.7	4.76	0.4	5.16	
	120408-MH	●	●	12.7	4.76	0.8	5.16	
	120412-MH	●	●	12.7	4.76	1.2	5.16	
	190612-MH	●	●	19.05	6.35	1.2	7.93	
	190616-MH	●	●	19.05	6.35	1.6	7.93	
Medium Cutting								
MP Breaker 	SNMG120404-MP	●	●	12.7	4.76	0.4	5.16	
	120408-MP	●	●	12.7	4.76	0.8	5.16	
	120412-MP	●	●	12.7	4.76	1.2	5.16	
Medium Cutting								
MS Breaker 	SNMG120404-MS		★	12.7	4.76	0.4	5.16	
	120408-MS		●	12.7	4.76	0.8	5.16	
	120412-MS		★	12.7	4.76	1.2	5.16	
Medium Cutting								
MV Breaker 	SNMG120404-MV	●	●	12.7	4.76	0.4	5.16	
	120408-MV	●	●	12.7	4.76	0.8	5.16	
	120412-MV	●	●	12.7	4.76	1.2	5.16	
Medium Cutting								

UE6105/UE6110

Inserts

● Negative Inserts (With hole)


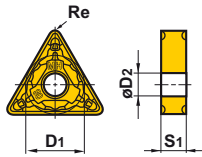

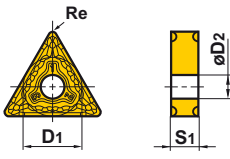

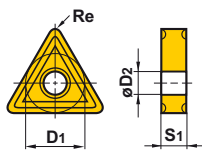

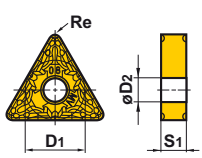

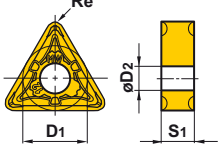

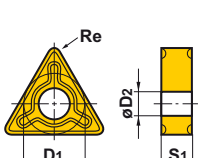

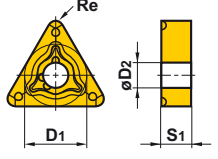

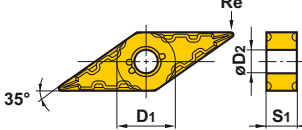
Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
GH Breaker  Semi-Heavy Cutting	SNMG120408-GH	●	●	12.7	4.76	0.8	5.16	
	120412-GH	●	●	12.7	4.76	1.2	5.16	
	120416-GH	●	●	12.7	4.76	1.6	5.16	
	150612-GH	●	●	15.875	6.35	1.2	6.35	
	150616-GH	●	●	15.875	6.35	1.6	6.35	
	190612-GH	●	●	19.05	6.35	1.2	7.93	
	190616-GH	●	★	19.05	6.35	1.6	7.93	
HL Breaker  Heavy Cutting	SNMM120408-HL		●	12.7	4.76	0.8	5.16	
	120412-HL		●	12.7	4.76	1.2	5.16	
	150612-HL		●	15.875	6.35	1.2	6.35	
	150616-HL		●	15.875	6.35	1.6	6.35	
	190612-HL		●	19.05	6.35	1.2	7.93	
	190616-HL		●	19.05	6.35	1.6	7.93	
	190624-HL		●	19.05	6.35	2.4	7.93	
HM Breaker  Heavy Cutting	SNMM150612-HM		●	15.875	6.35	1.2	6.35	
	150616-HM		●	15.875	6.35	1.6	6.35	
	190612-HM		●	19.05	6.35	1.2	7.93	
	190616-HM		●	19.05	6.35	1.6	7.93	
	190624-HM		●	19.05	6.35	2.4	7.93	
	250724-HM		●	25.4	7.94	2.4	9.12	
	250924-HM		●	25.4	9.52	2.4	9.12	
HV Breaker  Heavy Cutting	SNMM190616-HV		●	19.05	6.35	1.6	7.93	
	190624-HV		●	19.05	6.35	2.4	7.93	
	250724-HV		●	25.4	7.94	2.4	9.12	
	250924-HV		●	25.4	9.53	2.4	9.12	
HX Breaker  Heavy Cutting	SNMM150612-HX		●	15.875	6.35	1.2	6.35	
	150616-HX		●	15.875	6.35	1.6	6.35	
	190612-HX		●	19.05	6.35	1.2	7.93	
	190616-HX		●	19.05	6.35	1.6	7.93	
	190624-HX		●	19.05	6.35	2.4	7.93	
	250724-HX		●	25.4	7.94	2.4	9.12	
	250924-HX		●	25.4	9.52	2.4	9.12	
FH Breaker  Finish Cutting	TNMG160404-FH		●	9.525	4.76	0.4	3.81	
	160408-FH		●	9.525	4.76	0.8	3.81	

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
SA Breaker 	TNMG160404-SA	●	●	9.525	4.76	0.4	3.81	
	160408-SA	●	●	9.525	4.76	0.8	3.81	
	160412-SA	●	●	9.525	4.76	1.2	3.81	
	220408-SA	●	●	12.7	4.76	0.8	5.16	
	220412-SA		●	12.7	4.76	1.2	5.16	
Light Cutting								
SH Breaker 	TNMG160404-SH	●	●	9.525	4.76	0.4	3.81	
	160408-SH	●	●	9.525	4.76	0.8	3.81	
	220408-SH	●	★	12.7	4.76	0.8	5.16	
Light Cutting								
SW Breaker 	TNMX160404-SW	●	●	9.525	4.76	0.4	3.81	
	160408-SW	●	●	9.525	4.76	0.8	3.81	
Light Cutting (Wiper)								
Standard Breaker 	TNMG110304		●	6.35	3.18	0.4	2.26	
	110308		★	6.35	3.18	0.8	2.26	
	160304		★	9.525	3.18	0.4	3.81	
	160308		★	9.525	3.18	0.8	3.81	
	160404	●	●	9.525	4.76	0.4	3.81	
	160408	●	●	9.525	4.76	0.8	3.81	
	160412	●	●	9.525	4.76	1.2	3.81	
	160416		●	9.525	4.76	1.6	3.81	
	220404	●	●	12.7	4.76	0.4	5.16	
	220408	●	●	12.7	4.76	0.8	5.16	
	220412	●	●	12.7	4.76	1.2	5.16	
	220416		●	12.7	4.76	1.6	5.16	
	270608		★	15.875	6.35	0.8	6.35	
	270612		★	15.875	6.35	1.2	6.35	
Medium Cutting	270616		★	15.875	6.35	1.6	6.35	
MA Breaker 	TNMG160404-MA	●	●	9.525	4.76	0.4	3.81	
	160408-MA	●	●	9.525	4.76	0.8	3.81	
	160412-MA	●	●	9.525	4.76	1.2	3.81	
	220408-MA	●	●	12.7	4.76	0.8	5.16	
	220412-MA	●	●	12.7	4.76	1.2	5.16	
	270608-MA	●	★	15.875	6.35	0.8	6.35	
	Medium Cutting	270612-MA	●	★	15.875	6.35	1.2	


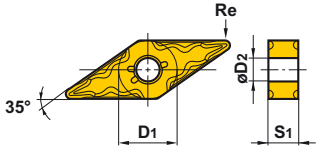

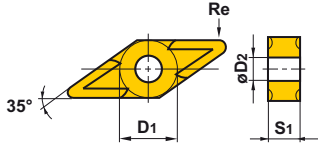

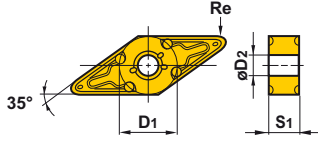

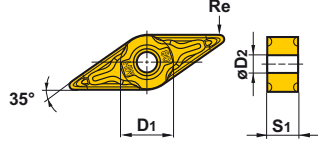

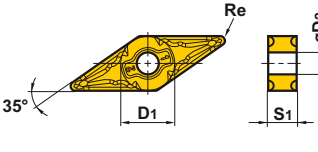

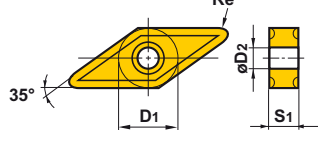

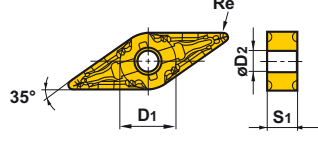

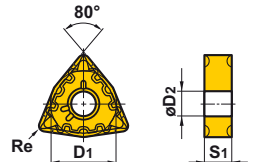
UE6105/UE6110

Inserts

● Negative Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
MH Breaker  Medium Cutting	TNMG160404-MH	●	●	9.525	4.76	0.4	3.81	
	160408-MH	●	●	9.525	4.76	0.8	3.81	
	160412-MH	●	●	9.525	4.76	1.2	3.81	
	220408-MH	●	●	12.7	4.76	0.8	5.16	
	220412-MH	●	●	12.7	4.76	1.2	5.16	
MP Breaker  Medium Cutting	TNMG160404-MP	●	●	9.525	4.76	0.4	3.81	
	160408-MP	●	●	9.525	4.76	0.8	3.81	
	160412-MP	●	●	9.525	4.76	1.2	3.81	
	220408-MP	●	●	12.7	4.76	0.8	5.16	
	220412-MP	●	●	12.7	4.76	1.2	5.16	
MS Breaker  Medium Cutting	TNMG160404-MS		●	9.525	4.76	0.4	3.81	
	160408-MS		★	9.525	4.76	0.8	3.81	
	160412-MS		★	9.525	4.76	1.2	3.81	
	220408-MS		★	12.7	4.76	0.8	5.16	
MV Breaker  Medium Cutting	TNMG160404-MV	●	●	9.525	4.76	0.4	3.81	
	160408-MV	●	●	9.525	4.76	0.8	3.81	
	160412-MV	●	●	9.525	4.76	1.2	3.81	
	220408-MV	●	●	12.7	4.76	0.8	5.16	
	220412-MV	●	●	12.7	4.76	1.2	5.16	
MW Breaker  Light Cutting (Wiper)	TNMX160408-MW	●	●	9.525	4.76	0.8	3.81	
	160412-MW	●	●	9.525	4.76	1.2	3.81	
GH Breaker  Semi-Heavy Cutting	TNMG160408-GH	●	●	9.525	4.76	0.8	3.81	
	160412-GH	●	●	9.525	4.76	1.2	3.81	
	220408-GH	●	●	12.7	4.76	0.8	5.16	
	220412-GH	●	●	12.7	4.76	1.2	5.16	
	220416-GH	●	●	12.7	4.76	1.6	5.16	
	270612-GH	●	★	15.875	6.35	1.2	6.35	
	270616-GH	●	★	15.875	6.35	1.6	6.35	
HL Breaker  Heavy Cutting	TNMM160408-HL		●	9.525	4.76	0.8	3.81	
	160412-HL		●	9.525	4.76	1.2	3.81	
	220408-HL		●	12.7	4.76	0.8	5.16	
	220412-HL		●	12.7	4.76	1.2	5.16	
	220416-HL		●	12.7	4.76	1.6	5.16	
FH Breaker  Finish Cutting	VNMG160404-FH		★	9.525	4.76	0.4	3.81	
	160408-FH		★	9.525	4.76	0.8	3.81	


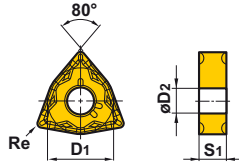

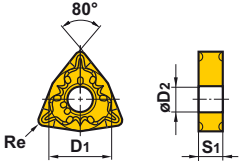

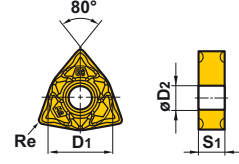

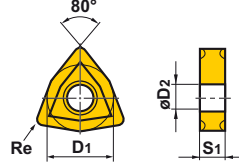

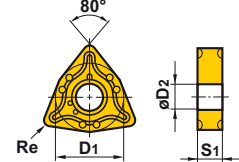

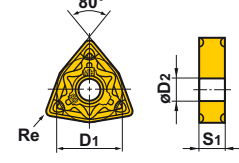
● : Inventory maintained. ★ : Inventory maintained in Japan. □ : Non stock, produced to order only.


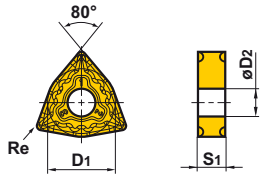

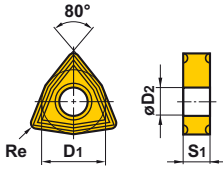

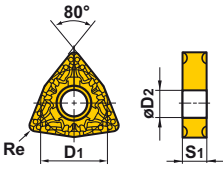

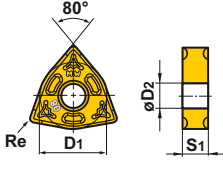

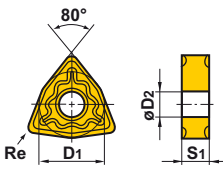
Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
SH Breaker  Light Cutting	VNMG160404-SH	●	★	9.525	4.76	0.4	3.81	
	160408-SH	●	★	9.525	4.76	0.8	3.81	
Standard Breaker  Medium Cutting	VNMG160404	●	●	9.525	4.76	0.4	3.81	
	160408	●	●	9.525	4.76	0.8	3.81	
	160412	●	●	9.525	4.76	1.2	3.81	
MA Breaker  Medium Cutting	VNMG160404-MA	●	●	9.525	4.76	0.4	3.81	
	160408-MA	●	●	9.525	4.76	0.8	3.81	
MH Breaker  Medium Cutting	VNMG160404-MH	●	●	9.525	4.76	0.4	3.81	
	160408-MH	●	●	9.525	4.76	0.8	3.81	
MP Breaker  Medium Cutting	VNMG160404-MP	●	●	9.525	4.76	0.4	3.81	
	160408-MP	●	●	9.525	4.76	0.8	3.81	
	160412-MP	●	●	9.525	4.76	1.2	3.81	
MS Breaker  Medium Cutting	VNMG160404-MS		★	9.525	4.76	0.4	3.81	
	160408-MS		★	9.525	4.76	0.8	3.81	
MV Breaker  Medium Cutting	VNMG160404-MV	●	●	9.525	4.76	0.4	3.81	
	160408-MV	●	●	9.525	4.76	0.8	3.81	
FH Breaker  Finish Cutting	WNMG080404-FH		★	12.7	4.76	0.4	5.16	
	080408-FH		★	12.7	4.76	0.8	5.16	

UE6105/UE6110


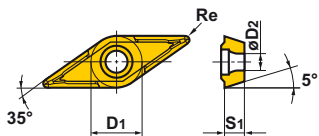

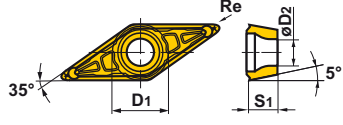
Inserts

● Negative Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
SA Breaker 	WNMG080404-SA	●	●	12.7	4.76	0.4	5.16	
	080408-SA	●	●	12.7	4.76	0.8	5.16	
	080412-SA	●	●	12.7	4.76	1.2	5.16	
Light Cutting								
SH Breaker 	WNMG06T304-SH	●	●	9.525	3.97	0.4	3.81	
	06T308-SH	●	●	9.525	3.97	0.8	3.81	
	06T312-SH		●	9.525	3.97	1.2	3.81	
	060404-SH	●	●	9.525	4.76	0.4	3.81	
	060408-SH	●	●	9.525	4.76	0.8	3.81	
	060412-SH		★	9.525	4.76	1.2	3.81	
	080404-SH	●	★	12.7	4.76	0.4	5.16	
	080408-SH	●	●	12.7	4.76	0.8	5.16	
080412-SH	●	●	12.7	4.76	1.2	5.16		
Light Cutting								
SW Breaker 	WNMG060404-SW	●	●	9.525	4.76	0.4	3.81	
	060408-SW	●	●	9.525	4.76	0.8	3.81	
	080404-SW	●	●	12.7	4.76	0.4	5.16	
	080408-SW	●	●	12.7	4.76	0.8	5.16	
	080412-SW	●	●	12.7	4.76	1.2	5.16	
Light Cutting (Wiper)								
Standard Breaker 	WNMG080404	●	●	12.7	4.76	0.4	5.16	
	080408	●	●	12.7	4.76	0.8	5.16	
	080412	●	●	12.7	4.76	1.2	5.16	
Medium Cutting								
MA Breaker 	WNMG06T304-MA	●	●	9.525	3.97	0.4	3.81	
	06T308-MA	●	●	9.525	3.97	0.8	3.81	
	06T312-MA	●	●	9.525	3.97	1.2	3.81	
	060404-MA	●	●	9.525	4.76	0.4	3.81	
	060408-MA	●	●	9.525	4.76	0.8	3.81	
	060412-MA	●	●	9.525	4.76	1.2	3.81	
	080404-MA	●	●	12.7	4.76	0.4	5.16	
	080408-MA	●	●	12.7	4.76	0.8	5.16	
	080412-MA	●	●	12.7	4.76	1.2	5.16	
080416-MA	●	●	12.7	4.76	1.6	5.16		
Medium Cutting								
MH Breaker 	WNMG080404-MH	●	●	12.7	4.76	0.4	5.16	
	080408-MH	●	●	12.7	4.76	0.8	5.16	
	080412-MH	●	●	12.7	4.76	1.2	5.16	
Medium Cutting								

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		L/E6105	L/E6110	D1	S1	Re	D2	
MP Breaker  Medium Cutting	WNMG060404-MP	●	●	9.525	4.76	0.4	5.16	
	060408-MP	●	●	9.525	4.76	0.8	5.16	
	060412-MP	●	●	9.525	4.76	1.2	5.16	
	06T304-MP	●	●	9.525	4.76	0.4	5.16	
	06T308-MP	●	●	9.525	4.76	0.8	5.16	
	06T312-MP	●	●	9.525	4.76	1.2	5.16	
	080404-MP	●	●	12.7	4.76	0.4	5.16	
	080408-MP	●	●	12.7	4.76	0.8	5.16	
	080412-MP	●	●	12.7	4.76	1.2	5.16	
080416-MP	●	●	12.7	4.76	1.6	5.16		
MS Breaker  Medium Cutting	WNMG06T304-MS		●	9.525	3.97	0.4	3.81	
	06T308-MS		●	9.525	3.97	0.8	3.81	
	060404-MS		★	9.525	4.76	0.4	3.81	
	060408-MS		★	9.525	4.76	0.8	3.81	
	080404-MS		●	12.7	4.76	0.4	5.16	
	080408-MS		●	12.7	4.76	0.8	5.16	
	080412-MS		★	12.7	4.76	1.2	5.16	
MV Breaker  Medium Cutting	WNMG06T304-MV	●	●	9.525	3.97	0.4	3.81	
	06T308-MV	●	●	9.525	3.97	0.8	3.81	
	06T312-MV	●	★	9.525	3.97	1.2	3.81	
	060404-MV	●	●	9.525	4.76	0.4	3.81	
	060408-MV	●	●	9.525	4.76	0.8	3.81	
	060412-MV	●	●	9.525	4.76	1.2	3.81	
	080404-MV	●	●	12.7	4.76	0.4	5.16	
	080408-MV	●	●	12.7	4.76	0.8	5.16	
080412-MV	●	●	12.7	4.76	1.2	5.16		
MW Breaker  Medium Cutting (Wiper)	WNMG060408-MW	●	●	9.525	4.76	0.8	3.81	
	060412-MW	●	●	9.525	4.76	1.2	3.81	
	080408-MW	●	●	12.7	4.76	0.8	5.16	
	080412-MW	●	●	12.7	4.76	1.2	5.16	
GH Breaker  Semi-Heavy Cutting	WNMG080408-GH	●	●	12.7	4.76	0.8	5.16	
	080412-GH	●	●	12.7	4.76	1.2	5.16	


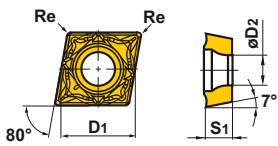

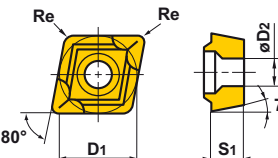

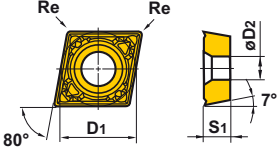

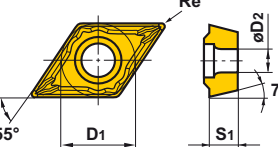

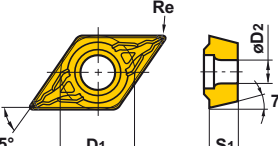

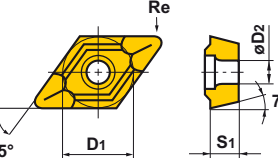
● 5° Positive Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		L/E6105	L/E6110	D1	S1	Re	D2	
Standard Breaker  Medium Cutting	VBMT160404		●	9.525	4.76	0.4	4.43	
	160408		●	9.525	4.76	0.8	4.43	
MV Breaker  Medium Cutting	VBMT160404-MV	●	●	9.525	4.76	0.4	4.43	
	160408-MV	●	●	9.525	4.76	0.8	4.43	


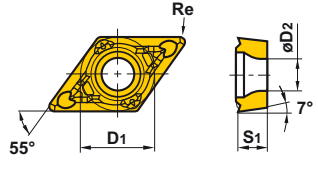

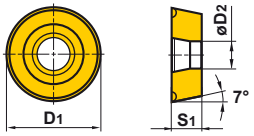

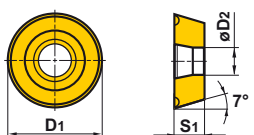

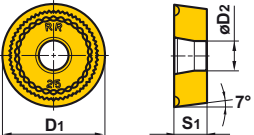

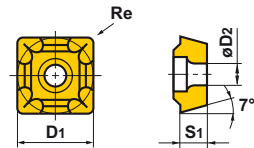

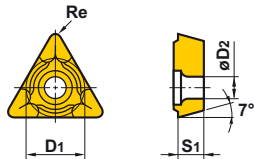

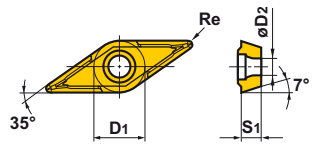
UE6105/UE6110

Inserts

● 7° Positive Inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
NEW SW Breaker  Light Cutting (Wiper)	CCMT060202-SW	●	●	6.35	2.38	0.2	2.8	
	060204-SW	●	●	6.35	2.38	0.4	2.8	
	09T302-SW	●	●	9.525	3.97	0.2	4.4	
	09T304-SW	●	●	9.525	3.97	0.4	4.4	
Standard Breaker  Medium Cutting	CCMT060202		●	6.35	2.38	0.2	2.8	
	060204	●	●	6.35	2.38	0.4	2.8	
	060208		●	6.35	2.38	0.8	2.8	
	080302		●	7.94	3.18	0.2	3.4	
	080304		●	7.94	3.18	0.4	3.4	
	080308		●	7.94	3.18	0.8	3.4	
	09T302		●	9.525	3.97	0.2	4.4	
	09T304	●	●	9.525	3.97	0.4	4.4	
	09T308	●	●	9.525	3.97	0.8	4.4	
	120404	★	●	12.7	4.76	0.4	5.5	
120408	★	●	12.7	4.76	0.8	5.5		
120412		●	12.7	4.76	1.2	5.5		
NEW MW Breaker  Medium Cutting (Wiper)	CCMT060208-MW		●	6.35	2.38	0.8	2.8	
	09T304-MW		●	9.525	3.97	0.4	4.4	
	09T308-MW		●	9.525	3.97	0.8	4.4	
	120404-MW		●	12.7	4.76	0.4	5.5	
	120408-MW		●	12.7	4.76	0.8	5.5	
FV Breaker  Finish Cutting	DCMT070202-FV		●	6.35	2.38	0.2	2.8	
	070204-FV		●	6.35	2.38	0.4	2.8	
	11T304-FV		●	9.525	3.97	0.4	4.4	
	11T308-FV		●	9.525	3.97	0.8	4.4	
SV Breaker  Light Cutting	DCMT070202-SV		□	6.35	2.38	0.2	2.8	
	070204-SV		●	6.35	2.38	0.4	2.8	
	070208-SV		●	6.35	2.38	0.8	2.8	
	11T302-SV		●	9.525	3.97	0.2	4.4	
	11T304-SV		●	9.525	3.97	0.4	4.4	
11T308-SV		●	9.525	3.97	0.8	4.4		
Standard Breaker  Medium Cutting	DCMT070202		●	6.35	2.38	0.2	2.8	
	070204	●	●	6.35	2.38	0.4	2.8	
	070208		□	6.35	2.38	0.8	2.8	
	11T302		●	9.525	3.97	0.2	4.4	
	11T304	●	●	9.525	3.97	0.4	4.4	
	11T308	●	●	9.525	3.97	0.8	4.4	
	11T312		★	9.525	3.97	1.2	4.4	
	150404		●	12.7	4.76	0.4	5.5	
150408		●	12.7	4.76	0.8	5.5		
150412		●	12.7	4.76	1.2	5.5		


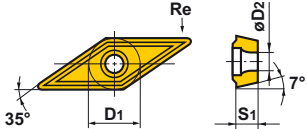

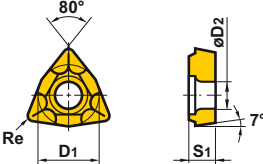
● : Inventory maintained. ★ : Inventory maintained in Japan. □ : Non stock, produced to order only.

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
MV Breaker  Medium Cutting	DCMT070202-MV		●	6.35	2.38	0.2	2.8	
	070204-MV		●	6.35	2.38	0.4	2.8	
	070208-MV		●	6.35	2.38	0.8	2.8	
	11T302-MV		●	9.525	3.97	0.2	4.4	
	11T304-MV		●	9.525	3.97	0.4	4.4	
	11T308-MV		●	9.525	3.97	0.8	4.4	
Standard Breaker  Medium Cutting	RCMT0602M0		●	6	2.38	—	2.8	
	0803M0		●	8	3.18	—	3.4	
Standard Breaker  Medium Cutting	RCMX1003M0		●	10	3.18	—	3.6	
	1204M0	●	●	12	4.76	—	4.2	
	1606M0	●	●	16	6.35	—	5.2	
	2006M0	●	●	20	6.35	—	6.5	
	2507M0	●	●	25	7.94	—	7.2	
	3209M0	●	●	32	9.52	—	9.5	
RR Breaker  Medium Cutting	RCMX1606M0-RR		●	16	6.35	—	5.2	
	2006M0-RR		●	20	6.35	—	6.5	
	2507M0-RR		●	25	7.94	—	7.2	
	3209M0-RR		●	32	9.52	—	9.5	
Standard Breaker  Medium Cutting	SCMT09T304	●	●	9.525	3.97	0.4	4.4	
	09T308	●	●	9.525	3.97	0.8	4.4	
	120404	●	●	12.7	4.76	0.4	5.5	
	120408	●	●	12.7	4.76	0.8	5.5	
	120412		●	12.7	4.76	1.2	5.5	
Standard Breaker  Medium Cutting	TCMT090204		●	5.56	2.38	0.4	2.5	
	110202		●	6.35	2.38	0.2	2.8	
	110204	★	●	6.35	2.38	0.4	2.8	
	110208	★	★	6.35	2.38	0.8	2.8	
	130304		●	7.94	3.18	0.4	3.4	
	16T304		●	9.525	3.97	0.4	4.4	
	16T308		●	9.525	3.97	0.8	4.4	
16T312		●	9.525	3.97	1.2	4.4		
FV Breaker  Finish Cutting	VCMT160404-FV		●	9.525	4.76	0.4	4.4	
	160408-FV		●	9.525	4.76	0.8	4.4	


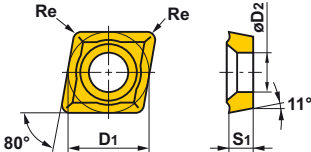
UE6105/UE6110

Inserts

● 7° Positive Inserts (With hole)


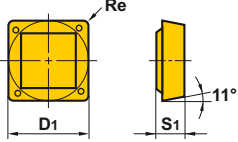

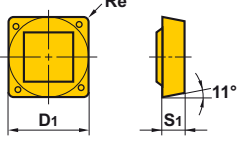

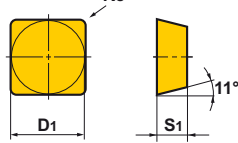

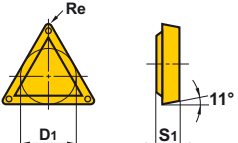

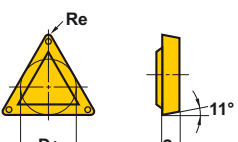

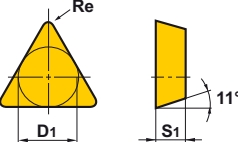
Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
Standard Breaker  Medium Cutting	VCMT110304		●	6.35	3.18	0.4	2.8	
	160404	●	●	9.525	4.76	0.4	4.4	
	160408	●	●	9.525	4.76	0.8	4.4	
	160412		●	9.525	4.76	1.2	4.4	
Standard Breaker  Medium Cutting	WCMT020102		★	3.97	1.59	0.2	2.3	
	020104		★	3.97	1.59	0.4	2.3	
	L30202		★	4.76	2.38	0.2	2.3	
	L30204		★	4.76	2.38	0.4	2.3	
	040202		★	6.35	2.38	0.2	2.8	
	040204		★	6.35	2.38	0.4	2.8	
	06T304		★	9.525	3.97	0.4	4.4	
06T308		★	9.525	3.97	0.8	4.4		

● 11° Positive inserts (With hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	D2	
Standard Breaker  Medium Cutting	CPMX080204		★	7.94	2.38	0.4	3.5	
	080208		★	7.94	2.38	0.8	3.5	
	090304		★	9.525	3.18	0.4	4.6	
	090308		★	9.525	3.18	0.8	4.6	

Inserts


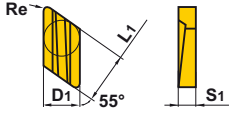
● 11° Positive Inserts (Without hole)

Shape	Order Number	Stock		Dimensions (mm)			Geometry
		UE6105	UE6110	D1	S1	Re	
Standard Breaker  Light to Medium Cutting	SPMR090304		●	9.525	3.18	0.4	
	090308		●	9.525	3.18	0.8	
	120304		●	12.7	3.18	0.4	
	120308		●	12.7	3.18	0.8	
	120312		●	12.7	3.18	1.2	
80 Breaker NEW  Light to Medium Cutting	SPMR090308-80		●	9.525	3.18	0.8	
	120308-80		●	12.7	3.18	0.8	
Flat Top NEW  Light to Medium Cutting	SPMN090308		●	9.525	3.18	0.8	
	120304		●	12.7	3.18	0.4	
	120308		●	12.7	3.18	0.8	
	120312		●	12.7	3.18	1.2	
	190412		★	19.05	4.76	1.2	
Standard Breaker  Light to Medium Cutting	TPMR090204		●	5.56	2.38	0.4	
	090208		●	5.56	2.38	0.8	
	110302		●	6.35	3.18	0.2	
	110304		●	6.35	3.18	0.4	
	110308		●	6.35	3.18	0.8	
	160304		●	9.525	3.18	0.4	
	160308		●	9.525	3.18	0.8	
	160312		●	9.525	3.18	1.2	
80 Breaker NEW  Light to Medium Cutting	TPMR110304-80		●	6.35	3.18	0.4	
	110308-80		●	6.35	3.18	0.8	
	160304-80		●	9.525	3.18	0.4	
	160308-80		●	9.525	3.18	0.8	
Flat Top NEW  Light to Medium Cutting	TPMN110304		●	6.35	3.18	0.4	
	110308		★	6.35	3.18	0.8	
	160304		●	9.525	3.18	0.4	
	160308		●	9.525	3.18	0.8	
	160312		★	9.525	3.18	1.2	
	220404		★	12.7	4.76	0.4	
	220408		★	12.7	4.76	0.8	
	220412		★	12.7	4.76	1.2	

UE6105/UE6110

Inserts

● Negative Inserts (Without hole)

Shape	Order Number	Stock		Dimensions (mm)				Geometry
		UE6105	UE6110	D1	S1	Re	L1	
R/L-M12 Breaker  Semi-Heavy Cutting	KNUX160405R-M1		●	9.525	4.76	0.5	16.15	
	160405L-M1		●	9.525	4.76	0.5	16.15	
	160410R-M1		●	9.525	4.76	1.0	16.15	
	160410L-M1		●	9.525	4.76	1.0	16.15	
	160405R-M2		●	9.525	4.76	0.5	16.15	
	160405L-M2		●	9.525	4.76	0.5	16.15	
	160410R-M2		●	9.525	4.76	1.0	16.15	
	160410L-M2		●	9.525	4.76	1.0	16.15	



www.mitsubishicarbide.com

MMC HARTMETALL GmbH
Comeniusstr. 2, 40670 Meerbusch, Germany
Tel. +49-2159-91890 Fax +49-2159-918966
e-mail marketing@mmchg.de

MITSUBISHI MATERIALS ESPAÑA, S.A.
C/Emperador 2, 46136 Museros, Valencia, Spain
Tel. +34-96-144-1711 Fax +34-96-144-3786
e-mail mme@mmevalencia.com

MITSUBISHI HARDMETAL RUSSIA OOO LTD.
ul. Bolschaja Pochtovaja, d.36, str.1 105082 Moscow, Russia
Tel. +007-095-72558-85 Fax +007-095-72558-85
e-mail mmc-moscow@lescom.ru

MMC HARDMETAL U.K. LTD.
Mitsubishi House, Galena Close, Tamworth, B77 4AS, U.K.
Tel. +44-1827-312312 Fax +44-1827-312314
e-mail sales@mitsubishicarbide.co.uk

MMC ITALIA S.r.l.
V.le delle Industrie 20/5, 20020 Arese (Mi)
Tel. +39-02 93 77 03 1 Fax +39-02 93 58 90 93
e-mail info@mmc-italia.it

MMC METAL FRANCE S.A.R.L.
6, rue Jacques Monod, 91893 Orsay Cedex, France
Tel. +33-1-69 35 53 53 Fax +33-1-69 35 53 50
e-mail mmfsales@mmc-metal-france.fr

MMC HARDMETAL POLAND Sp. z o.o.
Armii Karjowej 61, Wroclaw, Poland
Tel. +48-71-3351-620 Fax +48-71-3351-620
e-mail mmc@mhpl.pl