

New CVD Coated Grade for High Speed Turning of Steels

UE6105

LP/RP
Chip Breaker
Expansion

Leading edge technology for high efficiency steel turning.

The 2 in 1 coating technology ensures longer tool life.



New CVD Coated Grade for High Speed Turning of Steels

UE6105

Superior machining performance achieved using 2 in 1 technology

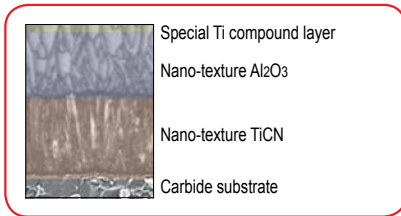
High Crater Wear Resistance

The gold Ti compound coating on the rake face exhibits high crater wear resistance. It also enhances the crater wear resistance of the nano-texture Al₂O₃.

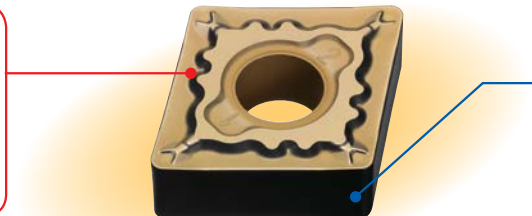
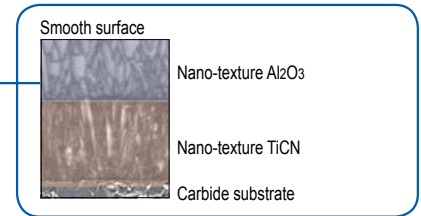
High Flank Wear Resistance

The black coating on the flank face has an extremely smooth surface, this prevents abnormal wear and weld chipping, leading to improved surface finishes and stable tool life.

Coating structure on the rake face



Coating structure on the flank face



Superior wear resistance when dry high-speed machining.

UE6105-MA breaker	Competitor's
Cutting Speed : 350m/min	Cutting Speed : 300m/min
Cutting Time : 4min	Cutting Time : 4min
	<p>Large crater wear</p> <p>Large flank wear</p>

<Cutting Conditions>

- Insert : CNMG120408-○○○
- Tool : PCLNL2525M12
- Feed : 0.3mm/rev
- Depth of cut : 1.5mm
- Coolant : Dry cutting
- External continuous cutting
- indicates types of general-purpose chip breakers from respective companies.

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

1 Wear resistant nano-texture Al₂O₃

High speed and high efficiency machining can be achieved due to the thickened Al₂O₃ layer.

2 Black super-smooth coating

Improved surface finishes and stable tool life can be obtained due to the use of the black super smooth coating. This coating limits wear development and weld chipping.

Comparison of Al₂O₃ structure

Conventional Al₂O₃

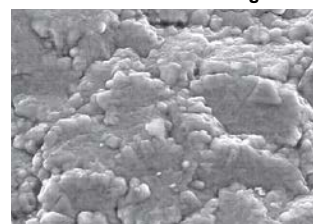


Nano-texture Al₂O₃



Comparison of coating surface

Conventional coating



Black super-smooth coating



Application Range and Recommended Cutting Conditions

UE6105 is the first recommendation for high speed steel turning. It is suitable for turning mild, carbon and alloy steels.

Application Range	
ISO	Steel
P01	UE6105
P10	UE6110
P20	MC6025
P30	UE6020
P40	UE6035
	UH6400

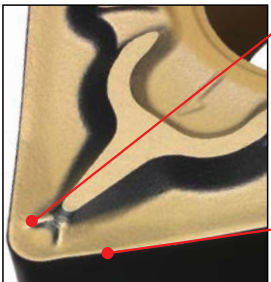
RECOMMENDED CUTTING CONDITIONS

Negative Inserts (External turning tools)

Work Material	Hardness	Cutting Mode		Breaker	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)
P Carbon Steel, Alloy Steel (Ck45, 42CrMo4)	180—280HB	Stable Cutting	Light Cutting	LP	220—405	0.10—0.40	0.30—2.00
		Stable Cutting	Medium Cutting	MP	200—370	0.16—0.50	0.30—4.00
		Stable Cutting	Rough Cutting	RP	190—350	0.25—0.60	1.50—6.00

Addition of New Chip Breakers

NEW LP for light cutting



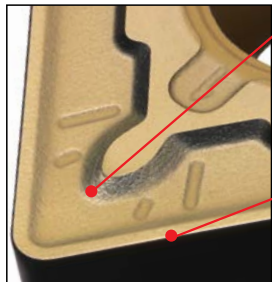
Butterfly protrusions are optimized for different cutting conditions.

Chips curl upwards to reduce cutting resistance for improved surface finishes. The breaker protrusion is highly resistant to wear even during high-speed machining, delivering stable chip breaking for long periods of time.

Excels in copy machining

A sharp edge delivers excellent chip breaking during copy machining and reverse face machining.

NEW RP for rough cutting

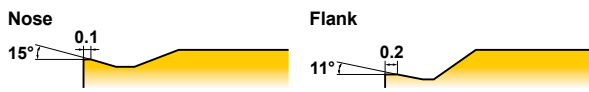


Peninsular protrusion optimised for rough cutting.

For efficient chip breaking over a wide range of rough turning applications. The gradually sloped cutting face prevents chip clogging and reduces crater wear.

High fracture resistance

The edge has a strong flat land and broad chip pocket to reduce clogging and fracturing during chamfering.



Optimum Selection of Insert

P Carbon Steel, Alloy Steel NEGATIVE INSERTS

Finish Cutting	Light Cutting	Medium Cutting	Rough Cutting	Heavy Cutting
FH AP25N	LP UE6105	MP UE6105	RP UE6105	HX UE6110
FH MP3025	LP UE6110	MP UE6110	RP UE6110	HX UE6020
FH UE6110	LP MC6025	MP MC6025	RP MC6025	HX UH6400

CUTTING CONDITIONS


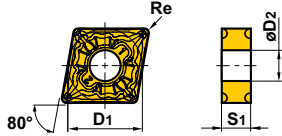

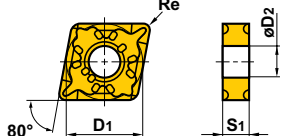

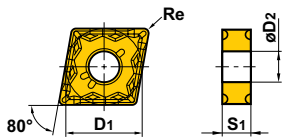

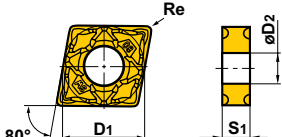

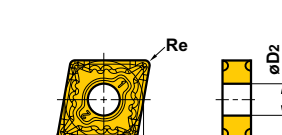

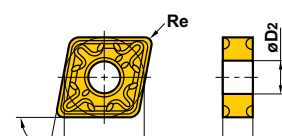
●	Stable Cutting	Continuous Cutting Constant Depth of Cut Pre-Machined Securely Clamped Component
○	General Cutting	
⊕	Unstable Cutting	Heavy Interrupted Cutting Irregular Depth of Cut Low Clamping Rigidity

CUTTING AREA


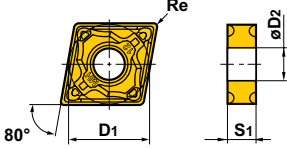

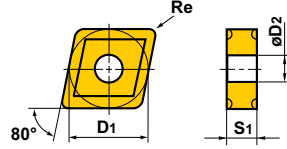

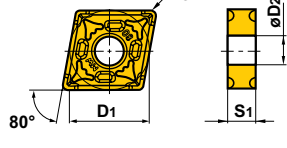

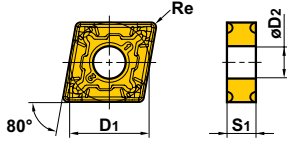

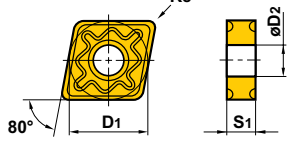

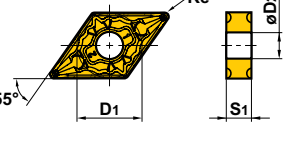
F	Finish Cutting
L	Light Cutting
M	Medium Cutting
R	Rough Cutting
H	Heavy Cutting

Inserts

Negative Inserts (With hole)


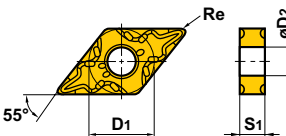

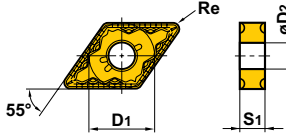

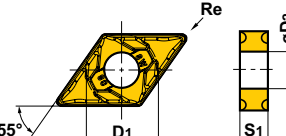

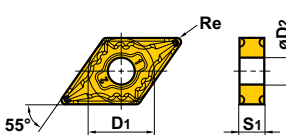
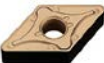
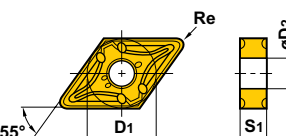
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
	CNMG120404-LP	●	12.7	4.76	0.4	5.16	
	120408-LP	●	12.7	4.76	0.8	5.16	
	120412-LP	●	12.7	4.76	1.2	5.16	
Light Cutting							
	CNMG120404-SH	●	12.7	4.76	0.4	5.16	
	120408-SH	●	12.7	4.76	0.8	5.16	
	120412-SH	●	12.7	4.76	1.2	5.16	
Light Cutting							
	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	
Light Cutting							
	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)							
	CNMG120404-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	
	120416-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		
Medium Cutting							
	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	
Medium Cutting	190612-MA	●	19.05	6.35	1.2	7.93	

● : Inventory maintained.


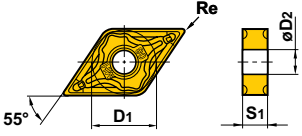

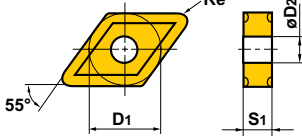

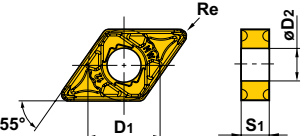

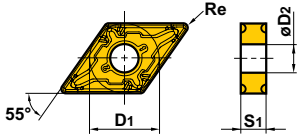

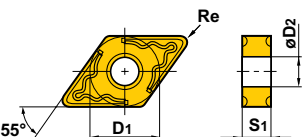

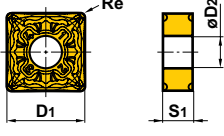
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
	CNMG120404-MH	●	12.7	4.76	0.4	5.16	
	120408-MH	●	12.7	4.76	0.8	5.16	
	120412-MH	●	12.7	4.76	1.2	5.16	
	120416-MH	●	12.7	4.76	1.6	5.16	
	160608-MH	●	15.875	6.35	0.8	6.35	
	160612-MH	●	15.875	6.35	1.2	6.35	
	160616-MH	●	15.875	6.35	1.6	6.35	
	190612-MH	●	19.05	6.35	1.2	7.93	
Medium Cutting	190616-MH	●	19.05	6.35	1.6	7.93	
	CNMG120404	●	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	
Medium Cutting	190612	●	19.05	6.35	1.2	7.93	
	190616	●	19.05	6.35	1.6	7.93	
	CNMG120408-MW	●	12.7	4.76	0.8	5.16	
	120412-MW	●	12.7	4.76	1.2	5.16	
Medium Cutting (Wiper)							
	CNMG120408-RP	●	12.7	4.76	0.8	5.16	
	120412-RP	●	12.7	4.76	1.2	5.16	
	120416-RP	●	12.7	4.76	1.6	5.16	
	160612-RP	●	15.875	6.35	1.2	6.35	
	160616-RP	●	15.875	6.35	1.6	6.35	
	190612-RP	●	19.05	6.35	1.2	7.93	
Rough Cutting	190616-RP	●	19.05	6.35	1.6	7.93	
	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	
Rough Cutting	190616-GH	●	19.05	6.35	1.6	7.93	
	DNMG110404-LP	●	9.525	4.76	0.4	3.81	
	110408-LP	●	9.525	4.76	0.8	3.81	
	150404-LP	●	12.7	4.76	0.4	5.16	
	150408-LP	●	12.7	4.76	0.8	5.16	
	150412-LP	●	12.7	4.76	1.2	5.16	
	150604-LP	●	12.7	6.35	0.4	5.16	
	150608-LP	●	12.7	6.35	0.8	5.16	
	Light Cutting	150612-LP	●	12.7	6.35	1.2	

Inserts

Negative Inserts (With hole)


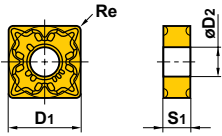

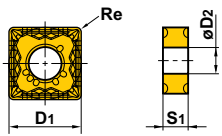

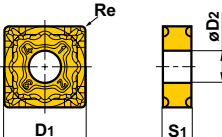

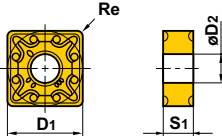

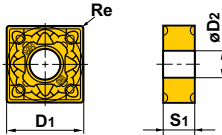

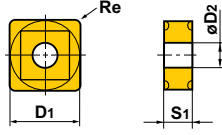
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
 Light Cutting	DNMG110404-SH	●	9.525	4.76	0.4	3.81	
	110408-SH	●	9.525	4.76	0.8	3.81	
	150404-SH	●	12.7	4.76	0.4	5.16	
	150408-SH	●	12.7	4.76	0.8	5.16	
	150412-SH	●	12.7	4.76	1.2	5.16	
	150604-SH	●	12.7	6.35	0.4	5.16	
	150608-SH	●	12.7	6.35	0.8	5.16	
	150612-SH	●	12.7	6.35	1.2	5.16	
 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	
 Light Cutting (Wiper)	DNMX110404-SW	●	9.525	4.76	0.4	3.81	
	110408-SW	●	9.525	4.76	0.8	3.81	
	150404-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	
 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	
	150616-MP	●	12.7	6.35	1.6	5.16	
 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	
	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	

● : Inventory maintained.


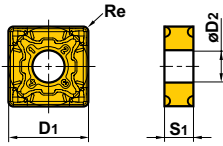

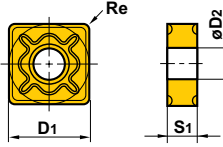

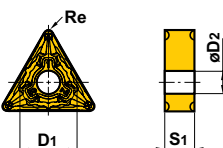



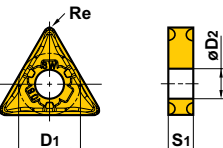

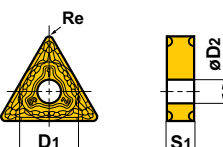
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
MH  Medium Cutting	DNMG150404-MH	●	12.7	4.76	0.4	5.16	
	150408-MH	●	12.7	4.76	0.8	5.16	
	150412-MH	●	12.7	4.76	1.2	5.16	
	150604-MH	●	12.7	6.35	0.4	5.16	
	150608-MH	●	12.7	6.35	0.8	5.16	
	150612-MH	●	12.7	6.35	1.2	5.16	
Standard  Medium Cutting	DNMG150404	●	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	
	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	
MW  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	
NEW RP  Rough Cutting	DNMG150408-RP	●	12.7	4.76	0.8	5.16	
	150412-RP	●	12.7	4.76	1.2	5.16	
	150416-RP	★	12.7	4.76	1.6	5.16	
	150608-RP	●	12.7	6.35	0.8	5.16	
	150612-RP	●	12.7	6.35	1.2	5.16	
	150616-RP	●	12.7	6.35	1.6	5.16	
GH  Rough 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	
NEW LP  Light Cutting	SNMG120404-LP	●	12.7	4.76	0.4	5.16	
	120408-LP	●	12.7	4.76	0.8	5.16	
	120412-LP	●	12.7	4.76	1.2	5.16	

Inserts

Negative Inserts (With hole)


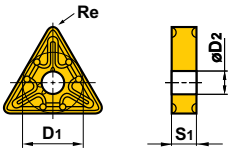

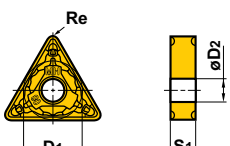

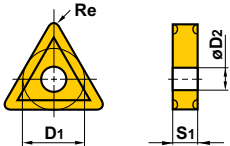

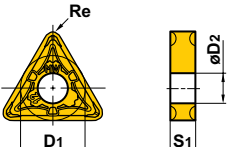

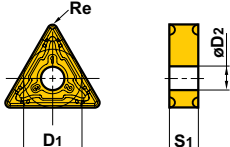

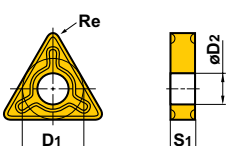
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
SH  Light Cutting	SNMG120408-SH	●	12.7	4.76	0.8	5.16	
SA  Light Cutting	SNMG120408-SA	●	12.7	4.76	0.8	5.16	
MP  Medium Cutting	SNMG120404-MP	●	12.7	4.76	0.4	5.16	
	120408-MP	●	12.7	4.76	0.8	5.16	
	120412-MP	●	12.7	4.76	1.2	5.16	
MA  Medium Cutting	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	
	190612-MA	●	19.05	6.35	1.2	7.93	
	190616-MA	●	19.05	6.35	1.6	7.93	
MH  Medium Cutting	SNMG120408-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	
Standard  Medium Cutting	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	
	150612	●	15.875	6.35	1.2	6.35	
	190612	●	19.05	6.35	1.2	7.93	
	190616	●	19.05	6.35	1.6	7.93	

● : Inventory maintained.

Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
NEW RP  Rough Cutting	SNMG120408-RP	●	12.7	4.76	0.8	5.16	
	120412-RP	●	12.7	4.76	1.2	5.16	
	120416-RP	●	12.7	4.76	1.6	5.16	
	150612-RP	●	15.875	6.35	1.2	6.35	
	150616-RP	●	15.875	6.35	1.6	6.35	
	190612-RP	●	19.05	6.35	1.2	7.93	
	190616-RP	●	19.05	6.35	1.6	7.93	
GH  Rough 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	
	190612-GH	●	19.05	6.35	1.2	7.93	
	190616-GH	●	19.05	6.35	1.6	7.93	
NEW LP  Light Cutting	TNMG160404-LP	●	9.525	4.76	0.4	3.81	
	160408-LP	●	9.525	4.76	0.8	3.81	
	160412-LP	●	9.525	4.76	1.2	3.81	
	220408-LP	●	12.7	4.76	0.8	5.16	
	220412-LP	●	12.7	4.76	1.2	5.16	
	SH  Light Cutting	TNMG160404-SH	●	9.525	4.76	0.4	
160408-SH		●	9.525	4.76	0.8	3.81	
220408-SH		●	12.7	4.76	0.8	5.16	
SA  Light Cutting		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	
SW  Light Cutting (Wiper)	TNMX160404-SW	●	9.525	4.76	0.4	3.81	
	160408-SW	●	9.525	4.76	0.8	3.81	
MP  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	

Inserts

Negative Inserts (With hole)


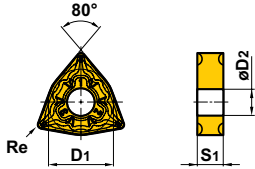

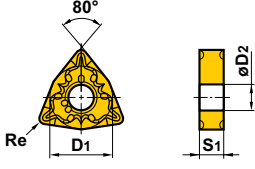

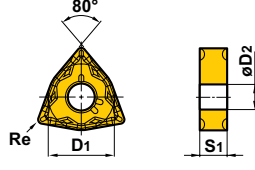

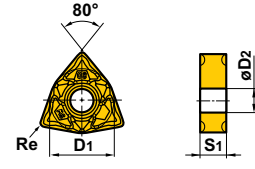

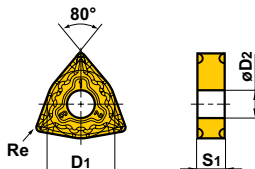
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
 Medium Cutting	TNMG160404-MA	●	9.525	4.76	0.4	3.81	
	160408-MA	●	9.525	4.76	0.8	3.81	
	160412-MA	●	9.525	4.76	1.2	3.81	
	220408-MA	●	12.7	4.76	0.8	5.16	
	220412-MA	●	12.7	4.76	1.2	5.16	
	270608-MA	●	15.875	6.35	0.8	6.35	
	270612-MA	●	15.875	6.35	1.2	6.35	
 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	
 Medium Cutting	TNMG160404	●	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	
	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	
 Medium Cutting (Wiper)	TNMX160408-MW	●	9.525	4.76	0.8	3.81	
	160412-MW	●	9.525	4.76	1.2	3.81	
 Rough Cutting	TNMG160408-RP	●	9.525	4.76	0.8	3.81	
	160412-RP	●	9.525	4.76	1.2	3.81	
	220408-RP	●	12.7	4.76	0.8	5.16	
	220412-RP	●	12.7	4.76	1.2	5.16	
	220416-RP	●	12.7	4.76	1.6	5.16	
	270612-RP	★	15.875	6.35	1.2	6.35	
	270616-RP	★	15.875	6.35	1.6	6.35	
 Rough 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	

● : Inventory maintained.


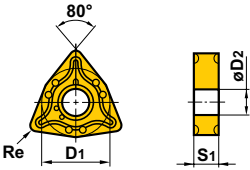

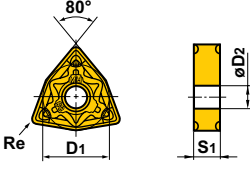

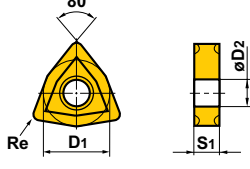

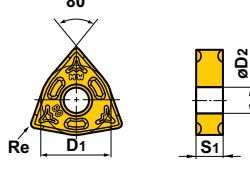

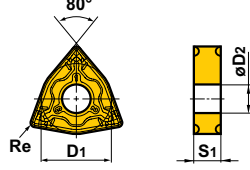

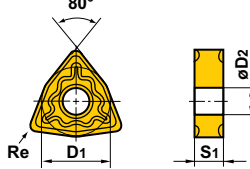
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
NEW LP	VNMG160404-LP	●	9.525	4.76	0.4	3.81	
	160408-LP	●	9.525	4.76	0.8	3.81	
Light Cutting							
SH	VNMG160404-SH	●	9.525	4.76	0.4	3.81	
	160408-SH	●	9.525	4.76	0.8	3.81	
Light Cutting							
MP	VNMG160404-MP	●	9.525	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	
Medium Cutting							
MA	VNMG160404-MA	●	9.525	4.76	0.4	3.81	
	160408-MA	●	9.525	4.76	0.8	3.81	
Medium Cutting							
MH	VNMG160404-MH	●	9.525	4.76	0.4	3.81	
	160408-MH	●	9.525	4.76	0.8	3.81	
Medium Cutting							
Standard	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	
Medium Cutting							

Inserts

Negative Inserts (With hole)


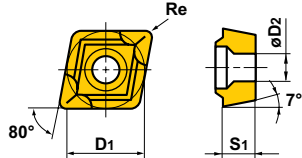
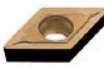
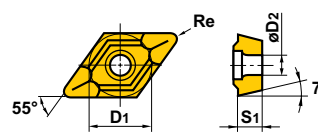

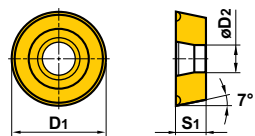

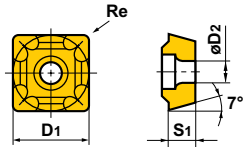

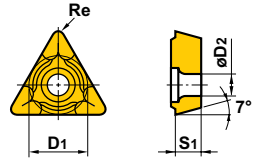

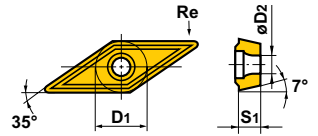
Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
 Light Cutting	WNUMG06T304-LP	●	9.525	3.97	0.4	3.81	
	06T308-LP	●	9.525	3.97	0.8	3.81	
	060404-LP	●	9.525	4.76	0.4	3.81	
	060408-LP	●	9.525	4.76	0.8	3.81	
	080404-LP	●	12.7	4.76	0.4	5.16	
	080408-LP	●	12.7	4.76	0.8	5.16	
	080412-LP	●	12.7	4.76	1.2	5.16	
 Light Cutting	WNUMG06T304-SH	●	9.525	3.97	0.4	3.81	
	06T308-SH	●	9.525	3.97	0.8	3.81	
	060404-SH	●	9.525	4.76	0.4	3.81	
	060408-SH	●	9.525	4.76	0.8	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	WNUMG080404-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 (Wiper)	WNUMG060404-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	
 Medium Cutting	WNUMG06T304-MP	●	9.525	3.97	0.4	3.81	
	06T308-MP	●	9.525	3.97	0.8	3.81	
	06T312-MP	●	9.525	3.97	1.2	3.81	
	060404-MP	●	9.525	4.76	0.4	3.81	
	060408-MP	●	9.525	4.76	0.8	3.81	
	060412-MP	●	9.525	4.76	1.2	3.81	
	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	

● : Inventory maintained.

Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D1	S1	Re	D2	
MA  Medium Cutting	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	
MH  Medium Cutting	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	
Standard  Medium Cutting	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	
MW  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	
NEW RP  Rough Cutting	WNMG080408-RP	●	12.7	4.76	0.8	5.16	
	080412-RP	●	12.7	4.76	1.2	5.16	
GH  Rough Cutting	WNMG080408-GH	●	12.7	4.76	0.8	5.16	
	080412-GH	●	12.7	4.76	1.2	5.16	

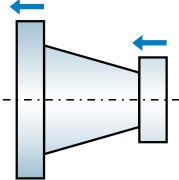
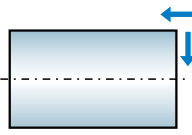
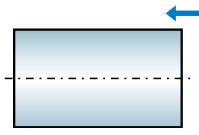
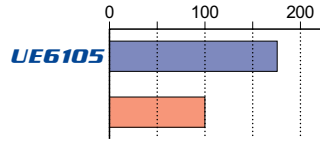
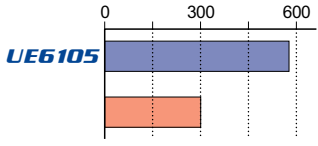

Inserts

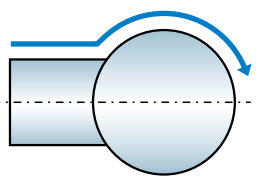
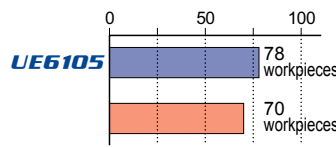
7° Positive inserts (With hole)

Shape	Order Number	Stock	Dimensions (mm)				Geometry
		<i>UE6105</i>	D ₁	S ₁	Re	D ₂	
	Standard CCMT060204	●	6.35	2.38	0.4	2.8	
	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	
Medium Cutting							
	Standard DCMT070204	●	6.35	2.38	0.4	2.8	
	11T304	●	9.525	3.97	0.4	4.4	
	11T308	●	9.525	3.97	0.8	4.4	
Medium Cutting							
	Standard RCMX1204M0	●	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	
Medium Cutting							
	Standard 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	
Medium Cutting							
	Standard TCMT110204	●	6.35	2.38	0.4	2.8	
	110208	●	6.35	2.38	0.8	2.8	
	16T304	●	9.525	3.97	0.4	4.4	
	16T308	●	9.525	3.97	0.8	4.4	
Medium Cutting							
	Standard VCMT160404	●	9.525	4.76	0.4	4.4	
	160408	●	9.525	4.76	0.8	4.4	
Medium Cutting							

● : Inventory maintained.

Application Examples

Insert		CNMG160612-GH	CNMG120408-SW	DNMG150404-LP
Work material		21NiCrMo2 (Cone) 	100Cr6 (Bar) 	25CrMo4 (Input Shaft) 
Cutting conditions	Cutting speed (m/min)	270	400	240
	Feed (mm/rev)	0.5	0.2 – 0.25	0.2
	Depth of cut (mm)	3.0	1.0 – 1.5	0.5
Coolant		Wet	Wet	Wet
Result		 <p>UE6105 displays excellent wear resistance and achieved 1.5 times longer tool life than the competitors grade.</p>	 <p>UE6105 displays excellent chipping resistance and achieved 1.5 times longer tool life than the competitors grade.</p>	 <p>UE6105 displayed no abnormal damage and produced less wear than competitors tools after a long, constant machining cycle.</p>

Insert		DNMG150612-RP
Work material		Ck55 (Ball joint) 
Cutting conditions	Cutting speed (m/min)	280
	Feed (mm/rev)	0.6
	Depth of cut (mm)	2.0
Coolant		Wet
Result		 <p>UE6105 RP breaker extended tool life compared to a competitors' tool due to the excellent chip control.</p>



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