Métaldur

Member IMC Group

M Turn

GRADE	ISO RANGE	FEATURES & APPLICATION
CW210 **UNCOATED**	N10 – N15	• For aluminum machining • Uncoated grade
UPGRADE CW820 **CVD COATED**	K10 – K20	• High speed machining in cast iron machining • Combination thick Al_2O_3 coating layer and high wear resistant substrate for extreme wear resistance. • TiCN-Al_2O_3-TiN
UPGRADE CW9015 **CVD COATED**	P05 – P25	• First recommendation for high speed machining in steel • Good combination of wear resistance and toughness • TiN-TiCN-Al_2O_3-TiN • Improved chipping resistance
UPGRADE CW9025 **CVD COATED**	P15 – P35	• For general machining in steel • Wide application range due to good wear resistance and toughness • TiN-TiCN-Al_2O_3-TiN • Improved chipping resistance
CW8035 **CVD COATED**	P20 – P40 M30 – M40	• For low carbon steel, low carbon alloy steel and stainless steel • Interrupted cutting in general steel • Excellent toughness • TiN-TiCN-Al_2O_3-TiN
CW610 **UNCOATED**	P05 – P25 M05 – M15	• A cermet grade, used for grooving and turning applications. Recommended for semi-finishing and finishing operations when excellent surface finish is required. Wear resistant, prevents built-up edge.

M Cut

GRADE	ISO RANGE	FEATURES & APPLICATION
CW9800 **PVD COATED**	P15 – P35 M10 – M30 K10 – K30 S10 – S25	• For steel and stainless steel machining • Improved tool life • TiAlN
CW9235 **PVD COATED**	P30 – P45 M30 – M45 K20 – K40 N15 – N30 S20 – S30	• For roughing and low speed applications, high feed machining of steel, stainless steel and cast iron • Coated grade with improved edge strength • TiCN
CW120 **PVD COATED**	P15 – P30 K10 – K20	• Very successful on stainless steel, cast iron and nonferrous materials, good also for interrupted cuts • Has low wear resistance
CW610 **UNCOATED**	P05 – P25 M05 – M15	• A cermet grade, used for grooving and turning applications. Recommended for semi-finishing and finishing operations when excellent surface finish is required. Wear resistant, prevents built-up edge.

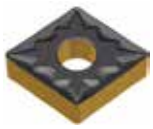
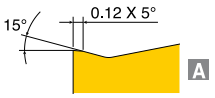
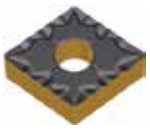
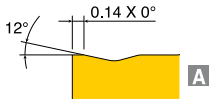
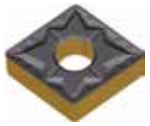
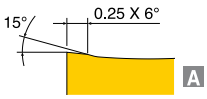
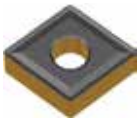
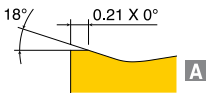
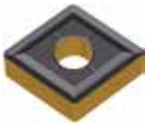
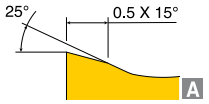
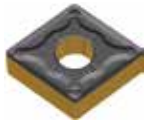
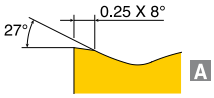
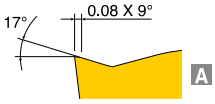
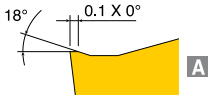
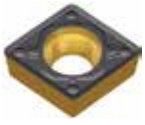
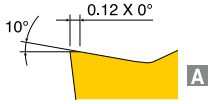
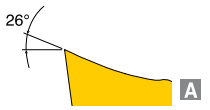
M Mill

GRADE	ISO RANGE	FEATURES & APPLICATION
CW210 **UNCOATED**	N10 – N15	• For cast iron milling • Uncoated grade • For aluminum machining
CW325M **UNCOATED**	P25 – P35	• For steel milling • Uncoated grade
CW235 **UNCOATED**	P30 – P50 M30 – M40 N10 – N30 S20 – S25	•Uncoated carbide grade. Used mainly for machining aluminum at medium cutting speeds with medium to large chip sections. •The inserts usually feature very sharp cutting angles.
CW208 **UNCOATED**	M10 – M30 N10 – N25 S10 – S30	• Uncoated, fine grain carbide grade. Used for stainless steel and high temperature alloys at low to medium cutting speeds.
CW9200 **PVD COATED**	K05 – K20 N05 – N20 H05 – H20	• Prolonged tool life in milling of cast iron • Wear resistance and enhanced substrate • AlTiAlN
WP7320 **PVD COATED**	K05 – K20 N05 – N20 H05 – H20	• Prolonged tool life in milling of cast iron • Wear resistance and enhanced substrate • TiAlN + TiN
CW9235 **PVD COATED**	P30 – P45 M30 – M45 K20 – K40 N15 – N30 S20 – S30	• For roughing and low speed applications, high feed machining of steel, stainless steel and cast iron • Coated grade with improved edge strength • TiCN
WP8330 **PVD COATED**	P30 – P45 M25 – M40 S15 – S30	• High mechanical shock resistance • PVD TiAlN coating • For semi-roughing and medium machining applications • TiAlN + TiN
CW9300 **PVD COATED**	P15 – P40	• Prolonged tool life in milling of steel • Tough enhanced substrate • TiAlN
WP9320 **PVD COATED**	P10 – P40	• Prolonged tool life in mold & die steel • Wear resistance and toughness enhanced grade • TiAlN + TiN
CW9800 **PVD COATED**	P15 – P35 M10 – M30 K10 – K30 S10 – S25 H15 – H30	• For semi-roughing and medium machining applications • Optimum mechanical shock resistance • TiAlN
WP5320 **PVD COATED**	P15 – P35 M10 – M30 K10 – K30 S10 – S25 H15 – H30	• Prolonged tool life in mold & die steel • Wear resistance and toughness enhanced grade • For semi -roughing and medium machining applications • TiAlN + TiN
CW7800 **CVD COATED**	P20 – P45 M30 – M45	• For heavy duty applications in milling of steel • Improved edge strength and better toughness
CW150 **PVD COATED**	P20 – P35	• For heavy duty applications in milling of steel • Improved edge strength and better toughness
CW8236 **CVD COATED**	P20 – P50 M20 – M30 K20 – K40	• TiCN/TiC/Al_2O_3 multilayer, CVD coated grade. Used for milling grey and nodular cast iron, at medium to high cutting speeds. • A high wear resistant grade.
CW9500 **PVD COATED**	P20 – P50 M20 – M30 K15 – K40 S15 – S40	• A PVD TiAlN coated tough grade. Suitable for milling stainless steel, high temperature alloys and other alloy steels. • Recommended for interrupted cut and heavy operations.

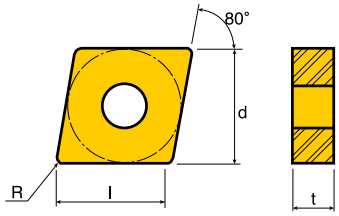
Cutting Conditions

Material		Chipbreaker	CVD			
			CW820	CW9015	CW9025	CW8035
			Cutting speed (m/min)			
Carbon Steel	Low 0.05-0.25% C SM18C	**41 43 45**	-	350-500	200-420	180-350
	Medium 0.25-0.55% C SM45C	**41 43 46**	-	220-380	150-330	120-250
	High 0.55-0.80% C SM55C	**41 43 46 53**	-	180-380	120-300	-
Alloy Steel	Low Alloy SCM415	**41 43 45**	-	180-350	130-300	60-320
	Alloy SCM440	**41 43 46 53**	-	180-350	140-300	60-200
Cast Iron	Grey Cast Iron	**□□MA 46 53**	180-440	90-300	-	-
	Ductile Cast Iron		200-340	90-280	-	-
Stainless Steel		**41 42 45**	-	-	-	100-210

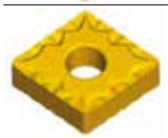
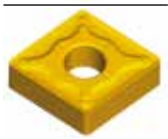
Feature of Chipbreaker

TYPE	INSERT • EDGE GEOMETRY		FEATURE • APPLICATION
NEGATIVE	**41** 		• For medium & finishing • Good chip evacuation in low feed and depth of cut • Excellent chip control
	43 		• Balance between strength and sharpness • For semi finishing to medium machining in steel and alloy steel • Good chip control in profiling
	New **46** 		• Medium for carbon steel and alloy steel • From medium to finishing of cast iron machining • Suitable for continuous to interrupted • Geometry of low cutting force
	53 		• Medium to roughing in steel and cast iron • Strong cutting edge • Recommended for unstable conditions
	42 		• For medium machining in stainless steel and low carbon steel • Low cutting force with sharp edge geometry
	45 		• For medium machining in stainless steel, low carbon steel & low carbon alloy steel • Semi finishing in cast Iron • Minimum of built-up edge from sharp edge geometry
POSITIVE	**41** 		• For finish to medium machining • Good chip evacuation in low feed and depth of cut • Low cutting force & good chip control
	51 		• Medium to roughing in steel and cast iron • Applicable to both interrupted and continuous
	52 		• For semi-finishing to medium machining • Good chip evacuation in low feed and depth of cut • Good chip control
	AU 		• For aluminum machining • Low cutting force, excellent chip evacuation

Negative 80° Insert



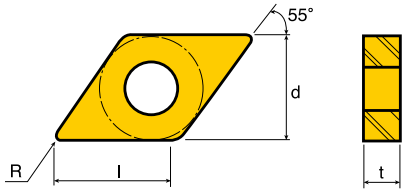
CNM□

Insert	Designation	Dimension (mm)				Recommended Cutting Conditions		Grade				
		l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 CNMA For Cast Iron	**CNMA 120404**	12.4	12.7	4.76	0.4	0.15 - 0.50	1.0 - 5.0	●				
	120408	12.0	12.7	4.76	0.8	0.15 - 0.60	1.0 - 6.0	●				
	120412	11.6	12.7	4.76	1.2	0.15 - 0.70	1.5 - 6.0	●				
 CNMG 41 Finishing & Medium	**CNMG 120404 41**	12.4	12.7	4.76	0.4	0.07 - 0.40	0.3 - 4.5		●	●		●
	120408 41	12.0	12.7	4.76	0.8	0.10 - 0.45	0.3 - 4.5		●	●	●	●
 CNMG 42 For Stainless Steel	**120408 42**	12.0	12.7	4.76	0.8	0.15 - 0.45	0.5 - 4.0			●	●	
	120412 42	11.6	12.7	4.76	1.2	0.17 - 0.50	0.7 - 4.0				●	
 CNMG 43 Semi-finishing & Medium	**CNMG 120404 43**	12.4	12.7	4.76	0.4	0.13 - 0.40	0.4 - 3.0		●	●		
	120408 43	12.0	12.7	4.76	0.8	0.15 - 0.40	0.5 - 3.0		●	●		
	120412 43	11.6	12.7	4.76	1.2	0.17 - 0.45	0.6 - 3.0	●	●	●	●	
 CNMG 45 Medium & Roughing	**CNMG 120404 45**	12.4	12.7	4.76	0.4	0.17 - 0.45	0.5 - 4.0	●	●	●	●	
	120408 45	12.0	12.7	4.76	0.8	0.20 - 0.50	0.5 - 4.0	●	●	●	●	
	120412 45	11.6	12.7	4.76	1.2	0.22 - 0.55	0.8 - 4.0	●	●	●		
 CNMG 52 Medium	**CNMG 120404 52**	12.4	12.7	4.76	0.4	0.10 - 0.30	0.5 - 3.5	●				
	120408 52	12.0	12.7	4.76	0.8	0.12 - 0.35	0.7 - 3.5	●	●	●		
	120412 52	11.6	12.7	4.76	1.2	0.15 - 0.40	0.7 - 3.5	●	●			
 CNMG 53 Medium & Roughing	**CNMG 120404 53**	12.4	12.7	4.76	0.4	0.17 - 0.45	1.0 - 5.0	●				
	120408 53	12.0	12.7	4.76	0.8	0.23 - 0.60	1.5 - 5.0	●	●	●		
	120412 53	11.6	12.7	4.76	1.2	0.25 - 0.60	2.0 - 5.0	●	●	●		

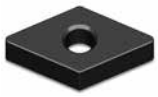
● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 24, 25, 36

Negative 55° Insert



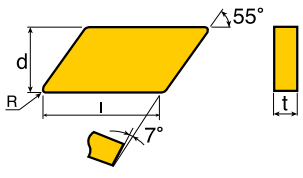
DNM□

Insert		Designation	Dimension (mm)				Recommended Cutting Conditions		Grade					
			l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610	CW9235
	DNMA For Cast Iron	**DNMA 150608**	14.7	12.7	6.35	0.8	0.15 - 0.65	0.8 - 4.0	●					
		150612	14.4	12.7	6.35	1.2	0.15 - 0.65	1.2 - 4.0	●					
	DNMG 41 Finishing & Medium	**DNMG 150408 41**	14.7	12.7	4.76	0.8	0.10 - 0.45	0.5 - 4.0	●	●	●		●	
		150604 41	15.1	12.7	6.35	0.4	0.07 - 0.40	0.3 - 4.0	●	●	●		●	
		150608 41	14.7	12.7	6.35	0.8	0.10 - 0.45	0.5 - 4.0	●	●	●		●	
	DNMG 42 For Stainless Steel	**DNMG 150604 42**	15.1	12.7	6.35	0.4	0.13 - 0.40	0.4 - 4.0				●		
		150608 42	15.1	12.7	6.35	0.8	0.15 - 0.45	0.4 - 4.0				●		
		150612 42	14.7	12.7	6.35	1.2	0.17 - 0.5	0.7 - 4.0				●		
	DNMG 43 Semi-finishing & Medium	**DNMG 150408 43**	14.7	12.7	4.76	0.8	0.12 - 0.35	0.7 - 3.5		●	●			
		150412 43	14.7	12.7	4.76	1.2	0.12 - 0.35	0.7 - 3.5		●	●			
		150608 43	15.1	12.7	6.35	0.8	0.12 - 0.35	0.5 - 3.0		●	●			
		150612 43	14.7	12.7	6.35	1.2	0.15 - 0.35	0.6 - 3.0		●	●			
	DNMG 45 Medium & Roughing	**DNMG 150604 45**	15.1	12.7	6.35	0.4	0.16 - 0.42	0.5 - 4.0		●	●			
		150608 45	15.1	12.7	6.35	0.8	0.18 - 0.45	0.5 - 4.0	●	●	●	●		
		150612 45	14.7	12.7	6.35	1.2	0.20 - 0.45	0.8 - 4.0		●	●			
	DNMG 52 Medium	**DNMG 150404 52**	15.1	12.7	4.76	0.4	0.10 - 0.30	0.5 - 3.5			●			
		150408 52	14.7	12.7	4.76	0.8	0.12 - 0.35	0.7 - 3.5			●			
		150604 52	15.1	12.7	6.35	0.4	0.10 - 0.30	0.5 - 3.5	●		●			
		150608 52	14.7	12.7	6.35	0.8	0.12 - 0.35	0.7 - 3.5	●	●	●			●
		150612 52	14.4	12.7	6.35	1.2	0.10 - 0.35	1.0 - 3.5	●	●	●			
	DNMG 53 Medium & Roughing	**DNMG 150604 53**	15.1	12.7	6.35	0.4	0.17 - 0.45	1.0 - 4.0	●	●	●	●		
		150608 53	14.7	12.7	6.35	0.8	0.17 - 0.55	1.5 - 4.0	●	●	●			
		150612 53	14.4	12.7	6.35	1.2	0.25 - 0.55	1.5 - 4.0	●	●	●			

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 25, 26, 36

Negative 55° Insert



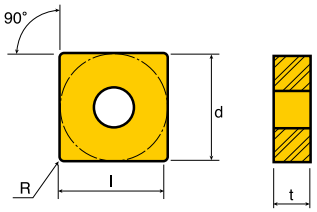
KNUX

Insert		Designation	Dimension (mm)				Recommended Cutting Conditions		Grade
			l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW9025
	**KNUX**	**160405 L11**	19.7	9.52	4.76	0.5	0.15 - 0.35	1.5 - 5.0	●
		160405 R11	19.7	9.52	4.76	0.5	0.15 - 0.35	1.5 - 5.0	●

● For Steel

Holder page: 22

Negative 90° Insert



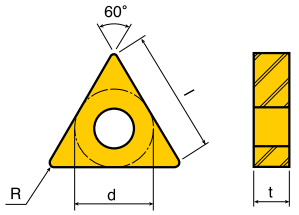
SNM□

Insert		Designation		Dimension (mm)				Recommended Cutting Conditions		Grade			
				l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035
	SNMA For Cast Iron	**SNMA**	**120408**	11.9	12.7	4.76	0.8	0.15 - 0.70	1.0 - 6.0	●			
			120412	11.5	12.7	4.76	1.2	0.20 - 0.80	1.5 - 6.0	●			
	SNMG 42 For Stainless Steel	**SNMG**	**120404 42**	12.3	12.7	4.76	0.4	0.13 - 0.40	0.4 - 4.0				●
			120408 42	11.9	12.7	4.76	0.8	0.15 - 0.45	0.5 - 4.0				●
			120412 42	11.5	12.7	4.76	1.2	0.17 - 0.50	0.7 - 4.0				●
	SNMG 45 Medium & Roughing	**SNMG**	**120404 45**	12.3	12.7	4.76	0.4	0.17 - 0.45	0.5 - 4.0	●	●	●	●
			120408 45	11.9	12.7	4.76	0.8	0.20 - 0.50	0.5 - 4.0	●	●	●	●
			120412 45	11.5	12.7	4.76	1.2	0.22 - 0.55	0.8 - 4.0	●	●	●	●
	SNMG 52 Medium	**SNMG**	**120408 52**	11.9	12.7	4.76	0.8	0.12 - 0.35	0.7 - 3.5	●	●	●	
			120412 52	11.5	12.7	4.76	1.2	0.15 - 0.40	0.7 - 3.5	●	●	●	
	SNMG 53 Medium & Roughing	**SNMG**	**120404 53**	12.3	12.7	4.76	0.4	0.17 - 0.45	1.0 - 5.0	●	●	●	
			120408 53	11.9	12.7	4.76	0.8	0.23 - 0.60	1.5 - 5.0	●	●	●	
			120412 53	11.5	12.7	4.76	1.2	0.25 - 0.60	2.0 - 5.0	●		●	

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 26, 27, 28

Negative 60° Insert



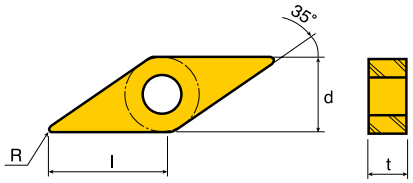
TNM□

Insert		Designation	Dimension (mm)				Recommended Cutting Conditions		Grade				
			l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
	TNMA For Cast Iron	**TNMA 160404**	15.5	9.52	4.76	0.4	0.10 - 0.30	1.0 - 4.0	●				
		160408	14.5	9.52	4.76	0.8	0.15 - 0.40	1.0 - 4.0	●				
		160412	13.5	9.52	4.76	1.2	0.20 - 0.50	1.5 - 4.5	●				
	TNMG 41 Finishing & Medium	**TNMG 160404 41**	15.5	9.52	4.76	0.4	0.07 - 0.40	0.3 - 3.5		●	●	●	●
		160408 41	14.5	9.52	4.76	0.8	0.10 - 0.45	0.5 - 3.5		●	●		●
	TNMG 42 For Stainless Steel	**TNMA 160404 42**	15.5	9.52	4.76	0.4	0.13 - 0.40	0.4 - 4.0				●	
		160408 42	14.5	9.52	4.76	0.8	0.15 - 0.45	0.4 - 4.0				●	
		160412 42	13.5	9.52	4.76	1.2	0.17 - 0.50	0.7 - 4.0				●	
	TNMG 43 Semi-finishing & Medium	**TNMA 160404 43**	15.5	9.52	4.76	0.4	0.12 - 0.35	0.4 - 3.0		●	●	●	
		160408 43	14.5	9.52	4.76	0.8	0.12 - 0.35	0.5 - 3.0		●	●	●	
		160412 43	13.5	9.52	4.76	1.2	0.15 - 0.35	0.6 - 3.0		●	●	●	
	TNMG 45 Medium & Roughing	**TNMA 160404 45**	15.5	9.52	4.76	0.4	0.16 - 0.42	0.5 - 4.0	●	●	●	●	
		160408 45	14.5	9.52	4.76	0.8	0.18 - 0.45	0.5 - 4.0	●	●	●	●	
		160412 45	13.5	9.52	4.76	1.2	0.20 - 0.45	0.8 - 4.0	●	●	●	●	
	TNMG 52 Medium	**TNMG 160404 52**	15.5	9.52	4.76	0.4	0.15 - 0.35	0.7 - 3.5	●	●	●		
		160408 52	14.5	9.52	4.76	0.8	0.17 - 0.40	0.7 - 3.5	●	●	●	●	
	TNMG 53 Medium & Roughing	**TNMG 160404 53**	15.5	9.52	4.76	0.4	0.17 - 0.45	1.5 - 3.5	●	●	●		
		160408 53	14.5	9.52	4.76	0.8	0.17 - 0.55	2.0 - 3.5	●	●	●		
		160412 53	13.5	9.52	4.76	1.2	0.25 - 0.55	2.0 - 3.5	●	●	●		

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 28, 29, 33, 34, 37, 40

Negative 35° Insert

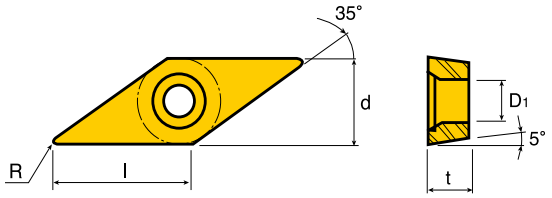


VNMG

Insert	Designation	Dimension (mm)				Recommended Cutting Conditions		Grade				
		l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 VNMG 41 Finishing & Medium	**VNMG 160404 41**	15.6	9.52	4.76	0.4	0.10 - 0.32	0.5 - 2.5		●	●		●
	160408 41	14.6	9.52	4.76	0.8	0.12 - 0.35	0.7 - 2.5		●	●		●
 VNMG 45 Medium & Roughing	**VNMG 160404 45**	15.6	9.52	4.76	0.4	0.13 - 0.32	0.5 - 3.0	●	●	●	●	
	160408 45	14.6	9.52	4.76	0.8	0.15 - 0.35	0.5 - 3.0	●	●	●	●	
 VNMG 53 Medium & Roughing	**VNMG 160404 53**	15.6	9.52	4.76	0.4	0.17 - 0.40	1.0 - 3.0		●	●		
	160408 53	14.6	9.52	4.76	0.8	0.17 - 0.50	1.5 - 3.0	●	●	●		
	160412 53	13.6	9.52	4.76	1.2	0.20 - 0.50	1.5 - 3.0	●	●	●		

● For Cast Iron ● For Steel ● For Stainless Steel Holder pages: 23, 26

Positive 35° Insert



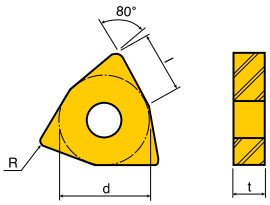
VBMT

Insert	Designation	Dimension (mm)					Recommended Cutting Conditions		Grade				
		l	d	t	R	D1	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 VBMT 41 Finishing & Medium	**VBMT 160404 52**	15.6	9.52	4.76	0.4	4.4	0.08 - 0.25	0.4 - 3.0		●	●		●
	160408 52	14.6	9.52	4.76	0.8	4.4	0.10 - 0.30	0.7 - 3.0		●	●		●
 VBMT 51 Finishing	**VBMT 160404 41**	15.6	9.52	4.76	0.4	4.4	0.07 - 0.20	0.5 - 1.5		●	●	●	
	160408 41	14.6	9.52	4.76	0.8	4.4	0.10 - 0.25	0.7 - 2.0		●	●	●	
 VBMT 52 Medium	**VBMT 160404 51**	15.6	9.52	4.76	0.4	4.4	0.10 - 0.25	0.6 - 3.0	●		●	●	
	160408 51	14.6	9.52	4.76	0.8	4.4	0.13 - 0.30	0.9 - 3.0	●		●		●
	160412 51	13.6	9.52	4.76	1.2	4.4	0.15 - 0.30	1.2 - 3.0	●	●	●		

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 32, 33, 40

Negative 80° Insert



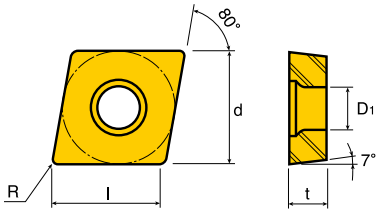
WNM□

Insert	Designation	Dimension (mm)				Recommended Cutting Conditions		Grade				
		l	d	t	R	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 WNMA For Cast Iron	**WNMA 080408**	8.3	12.7	4.76	0.8	0.10 - 0.32	0.5 - 2.5	●				
	080412	8.2	12.7	4.76	1.2	0.12 - 0.35	0.7 - 2.5	●				
 WNMG 41 Finishing & Medium	**WNMG 080408 41**	8.3	12.7	4.76	0.8	0.07 - 0.40	0.3 - 4.5		●	●		●
	080412 41	8.2	12.7	4.76	1.2	0.09 - 0.42	0.5 - 4.5		●	●		●
 WNMG 42 For Stainless Steel	**WNMG 080404 42**	8.4	12.7	4.76	0.4	0.13 - 0.40	0.4 - 4.0				●	
	080408 42	8.3	12.7	4.76	0.8	0.15 - 0.45	0.5 - 4.0				●	
	080412 42	8.2	12.7	4.76	1.2	0.17 - 0.50	0.7 - 4.0				●	
 WNMG 43 Semi-finishing & Medium	**WNMG 080404 43**	8.4	12.7	4.76	0.4	0.13 - 0.40	0.4 - 3.0		●	●		
	080408 43	8.3	12.7	4.76	0.8	0.15 - 0.40	0.5 - 3.0		●	●		
	080412 43	8.2	12.7	4.76	1.2	0.17 - 0.45	0.6 - 3.0		●	●		
 WNMG 45 Medium & Roughing	**WNMG 060404 45**	6.2	9.52	4.76	0.4	0.16 - 0.35	0.5 - 2.5	●	●	●	●	
	060408 45	6.1	9.52	4.76	0.8	0.18 - 0.40	0.5 - 2.5	●	●	●	●	
	060412 45	6.0	9.52	4.76	1.2	0.20 - 0.40	0.7 - 2.5	●	●	●	●	
	080404 45	8.4	12.7	4.76	0.4	0.17 - 0.45	0.5 - 4.0	●	●	●		●
	080408 45	8.3	12.7	4.76	0.8	0.20 - 0.50	0.5 - 4.0	●	●	●	●	●
	080412 45	8.2	12.7	4.76	1.2	0.22 - 0.55	0.8 - 4.0	●	●	●		
 WNMG 52 Medium	**WNMG 080404 52**	8.4	12.7	4.76	0.4	0.10 - 0.32	0.5 - 2.5	●	●	●		
	080408 52	8.3	12.7	4.76	0.8	0.12 - 0.35	0.7 - 2.5	●	●	●		
 WNMG 53 Medium & Roughing	**WNMG 080412 53**	8.2	12.7	4.76	1.2	0.22 - 0.55	0.8 - 4.0			●		

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 41

Positive 80° Insert



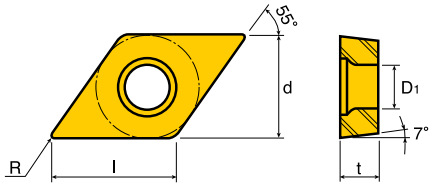
CCMT

Insert	Designation	Dimension (mm)					Recommended Cutting Conditions		Grade				
		l	d	t	R	D1	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 CCMT 52 Medium	**CCMT 060204 52**	6.0	6.35	2.38	0.4	2.8	0.06 - 0.20	0.4 - 2.0			●	●	●
	09T304 52	9.2	9.52	3.97	0.4	4.4	0.08 - 0.25	0.5 - 3.5		●	●	●	●
	09T308 52	8.8	9.52	3.97	0.8	4.4	0.11 - 0.30	0.8 - 3.5		●	●	●	●
 CCMT 41 Finishing	**CCMT 09T304 41**	9.2	9.52	3.97	0.4	4.4	0.07 - 0.20	0.4 - 2.0		●	●		
	09T308 41	8.8	9.52	3.97	0.8	4.4	0.10 - 0.25	0.6 - 2.0		●	●		
 CCMT 51 Medium & Roughing	**CCMT 09T304 51**	9.2	9.52	3.97	0.4	4.4	0.10 - 0.25	0.7 - 3.5	●	●	●		
	09T308 51	8.8	9.52	3.97	0.8	4.4	0.13 - 0.30	1.0 - 3.5	●	●	●	●	
	120408 51	12.0	12.7	4.76	0.8	5.5	0.17 - 0.35	1.5 - 5.0	●	●	●		

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 29, 37

Positive 55° Insert



DCMT

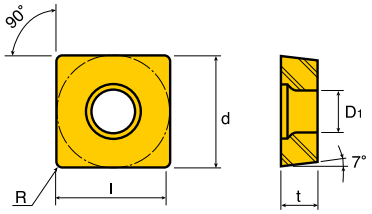
Insert	Designation	Dimension (mm)					Recommended Cutting Conditions		Grade				
		l	d	t	R	D1	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW610
 DCMT 52 Medium	**DCMT 070204 52**	7.3	6.35	2.38	0.4	2.8	0.06 - 0.20	0.4 - 2.0		●	●		●
	11T304 52	11.2	9.52	3.97	0.4	4.4	0.08 - 0.25	0.5 - 3.0		●	●		●
	11T308 52	10.8	9.52	3.97	0.8	4.4	0.11 - 0.30	0.8 - 3.0		●	●		●
 DCMT 41 Finishing	**DCMT 11T304 41**	11.2	9.52	3.97	0.4	4.4	0.10 - 0.25	0.6 - 2.0		●	●		
	11T308 41	10.8	9.52	3.97	0.8	4.4	0.10 - 0.25	0.6 - 1.5		●	●	●	
 DCMT 51 Medium & Roughing	**DCMT 11T304 51**	11.2	9.52	3.97	0.4	4.4	0.10 - 0.25	0.7 - 3.5	●	●	●		
	11T308 51	10.8	9.52	3.97	0.8	4.4	0.13 - 0.30	1.0 - 3.5	●	●	●	●	
	11T312 51	10.5	9.52	3.97	1.2	4.4	0.17 - 0.35	1.5 - 3.0	●				

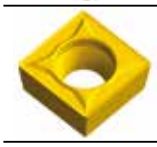
● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 30, 38

Positive 90° Insert

SCMT



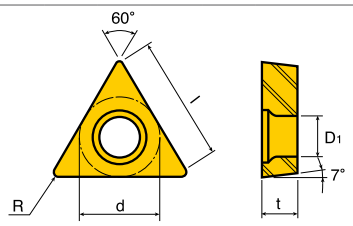
Insert	Designation	Dimension (mm)					Recommended Cutting Conditions		Grade			
		l	d	t	R	D1	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035
 SCMT 41 Finishing	**SCMT 09T304 41**	9.2	9.52	3.97	0.4	4.4	0.08 - 0.25	0.6 - 2.0			●	
 SCMT 51 Medium & Roughing	**SCMT 09T304 51**	9.2	9.52	3.97	0.4	4.4	0.10 - 0.25	0.7 - 3.5	●	●	●	
	09T308 51	9.2	9.52	3.97	0.4	4.4	0.13 - 0.30	1.0 - 3.5	●	●	●	●

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 31, 39

Positive 60° Insert

TCMT

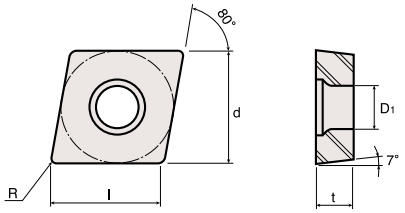


Insert	Designation	Dimension (mm)					Recommended Cutting Conditions		Grade				
		l	d	t	R	D1	Feed (mm/rev)	D.O.C. (mm)	CW820	CW9015	CW9025	CW8035	CW6105
 TCMT 52 Medium	**TCMT 110204 52**	10.0	6.35	2.38	0.4	2.8	0.08 - 0.25	0.4 - 3.0			●	●	●
 TCMT 41 Finishing	**TCMT 16T304 41**	15.5	9.52	3.97	0.4	4.4	0.07 - 0.20	0.4 - 2.0		●	●		
	16T308 41	14.5	9.52	3.97	0.8	4.4	0.10 - 0.25	0.6 - 2.0		●	●		
 TCMT 51 Medium & Roughing	**TCMT 16T304 51**	15.5	9.52	3.97	0.4	4.4	0.10 - 0.25	0.8 - 5.0	●	●	●		●
	16T308 51	14.5	9.52	3.97	0.8	4.4	0.10 - 0.30	1.0 - 5.0	●	●	●	●	
	16T312 51	13.5	9.52	3.97	1.2	4.4	0.10 - 0.30	1.5 - 5.0	●	●	●		

● For Cast Iron ● For Steel ● For Stainless Steel

Holder pages: 31, 39

Positive 80° Insert - For Aluminum

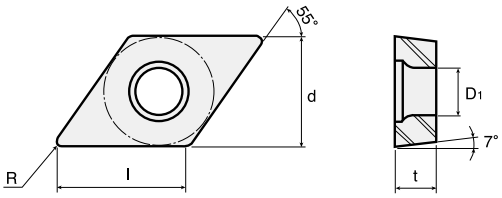


CCGT AU

Insert	Designation	Dimension (mm)					Grade
		l	d	t	R	ØD1	CW210
	**CCGT 060204 AU**	6.0	6.35	2.38	0.4	2.8	●
	09T302 AU	9.2	9.52	3.97	0.2	4.4	●
	09T304 AU	9.2	9.52	3.97	0.4	4.4	●
	09T308 AU	9.2	9.52	3.92	0.8	4.4	●
	120404 AU	12.4	12.7	4.76	0.4	5.5	●

Holder pages: 37

Positive 55° Insert - For Aluminum

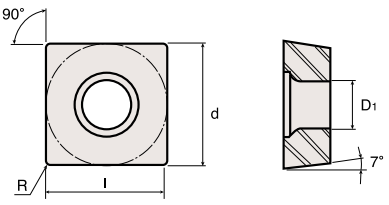


DCGT AU

Insert	Designation	Dimension (mm)					Grade
		l	d	t	R	ØD1	CW210
	**DCGT 070202 AU**	7.5	6.35	2.38	0.2	2.8	●
	070204 AU	7.3	6.35	2.38	0.4	2.8	●
	11T302 AU	11.4	9.525	3.97	0.2	4.4	●
	11T304 AU	11.2	9.525	3.97	0.4	4.4	●
	11T8308 AU	11.2	9.525	3.97	0.8	4.4	●

Holder pages: 30, 38

Positive 90° Insert - For Aluminum

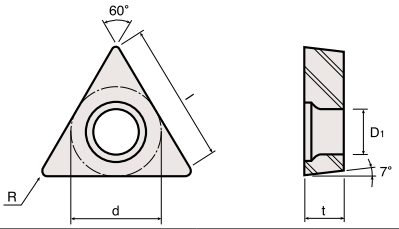


SCGT AU

Insert	Designation	Dimension (mm)					Grade
		l	d	t	R	ØD1	CW210
	**SCGT 120404 AU**	12.3	12.70	4.76	0.4	5.5	●
	120408 AU	11.9	12.70	4.76	0.8	5.5	●

Holder pages: 31, 39

Positive 60° Insert - For Aluminum

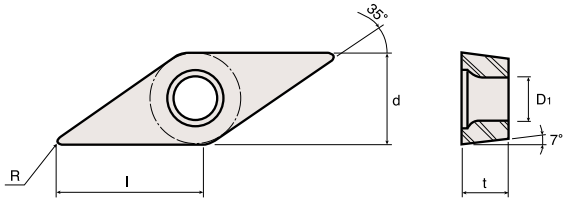


TCGT AU

Insert	Designation	Dimension (mm)					Grade
		l	d	t	R	ØD1	CW210
	**TCGT 110204 AU**	10.0	6.35	2.38	0.4	2.8	●
	16T304 AU	15.5	9.525	3.97	0.4	4.4	●

Holder pages: 31, 39

Positive 35° Insert - For Aluminum



VCGT AU

Insert	Designation	Dimension (mm)					Grade
		l	d	t	R	ØD1	CW210
	**VCGT 110304 AU**	10.0	6.35	3.18	0.4	2.8	●
	160404 AU	15.6	9.52	4.76	0.4	4.4	●
	160408 AU	14.6	9.52	4.76	0.8	4.4	●

Holder page: 32