DIA EDGE

MC6100 SERIES

ULTIMATE HIGH SPEED
CUTTING PERFORMANCE

ABOUT OUR BRAND

Your manufacturing success is our success.

It's simple. We want to provide high-quality cutting tool products that help deliver unparalleled performance and control for you to manufacture precisely perfect products every day.

Our long heritage of building partnerships through cutting tool solutions to metal working manufacturers, like yours, has given Mitsubishi Materials USA a solid reputation as an industry leader. We understand the importance of getting it right the first time by delivering high-quality cutting tool product brands to help overcome machining challenges to improve machining processes.

Your success is our success and is the driving force behind our innovative products. Our product brands, DIAEDGE and MOLDINO, are trusted globally in the metal manufacturing and die & mold industries for delivering expertly-designed manufactured tools of the trade for highly specialized industries like yours.

With the acquisition of MOLDINO Tool Engineering, Ltd, our traditional Mitsubishi Materials USA cutting tool product line is now sold under the DIAEDGE product brand name.

Brands you can trust:

MITSUBISHI MATERIALS U.S.A.

TRUSTED PRODUCT BRANDS

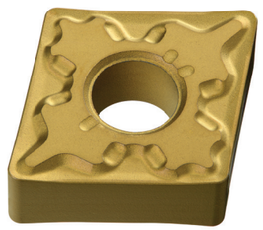
DIAEDGE MOLDINO

CVD Coated Grade for Steel Turning

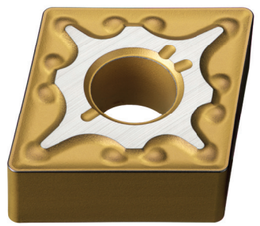
MC6100 Series

Dramatic increase in stability and wear resistance, enabled by utilizing improved coating adhesion and crystal orientation technology.

High Speed Turning
MC6115



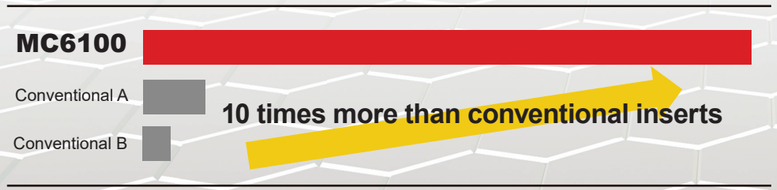
First Recommendation
MC6125



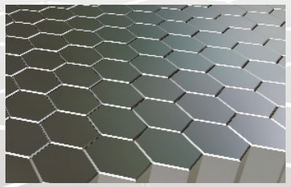
Features

"Super" Nano Texture Technology

The standard Nano Texture Technology has been improved and developed to be an industry leading standard for crystal growth of Al_2O_3 coatings. This Super Nano Texture Technology increases tool life and wear resistance due to the fine, dense crystal growth process.



The ratio of Al_2O_3 crystal grains with the same orientation



*By Image

Conventional CVD inserts

Grain size and growth direction are uneven.

Nano Texture

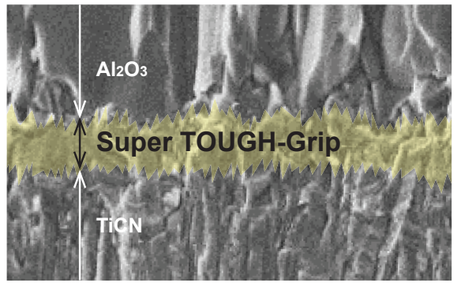
Uniformity of the grain size and growth direction has improved.

"Super" Nano Texture

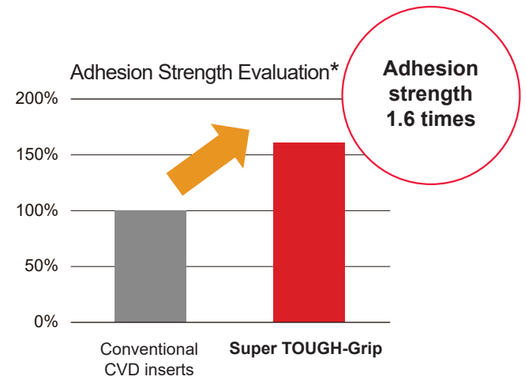
Uniformity of the growth direction has drastically improved.

Super TOUGH-Grip

The Super TOUGH-Grip layer has finer crystal grains that enhance the strength of the adhesion between the coating layers.



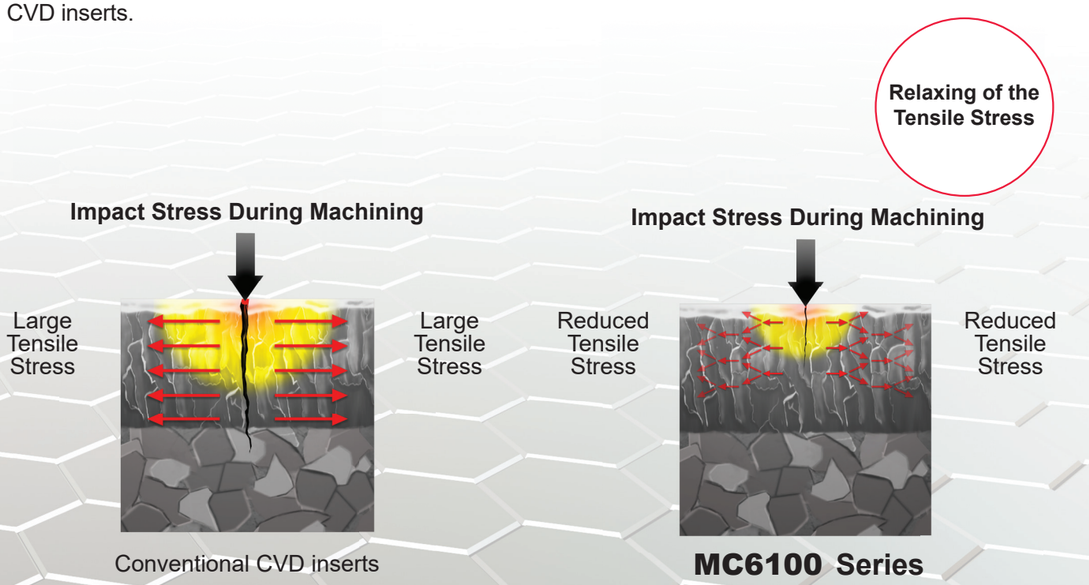
*By Image



*Adhesion strength measurement is obtained from a scratch test that records the force needed to peel the coating layers.

Protection Against Sudden Fracturing

Cracks that occur during unstable machining are prevented due to the relaxing of the tensile stress in the coating. MC6100 series has an 80% reduction in coating tensile stress compared to conventional CVD inserts.



Conventional CVD inserts

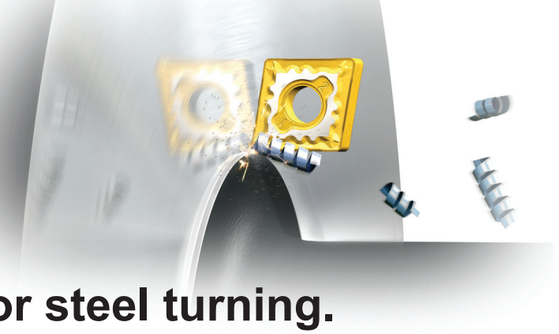
Cracks are generated in the surface of coatings during machining. They propagate through the coating into the substrate due to the large tensile stress in the coating structure. This creates one of the main causes of sudden insert breakage.

MC6100 Series

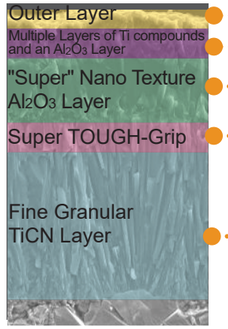
MC6100 series has a much lower level of stress than conventional CVD coatings due to the surface treatment. This divides the force of impacts during machining and protects from sudden fracturing.

CVD Coated Grade for Steel Turning

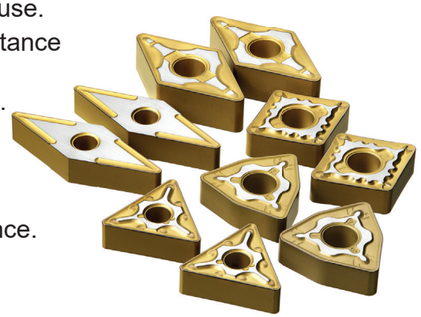
MC6125



First recommended grade for steel turning. Increased tool life plus stable performance covering a wide range of applications.



- Outer Layer — Better identification of corner use.
- Multiple Layers of Ti compounds and an Al_2O_3 Layer — Achieves excellent wear resistance
- "Super" Nano Texture Al_2O_3 Layer — Outstanding wear resistance especially at high temperatures.
- Super TOUGH-Grip — Strong adhesion between the tough coating layers.
- Fine Granular TiCN Layer — Coating for high wear resistance.

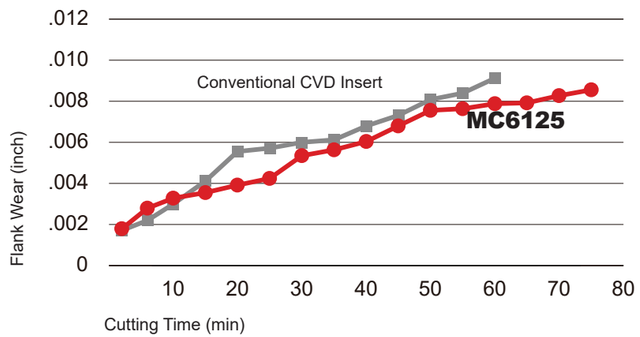


Special Smooth Surface Treatment

MC6125 uses a new surface treatment on the cutting edge for increased stability. Additionally, the seating faces have a special smooth surface treatment that provides improved clamping stability to enable a wider range of applications.

Machining AISI 1045 : Comparison of Wear Resistance

Increased tool life plus stable performance covering a wide range of applications.

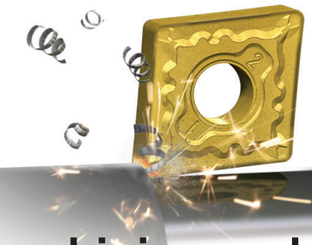


<Cutting Conditions>

Workpiece Material	: AISI 1045
Inserts	: CNMG432MA
Cutting Speed	: vc = 655 SFM
Feed per Rev.	: f=.012 IPR
Depth of Cut	: ap =.059 inch
Cutting Mode	: Wet Cutting

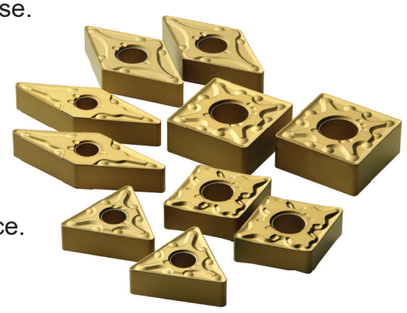
CVD Coated Grade for Steel Turning

MC6115



MC6115 improves high speed machining and process efficiency with a dramatic increase in resistance to wear and heat.

- Outer Layer — Better identification of corner use.
- "Super" Nano Texture Al_2O_3 Layer — Outstanding wear resistance especially at high temperatures.
- Super TOUGH-Grip — Strong adhesion between the tough coating layers.
- Fine Granular TiCN Layer — Coating for high wear resistance.



Improved Outer Coating (Layer)

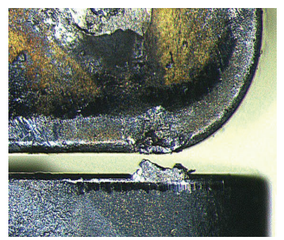
The outer layer of MC6115 restricts chip welding thereby improving the dimensional accuracy and surface roughness of components. This also allows for easy recognition of whether the corner can continue machining.

Example when machining AISI 5120H

When comparing the high edge strength MH breaker with a conventional low resistance chip breaker, it shows that MC6115 accomplishes both high welding and wear resistance.

After 2 Minutes Machining

MC6115 MH Breaker



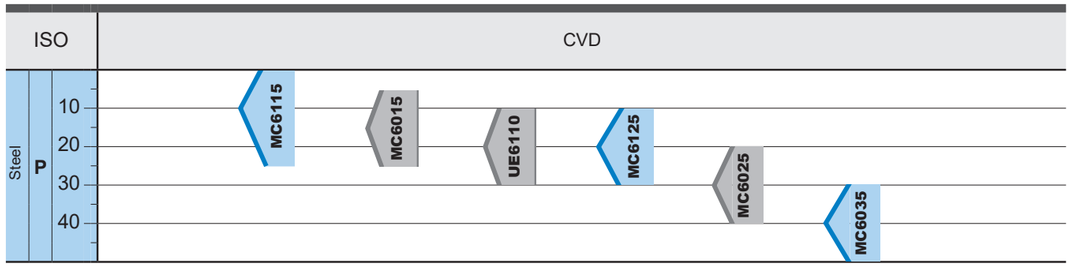
Conventional CVD Insert

<Cutting Conditions>

Workpiece Material	: AISI 5120H 170HB
Inserts	: CNMG432MH
Cutting Speed	: vc = 655 SFM
Feed per Rev.	: f=.012 IPR
Depth of Cut	: ap =.059 inch
Cutting Mode	: Dry Cutting

CVD Coated Grade for Steel Turning

Application Range



Selection Criteria

Workpiece Material		Cutting Mode	Grade
P	Steel	Continuous Cutting Low Medium High Interrupted Cutting	MC6115 MC6125 MC6035

Chip Breaker System for Steel Turning

Negative Inserts

Application	Tolerance	Chip Breaker Name and Picture	Features	Cross Section Geometry
Light Cutting	M	LP	**First recommendation for light cutting of carbon steel and alloy steel** Stable chip control in the light cutting range. The curved edge allows smooth chip discharge.	Carbon Steel • Alloy Steel; ap (inch) .157 .118 .079 .039 0; f (mm/rev) .004 .012 .020; 15° .004" Corner; 11° .008" Flank; CNMG432LP
		SH	**Alternative chip breaker for light cutting of carbon steel and alloy steel** Can be used at low depth of cuts and high feed rates. The curved edge allows smooth chip discharge. Recommended for workpieces in the 160—250HB range.	Carbon Steel • Alloy Steel; ap (inch) .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 15° Corner; 15° .008" Flank; CNMG432SH
		SA	**Alternative chip breaker for light cutting of carbon steel and alloy steel** Superior chip control at small depth of cuts. Covers copying and back turning with wavy edge. Recommended for workpieces in the 200—300HB range.	Carbon Steel • Alloy Steel; ap (inch) .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 25° .012" 10° Corner; 25° .013" 8° Flank; CNMG432SA
		SW	**Wiper insert for light cutting of carbon steel, alloy steel, stainless steel and cast iron** In comparison to conventional chip breakers, the surface finish is maintained even if the feed per revolution is doubled. Wiper design for increased productivity and improved surface finish.	Carbon Steel • Alloy Steel; ap (inch) .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 18° .006" 7° Corner; 18° .006" 7° Flank; CNMG432SW

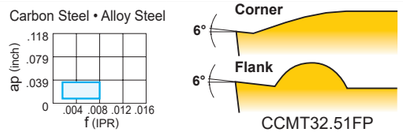
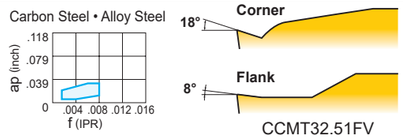
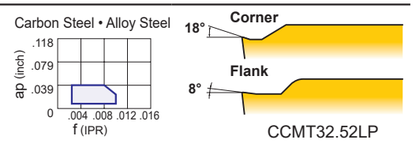
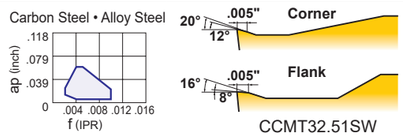
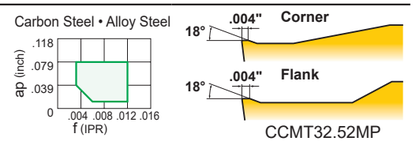
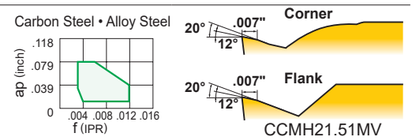
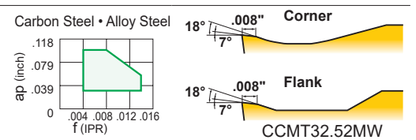
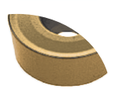
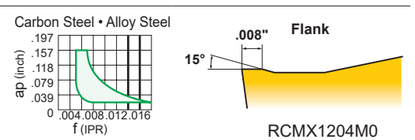
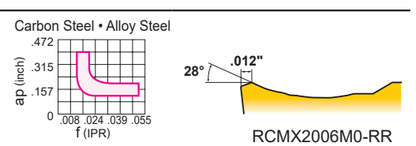
Chip Breaker System for Steel Turning

Negative Inserts

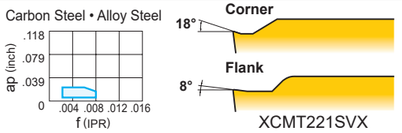
Application	Tolerance	Chip Breaker Name and Picture	Features	Cross Section Geometry
Medium Cutting	M	MP	**First recommendation for medium cutting of carbon steel and alloy steel** Suitable for medium to light cutting. Chip breaker geometry appropriate for copying and back turning. Cutting edge geometry for an optimum balance of sharpness and fracture resistance.	Carbon Steel • Alloy Steel; ap (inch) .197 .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 15° .006" Corner; 11° .008" Flank; CNMG432MP
		MA	**For medium cutting of carbon steel and alloy steel** Ideal for general cutting applications. Positive land provides sharp cutting action.	Carbon Steel • Alloy Steel; ap (inch) .197 .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 22° .008" 6° Corner; 22° .008" 6° Flank; CNMG432MA
		MH	**Alternative chip breaker for medium cutting of carbon steel and alloy steel** Flat land offers high edge strength. Good chip control with suitable chip pocket.	Carbon Steel • Alloy Steel; ap (inch) .197 .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 16° .010" Corner; 16° .014" Flank; CNMG432MH
		Standard	**Alternative chip breaker for medium cutting of carbon steel and alloy steel** Flat land offers high edge strength. Flat top breaker shape offers high edge strength.	Carbon Steel • Alloy Steel; ap (inch) .197 .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 15° .010" Corner; 15° .010" Flank; CNMG432
		MW	**Wiper insert for medium cutting carbon steel, alloy steel, stainless steel and cast iron** The wiper allows up to two times higher feed. A wide chip pocket prevents chip jamming.	Carbon Steel • Alloy Steel; ap (inch) .197 .157 .118 .079 .039 0; f (IPR) .004 .012 .020; 19° .010" Corner; 19° .012" Flank; CNMG432MW
Rough Cutting	M	RP	**First recommendation for rough cutting of carbon steel and alloy steel** For interrupted cuts and removing scale. Good balance of cutting edge strength and low cutting resistance because of suitable rake angle.	Carbon Steel • Alloy Steel; ap (inch) .276 .197 .118 .039 0; f (IPR) .004 .012 .020 .028; 3° .013" Corner; .013" Flank; CNMG432RP
		GH	**Alternative chip breaker for rough cutting of carbon steel, alloy steel and cast iron** For interrupted cuts and removing scale. A combination of wide land and a large chip pocket allows high feed rates.	Carbon Steel • Alloy Steel; ap (inch) .276 .197 .118 .039 0; f (IPR) .004 .012 .020 .028; 18° .013" Corner; 18° .013" Flank; CNMG432GH

Chip Breaker System for Steel Turning

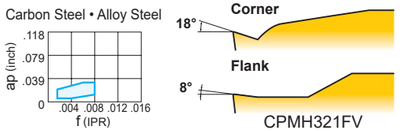
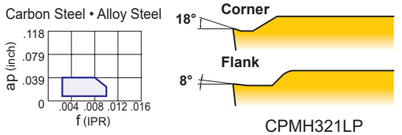
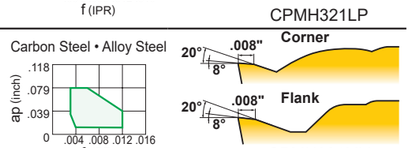
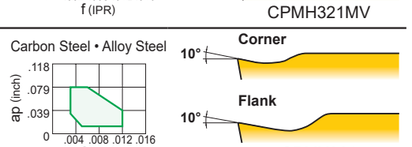
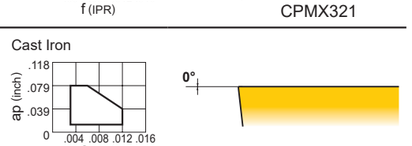
5°, 7° Positive Inserts

Application	Tolerance	Chip Breaker Name and Picture	Features	Cross Section Geometry
Finish Cutting	M	**FP** 	**First recommendation for finishing carbon steel, alloy steel and mild steel** Chip breaker protrusion at the corner tip controls chips even at small depth of cut. Maintains the edge strength at the corner and prevents sudden fractures.	
		FV 	**Alternative chip breaker for finishing carbon steel, alloy steel, mild steel and stainless steel** Suitable for low depths of cut and low feed rates. Sharp cutting edge and low resistance design achieves excellent cutting performance.	
Light Cutting	M	**LP** 	**First recommendation for light cutting of carbon steel, alloy steel and mild steel** Sharp cutting edge due to a large rake angle. Prevents welding of the insert and controls white turbidity of the surface finish. Chip breaker protrusion suitable for depth of cut area achieves a wide range of chip control.	
		SW 	**Wiper insert for light cutting of carbon steel, alloy steel, mild steel and stainless steel** In comparison to conventional chip breakers, the surface finish is maintained even if the feed per revolution is doubled. Positive land improves sharpness.	
Medium Cutting	M	**MP** 	**First recommendation for medium cutting of carbon steel, alloy steel and mild steel** Good balance of wear resistance and fracture resistance because of the flat land cutting edge. A wide chip pocket controls increasing of the cutting resistance and reduces vibration and chip jamming even at large depths of cut.	
		MV 	**Alternative chip breaker for medium cutting of carbon steel, alloy steel, mild steel and stainless steel** A positive insert and the large rake angle achieve sharp cutting edge performance. The double chip breaker and round shape in the rake face achieve a wide range of chip discharge.	
		MW 	**Wiper insert for medium cutting of carbon steel, alloy steel, mild steel and stainless steel** The wiper allows up to two times higher feed. A wide chip pocket prevents chip jamming.	
		Standard 	**Alternative chip breaker for medium cutting of carbon steel, alloy steel, mild steel, stainless steel and cast iron** Balance of edge strength and sharpness due to a combination of a flat land and large rake angle.	
Heavy Cutting	M	**RR** 	**Chip breaker for heavy cutting of carbon steel and alloy steel** A wide groove chip breaker prevents chips from jamming at large depths of cut. Small dimples improve chip control at small depths of cut.	

7° Positive Inserts

Application	Tolerance	Chip Breaker Name and Picture	Features	Cross Section Geometry
Finish Cutting	M	**SVX** 	**Alternative chip breaker for light cutting of carbon steel and alloy steel** Chip control is improved by having a chip breaker geometry suitable for copying.	

11° Positive Inserts

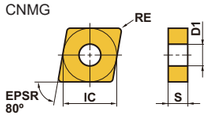
Application	Tolerance	Chip Breaker Name and Picture	Features	Cross Section Geometry
Finish Cutting	M	**FV** 	**First recommendation for finishing carbon steel, alloy steel, mild steel and stainless steel** Suitable for low depths of cut and low feed rates. Sharp cutting edge and low resistance design achieves excellent cutting performance.	
Light Cutting	M	**LP** 	**First recommendation for light cutting of carbon steel, alloy steel and mild steel** Sharp cutting edge due to a large rake angle. Prevents welding of the insert and controls white turbidity of the surface finish. Chip breaker protrusion suitable for depth of cut area achieves a wide range of chip control.	
Medium Cutting	M	**MV** 	**First recommendation for medium cutting of carbon steel, alloy steel, mild steel, stainless steel and cast iron** A positive insert and large rake angle achieves sharp cutting edge performance. Double chip breaker in the rake face achieve a wide range of chip discharge.	
		Standard 	**Alternative chip breaker for medium cutting of carbon steel, alloy steel and stainless steel** Standard, general purpose chip breaker.	
For Cast Iron	M	**Flat Top** 	**Chip breaker for Heavy cutting of cast iron** Flat top. Most effective for unstable machining due to its high edge strength.	

MC6100 Series

Negative Inserts (With Hole)

M Class

CNMG



Light	Light	Light	Light	Medium	Medium
LP	SH	SA	SW	MP	MA
			(Wiper)		
Medium	**Medium**	**Medium**	**Rough**	**Rough**	
MH	Standard	MW	RP	GH	
		(Wiper)			

(inch)

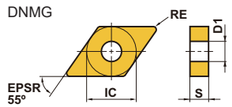
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
CNMG431LP	L	●	●	.500	.187	.016	.203
CNMG432LP	L	●	●	.500	.187	.031	.203
CNMG433LP	L	●	●	.500	.187	.047	.203
CNMG431SH	L	●	●	.500	.187	.016	.203
CNMG432SH	L	●	●	.500	.187	.031	.203
CNMG433SH	L	●	●	.500	.187	.047	.203
CNMG431SA	L	●	●	.500	.187	.016	.203
CNMG432SA	L	●	●	.500	.187	.031	.203
CNMG433SA	L	●	●	.500	.187	.047	.203
CNMG431SW	L	●	●	.500	.187	.016	.203
CNMG432SW	L	●	●	.500	.187	.031	.203
CNMG433SW	L	●	●	.500	.187	.047	.203
CNMG431MP	M	●	●	.500	.187	.016	.203
CNMG432MP	M	●	●	.500	.187	.031	.203
CNMG433MP	M	●	●	.500	.187	.047	.203
CNMG434MP	M	●	●	.500	.187	.063	.203
CNMG542MP	M	●	●	.625	.250	.031	.250
CNMG543MP	M	●	●	.625	.250	.047	.250
CNMG544MP	M	●	●	.625	.250	.063	.250
CNMG431MA	M	●	●	.500	.187	.016	.203
CNMG432MA	M	●	●	.500	.187	.031	.203
CNMG433MA	M	●	●	.500	.187	.047	.203
CNMG434MA	M	●	●	.500	.187	.063	.203
CNMG542MA	M	●	●	.625	.250	.031	.250
CNMG543MA	M	●	●	.625	.250	.047	.250
CNMG544MA	M	●	●	.625	.250	.063	.250
CNMG643MA	M	●	●	.750	.250	.047	.312
CNMG644MA	M	●	●	.750	.250	.063	.312
CNMG431MH	M	●	●	.500	.187	.016	.203
CNMG432MH	M	●	●	.500	.187	.031	.203
CNMG433MH	M	●	●	.500	.187	.047	.203
CNMG434MH	M	●	●	.500	.187	.063	.203
CNMG542MH	M	●	●	.625	.250	.031	.250
CNMG543MH	M	●	●	.625	.250	.047	.250
CNMG544MH	M	●	●	.625	.250	.063	.250
CNMG643MH	M	●	●	.750	.250	.047	.312
CNMG644MH	M	●	●	.750	.250	.063	.312
CNMG431	M	●	●	.500	.187	.016	.203
CNMG432	M	●	●	.500	.187	.031	.203
CNMG433	M	●	●	.500	.187	.047	.203
CNMG434	M	●	●	.500	.187	.063	.203
CNMG542	M	●	●	.625	.250	.031	.250
CNMG543	M	●	●	.625	.250	.047	.250
CNMG544	M	●	●	.625	.250	.063	.250
CNMG642	M	●	●	.750	.250	.031	.312
CNMG643	M	●	●	.750	.250	.047	.312
CNMG644	M	●	●	.750	.250	.063	.312
CNMG432MW	M	●	●	.500	.187	.031	.203
CNMG433MW	M	●	●	.500	.187	.047	.203
CNMG432RP	R	●	●	.500	.187	.031	.203
CNMG433RP	R	●	●	.500	.187	.047	.203
CNMG434RP	R	●	●	.500	.187	.063	.203
CNMG543RP	R	●	●	.625	.250	.047	.250
CNMG544RP	R	●	●	.625	.250	.063	.250
CNMG643RP	R	●	●	.750	.250	.047	.312
CNMG644RP	R	●	●	.750	.250	.063	.312
CNMG432GH	R	●	●	.500	.187	.031	.203
CNMG433GH	R	●	●	.500	.187	.047	.203
CNMG434GH	R	●	●	.500	.187	.063	.203
CNMG543GH	R	●	●	.625	.250	.047	.250
CNMG544GH	R	●	●	.625	.250	.063	.250
CNMG643GH	R	●	●	.750	.250	.047	.312
CNMG644GH	R	●	●	.750	.250	.063	.312

● : USA Stock
(10 inserts in one case)

Negative Inserts (With Hole)

M Class

DNMG



Light	Light	Light			
LP	SH	SA			
Medium	**Medium**	**Medium**	**Medium**	**Rough**	**Rough**
MP	MA	MH	Standard	RP	GH

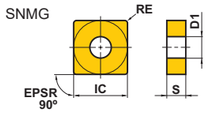
(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
DNMG431LP	L	●	●	.500	.187	.016	.203
DNMG432LP	L	●	●	.500	.187	.031	.203
DNMG433LP	L	●	●	.500	.187	.047	.203
DNMG441LP	L	●	●	.500	.250	.016	.203
DNMG442LP	L	●	●	.500	.250	.031	.203
DNMG443LP	L	●	●	.500	.250	.047	.203
DNMG431SH	L	●	●	.500	.187	.016	.203
DNMG432SH	L	●	●	.500	.187	.031	.203
DNMG433SH	L	●	●	.500	.187	.047	.203
DNMG441SH	L	●	●	.500	.250	.016	.203
DNMG442SH	L	●	●	.500	.250	.031	.203
DNMG443SH	L	●	●	.500	.250	.047	.203
DNMG431SA	L	●	●	.500	.187	.016	.203
DNMG432SA	L	●	●	.500	.187	.031	.203
DNMG433SA	L	●	●	.500	.187	.047	.203
DNMG441SA	L	●	●	.500	.250	.016	.203
DNMG442SA	L	●	●	.500	.250	.031	.203
DNMG443SA	L	●	●	.500	.250	.047	.203
DNMG431MP	M	●	●	.500	.187	.016	.203
DNMG432MP	M	●	●	.500	.187	.031	.203
DNMG433MP	M	●	●	.500	.187	.047	.203
DNMG434MP	M	●	●	.500	.187	.063	.203
DNMG441MP	M	●	●	.500	.250	.016	.203
DNMG442MP	M	●	●	.500	.250	.031	.203
DNMG443MP	M	●	●	.500	.250	.047	.203
DNMG444MP	M	●	●	.500	.250	.063	.203
DNMG431MA	M	●	●	.500	.187	.016	.203
DNMG432MA	M	●	●	.500	.187	.031	.203
DNMG433MA	M	●	●	.500	.187	.047	.203
DNMG441MA	M	●	●	.500	.250	.016	.203
DNMG442MA	M	●	●	.500	.250	.031	.203
DNMG443MA	M	●	●	.500	.250	.047	.203
DNMG431MH	M	●	●	.500	.187	.016	.203
DNMG432MH	M	●	●	.500	.187	.031	.203
DNMG433MH	M	●	●	.500	.187	.047	.203
DNMG441MH	M	●	●	.500	.250	.016	.203
DNMG442MH	M	●	●	.500	.250	.031	.203
DNMG443MH	M	●	●	.500	.250	.047	.203
DNMG431	M	●	●	.500	.187	.016	.203
DNMG432	M	●	●	.500	.187	.031	.203
DNMG433	M	●	●	.500	.187	.047	.203
DNMG441	M	●	●	.500	.250	.016	.203
DNMG442	M	●	●	.500	.250	.031	.203
DNMG443	M	●	●	.500	.250	.047	.203
DNMG432RP	R	●	●	.500	.187	.031	.203
DNMG433RP	R	●	●	.500	.187	.047	.203
DNMG434RP	R	●	●	.500	.187	.063	.203
DNMG442RP	R	●	●	.500	.250	.031	.203
DNMG443RP	R	●	●	.500	.250	.047	.203
DNMG444RP	R	●	●	.500	.250	.063	.203
DNMG432GH	R	●	●	.500	.187	.031	.203
DNMG433GH	R	●	●	.500	.187	.047	.203
DNMG442GH	R	●	●	.500	.250	.031	.203
DNMG443GH	R	●	●	.500	.250	.047	.203

MC6100 Series

Negative Inserts (With Hole)

M Class



Light	Light	Light			
LP	SH	SA			
Medium	Medium	Medium	Medium	Rough	Rough
MP	MA	MH	Standard	RP	GH

(inch)

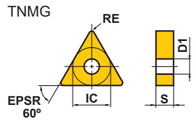
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
SNMG431LP	L	●	●	.500	.187	.016	.203
SNMG432LP	L	●	●	.500	.187	.031	.203
SNMG433LP	L	●	●	.500	.187	.047	.203
SNMG432SH	L	●	●	.500	.187	.031	.203
SNMG432SA	L	●	●	.500	.187	.031	.203

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
SNMG431MP	M	●	●	.500	.187	.016	.203
SNMG432MP	M	●	●	.500	.187	.031	.203
SNMG433MP	M	●	●	.500	.187	.047	.203
SNMG431MA	M	●	●	.500	.187	.016	.203
SNMG432MA	M	●	●	.500	.187	.031	.203
SNMG433MA	M	●	●	.500	.187	.047	.203
SNMG542MA	M	●	●	.625	.250	.031	.250
SNMG543MA	M	●	●	.625	.250	.047	.250
SNMG643MA	M	●	●	.750	.250	.047	.312
SNMG644MA	M	●	●	.750	.250	.063	.312
SNMG432MH	M	●	●	.500	.187	.031	.203
SNMG433MH	M	●	●	.500	.187	.047	.203
SNMG643MH	M	●	●	.750	.250	.047	.312
SNMG644MH	M	●	●	.750	.250	.063	.312
SNMG431	M	●	●	.500	.187	.016	.203
SNMG432	M	●	●	.500	.187	.031	.203
SNMG433	M	●	●	.500	.187	.047	.203
SNMG543	M	●	●	.625	.250	.047	.250
SNMG643	M	●	●	.750	.250	.047	.312
SNMG644	M	●	●	.750	.250	.063	.312
SNMG432RP	R	●	●	.500	.187	.031	.203
SNMG433RP	R	●	●	.500	.187	.047	.203
SNMG434RP	R	●	●	.500	.187	.063	.203
SNMG543RP	R	●	●	.625	.250	.047	.250
SNMG544RP	R	●	●	.625	.250	.063	.250
SNMG643RP	R	●	●	.750	.250	.047	.312
SNMG644RP	R	●	●	.750	.250	.063	.312
SNMG432GH	R	●	●	.500	.187	.031	.203
SNMG433GH	R	●	●	.500	.187	.047	.203
SNMG434GH	R	●	●	.500	.187	.063	.203
SNMG543GH	R	●	●	.625	.250	.047	.250
SNMG643GH	R	●	●	.750	.250	.047	.312
SNMG644GH	R	●	●	.750	.250	.063	.312

● : USA Stock
(10 inserts in one case)

Negative Inserts (With Hole)

M Class



Light	Light	Light			
LP	SH	SA			
Medium	Medium	Medium	Medium	Rough	Rough
MP	MA	MH	Standard	RP	GH

(inch)

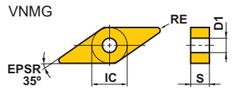
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
TNMG331LP	L	●	●	.375	.187	.016	.150
TNMG332LP	L	●	●	.375	.187	.031	.150
TNMG333LP	L	●	●	.375	.187	.047	.150
TNMG432LP	L	●	●	.500	.187	.031	.203
TNMG433LP	L	●	●	.500	.187	.047	.203
TNMG331SH	L	●	●	.375	.187	.016	.150
TNMG332SH	L	●	●	.375	.187	.031	.150
TNMG432SH	L	●	●	.500	.187	.031	.203
TNMG331SA	L	●	●	.375	.187	.016	.150
TNMG332SA	L	●	●	.375	.187	.031	.150
TNMG333SA	L	●	●	.375	.187	.047	.150
TNMG432SA	L	●	●	.500	.187	.031	.203

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
TNMG331MP	M	●	●	.375	.187	.016	.150
TNMG332MP	M	●	●	.375	.187	.031	.150
TNMG333MP	M	●	●	.375	.187	.047	.150
TNMG432MP	M	●	●	.500	.187	.031	.203
TNMG433MP	M	●	●	.500	.187	.047	.203
TNMG331MA	M	●	●	.375	.187	.016	.150
TNMG332MA	M	●	●	.375	.187	.031	.150
TNMG333MA	M	●	●	.375	.187	.047	.150
TNMG432MA	M	●	●	.500	.187	.031	.203
TNMG433MA	M	●	●	.500	.187	.047	.203
TNMG542MA	M	●	●	.625	.250	.031	.250
TNMG543MA	M	●	●	.625	.250	.047	.250
TNMG331MH	M	●	●	.375	.187	.016	.150
TNMG332MH	M	●	●	.375	.187	.031	.150
TNMG333MH	M	●	●	.375	.187	.047	.150
TNMG432MH	M	●	●	.500	.187	.031	.203
TNMG433MH	M	●	●	.500	.187	.047	.203
TNMG331	M	●	●	.375	.187	.016	.150
TNMG332	M	●	●	.375	.187	.031	.150
TNMG333	M	●	●	.375	.187	.047	.150
TNMG431	M	●	●	.500	.187	.016	.203
TNMG432	M	●	●	.500	.187	.031	.203
TNMG433	M	●	●	.500	.187	.047	.203
TNMG332RP	R	●	●	.375	.187	.031	.150
TNMG333RP	R	●	●	.375	.187	.047	.150
TNMG432RP	R	●	●	.500	.187	.031	.203
TNMG433RP	R	●	●	.500	.187	.047	.203
TNMG434RP	R	●	●	.500	.187	.063	.203
TNMG543RP	R	●	●	.625	.250	.047	.250
TNMG544RP	R	●	●	.625	.250	.063	.250
TNMG332GH	R	●	●	.375	.187	.031	.150
TNMG333GH	R	●	●	.375	.187	.047	.150
TNMG432GH	R	●	●	.500	.187	.031	.203
TNMG433GH	R	●	●	.500	.187	.047	.203
TNMG434GH	R	●	●	.500	.187	.063	.203
TNMG543GH	R	●	●	.625	.250	.047	.250
TNMG544GH	R	●	●	.625	.250	.063	.250

MC6100 Series

Negative Inserts (With Hole)
M Class

VNMG



Light	Light		
LP	SH		
			
Medium	**Medium**	**Medium**	**Medium**
MP	MA	MH	Standard
			

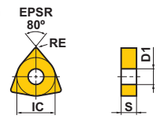
(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
VNMG331LP	L	●	●	.375	.187	.016	.150
VNMG332LP	L	●	●	.375	.187	.031	.150
VNMG331SH	L	●	●	.375	.187	.016	.150
VNMG332SH	L	●	●	.375	.187	.031	.150

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
VNMG331MP	M	●	●	.375	.187	.016	.150
VNMG332MP	M	●	●	.375	.187	.031	.150
VNMG333MP	M	●	●	.375	.187	.047	.150
VNMG331MA	M	●	●	.375	.187	.016	.150
VNMG332MA	M	●	●	.375	.187	.031	.150
VNMG331MH	M	●	●	.375	.187	.016	.150
VNMG332MH	M	●	●	.375	.187	.031	.150
VNMG331	M	●	●	.375	.187	.016	.150
VNMG332	M	●	●	.375	.187	.031	.150
VNMG333	M	●	●	.375	.187	.047	.150

Negative Inserts (With Hole)
M Class

WNMG



Light	Light	Light	Light	Medium	Medium
LP	SH	SA	SW	MP	MA
			 (Wiper)		
Medium	**Medium**	**Medium**	**Rough**	**Rough**	
MH	Standard	MW	RP	GH	
		 (Wiper)			

(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
WNMG431LP	L	●	●	.500	.187	.016	.203
WNMG432LP	L	●	●	.500	.187	.031	.203
WNMG433LP	L	●	●	.500	.187	.047	.203
WNMG431SH	L	●	●	.500	.187	.016	.203
WNMG432SH	L	●	●	.500	.187	.031	.203
WNMG433SH	L	●	●	.500	.187	.047	.203
WNMG431SA	L	●	●	.500	.187	.016	.203
WNMG432SA	L	●	●	.500	.187	.031	.203
WNMG433SA	L	●	●	.500	.187	.047	.203
WNMG431SW	L	●	●	.500	.187	.016	.203
WNMG432SW	L	●	●	.500	.187	.031	.203
WNMG433SW	L	●	●	.500	.187	.047	.203
WNMG431MP	M	●	●	.500	.187	.016	.203
WNMG432MP	M	●	●	.500	.187	.031	.203
WNMG433MP	M	●	●	.500	.187	.047	.203
WNMG434MP	M	●	●	.500	.187	.063	.203
WNMG431MA	M	●	●	.500	.187	.016	.203
WNMG432MA	M	●	●	.500	.187	.031	.203
WNMG433MA	M	●	●	.500	.187	.047	.203
WNMG434MA	M	●	●	.500	.187	.063	.203

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
WNMG431MH	M	●	●	.500	.187	.016	.203
WNMG432MH	M	●	●	.500	.187	.031	.203
WNMG433MH	M	●	●	.500	.187	.047	.203
WNMG431	M	●	●	.500	.187	.016	.203
WNMG432	M	●	●	.500	.187	.031	.203
WNMG433	M	●	●	.500	.187	.047	.203
WNMG432MW	M	●	●	.500	.187	.031	.203
WNMG433MW	M	●	●	.500	.187	.047	.203
WNMG432RP	R	●	●	.500	.187	.031	.203
WNMG433RP	R	●	●	.500	.187	.047	.203
WNMG432GH	R	●	●	.500	.187	.031	.203
WNMG433GH	R	●	●	.500	.187	.047	.203

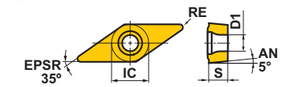
● : USA Stock
(10 inserts in one case)

MC6100 Series

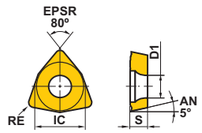
5° Positive Inserts (With Hole)

M Class

VBMT



WBMT



Finish	Light	Light	Medium	Medium
FP	FV	LP	MP	MV
				
Medium				
MV				
				

(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **VBMT220.5FP**	F	●	●	.250	.125	.008	.114
NEW **VBMT221FP**	F	●	★	.250	.125	.016	.114
NEW **VBMT222FP**	F	●	★	.250	.125	.031	.114
NEW **VBMT331FP**	F	●	★	.375	.187	.016	.173
NEW **VBMT332FP**	F	★	★	.375	.187	.031	.173
NEW **VBMT221FV**	F		★	.250	.125	.016	.114
NEW **VBMT222FV**	F		●	.250	.125	.031	.114
NEW **VBMT331FV**	F		●	.375	.187	.016	.173
NEW **VBMT332FV**	F		●	.375	.187	.031	.173
NEW **VBMT221LP**	L	●	●	.250	.125	.016	.114
NEW **VBMT222LP**	L	●	●	.250	.125	.031	.114
NEW **VBMT331LP**	L	●	●	.375	.187	.016	.173
NEW **VBMT332LP**	L	●	●	.375	.187	.031	.173
NEW **VBMT331MP**	M	●	★	.375	.187	.016	.173
NEW **VBMT332MP**	M	●	●	.375	.187	.031	.173
NEW **VBMT221MV**	M		●	.250	.125	.016	.114
NEW **VBMT222MV**	M		●	.250	.125	.031	.114
NEW **VBMT331MV**	M		★	.375	.187	.016	.173
NEW **VBMT332MV**	M		●	.375	.187	.031	.173

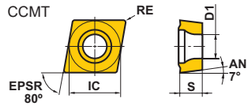
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **WBMT1.51.50.5LMV**	M		★	.187	.094	.008	.091
NEW **WBMT1.51.50.5RMV**	M		★	.187	.094	.008	.091
NEW **WBMT1.51.51LMV**	M		★	.187	.094	.016	.091
NEW **WBMT1.51.51RMV**	M		●	.187	.094	.016	.091

● : USA Stock ★ : Stocked in Japan
(10 inserts in one case)

7° Positive Inserts (With Hole)

M Class

CCMT



Finish	Finish	Light	Light
FP	FV	LP	SW
			 (Wiper)
Medium	**Medium**	**Medium**	
MP	MV	MW	
		 (Wiper)	

(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **CCMT21.50.5FP**	F	●	●	.250	.094	.008	.110
NEW **CCMT21.51FP**	F	●	●	.250	.094	.016	.110
NEW **CCMT32.50.5FP**	F	●	●	.375	.156	.008	.173
NEW **CCMT32.51FP**	F	●	●	.375	.156	.016	.173
NEW **CCMT32.52FP**	F	●	●	.375	.156	.031	.173
NEW **CCMT21.50.5FV**	F		●	.250	.094	.008	.110
NEW **CCMT21.51FV**	F		●	.250	.094	.016	.110
NEW **CCMT32.50.5FV**	F		★	.375	.156	.008	.173
NEW **CCMT32.51FV**	F		●	.375	.156	.016	.173
NEW **CCMT32.52FV**	F		●	.375	.156	.031	.173
NEW **CCMT21.50.5LP**	L		★	.250	.094	.008	.110
NEW **CCMT21.51LP**	L	●	●	.250	.094	.016	.110
NEW **CCMT21.52LP**	L	●	●	.250	.094	.031	.110
NEW **CCMT32.51LP**	L	●	●	.375	.156	.016	.173
NEW **CCMT32.52LP**	L	●	●	.375	.156	.031	.173
NEW **CCMT21.50.5SW**	L	●	★	.250	.094	.008	.110
NEW **CCMT21.51SW**	L	★	★	.250	.094	.016	.110
NEW **CCMT32.50.5SW**	L	●	●	.375	.156	.008	.173
NEW **CCMT32.51SW**	L	●	●	.375	.156	.016	.173

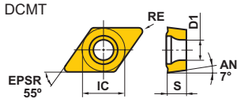
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **CCMT21.50.5MP**	M	●	●	.250	.094	.008	.110
NEW **CCMT21.51MP**	M	●	●	.250	.094	.016	.110
NEW **CCMT21.52MP**	M	●	●	.250	.094	.031	.110
NEW **CCMT2.520.5MP**	M	★	★	.313	.125	.008	.134
NEW **CCMT2.521MP**	M	★	★	.313	.125	.016	.134
NEW **CCMT2.522MP**	M	★	★	.313	.125	.031	.134
NEW **CCMT32.50.5MP**	M	●	●	.375	.156	.008	.173
NEW **CCMT32.51MP**	M	●	●	.375	.156	.016	.173
NEW **CCMT32.52MP**	M	●	●	.375	.156	.031	.173
NEW **CCMT431MP**	M	●	●	.500	.187	.016	.217
NEW **CCMT432MP**	M	●	●	.500	.187	.031	.217
NEW **CCMT433MP**	M	★	★	.500	.187	.047	.217
NEW **CCMH21.50.5MV**	M		★	.250	.094	.008	.110
NEW **CCMH21.51MV**	M		●	.250	.094	.016	.110
NEW **CCMT21.51MW**	M	★	★	.250	.094	.016	.110
NEW **CCMT21.52MW**	M	●	●	.250	.094	.031	.110
NEW **CCMT32.51MW**	M	●	●	.375	.156	.016	.173
NEW **CCMT32.52MW**	M	●	●	.375	.156	.031	.173
NEW **CCMT431MW**	M	★	★	.500	.187	.016	.217
NEW **CCMT432MW**	M	★	★	.500	.187	.031	.217

MC6100 Series

7° Positive Inserts (With Hole)

M Class

DCMT



Finish	Finish	Light
FP	FV	LP
		
Medium	**Medium**	
MP	MV	
		

(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **DCMT21.50.5FP**	F	●	★	.250	.094	.008	.110
NEW **DCMT21.51FP**	F	●	●	.250	.094	.016	.110
NEW **DCMT32.50.5FP**	F	●	★	.375	.156	.008	.173
NEW **DCMT32.51FP**	F	●	●	.375	.156	.016	.173
NEW **DCMT32.52FP**	F	●	●	.375	.156	.031	.173
NEW **DCMT21.50.5FV**	F	★	★	.250	.094	.008	.110
NEW **DCMT21.51FV**	F	★	●	.250	.094	.016	.110
NEW **DCMT21.52FV**	F		●	.250	.094	.031	.110
NEW **DCMT32.50.5FV**	F		●	.375	.156	.008	.173
NEW **DCMT32.51FV**	F	★	●	.375	.156	.016	.173
NEW **DCMT32.52FV**	F	★	●	.375	.156	.031	.173
NEW **DCMT21.50.5LP**	L		★	.250	.094	.008	.110
NEW **DCMT21.51LP**	L	●	●	.250	.094	.016	.110
NEW **DCMT21.52LP**	L	★	●	.250	.094	.031	.110
NEW **DCMT32.50.5LP**	L	★	●	.375	.156	.008	.173
NEW **DCMT32.51LP**	L	●	●	.375	.156	.016	.173
NEW **DCMT32.52LP**	L	●	●	.375	.156	.031	.173
NEW **DCMT21.50.5MP**	M	★	●	.250	.094	.008	.110
NEW **DCMT21.51MP**	M	●	●	.250	.094	.016	.110
NEW **DCMT21.52MP**	M	★	●	.250	.094	.031	.110
NEW **DCMT32.50.5MP**	M	★	●	.375	.156	.008	.173
NEW **DCMT32.51MP**	M	●	●	.375	.156	.016	.173
NEW **DCMT32.52MP**	M	●	●	.375	.156	.031	.173
NEW **DCMT32.53MP**	M	★	●	.375	.156	.047	.173
NEW **DCMT431MP**	M	●	●	.500	.187	.016	.217
NEW **DCMT432MP**	M	●	★	.500	.187	.031	.217
NEW **DCMT433MP**	M	★	★	.500	.187	.047	.217

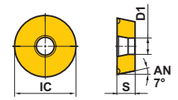
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **DCMT21.50.5MV**	M	★	●	.250	.094	.008	.110
NEW **DCMT21.51MV**	M	★	★	.250	.094	.016	.110
NEW **DCMT21.52MV**	M	★	★	.250	.094	.031	.110
NEW **DCMT32.50.5MV**	M	★	●	.375	.156	.008	.173
NEW **DCMT32.51MV**	M	★	●	.375	.156	.016	.173
NEW **DCMT32.52MV**	M	★	★	.375	.156	.031	.173

● : USA Stock ★ : Stocked in Japan
(10 inserts in one case)

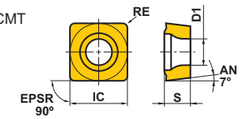
7° Positive Inserts (With Hole)

M Class

RCMT
RCMX



SCMT



Finish	Rough	
Standard	RR	
		
Medium	**Medium**	
FP	FV	MP
		

(inch)

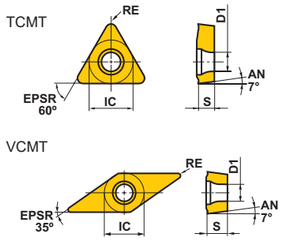
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **RCMT0602M0**	M	★	●	.236	.094	-	.110
NEW **RCMT0803M0**	M	★	★	.315	.125	-	.134
NEW **RCMX1003M0**	M	★	★	.394	.125	-	.142
NEW **RCMX1204M0**	M	★	★	.472	.187	-	.165
NEW **RCMX1606M0**	M	★	★	.630	.250	-	.205
NEW **RCMX2006M0**	M	★	★	.787	.250	-	.256
NEW **RCMX1606M0-RR**	R	★	★	.630	.250	-	.205
NEW **RCMX2006M0-RR**	R	★	★	.787	.250	-	.256

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **SCMT32.51FP**	F	★	★	.375	.156	.016	.173
NEW **SCMT32.52FP**	F	★	★	.375	.156	.031	.173
NEW **SCMT32.51FV**	F		★	.375	.156	.016	.173
NEW **SCMT32.51LP**	L	★	●	.375	.156	.016	.173
NEW **SCMT32.52LP**	L	★	●	.375	.156	.031	.173
NEW **SCMT32.51MP**	M	★	★	.375	.156	.016	.173
NEW **SCMT32.52MP**	M	●	★	.375	.156	.031	.173
NEW **SCMT431MP**	M	★	●	.500	.187	.016	.217
NEW **SCMT432MP**	M	★	★	.500	.187	.031	.217
NEW **SCMT433MP**	M	★	★	.500	.187	.047	.217

MC6100 Series

7° Positive Inserts (With Hole)

M Class



Finish	Light	Light	Medium	
FP	FV	LP	MP	
				
Finish	**Finish**	**Light**	**Medium**	**Medium**
FP	FV	LP	MP	MV
				

(inch)

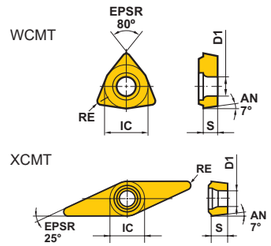
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **TCMT1.81.50.5FP**	F	★	★	.219	.094	.008	.098
NEW **TCMT1.81.51FP**	F	●	★	.219	.094	.016	.098
NEW **TCMT21.50.5FP**	F	●	★	.250	.094	.008	.110
NEW **TCMT21.51FP**	F	●	●	.250	.094	.016	.110
NEW **TCMT32.51FP**	F	★	★	.375	.156	.016	.173
NEW **TCMT21.51FV**	F		●	.250	.094	.016	.110
NEW **TCMT32.51FV**	F		★	.375	.156	.016	.173
NEW **TCMT1.81.51LP**	L	★	●	.219	.094	.016	.098
NEW **TCMT1.81.52LP**	L	★	★	.219	.094	.031	.098
NEW **TCMT21.51LP**	L	●	●	.250	.094	.016	.110
NEW **TCMT21.52LP**	L	★	●	.250	.094	.031	.110
NEW **TCMT32.51LP**	L	●	●	.375	.156	.016	.173
NEW **TCMT32.52LP**	L	●	●	.375	.156	.031	.173
NEW **TCMT1.81.51MP**	M	●	★	.219	.094	.016	.098
NEW **TCMT1.81.52MP**	M	★	●	.219	.094	.031	.098
NEW **TCMT21.50.5MP**	M	★	●	.250	.094	.008	.110
NEW **TCMT21.51MP**	M	●	●	.250	.094	.016	.110
NEW **TCMT21.52MP**	M	●	●	.250	.094	.031	.110
NEW **TCMT2.521MP**	M	★	★	.313	.125	.016	.134
NEW **TCMT32.51MP**	M	●	●	.375	.156	.016	.173
NEW **TCMT32.52MP**	M	●	★	.375	.156	.031	.173
NEW **TCMT32.53MP**	M	●	★	.375	.156	.047	.173

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **VCMT220.5FP**	F	★	●	.250	.125	.008	.110
NEW **VCMT221FP**	F	●	●	.250	.125	.016	.110
NEW **VCMT331FP**	F	●	●	.375	.187	.016	.173
NEW **VCMT332FP**	F	★	●	.375	.187	.031	.173
NEW **VCMT1.51.50.5FV**	F		★	.187	.094	.008	.094
NEW **VCMT1.51.51FV**	F		★	.187	.094	.016	.094
NEW **VCMT331FV**	F	★	●	.375	.187	.016	.173
NEW **VCMT332FV**	F	★	●	.375	.187	.031	.173
NEW **VCMT1.51.50.5LP**	L		●	.187	.094	.008	.094
NEW **VCMT1.51.51LP**	L		●	.187	.094	.016	.094
NEW **VCMT221LP**	L	●	●	.250	.125	.016	.110
NEW **VCMT222LP**	L	●	●	.250	.125	.031	.110
NEW **VCMT331LP**	L	●	●	.375	.187	.016	.173
NEW **VCMT332LP**	L	●	●	.375	.187	.031	.173
NEW **VCMT221MP**	M	●	★	.250	.125	.016	.110
NEW **VCMT331MP**	M	●	★	.375	.187	.016	.173
NEW **VCMT332MP**	M	●	★	.375	.187	.031	.173
NEW **VCMT333MP**	M	★	★	.375	.187	.047	.173
NEW **VCMT1.51.50.5MV**	M		●	.187	.094	.008	.094
NEW **VCMT1.51.51MV**	M		★	.187	.094	.016	.094

● : USA Stock ★ : Stocked in Japan
(10 inserts in one case)

7° Positive Inserts (With Hole)

M Class



Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **WCMT1.210.5MP**	M	●	●	.156	.063	.008	.091
NEW **WCMT1.211MP**	M	●	●	.156	.063	.016	.091
NEW **WCMT1.51.50.5MP**	M	●	●	.187	.094	.008	.091
NEW **WCMT1.51.51MP**	M	●	★	.187	.094	.016	.091
NEW **WCMT21.50.5MP**	M	●	●	.250	.094	.008	.110
NEW **WCMT21.51MP**	M	●	●	.250	.094	.016	.110
NEW **WCMT21.52MP**	M		●	.250	.094	.031	.110
NEW **WCMT32.51MP**	M	●	●	.375	.156	.016	.173
NEW **WCMT32.52MP**	M	●	●	.375	.156	.031	.173

Medium
MP

Finish
SVX


(inch)

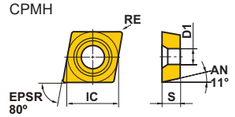
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW **XCMT221SVX**	F		●	.250	.125	.016	.112
NEW **XCMT222SVX**	F		★	.250	.125	.031	.112

MC6100 Series

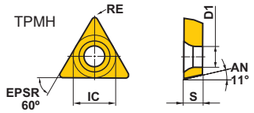
11° Positive Inserts (With Hole)

M Class

CPMH



TPMH



Finish	Light	Medium	Medium
FV	LP	Standard	MV
			
Finish	Light	Medium	
FV	LP	MV	
			

(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW CPMH2.51.50.5FV	F		★	.313	.094	.008	.138
NEW CPMH2.51.51FV	F		★	.313	.094	.016	.138
NEW CPMH320.5FV	F		★	.375	.125	.008	.177
NEW CPMH321FV	F		●	.375	.125	.016	.177
NEW CPMH322FV	F		●	.375	.125	.031	.177
NEW CPMH2.51.50.5LP	L		★	.313	.094	.008	.138
NEW CPMH2.51.51LP	L		★	.313	.094	.016	.138
NEW CPMH320.5LP	L		★	.375	.125	.008	.177
NEW CPMH321LP	L		★	.375	.125	.016	.177
NEW CPMH322LP	L		★	.375	.125	.031	.177
NEW CPMH2.51.51	M	★	★	.313	.094	.016	.138
NEW CPMH2.51.52	M	★	●	.313	.094	.031	.138
NEW CPMH321	M	★	★	.375	.125	.016	.177
NEW CPMH322	M	★	★	.375	.125	.031	.177
NEW CPMH2.51.51MV	M		●	.313	.094	.016	.138
NEW CPMH2.51.52MV	M		●	.313	.094	.031	.138
NEW CPMH321MV	M		●	.375	.125	.016	.177
NEW CPMH322MV	M		●	.375	.125	.031	.177

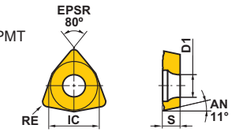
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW TPMH1.51.50.5FV	F		★	.187	.094	.008	.094
NEW TPMH1.51.51FV	F		●	.187	.094	.016	.094
NEW TPMH1.81.50.5FV	F		★	.219	.094	.008	.114
NEW TPMH1.81.51FV	F		●	.219	.094	.016	.114
NEW TPMH220.5FV	F		●	.250	.125	.008	.134
NEW TPMH221FV	F		●	.250	.125	.016	.134
NEW TPMH222FV	F		●	.250	.125	.031	.134
NEW TPMH320.5FV	F		●	.375	.125	.008	.173
NEW TPMH321FV	F		●	.375	.125	.016	.173
NEW TPMH322FV	F		●	.375	.125	.031	.173
NEW TPMH1.51.50.5LP	L		★	.187	.094	.008	.094
NEW TPMH1.51.51LP	L		★	.187	.094	.016	.094
NEW TPMH1.81.50.5LP	L		●	.219	.094	.008	.114
NEW TPMH1.81.51LP	L		★	.219	.094	.016	.114
NEW TPMH220.5LP	L		★	.250	.125	.008	.134
NEW TPMH221LP	L		★	.250	.125	.016	.134
NEW TPMH222LP	L		★	.250	.125	.031	.134
NEW TPMH320.5LP	L		★	.375	.125	.008	.173
NEW TPMH321LP	L		★	.375	.125	.016	.173
NEW TPMH322LP	L		●	.375	.125	.031	.173
NEW TPMH1.51.50.5MV	M		★	.187	.094	.008	.094
NEW TPMH1.51.51MV	M		★	.187	.094	.016	.094
NEW TPMH1.81.50.5MV	M		★	.219	.094	.008	.114
NEW TPMH1.81.51MV	M		★	.219	.094	.016	.114
NEW TPMH1.81.52MV	M		★	.219	.094	.031	.114
NEW TPMH220.5MV	M		★	.250	.125	.008	.134
NEW TPMH221MV	M		★	.250	.125	.016	.134
NEW TPMH222MV	M		★	.250	.125	.031	.134
NEW TPMH321MV	M		●	.375	.125	.016	.173
NEW TPMH322MV	M		●	.375	.125	.031	.173

● : USA Stock ★ : Stocked in Japan
(10 inserts in one case)

11° Positive Inserts (With Hole)

M Class

WPMT



Medium
MV

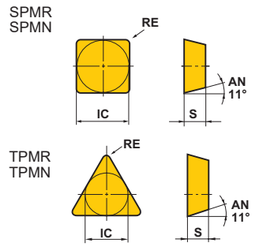

(inch)

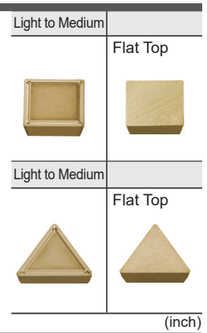
Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW WPMT21.50.5MV	M		●	.250	.094	.008	.110
NEW WPMT21.51MV	M		★	.250	.094	.016	.110
NEW WPMT321MV	M		●	.375	.125	.016	.173
NEW WPMT322MV	M		★	.375	.125	.031	.173

MC6100 Series

11° Positive Inserts (Without Hole)

M Class





(inch)

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW SPMR321	M	★	★	.375	.125	.016	–
NEW SPMR322	M	★	●	.375	.125	.031	–
NEW SPMR421	M	★	●	.500	.125	.016	–
NEW SPMR422	M	●	★	.500	.125	.031	–
NEW SPMN322	–	●		.375	.125	.031	–
NEW SPMN421	–	★		.500	.125	.016	–
NEW SPMN422	–	●		.500	.125	.031	–
NEW SPMN423	–	★		.500	.125	.047	–

Order Number	Cutting Area	MC6115	MC6125	IC	S	RE	D1
NEW TPMR221	M	●	★	.250	.125	.016	–
NEW TPMR222	M	●	●	.250	.125	.031	–
NEW TPMR321	M	●	●	.375	.125	.016	–
NEW TPMR322	M	●	●	.375	.125	.031	–
NEW TPMR323	M	★	●	.375	.125	.047	–
NEW TPMN221	–	★		.250	.125	.016	–
NEW TPMN222	–	★		.250	.125	.031	–
NEW TPMN321	–	★		.375	.125	.016	–
NEW TPMN322	–	●		.375	.125	.031	–
NEW TPMN323	–	★		.375	.125	.047	–
NEW TPMN431	–	●		.500	.187	.016	–
NEW TPMN432	–	●		.500	.187	.031	–
NEW TPMN433	–	●		.500	.187	.047	–

● : USA Stock ★ : Stocked in Japan
(10 inserts in one case)

Recommended Cutting Conditions

Negative Inserts (For External Turning)

(inch)

Workpiece Material		Properties	Cutting Range		Priority	Grade	Chip Breaker	Cutting Speed vc (SFM)	Feed f (IPR)	Depth of Cut ap
P	Carbon and Alloy Steel	180–280HB	●	L	1	MC6115	LP	820–1575	.004–.016	.012–.079
			●	L	2	MC6125	LP	900–1395	.004–.016	.012–.079
			●	L	3	MC6115	SH	820–1575	.004–.016	.012–.079
			●	L	4	MC6125	SH	900–1395	.004–.016	.012–.079
			●	L	5	MC6115	SA	820–1575	.004–.016	.012–.079
			●	L	6	MC6125	SA	900–1395	.004–.016	.012–.079
			●	L	7	MC6115	SW	820–1575	.004–.020	.012–.098
			●	L	8	MC6125	SW	900–1395	.004–.020	.012–.098
			●	M	1	MC6115	MP	755–1445	.006–.020	.012–.157
			●	M	2	MC6125	MP	820–1280	.006–.020	.012–.157
			●	M	3	MC6115	MA	755–1445	.008–.020	.012–.157
			●	M	4	MC6125	MA	820–1280	.008–.020	.012–.157
			●	M	5	MC6115	Std	755–1445	.010–.024	.059–.197
			●	M	6	MC6125	Std	820–1280	.010–.024	.059–.197
			●	M	7	MC6115	MW	755–1445	.008–.024	.035–.157
			●	M	8	MC6125	MW	820–1280	.008–.024	.035–.157
			●	R	1	MC6115	RP	705–1360	.010–.024	.059–.236
			●	R	2	MC6125	RP	770–1215	.010–.024	.059–.236
			●	R	3	MC6115	GH	705–1360	.010–.024	.059–.236
			●	R	4	MC6125	GH	770–1215	.010–.024	.059–.236
			◐	L	1	MC6115	LP	820–1575	.004–.016	.012–.079
			◐	L	2	MC6125	LP	900–1395	.004–.016	.012–.079
			◐	L	3	MC6115	SH	820–1575	.004–.016	.012–.079
			◐	L	4	MC6125	SH	900–1395	.004–.016	.012–.079
			◐	L	5	MC6115	SA	820–1575	.004–.016	.012–.079
			◐	L	6	MC6125	SA	900–1395	.004–.016	.012–.079
			◐	L	7	MC6115	SW	820–1575	.004–.020	.012–.098
			◐	L	8	MC6125	SW	900–1395	.004–.020	.012–.098
			◐	M	1	MC6125	MP	820–1280	.006–.020	.012–.157
			◐	M	2	MC6115	MP	755–1445	.006–.020	.012–.157
			◐	M	3	MC6125	MA	820–1280	.008–.020	.012–.157
			◐	M	4	MC6115	MA	755–1445	.008–.020	.012–.157
			◐	M	5	MC6125	MH	820–1280	.008–.022	.039–.157
			◐	M	6	MC6115	MH	755–1445	.008–.022	.039–.157
			◐	M	7	MC6125	Std	820–1280	.010–.024	.059–.197
			◐	M	8	MC6115	Std	755–1445	.010–.024	.059–.197
			◐	M	9	MC6125	MW	820–1280	.008–.024	.035–.157
			◐	M	10	MC6115	MW	755–1445	.008–.024	.035–.157
			◐	R	1	MC6125	RP	770–1215	.010–.024	.059–.236
			◐	R	2	MC6115	RP	705–1360	.010–.024	.059–.236
			◐	R	3	MC6125	GH	770–1215	.010–.024	.059–.236
			◐	R	4	MC6115	GH	705–1360	.010–.024	.059–.236
			✣	L	1	MC6125	LP	900–1395	.004–.016	.012–.079
			✣	L	2	MC6125	SH	900–1395	.004–.016	.012–.079
			✣	L	3	MC6125	SA	900–1395	.004–.016	.012–.079
			✣	M	1	MC6125	MP	820–1280	.006–.020	.012–.157
			✣	M	2	MC6125	MA	820–1280	.008–.020	.012–.157
			✣	M	3	MC6125	MH	820–1280	.008–.022	.039–.157
			✣	M	4	MC6125	Std	820–1280	.010–.024	.059–.197
			✣	M	5	MC6125	MW	820–1280	.008–.024	.035–.157
			✣	R	1	MC6125	RP	770–1215	.010–.024	.059–.236
			✣	R	2	MC6125	GH	770–1215	.010–.024	.059–.236

Note1) Verify the recommended conditions for each boring bar as cutting conditions for internal machining will vary depending on the length of overhang.

Cutting Conditions : ● : Stable Cutting ◐ : General Cutting ✣ : Unstable Cutting
Cutting Area : **L** : Light Cutting **M** : Medium Cutting **R** : Rough Cutting

Recommended Cutting Conditions

7° Positive Inserts (For External Turning)

(inch)

Workpiece Material	Properties	Cutting Range		Priority	Grade	Chip Breaker	Cutting Speed **vc** (SFM)	Feed **f** (IPR)	Depth of Cut **ap**
P									
Mild Steel	Hardness ≤180HB	◐	F	1	**MC6115**	**FP**	970—1870	.002—.008	.008—.035
		◐	F	2	**MC6115**	**FV**	970—1870	.002—.008	.008—.035
		◐	L	1	**MC6115**	**LP**	970—1870	.002—.010	.008—.039
		◐	L	2	**MC6115**	**SW**	970—1870	.002—.009	.008—.059
		◐	M	1	**MC6115**	**MP**	805—1560	.003—.012	.012—.079
		◐	M	2	**MC6115**	**MV**	805—1560	.003—.012	.012—.079
		◐	M	3	**MC6115**	**MW**	805—1560	.004—.014	.031—.098
		✣	F	1	**MC6125**	**FP**	1050—1655	.002—.008	.008—.035
		✣	F	2	**MC6125**	**FV**	1050—1655	.002—.008	.008—.035
		✣	L	1	**MC6125**	**LP**	1050—1655	.002—.010	.008—.039
		✣	L	2	**MC6125**	**SV**	1050—1655	.002—.010	.008—.039
		✣	L	3	**MC6125**	**SW**	1050—1655	.002—.009	.008—.059
		✣	M	1	**MC6125**	**MP**	885—1380	.003—.012	.012—.079
		✣	M	2	**MC6125**	**MV**	885—1380	.003—.012	.012—.079
		✣	M	3	**MC6125**	**MW**	885—1380	.004—.014	.031—.098
Carbon Steel Alloy Steel	Hardness 180—280HB	◐	F	1	**MC6115**	**FP**	720—1380	.002—.008	.008—.035
		◐	F	2	**MC6115**	**FV**	720—1380	.002—.008	.008—.035
		◐	L	1	**MC6115**	**LP**	720—1380	.002—.010	.008—.039
		◐	L	2	**MC6115**	**SW**	720—1380	.002—.009	.008—.059
		◐	M	1	**MC6125**	**MP**	655—1015	.003—.012	.012—.079
		◐	M	2	**MC6115**	**MP**	590—1150	.003—.012	.012—.079
		◐	M	3	**MC6125**	**MV**	655—1015	.003—.012	.012—.079
		◐	M	4	**MC6115**	**MV**	590—1150	.003—.012	.012—.079
		◐	M	5	**MC6115**	**MW**	590—1150	.004—.014	.031—.098
		✣	F	1	**MC6125**	**FP**	785—1215	.002—.008	.008—.035
		✣	F	2	**MC6125**	**FV**	785—1215	.002—.008	.008—.035
		✣	L	1	**MC6125**	**LP**	785—1215	.002—.010	.008—.039
		✣	L	2	**MC6125**	**SV**	785—1215	.002—.010	.008—.039
		✣	L	3	**MC6125**	**SW**	785—1215	.002—.009	.008—.059
		✣	M	1	**MC6125**	**MP**	655—1015	.003—.012	.012—.079
		✣	M	2	**MC6125**	**MV**	655—1015	.003—.012	.012—.079
		✣	M	2	**MC6125**	**MW**	655—1015	.004—.014	.031—.098
Carbon Steel Alloy Steel	Hardness 280—350HB	◐	F	1	**MC6115**	**FP**	510—970	.002—.008	.008—.035
		◐	F	2	**MC6115**	**FV**	510—970	.002—.008	.008—.035
		◐	L	1	**MC6115**	**LP**	510—970	.002—.010	.008—.039
		◐	M	1	**MC6115**	**MP**	425—805	.003—.012	.012—.079
		◐	M	2	**MC6115**	**MV**	425—805	.003—.012	.012—.079
		✣	F	1	**MC6125**	**FP**	560—870	.002—.008	.008—.035
		✣	F	2	**MC6125**	**FV**	560—870	.002—.008	.008—.035
		✣	L	1	**MC6125**	**LP**	560—870	.002—.010	.008—.039
		✣	M	1	**MC6125**	**MP**	460—720	.003—.012	.012—.079
		✣	M	2	**MC6125**	**MV**	460—720	.003—.012	.012—.079

Note 1) Recommended cutting conditions for 5º/7º/11º positive inserts are provided as a guideline only.
Verify the recommended conditions for each boring bar as cutting conditions for internal machining will vary depending on the length of overhang.
Note 2) Please scan the QR code for a pamphlet of the recommended conditions for the XCMT profile holder insert.

Cutting Conditions : ● : Stable Cutting ◐ : General Cutting ✣ : Unstable Cutting
Cutting Area : **L** : Light Cutting **M** : Medium Cutting **R** : Rough Cutting

11° Positive Inserts (For External Turning)

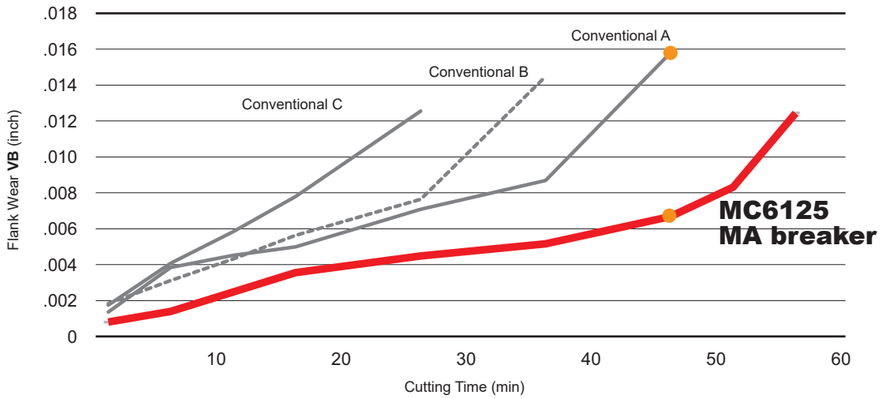
(inch)

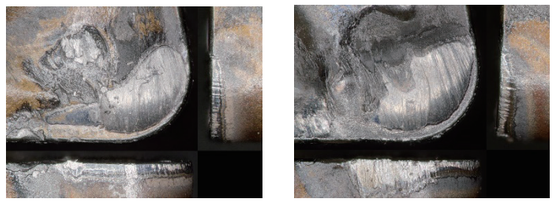
Workpiece Material	Properties	Cutting Range		Priority	Grade	Chip Breaker	Cutting Speed **vc** (SFM)	Feed **f** (IPR)	Depth of Cut **ap**
P									
Mild Steel	Hardness ≤180HB	◐	F	1	**MC6125**	**FV**	1050—1655	.002—.008	.008—.035
		◐	L	1	**MC6125**	**LP**	1050—1655	.002—.010	.008—.039
		◐	L	2	**MC6115**	**R-Std**	805—1560	.003—.012	.012—.079
		◐	M	1	**MC6125**	**MV**	885—1380	.003—.012	.012—.079
		◐	M	2	**MC6115**	**MV**	805—1560	.003—.012	.012—.079
		◐	M	3	**MC6125**	**R-Std**	885—1380	.003—.012	.012—.079
		✣	L	1	**MC6125**	**LP**	1050—1655	.002—.010	.008—.039
		✣	L	2	**MC6125**	**R-Std**	885—1380	.003—.012	.012—.079
		✣	M	1	**MC6125**	**MV**	885—1380	.003—.012	.012—.079
		✣	M	2	**MC6125**	**R-Std**	885—1380	.003—.012	.012—.079
Carbon Steel Alloy Steel	Hardness 180—280HB	◐	F	1	**MC6125**	**FV**	785—1215	.002—.008	.008—.035
		◐	L	1	**MC6125**	**LP**	785—1215	.002—.010	.008—.039
		◐	L	2	**MC6115**	**R-Std**	590—1150	.003—.012	.012—.079
		◐	L	3	**MC6125**	**R-Std**	655—1015	.003—.012	.012—.079
		◐	M	1	**MC6125**	**MV**	655—1015	.003—.012	.012—.079
		◐	M	2	**MC6115**	**R-Std**	590—1150	.003—.012	.012—.079
		◐	M	3	**MC6125**	**R-Std**	655—1015	.003—.012	.012—.079
		✣	L	1	**MC6125**	**LP**	785—1215	.002—.010	.008—.039
		✣	L	2	**MC6125**	**R-Std**	655—1015	.003—.012	.012—.079
		✣	M	1	**MC6125**	**MV**	655—1015	.003—.012	.012—.079
		✣	M	2	**MC6125**	**R-Std**	655—1015	.003—.012	.012—.079

Cutting Performance

Machining : Comparison of Wear Resistance During Continuous Wet Cutting

The thick coating exclusively for MC6125 highly suppresses early wear.





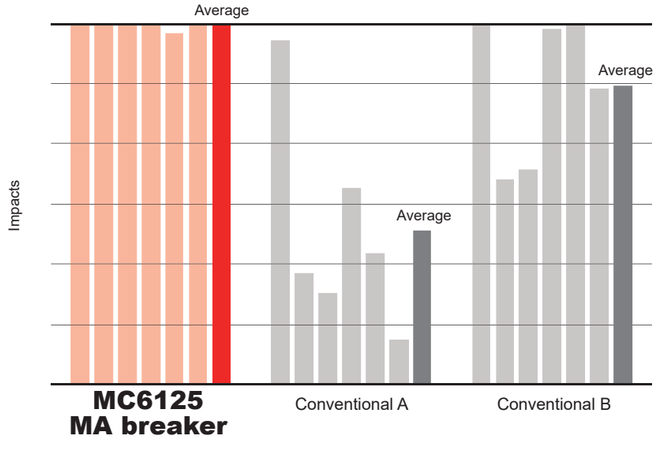
MC6125 46 min.
MA breaker

Conventional A 46 min.

<Cutting Conditions>
Workpiece Material : ANSI 5120H
Inserts : CNMG432-◌◌
Cutting Speed : vc=985 SFM
Feed per Rev. : f=.012 IPR
Depth of Cut : ap=.059 inch
Cutting Mode : Wet Cutting

Comparison of Toughness During Interrupted Cutting

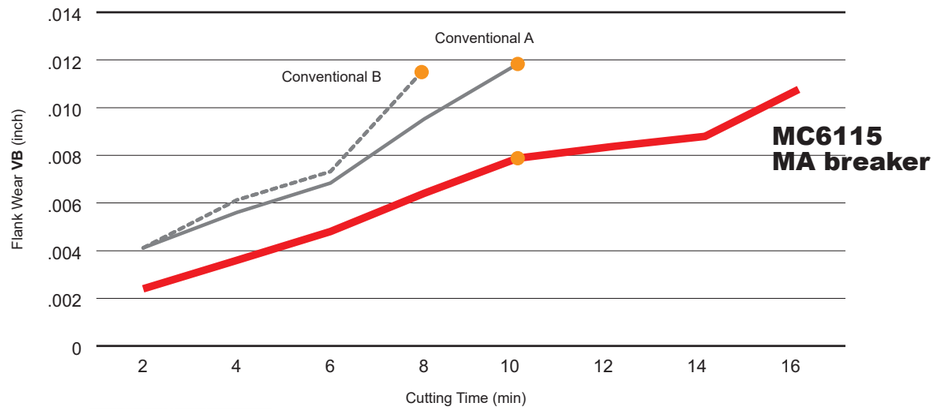
Provides stable cutting under severe cutting conditions that are likely to cause sudden fracturing.

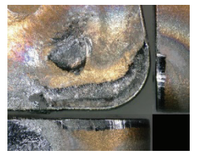


<Cutting Conditions>
Workpiece Material : AISI 4140
Inserts : CNMG432◌◌
Cutting Speed : vc=655 SFM
Feed per Rev. : f=.010 IPR
Depth of Cut : ap=.059 inch
Cutting Mode : Wet Cutting

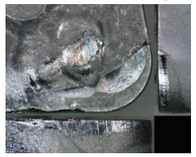
Machining AISI 1045 : Comparison of Wear Resistance During Continuous Dry Cutting

The "Super" Nano Texture Technology increases tool life even when dry cutting by suppressing crater wear.

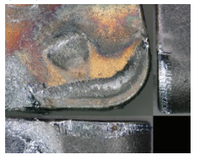




MC6115 10 min.



Conventional A 10 min.

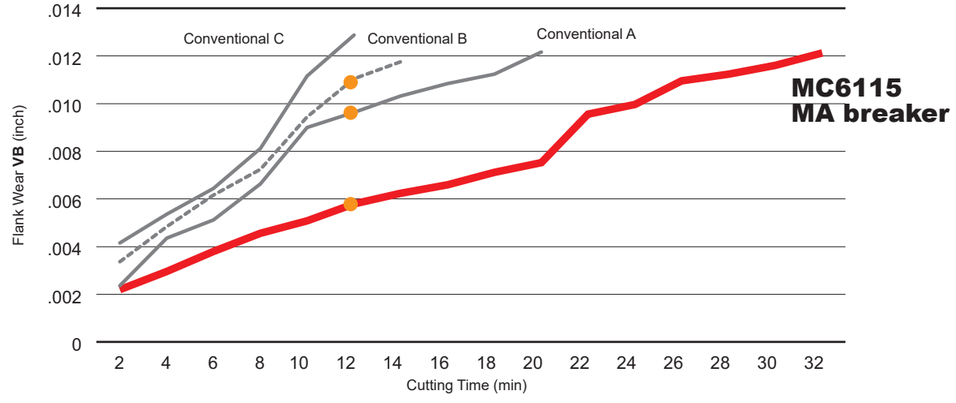


Conventional B 8 min.

<Cutting Conditions>
Workpiece Material : AISI 1045
Inserts : CNMG432◌◌
Cutting Speed : vc=985 SFM
Feed per Rev. : f=.012 IPR
Depth of Cut : ap=.059 inch
Cutting Mode : Dry Cutting

Machining AISI 52100 : Comparison of Wear Resistance During Continuous Wet Cutting

The thick coating provides high flank wear resistance.



MC6115 12 min.

Conventional A 12 min.

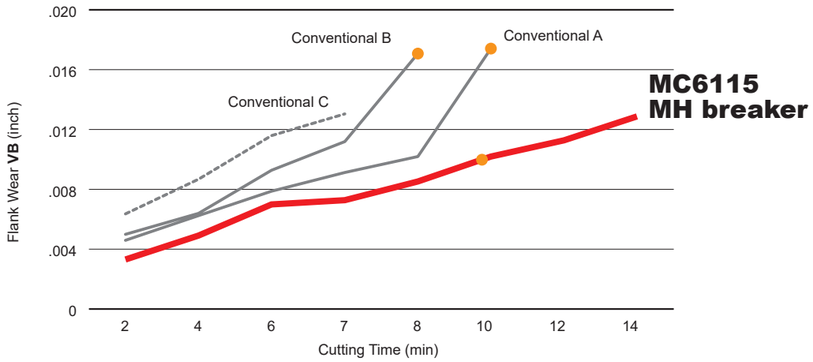
Conventional B 12 min.

<Cutting Conditions>
Workpiece Material : AISI 52100
Inserts : CNMG432◌◌
Cutting Speed : vc=985 SFM
Feed per Rev. : f=.012 IPR
Depth of Cut : ap=.059 inch
Cutting Mode : Wet Cutting

Cutting Performance

Machining AISI 4140 : Comparison of Wear Resistance During Continuous Wet Cutting

MC6115 with high edge strength breakers can also enable excellent wear resistance during high speed turning.



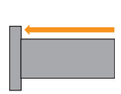
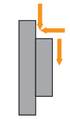
MC6115 10 min.

Conventional A 10 min.

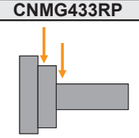
Conventional B 8 min.

<Cutting Conditions>
Workpiece Material : AISI 4140
Inserts : CNMG432◯◯
Cutting Speed : vc=1150 SFM
Feed per Rev. : f=.012 IPR
Depth of Cut : ap=.059 inch
Cutting Mode : Wet Cutting

Examples of Usage

Insert		CNMG432MA	WNMG432MP
Workpiece Material		AISI 1045 	Carbon Steel 
Component		Hex Bar Parts	Automotive Parts
Application		Interrupted Finish Turning	External Turning and Facing
Cutting Conditions	Cutting Speed vc (SFM)	490	260
	Feed per Rev. f (IPR)	.008	.004 - .020
	Depth of Cut ap (inch)	.079, .063	.020
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 500 1000 **MC6125** Conventional Conventional products fractured after chipping but MC6125 formed good chip shapes and achieved a longer tool life.	Number of Workpieces 500 1000 1500 2000 2500 **MC6125** Conventional MC6125 achieved more than 1.3 times longer tool life due to its high wear resistance.

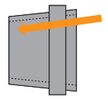
Insert		DNMG433S	CNMG432MH
Workpiece Material		AISI 1053 	General Structural Steel 
Component		–	Hun Parts
Application		Interrupted Finish Turning	Face Turning
Cutting Conditions	Cutting Speed vc (SFM)	655	655→785
	Feed per Rev. f (IPR)	.012	.010
	Depth of Cut ap (inch)	.047	.079
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 50 100 150 **MC6125** Conventional MC6125 provided a stable cutting action and achieved 1.5 times more tool life than conventional products.	Number of Workpieces 50 100 150 200 **MC6125** Conventional MC6125 improved efficiency and tool life by increasing the cutting speed.

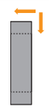
Insert		CNMG433RP
Workpiece Material		AISI 5135 
Component		Flange Parts
Application		External Turning and Facing
Cutting Conditions	Cutting Speed vc (SFM)	655
	Feed per Rev. f (IPR)	.010
	Depth of Cut ap (inch)	.059
Cutting Mode		Wet Cutting
Results		Number of Workpieces 50 100 **MC6125** Conventional Conventional products machined an inconsistent number of components. MC6125 was more consistent and improved tool life.

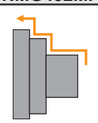
The application examples are from customers workpieces and can therefore differ from the recommended cutting conditions.

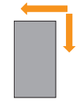
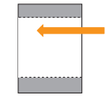
CVD Coated Grade for Steel Turning

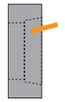
Examples of Usage

Insert		CNMG432MA	WNMG432MA
Workpiece Material		AISI 4140 	AISI 5140 
Component		Heavy Machinery Parts	Automotive Parts
Application		Internal Turning	External Face Turning
Cutting Conditions	Cutting Speed vc (SFM)	490	950
	Feed per Rev. f (IPR)	.012	.010
	Depth of Cut ap (inch)	.059	.039
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 1 2 3 MC6115 Conventional	Number of Workpieces 20 40 60 MC6115 Conventional
		Tool life increased x 1.5 on a large workpiece (inner diameter 16.929 inch)	The excellent wear resistance of MC6115 helped achieve double tool life.

Insert		WNMG432MA	WNMG433MP
Workpiece Material		AISI 52100 	AISI 5120H 
Component		Bearing Parts	Machine Parts
Application		External Face Turning	Face Turning
Cutting Conditions	Cutting Speed vc (SFM)	650-910	770
	Feed per Rev. f (IPR)	.008-.012	.014
	Depth of Cut ap (inch)	.039	.039
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 100 200 300 MC6115 Conventional	Number of Workpieces 100 200 300 MC6115 Conventional
		The excellent wear resistance of MC6115 helped achieve double tool life.	MC6115 achieved longer tool life compared to a conventional product.

Insert		WNMG432MP	WNMG434MA
Workpiece Material		AISI 5140 	AISI 1049 
Component		Hub	Joint Parts
Application		External Turning and Facing	Internal Turning and Facing
Cutting Conditions	Cutting Speed vc (SFM)	985	705
	Feed per Rev. f (IPR)	.010-.014	.010-.011
	Depth of Cut ap (inch)	.039-.098	.124
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 100 200 300 MC6115 Conventional	Number of Workpieces 50 150 250 350 MC6115 Conventional
		Superior wear resistance compared to conventional products meant tool life was extended.	Excellent wear resistance during rough machining of forged product applications helped achieve 150% tool life.

Insert		DNMG443SA	CNMG432MP
Workpiece Material		Bearing Steel 	AISI 5140 
Component		Bearing Parts	Shaft Parts
Application		External Turning and Facing	Internal Turning
Cutting Conditions	Cutting Speed vc (SFM)	850	920
	Feed per Rev. f (IPR)	.012-.014	.011
	Depth of Cut ap (inch)	.020	.098
Cutting Mode		Wet Cutting	Wet Cutting
Results		Number of Workpieces 50 100 150 200 250 MC6115 Conventional	Number of Workpieces 50 150 250 350 MC6115 Conventional
		Extreme resistance to chipping achieved 150% tool life and enabled easy identification of wear.	Number of components machined increased by 50% due to improved wear resistance.

Insert		WNMG432MP
Workpiece Material		Heated Tool Steel 
Component		Die Casting Parts
Application		Internal Turning
Cutting Conditions	Cutting Speed vc (SFM)	525
	Feed per Rev. f (IPR)	.010
	Depth of Cut ap (inch)	.079
Cutting Mode		Wet Cutting
Results		Number of Workpieces 1 2 3 4 MC6115 Conventional
		MC6115 gave 1.5 x longer tool life even when machining heat treated materials.

The application examples are from customers workpieces and can therefore differ from the recommended cutting conditions.

DIA EDGE

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For Your Safety

- Don't handle inserts and chips without gloves.
- Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage.
- Please use safety covers and wear safety glasses.
- When using compounded cutting oils, please take fire precautions.
- When attaching inserts or spare parts, please use only the correct wrench or driver.
- When using rotating tools, please make a trial run to check run-out, vibration and abnormal sounds etc.

MITSUBISHI MATERIALS U.S.A.

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Tools specifications subject to change without notice.

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