

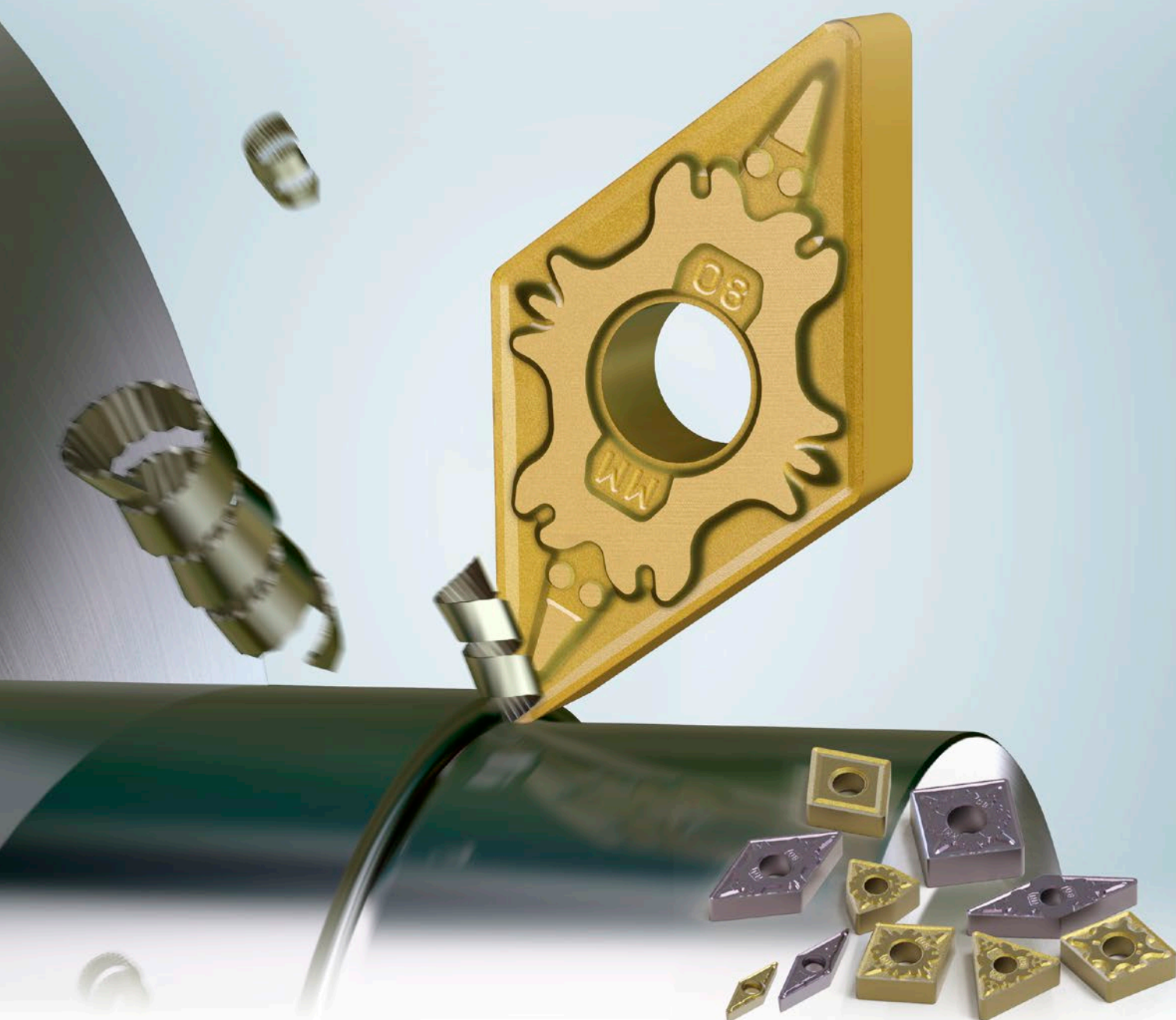
Coated Grade for Stainless Steel Turning

MC/MP7100 Series

New
Products

Dedicated Carbide Substrate + New Coating Technology

Creation of a new series for a variety of stainless steel applications.



Coated Grade for Stainless Steel Turning

MC/MP7100 Series

Improved coating adhesion strength and dedicated carbide substrate suppresses notching during stainless steel turning.

Stainless steels are widely used for components that require resistance to corrosion. When comparing stainless steels to other steels and cast irons, it has low hardness but is tough to machine and susceptible to work hardening. Due to these characteristics, turning inserts are prone to edge damage and weld chipping. Additionally, plastic deformation of the insert due to the heat generated makes more difficult to cut, resulting in unstable tool life.

The properties of stainless steels, such as corrosion and heat resistance, vary greatly depending on the metallurgical structure and composition, and these small differences can make it appear as if a completely different workpiece material is being machined.

Mitsubishi Materials has the ability to combine coating and substrate technology to produce a series of grades to successfully machine stainless steels.



Notching



Fracture from welding chipping



Plastic deformation

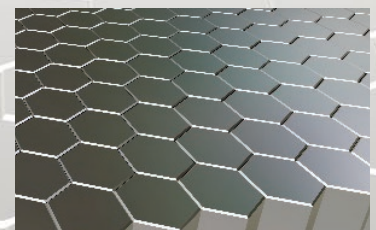
Features of The MC7100 Series Coating

"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



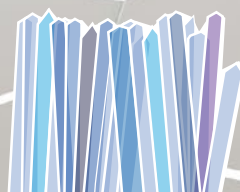
*By Image

Crystal Orientation



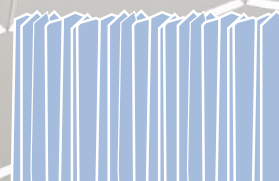
Conventional CVD inserts

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.

Tough and Sub Grip Layers

The extra strength of the adhesion between the coating layers suppresses peeling during machining of stainless steels.



Super-TOUGH-Grip

The adhesion strength of the Al_2O_3 layer, which was prone to peeling due to the work-hardened layer when machining stainless steel, has been significantly improved.

SUB-Grip

It increases the adhesion strength between the carbide substrate and the coating layer, and prevents the coating from peeling off due to welding.

Features of Carbide Substrate

MC7115

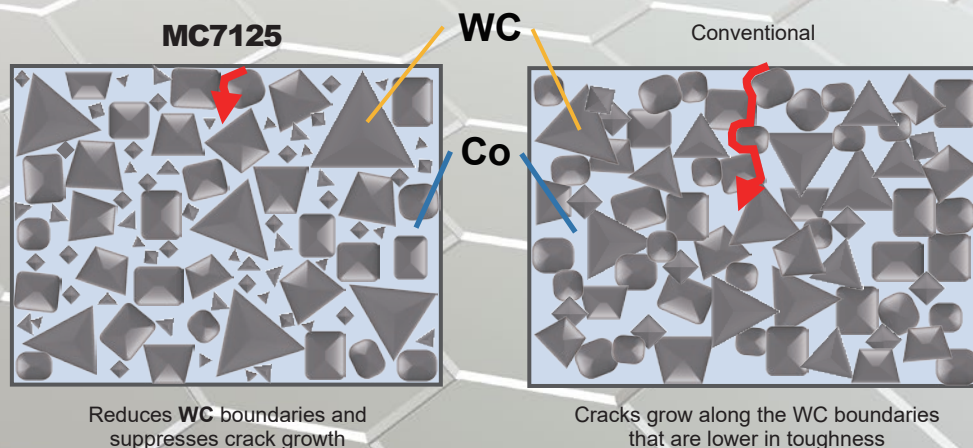
Has crater wear and plastic deformation resistance that are ideal for high-speed cutting of stainless steel.

MC7125

By optimising the particle size distribution, the boundary contact between the low toughness WC particles has been reduced and promotes hardness, thereby dramatically improving plastic deformation and fracture resistance.

MP7135

The dedicated carbide substrate has excellent wear resistance and greatly improved chipping resistance.

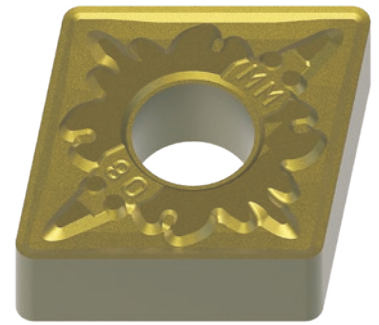


The All Round Choice for Stainless Steel Turning

MC7125

First recommended grade

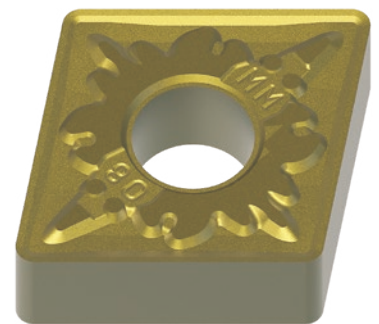
Compatible with a wide range of applications,
from continuous cutting through to interrupted cutting.
Suitable for a wide variety of stainless steels.



For High Speed Turning

MC7115

CVD coated carbide grade specialised for high speed cutting
For medium to large austenitic stainless steel parts, cutting
speeds of 250 m/min or more reduce machining time.



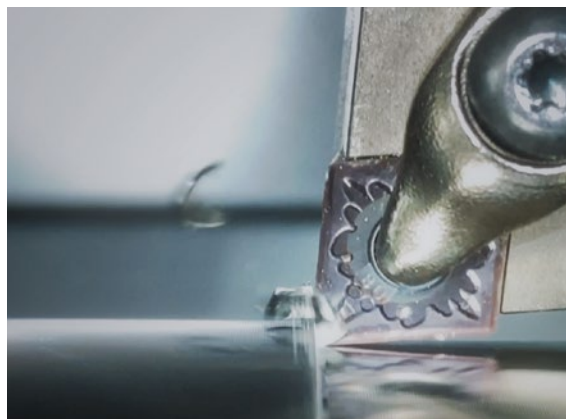
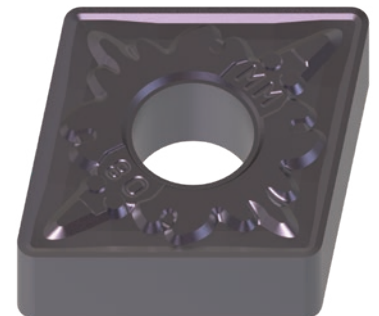
Note) The appearance colour of MC7115 and MC7125 may vary depending on
the product, but this does not affect the quality or performance.

Tougher for Interrupted Cutting

MP7135

PVD coated carbide grade that is resistant to the
impacts of interrupted cutting

It is ideal for intermittent cutting of workpieces, as well
as for rough machining of forged and cast products.



**MC/MP7000 series
machining video**

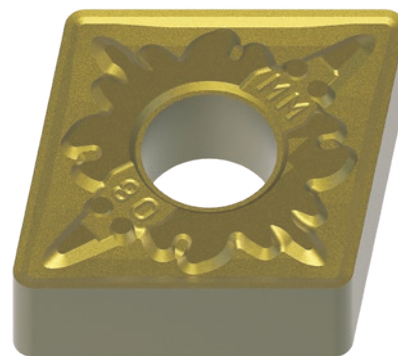


YouTube

The All-Rounder for Stainless Steel Turning

MC7125

Incredibly stable with both plastic deformation and chipping resistance



Coating layer with high adhesive strength

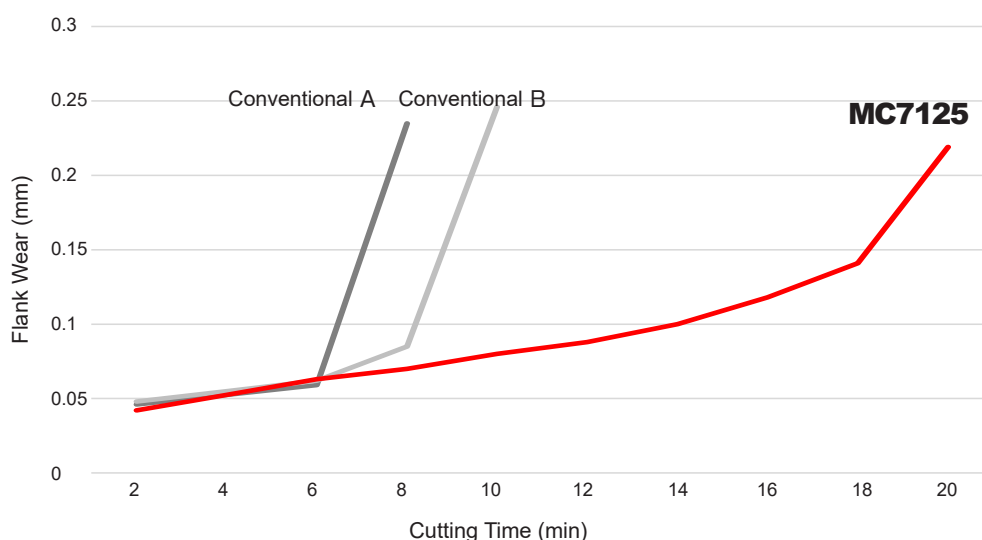
Tough and Super TOUGH-Grip dramatically improve adhesion strength and maximise the effectiveness of the coating.

Substrate resistant to plastic deformation and chipping

By optimising the particle size distribution of the main component WC and improving its dispersibility, reduced contact between the WC particles, dramatically improves resistance to plastic deformation and fracture.



Machining SUS316L : Comparison of wear resistance during wet cutting



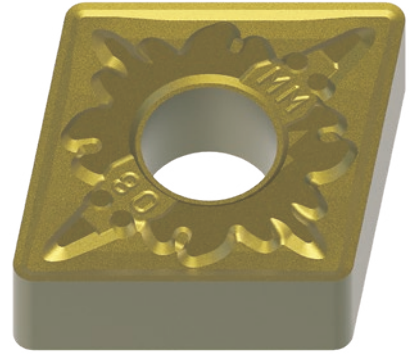
**Tool life
doubled**

<Cutting Conditions>
Material : SUS316L
Inserts : CNMG120408-
Cutting Speed : $v_c = 150$ m/min
Feed per Rev. : $f = 0.30$ mm/rev
Depth of Cut : $a_p = 1.5$ mm
Cutting Mode : Wet Cutting

For High Speed Turning

MC7115

Increases the hardness of the base material, providing excellent resistance to plastic deformation and crater wear

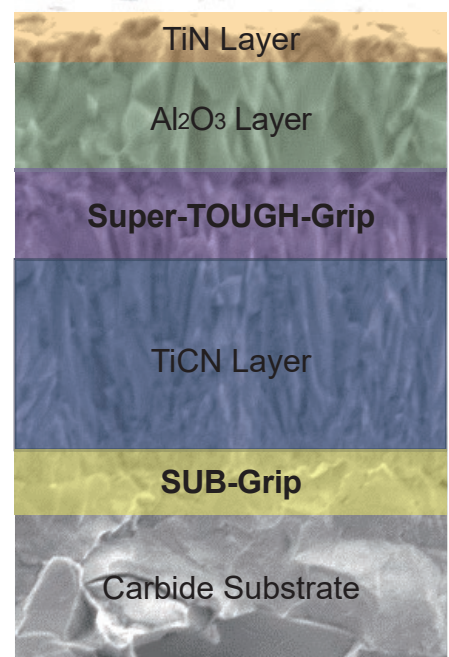


Coating layer with high adhesive strength

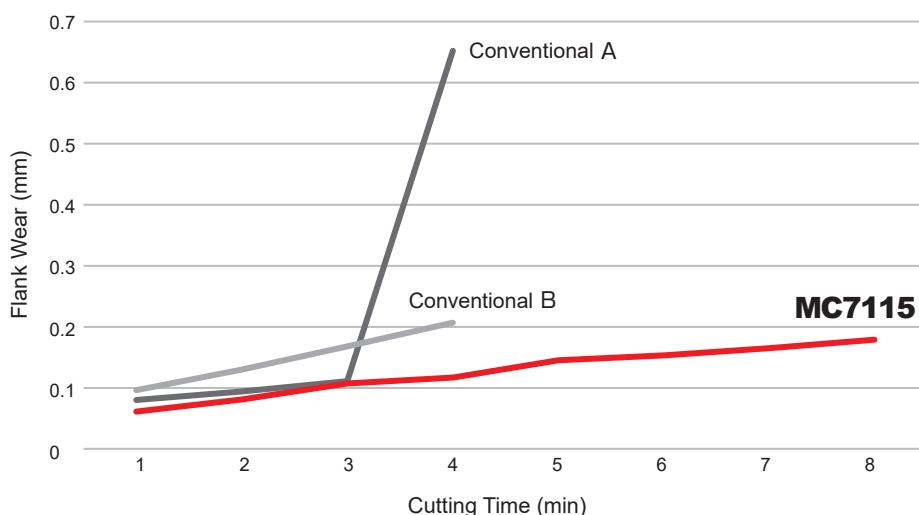
Tough and Super Tough Grip improve adhesion strength and maximise the effectiveness of the coating. "Super" Nano Texture Technology suppresses crater wear during high speed cutting.

Carbide Substrate That is Strong for High Speed Cutting

The hard carbide substrate is resistant to the high temperatures generated during high speed cutting and has excellent resistance to plastic deformation and crater wear.



Machining SUS304 : Comparison of wear resistance during wet cutting



**Tool life
doubled**

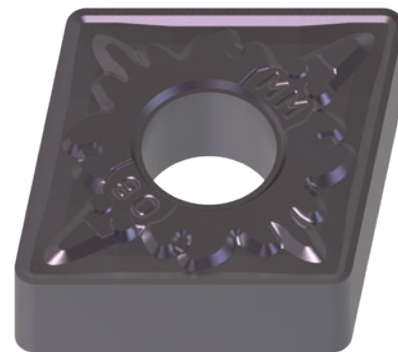
<Cutting Conditions>

Material	: SUS304
Inserts	: CNMG120408-00
Cutting Speed	: $v_c = 250$ m/min
Feed per Rev.	: $f = 0.30$ mm/rev
Depth of Cut	: $a_p = 1.5$ mm
Cutting Mode	: Wet Cutting

Tougher for Interrupted Cutting

MP7135

The highly heat resistant coating and dedicated carbide substrate provide both wear resistance and chipping resistance.



AlTiN-based nano-layer coating

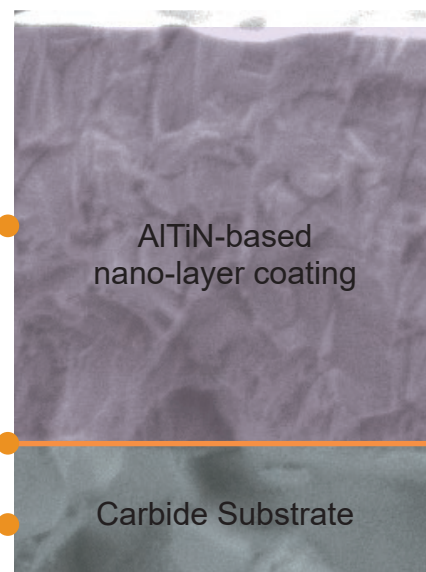
By layering the highly heat resistant AlTiN coating at the Nano level, excellent wear and chipping resistance has been achieved.

Technology to improve adhesion strength

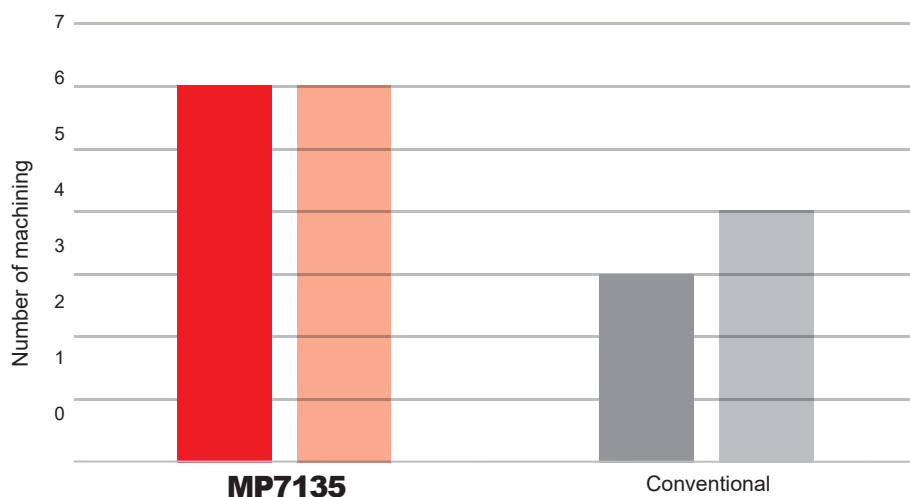
Suppresses peeling when machining stainless steel and exhibits excellent chipping resistance.

Dedicated carbide base material

A carbide substrate exclusively for stainless steel that combines both wear and fracture resistance.



Machining SUS304 : Intermittent Cutting Comparison



**Almost double
tool life**



<Cutting Conditions>

Material : SUS304
Inserts : CNMG120408-
Cutting Speed : $v_c = 120$ m/min
Feed per Rev. : $f = 0.25$ mm/rev
Depth of Cut : 2.0 mm x 2 pass
Cutting Mode : Wet Cutting

CLASSIFICATION

**Ferritic
Stainless Steel**
SUS430

**Austenitic
Stainless Steel**
SUS304,
SUS316

**Martensitic
Stainless Steel**
SUS420J2

**Hardened
Stainless Steel**
SUS630



MC7125

First **NEW**
MM Chipbreaker

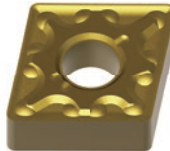
The new design has improved sharpness and welding resistance.



When cutting edge stability is required

MA Chipbreaker

A general-purpose chipbreaker with excellent stability and chip control.



When sharpness is required

GM Chipbreaker

It has a sharp cutting edge and produces chips that do not get tangled.



**High-Efficiency
High-Speed**



MC7115

NEW
MM Chipbreaker



LM Chipbreaker

The large rake angle helps to reduce burrs.



**Fracture Resistance
Intermittent Machining**



**Wear Resistance
Continuous Machining**



MP7135

First **GM** Chipbreaker

Combined with PVD coating, it provides excellent sharpness even during rough machining.



When cutting edge stability is required

NEW
MM Chipbreaker



For rough machining

RM Chipbreaker

The strong cutting edge geometry provides excellent breakage resistance during interrupted cutting.



**Duplex
Stainless Steel**
SUS329J1

For general stainless steels, MC7125 is the first recommendation.
For duplex stainless steels, MP7135 is the first recommendation.
Even with the same grade, it is possible to improve tool life by selecting the appropriate chipbreaker.
When using MC7125 and wear is stable, higher efficiency could be realised through higher speeds by using MC7115.
For greater fracture resistance choose MP7135.
When using MP7135 for continuous machining wear resistance and improved productivity can be realised by using MC7125.

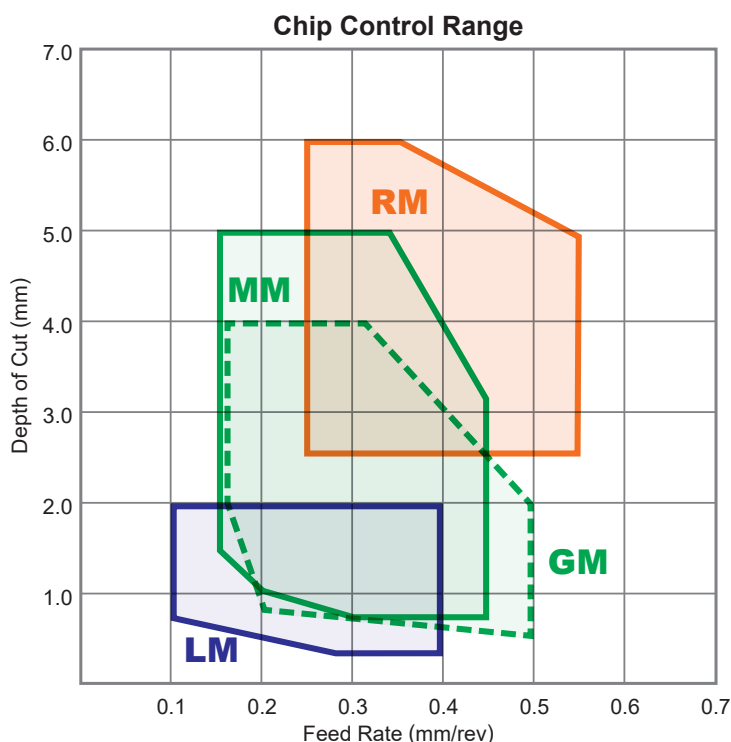
Recommended Conditions

Extracts from Recommended Conditions for Negative Inserts

Material	Cutting Area	Cutting Conditions	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed per Rev. f (mm/rev)	Depth of Cut ap (mm)
Austenitic Stainless Steel SUS304, SUS316, etc.	Light Cutting	First recommended	MC7115	LM	185—295	0.10—0.35	0.3—2.0
		Fracture resistance	MC7125	LM	175—240	0.10—0.35	0.3—2.5
	Medium Cutting	First recommended	MC7125	MM	160—220	0.15—0.50	0.3—5.0
		Alternative	MC7125	GM, MA	160—220	0.15—0.50	0.3—5.0
		Wear resistance	MC7115	MM	170—270	0.15—0.45	0.7—5.0
		Fracture resistance	MP7135	GM, MM, MA	120—155	0.15—0.50	0.3—4.0
	Rough Cutting	First recommended	MP7135	RM	110—145	0.25—0.60	1.5—6.0
		Wear resistance	MC7125	RM	150—205	0.25—0.55	1.5—6.0
Ferritic and Martensitic Stainless Steel SUS430, SUS420J2, etc.	Light Cutting	First recommended	MC7115	LM	185—295	0.10—0.35	0.3—2.0
		Fracture resistance	MC7125	LM	175—240	0.10—0.50	0.3—2.5
	Medium Cutting	First recommended	MC7125	MM	160—220	0.15—0.50	0.3—5.0
		Alternative	MC7125	GM, MA	160—220	0.15—0.50	0.3—5.0
		Wear resistance	MC7115	MM	170—270	0.15—0.45	0.7—5.0
		Fracture resistance	MP7135	GM, MM, MA	120—155	0.15—0.50	0.3—4.0
	Rough Cutting	First recommended	MP7135	RM	110—145	0.25—0.60	1.5—6.0
		Wear resistance	MC7125	RM	150—205	0.25—0.55	1.5—6.0
Precipitation-Hardening Stainless Steel SUS630, etc.	Light Cutting	First recommended	MC7115	LM	110—165	0.10—0.35	0.3—2.0
		Fracture resistance	MC7125	LM	95—120	0.10—0.50	0.3—2.5
	Medium Cutting	First recommended	MC7125	MM	90—110	0.15—0.50	0.3—5.0
		Alternative	MC7125	GM, MA	90—110	0.15—0.50	0.3—5.0
		Wear resistance	MC7115	MM	100—150	0.15—0.45	0.7—5.0
		Fracture resistance	MP7135	GM, MM, MA	65—90	0.15—0.50	0.3—5.0
	Rough Cutting	First recommended	MP7135	RM	60—85	0.25—0.60	1.5—6.0
		Wear resistance	MC7125	RM	85—100	0.25—0.55	1.5—6.0
Duplex Stainless Steel SUS329J1, etc.	Light Cutting	First recommended	MP7135	LM	85—115	0.10—0.40	0.3—2.5
		Fracture resistance	MC7125	LM	115—160	0.10—0.40	0.3—2.5
	Medium Cutting	First recommended	MP7135	GM	80—105	0.15—0.50	0.3—5.0
		Alternative	MP7135	MM, MA	80—105	0.15—0.50	0.3—5.0
		Wear resistance	MC7125	GM, MM, MA	105—145	0.15—0.50	0.3—5.0
	Rough Cutting	First recommended	MP7135	RM	75—100	0.25—0.60	1.5—6.0

For recommended conditions other than those listed above, please refer to the information starting from page 22.

Chipbreaker System (Negative Inserts)



M Stainless Steel

Negative insert for external turning

	Light Cutting	Medium Cutting	Rough Cutting
○	LM MC7115	MM MC7115	RM MC7115
◐	LM MC7125	MM MC7125	RM MC7125
⊕	LM MP7135	GM MP7135	RM MP7135

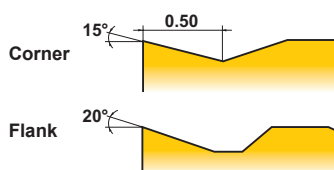
CUTTING CONDITIONS

- Stable Cutting**
 - Continuous Cutting
 - Constant Depth of Cut
 - Pre-machined Surfaces
 - Securely Clamped Component Cutting
- ◐ General Cutting**
- ⊕ Unstable Cutting**
 - Heavy Interrupted Cutting
 - Irregular Depth of Cut
 - Low Clamping Rigidity Cutting

Main Chipbreaker

LM chipbreaker for light cutting

Excellent burr control
Reduces the incidence of burrs drastically because the sharpness properties and cutting edge strength are optimised with different rake angles.

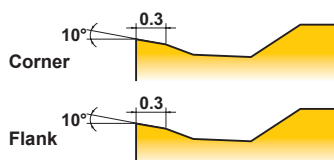


MM chipbreaker for medium cutting

Excellent welding resistance
The sharp design of the corner radius and main cutting edge improves welding resistance and prevents problems.

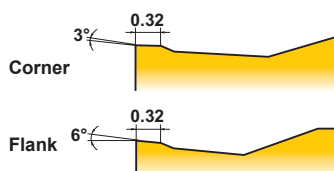


New Design



RM chipbreaker for rough cutting

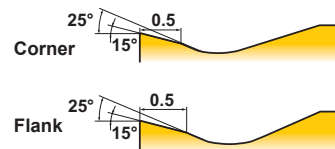
Excellent fracture resistance
By optimising the land angle and honing geometry, high cutting edge stability is achieved during interrupted machining.



Interpolated Chipbreaker

GM chipbreaker

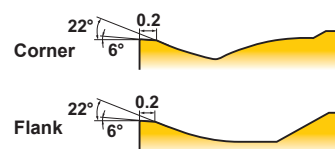
Sub chipbreaker of the main LM and MM chipbreaker.
Excellent in notching resistance for light cutting to medium cutting.



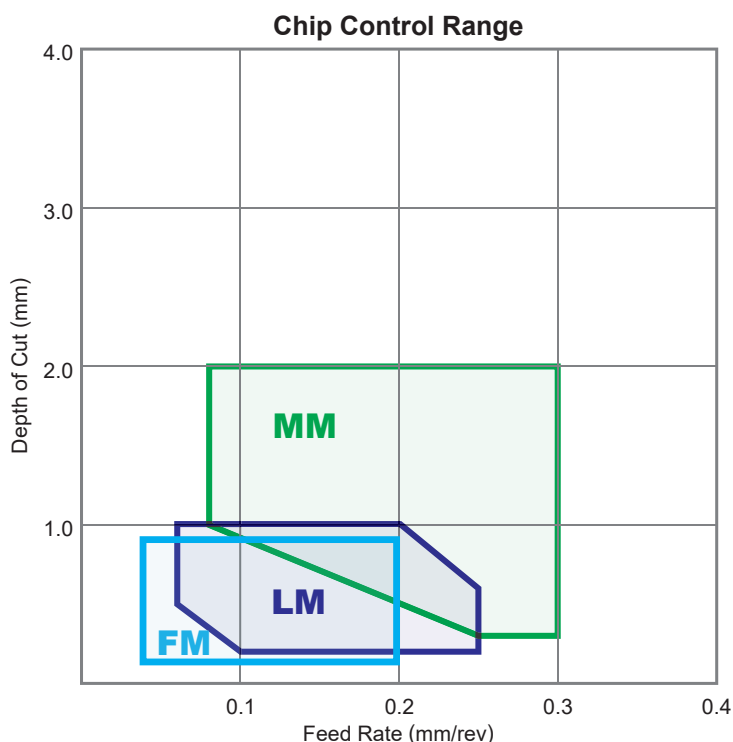
Multi-Assist Chipbreaker

MA chipbreaker

Suitable for medium cutting range.



Chipbreaker System (Positive Inserts)



M Stainless Steel 7° Positive Insert

	Finish Cutting	Light Cutting	Medium Cutting
●	FM MC7125	LM MC7125	MM MC7125
◐	FM MC7125	LM MC7125	MM MC7125
⊕	FM MP7135	LM MP7135	MM MP7135

CUTTING CONDITIONS



Stable Cutting

Continuous Cutting
Constant Depth of Cut
Pre-machined Surfaces
Securely Clamped Component Cutting



General Cutting



Unstable Cutting

Heavy Interrupted Cutting
Irregular Depth of Cut
Low Clamping Rigidity Cutting

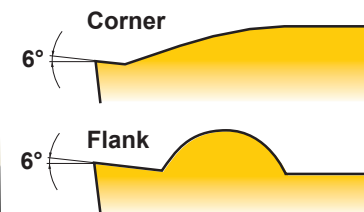
Main Chipbreaker

FM chipbreaker for finish cutting

First recommendation for finishing stainless steel

Chipbreaker protrusion at the tip controls chips even at small depth of cut. Maintains maintains edge strength and prevents sudden fractures.

5° 7° Positive Insert

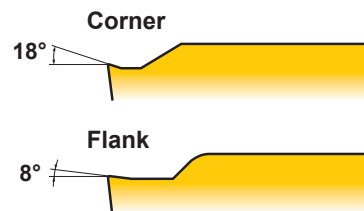
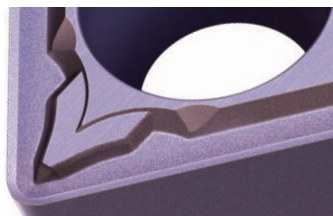


LM chipbreaker for light cutting

First recommendation for light cutting of stainless steel

The large rake angle gives a sharp cutting edge that prevents chip welding, which in turn helps to control the surface finish. The protruding chipbreaker provides an ideal range of chip control.

5° 7° 11° Positive Insert

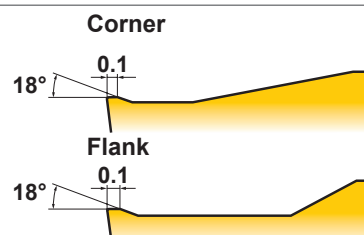
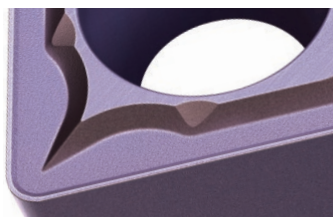


MM chipbreaker for medium cutting

First recommendation for medium cutting of stainless steel

The flat land enables a good balance of wear and fracture resistance. The wide pocket reduces vibration and chip jamming and also prevents increases in cutting resistance even at large depths of cut.

5° 7° Positive Insert

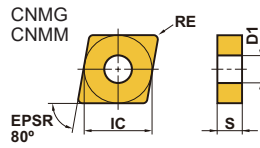


MC/MP7100 Series

NEW

Negative Inserts (With Hole)

M Class



Light	Light	Medium	Medium	Medium	Medium
LM	SH	MM	MA	GM	GH
					
Rough	Heavy	Heavy			
RM	HL	HM			
					

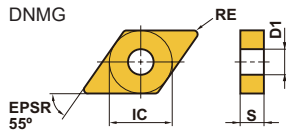
(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
CNMG120404-LM	L	●	●	●	12.7	4.76	0.4	5.16
CNMG120408-LM	L	●	●	●	12.7	4.76	0.8	5.16
CNMG120412-LM	L	●	●	●	12.7	4.76	1.2	5.16
CNMG120404-SH	L			●	12.7	4.76	0.4	5.16
CNMG120408-SH	L			●	12.7	4.76	0.8	5.16
CNMG120408-MM	M	●	●	●	12.7	4.76	0.8	5.16
CNMG120412-MM	M	●	●	●	12.7	4.76	1.2	5.16
CNMG120416-MM	M	●	●	●	12.7	4.76	1.6	5.16
CNMG160608-MM	M	●	●	●	15.875	6.35	0.8	6.35
CNMG160612-MM	M	●	●	●	15.875	6.35	1.2	6.35
CNMG160616-MM	M	●	●	●	15.875	6.35	1.6	6.35
CNMG190608-MM	M	●	●	●	19.05	6.35	0.8	7.93
CNMG190612-MM	M	●	●	●	19.05	6.35	1.2	7.93
CNMG190616-MM	M	●	●	●	19.05	6.35	1.6	7.93
CNMG120404-MA	M		●	●	12.7	4.76	0.4	5.16
CNMG120408-MA	M		●	●	12.7	4.76	0.8	5.16
CNMG120412-MA	M		●	●	12.7	4.76	1.2	5.16
CNMG120416-MA	M		●	●	12.7	4.76	1.6	5.16
CNMG160608-MA	M			●	15.875	6.35	0.8	6.35
CNMG160612-MA	M			●	15.875	6.35	1.2	6.35
CNMG160616-MA	M			●	15.875	6.35	1.6	6.35
CNMG190612-MA	M			●	19.05	6.35	1.2	7.93
CNMG190616-MA	M		●	●	19.05	6.35	1.6	7.93
CNMG120404-GM	M		●	●	12.7	4.76	0.4	5.16
CNMG120408-GM	M		●	●	12.7	4.76	0.8	5.16
CNMG120412-GM	M		●	●	12.7	4.76	1.2	5.16

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
CNMG120408-GH	M			●	12.7	4.76	0.8	5.16
CNMG120412-GH	M			●	12.7	4.76	1.2	5.16
CNMG160612-GH	M			●	15.875	6.35	1.2	6.35
CNMG190612-GH	M			●	19.05	6.35	1.2	7.93
CNMG190616-GH	M			●	19.05	6.35	1.6	7.93
CNMG120408-RM	R	●	●	●	12.7	4.76	0.8	5.16
CNMG120412-RM	R	●	●	●	12.7	4.76	1.2	5.16
CNMG120416-RM	R	●	●	●	12.7	4.76	1.6	5.16
CNMG160612-RM	R	●	●	●	15.875	6.35	1.2	6.35
CNMG160616-RM	R	●	●	●	15.875	6.35	1.6	6.35
CNMG190612-RM	R	●	●	●	19.05	6.35	1.2	7.93
CNMG190616-RM	R	●	●	●	19.05	6.35	1.6	7.93
CNMM190612-HL	H		●		19.05	6.35	1.2	7.93
CNMM190616-HL	H		●		19.05	6.35	1.6	7.93
CNMM190612-HM	H		●		19.05	6.35	1.2	7.93
CNMM190616-HM	H		●		19.05	6.35	1.6	7.93

Negative Inserts (With Hole)

M Class



Light	Light	Medium	Medium	Medium	Medium
LM	SH	MM	MA	GM	GH
					
Rough					
RM					
					

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
DNMG110404-LM	L	●	●	●	9.525	4.76	0.4	3.81
DNMG110408-LM	L	●	●	●	9.525	4.76	0.8	3.81
DNMG150404-LM	L	●	●	●	12.7	4.76	0.4	5.16
DNMG150408-LM	L	●	●	●	12.7	4.76	0.8	5.16
DNMG150412-LM	L	●	●	●	12.7	4.76	1.2	5.16
DNMG150604-LM	L	●	●	●	12.7	6.35	0.4	5.16
DNMG150608-LM	L	●	●	●	12.7	6.35	0.8	5.16
DNMG110404-SH	L			●	9.525	4.76	0.4	3.81
DNMG110408-SH	L			●	9.525	4.76	0.8	3.81
DNMG150404-SH	L			●	12.7	4.76	0.4	5.16
DNMG150408-SH	L			●	12.7	4.76	0.8	5.16
DNMG150408-MM	M	●	●	●	12.7	4.76	0.8	5.16
DNMG150412-MM	M		●	●	12.7	4.76	1.2	5.16
DNMG150608-MM	M	●	●	●	12.7	6.35	0.8	5.16
DNMG150612-MM	M	●	●	●	12.7	6.35	1.2	5.16
DNMG150404-MA	M		●	●	12.7	4.76	0.4	5.16
DNMG150408-MA	M		●	●	12.7	4.76	0.8	5.16
DNMG150412-MA	M		●	●	12.7	4.76	1.2	5.16
DNMG150604-MA	M		●	●	12.7	6.35	0.4	5.16
DNMG150608-MA	M		●	●	12.7	6.35	0.8	5.16
DNMG150612-MA	M		●	●	12.7	6.35	1.2	5.16
DNMG150404-GM	M		●	●	12.7	4.76	0.4	5.16
DNMG150408-GM	M		●	●	12.7	4.76	0.8	5.16
DNMG150604-GM	M		●	●	12.7	6.35	0.4	5.16
DNMG150608-GM	M		●	●	12.7	6.35	0.8	5.16
DNMG150408-GH	M			●	12.7	4.76	0.8	5.16
DNMG150412-GH	M			●	12.7	4.76	1.2	5.16
DNMG150608-GH	M			●	12.7	6.35	0.8	5.16
DNMG150612-GH	M			●	12.7	6.35	1.2	5.16

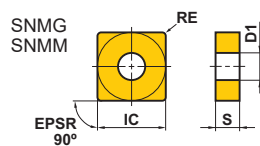
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
DNMG150408-RM	R	●	●	●	12.7	4.76	0.8	5.16
DNMG150412-RM	R		●	●	12.7	4.76	1.2	5.16
DNMG150416-RM	R		●	●	12.7	4.76	1.6	5.16
DNMG150608-RM	R		●	●	12.7	6.35	0.8	5.16
DNMG150612-RM	R		●	●	12.7	6.35	1.2	5.16

MC/MP7100 Series

NEW

Negative Inserts (With Hole)

M Class



Light	Medium	Medium	Medium	Medium
LM	MM	MA	GM	GH
Rough	Heavy	Heavy		
RM	HL	HM		

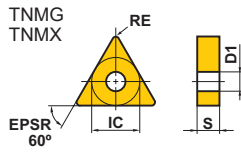
(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
SNMG120404-LM	L	●	●	●	12.7	4.76	0.4	5.16
SNMG120408-LM	L	●	●	●	12.7	4.76	0.8	5.16
SNMG120408-MM	M	●	●	●	12.7	4.76	0.8	5.16
SNMG120412-MM	M	●	●	●	12.7	4.76	1.2	5.16
SNMG120416-MM	M	●	●	●	12.7	4.76	1.6	5.16
SNMG150608-MM	M		●	●	15.875	6.35	0.8	6.35
SNMG150612-MM	M	●	●	●	15.875	6.35	1.2	6.35
SNMG150616-MM	M		●		15.875	6.35	1.6	6.35
SNMG190612-MM	M		●	●	19.05	6.35	1.2	7.93
SNMG190616-MM	M		●	●	19.05	6.35	1.6	7.93
SNMG120404-MA	M		●	●	12.7	4.76	0.4	5.16
SNMG120408-MA	M		●	●	12.7	4.76	0.8	5.16
SNMG120412-MA	M		●	●	12.7	4.76	1.2	5.16
SNMG150608-MA	M		●	●	15.875	6.35	0.8	6.35
SNMG150612-MA	M		●	●	15.875	6.35	1.2	6.35
SNMG190616-MA	M		●	●	19.05	6.35	1.6	7.93
SNMG120404-GM	M		●	●	12.7	4.76	0.4	5.16
SNMG120408-GM	M		●	●	12.7	4.76	0.8	5.16
SNMG120412-GM	M		●	●	12.7	4.76	1.2	5.16
SNMG120408-GH	M			●	12.7	4.76	0.8	5.16
SNMG120412-GH	M			●	12.7	4.76	1.2	5.16
SNMG120416-GH	M			●	12.7	4.76	1.6	5.16
SNMG190612-GH	M			●	19.05	6.35	1.2	7.93
SNMG190616-GH	M			●	19.05	6.35	1.6	7.93

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
SNMG120408-RM	R	●	●	●	12.7	4.76	0.8	5.16
SNMG120412-RM	R	●	●	●	12.7	4.76	1.2	5.16
SNMG120416-RM	R	●	●	●	12.7	4.76	1.6	5.16
SNMG150612-RM	R	●	●	●	15.875	6.35	1.2	6.35
SNMG150616-RM	R	●			15.875	6.35	1.6	6.35
SNMG190612-RM	R	●	●	●	19.05	6.35	1.2	7.93
SNMG190616-RM	R	●	●	●	19.05	6.35	1.6	7.93
SNMM190612-HL	H		●		19.05	6.35	1.2	7.93
SNMM190616-HL	H		●		19.05	6.35	1.6	7.93
SNMM190612-HM	H		●		19.05	6.35	1.2	7.93
SNMM190616-HM	H		●		19.05	6.35	1.6	7.93
SNMM250732-HM	H		●		25.4	7.94	3.2	9.12

Negative Inserts (With Hole)

M Class



Light	Light	Light	Medium	Medium	Medium
LM	SH	SW	MM	MA	GM
		 (Wiper)			
Medium	Medium	Rough			
GH	R/L-ES	RM			
					

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
TNMG160404-LM	L	●	●	●	9.525	4.76	0.4	3.81
TNMG160408-LM	L	●	●	●	9.525	4.76	0.8	3.81
TNMG160412-LM	L	●	●	●	9.525	4.76	1.2	3.81
TNMG160404-SH	L			●	9.525	4.76	0.4	3.81
TNMG160408-SH	L			●	9.525	4.76	0.8	3.81
TNMX160408-SW	L		●		9.525	4.76	0.8	3.81
TNMG160408-MM	M	●	●	●	9.525	4.76	0.8	3.81
TNMG160412-MM	M	●	●	●	9.525	4.76	1.2	3.81
TNMG220408-MM	M	●	●	●	12.7	4.76	0.8	5.16
TNMG220412-MM	M		●	●	12.7	4.76	1.2	5.16
TNMG220416-MM	M		●		12.7	4.76	1.6	5.16
TNMG160404-MA	M		●	●	9.525	4.76	0.4	3.81
TNMG160408-MA	M		●	●	9.525	4.76	0.8	3.81
TNMG160412-MA	M		●	●	9.525	4.76	1.2	3.81
TNMG220408-MA	M		●	●	12.7	4.76	0.8	5.16
TNMG220412-MA	M		●	●	12.7	4.76	1.2	5.16
TNMG160404-GM	M		●	●	9.525	4.76	0.4	3.81
TNMG160408-GM	M		●	●	9.525	4.76	0.8	3.81
TNMG160412-GM	M		●	●	9.525	4.76	1.2	3.81
TNMG220408-GM	M		●	●	12.7	4.76	0.8	5.16
TNMG160408-GH	M			●	9.525	4.76	0.8	3.81
TNMG220408-GH	M			●	12.7	4.76	0.8	5.16
TNMG220412-GH	M			●	12.7	4.76	1.2	5.16

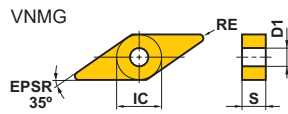
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
TNMG160404R-ES	M		●	●	9.525	4.76	0.4	3.81
TNMG160404L-ES	M		●	●	9.525	4.76	0.8	3.81
TNMG160408R-ES	M		●	●	9.525	4.76	0.8	3.81
TNMG160408L-ES	M		●	●	9.525	4.76	0.8	3.81
TNMG220408R-ES	M			●	12.7	4.76	0.8	5.16
TNMG220408L-ES	M			●	12.7	4.76	0.8	5.16
TNMG160408-RM	R	●	●	●	9.525	4.76	0.8	3.81
TNMG160412-RM	R	●	●	●	9.525	4.76	1.2	3.81
TNMG220408-RM	R		●	●	12.7	4.76	0.8	5.16
TNMG220412-RM	R		●	●	12.7	4.76	1.2	5.16
TNMG220416-RM	R		●	●	12.7	4.76	1.6	5.16

MC/MP7100 Series

NEW

Negative Inserts (With Hole)

M Class



Light	Medium	Medium	Medium
LM	MM	MA	GM
			

(mm)

Order Number	Cutting Area				IC	S	RE	D1
		MC7115	MC7125	MP7135				
VNMG160404-LM	L	●	●	●	9.525	4.76	0.4	3.81
VNMG160408-LM	L	●	●	●	9.525	4.76	0.8	3.81
VNMG160408-MM	M	●	●	●	9.525	4.76	0.8	3.81
VNMG160404-MA	M		●	●	9.525	4.76	0.4	3.81
VNMG160408-MA	M		●	●	9.525	4.76	0.8	3.81
VNMG160404-GM	M		●	●	9.525	4.76	0.4	3.81
VNMG160408-GM	M		●	●	9.525	4.76	0.8	3.81

Negative Inserts (With Hole)

M Class

WNMG



Light	Light	Medium	Medium	Medium	Medium
LM	SH	MM	MA	GM	GH
Rough					
RM					

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
WNMG060404-LM	L	●	●	●	9.525	4.76	0.4	3.81
WNMG060408-LM	L	●	●	●	9.525	4.76	0.8	3.81
WNMG080404-LM	L	●	●	●	12.7	4.76	0.4	5.16
WNMG080408-LM	L	●	●	●	12.7	4.76	0.8	5.16
WNMG06T304-SH	L			●	9.525	3.97	0.4	3.81
WNMG06T308-SH	L			●	9.525	3.97	0.8	3.81
WNMG060404-SH	L			●	9.525	4.76	0.4	3.81
WNMG060408-SH	L			●	9.525	4.76	0.8	3.81
WNMG080404-SH	L			●	12.7	4.76	0.4	5.16
WNMG080408-SH	L			●	12.7	4.76	0.8	5.16
WNMG060408-MM	M	●	●	●	9.525	4.76	0.8	3.81
WNMG060412-MM	M		●	●	9.525	4.76	1.2	3.81
WNMG080408-MM	M	●	●	●	12.7	4.76	0.8	5.16
WNMG080412-MM	M	●	●	●	12.7	4.76	1.2	5.16
WNMG06T304-MA	M		●	●	9.525	3.97	0.4	3.81
WNMG06T308-MA	M		●	●	9.525	3.97	0.8	3.81
WNMG06T312-MA	M		●	●	9.525	3.97	1.2	3.81
WNMG060408-MA	M		●	●	9.525	4.76	0.8	3.81
WNMG060412-MA	M		●	●	9.525	4.76	1.2	3.81
WNMG080404-MA	M		●	●	12.7	4.76	0.4	5.16
WNMG080408-MA	M		●	●	12.7	4.76	0.8	5.16
WNMG080412-MA	M		●	●	12.7	4.76	1.2	5.16
WNMG060404-GM	M		●	●	9.525	4.76	0.4	3.81
WNMG060408-GM	M		●	●	9.525	4.76	0.8	3.81
WNMG080404-GM	M		●	●	12.7	4.76	0.4	5.16
WNMG080408-GM	M		●	●	12.7	4.76	0.8	5.16
WNMG080412-GM	M		●	●	12.7	4.76	1.2	5.16
WNMG080408-GH	M			●	12.7	4.76	0.8	5.16
WNMG080412-GH	M			●	12.7	4.76	1.2	5.16

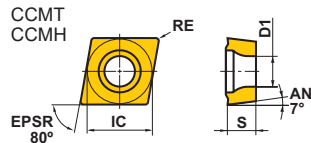
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
WNMG060408-RM	R	●	●	●	9.525	4.76	0.8	3.81
WNMG060412-RM	R		●	●	9.525	4.76	1.2	3.81
WNMG080408-RM	R	●	●	●	12.7	4.76	0.8	5.16
WNMG080412-RM	R	●	●	●	12.7	4.76	1.2	5.16

MC/MP7100 Series

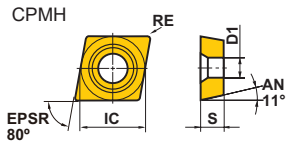
NEW

7°, 11° Positive Inserts (With Hole)

M Class

CCMT
CCMH

CPMH



Finish	Light	Medium	Medium
FM	LM	MM	MV
Light	Medium		
LM	MV		

(mm)

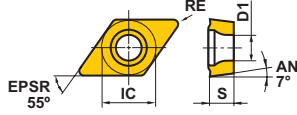
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
CCMT060202-FM	F	●	●		6.35	2.38	0.2	2.8
CCMT060204-FM	F	●	●	●	6.35	2.38	0.4	2.8
CCMT09T302-FM	F		●		9.525	3.97	0.2	4.4
CCMT09T304-FM	F	●	●	●	9.525	3.97	0.4	4.4
CCMT09T308-FM	F	●	●	●	9.525	3.97	0.8	4.4
CCMT060204-LM	L	●	●	●	6.35	2.38	0.4	2.8
CCMT060208-LM	L	●	●	●	6.35	2.38	0.8	2.8
CCMT09T304-LM	L	●	●	●	9.525	3.97	0.4	4.4
CCMT09T308-LM	L	●	●	●	9.525	3.97	0.8	4.4
CCMT060202-MM	M		●	●	6.35	2.38	0.2	2.8
CCMT060204-MM	M	●	●	●	6.35	2.38	0.4	2.8
CCMT060208-MM	M	●	●	●	6.35	2.38	0.8	2.8
CCMT09T302-MM	M		●	●	9.525	3.97	0.2	4.4
CCMT09T304-MM	M	●	●	●	9.525	3.97	0.4	4.4
CCMT09T308-MM	M	●	●	●	9.525	3.97	0.8	4.4
CCMT120404-MM	M	●	●	●	12.7	4.76	0.4	5.5
CCMT120408-MM	M	●	●	●	12.7	4.76	0.8	5.5
CCMT120412-MM	M	●	●	●	12.7	4.76	1.2	5.5
CCMH060202-MV	M		●	●	6.35	2.38	0.2	2.8
CCMH060204-MV	M		●	●	6.35	2.38	0.4	2.8

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
CPMH080204-LM	L	●	●	●	7.94	2.38	0.4	3.5
CPMH080208-LM	L	●	●	●	7.94	2.38	0.8	3.5
CPMH090304-LM	L	●	●	●	9.525	3.18	0.4	4.4
CPMH090308-LM	L	●	●	●	9.525	3.18	0.8	4.4
CPMH080204-MV	M		●	●	7.94	2.38	0.4	3.5
CPMH080208-MV	M		●	●	7.94	2.38	0.8	3.5
CPMH090304-MV	M		●	●	9.525	3.18	0.4	4.4
CPMH090308-MV	M		●	●	9.525	3.18	0.8	4.4

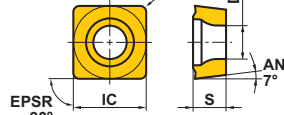
7° Positive Inserts (With Hole)

M Class

DCMT



SCMT



Finish	Light	Medium	Medium
FM	LM	MM	MV
			
Light	Medium		
LM	MM		
			

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
DCMT070202-FM	F		●		6.35	2.38	0.2	2.8
DCMT070204-FM	F	●	●		6.35	2.38	0.4	2.8
DCMT11T302-FM	F		●		9.525	3.97	0.2	4.4
DCMT11T304-FM	F	●	●	●	9.525	3.97	0.4	4.4
DCMT11T308-FM	F	●	●	●	9.525	3.97	0.8	4.4
DCMT070202-LM	L		●		6.35	2.38	0.2	2.8
DCMT070204-LM	L	●	●	●	6.35	2.38	0.4	2.8
DCMT070208-LM	L	●	●	●	6.35	2.38	0.8	2.8
DCMT11T302-LM	L		●		9.525	3.97	0.2	4.4
DCMT11T304-LM	L	●	●	●	9.525	3.97	0.4	4.4
DCMT11T308-LM	L	●	●	●	9.525	3.97	0.8	4.4
DCMT070202-MM	M		●	●	6.35	2.38	0.2	2.8
DCMT070204-MM	M	●	●	●	6.35	2.38	0.4	2.8
DCMT070208-MM	M	●	●	●	6.35	2.38	0.8	2.8
DCMT11T302-MM	M		●		9.525	3.97	0.2	4.4
DCMT11T304-MM	M	●	●	●	9.525	3.97	0.4	4.4
DCMT11T308-MM	M	●	●	●	9.525	3.97	0.8	4.4
DCMT150404-MM	M	●	●	●	12.7	4.76	0.4	5.5
DCMT150408-MM	M	●	●	●	12.7	4.76	0.8	5.5
DCMT070202-MV	M		●	●	6.35	2.38	0.2	2.8
DCMT070204-MV	M		●	●	6.35	2.38	0.4	2.8
DCMT070208-MV	M		●	●	6.35	2.38	0.8	2.8
DCMT11T302-MV	M		●		9.525	3.97	0.2	4.4
DCMT11T304-MV	M		●	●	9.525	3.97	0.4	4.4
DCMT11T308-MV	M		●	●	9.525	3.97	0.8	4.4

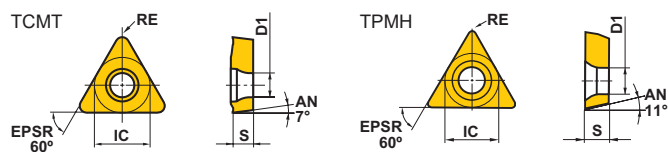
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
SCMT09T304-LM	L	●	●	●	9.525	3.97	0.4	4.4
SCMT09T308-LM	L	●	●	●	9.525	3.97	0.8	4.4
SCMT09T304-MM	M	●	●	●	9.525	3.97	0.4	4.4
SCMT09T308-MM	M	●	●	●	9.525	3.97	0.8	4.4
SCMT120404-MM	M	●	●	●	12.7	4.76	0.4	5.5
SCMT120408-MM	M	●	●	●	12.7	4.76	0.8	5.5

MC/MP7100 Series

NEW

7°, 11° Positive Inserts (With Hole)

M Class



Finish	Light	Medium
FM	LM	MM
		
Light	Medium	
LM	MV	
		

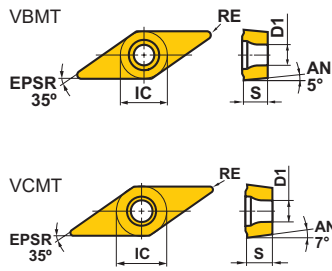
(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
TCMT090204-FM	F	●	●	●	5.56	2.38	0.4	2.5
TCMT090204-LM	L		●	●	5.56	2.38	0.4	2.5
TCMT110204-LM	L		●	●	6.35	2.38	0.4	2.8
TCMT110208-LM	L		●	●	6.35	2.38	0.8	2.8
TCMT16T304-LM	L	●	●	●	9.525	3.97	0.4	4.4
TCMT16T308-LM	L	●	●	●	9.525	3.97	0.8	4.4
TCMT090204-MM	M		●	●	5.56	2.38	0.4	2.5
TCMT090208-MM	M			●	5.56	2.38	0.8	2.5
TCMT110204-MM	M		●	●	6.35	2.38	0.4	2.8
TCMT110208-MM	M	●	●	●	6.35	2.38	0.8	2.8
TCMT130304-MM	M			●	7.94	3.18	0.4	3.4
TCMT16T304-MM	M	●	●	●	9.525	3.97	0.4	4.4
TCMT16T308-MM	M	●	●	●	9.525	3.97	0.8	4.4
TCMT16T312-MM	M		●	●	9.525	3.97	1.2	4.4

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
TPMH090204-LM	L		●	●	5.56	2.38	0.4	2.9
TPMH110304-LM	L		●	●	6.35	3.18	0.4	3.4
TPMH110308-LM	L		●	●	6.35	3.18	0.8	3.4
TPMH160304-LM	L		●	●	9.525	3.18	0.4	4.4
TPMH160308-LM	L		●	●	9.525	3.18	0.8	4.4
TPMH080202-MV	M		●	●	4.76	2.38	0.2	2.4
TPMH080204-MV	M		●	●	4.76	2.38	0.4	2.4
TPMH090204-MV	M		●	●	5.56	2.38	0.4	2.9
TPMH090208-MV	M		●	●	5.56	2.38	0.8	2.9
TPMH110302-MV	M		●	●	6.35	3.18	0.2	3.4
TPMH110304-MV	M		●	●	6.35	3.18	0.4	3.4
TPMH110308-MV	M		●	●	6.35	3.18	0.8	3.4
TPMH160304-MV	M		●	●	9.525	3.18	0.4	4.4
TPMH160308-MV	M		●	●	9.525	3.18	0.8	4.4

5°, 7° Positive Inserts (With Hole)

M Class



Finish	Light	Medium	Medium
FM	LM	MM	MV
			
Finish	Light	Medium	Medium
FM	LM	MM	MV
			

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
VBMT110302-FM	F		●	●	6.35	3.18	0.2	2.9
VBMT110304-FM	F	●	●	●	6.35	3.18	0.4	2.9
VBMT110308-FM	F	●	●		6.35	3.18	0.8	2.9
VBMT160404-FM	F	●	●	●	9.525	4.76	0.4	4.4
VBMT160408-FM	F	●	●		9.525	4.76	0.8	4.4
VBMT110304-LM	L	●	●	●	6.35	3.18	0.4	2.9
VBMT110308-LM	L	●	●	●	6.35	3.18	0.8	2.9
VBMT160404-LM	L	●	●	●	9.525	4.76	0.4	4.4
VBMT160408-LM	L	●	●	●	9.525	4.76	0.8	4.4
VBMT160404-MM	M	●	●	●	9.525	4.76	0.4	4.4
VBMT160408-MM	M	●	●	●	9.525	4.76	0.8	4.4
VBMT110304-MV	M		●	●	6.35	3.18	0.4	2.9
VBMT110308-MV	M		●	●	6.35	3.18	0.8	2.9
VBMT160404-MV	M		●	●	9.525	4.76	0.4	4.4
VBMT160408-MV	M		●	●	9.525	4.76	0.8	4.4

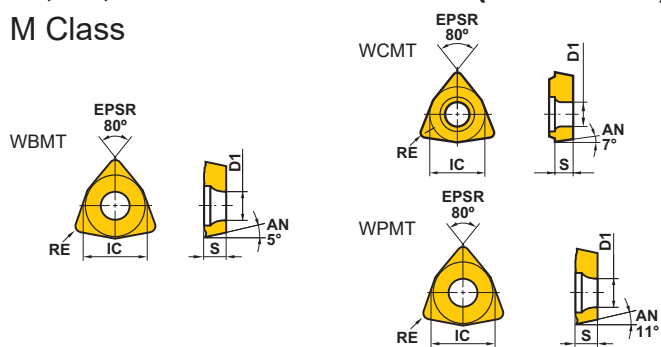
Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
VCMT110302-FM	F		●	●	6.35	3.18	0.2	2.8
VCMT110304-FM	F	●	●	●	6.35	3.18	0.4	2.8
VCMT160404-FM	F	●	●	●	9.525	4.76	0.4	4.4
VCMT110304-LM	L	●	●	●	6.35	3.18	0.4	2.8
VCMT110308-LM	L	●	●	●	6.35	3.18	0.8	2.8
VCMT160404-LM	L	●	●	●	9.525	4.76	0.4	4.4
VCMT160408-LM	L	●	●	●	9.525	4.76	0.8	4.4
VCMT160404-MM	M	●	●	●	9.525	4.76	0.4	4.4
VCMT160408-MM	M	●	●	●	9.525	4.76	0.8	4.4
VCMT160412-MM	M		●	●	9.525	4.76	1.2	4.4
VCMT080202-MV	M		●	●	4.76	2.38	0.2	2.4
VCMT080204-MV	M		●	●	4.76	2.38	0.4	2.4

MC/MP7100 Series

NEW

5°, 7°, 11° Positive Inserts (With Hole)

M Class



Medium		Medium
L-MV		MM
		
Medium		
MV		
		

(mm)

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
WBMTL30202L-MV	M		●		4.76	2.38	0.2	2.3
WBMTL30204L-MV	M		●		4.76	2.38	0.4	2.3
WCMT020102-MM	M		●	●	3.97	1.59	0.2	2.3
WCMT020104-MM	M		●	●	3.97	1.59	0.4	2.3
WCMTL30202-MM	M		●	●	4.76	2.38	0.2	2.3
WCMTL30204-MM	M		●	●	4.76	2.38	0.4	2.3
WCMT040202-MM	M		●	●	6.35	2.38	0.2	2.8
WCMT040204-MM	M		●	●	6.35	2.38	0.4	2.8
WCMT06T304-MM	M		●	●	9.525	3.97	0.4	4.4
WCMT06T308-MM	M		●	●	9.525	3.97	0.8	4.4

Order Number	Cutting Area	MC7115	MC7125	MP7135	IC	S	RE	D1
WPMT040204-MV	M		●	●	6.35	2.38	0.4	2.8
WPMT060304-MV	M		●	●	9.525	3.18	0.4	4.4
WPMT060308-MV	M		●	●	9.525	3.18	0.8	4.4

Recommended Cutting Conditions

Negative Inserts (For External Turning)

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Austenitic Stainless Steel Hardness ≤ 200 HB						
●	L	1	MC7115	LM	185–295	0.10–0.35
●	L	2	MC7125	LM	175–240	0.10–0.35
●	L	3	MC7125	SW	175–240	0.10–0.50
●	M	1	MC7115	MM	170–270	0.15–0.45
●	R	1	MC7115	RM	160–255	0.25–0.55
●	H	1	MC7125	HL	135–185	0.30–0.70
●	L	1	MC7125	LM	175–240	0.10–0.35
●	M	1	MC7125	MM	160–220	0.15–0.45
●	M	2	MC7125	GM	160–220	0.16–0.50
●	M	3	MC7125	MA	160–220	0.20–0.50
●	M	4	MC7125	R/L-ES	160–220	0.20–0.50
●	M	5	MP7135	GM	120–155	0.16–0.50
●	M	6	MP7135	MM	120–155	0.15–0.45
●	R	1	MC7125	RM	150–205	0.25–0.55
●	R	2	MP7135	RM	110–145	0.25–0.55
●	R	3	MP7135	GH	110–145	0.25–0.60
●	H	1	MC7125	HL	135–185	0.30–0.70
●	H	2	MC7125	HM	135–185	0.50–1.10
✱	L	1	MP7135	LM	130–170	0.10–0.35
✱	L	2	MP7135	SH	130–170	0.10–0.40
✱	M	1	MP7135	GM	120–155	0.16–0.50
✱	M	2	MP7135	MM	120–155	0.15–0.45
✱	M	3	MP7135	MA	120–155	0.20–0.50
✱	M	4	MC7125	R/L-ES	160–220	0.20–0.50
✱	R	1	MP7135	RM	110–145	0.25–0.55
✱	R	2	MP7135	GH	110–145	0.25–0.60
✱	H	1	MC7125	HL	135–185	0.30–0.70
✱	H	2	MC7125	HM	135–185	0.50–1.10
M Austenitic Stainless Steel Hardness > 200 HB						
●	L	1	MC7115	LM	155–245	0.10–0.35
●	L	2	MC7125	LM	145–200	0.10–0.35
●	M	1	MC7115	MM	140–225	0.15–0.45
●	R	1	MC7115	RM	135–215	0.25–0.55
●	H	1	MC7125	HL	110–155	0.30–0.70
●	H	2	MC7125	HM	110–155	0.50–1.10
●	L	1	MC7125	LM	145–200	0.10–0.35
●	M	1	MC7125	MM	130–180	0.15–0.45
●	M	2	MC7125	GM	130–180	0.16–0.50
●	M	3	MC7125	MA	130–180	0.20–0.50
●	M	4	MP7135	GM	100–130	0.16–0.50
●	M	5	MP7135	MM	100–130	0.15–0.45
●	M	6	MP7135	MA	100–130	0.20–0.50
●	R	1	MC7125	RM	125–175	0.25–0.55
●	R	2	MP7135	RM	95–120	0.25–0.55
●	R	3	MP7135	GH	95–120	0.25–0.60
●	H	1	MC7125	HL	110–155	0.30–0.70
●	H	2	MC7125	HM	110–155	0.50–1.10
✱	L	1	MP7135	LM	110–140	0.10–0.35
✱	L	2	MP7135	SH	110–140	0.10–0.40
✱	M	1	MP7135	GM	100–130	0.16–0.50
✱	M	2	MP7135	MM	100–130	0.15–0.45
✱	M	3	MP7135	MA	100–130	0.20–0.50
✱	R	1	MP7135	RM	95–120	0.25–0.55
✱	R	2	MP7135	GH	95–120	0.25–0.60
✱	H	1	MC7125	HL	110–155	0.30–0.70
✱	H	2	MC7125	HM	110–155	0.50–1.10
M Ferritic and Martensitic Stainless Steel Hardness ≤ 200 HB						
●	L	1	MC7115	LM	185–295	0.10–0.35
●	L	2	MC7125	LM	175–240	0.10–0.35
●	M	1	MC7115	MM	170–270	0.15–0.45
●	R	1	MC7115	RM	160–255	0.25–0.55
●	H	1	MC7125	HL	135–185	0.30–0.70
●	H	2	MC7125	HM	135–185	0.50–1.10

(mm)

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Ferritic and Martensitic Stainless Steel Hardness ≤ 200 HB						
●	L	1	MC7125	LM	175–240	0.10–0.35
●	M	1	MC7125	MM	160–220	0.15–0.45
●	M	2	MC7125	GM	160–220	0.16–0.50
●	M	3	MC7125	MA	160–220	0.20–0.50
●	M	4	MP7135	GM	120–155	0.16–0.50
●	M	5	MP7135	MM	120–155	0.15–0.45
●	M	6	MP7135	MA	120–155	0.20–0.50
●	R	1	MC7125	RM	150–205	0.25–0.55
●	R	2	MP7135	RM	110–145	0.25–0.55
●	R	3	MP7135	GH	110–145	0.25–0.60
●	H	1	MC7125	HL	135–185	0.30–0.70
●	H	2	MC7125	HM	135–185	0.50–1.10
✱	L	1	MP7135	LM	130–170	0.10–0.35
✱	L	2	MP7135	SH	130–170	0.10–0.40
✱	M	1	MP7135	GM	120–155	0.16–0.50
✱	M	2	MP7135	MM	120–155	0.15–0.45
✱	M	3	MP7135	MA	120–155	0.20–0.50
✱	R	1	MP7135	RM	110–145	0.25–0.55
✱	R	2	MP7135	GH	110–145	0.25–0.60
✱	H	1	MC7125	HL	135–185	0.30–0.70
✱	H	2	MC7125	HM	135–185	0.50–1.10
M Ferritic and Martensitic Stainless Steel Hardness > 200 HB						
●	L	1	MC7115	LM	155–245	0.10–0.35
●	L	2	MC7125	LM	145–200	0.10–0.35
●	L	3	MC7125	SW	145–200	0.10–0.50
●	M	1	MC7115	MM	140–225	0.15–0.45
●	R	1	MC7115	RM	135–215	0.25–0.55
●	H	1	MC7125	HL	110–155	0.30–0.70
●	H	2	MC7125	HM	110–155	0.50–1.10
●	L	1	MC7125	LM	145–200	0.10–0.35
●	M	1	MC7125	MM	130–180	0.15–0.45
●	M	2	MC7125	GM	130–180	0.16–0.50
●	M	3	MC7125	MA	130–180	0.20–0.50
●	M	4	MP7135	GM	100–130	0.16–0.50
●	M	5	MP7135	MM	100–130	0.15–0.45
●	M	6	MP7135	R/L-ES	100–130	0.20–0.50
●	R	1	MC7125	RM	125–175	0.25–0.55
●	H	1	MC7125	HL	110–155	0.30–0.70
●	H	2	MC7125	HM	110–155	0.50–1.10
✱	L	1	MP7135	LM	110–140	0.10–0.35
✱	L	2	MP7135	SH	110–140	0.10–0.40
✱	M	1	MP7135	GM	100–130	0.16–0.50
✱	M	2	MP7135	MM	100–130	0.15–0.45
✱	M	3	MP7135	MA	100–130	0.20–0.50
✱	M	4	MP7135	R/L-ES	100–130	0.20–0.50
✱	R	1	MP7135	RM	95–120	0.25–0.55
✱	R	2	MP7135	GH	95–120	0.25–0.60
✱	H	1	MC7125	HL	110–155	0.30–0.70
✱	H	2	MC7125	HM	110–155	0.50–1.10
M Two-phase Stainless Steel Hardness ≤ 280 HB						
●	L	1	MP7135	LM	85–115	0.10–0.35
●	L	2	MP7135	SH	85–115	0.10–0.40
●	L	3	MC7125	LM	115–160	0.10–0.35
●	L	4	MC7125	SW	115–160	0.10–0.50
●	M	1	MP7135	GM	80–105	0.16–0.50
●	M	2	MP7135	MM	80–105	0.15–0.45
●	M	3	MP7135	MA	80–105	0.20–0.50
●	M	4	MC7125	MM	105–145	0.15–0.45
●	M	5	MC7125	GM	105–145	0.16–0.50
●	M	6	MC7125	MA	105–145	0.20–0.50
●	M	7	MC7115	MM	115–180	0.15–0.45
●	R	1	MP7135	RM	75–100	0.25–0.55
●	R	2	MP7135	GH	75–100	0.25–0.60

Note 1) Recommended cutting conditions for 5°/7°/11° 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.

Cutting Conditions : ● : Stable Cutting ● : General Cutting ✱ : Unstable Cutting

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

Recommended Cutting Conditions

Negative Inserts (For External Turning)

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Two-phase Stainless Steel Hardness ≤ 280 HB						
●	R	3	MC7125	RM	100—140	0.25—0.55
●	H	1	MC7125	HL	90—125	0.30—0.70
●	H	2	MC7125	HM	90—125	0.50—1.10
●	L	1	MP7135	LM	85—115	0.10—0.35
●	L	2	MP7135	SH	85—115	0.10—0.40
●	L	3	MC7125	LM	115—160	0.10—0.35
●	M	1	MP7135	GM	80—105	0.16—0.50
●	M	2	MP7135	MM	80—105	0.15—0.45
●	M	3	MP7135	MA	80—105	0.20—0.50
●	M	4	MP7135	R/L-ES	80—105	0.20—0.50
●	M	5	MC7125	MM	105—145	0.15—0.45
●	M	6	MC7125	GM	105—145	0.16—0.50
●	M	7	MC7125	MA	105—145	0.20—0.50
●	R	1	MP7135	RM	75—100	0.25—0.55
●	R	2	MP7135	GH	75—100	0.25—0.60
●	R	3	MC7125	RM	100—140	0.25—0.55
●	H	1	MC7125	HL	90—125	0.30—0.70
●	H	2	MC7125	HM	90—125	0.50—1.10
✱	L	1	MP7135	LM	85—115	0.10—0.35
✱	L	2	MP7135	SH	85—115	0.10—0.40
✱	M	1	MP7135	GM	80—105	0.16—0.50
✱	M	2	MP7135	MM	80—105	0.15—0.45
✱	M	3	MP7135	MA	80—105	0.20—0.50
✱	M	4	MP7135	R/L-ES	80—105	0.20—0.50
✱	R	1	MP7135	RM	75—100	0.25—0.55
✱	R	2	MP7135	GH	75—100	0.25—0.60
✱	H	1	MC7125	HL	90—125	0.30—0.70
✱	H	2	MC7125	HM	90—125	0.50—1.10
M Precipitation-Hardening Stainless Steel Hardness < 450 HB						
●	L	1	MC7115	LM	110—165	0.10—0.35
●	L	2	MC7125	LM	95—120	0.10—0.35
●	L	3	MC7125	SW	95—120	0.10—0.50
●	M	1	MC7115	MM	100—150	0.15—0.45
●	R	1	MC7115	RM	95—140	0.25—0.55
●	H	1	MC7125	HL	75—90	0.40—1.00
●	H	2	MC7125	HM	75—90	0.50—1.10
●	L	1	MC7125	LM	95—120	0.10—0.35
●	L	2	MP7135	LM	70—95	0.10—0.35
●	L	3	MP7135	SH	70—95	0.10—0.40
●	M	1	MC7125	MM	90—110	0.15—0.45
●	M	2	MC7125	GM	90—110	0.16—0.50
●	M	3	MC7125	MA	90—110	0.10—0.30
●	M	4	MC7125	R/L-ES	90—110	0.20—0.50
●	M	5	MP7135	GM	65—90	0.16—0.50
●	M	6	MP7135	MM	65—90	0.15—0.45
●	M	7	MP7135	MA	65—90	0.10—0.30
●	R	1	MC7125	RM	85—100	0.25—0.55
●	R	2	MP7135	RM	60—85	0.25—0.55
●	R	3	MP7135	GH	60—85	0.25—0.60
●	H	1	MC7125	HL	75—90	0.40—1.00
●	H	2	MC7125	HM	75—90	0.50—1.00
✱	L	1	MP7135	LM	70—95	0.10—0.35
✱	L	2	MP7135	SH	70—95	0.10—0.40
✱	M	1	MP7135	GM	65—90	0.16—0.50
✱	M	2	MP7135	MM	65—90	0.15—0.45
✱	M	3	MP7135	MA	65—90	0.10—0.30
✱	R	1	MP7135	RM	60—85	0.25—0.55
✱	R	2	MP7135	GH	60—85	0.25—0.60
✱	H	1	MC7125	HL	75—90	0.40—1.00
✱	H	2	MC7125	HM	75—90	0.50—1.10

Note 1) Recommended cutting conditions for 5°/7°/11° 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.

Cutting Conditions : ● : Stable Cutting ● : General Cutting ✱ : Unstable Cutting

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

Recommended Cutting Conditions

7° Positive Inserts (For External Turning)

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Austenitic Stainless Steel Hardness ≤ 200 HB						
●	F	1	MC7115	FM	160–255	0.04–0.20
●	F	2	MC7125	FM	150–210	0.04–0.20
●	L	1	MC7125	LM	150–210	0.06–0.25
●	L	2	MC7115	LM	160–255	0.06–0.25
●	M	1	MC7125	MM	125–175	0.08–0.30
●	M	2	MC7125	MV	125–175	0.08–0.30
●	M	3	MC7115	MM	135–215	0.08–0.30
●	F	1	MC7125	FM	150–210	0.04–0.20
●	L	1	MC7125	LM	150–210	0.06–0.25
●	L	2	MP7135	LM	115–145	0.06–0.25
●	M	1	MC7125	MM	125–175	0.08–0.30
●	M	2	MC7125	MV	125–175	0.08–0.30
●	F	1	MP7135	FM	115–145	0.04–0.20
✱	L	1	MP7135	LM	115–145	0.06–0.25
✱	M	1	MP7135	MM	95–120	0.08–0.30
✱	M	2	MP7135	MV	95–120	0.08–0.30
M Austenitic Stainless Steel Hardness > 200 HB						
●	F	1	MC7115	FM	135–215	0.04–0.20
●	F	2	MC7125	FM	125–175	0.04–0.20
●	L	1	MC7125	LM	125–175	0.06–0.25
●	L	2	MC7115	LM	135–215	0.06–0.25
●	M	1	MC7125	MM	105–145	0.08–0.30
●	M	2	MC7125	MV	105–145	0.08–0.30
●	M	3	MC7115	MM	110–180	0.08–0.30
●	F	1	MC7125	FM	125–175	0.04–0.20
●	L	1	MC7125	LM	125–175	0.06–0.25
●	L	2	MP7135	LM	95–120	0.06–0.25
●	M	1	MC7125	MM	105–145	0.08–0.30
●	M	2	MC7125	MV	105–145	0.08–0.30
●	F	1	MP7135	FM	95–120	0.04–0.20
✱	L	1	MP7135	LM	95–120	0.06–0.25
✱	M	1	MP7135	MM	80–100	0.08–0.30
✱	M	2	MP7135	MV	80–100	0.08–0.30
M Ferritic and Martensitic Stainless Steel Hardness ≤ 200 HB						
●	F	1	MC7125	FM	150–210	0.04–0.20
●	L	1	MC7125	LM	150–210	0.06–0.25
●	L	2	MC7115	LM	160–255	0.06–0.25
●	M	1	MC7125	MM	125–175	0.08–0.30
●	M	2	MC7125	MV	125–175	0.08–0.30
●	M	3	MC7115	MM	135–215	0.08–0.30
●	F	1	MC7125	FM	150–210	0.04–0.20
●	L	1	MC7125	LM	150–210	0.06–0.25
●	L	2	MP7135	LM	115–145	0.06–0.25
●	M	1	MC7125	MM	125–175	0.08–0.30
●	M	2	MC7125	MV	125–175	0.08–0.30
✱	F	1	MP7135	FM	115–145	0.04–0.20
✱	L	1	MP7135	LM	115–145	0.06–0.25
✱	M	1	MP7135	MM	95–120	0.08–0.30
✱	M	2	MP7135	MV	95–120	0.08–0.30
M Ferritic and Martensitic Stainless Steel Hardness > 200 HB						
●	F	1	MC7125	FM	125–175	0.04–0.20
●	F	2	MC7115	FM	135–215	0.04–0.20
●	L	1	MC7125	LM	125–175	0.06–0.25
●	L	2	MC7115	LM	135–215	0.06–0.25
●	M	1	MC7125	MM	105–145	0.08–0.30
●	M	2	MC7125	MV	105–145	0.08–0.30
●	M	3	MC7115	MM	110–180	0.08–0.30
●	F	1	MC7125	FM	125–175	0.04–0.20
●	L	1	MC7125	LM	125–175	0.06–0.25
●	L	2	MP7135	LM	95–120	0.06–0.25
●	M	1	MC7125	MM	105–145	0.08–0.30
●	M	2	MC7125	MV	105–145	0.08–0.30
✱	F	1	MP7135	FM	95–120	0.04–0.20
✱	L	1	MP7135	LM	95–120	0.06–0.25
✱	M	1	MP7135	MM	80–100	0.08–0.30
✱	M	2	MP7135	MV	80–100	0.08–0.30

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Two-phase Stainless Steel Hardness ≤ 280 HB						
●	F	1	MP7135	FM	75–100	0.04–0.20
●	L	1	MP7135	LM	75–100	0.06–0.25
●	L	2	MC7125	LM	100–140	0.06–0.25
●	L	3	MC7115	LM	110–175	0.06–0.25
●	M	1	MP7135	MM	65–80	0.08–0.30
●	M	2	MC7125	MM	85–115	0.08–0.30
●	M	3	MC7125	MV	85–115	0.08–0.30
●	M	4	MC7115	MM	90–145	0.08–0.30
●	F	1	MC7125	FM	100–140	0.04–0.20
●	L	1	MC7125	LM	100–140	0.06–0.25
●	M	1	MC7125	MM	85–115	0.08–0.30
●	M	2	MC7125	MV	85–115	0.08–0.30
✱	F	1	MP7135	FM	75–100	0.04–0.20
✱	L	1	MP7135	LM	75–100	0.06–0.25
✱	M	1	MP7135	MM	65–80	0.08–0.30
✱	M	2	MP7135	MV	65–80	0.08–0.30
M Precipitation-Hardening Stainless Steel Hardness < 450 HB						
●	F	1	MC7115	FM	95–140	0.04–0.20
●	L	1	MC7115	LM	95–140	0.06–0.20
●	L	2	MC7125	LM	85–105	0.06–0.20
●	M	1	MC7115	MM	80–120	0.08–0.25
●	M	2	MC7125	MM	70–85	0.08–0.25
●	F	1	MC7125	FM	85–105	0.04–0.20
●	F	2	MP7135	FM	60–85	0.04–0.20
●	L	1	MC7125	LM	85–105	0.06–0.20
●	L	2	MP7135	LM	60–85	0.06–0.20
●	M	1	MC7125	MM	70–85	0.08–0.25
●	M	2	MC7125	MV	70–85	0.08–0.30
●	M	3	MP7135	MM	50–70	0.08–0.25
✱	F	1	MP7135	FM	60–85	0.04–0.20
✱	L	1	MP7135	LM	60–85	0.06–0.20
✱	M	1	MP7135	MM	50–70	0.08–0.25
✱	M	2	MP7135	MV	50–70	0.08–0.30

Note 1) Recommended cutting conditions for 5°/7°/11° 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.

Cutting Conditions : ● : Stable Cutting ● : General Cutting ✱ : Unstable Cutting

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

Coated Grade for Stainless Steel Turning

Recommended Cutting Conditions

11° Positive Inserts (For External Turning)

Cutting Range	Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap	
M Austenitic Stainless Steel Hardness ≤ 200 HB							
●	L	1	MC7125	LM	150—210	0.06—0.25	0.2—1.0
●	L	2	MC7115	LM	160—255	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	125—175	0.08—0.30	0.3—2.0
●	M	2	MC7115	MM	135—215	0.08—0.30	0.3—2.0
●	L	1	MC7125	LM	150—210	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	125—175	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	125—175	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	115—145	0.06—0.25	0.2—1.0
⚙	M	1	MP7135	MM	95—120	0.08—0.30	0.3—2.0
⚙	M	2	MP7135	MV	95—120	0.08—0.30	0.3—2.0
M Austenitic Stainless Steel Hardness > 200 HB							
●	L	1	MC7125	LM	125—175	0.06—0.25	0.2—1.0
●	L	2	MC7115	LM	135—215	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	105—145	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	105—145	0.08—0.30	0.3—2.0
●	M	3	MC7115	MM	110—180	0.08—0.30	0.3—2.0
●	L	1	MC7125	LM	125—175	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	105—145	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	105—145	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	95—120	0.06—0.25	0.2—1.0
⚙	M	1	MP7135	MM	80—100	0.08—0.30	0.3—2.0
⚙	M	2	MP7135	MV	80—100	0.08—0.30	0.3—2.0
M Ferritic and Martensitic Stainless Steel Hardness ≤ 200 HB							
●	L	1	MC7125	LM	150—210	0.06—0.25	0.2—1.0
●	L	2	MC7115	LM	160—255	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	125—175	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	125—175	0.08—0.30	0.3—2.0
●	M	3	MC7115	MM	135—215	0.08—0.30	0.3—2.0
●	L	1	MC7125	LM	150—210	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	125—175	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	125—175	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	115—145	0.06—0.25	0.2—1.0
⚙	M	1	MP7135	MM	95—120	0.08—0.30	0.3—2.0
⚙	M	2	MP7135	MV	95—120	0.08—0.30	0.3—2.0
M Ferritic and Martensitic Stainless Steel Hardness > 200 HB							
●	L	1	MC7125	LM	125—175	0.06—0.25	0.2—1.0
●	L	2	MC7115	LM	135—215	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	105—145	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	105—145	0.08—0.30	0.3—2.0
●	M	3	MC7115	MM	110—180	0.08—0.30	0.3—2.0
●	L	1	MC7125	LM	125—175	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	105—145	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	95—120	0.06—0.25	0.2—1.0
⚙	M	1	MP7135	MM	80—100	0.08—0.30	0.3—2.0
⚙	M	2	MP7135	MV	80—100	0.08—0.30	0.3—2.0

Cutting Range		Priority	Grade	Chipbreaker	Cutting Speed vc (m/min)	Feed f (mm/rev)	Depth of Cut ap
M Two-phase Stainless Steel Hardness ≤ 280 HB							
●	L	1	MC7125	LM	100—140	0.06—0.25	0.2—1.0
●	L	2	MC7115	LM	110—175	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	85—115	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	85—115	0.08—0.30	0.3—2.0
●	M	3	MC7115	MM	90—145	0.08—0.30	0.3—2.0
●	L	1	MP7135	LM	75—100	0.06—0.25	0.2—1.0
●	L	2	MC7125	LM	100—140	0.06—0.25	0.2—1.0
●	M	1	MC7125	MM	85—115	0.08—0.30	0.3—2.0
●	M	2	MC7125	MV	85—115	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	75—100	0.06—0.25	0.2—1.0
⚙	M	1	MP7135	MM	65—80	0.08—0.30	0.3—2.0
⚙	M	2	MP7135	MV	65—80	0.08—0.30	0.3—2.0
M Precipitation-Hardening Stainless Steel Hardness < 450 HB							
●	L	1	MC7125	LM	85—105	0.06—0.20	0.2—1.0
●	L	2	MC7115	LM	95—140	0.06—0.20	0.2—1.0
●	M	1	MC7125	MM	70—85	0.08—0.25	0.3—2.0
●	M	2	MC7125	MV	70—85	0.08—0.30	0.3—2.0
●	L	1	MC7125	LM	85—105	0.06—0.20	0.2—1.0
●	M	1	MC7125	MM	70—85	0.08—0.25	0.3—2.0
●	M	2	MC7125	MV	70—85	0.08—0.30	0.3—2.0
⚙	L	1	MP7135	LM	60—85	0.06—0.20	0.2—1.0
⚙	M	1	MC7125	MM	70—85	0.08—0.25	0.3—2.0
⚙	M	2	MC7125	MV	70—85	0.08—0.30	0.3—2.0

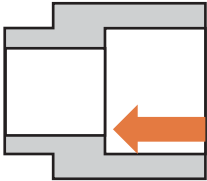
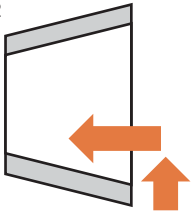
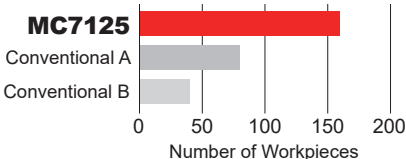
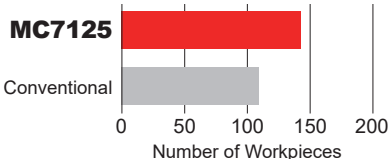
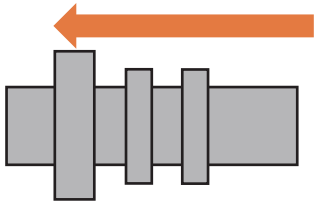
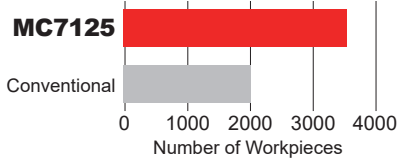
Note 1) Recommended cutting conditions for 5°/7°/11° positive inserts are provided as a guideline only.

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

Cutting Conditions : ● : Stable Cutting ● : General Cutting ✖ : Unstable Cutting

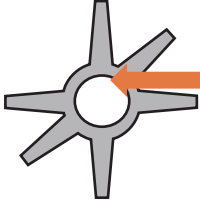
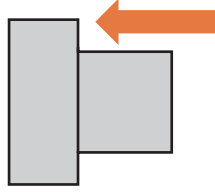
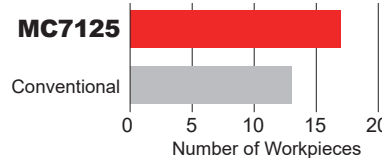
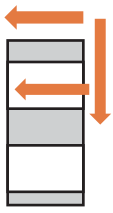
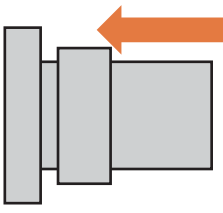
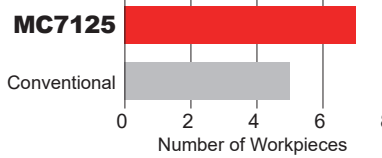
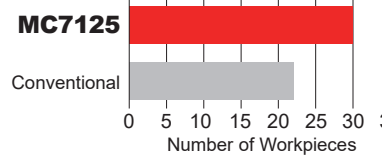
Cutting Area : F : Finish Cutting L : Light Cutting M : Medium Cutting R : Rough Cutting H : Heavy Cutting

Application Examples

Insert		CCMT09T308-MM (MC7125)	CNMG120408-MM (MC7125)
Workpiece	JIS SUS316		ISO X9CrNiSiCe21-11-2
			
Component		Machine Parts	Machine Parts
Application		Internal Turning	Face and Internal Turning
Cutting Conditions	Cutting Speed (m/min)	100	90
	Feed per Rev. (mm/rev)	0.24	0.2 – 0.38
	Depth of Cut (mm)	2.2	1 – 1.5
Cutting Mode		wet	wet
Results		MC7125  The tool life has doubled compared to previous inserts.	MC7125  Machined 30% more components when compared to conventional products.
Insert		DCMT11T304-MM (MC7125)	CNMG120408-MM (MC7125)
Workpiece	JIS SUS316		JIS SUS304
			No Image
Component		Nozzle Parts	Machine Parts
Application		External Turning	External Turning
Cutting Conditions	Cutting Speed vc (m/min)	48→66	100→160
	Feed per Rev. f (mm/rev)	0.06	0.25
	Depth of Cut ap (mm)	2.8	1.6
Cutting Mode		wet	wet
Results		MC7125  Greatly extended tool life even at increased cutting speeds.	Due to stable wear, the cutting speed can be increased by 1.6 times, thereby improving work efficiency.

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

Application Examples

Insert		CNMG120408-GM (MP7135)	WNMG080408-MM (MC7125)
Workpiece	JIS SUS316L		JIS SUS316
			
Component		Machine Parts	Machine Parts
Application		Face Turning	External Turning
Cutting Conditions	Cutting Speed (m/min)	100	170
	Feed per Rev. (mm/rev)	0.15	0.25 – 0.33
	Depth of Cut (mm)	0.7	0.5 – 3.0
Cutting Mode		wet	wet
Results		MP7135  Tool life was improved even on workpieces with severe interrupted cutting.	MC7125  MC7125 increased the number of parts machined per cutting edge.
Insert		WNMG080408-MM (MC7125)	CNMG120408-GM (MC7125)
Workpiece	JIS SUS347H		JIS SUS316L
			
Component		Machine Parts	Joint Parts
Application		Face, External and Internal Turning	Face and External Turning
Cutting Conditions	Cutting Speed v_c (m/min)	150	120 – 170
	Feed per Rev. f (mm/rev)	0.1 – 0.3	0.22
	Depth of Cut a_p (mm)	0.25	0.5 – 1.8
Cutting Mode		wet	wet
Results		MC7125  Tool life has been increased by 1.4 times for large workpieces.	MC7125  Achieved a 35% increase in the number of machining operations without fracturing.

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

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.

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