

Coated Carbide Grades for Stainless Steel Turning

AC6030M / AC6040M



AC6030M - New CVD coating „Absotech Platinum“
- For general purpose

AC6040M - New PVD coating „Absotech Bronze“
- Excellent stability

NEM - New chipbreaker for rough cutting of stainless steel



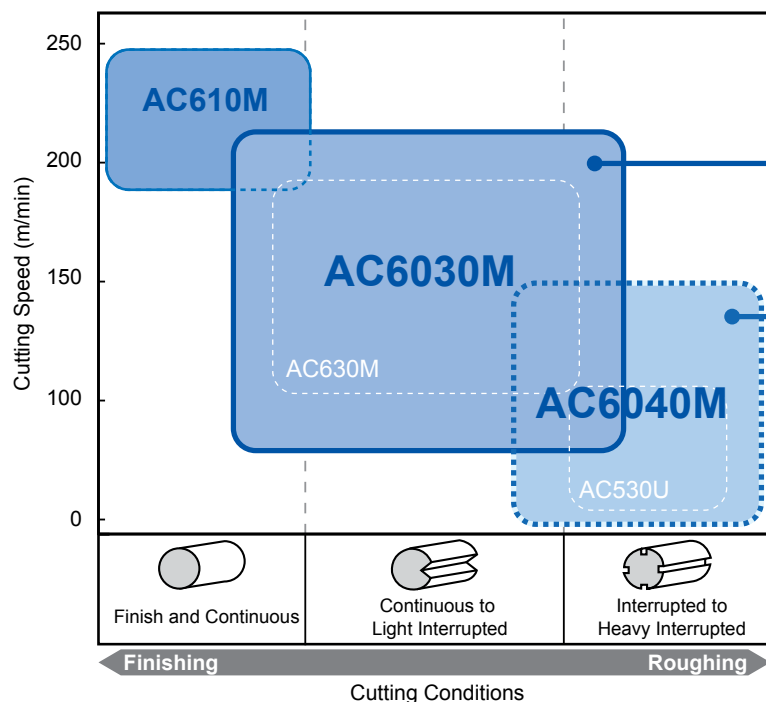
SUMITOMO

CARBIDE - CBN - DIAMOND

For Stainless Steel Turning

AC6030M / AC6040M

Application Range



AC6030M

The first recommended grade for general machining of stainless steel drastically reduces the occurrence of abnormal damage in stainless steel machining and achieves stable long tool life thanks to the new coating „Absotech Platinum“.

AC6040M

The first recommended grade for general machining of stainless steel drastically improves the reliability in unstable machining thanks to the excellent adhesion and the peeling-off resistance of the new coating „Absotech Bronze“. The improved fracture resistance of the exclusive carbide substrate assures the production.

AC610M

A high efficiency M10 grade featuring improved wear resistance during stainless steel cutting. Employs special, ultra-hard substrate and thin Super FF Coat.

Feature

The new series of coated grades and chipbreakers recommended as ideal for turning of heavy-cut stainless steel. Absotech, a newly developed coating technology, drastically improves peeling-off resistance and provides stable tool life.

Extended tool life and thereby reduced tool costs in a wide range of applications, from roughing to finishing and from low-speed to high-speed machining of various types of stainless steel.

Recommended Cutting Conditions

(Min. - Optimum - Max.)

Work Material			Cutting Range	Chipbreaker	Grade	Cutting Conditions		
						Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
Cr-Based	Ferritic Materials	X6CrAl 13, X8CrNiS 18 9, X29CrS 13, X6CrMoS 17, X12CrS 13	Finishing	NEF (NSU)	AC610M	0,5-1,5-2,0	0,05-0,15-0,25	170-225-300
			Medium	NEG · NEX · NGU	AC6030M	1,0-2,5-4,0	0,10-0,25-0,40	140-180-235
			Roughing	NEM	AC6040M	1,5-3,5-6,0	0,20-0,35-0,60	120-150-180
	Martensitic Materials	X12Cr 13, X20Cr 13, X30Cr 13, X6Cr 17, X19CrNi 17 2, X6CrNi 18 9	Finishing	NEF (NSU)	AC6030M	0,5-1,5-2,0	0,05-0,15-0,25	120-175-230
			Medium	NEG · NEX · NGU	AC6030M	1,0-2,5-4,0	0,10-0,25-0,40	100-140-180
			Roughing	NEM	AC6040M	1,5-3,5-6,0	0,20-0,35-0,60	80-120-160
Cr/Ni-Based	Austenitic Materials	X5CrNi 18 10, X2CrNi 19 11, X2CrNiMo 18 10, X4CrNiMo 17 12 2, X2CrNiMo 17 12 2, X5CrNiMo 17 13, X6CrNiTi 18 10, X70CrMo 15	Finishing	NEF (NSU)	AC6030M	0,5-1,5-2,0	0,05-0,15-0,25	90-115-140
			Medium	NEG · NEX · NGU	AC6030M	1,0-2,5-4,0	0,10-0,25-0,40	70- 90-110
			Roughing	NEM	AC6040M	1,5-3,5-6,0	0,20-0,35-0,60	50- 75-100
	Two-Phase (Austenite / Ferrite) Materials	X5CrNi 17 7, X2CrNi 18 9, X6CrNi 25 20, X2CrNiMoN 17 12 2, X6CrNiNb 18 10	Finishing	NEF (NSU)	AC6030M	0,5-1,5-2,0	0,05-0,15-0,25	90-115-140
			Medium	NEG · NEX · NGU	AC6030M	1,0-2,5-4,0	0,10-0,25-0,40	70- 90-110
			Roughing	NEM	AC6040M	1,5-3,5-6,0	0,20-0,35-0,60	50- 75-100
	Precipitation Hardening	X5CrNiCuNb 16 4, X7CrNiAl 17 7, X4CrNuMo 27 5 2, X2CrNiMoN 22 5 3, X2CrNiMoCuN 25 6 3	Finishing	NEF (NSU)	AC6030M	0,5-1,5-2,0	0,05-0,15-0,25	90-115-140
			Medium	NEG · NEX · NGU	AC6030M	1,0-2,5-4,0	0,10-0,25-0,40	70- 90-110
			Roughing	NEM	AC6040M	1,5-3,5-6,0	0,20-0,35-0,60	50- 75-100

AC6030M



■ Grade for General Machining

Achieves more than double the chipping resistance of conventional coatings thanks to the improved coating strength.

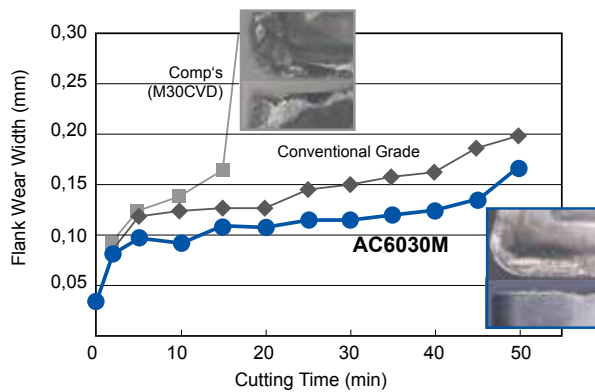
Drastically improves the adhesion resistance and reduces the occurrence of abnormal damage thanks to excellent surface smoothness.

Improves the corner visibility with a unique light color.

■ New CVD Coating „Absotech Platinum“

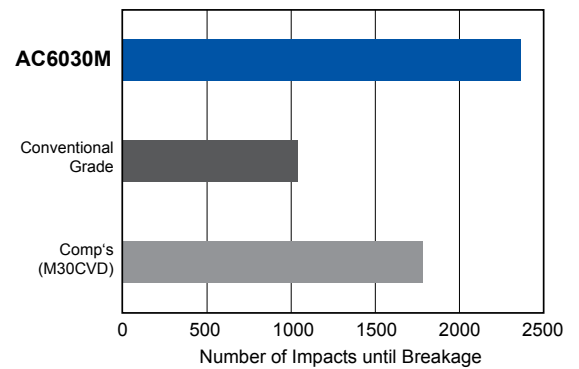
Achieves a good balance between drastically improved coating strength and excellent surface smoothness thanks to a newly developed, boride-based titanium compound coating.

● Continuous Cutting



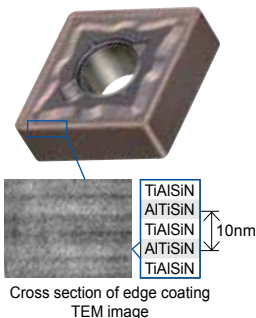
Work Material: X6CrMo17 12 2
Insert: CNMG120408
Cutting Conditions: $v_c=200\text{m/min}$, $f=0,2\text{mm/rev}$, $a_p=2,0\text{mm}$, Wet

● Interrupted Cutting



Work Material: X6CrMo17 12 2
Insert: CNMG120408
Cutting Conditions: $v_c=100\text{m/min}$, $f=0,10\text{mm/rev}$, $a_p=1,0\text{mm}$, Wet

AC6040M



■ Grade for Heavy Interrupted Cutting

Achieves excellent wear and oxidation resistance thanks to the new composition's TiAlSiN-based ultra-multi-layered coating structure.

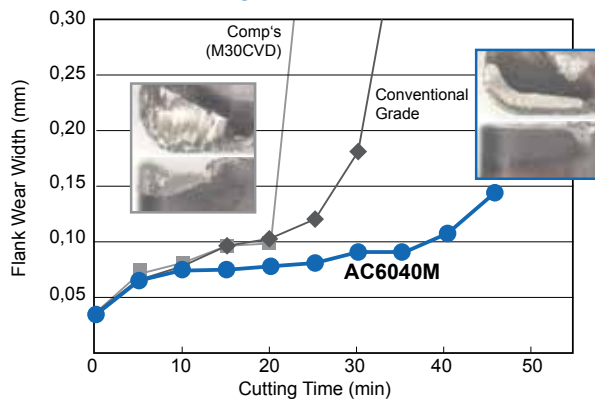
Drastically improves the peeling-off resistance of coating by improving the boundary control technology between carbide substrate and coating.

Compared to conventional grades, achieves more than double the fracture resistance in stainless steel machining.

■ New PVD Coating „Absotech Bronze“

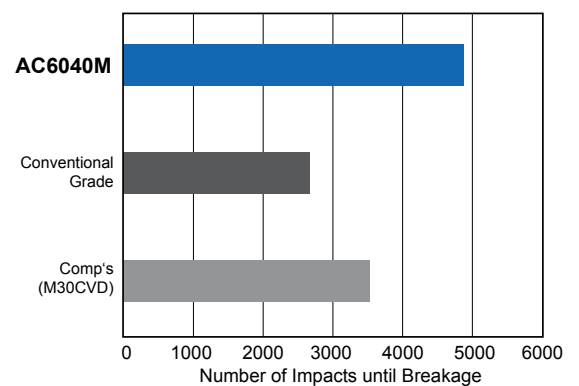
Improves the stability of the cutting edge by succeeding our unique ultra-multi-layered coating structure, which is applied to Super ZX Coating and by employing highly heat-resistant coating of new composition, as well as improving the adhesion strength between carbide substrate and coating.

● Continuous Cutting



Work Material: X6CrMo17 12 2
Insert: CNMG120408
Cutting Conditions: $v_c=150\text{m/min}$, $f=0,2\text{mm/rev}$, $a_p=2,0\text{mm}$, Wet

● Interrupted Cutting

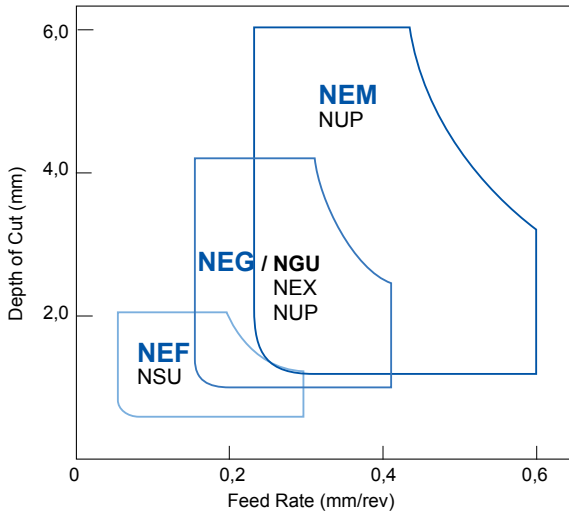


Work Material: X6CrMo17 12 2
Insert: CNMG120408
Cutting Conditions: $v_c=230\text{m/min}$, $f=0,23\text{mm/rev}$, $a_p=0,8\text{mm}$, Dry

For Stainless Steel Turning

NEF / NEG / NEM

■ Chipbreaker Application Range

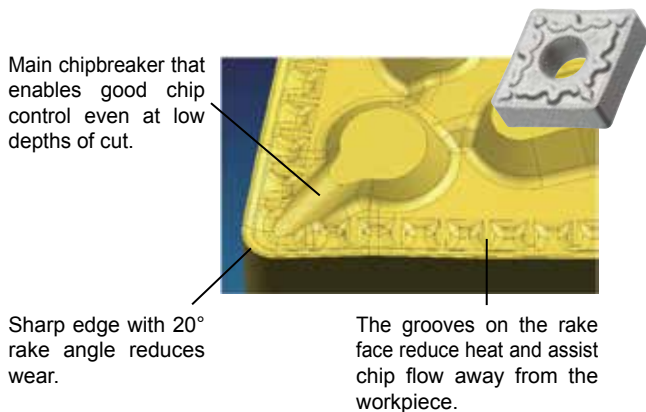


In addition to the NEF type for finishing and the NEG type for medium cutting, the NEM type for rough cutting has been added to the chipbreaker series for stainless steel machining.

The NEM type achieves excellent wear resistance and cutting edge strength while the NEF type and NEG type achieve excellent wear resistance and chip control and ensuring stable machining of stainless steel.

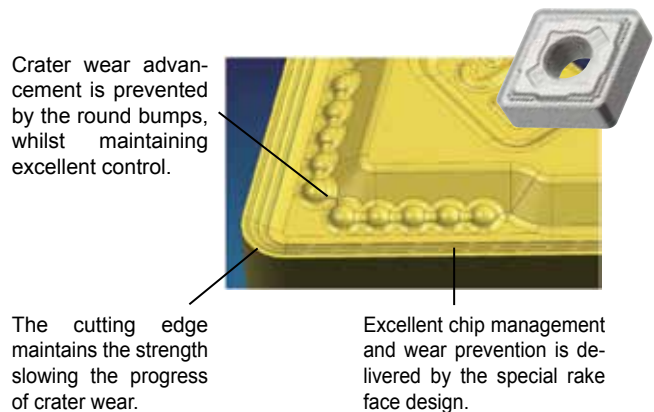
■ NEF Chipbreaker for Finishing

The NEF chipbreaker reduces chip curl diameter in finishing applications. Provides very good chip management not fluctuated by the material in use.

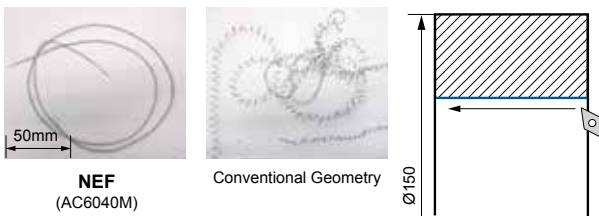


■ NEG Chipbreaker for Medium Cutting

The NEG chipbreaker achieves excellent wear resistance and chip control from general-purpose machining to roughing applications. Also provides very high versatility.



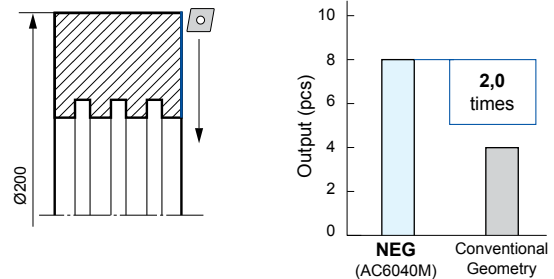
● Application Example



Improves chip control and reduces scratches on finished surfaces.

Work Material: X5CrMo18 10, Cover Component
Insert: DNMG150408NEF (AC6040M)
Cutting Conditions: $v_c=55\text{m/min}$, $f=0.125\text{mm/rev}$, $a_p=0.3\text{mm}$, Wet

● Application Example



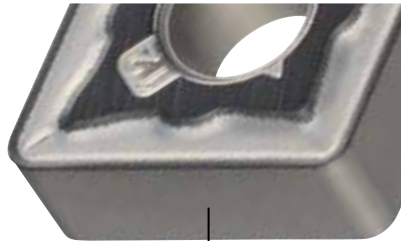
Reduces flank wear and achieves excellent chip control.

Work Material: GX6CrNi18 9, Coupling Component
Insert: CNMG120408NEG (AC6040M)
Cutting Conditions: $v_c=70\sim180\text{m/min}$, $f=0.143\text{mm/rev}$, $a_p=2.5\text{mm}$, Wet

■ NEM Chipbreaker for Rough Cutting

● Feature

The NEM chipbreaker achieves excellent fracture and crater resistance and ensures extremely stable machining.



Bright colors for easy identification of used cutting edge.

Large radius rake face design that reduces crater wear while maintaining the cutting edge strength.

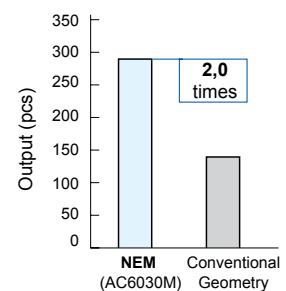
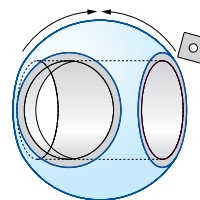
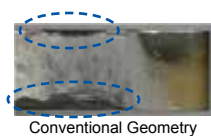
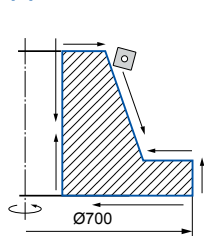


Reduces boundary damage by eliminating changing points from the cutting edge.

● Reduction of Damage

	Reduction of Boundary Damage		Reduction of Crater Wear	
	Cutting Edge	Boundary Wear Comparison	Cross Section	Crater Wear Comparison
Conventional Geometry				
NEM Type				
	The NEM chipbreaker has no changing points on the cutting edge, so boundary damage is reduced.		The NEM chipbreaker smoothly evacuates chips thanks to its large radius rake face design, so crater wear is reduced.	

● Application Example



Reduces breakage out of the cutting edge and ensures stable machining.

Reduces crater wear and provides long tool life.

Work Material: X5CrMo17 12 2
Insert: SNMG190616NEM (AC6030M)
Cutting Conditions: $v_c=70\text{m/min}$, $f=0,5\text{mm/rev}$, $a_p=3,0\sim8,0\text{mm}$, Wet

Work Material: X5CrNiS18 10
Insert: SNMG120408NEM (AC6030M)
Cutting Conditions: $v_c=100\text{m/min}$, $f=0,32\text{mm/rev}$, $a_p=2,0\sim2,5\text{mm}$, Wet

For Stainless Steel Turning

AC6030M / AC6040M

■ Negative Type Inserts

◇ 80° Diamond Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	CNMG 120402 NSU	●	●	12,7	4,76	5,16	0,2
	120404 NSU	●	●				0,4
	120408 NSU	●	●				0,8
	120412 NSU	●	●				1,2
	CNMG 120404 NEF	●	●	12,7	4,76	5,16	0,4
	120408 NEF	●	●				0,8
	CNMG 120404 NEX	●	●	12,7	4,76	5,16	0,4
	120408 NEX	●	●				0,8
	120412 NEX	●	●				1,2
	CNMG 120404 NUP	●	●	12,7	4,76	5,16	0,4
	120408 NUP	●	●				0,8
	120412 NUP	●	●				1,2
	CNMG 120404 NGU	●	●	12,7	4,76	5,16	0,4
	120408 NGU	●	●				0,8
	120412 NGU	●	●				1,2
	CNMG 120408 NEG	●	●	12,7	4,76	5,16	0,8
	120412 NEG	●	●				1,2
	CNMG 160612 NEG	●	●	15,875	6,35	6,35	1,2
	CNMG 190612 NEG	●	●	19,05	6,35	7,94	1,2
	190616 NEG	●	●				1,6
	CNMG 120408 NEM	●	●	12,7	4,76	5,16	0,8
	120412 NEM	●	●				1,2
	120416 NEM	●	●				1,6
	CNMG 160612 NEM	●	●	15,875	6,35	6,35	1,2
	160616 NEM	●	●				1,6
	CNMG 190612 NEM	●	●	19,05	6,35	7,94	1,2
	190616 NEM	●	●				1,6
	CNMM 120408 NMP	●	●	12,7	4,76	5,16	0,8
	120412 NMP	●	●				1,2
	120416 NMP	●	●				1,6
	CNMM 190608 NMP	○	○	19,06	6,35	7,94	0,8
	190612 NMP	●	●				1,2
	190616 NMP	●	●				1,6
	190624 NMP	○	○				2,4

◇ 55° Diamond Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	DNMG 150402 NSU	○	○	12,7	4,76	5,16	0,2
	150404 NSU	○	○				0,4
	150408 NSU	○	○				0,8
	150412 NSU	○					1,2
	DNMG 150604 NSU	●	●	12,7	6,35	5,16	0,4
	150608 NSU	●	●				0,8
	DNMG 150404 NEF	○	○	12,7	4,76	5,16	0,4
	150408 NEF	○	○				0,8
	150412 NEF	○					1,2
	DNMG 150604 NEF	●	●	12,7	6,35	5,16	0,4
	150608 NEF	●	●				0,8
	150612 NEF	●					1,2
	DNMG 150404 NEX	○	○	12,7	4,76	5,16	0,4
	150408 NEX	○	○				0,8
	150412 NEX	○					1,2
	DNMG 150604 NEX	●	●	12,7	6,35	5,16	0,4
	150608 NEX	●	●				0,8
	150612 NEX	●					1,2

◇ 55° Diamond Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	DNMG 150404 NUP	○	○	12,7	4,76	5,16	0,4
	150408 NUP	○	○				0,8
	150412 NUP	○	○				1,2
	DNMG 150604 NUP	●	●				0,4
	150608 NUP	●	●	12,7	6,35	5,16	0,8
	DNMG 110404 NGU	●	●				0,4
	110408 NGU	●	●				0,8
	DNMG 150404 NGU	○	○				0,4
	150408 NGU	○	○	12,7	4,76	5,16	0,8
	150412 NGU	○	○				1,2
	DNMG 150604 NGU	●	●				0,4
	150608 NGU	●	●				0,8
	150612 NGU	●	●	12,7	6,35	5,16	1,2
	DNMG 150404 NEG	○	○				0,4
	150408 NEG	○	○				0,8
	150412 NEG	○	○				1,2
	DNMG 150604 NEG	●	●	12,7	6,35	5,16	0,4
	150608 NEG	●	●				0,8
	150612 NEG	●	●				1,2
	DNMG 150408 NEM	○	○	12,7	4,76	5,16	0,8
	150412 NEM	○	○				1,2
	150416 NEM	○	○				1,6
	DNMG 150608 NEM	●	●				0,8
	150612 NEM	●	●	12,7	6,35	5,16	1,2
	DNMG 150404 RHM	○	○				0,4
	150404 LHM	○	○			5,16	0,4
	150408 RHM	○	○				0,8
	150408 LHM	○	○				0,8

● Euro stock
○ Japan stock

○ Square Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	SNMG 120408 NSU	●	●	12,7	4,76	5,16	0,8
	SNMG 120404 NEX	●	●	12,7	4,76	5,16	0,4
	120408 NEX	●	●				0,8
	120412 NEX	●	●				1,2
	SNMG 120404 NUP	●	●	12,7	4,76	5,16	0,4
	120408 NUP	●	●				0,8
	120412 NUP	●	●				1,2
	SNMG 120404 NGU	●	●	12,7	4,76	5,16	0,4
	120408 NGU	●	●				0,8
	120412 NGU	●	●				1,2
	SNMG 120408 NEG	●	●	12,7	4,76	5,16	0,8
	120412 NEG	●	●				1,2
	SNMG 150612 NEG	●	●	15,875	6,35	6,35	1,2
	190616 NEG	●	●				1,6
	SNMG 120408 NEM	●	●	12,7	4,76	5,16	0,8
	120412 NEM	●	●				1,2
	SNMG 150612 NEM	●	●				1,2
	150616 NEM	●	●	15,875	6,35	6,35	1,6
	SNMG 190612 NEM	●	●				1,2
	190616 NEM	●	●	19,05	6,35	7,94	1,6

For Stainless Steel Turning

AC6030M / AC6040M

■ Negative Type Inserts

○ Square Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	SNMG 120408 RHM	●		12,7	4,76	5,16	0,8
	120408 LHM	●					0,8
	SNMM 120408 NMP	●					0,8
	120412 NMP	●		12,7	4,76	5,16	1,2
	120416 NMP	●					1,6
	SNMM 190612 NMP	●		19,05	6,35	7,94	1,2
	190616 NMP	●					1,6
	SNMM 250724 NMP	○		25,4	7,94	9,2	2,4
	SNMM 250924 NMP	○		25,4	9,52	9,2	2,4
	SNMM 310924 NMP	○		31,75	9,52	8,8	2,4

◊ 35° Diamond Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	VNMG 160404 NEX	●	●	9,525	4,76	3,81	0,4
	160408 NEX	●	●				0,8
	VNMG 160404 NUP	●		9,525	4,76	3,81	0,4
	160408 NUP	●					0,8
	VNMG 160404 NGU	●	●				0,4
	160408 NGU	●	●	9,525	4,76	3,81	0,8
	160412 NGU		●				1,2
	VNMG 160408 NEG	●	●	9,525	4,76	3,81	0,8

△ Triangular Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	TNMG 160402 NSU	●	●				0,2
	160404 NSU	●	●	12,7	4,76	5,16	0,4
	160408 NSU	●	●				0,8
	160412 NSU	●	●				1,2
	TNMG 160404 NEF	●	●	12,7	4,76	5,16	0,4
	160408 NEF	●	●				0,8
	TNMG 160404 NEX	●	●				0,4
	160408 NEX	●	●	12,7	4,76	5,16	0,8
	160412 NEX	●	●				1,2
	TNMG 160404 NUP	●	●				0,4
	160408 NUP	●	●	12,7	4,76	5,16	0,8
	160412 NUP	●	●				1,2
	TNMG 160404 NGU	●	●				0,4
	160408 NGU	●	●	12,7	4,76	5,16	0,8
	160412 NGU	●	●				1,2
	TNMG 160408 NEG	●	●	12,7	4,76	5,16	0,8
	160412 NEG	●	●				1,2
	TNMG 160408 NEM	●	●	12,7	4,76	5,16	0,8
	160412 NEM	●	●				1,2
	TNMG 160404 RHM	●					0,4
	160404 LHM	●					0,4
	160408 RHM	●		12,7	4,76	5,16	0,8
	160408 LHM	●					0,8

◊ Trigon Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	WNMG 080404 NSU	●	●				0,4
	080408 NSU	●	●	12,7	4,76	5,16	0,8
	080412 NSU	●	●				1,2
	080412 NSU	●	●				1,2
	WNMG 080404 NEF	●	●	12,7	4,76	5,16	0,4
	080408 NEF	●	●				0,8
	WNMG 080404 NEX	●	●				0,4
	080408 NEX	●	●	12,7	4,76	5,16	0,8
	080412 NEX	●	●				1,2
	WNMG 080408 NUP	●	●	12,7	4,76	5,16	0,8
	080412 NUP	●	●				1,2
	WNMG 080404 NGU	●	●				0,4
	080408 NGU	●	●	12,7	4,76	5,16	0,8
	080412 NGU	●	●				1,2
	WNMG 080408 NEG	●	●	12,7	4,76	5,16	0,8
	080412 NEG	●	●				1,2
	WNMG 080408 NEM	●	●	12,7	4,76	5,16	0,8
	080412 NEM	●	●				1,2

● Euro stock
○ Japan stock

◊ 35° Diamond Type

Shape	Cat. No.	Stock		Dimensions (mm)			
		AC6030M	AC6040M	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	VNMG 160402 NSU	●	●				0,2
	160404 NSU	●	●	9,525	4,76	3,81	0,4
	160408 NSU	●	●				0,8
	VNMG 160402 NEF	●					0,2
	160404 NEF	●	●	9,525	4,76	3,81	0,4
	160408 NEF	●	●				0,8

For Stainless Steel Turning

AC6030M / AC6040M

Positive Type Inserts

80° Diamond Type

Shape	Relief Angle	Cat. No.	Stock		Dimensions (mm)			
			AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	CCMT 060202 NLU	●	●	6,35	2,38	2,8	0,2
		060204 NLU	●	●				0,4
		CCMT 09T304 NLU	●	●	9,525	3,97	4,4	0,4
		09T308 NLU	●	●				0,8
	7°	CCMT 060202 NLB	●	●	6,35	2,38	2,8	0,2
		060204 NLB	●	●				0,4
		060208 NLB	●	●				0,8
		CCMT 09T302 NLB	●	●	9,525	3,97	4,4	0,2
		09T304 NLB	●	●				0,4
		09T308 NLB	●	●				0,8
	7°	CCMT 060202 NSU	●	●	6,35	2,38	2,8	0,2
		060204 NSU	●	●				0,4
		060208 NSU	●	●				0,8
		CCMT 09T302 NSU	●	●	9,525	3,97	4,4	0,2
		09T304 NSU	●	●				0,4
		09T308 NSU	●	●				0,8
	7°	CCMT 09T304 NMU	●	●	9,525	3,97	4,4	0,4
		09T308 NMU	●	●				0,8
	11°	CPMT 090304 NLU	○	○	9,525	3,18	4,4	0,4
		090308 NLU	○	○				0,8
	11°	CPMT 090304 NLB	●	●	9,525	3,18	4,4	0,4
		090308 NLB	●	●				0,8
	11°	CPMT 090304 NSU	○	○	9,525	3,18	4,4	0,4
		090308 NSU	○	○				0,8
	11°	CPMT 090304 NMU	○	○	9,525	3,18	4,4	0,4
		090308 NMU	○	○				0,8

55° Diamond Type

Shape	Relief Angle	Cat. No.	Stock		Dimensions (mm)			
			AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	DCMT 070202 NLU	●	●	6,35	2,38	2,8	0,2
		070204 NLU	●	●				0,4
		DCMT 11T302 NLU	●	●	9,525	3,97	4,4	0,2
		11T304 NLU	●	●				0,4
		11T308 NLU	●	●				0,8
	7°	DCMT 070202 NLB	●	●	6,35	2,38	2,8	0,2
		070204 NLB	●	●				0,4
		070208 NLB	●	●				0,8
		DCMT 11T302 NLB	●	●	9,525	3,97	4,4	0,2
		11T304 NLB	●	●				0,4
		11T308 NLB	●	●				0,8
	7°	DCMT 070202 NSU	●	●	6,35	2,38	2,8	0,2
		070204 NSU	●	●				0,4
		070208 NSU	●	●				0,8
		DCMT 11T302 NSU	●	●	9,525	3,97	4,4	0,2
		11T304 NSU	●	●				0,4
	7°	DCMT 11T308 NSU	●	●	9,525	3,97	4,4	0,8
		11T304 NMU	●	●				0,4
		11T308 NMU	●	●				0,8

Square Type

Shape	Relief Angle	Cat. No.	Stock		Dimensions (mm)			
			AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	SCMT 09T304 NLU	○	○	9,525	3,97	4,4	0,4
		09T308 NLU	○	○				0,8
	7°	SCMT 09T304 NSU	●	●	9,525	3,97	4,4	0,4
		09T308 NSU	●	●				0,8
	7°	SCMT 09T308 NMU	●	●	9,525	3,97	4,4	0,8
	11°	SPMT 090304 NLU	○	○	9,525	3,18	3,4	0,4
		090308 NLU	○	○				0,8

Triangular Type

Shape	Relief Angle	Cat. No.	Stock		Dimensions (mm)			
			AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	TCMT 110204 NLU	○	○	6,35	2,38	2,8	0,4
		110208 NLU	○	○				0,8
	7°	TCMT 110204 NSU	●	●	6,35	2,38	2,8	0,4
		110208 NSU	●	●				0,8
		TCMT 16T304 NSU	●	●	9,525	3,97	4,3	0,4
		16T308 NSU	●	●				0,8
	11°	TPMT 080202 NLU	●	●	4,76	2,38	2,4	0,2
		080204 NLU	●	●				0,4
		TPMT 110302 NLU	●	●	6,35	3,18	3,4	0,2
		110304 NLU	●	●				0,4
	11°	TPMT 110308 NLU	●	●	6,35	3,18	3,4	0,8
		TPMT 090202 NLB	●	●	5,56	2,38	2,8	0,2
		090204 NLB	●	●				0,4
	11°	TPMT 110302 NLB	●	●	6,35	3,18	3,4	0,2
		110304 NLB	●	●				0,4
		110308 NLB	●	●				0,8
		TPMT 080202 NSU	●	●	4,76	2,38	2,4	0,2
		080204 NSU	●	●				0,4
		TPMT 110302 NSU	●	●				0,2
	11°	110304 NSU	●	●	6,35	3,18	3,4	0,4
		110308 NSU	●	●				0,8
		TPMT 160404 NSU	○	○	9,525	4,76	4,4	0,4
		160408 NSU	○	○				0,8
	11°	TPMT 110304 NMU	●	●	6,35	3,18	3,4	0,4
		110308 NMU	●	●				0,8
	11°	TPMT 160404 NMU	○	○	9,525	4,76	4,4	0,4
		160408 NMU	○	○				0,8

● Euro stock
○ Japan stock

■ Positive Type Inserts

◊ 35° Diamond Type

Shape	Relief Angle	Cat. No.	Stock		Dimensions (mm)			
			AC6030M	AC6040M	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	5°	VBMT 110304 NLU	●	●	6,35	3,18	2,8	0,4
		110308 NLU	○	●				0,8
		VBMT 160404 NLU	○	●	9,525	4,76	4,4	0,4
		160408 NLU	○	●				0,8
	5°	VBMT 160404 NLB	●	●				0,4
		160408 NLB	●	●	9,525	4,76	4,4	0,8
		160412 NLB	●	●				1,2
	5°	VBMT 110304 NSU	●	●	6,35	3,18	2,8	0,4
		110308 NSU	●	●				0,8
		VBMT 160404 NSU	●	●	9,525	4,76	4,4	0,4
		160408 NSU	●	●				0,8
	7°	VCMT 160404 NLU	○	●	9,525	4,76	4,4	0,4
		160408 NLU	○	●				0,8
	7°	VCMT 080204 NSU	○	●	4,76	2,38	2,3	0,4
		VCMT 110302 NSU	●	●				0,2
		110304 NSU	●	●	6,35	3,18	2,8	0,4
		110308 NSU	●	●				0,8
		VCMT 160404 NSU	●	●	9,525	4,76	4,4	0,4
		160408 NSU	●	●				0,8

● Euro stock
 ○ Japan stock

For Stainless Steel Turning

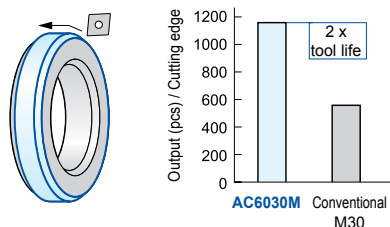
AC6030M / AC6040M

Application Examples

AC6030M

X6Cr17, Motorcycle Part

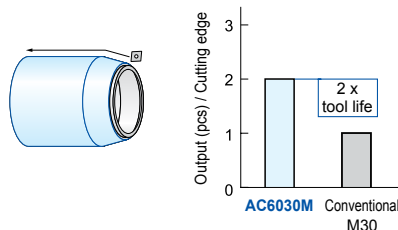
Ensures stable surface quality and 2 times longer tool life thanks to excellent adhesion resistance.



Insert: CNMG120404NEF (AC6030M)
Cutting Conditions: $v_c=120\text{m/min}$, $f=0,10\text{mm/rev}$, $a_p=0,8-1,5\text{mm}$, Wet

GX6CrNi18-9, Pump Part

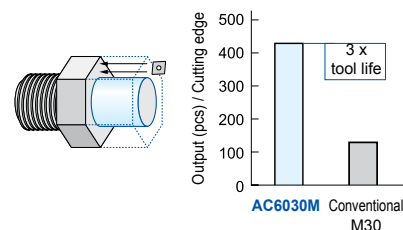
Provides 2,5 times efficiency ($v_c=60-100\text{m/min}$, $f=0,2-0,3\text{mm/rev}$) and 2 times longer tool life.



Insert: CNMG120408NEG (AC6030M)
Cutting Conditions: $v_c=100\text{m/min}$, $f=0,3\text{mm/rev}$, $a_p=0,5\text{mm}$, Wet

X5CrNiS1810, Joint Component

Enables roughing and finishing in hexagonal bar shaping with one grade and achieves 3 times longer tool life.

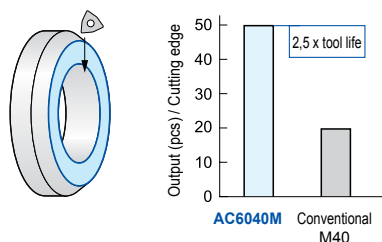


Insert: CNMG120412NGU (AC6030M)
Cutting Conditions: $v_c=50-75\text{m/min}$, $f=0,16\text{mm/rev}$, $a_p=2,0\text{mm}$, Wet

AC6040M

GX40CrNi24-4, Flange Joint Component

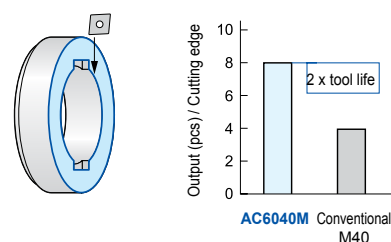
Provides stable machined surfaces and achieves 2,5 times longer tool life thanks to excellent wear resistance.



Insert: WNMG080408NEX (AC6040M)
Cutting Conditions: $v_c=140-200\text{m/min}$, $f=0,08\text{mm/rev}$, $a_p=0,5\text{mm}$, Wet

GX40CrNi24-4, Coupling

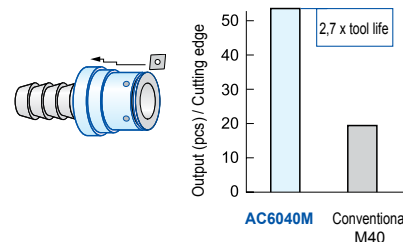
Achieves 2 times longer tool life thanks to excellent fracture resistance.



Insert: CNMG120408NEG (AC6040M)
Cutting Conditions: $v_c=70-180\text{m/min}$, $f=0,14\text{mm/rev}$, $a_p=2,5\text{mm}$, Wet

X5CrNiS1810, Nipple

Achieves 2,7 times longer tool life thanks to excellent adhesion resistance.



Insert: CNMG120408NGU (AC6040M)
Cutting Conditions: $v_c=150\text{m/min}$, $f=0,15\text{mm/rev}$, $a_p=1,5\text{mm}$, Wet



CARBIDE - CBN - DIAMOND

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