SUMITOMO
CARBIDE - CBN - DIAMOND
Global Support, Global Solutions.

ステンレス鋼旋削用コーティング材種
Coating Grades for Stainless Steel Turning

AC6020M/AC6030M/AC6040M

AC6020M / AC6030M / AC6040M 第5版

絶対的な安定加工を実現する ステンレス鋼旋削材種シリーズ

New grade for stainless steel turning, creating "**ABSOLUTELY STABLE CUTTING**"

New 汎用ポジティブ M級チップブレーカ
GU型 シリーズ化
GU type chipbreaker expanded
Positive M-class chipbreaker for General cutting

P M K N S H

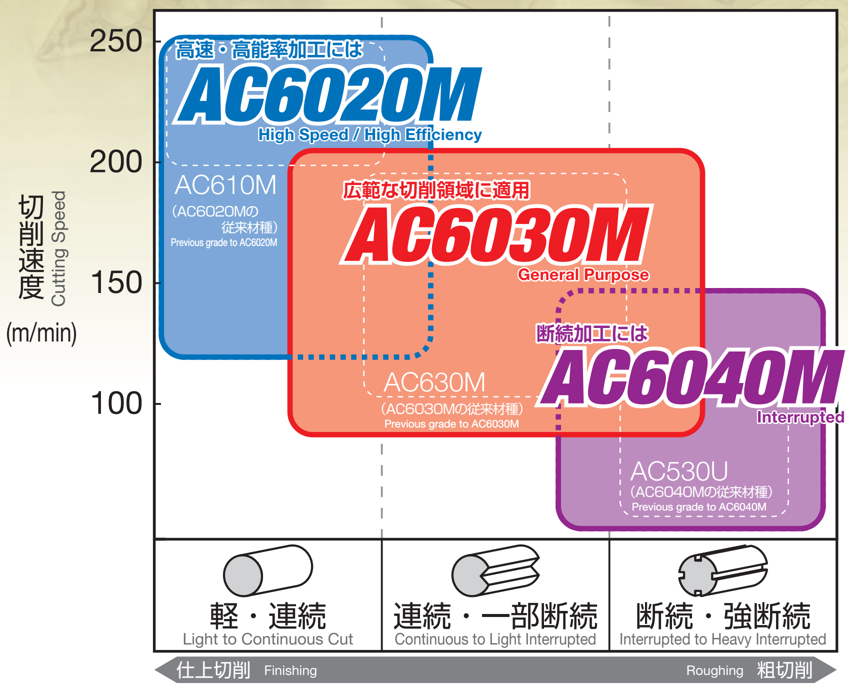
SUMITOMO ELECTRIC GROUP

切削動画
公開中
VIDEO OF CUTTING

ステンレス鋼旋削用コーティング材種
Coating carbide grades for Stainless Steel Turning

AC6020M/AC6030M/AC6040M

■ 適用領域 Application Range



■ 特長 Feature

難削材とされるステンレス鋼の旋削加工に最適なコーティング材種シリーズ

新開発のコーティング技術 **Absotech®** により耐剥離性能が著しく向上し、工具寿命が安定！

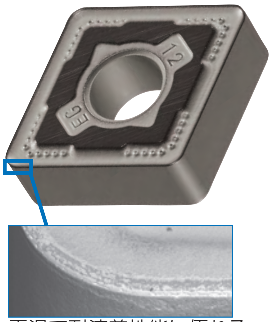
粗加工から仕上げ加工、高速加工から低速加工などの様々な条件下で、用途、条件、被削材を問わず、ステンレス鋼加工での工具寿命延長を実現し、工具費低減が可能となります。

A new series of coating grades , which is ideal for turning of hard-to-cut stainless steel

Absotech®, a newly developed coating technology, drastically improves peel-off resistance and provides stable tool life!

Extends tool life and thereby reduces 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.

高速・高能率加工用材種 AC6020M
High Speed / High Efficiency Cut



平滑で耐溶着性能に優れる
Smooth and high adherence coating

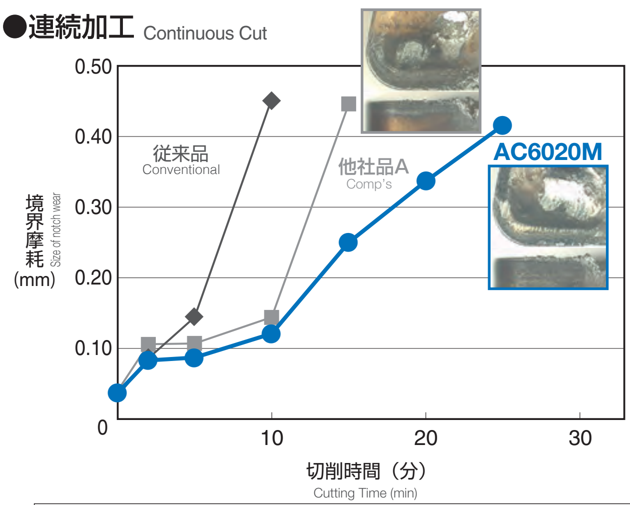
CVDコーティング **Absotech®** を採用。耐摩耗性能に優れる高硬度超硬母材との組み合わせにより、優れた耐摩耗性能・耐チッピング性能・耐溶着性能を実現するステンレス鋼高速・高能率加工用材種。

Grade for high speed and high efficiency stainless steel turning by the combination of new CVD coating "Absotech®" and hard substrate with high wear resistance, has excellent wear,chipping or peeling resistance.

CVD Coating CVDコーティング Absotech® ABSOTECH

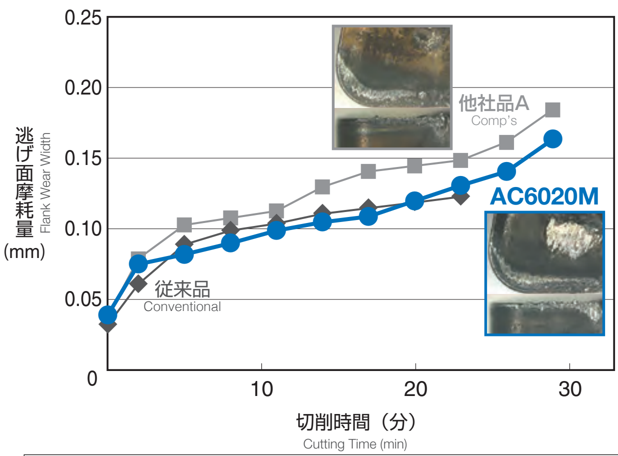
新開発の応力制御技術と表面平滑化処理（特許技術）を採用することで、耐チッピング性能と耐溶着性能を大幅に向上。
Drastically improved chipping resistance and adhesion resistance thanks to newly developed stress control techniques and surface smoothness treatment (patented technology).

●連続加工 Continuous Cut



被削材 Work Material：SUS316L　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=150m/min　f=0.3mm/rev　a_p=2.0mm　Wet

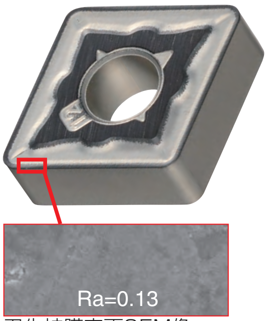
●連続加工 Continuous Cut



被削材 Work Material：SUS316L　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=200m/min　f=0.3mm/rev　a_p=2.0mm　Wet

汎用加工
General Purpose

AC6030M



刃先被膜表面SEM像
Surface of Edge Coating: SEM Image

CVDコーティング **Absotech®** を採用。コーティング膜強度の向上と表面平滑化による耐溶着性能向上により、ステンレス鋼加工で問題となる異常損傷の発生を大幅に低減、安定して長寿命を実現するステンレス鋼加工の第一推奨材種。

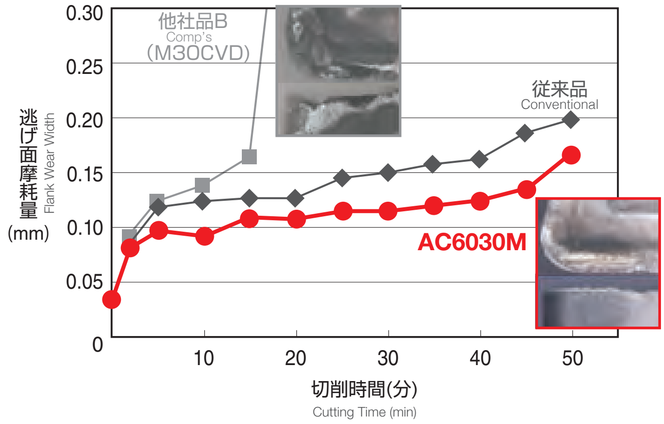
Grade for general stainless steel turning, 1st choice, by the improvement of strength of coating layer with new CVD coating "Absotech®" and adhesion resistance by smooth edge treatment, realizes much less damage of cutting edge, stable and long tool life.

CVD Coating CVDコーティング Absotech® ABSOTECH

新開発の応力制御技術と表面平滑化処理（特許技術）を採用することで、耐チッピング性能と耐溶着性能を大幅に向上。

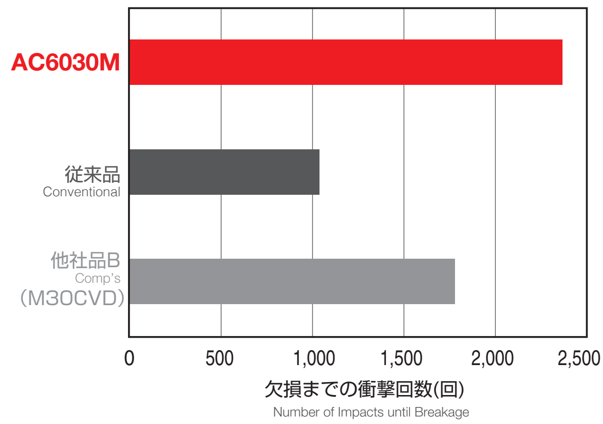
Drastically improved chipping resistance and adhesion resistance thanks to newly developed stress control techniques and surface smoothness treatment (patented technology).

●連続切削 Continuous Cut



被削材 Work Material：SUS316　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=200m/min　f=0.2mm/rev　a_p=2.0mm　Wet

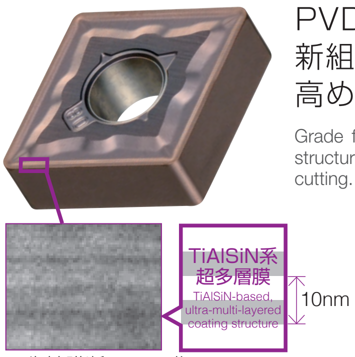
●断続切削 Interrupted Cut



被削材 Work Material：SUS316　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=100m/min　f=0.10mm/rev　a_p=1.0mm　Wet

断続加工
Interrupted Cut

AC6040M



刃先被膜断面TEM像
Cross Section of Edge Coating: TEM Image

PVDコーティング **Absotech®** と専用強靭超硬母材を採用。
新組成TiAlSiN系超多層膜による優れた耐溶着性能、耐剥離性能と耐欠損性能を高めた専用超硬母材により、不安定加工領域での信頼性を大幅に向上。

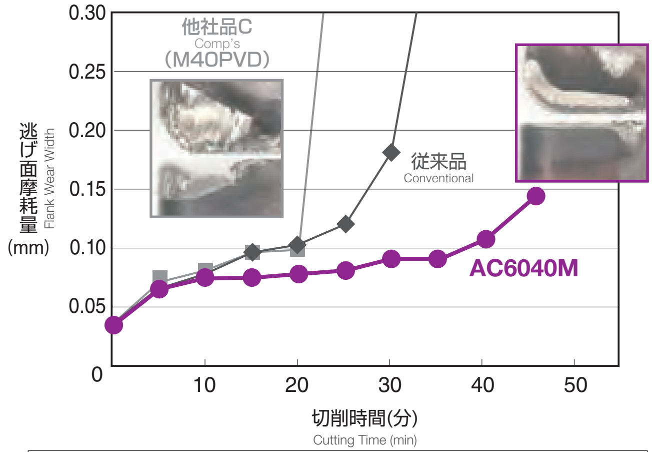
Grade for interrupted cutting of stainless steel, by new PVD coating "Absotech®", newly optimized composition of TiAlSiN multi-layer structure and exclusive carbide substrate with high peeling and chipping resistance improves greatly the stability of tool life even in unstable cutting.

PVD Coating PVDコーティング Absotech® ABSOTECH

スーパーZXコートに適用している当社独自の超多層薄膜構造を継承するとともに、耐熱性能に優れた新組成の膜質を採用、更に超硬母材と膜の密着力を改良することで刃先の安定性を向上。

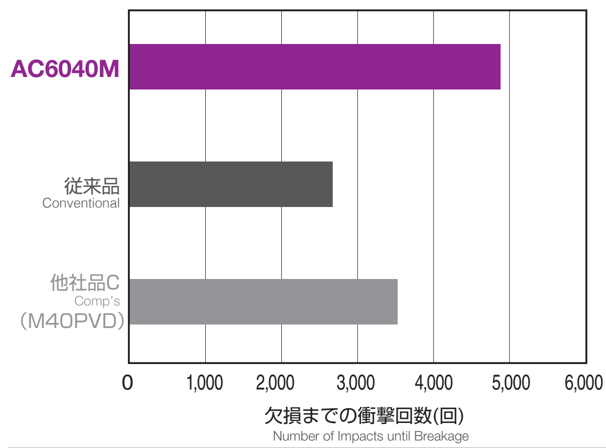
Improves the stability of the cutting edge by succeeding our unique ultra-multi-layered coating structure, which is applied to Super ZX Coating, and by employing highly heat-resistant coating of new composition, as well as improving the adhesion strength between carbide substrate and coating

●連続加工 Continuous Cut



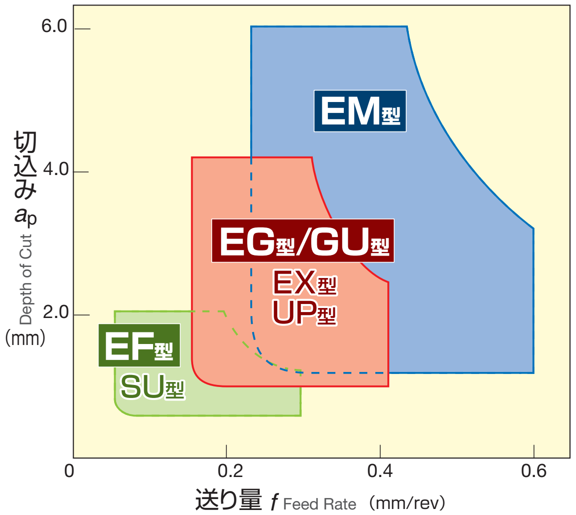
被削材 Work Material：SUS316　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=150m/min　f=0.2mm/rev　a_p=2.0mm　Wet

●断続加工 Interrupted Cut



被削材 Work Material：SUS316　インサート Insert：CNMG120408
切削条件 Cutting Conditions：v_c=230m/min　f=0.23mm/rev　a_p=0.8mm　Dry

■ チップブレーカ適用領域 Chipbreaker Application Range



・ステンレス鋼加工用ブレーカシリーズとして仕上げ切削用EF型、中切削用EG型に加え、粗切削用EM型をシリーズ化
・EM型は刃先強度、EG型は刃先強度と切りくず処理性能、EF型は切りくず処理性能を向上させることで、ステンレス鋼の旋削加工において優れた安定性を実現

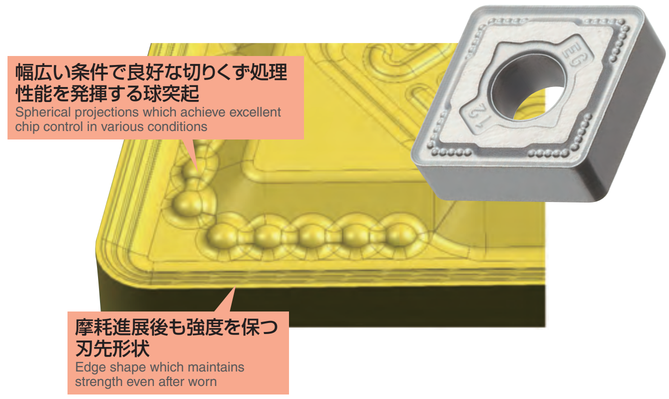
・In addition to the EF Type for finishing and the EG Type for medium cutting, the EM Type for rough cutting has been added to the chipbreaker series for stainless steel machining.
・To ensure excellent stability in stainless steel turning applications, the EM type offers cutting edge strength, the EG type both cutting edge strength and chip control capabilities, and the EF type further improved chip control capabilities.

仕上げ切削用 EF型ブレーカ
EF Type Chipbreaker for Finishing

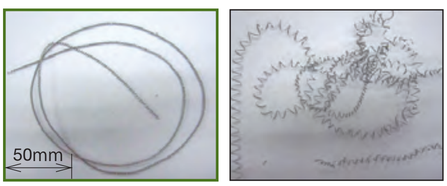
●仕上げ加工領域において切りくずカール径を抑制し、非常に優れた切りくず処理性能を発揮
・Reduces chip curl diameters and thereby achieves excellent chip control in the finishing region.

中切削用 EG型ブレーカ
EG Type Chipbreaker for Medium Cut

●中切削加工領域において優れた耐摩耗性能と切りくず処理性能を両立。高い汎用性を発揮
・Achieves excellent wear resistance and chip control in the general to rough machining regions and thereby provides excellent versatility.

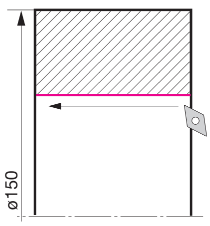


■ 使用実例 Application Example



EF型ブレーカ (AC6030M)
EF Type (AC6030M)

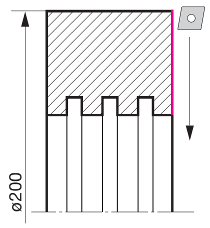
従来品
Conventional

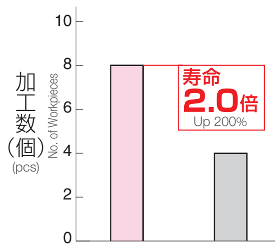


切りくず処理を改善、被削材仕上げ面の傷を抑制
Improves chip control and reduces scratches on finished surfaces.

被削材 Work Material：SUS304 カバー部品 Cover Component
インサート Insert：DNMG150408 (AC6030M)
切削条件 Cutting Conditions：v_c=55m/min　f=0.125mm/rev　a_p=0.3mm　Wet

■ 使用実例 Application Example





EG型ブレーカ (AC6040M)
EG Type (AC6040M)
従来品
Conventional

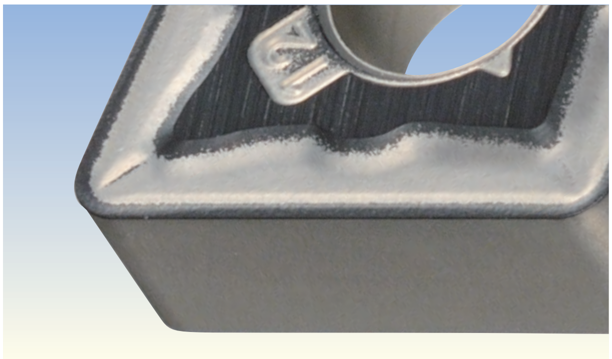
逃げ面摩耗の抑制・優れた切りくず処理性能を発揮
Reduces flank wear and achieves excellent chip control.

被削材 Work Material：SCS13A カップリング部品 Coupling Component
インサート Insert：CNMG120408 (AC6040M)
切削条件 Cutting Conditions：v_c=70～180m/min　f=0.14mm/rev　a_p=2.5mm　Wet

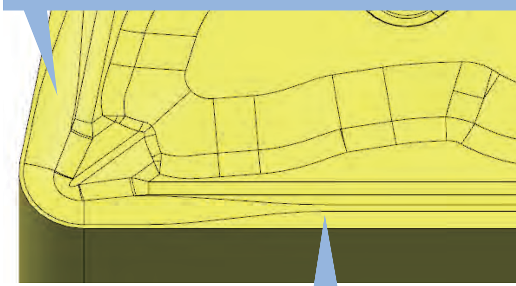
粗切削用 EM型ブレーカ
EM Type Chipbreaker for Rough Cut

●優れた耐欠損性能と耐クレータ摩耗性能を両立し
抜群の安定加工を実現

Achieves excellent fracture and crater resistance and ensures extremely stable machining

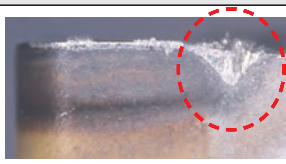
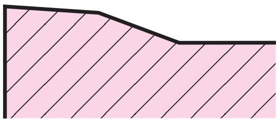
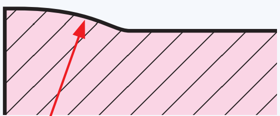
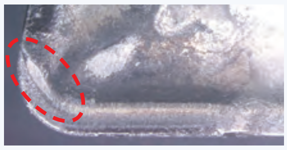


刃先強度を保持したまま、クレータ摩耗を抑制する大Rすくい面形状
Large radius rake face design reduces crater wear while maintaining the cutting edge strength

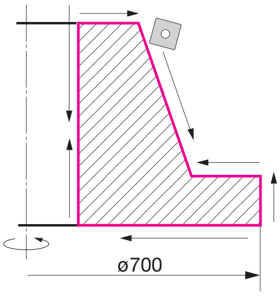


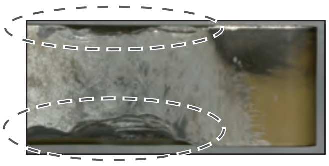
境界損傷を抑制する変化点のない切れ刃稜線
Cutting edge ridge design with no changing points for reduced boundary damage

損傷の改善 Reduction of Damage

	境界損傷の改善 Reduction of Boundary Damage		クレータ摩耗の改善 Reduction of Crater Wear	
	切れ刃部形状 Cutting Edge	境界摩耗比較 Boundary Wear Comparison	断面形状 Cross Section	すくい面摩耗比較 Crater Wear Comparison
従来品 Conventional				
EM 型 EM Type				
	切れ刃稜線部の変化点がないため境界部の損傷が抑制される The cutting edge has no changing points, so boundary damage is reduced.		大R形状により切りくずがすくい面をスムーズに流れ、クレータ摩耗を抑制 Thanks to a large radius rake face design, chips are smoothly evacuated and crater wear is reduced.	

■ 使用実例 Application Example

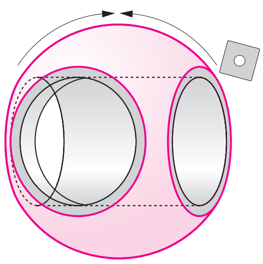


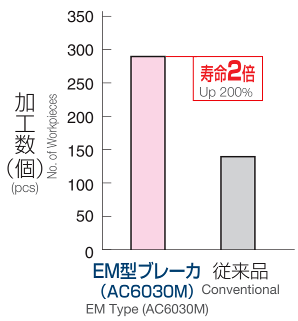


従来品 Conventional

EM型ブレーカ（AC6030M）
EM Type (AC6030M)

切れ刃外欠損を抑制し、安定加工を実現
Reduces breakage out of the cutting edge and ensures stable machining.

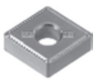
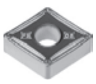
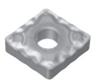
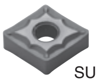
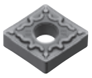
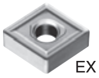
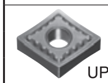
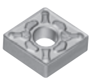
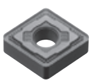
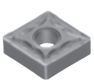
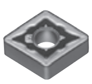
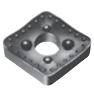




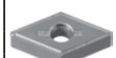
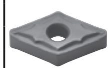
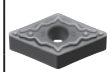
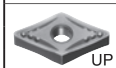
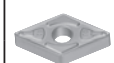
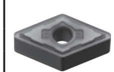
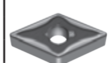
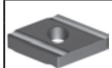
クレータ摩耗を抑制し長寿命を実現
Reduces crater wear and provides long tool life.

被削材 Work Material：SUS316 フランジ部品 Flange Component インサート Insert：SNMG190616 (AC6030M) 切削条件 Cutting Conditions：v_c=70m/min　f=0.5mm/rev　a_p=3.0～8.0mm　Wet	被削材 Work Material：SUS304 バルブ部品 Valve Component インサート Insert：SNMG120408 (AC6030M) 切削条件 Cutting Conditions：v_c=100m/min　f=0.32mm/rev　a_p=2.0～2.5mm　Wet

ネガティブ80°菱形 Negative 80°Diamond Type

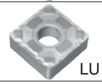
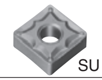
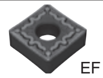
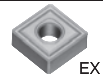
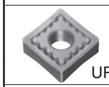
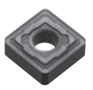
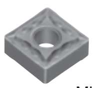
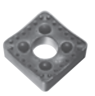
形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法（mm）Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diamete	コーナー半径 Nose Radius
 FB	CNMG 090304N-FB	–	–	●	9.525	3.18	3.81	0.4
	090308N-FB	–	–	●				0.8
	CNMG 090404N-FB	–	–	●	9.525	4.76	3.81	0.4
	090408N-FB	–	–	●				0.8
	CNMG 120402N-FB	–	–	●	12.7	4.76	5.16	0.2
	120404N-FB	–	–	●				0.4
	120408N-FB	–	–	●				0.8
 FE	CNMG 090304N-FE		●	●	9.525	3.18	3.81	0.4
	090308N-FE		●	●				0.8
	CNMG 090404N-FE		●	●	9.525	4.76	3.81	0.4
	090408N-FE		●	●				0.8
	CNMG 120402N-FE		●	●	12.7	4.76	5.16	0.2
	120404N-FE		●	●				0.4
	120408N-FE		●	●				0.8
	120412N-FE		●	●				1.2
 LU	CNMG 090304N-LU		●		9.525	3.18	3.81	0.4
	090308N-LU		●					0.8
	CNMG 120402N-LU		●		12.7	4.76	5.16	0.2
	120404N-LU		●					0.4
	120408N-LU		●					0.8
	120412N-LU		●					1.2
 LUW	CNMG 120404N-LUW		●		12.7	4.76	5.16	0.4
	120408N-LUW		●					0.8
	120412N-LUW		●					1.2
 SU	CNMG 120402N-SU	●	●	●	12.7	4.76	5.16	0.2
	120404N-SU	●	●	●				0.4
	120408N-SU	●	●	●				0.8
	120412N-SU	●	●	●				1.2
 EF	CNMG 090404N-EF	●	●	●	9.525	4.76	3.81	0.4
	090408N-EF	●	●	●				0.8
	CNMG 120404N-EF	●	●	●	12.7	4.76	5.16	0.4
	120408N-EF	●	●	●				0.8
	120412N-EF	●	●	●				1.2
 EX	CNMG 120404N-EX	●	●	●	12.7	4.76	5.16	0.4
	120408N-EX	●	●	●				0.8
	120412N-EX	●	●	●				1.2
 UP	CNMG 120404N-UP	●	●	●	12.7	4.76	5.16	0.4
	120408N-UP	●	●	●				0.8
	120412N-UP	●	●	●				1.2
 GU	CNMG 120404N-GU	●	●	●	12.7	4.76	5.16	0.4
	120408N-GU	●	●	●				0.8
	120412N-GU	●	●	●				1.2
	CNMG 160608N-GU		●	●	15.875	6.35	6.35	0.8
	160612N-GU		●	●				1.2
	160616N-GU		●	●				1.6
 EG	CNMG 090408N-EG	●	●	●	9.525	4.76	3.81	0.8
	090412N-EG	●	●	●				1.2
	CNMG 120404N-EG	●	●	●	12.7	4.76	5.16	0.4
	120408N-EG	●	●	●				0.8
	120412N-EG	●	●	●				1.2
	CNMG 160608N-EG	●	●	●	15.875	6.35	6.35	0.8
	160612N-EG	●	●	●				1.2
	160616N-EG	●	●	●				1.6
	CNMG 190612N-EG	●	●	●	19.05	6.35	7.94	1.2
	190616N-EG	●	●	●				1.6
 MU	CNMG 120408N-MU		●		12.7	4.76	5.16	0.8
	120412N-MU		●					1.2
	CNMG 160612N-MU		●		15.875	6.35	6.35	1.2
	160616N-MU		●					1.6
	CNMG 190612N-MU		●		19.05	6.35	7.94	1.2
	190616N-MU		●					1.6
 EM	CNMG 120408N-EM	●	●	●	12.7	4.76	5.16	0.8
	120412N-EM	●	●	●				1.2
	120416N-EM	●	●	●				1.6
	CNMG 160608N-EM	●	●	●	15.875	6.35	6.35	0.8
	160612N-EM	●	●	●				1.2
	160616N-EM	●	●	●				1.6
	CNMG 190612N-EM	●	●	●	19.05	6.35	7.94	1.2
	190616N-EM	●	●	●				1.6
	190624N-EM	●	●	●				2.4
	CNMG 250924N-EM		●	●	25.4	9.52	9.12	2.4
 MP	CNMM 120408N-MP	●	●	●	12.7	4.76	5.16	0.8
	120412N-MP	●	●	●				1.2
	120416N-MP	●	●					1.6
	CNMM 160608N-MP		●		15.875	6.35	6.35	0.8
	160612N-MP		●					1.2
	160616N-MP		●					1.6
	CNMM 190608N-MP		●		19.05	6.35	7.94	0.8
	190612N-MP	●	●					1.2
	190616N-MP	●	●	●				1.6
	190624N-MP	●	●	●				2.4

ネガティブ55°菱形 Negative 55°Diamond Type

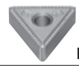
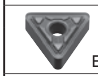
形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法（mm）Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 FB	DNMG 110404N-FB	–	–	●	9.525	4.76	3.81	0.4
	110408N-FB	–	–	●				0.8
	DNMG 150404N-FB	–	–	●	12.7	4.76	5.16	0.4
	150408N-FB	–	–	●				0.8
	DNMG 150604N-FB	–	–	●	12.7	6.35	5.16	0.4
	150608N-FB	–	–	●				0.8
 FE	DNMG 110404N-FE		●	●	9.525	4.76	3.81	0.4
	110408N-FE		●	●				0.8
	110412N-FE		●	●				1.2
	DNMG 150402N-FE		●	●	12.7	4.76	5.16	0.2
	150404N-FE		●	●				0.4
	150408N-FE		●	●				0.8
	150412N-FE		●	●				1.2
	DNMG 150602N-FE		●	●	12.7	6.35	5.16	0.2
	150604N-FE		●	●				0.4
	150608N-FE		●	●				0.8
	150612N-FE		●	●				1.2
 LU	DNMG 110404N-LU		●		9.525	4.76	3.81	0.4
	110408N-LU		●					0.8
	DNMG 150402N-LU		●		12.7	4.76	5.16	0.2
	150404N-LU		●					0.4
	150408N-LU		●					0.8
	150412N-LU		●					1.2
 SU	DNMG 110404N-SU	●	●	●	9.525	4.76	3.81	0.4
	110408N-SU	●	●	●				0.8
	110412N-SU	●	●	●				1.2
	DNMG 150402N-SU	●	●	●	12.7	4.76	5.16	0.2
	150404N-SU	●	●	●				0.4
	150408N-SU	●	●	●				0.8
	150412N-SU	●	●	●				1.2
 EF	DNMG 110404N-EF	●	●	●	9.525	4.76	3.81	0.4
	110408N-EF	●	●	●				0.8
	110412N-EF	●	●	●				1.2
	DNMG 150404N-EF	●	●	●	12.7	4.76	5.16	0.4
	150408N-EF	●	●	●				0.8
	150412N-EF	●	●	●				1.2
	DNMG 150604N-EF	●	●	●	12.7	6.35	5.16	0.4
	150608N-EF	●	●	●				0.8
	150612N-EF	●	●	●				1.2
 EX	DNMG 150404N-EX	●	●	●	12.7	4.76	5.16	0.4
	150408N-EX	●	●	●				0.8
	150412N-EX	●	●	●				1.2
	DNMG 150604N-EX	●	●	●	12.7	6.35	5.16	0.4
	150608N-EX	●	●	●				0.8
	150612N-EX	●	●	●				1.2
 UP	DNMG 150404N-UP	●	●	●	12.7	4.76	5.16	0.4
	150408N-UP	●	●	●				0.8
	150412N-UP	●	●	●				1.2
 GU	DNMG 110404N-GU	●	●	●	9.525	4.76	3.81	0.4
	110408N-GU	●	●	●				0.8
	110412N-GU	●	●	●				1.2
	DNMG 150404N-GU	●	●	●	12.7	4.76	5.16	0.4
	150408N-GU	●	●	●				0.8
	150412N-GU	●	●	●				1.2
	DNMG 150608N-GU	●	●	●	12.7	6.35	5.16	0.8
	150612N-GU	●	●	●				1.2
 EG	DNMG 110408N-EG	●	●	●	9.525	4.76	3.81	0.8
	110412N-EG	●	●	●				1.2
	DNMG 150404N-EG	●	●	●	12.7	4.76	5.16	0.4
	150408N-EG	●	●	●				0.8
	150412N-EG	●	●	●				1.2
	DNMG 150604N-EG	●	●	●	12.7	6.35	5.16	0.4
	150608N-EG	●	●	●				0.8
	150612N-EG	●	●	●				1.2
 MU	DNMG 150408N-MU		●		12.7	4.76	5.16	0.8
	150412N-MU		●					1.2
	DNMG 150608N-MU		●		12.7	6.35	5.16	0.8
	150612N-MU		●					1.2
 EM	DNMG 150408N-EM	●	●	●	12.7	4.76	5.16	0.8
	150412N-EM	●	●	●				1.2
	150416N-EM	●	●	●				1.6
	DNMG 150608N-EM	●	●	●	12.7	6.35	5.16	0.8
	150612N-EM	●	●	●				1.2
 HM	DNMG 150404R-HM	●	●	●	12.7	4.76	5.16	0.4
	150404L-HM	●	●	●				0.4
	150408R-HM	●	●	●				0.8
	150408L-HM	●	●	●				0.8

●印：標準在庫品　無印：受注生産品　ー印：製作いたしません
●mark : Standard stock item　No mark : Made-to-order item　ーmark : We cannot produce

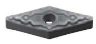
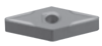
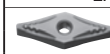
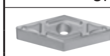
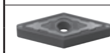
ネガティブ正方形 Negative Square Type

形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 FB	SNMG 120404N-FB	–	–	●	12.7	4.76	5.16	0.4
	120408N-FB	–	–	●				0.8
 FE	SNMG 120404N-FE		●	●	12.7	4.76	5.16	0.4
	120408N-FE		●	●				0.8
	120412N-FE		●	●				1.2
 LU	SNMG 120408N-LU		●		12.7	4.76	5.16	0.8
	120412N-LU		●					1.2
 SU	SNMG 120408N-SU	●	●	●	12.7	4.76	5.16	0.8
 EF	SNMG 120404N-EF	●	●	●	12.7	4.76	5.16	0.4
	120408N-EF	●	●	●				0.8
 EX	SNMG 120404N-EX	●	●	●	12.7	4.76	5.16	0.4
	120408N-EX	●	●	●				0.8
	120412N-EX	●	●	●				1.2
 UP	SNMG 120404N-UP	●	●	●	12.7	4.76	5.16	0.4
	120408N-UP	●	●	●				0.8
	120412N-UP	●	●	●				1.2
 GU	SNMG 120404N-GU	●	●	●	12.7	4.76	5.16	0.4
	120408N-GU	●	●	●				0.8
	120412N-GU	●	●	●				1.2
	SNMG 150608N-GU		●	●	15.875	6.35	6.35	0.8
	150612N-GU		●	●				1.2
	150616N-GU		●	●				1.6
 EG	SNMG 120404N-EG	●	●	●	12.7	4.76	5.16	0.4
	120408N-EG	●	●	●				0.8
	120412N-EG	●	●	●				1.2
	SNMG 150608N-EG	●	●	●	15.875	6.35	6.35	0.8
	150612N-EG	●	●	●				1.2
	150616N-EG	●	●	●				1.6
	SNMG 190612N-EG	●	●	●	19.05	6.35	7.94	1.2
	190616N-EG	●	●	●				1.6
 MU	SNMG 120408N-MU		●		12.7	4.76	5.16	0.8
	120412N-MU		●					1.2
	SNMG 150612N-MU		●		15.875	6.35	6.35	1.2
	150616N-MU		●					1.6
	SNMG 190612N-MU		●		19.05	6.35	7.94	1.2
	190616N-MU		●					1.6
 EM	SNMG 120408N-EM	●	●	●	12.7	4.76	5.16	0.8
	120412N-EM	●	●	●				1.2
	SNMG 150608N-EM	●	●	●	15.875	6.35	6.35	0.8
	150612N-EM	●	●	●				1.2
	150616N-EM	●	●	●				1.6
	SNMG 190612N-EM	●	●	●	19.05	6.35	7.94	1.2
	190616N-EM	●	●	●				1.6
	190624N-EM	●	●	●				2.4
	SNMG 250924N-EM		●	●	25.4	9.52	9.12	2.4
 HM	SNMG 120408R-HM	●	●	●	12.7	4.76	5.16	0.8
	120408L-HM	●	●	●				0.8
	SNMG 150608R-HM	●	●	●	15.875	6.35	6.35	0.8
	150608L-HM	●	●	●				0.8
 MP	SNMM 120408N-MP	●	●	●	12.7	4.76	5.16	0.8
	120412N-MP	●	●	●				1.2
	120416N-MP		●					1.6
	SNMM 150612N-MP		●		15.875	6.35	6.35	1.2
	150616N-MP		●					1.6
	SNMM 190612N-MP	●	●	●	19.05	6.35	7.94	1.2
	190616N-MP	●	●	●				1.6
	SNMM 250724N-MP		●		25.4	7.94	9.12	2.4
	SNMM 250924N-MP		●		25.4	9.52	9.12	2.4
	SNMM 310924N-MP		●		31.75	9.52	8.8	2.4

ネガティブ三角形 Negative Triangular Type

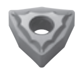
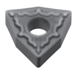
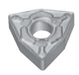
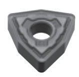
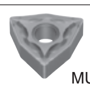
形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 FB	TNMG 160402N-FB	–	–	●	9.525	4.76	3.81	0.2
	160404N-FB	–	–	●				0.4
	160408N-FB	–	–	●				0.8
 FE	TNMG 160402N-FE		●	●	9.525	4.76	3.81	0.2
	160404N-FE		●	●				0.4
	160408N-FE		●	●				0.8
	160412N-FE		●	●				1.2
 LU	TNMG 160402N-LU		●		9.525	4.76	3.81	0.2
	160404N-LU		●					0.4
	160408N-LU		●					0.8
	160412N-LU		●					1.2
 SU	TNMG 160402N-SU	●	●	●	12.7	4.76	3.81	0.2
	160404N-SU	●	●	●				0.4
	160408N-SU	●	●	●				0.8
	160412N-SU	●	●	●				1.2
 EF	TNMG 160404N-EF	●	●	●	12.7	4.76	3.81	0.4
	160408N-EF	●	●	●				0.8
 EX	TNMG 160404N-EX	●	●	●	12.7	4.76	3.81	0.4
	160408N-EX	●	●	●				0.8
	160412N-EX	●	●	●				1.2
 UP	TNMG 160404N-UP	●	●	●	12.7	4.76	3.81	0.4
	160408N-UP	●	●	●				0.8
	160412N-UP	●	●	●				1.2
 GU	TNMG 160404N-GU	●	●	●	12.7	4.76	3.81	0.4
	160408N-GU	●	●	●				0.8
	160412N-GU	●	●	●				1.2
 EG	TNMG 160404N-EG	●	●	●	12.7	4.76	3.81	0.4
	160408N-EG	●	●	●				0.8
	160412N-EG	●	●	●				1.2
 MU	TNMG 160408N-MU		●		9.525	4.76	3.81	0.8
	160412N-MU		●					1.2
 EM	TNMG 160408N-EM	●	●	●	12.7	4.76	3.81	0.8
	160412N-EM	●	●	●				1.2
	TNMG 330924N-EM		●	●	19.05	9.52	7.93	2.4
 HM	TNMG 160404R-HM	●	●	●	12.7	4.76	3.81	0.4
	160404L-HM	●	●	●				0.4
	160408R-HM	●	●	●				0.8
	160408L-HM	●	●	●				0.8

ネガティブ35°菱形 Negative 35°Diamond Type

形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 FB	VNMG 160404N-FB	–	–	●	9.525	4.76	3.81	0.4
	160408N-FB	–	–	●				0.8
 FE	VNMG 160402N-FE		●	●	9.525	4.76	3.81	0.2
	160404N-FE		●	●				0.4
	160408N-FE		●	●				0.8
	160412N-FE		●	●				1.2
 LU	VNMG 160402N-LU		●		9.525	4.76	3.81	0.2
	160404N-LU		●					0.4
	160408N-LU		●					0.8
 SU	VNMG 160402N-SU	●	●	●	9.525	4.76	3.81	0.2
	160404N-SU	●	●	●				0.4
	160408N-SU	●	●	●				0.8
 EF	VNMG 160402N-EF	●	●	●	9.525	4.76	3.81	0.2
	160404N-EF	●	●	●				0.4
	160408N-EF	●	●	●				0.8
 EX	VNMG 160404N-EX	●	●	●	9.525	4.76	3.81	0.4
	160408N-EX	●	●	●				0.8
 UP	VNMG 160404N-UP	●	●	●	9.525	4.76	3.81	0.4
	160408N-UP	●	●	●				0.8
 GU	VNMG 160404N-GU	●	●	●	9.525	4.76	3.81	0.4
	160408N-GU	●	●	●				0.8
	160412N-GU			●				1.2
 EG	VNMG 160404N-EG	●	●	●	9.525	4.76	3.81	0.4
	160408N-EG	●	●	●				0.8
	160412N-EG	●	●	●				1.2

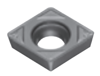
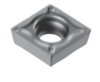
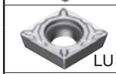
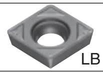
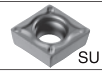
●印：標準在庫品　無印：受注生産品　ー印：製作いたしません
● mark : Standard stock item　No mark : Made-to-order item　ー mark : We cannot produce

ネガティブ六角形 Negative Trigon Type

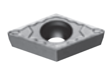
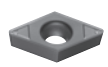
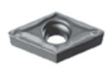
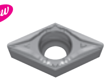
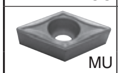
形状 Shape	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 FB	WNMG 060404N-FB	—	—	●	9.525	4.76	3.81	0.4
	060408N-FB	—	—	●				0.8
	WNMG 080402N-FB	—	—	●	12.7	4.76	5.16	0.2
	080404N-FB	—	—	●				0.4
	080408N-FB	—	—	●				0.8
 FE	WNMG 060404N-FE		●	●	9.525	4.76	3.81	0.4
	060408N-FE		●	●				0.8
	WNMG 080402N-FE		●	●	12.7	4.76	5.16	0.2
	080404N-FE		●	●				0.4
	080408N-FE		●	●				0.8
	080412N-FE		●	●				1.2
 LU	WNMG 080404N-LU		●		12.7	4.76	5.16	0.4
	080408N-LU		●					0.8
	080412N-LU		●					1.2
 LUW	WNMG 060404N-LUW		●		9.525	4.76	3.81	0.4
	060408N-LUW		●					0.8
	WNMG 080404N-LUW		●		12.7	4.76	5.16	0.4
	080408N-LUW		●					0.8
	080412N-LUW		●					1.2
 SU	WNMG 060404N-SU	●	●	●	9.525	4.76	3.81	0.4
	060408N-SU	●	●	●				0.8
	060412N-SU	●	●	●				1.2
	WNMG 080404N-SU	●	●	●	12.7	4.76	5.16	0.4
	080408N-SU	●	●	●				0.8
	080412N-SU	●	●	●				1.2
 EF	WNMG 060404N-EF	●	●	●	9.525	4.76	3.81	0.4
	060408N-EF	●	●	●				0.8
	WNMG 080404N-EF	●	●	●	12.7	4.76	5.16	0.4
	080408N-EF	●	●	●				0.8
 EX	WNMG 080404N-EX	●	●	●	12.7	4.76	5.16	0.4
	080408N-EX	●	●	●				0.8
	080412N-EX	●	●	●				1.2
 UP	WNMG 080408N-UP	●	●	●	12.7	4.76	5.16	0.8
	080412N-UP	●	●	●				1.2
 GU	WNMG 060404N-GU	●	●	●	9.525	4.76	3.81	0.4
	060408N-GU	●	●	●				0.8
	060412N-GU	●	●	●				1.2
	WNMG 080404N-GU	●	●	●	12.7	4.76	5.16	0.4
	080408N-GU	●	●	●				0.8
	080412N-GU	●	●	●				1.2
 EG	WNMG 060408N-EG	●	●	●	9.525	4.76	3.81	0.8
	060412N-EG	●	●	●				1.2
	WNMG 080404N-EG	●	●	●	12.7	4.76	5.16	0.4
	080408N-EG	●	●	●				0.8
	080412N-EG	●	●	●				1.2
 MU	WNMG 080408N-MU		●		12.7	4.76	5.16	0.8
	080412N-MU		●					1.2
 EM	WNMG 080408N-EM	●	●	●	12.7	4.76	5.16	0.8
	080412N-EM	●	●	●				1.2

●印：標準在庫品　無印：受注生産品　ー印：製作いたしません
● mark : Standard stock item　No mark : Made-to-order item　ー mark : We cannot produce

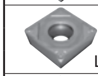
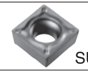
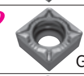
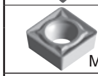
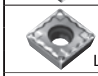
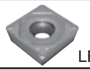
ポジティブ80°菱形 Positive 80°Diamond Type

形状 Shape	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 LU	7°	CCMT 060202N-LU		●	●	6.35	2.38	2.8	0.2
		060204N-LU		●	●				0.4
		CCMT 09T304N-LU		●	●	9.525	3.97	4.4	0.4
		09T308N-LU		●	●				0.8
 LB	7°	CCMT 060202N-LB	●	●	●	6.35	2.38	2.8	0.2
		060204N-LB	●	●	●				0.4
		060208N-LB	●	●	●				0.8
		CCMT 09T302N-LB	●	●	●	9.525	3.97	4.4	0.2
		09T304N-LB	●	●	●				0.4
		09T308N-LB	●	●	●				0.8
 SU	7°	CCMT 060202N-SU	●	●	●	6.35	2.38	2.8	0.2
		060204N-SU	●	●	●				0.4
		060208N-SU	●	●	●				0.8
		CCMT 09T302N-SU	●	●	●	9.525	3.97	4.4	0.2
		09T304N-SU	●	●	●				0.4
		09T308N-SU	●	●	●				0.8
New  GU	7°	CCMT 060204N-GU	🔴	🔴	🔴	6.35	2.38	2.8	0.4
		060208N-GU	🔴	🔴	🔴				0.8
		CCMT 09T304N-GU	🔴	🔴	🔴	9.525	3.97	4.4	0.4
		09T308N-GU	🔴	🔴	🔴				0.8
 MU	7°	CCMT 09T304N-MU	●	●		9.525	3.97	4.4	0.4
		09T308N-MU	●	●					0.8
 LU	11°	CPMT 090304N-LU		●	●	9.525	3.18	4.4	0.4
		090308N-LU		●	●				0.8
 LB	11°	CPMT 080204N-LB	●	●	●	7.94	2.38	3.4	0.4
		CPMT 090304N-LB	●	●	●	9.525	3.18	4.4	0.4
		090308N-LB	●	●	●				0.8
 SU	11°	CPMT 090304N-SU	●	●	●	9.525	3.18	4.4	0.4
		090308N-SU	●	●	●				0.8
New  GU	11°	CPMT 090304N-GU	🔴	🔴	🔴	9.525	3.18	4.4	0.4
		090308N-GU	🔴	🔴	🔴				0.8
 MU	11°	CPMT 090304N-MU	●	●		9.525	3.18	4.4	0.4
		090308N-MU	●	●					0.8

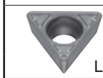
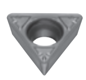
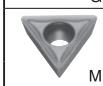
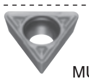
ポジティブ55°菱形 Positive 55°Diamond Type

形状 Shape	逃げ角 Relief angle	型番 Cat. No.	AC6020M	AC6030M	AC6040M	内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 LU	7°	DCMT 070202N-LU		●	●	6.35	2.38	2.8	0.2
		070204N-LU		●	●				0.4
		DCMT 11T302N-LU			●	9.525	3.97	4.4	0.2
		11T304N-LU		●	●				0.4
		11T308N-LU		●	●				0.8
 LB	7°	DCMT 070202N-LB	●	●	●	6.35	2.38	2.8	0.2
		070204N-LB	●	●	●				0.4
		070208N-LB	●	●	●				0.8
		DCMT 11T302N-LB	●	●	●	9.525	3.97	4.4	0.2
		11T304N-LB	●	●	●				0.4
		11T308N-LB	●	●	●				0.8
 SU	7°	DCMT 070202N-SU	●	●	●	6.35	2.38	2.8	0.2
		070204N-SU	●	●	●				0.4
		070208N-SU	●	●	●				0.8
		DCMT 11T302N-SU	●	●	●	9.525	3.97	4.4	0.2
		11T304N-SU	●	●	●				0.4
		11T308N-SU	●	●	●				0.8
New  GU	7°	DCMT 070204N-GU	🔴	🔴	🔴	6.35	2.38	2.8	0.4
		070208N-GU	🔴	🔴	🔴				0.8
		DCMT 11T302N-GU	🔴	🔴	🔴	9.525	3.97	4.4	0.2
		11T304N-GU	🔴	🔴	🔴				0.4
		11T308N-GU	🔴	🔴	🔴				0.8
		11T312N-GU		🔴					1.2
 MU	7°	DCMT 11T304N-MU	●	●		9.525	3.97	4.4	0.4
		11T308N-MU	●	●					0.8

ポジティブ正方形 Positive Square Type

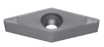
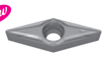
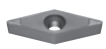
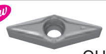
形状 Shape	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法 (mm) Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 LU	7°	SCMT 09T304N-LU		●	●	9.525	3.97	4.4	0.4
		09T308N-LU		●	●				0.8
 LB	7°	SCMT 09T304N-LB	●	●	●	9.525	3.97	4.4	0.4
		09T308N-LB	●	●	●				0.8
 SU	7°	SCMT 09T304N-SU	●	●	●	9.525	3.97	4.4	0.4
		09T308N-SU	●	●	●				0.8
New  GU	7°	SCMT 09T304N-GU	🔴	🔴	🔴	9.525	3.97	4.4	0.4
		09T308N-GU	🔴	🔴	🔴				0.8
 MU	7°	SCMT 09T308N-MU	●	●		9.525	3.97	4.4	0.8
 LU	11°	SPMT 090304N-LU		●	●	9.525	3.18	3.4	0.4
		090308N-LU		●	●				0.8
 LB	11°	SPMT 090304N-LB	●	●	●	9.525	3.18	3.4	0.4
		090308N-LB	●	●	●				0.8

ポジティブ三角形 Positive Triangular Type

形状 Shape	逃げ角 Relief angle	型番 Cat. No.	AC6020M	AC6030M	AC6040M	内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 LU	7°	TCMT 110204N-LU		●	●	6.35	2.38	2.8	0.4
		110208N-LU		●	●				0.8
 LB	7°	TCMT 110204N-LB	●	●	●	6.35	2.38	2.8	0.4
		110208N-LB	●	●	●				0.8
 SU	7°	TCMT 110204N-SU	●	●	●	6.35	2.38	2.8	0.4
		110208N-SU	●	●	●				0.8
		TCMT 16T304N-SU	●	●	●	9.525	3.97	4.3	0.4
		16T308N-SU	●	●	●				0.8
 LU	11°	TPMT 080202N-LU		●	●	4.76	2.38	2.4	0.2
		080204N-LU		●	●				0.4
		TPMT 110302N-LU			●	6.35	3.18	3.4	0.2
		110304N-LU		●	●				0.4
		110308N-LU		●	●				0.8
 LB	11°	TPMT 080202N-LB	●	●	●	4.76	2.38	2.4	0.2
		080204N-LB	●	●	●				0.4
		TPMT 090202N-LB	●	●	●	5.56	2.38	2.8	0.2
		090204N-LB	●	●	●				0.4
		TPMT 110302N-LB	●	●	●	6.35	3.18	3.4	0.2
		110304N-LB	●	●	●				0.4
		110308N-LB	●	●	●				0.8
		TPMT 160304N-LB	●	●	●	9.525	3.18	4.4	0.4
		160308N-LB	●	●	●				0.8
		TPMT 160404N-LB	●	●	●	9.525	4.76	4.4	0.4
		160408N-LB	●	●	●				0.8
 SU	11°	TPMT 080202N-SU	●	●	●	4.76	2.38	2.4	0.2
		080204N-SU	●	●	●				0.4
		TPMT 110302N-SU	●	●	●	6.35	3.18	3.4	0.2
		110304N-SU	●	●	●				0.4
		110308N-SU	●	●	●				0.8
		TPMT 160404N-SU	●	●	●	9.525	4.76	4.4	0.4
		160408N-SU	●	●	●				0.8
New  GU	11°	TPMT 110304N-GU	🔴	🔴	🔴	6.35	3.18	3.4	0.4
		110308N-GU	🔴	🔴	🔴				0.8
		TPMT 160404N-GU	🔴	🔴	🔴	9.525	4.76	4.4	0.4
		160408N-GU	🔴	🔴	🔴				0.8
 MU	11°	TPMT 110304N-MU	●	●		6.35	3.18	3.4	0.4
		110308N-MU	●	●					0.8
 MU	11°	TPMT 160404N-MU	●	●		9.525	4.76	4.4	0.4
		160408N-MU	●	●					0.8

●印：標準在庫品　無印：受注生産品　🔴印：標準在庫品(拡充品)
●mark : Standard stock item　No mark : Made-to-order item　🔴mark : Standard stock item(expanded item)

ポジティブ35°菱形 Positive 35°Diamond Type

形状 Shape	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock AC6020M	AC6030M	AC6040M	寸法（mm） Dimensions 内接円 Inscribed circle	厚さ Thickness	穴径 Hole diameter	コーナー半径 Nose Radius
 LU	5°	VBMT 110304N-LU			●	6.35	3.18	2.8	0.4
		110308N-LU		●	●				0.8
		VBMT 160404N-LU		●	●	9.525	4.76	4.4	0.4
		160408N-LU		●	●				0.8
 LB	5°	VBMT 110302N-LB	●	●	●	6.35	3.18	2.8	0.2
		110304N-LB	●	●	●				0.4
		110308N-LB	●	●	●				0.8
		VBMT 160404N-LB	●	●	●	9.525	4.76	4.4	0.4
		160408N-LB	●	●	●				0.8
		160412N-LB	●	●	●				1.2
 SU	5°	VBMT 110304N-SU			●	6.35	3.18	2.8	0.4
		110308N-SU	●	●	●				0.8
		VBMT 160404N-SU	●	●	●	9.525	4.76	4.4	0.4
		160408N-SU	●	●	●				0.8
New  GU	5°	VBMT 110304N-GU	🔴	🔴	🔴	6.35	3.18	2.8	0.4
		110308N-GU	🔴	🔴	🔴				0.8
		VBMT 160404N-GU	🔴	🔴	🔴	9.525	4.76	4.4	0.4
		160408N-GU	🔴	🔴	🔴				0.8
 LU	7°	VCMT 160404N-LU		●	●	9.525	4.76	4.4	0.4
		160408N-LU		●	●				0.8
 LB	7°	VCMT 080202N-LB	●	●	●	4.76	2.38	2.3	0.2
		080204N-LB	●	●	●				0.4
		VCMT 160404N-LB	●	●	●	9.525	4.76	4.4	0.4
		160408N-LB	●	●	●				0.8
 SU	7°	VCMT 080204N-SU	●	●	●	4.76	2.38	2.3	0.4
		VCMT 110302N-SU	●	●	●	6.35	3.18	2.8	0.2
		110304N-SU	●	●	●				0.4
		110308N-SU	●	●	●				0.8
		VCMT 160404N-SU	●	●	●	9.525	4.76	4.4	0.4
		160408N-SU	●	●	●				0.8
New  GU	7°	VCMT 160404N-GU	🔴	🔴	🔴	9.525	4.76	4.4	0.4
		160408N-GU	🔴	🔴	🔴				0.8

ポジティブ六角形 Positive Trigon Type

形状 Shape	逃げ角 Relief angle	型番 Cat. No.	AC6020M	AC6030M	AC6040M	内接円	厚さ	穴径	コーナー半径
 LB	11°	WPMT 110204N-LB	●	●	●	6.35	2.38	2.8	0.4
		WPMT 160308N-LB	●	●	●	9.525	3.18	4.4	0.8

●印：標準在庫品　無印：受注生産品　🔴印：標準在庫品(拡充品)
● mark : Standard stock item　No mark : Made-to-order item　🔴 mark : Standard stock item(expanded item)

■ 推奨切削条件 Recommended cutting conditions

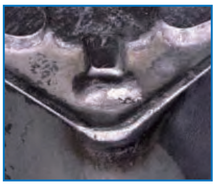
（赤字は第1推奨）
(Red text indicates first recommendations.)

被削材 Work Material			切削領域 Cutting Range	ブレーカ Chipbreaker	材種 Grade	切削条件 Cutting Conditions（下限値 Min. － 推奨値 Optimum － 上限値 Max.） 切込み a_p(mm) Depth of Cut	送り量 f(mm/rev) Feed Rate	切削速度 v_c(m/min) Cutting Speed
Cr系 Cr-based	フェライト系 Ferritic Materials	SUS405, SUS410L, SUS430, SUS430F, SUS434, SUS447J1	仕上げ Finish	EF(SU)	AC6020M	0.5-**1.5**-2.0	0.05-**0.15**-0.25	170-**230**-300
			中 Medium	EG·GU·EX	AC6030M	1.0-**2.5**-4.0	0.10-**0.25**-0.40	140-**170**-250
			粗 Rough	EM	AC6040M	1.5-**3.5**-6.0	0.20-**0.35**-0.60	140-**170**-200
	マルテンサイト系 Martensitic Materials	SUS403, SUS410, SUS420J2,SUS420F, SUS440F	仕上げ Finish	EF(SU)	AC6020M	0.5-**1.5**-2.0	0.05-**0.15**-0.25	120-**180**-240
			中 Medium	EG·GU·EX	AC6030M	1.0-**2.5**-4.0	0.10-**0.25**-0.40	100-**150**-200
			粗 Rough	EM	AC6040M	1.5-**3.5**-6.0	0.20-**0.35**-0.60	80-**130**-180
Cr/Ni系 Cr/Ni-based	オーステナイト系 Austenitic Materials	SSU304, SUS304L, SUS316, SUS316L, SUS303, SUS321	仕上げ Finish	EF(SU)	AC6020M	0.5-**1.5**-2.0	0.05-**0.15**-0.25	120-**180**-240
			中 Medium	EG·GU·EX	AC6030M	1.0-**2.5**-4.0	0.10-**0.25**-0.40	100-**150**-200
			粗 Rough	EM	AC6040M	1.5-**3.5**-6.0	0.20-**0.35**-0.60	80-**130**-180
	二相系（オーステナイト・フェライト系） Two-Phase (Austenite/ Ferrite) Materials	SUS329J1, SUS329J3L, SSU329J4L	仕上げ Finish	EF(SU)	AC6020M	0.5-**1.5**-2.0	0.05-**0.15**-0.25	100-**145**-180
			中 Medium	EG·GU·EX	AC6030M	1.0-**2.5**-4.0	0.10-**0.25**-0.40	80-**120**-160
			粗 Rough	EM	AC6040M	1.5-**3.5**-6.0	0.20-**0.35**-0.60	70-**100**-140
	析出硬化系 Deposition Hardened Structures	SUS630, SUS631, SUS632J1	仕上げ Finish	EF(SU)	AC6020M	0.5-**1.5**-2.0	0.05-**0.15**-0.25	90-**115**-140
			中 Medium	EG·GU·EX	AC6030M	1.0-**2.5**-4.0	0.10-**0.25**-0.40	70- **90**-130
			粗 Rough	EM	AC6040M	1.5-**3.5**-6.0	0.20-**0.35**-0.60	50- **80**-120

■ AC6020Mの使用実例

SUS316L ケーシング
SUS316L Casing

優れた耐チッピング性能により30%寿命向上
Reduced chipping 30% longer tool life



AC6020M
42個
42pcs/c

従来品(M20)
31個
Conv. 31pcs/c

インサート Insert：SNMG120412N-GU（AC6020M）
切削条件 Cutting Conditions：v_c=180m/min
f=0.25mm/rev a_p=2.50mm Wet

SUS316 部品
SUS316 Parts

優れた耐チッピング性能により30%寿命向上
Better chipping resistance

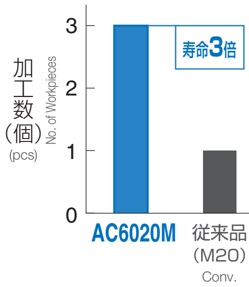
AC6020M
17分加工時
17min

従来品(M20)
17分加工時
Conv. 17min

インサート Insert：CNMG120408N-GU（AC6020M）
切削条件 Cutting Conditions：v_c=180m/min
f=0.2mm/rev a_p=2.5mm Wet

SUS316 部品
SUS316 Parts

耐摩耗性能良好により寿命3倍
3 times longer tool life

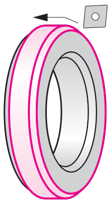


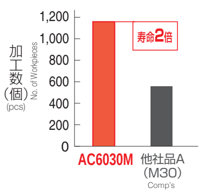
インサート Insert：CNMG120408N-GU（AC6020M）
切削条件 Cutting Conditions：v_c=180m/min
f=0.25mm/rev a_p=3.00mm, Wet

■ AC6030Mの使用実例

SUS430 オートバイ部品
SUS430 Motorcycle Part

優れた耐溶着性能により、安定した加工面品位で2倍の長寿命
Ensures stable surface quality and 2 times longer tool life thanks to excellent adhesion resistance

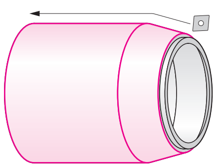


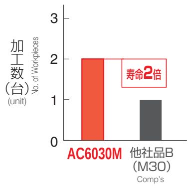


インサート Insert：CNMG120404N-EF（AC6030M）
切削条件 Cutting Conditions：v_c=120m/min
f=0.1mm/rev a_p=0.8～1.5mm Wet

SCS11 ポンプ部品
SCS11 Pump Part

2.5倍の能率(v_c=60→100m/min、f=0.2→0.3mm/rev)でも2倍の長寿命
Provides 2.5 times efficiency (v_c=60 →100m/min, f=0.2→0.3mm/rev) and 2 times longer tool life

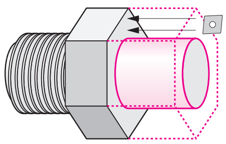


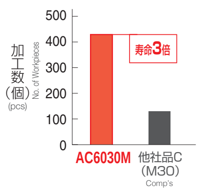


インサート Insert：CNMG120408N-EG（AC6030M）
切削条件 Cutting Conditions：v_c=100m/min
f=0.3mm/rev a_p=0.5mm Wet

SUS304 継手部品
SUS304 Joint Component

六角材からの削り出しの粗～仕上加工を1材種で対応し、3倍の長寿命
Enables roughing and finishing in hexagonal bar shaping with one grade and achieves 3 times longer tool life



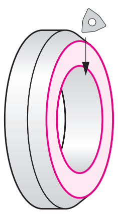


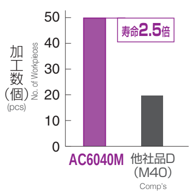
インサート Insert：CNMG120412N-GU（AC6030M）
切削条件 Cutting Conditions：v_c=50～75m/min
f=0.16mm/rev a_p=2.00mm Wet

■ AC6040Mの使用実例

SCS13 フランジ連結部品
SCS13 Flange Joint Component

優れた耐摩耗性能により、安定した加工面品位で2.5倍の長寿命
Provides stable machined surfaces and achieves 2.5 times longer tool life thanks to excellent wear resistance

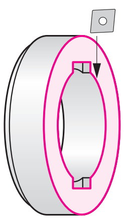


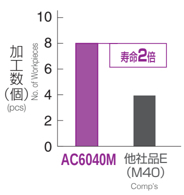


インサート Insert：WNMG080408N-EX（AC6040M）
切削条件 Cutting Conditions：v_c=140～200m/min
f=0.08mm/rev a_p=0.50mm Wet

SCS13 カップリング
SCS13 Coupling

優れた耐欠損性能により2倍の長寿命
Achieves 2 times longer tool life thanks to excellent fracture resistance

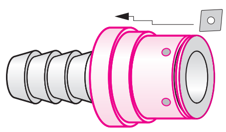


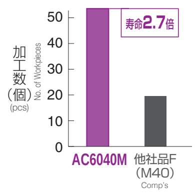


インサート Insert：CNMG120408N-EG（AC6040M）
切削条件 Cutting Conditions：v_c=70～180m/min
f=0.14mm/rev a_p=2.50mm Wet

SUS304 ニップル
SUS304 Nipple

優れた耐溶着性能により2.7倍の長寿命
Achieves 2.7 times longer tool life thanks to excellent adhesion resistance





インサート Insert：CNMG120408N-GU（AC6040M）
切削条件 Cutting Conditions：v_c=150m/min
f=0.15mm/rev a_p=1.50mm Wet

◆安全にお使いいただくために◆

- 高温の切りくずが飛散したり長く伸びた切りくずが排出されることがありますので、安全カバーや保護メガネ等の保護具を使用し、防災・防火に十分ご配慮ください。
- 鋭い切れ刃を持っているため取扱いにご注意ください。
- 使用方法を誤ったり、使用条件が不適切な場合、工具破損、飛散を招きますので推奨条件の範囲内でご使用ください。
- 不水溶性の切削液をご使用になる場合は、自動消火装置を設置するなどの対策を講じて頂き、火災にくれぐれもご注意ください。

- Very hot or lengthy chips may be discharged while the machine is in operation. Therefore, machine guards, safety goggles or other protective covers must be used. Fire safety precautions must also be considered.
- Please handle with care as this product has sharp edges.
- Improper cutting conditions or mis-handling of the tool may result in breakages or projectiles. Therefore, please use the tool within its recommended conditions.
- When using non-water soluble cutting oil, precautions against fire must be taken and please ensure that a fire extinguisher is placed near the machine.

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