

鋼旋削汎用コーティング新材種
New Coated Grade for Steel Turning

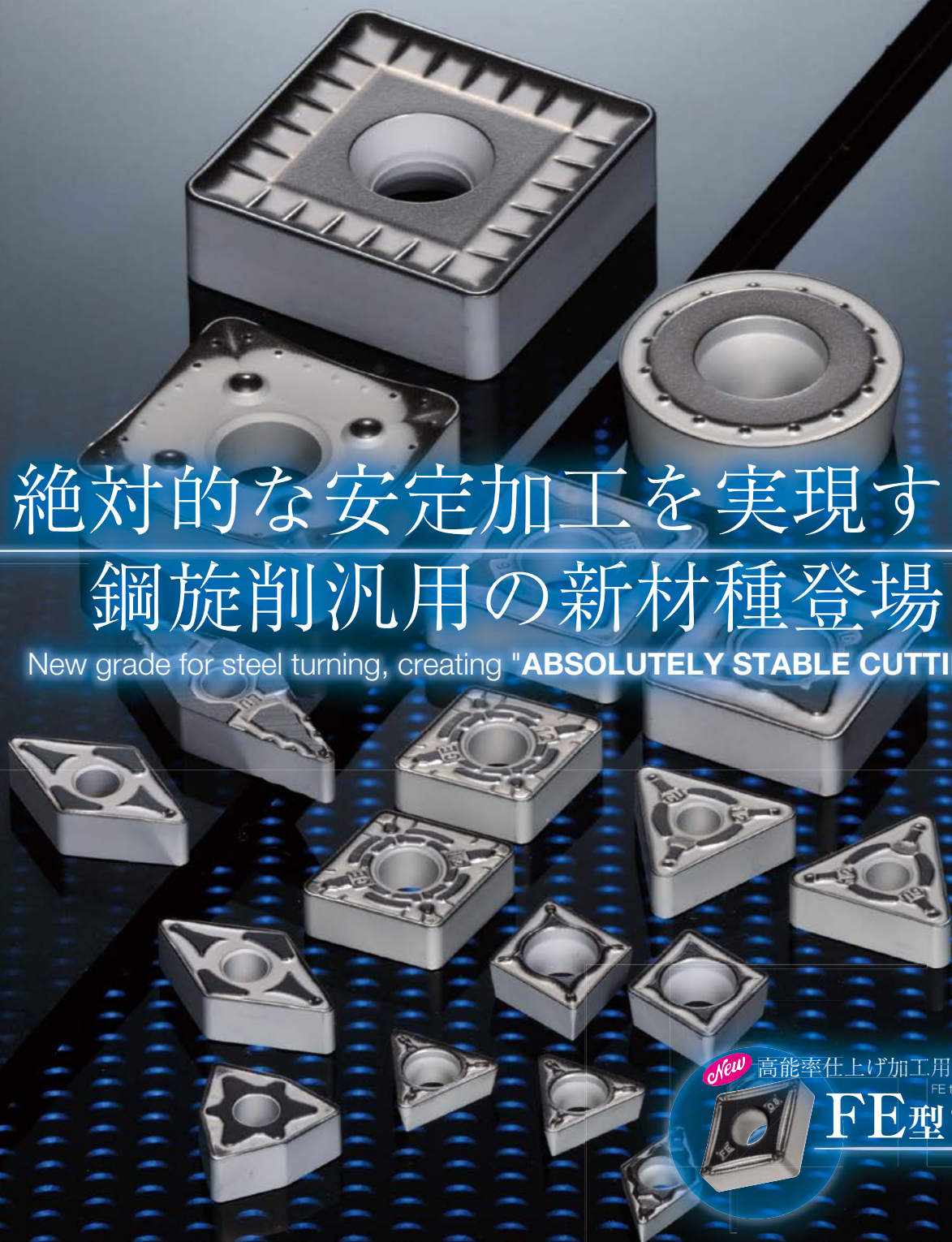
AC8025P

AC8025P 第2版



絶対的な安定加工を実現する 鋼旋削汎用の新材種登場

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

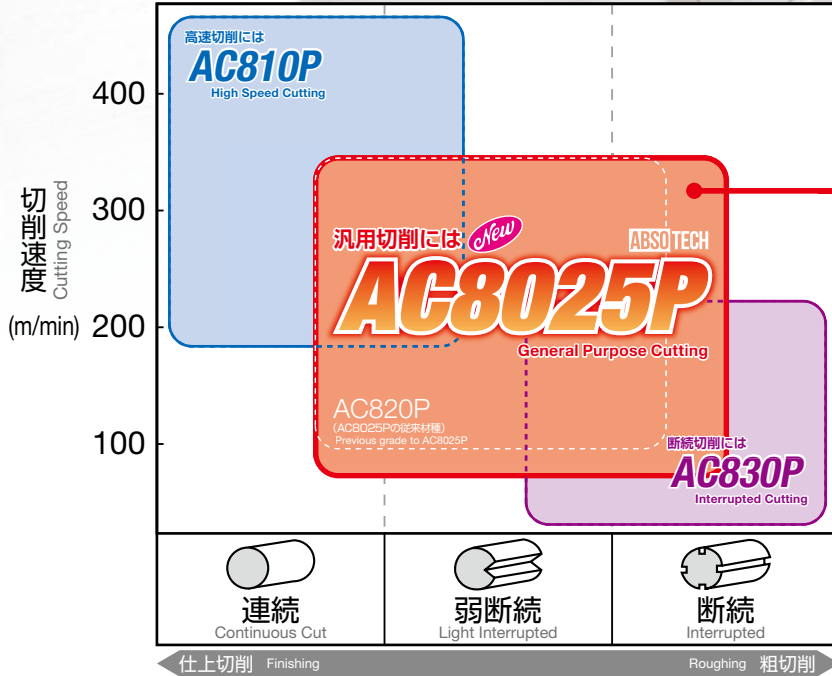


New 高能率仕上げ加工用ネガティブM級
FE type chipbreaker expanded
FE型ブレーカ
シリーズ化

AC8025P

Coated grade for Steel turning

■ 適用領域 Application Range



AC8025P new ABSOTECH

新コーティング「Absotech Platinum」を採用
Employs Absotech Platinum, a new CVD coating.

刃先処理最適化 Optimized edge preparation	チッピング要因排除 High chipping resistance
高密着力 High adherence	高い信頼性 Excellent stability
平滑表面処理 Smooth surface	切れ味向上 Reduced cutting force
膜中引張応力低減 Reduced tensile stress	びびり抑制 Avoid chattering

○ AC810P

高能率加工で最も耐摩耗性に優れる高速切削用材種。P05グレードに匹敵する耐摩耗性を実現。
An excellent grade for high speed applications, achieves high efficiency machining with the best wear resistance. The wear resistance of this grade is equivalent to that of a P05 carbide grade.

○ AC830P

断続切削や不安定なクランプでも耐久損性に優れる超強韌材種。P20グレードに匹敵する耐摩耗性を実現。
A super tough grade with excellent fracture resistance for interrupted turning and unstable work clamping conditions. The wear resistance of this grade is equivalent to that of a P20 grade carbide.

平滑表面処理の効果 耐溶着性能 Smooth surface (Adhesion resistance)

膜中引張応力低減の効果 耐チッピング性能 High-functional film with reduced tensile stress (Chipping resistance)

2min	70min	120min	従来品 Conventional	 Ra=0.4µm 亀裂進展 Cracks grow easily	 亀裂進展 Cracks grow easily	 従来品 Conventional 最低寿命40個/c Min: 40pcs/c
 溶着発生 Adhesions	 欠損 Breakage	 継続使用不可 Unable to continue	 正常摩耗 Normal wear			

被削材 Work Material : SCM415 25CrMo4 (端面加工 Facing)
チップ Insert : CNMG120408N-GU
切削条件 Cutting Conditions : $v_c=100-300\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet

被削材 Work Material : S50C ハブ C50 Hub
チップ Insert : CNMG120412N-GU
切削条件 Cutting Conditions : $v_c=180\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=0.5\text{mm}$ Wet

New AC8025P

耐チッピング性能向上
High chipping resistance

亀裂進展を抑制
Cracks does not grow easily

コーナー間の最低寿命2倍
Minimum tool life doubled

最低寿命80個/c
Min: 80pcs/c

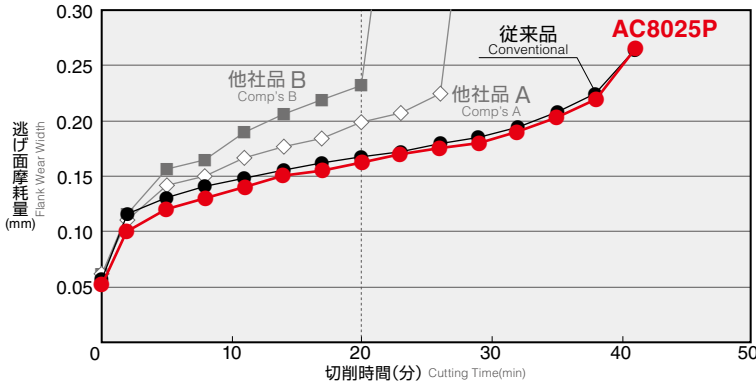
極めて平滑な表面 → 溶着を抑制
Extremely smooth surface → Avoid adhesions

安定長寿命 → 寿命予測が容易
Longer and more stable tool life → Predictable tool life

AC8025Pの切削性能

AC8025P Cutting Performance

■ 耐摩耗性(高速切削 $v_c=270\text{m/min}$) Wear resistance (High speed cut)



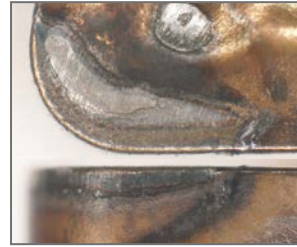
被削材 Work Material : SCM435
 チップ Insert : CNMG120408 ホルダー Holder : PCLNR2525M12
 切削条件 Cutting Conditions : $v_c=270\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet



AC8025P+GU型 GU Type



従来品 Conventional



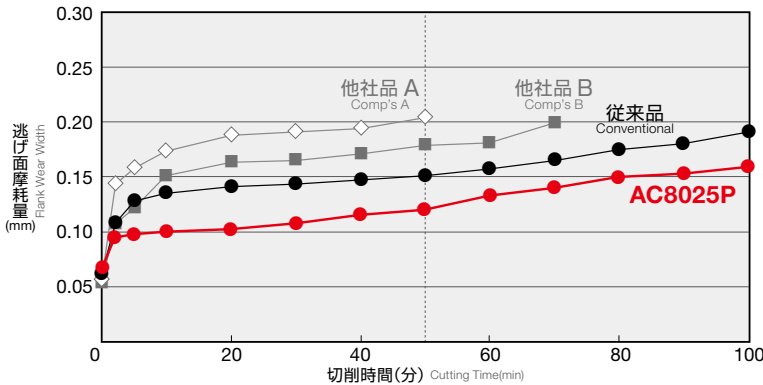
他社品 A Competitor's A



他社品 B Competitor's B

||| **AC8025P は高速切削で従来品同様の高い耐摩耗性を発揮** |||
 AC8025P shows good wear resistance

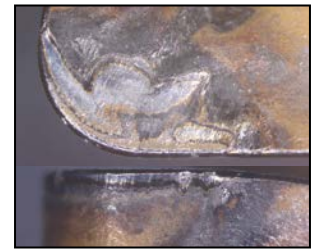
■ 耐摩耗性(中速切削 $v_c=200\text{m/min}$) Wear resistance (Medium speed cut)



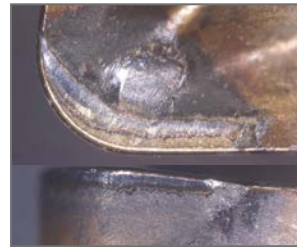
被削材 Work Material : SCM435
 チップ Insert : CNMG120408 ホルダー Holder : PCLNR2525M12
 切削条件 Cutting Conditions : $v_c=200\text{m/min}$ $f=0.2\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet



AC8025P+SE型 SE Type



従来品 Conventional



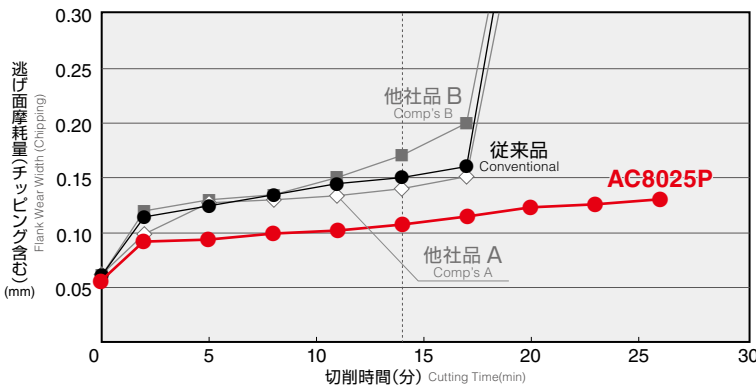
他社品 A Competitor's A



他社品 B Competitor's B

||| **AC8025P は中速切削でも耐摩耗性に優れる** |||
 AC8025P shows excellent wear resistance

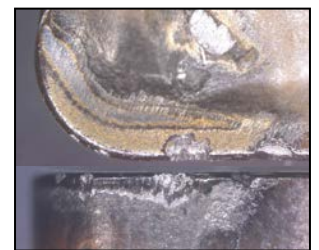
■ 耐溶着チップング性能 Adhesion resistance and chipping resistance



被削材 Work Material : SCM415
 チップ Insert : CNMG120408 ホルダー Holder : PCLNR2525M12
 切削条件 Cutting Conditions : $v_c=300\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet



AC8025P+GU型 GU Type



従来品 Conventional






他社品 A Competitor's A











他社品 B Competitor's B

||| **AC8025P は高機能膜・平滑表面処理の効果により耐溶着チップング性能が大幅向上** |||
 AC8025P shows excellent adhesion resistance

◆ ネガティブ 80° 菱形 (つづき) Negative 80° Diamond Type (Con't)













形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	CNMM 120408N-HG	●	●	12.7	4.76	5.16	0.8
	120412N-HG	●	●				1.2
	120416N-HG	●	●				1.6
	CNMM 160612N-HG	●	●	15.875	6.35	6.35	1.2
	160616N-HG	●	●				1.6
	CNMM 190612N-HG	●	●				19.05
190616N-HG	●	●	1.6				
190624N-HG	●	●	2.4				
	CNMM 120408N-HP	●	●	12.7	4.76	5.16	0.8
	120412N-HP	●	●				1.2
	120416N-HP	●	●				1.6
	CNMM 160608N-HP	●	●	15.875	6.35	6.35	0.8
	160612N-HP	●	●				1.2
	160616N-HP	●	●				1.6
CNMM 190608N-HP	●	●	19.05	6.35	7.94	0.8	
190612N-HP	●	●				1.2	
190616N-HP	●	●				1.6	
	CNMM 190616N-HF	●	●	19.05	6.35	7.94	1.6
	190624N-HF	●	●				2.4
	CNMM 250924N-HF	●	●	25.4	9.52	9.12	2.4
	250932N-HF	●	●				3.2

◆ ネガティブ 55° 菱形 Negative 55° Diamond Type

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	DNMG 150404N-FL	●	●	12.7	4.76	5.16	0.4
	150408N-FL	●	●				0.8
	150412N-FL	●	●				1.2
	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
DNMG 150412N-FE	●	●	12.7	6.35	5.16	1.2	
150602N-FE	●	●				0.2	
150604N-FE	●	●				0.4	
DNMG 150608N-FE	●	●	12.7	6.35	5.16	0.8	
150612N-FE	●	●				1.2	
	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				
	DNMG 110404N-SU	●	●	9.525	4.76	3.81	0.4
	110408N-SU	●	●				0.8
	110412N-SU	●	●				1.2
	DNMG 150404N-SU	●	●	12.7	4.76	5.16	0.4
	150408N-SU	●	●				0.8
	150412N-SU	●	●				1.2
DNMG 150604N-SU	●	●	12.7	6.35	5.16	0.4	
150608N-SU	●	●				0.8	
150612N-SU	●	●				1.2	
	DNMG 110408N-SE	●	●	9.525	4.76	3.81	0.8
	150404N-SE	●	●				0.4
	150408N-SE	●	●	12.7	4.76	5.16	0.8
	150412N-SE	●	●				1.2
	DNMX 110404N-SEW	●	●	9.525	4.76	3.81	0.4
	110408N-SEW	●	●				0.8
	110412N-SEW	●	●				1.2
	DNMX 150404N-SEW	●	●	12.7	4.76	5.16	0.4
	150408N-SEW	●	●				0.8
150412N-SEW	●	●	1.2				
	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	
	DNMG 150404N-SX	●	●	12.7	4.76	5.16	0.4
	150408N-SX	●	●				0.8
	150412N-SX	●	●				1.2

※ 近似値、ISO 規格に準拠しておりません。Approximation, ISO standard non-compliance

◆ ネガティブ 55° 菱形 (つづき) Negative 55° Diamond Type (Con't)

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	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 150416N-GU	●	●	12.7	6.35	5.16	1.6	
150604N-GU	●	●				0.4	
150608N-GU	●	●				0.8	
DNMG 150612N-GU	●	●	12.7	6.35	5.16	1.2	
150616N-GU	●	●				1.6	
	DNMG 110408N-GE	●	●	9.525	4.76	3.81	0.8
	110412N-GE	●	●				1.2
	DNMG 150404N-GE	●	●	12.7	4.76	5.16	0.4
	150408N-GE	●	●				0.8
	150412N-GE	●	●				1.2
	DNMG 150416N-GE	●	●	12.7	6.35	5.16	1.6
150604N-GE	●	●	0.4				
150608N-GE	●	●	0.8				
DNMG 150612N-GE	●	●	12.7	6.35	5.16	1.2	
150616N-GE	●	●				1.6	
	DNMG 110408N-UX	●	●	9.525	4.76	3.81	0.8
	150404N-UX	●	●				0.4
	DNMG 150408N-UX	●	●	12.7	4.76	5.16	0.8
	150412N-UX	●	●				1.2
	150604N-UX	●	●				0.4
	DNMG 150608N-UX	●	●	12.7	6.35	5.16	0.8
150612N-UX	●	●	1.2				
150616N-UX	●	●	1.6				
	DNMG 110404N-UG	●	●	9.525	4.76	3.81	0.4
	110408N-UG	●	●				0.8
	DNMG 150408N-UG	●	●	12.7	4.76	5.16	0.8
	150412N-UG	●	●				1.2
	150604N-UG	●	●				0.4
	DNMG 150608N-UG	●	●	12.7	6.35	5.16	0.8
150612N-UG	●	●	1.2				
150616N-UG	●	●	1.6				
	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				
	DNMG 150408N-MU	●	●	12.7	4.76	5.16	0.8
	150412N-MU	●	●				1.2
	DNMG 150416N-MU	●	●	12.7	6.35	5.16	1.6
	150608N-MU	●	●				0.8
	150612N-MU	●	●				1.2
	150616N-MU	●	●	1.6			
	DNMG 150408N-EM	●	●	12.7	4.76	5.16	0.8
	150412N-EM	●	●				1.2
	DNMG 150416N-EM	●	●	12.7	6.35	5.16	1.6
	150608N-EM	●	●				0.8
150612N-EM	●	●	1.2				
	DNMG 150408N-ME	●	●	12.7	4.76	5.16	0.8
	150412N-ME	●	●				1.2
	DNMG 150416N-ME	●	●	12.7	6.35	5.16	1.6
	150608N-ME	●	●				0.8
150612N-ME	●	●	1.2				
	DNMG 150408N-MX	●	●	12.7	4.76	5.16	0.8
	150412N-MX	●	●				1.2
	DNMG 150608N-MX	●	●	12.7	6.35	5.16	0.8
	150612N-MX	●	●				1.2
	DNMG 150404N-UZ	●	●	12.7	4.76	5.16	0.4
	150408N-UZ	●	●				0.8
	DNMG 150412N-UZ	●	●	12.7	6.35	5.16	1.2
	150608N-UZ	●	●				0.8
150612N-UZ	●	●	1.2				
	DNMG 150404R-HM	●	●	12.7	4.76	5.16	0.4
	150404L-HM	●	●				0.4
	150408R-HM	●	●	12.7	4.76	5.16	0.8
	150408L-HM	●	●				0.8
	DNMM 150404N-MP	●	●	12.7	4.76	5.16	0.4
	150408N-MP	●	●				0.8
	150412N-MP	●	●	12.7	4.76	5.16	1.2
	150416N-MP	●	●				1.6

●印：標準在庫品、無印：受注生産品、☑️印：ワイバーチップ



●mark : Standard stock item, Blank : Made to order item, ☑️mark : Wiper insert

在庫表















ネガティブチップ Negative insert

Stock items












◇ ネガティブ 55° 菱形 (つづき) Negative 55° Diamond Type (Con't)

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	DNMM 150604N-MP	●	●				0.4
	150608N-MP	●	●				0.8
	150612N-MP	●	●	12.7	6.35	5.16	1.2
	150616N-MP	●	●				1.6
	DNMM 150404N-HP	●	●				0.4
	150408N-HP	●	●				0.8
	150412N-HP	●	●	12.7	4.76	5.16	1.2
	150416N-HP	●	●				1.6
	DNMM 150604N-HP	●	●				0.4
	150608N-HP	●	●				0.8
	150612N-HP	●	●	12.7	6.35	5.16	1.2
	150616N-HP	●	●				1.6

○ ネガティブ正方形 Negative Square Type




















形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	SNMG 120408N-FL	●	●	12.7	4.76	5.16	0.8
	SNMG 120404N-FE	●	●				0.4
	120408N-FE	●	●	12.7	4.76	5.16	0.8
	120412N-FE	●	●				1.2
	SNMG 120408N-LU	●	●	12.7	4.76	5.16	0.8
	120412N-LU	●	●				1.2
	SNMG 120408N-SU	●	●	12.7	4.76	5.16	0.8
	SNMG 120408N-SE	●	●	12.7	4.76	5.16	0.8
	120412N-SE	●	●				1.2
	SNMG 120404N-EF	●	●				0.4
	120408N-EF	●	●	12.7	4.76	5.16	0.8
	SNMG 120408N-SX	●	●	12.7	4.76	5.16	0.8
	120412N-SX	●	●				1.2
	SNMG 090304N-GU	●	●				0.4
	090308N-GU	●	●	9.525	3.18	3.81	0.8
	SNMG 120404N-GU	●	●				0.4
	120408N-GU	●	●	12.7	4.76	5.16	0.8
	120412N-GU	●	●				1.2
	120416N-GU	●	●				1.6
	SNMG 150608N-GU	●	●				0.8
	150612N-GU	●	●	15.875	6.35	6.35	1.2
	150616N-GU	●	●				1.6
	SNMG 120408N-GE	●	●				0.8
	120412N-GE	●	●	12.7	4.76	5.16	1.2
	120416N-GE	●	●				1.6
	SNMG 150608N-GE	●	●	15.875	6.35	6.35	0.8
	150612N-GE	●	●				1.2
	150616N-GE	●	●				1.6
	SNMG 120408N-UX	●	●				0.8
	120412N-UX	●	●	12.7	4.76	5.16	1.2
	120416N-UX	●	●				1.6
	SNMG 190612N-UX	●	●	19.05	6.35	7.94	1.2
	190616N-UX	●	●				1.6
	SNMG 090308N-UG	●	●	9.525	3.18	3.81	0.8
	SNMG 120408N-UG	●	●	12.7	4.76	5.16	0.8
	120412N-UG	●	●				1.2
	SNMG 120404N-EG	●	●				0.4
	120408N-EG	●	●	12.7	4.76	5.16	0.8
	120412N-EG	●	●				1.2
	SNMG 150608N-EG	●	●				0.8
	150612N-EG	●	●	15.875	6.35	6.35	1.2
	150616N-EG	●	●				1.6
	SNMG 190612N-EG	●	●	19.05	6.35	7.94	1.2
	190616N-EG	●	●				1.6
	SNMG 120408N-MU	●	●				0.8
	120412N-MU	●	●	12.7	4.76	5.16	1.2
	120416N-MU	●	●				1.6
	SNMG 150608N-MU	●	●				0.8
	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
	190624N-MU	●	●				2.4
	SNMG 250924N-MU	●	●	25.4	9.52	9.12	2.4

○ ネガティブ正方形 (つづき) Negative Square Type (Con't)










形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	SNMG 120408N-EM	●	●				0.8
	120412N-EM	●	●	12.7	4.76	5.16	1.2
	SNMG 150608N-EM	●	●				0.8
	150612N-EM	●	●	15.875	6.35	6.35	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
	SNMG 120408N-ME	●	●				0.8
	120412N-ME	●	●	12.7	4.76	5.16	1.2
	120416N-ME	●	●				1.6
	SNMG 150608N-ME	●	●				0.8
	150612N-ME	●	●	15.875	6.35	6.35	1.2
	150616N-ME	●	●				1.6
	SNMG 190612N-ME	●	●	19.05	6.35	7.94	1.2
	190616N-ME	●	●				1.6
	190624N-ME	●	●				2.4
	SNMG 250924N-ME	●	●	25.4	9.52	9.12	2.4
	SNMG 120408N-MX	●	●				0.8
	120412N-MX	●	●	12.7	4.76	5.16	1.2
	120416N-MX	●	●				1.6
	SNMG 150612N-MX	●	●	15.875	6.35	6.35	1.2
	150616N-MX	●	●				1.6
	SNMG 190612N-MX	●	●	19.05	6.35	7.94	1.2
	190616N-MX	●	●				1.6
	SNMG 120408N-UZ	●	●				0.8
	120412N-UZ	●	●	12.7	4.76	5.16	1.2
	120416N-UZ	●	●				1.6
	SNMG 150612N-UZ	●	●	15.875	6.35	6.35	1.2
	190612N-UZ	●	●	19.05	6.35	7.94	1.2
	190616N-UZ	●	●				1.6
	SNMG 120408R-HM	●	●	12.7	4.76	5.16	0.8
	120408L-HM	●	●				0.8
	SNMM 120408N-MP	●	●				0.8
	120412N-MP	●	●	12.7	4.76	5.16	1.2
	120416N-MP	●	●				1.6
	120420N-MP	●	●				2.0
	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
	SNMM 120408N-HG	●	●				0.8
	120412N-HG	●	●	12.7	4.76	5.16	1.2
	120416N-HG	●	●				1.6
	SNMM 150616N-HG	●	●	15.875	6.35	6.35	1.6
	SNMM 190612N-HG	●	●	19.05	6.35	7.94	1.2
	190616N-HG	●	●				1.6
	190624N-HG	●	●				2.4
	SNMM 120408N-HP	●	●				0.8
	120412N-HP	●	●	12.7	4.76	5.16	1.2
	120416N-HP	●	●				1.6
	SNMM 190612N-HP	●	●	19.05	6.35	7.94	1.2
	190616N-HP	●	●				1.6
	SNMM 250724N-HP	●	●	25.4	7.94	9.12	2.4
	SNMM 250924N-HP	●	●	25.4	9.52	9.12	2.4
	SNMM 310924N-HP	●	●	31.75	9.52	8.8	2.4
	SNMM 250724N-HU	●	●	25.4	7.94	9.12	2.4
	SNMM 250924N-HU	●	●	25.4	9.52	9.12	2.4
	SNMM 310924N-HU	●	●	31.75	9.52	8.8	2.4
	SNMM 250724N-HW	●	●	25.4	7.94	9.12	2.4
	SNMM 250924N-HW	●	●	25.4	9.52	9.12	2.4
	SNMM 310924N-HW	●	●	31.75	9.52	8.8	2.4
	SNMM 190616N-HF	●	●	19.05	6.35	7.94	1.6
	190624N-HF	●	●				2.4
	SNMM 250724N-HF	●	●	25.4	7.94	9.12	2.4
	250732N-HF	●	●				3.2
	SNMM 250924N-HF	●	●	25.4	9.52	9.12	2.4
	250932N-HF	●	●				3.2
	SNMM 310924N-HF	●	●	31.75	9.52	8.8	2.4


●印：標準在庫品、無印：受注生産品
 ●mark：Standard stock item, Blank：Made to order item

△ ネガティブ三角形 Negative Triangular Type

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	TNMG 160404N-FL	●	●	9.525	4.76	3.81	0.4
	160408N-FL	●	●	9.525	4.76	3.81	0.8
	TNMG 160402N-FE	●	●				0.2
	160404N-FE	●	●	9.525	4.76	3.81	0.4
	160408N-FE	●	●	9.525	4.76	3.81	0.8
	160412N-FE	●	●	12.7	4.76	5.16	1.2
	TNMG 160404N-LU	●	●				0.4
	160408N-LU	●	●	9.525	4.76	3.81	0.8
	160412N-LU	●	●	12.7	4.76	5.16	1.2
	TNMG 160404N-SU	●	●				0.4
	160408N-SU	●	●	9.525	4.76	3.81	0.8
	160412N-SU	●	●	12.7	4.76	5.16	1.2
	TNMG 160404N-SE	●	●				0.4
	160408N-SE	●	●	9.525	4.76	3.81	0.8
	160412N-SE	●	●	12.7	4.76	5.16	1.2
	TNMG 220404N-SE	●	●				0.4
	220408N-SE	●	●	12.7	4.76	5.16	0.8
	220412N-SE	●	●	15.875	6.35	6.35	1.2
	TNMG 160404N-EF	●	●	9.525	4.76	3.81	0.4
	160408N-EF	●	●	9.525	4.76	3.81	0.8
	TNMG 160304N-SX	●	●	9.525	3.18	3.81	0.4
	160308N-SX	●	●	9.525	3.18	3.81	0.8
	TNMG 160404N-SX	●	●	9.525	4.76	3.81	0.4
	160408N-SX	●	●	9.525	4.76	3.81	0.8
	TNMG 220404N-SX	●	●				0.4
	220408N-SX	●	●	12.7	4.76	5.16	0.8
	TNMG 160404N-GU	●	●				0.4
	160408N-GU	●	●	9.525	4.76	3.81	0.8
	160412N-GU	●	●	12.7	4.76	5.16	1.2
	160416N-GU	●	●	15.875	6.35	6.35	1.6
	TNMG 220404N-GU	●	●				0.4
	220408N-GU	●	●	12.7	4.76	5.16	0.8
	220412N-GU	●	●	15.875	6.35	6.35	1.2
	220416N-GU	●	●	19.05	7.92	7.92	1.6
	TNMG 160404N-GE	●	●				0.4
	160408N-GE	●	●	9.525	4.76	3.81	0.8
	160412N-GE	●	●	12.7	4.76	5.16	1.2
	TNMG 220408N-GE	●	●	15.875	6.35	6.35	0.8
	220412N-GE	●	●	19.05	7.92	7.92	1.2
	TNMG 160404N-UX	●	●				0.4
	160408N-UX	●	●	9.525	4.76	3.81	0.8
	160412N-UX	●	●	12.7	4.76	5.16	1.2
	TNMG 220408N-UX	●	●	15.875	6.35	6.35	0.8
	220412N-UX	●	●	19.05	7.92	7.92	1.2
	TNMG 160404N-UG	●	●				0.4
	160408N-UG	●	●	9.525	4.76	3.81	0.8
	160412N-UG	●	●	12.7	4.76	5.16	1.2
	160416N-UG	●	●	15.875	6.35	6.35	1.6
	TNMG 220408N-UG	●	●	19.05	7.92	7.92	0.8
	220412N-UG	●	●	22.91	9.14	9.14	1.2
	TNMG 160404N-EG	●	●				0.4
	160408N-EG	●	●	9.525	4.76	3.81	0.8
	160412N-EG	●	●	12.7	4.76	5.16	1.2
	160416N-EG	●	●	15.875	6.35	6.35	1.6
	TNMG 160408N-MU	●	●	9.525	4.76	3.81	0.8
	160412N-MU	●	●	12.7	4.76	5.16	1.2
	TNMG 220408N-MU	●	●	15.875	6.35	6.35	0.8
	220412N-MU	●	●	19.05	7.92	7.92	1.2
	220416N-MU	●	●	22.91	9.14	9.14	1.6
	TNMG 270612N-MU	●	●	27.14	10.81	10.81	1.2
	270616N-MU	●	●	31.75	12.7	12.7	1.6
	TNMG 160408N-EM	●	●	9.525	4.76	3.81	0.8
	160412N-EM	●	●	12.7	4.76	5.16	1.2
	TNMG 330924N-EM	●	●	19.05	9.52	7.93	2.4
	TNMG 160408N-ME	●	●	9.525	4.76	3.81	0.8
	160412N-ME	●	●	12.7	4.76	5.16	1.2
	TNMG 220408N-ME	●	●	15.875	6.35	6.35	0.8
	220412N-ME	●	●	19.05	7.92	7.92	1.2
	220416N-ME	●	●	22.91	9.14	9.14	1.6
	TNMG 160408N-MX	●	●	9.525	4.76	3.81	0.8
	160412N-MX	●	●	12.7	4.76	5.16	1.2
	TNMG 220408N-MX	●	●	15.875	6.35	6.35	0.8
	220412N-MX	●	●	19.05	7.92	7.92	1.2

△ ネガティブ三角形 (つづき) Negative Triangular Type (Con't)

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	TNMG 160404N-UZ	●	●				0.4
	160408N-UZ	●	●	9.525	4.76	3.81	0.8
	160412N-UZ	●	●	12.7	4.76	5.16	1.2
	160416N-UZ	●	●	15.875	6.35	6.35	1.6
	TNMG 220408N-UZ	●	●	19.05	7.92	7.92	0.8
	220412N-UZ	●	●	22.91	9.14	9.14	1.2
	TNMG 220416N-UZ	●	●	27.14	10.81	10.81	1.6
	TNMG 270608N-UZ	●	●	27.14	10.81	10.81	0.8
	270612N-UZ	●	●	31.75	12.7	12.7	1.2
	270616N-UZ	●	●	36.36	14.6	14.6	1.6
	TNMG 160404R-HM	●	●				0.4
	160404L-HM	●	●	9.525	4.76	3.81	0.4
	160408R-HM	●	●	9.525	4.76	3.81	0.8
	160408L-HM	●	●	9.525	4.76	3.81	0.8
	TNMG 220404R-HM	●	●				0.4
	220404L-HM	●	●	12.7	4.76	5.16	0.4
	220408R-HM	●	●	12.7	4.76	5.16	0.8
	220408L-HM	●	●	12.7	4.76	5.16	0.8
	220408R-HM	●	●	12.7	4.76	5.16	0.8
	220408L-HM	●	●	12.7	4.76	5.16	0.8
	TNMM 160404N-MP	●	●				0.4
	160408N-MP	●	●	9.525	4.76	3.81	0.8
	160412N-MP	●	●	12.7	4.76	5.16	1.2
	TNMM 220408N-MP	●	●	15.875	6.35	6.35	0.8
	220412N-MP	●	●	19.05	7.92	7.92	1.2
	220416N-MP	●	●	22.91	9.14	9.14	1.6
	TNMM 270612N-MP	●	●	27.14	10.81	10.81	1.2
	270616N-MP	●	●	31.75	12.7	12.7	1.6
	TNMM 220408N-HG	●	●				0.8
	220412N-HG	●	●	12.7	4.76	5.16	1.2
	220416N-HG	●	●	15.875	6.35	6.35	1.6
	TNMM 160408N-HP	●	●				0.8
	160412N-HP	●	●	9.525	4.76	3.81	1.2
	TNMM 220408N-HP	●	●	12.7	4.76	5.16	0.8
	220412N-HP	●	●	15.875	6.35	6.35	1.2
	220416N-HP	●	●	19.05	7.92	7.92	1.6
	TNMM 270612N-HP	●	●	27.14	10.81	10.81	1.2
	270616N-HP	●	●	31.75	12.7	12.7	1.6

●印：標準在庫品、無印：受注生産品、：ファイバーチップ

●mark：Standard stock item, Blank：Made to order item, ：Wiper insert

ネガティブ 35° 菱形 Negative 35° Diamond Type

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
FL	VNMG 160404N-FL	●	●	9.525	4.76	3.81	0.4
	160408N-FL	●	●				0.8
FE	VNMG 160402N-FE	●	●				0.2
	160404N-FE	●	●	9.525	4.76	3.81	0.4
	160408N-FE	●	●				0.8
	160412N-FE	●	●				1.2
LU	VNMG 160404N-LU	●	●	9.525	4.76	3.81	0.4
	160408N-LU	●	●				0.8
SU	VNMG 160404N-SU	●	●	9.525	4.76	3.81	0.4
	160408N-SU	●	●				0.8
SE	VNMG 160404N-SE	●	●	9.525	4.76	3.81	0.4
	160408N-SE	●	●				0.8
EF	VNMG 160402N-EF	●	●				0.2
	160404N-EF	●	●	9.525	4.76	3.81	0.4
	160408N-EF	●	●				0.8
SX	VNMG 160404N-SX	●	●	9.525	4.76	3.81	0.4
	160408N-SX	●	●				0.8
GU	VNMG 160404N-GU	●	●	9.525	4.76	3.81	0.4
	160408N-GU	●	●				0.8
	160412N-GU	●	●				1.2
GE	VNMG 160404N-GE	●	●	9.525	4.76	3.81	0.4
	160408N-GE	●	●				0.8
	160412N-GE	●	●				1.2
UX	VNMG 160404N-UX	●	●	9.525	4.76	3.81	0.4
	160408N-UX	●	●				0.8
	160412N-UX	●	●				1.2
UG	VNMG 160404N-UG	●	●	9.525	4.76	3.81	0.4
	160408N-UG	●	●				0.8
EG	VNMG 160404N-EG	●	●	9.525	4.76	3.81	0.4
	160408N-EG	●	●				0.8
	160412N-EG	●	●				1.2
UZ	VNMG 160404N-UZ	●	●	9.525	4.76	3.81	0.4
	160408N-UZ	●	●				0.8
	160412N-UZ	●	●				1.2

ネガティブ六角形 (つづき) Negative Trigon Type (Con't)

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
SE	WNMG 080404N-SE	●	●	12.7	4.76	5.16	0.4
	080408N-SE	●	●				0.8
	080412N-SE	●	●				1.2
SEW	WNMG 060404N-SEW	●	●	9.525	4.76	3.81	0.4
	060408N-SEW	●	●				0.8
	WNMG 080404N-SEW	●	●	12.7	4.76	5.16	0.4
	080408N-SEW	●	●				0.8
	080412N-SEW	●	●				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
SX	WNMG 080404N-SX	●	●	12.7	4.76	5.16	0.4
	080408N-SX	●	●				0.8
	080412N-SX	●	●				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
GE	WNMG 060408N-GE	●	●	9.525	4.76	3.81	0.8
	060412N-GE	●	●				1.2
GE	WNMG 080404N-GE	●	●	12.7	4.76	5.16	0.4
	080408N-GE	●	●				0.8
	080412N-GE	●	●				1.2
	080416N-GE	●	●				1.6
GUW	WNMG 060408N-GUW	●	●	9.525	4.76	3.81	0.8
	080408N-GUW	●	●				0.8
	080412N-GUW	●	●				1.2
	WNMG 080404N-UX	●	●	12.7	4.76	5.16	0.4
	080408N-UX	●	●				0.8
	080412N-UX	●	●				1.2
UG	WNMG 06T304N-UG	●	●	9.525	3.97	3.81	0.4
	06T308N-UG	●	●				0.8
	WNMG 060404N-UG	●	●	9.525	4.76	3.81	0.4
	060408N-UG	●	●				0.8
	080404N-UG	●	●	12.7	4.76	5.16	0.4
	080408N-UG	●	●				0.8
	080412N-UG	●	●				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 060408N-MU	●	●	9.525	4.76	3.81	0.8
	060412N-MU	●	●				1.2
	WNMG 080408N-MU	●	●	12.7	4.76	5.16	0.8
	080412N-MU	●	●				1.2
	080416N-MU	●	●				1.6
EM	WNMG 080408N-EM	●	●	12.7	4.76	5.16	0.8
	080412N-EM	●	●				1.2
ME	WNMG 060408N-ME	●	●	9.525	4.76	3.81	0.8
	060412N-ME	●	●				1.2
	WNMG 080408N-ME	●	●	12.7	4.76	5.16	0.8
	080412N-ME	●	●				1.2
	080416N-ME	●	●				1.6
MX	WNMG 080408N-MX	●	●	12.7	4.76	5.16	0.8
	080412N-MX	●	●				1.2
UZ	WNMG 080404N-UZ	●	●	12.7	4.76	5.16	0.4
	080408N-UZ	●	●				0.8
	080412N-UZ	●	●				1.2

ネガティブ六角形 Negative Trigon Type

形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
FL	WNMG 080404N-FL	●	●	12.7	4.76	5.16	0.4
	080408N-FL	●	●				0.8
FE	WNMG 060404N-FE	●	●	9.525	4.76	3.81	0.4
	060408N-FE	●	●				0.8
	WNMG 080402N-FE	●	●				0.2
	080404N-FE	●	●	12.7	4.76	5.16	0.4
	080408N-FE	●	●				0.8
	080412N-FE	●	●				1.2
LU	WNMG 060404N-LU	●	●	9.525	4.76	3.81	0.4
	060408N-LU	●	●				0.8
	060412N-LU	●	●				1.2
	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
LUW	WNMG 080404N-LUW	●	●	12.7	4.76	5.16	0.4
	080408N-LUW	●	●				0.8
	080412N-LUW	●	●				1.2
SU	WNMG 06T304N-SU	●	●	9.525	3.97	3.81	0.4
	06T308N-SU	●	●				0.8
	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












●印：標準在庫品、無印：受注生産品、：ワイパーチップ
 ●mark：Standard stock item, Blank：Made to order item, ：Wiper insert

在庫表






ポジティブチップ Positive insert

Stock items




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

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	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
	7°	CCMT 09T304N-LUW	●	●	9.525	3.97	4.4	0.4
		09T308N-LUW	●	●				0.8
	7°	CCMT 060202N-LB	●	●	6.35	2.38	2.8	0.2
		060204N-LB	●	●				0.4
		060208N-LB	●	●	9.525	3.97	4.4	0.8
		09T302N-LB	●	●				0.2
		CCMT 09T304N-LB	●	●	9.525	3.97	4.4	0.4
		09T308N-LB	●	●				0.8
	7°	CCMT 060202N-SU	●	●	6.35	2.38	2.8	0.2
		060204N-SU	●	●				0.4
		060208N-SU	●	●	9.525	3.97	4.4	0.8
		09T302N-SU	●	●				0.2
		CCMT 09T304N-SU	●	●	9.525	3.97	4.4	0.4
		09T308N-SU	●	●				0.8
	7°	CCMT 120404N-SU	●	●	12.7	4.76	5.5	0.4
		120408N-SU	●	●				0.8
		CCMT 060204N-SC	●	●	6.35	2.38	2.8	0.4
		080304N-SC	●	●				7.94
CCMT 090308N-SC	●	●	9.525	3.18	4.4	0.8		
120408N-SC	●	●				12.7	4.76	5.5
	7°	CCMT 09T304N-MU	●	●	9.525	3.97	4.4	0.4
		09T308N-MU	●	●				0.8
	11°	CPMT 080204N-LU	●	●	7.94	2.38	3.4	0.4
		090304N-LU	●	●				0.8
		090308N-LU	●	●	9.525	3.18	4.4	0.8
	11°	CPMT 090304N-LUW	●	●	9.525	3.18	4.4	0.4
		090308N-LUW	●	●				0.8
		CPMT 080204N-LB	●	●	7.94	2.38	3.4	0.4
090304N-LB	●	●	9.525	3.18				4.4
	11°	CPMT 080204N-LB	●	●	7.94	2.38	3.4	0.4
		080208N-LB	●	●				0.8
		090304N-LB	●	●	9.525	3.18	4.4	0.4
090308N-LB	●	●	0.8					
	11°	CPMT 080204N-SU	●	●	7.94	2.38	3.4	0.4
		080208N-SU	●	●				0.8
		090304N-SU	●	●	9.525	3.18	4.4	0.4
090308N-SU	●	●	0.8					
	11°	CPMT 080204N-MU	●	●	7.94	2.38	3.4	0.4
		080208N-MU	●	●				0.8
		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 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	7°	DCMT 070202N-LU	●	●	6.35	2.38	2.8	0.2
		070204N-LU	●	●				0.4
	7°	DCMT 11T302N-LU	●	●	9.525	3.97	4.4	0.2
		11T304N-LU	●	●				0.4
		11T308N-LU	●	●				0.8
	7°	DCMT 070202N-LB	●	●	6.35	2.38	2.8	0.2
		070204N-LB	●	●				0.4
		070208N-LB	●	●	9.525	3.97	4.4	0.8
		11T302N-LB	●	●				0.2
		DCMT 11T304N-LB	●	●	9.525	3.97	4.4	0.4
		11T308N-LB	●	●				0.8
	7°	DCMT 070202N-SU	●	●	6.35	2.38	2.8	0.2
		070204N-SU	●	●				0.4
		070208N-SU	●	●	9.525	3.97	4.4	0.8
		11T302N-SU	●	●				0.2
		DCMT 11T304N-SU	●	●	9.525	3.97	4.4	0.4
		11T308N-SU	●	●				0.8
	7°	DCMT 11T304N-MU	●	●	9.525	3.97	4.4	0.4
		11T308N-MU	●	●				0.8

○ ポジティブ円形 Positive Round Type

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions						
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius			
	7°	RCMT 1003M0N-RX	●	●	10.0	3.18	4.4	—			
		1204M0N-RX	●	●				12.0	4.76	4.4	—
		1606M0N-RX	●	●				16.0	6.35	5.0	—
		2006M0N-RX	●	●				20.0	6.35	6.5	—
		2507M0N-RX	●	●				25.0	7.94	7.6	—
	7°	RCMT 1204M0N-RH	●	●	12.0	4.76	4.4	—			
		1606M0N-RH	●	●				16.0	6.35	5.0	—
		2006M0N-RH	●	●				20.0	6.35	6.5	—
	7°	RCMX 1003M0N-RP	●	●	10.0	3.18	3.6	—			
		1204M0N-RP	●	●				12.0	4.76	4.2	—
		1606M0N-RP	●	●				16.0	6.35	5.2	—
		2006M0N-RP	●	●				20.0	6.35	6.5	—
		2507M0N-RP	●	●				25.0	7.94	7.2	—
		3209M0N-RP	●	●				32.0	9.52	9.5	—

○ ポジティブ正方形 Positive Square Type

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	7°	SCMT 09T304N-LU	●	●	9.525	3.97	4.4	0.4
		09T308N-LU	●	●				0.8
	7°	SCMT 09T304N-LB	●	●	9.525	3.97	4.4	0.4
		09T308N-LB	●	●				0.8
	7°	SCMT 09T304N-SU	●	●	9.525	3.97	4.4	0.4
		09T308N-SU	●	●				0.8
		SCMT 120404N-SU	●	●				12.7
120408N-SU	●	●	0.8					
	7°	SCMT 09T308N-MU	●	●	9.525	3.97	4.4	0.8
		SCMT 120408N-MU	●	●				12.7
	11°	SPMT 090304N-LU	●	●	9.525	3.18	3.4	0.4
		090308N-LU	●	●				0.8
	11°	SPMT 090304N-LB	●	●	9.525	3.18	3.4	0.4
		090308N-LB	●	●				0.8
	11°	SPMT 090304N-SF	●	●	9.525	3.18	3.3	0.4
		090308N-SF	●	●				0.8

●印：標準在庫品、無印：受注生産品、：ワイパーチップ

















●mark：Standard stock item, Blank：Made to order item, ：Wiper insert

在庫表


ポジティブチップ Positive insert

Stock items




△ ポジティブ三角形 Positive Triangular Type

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	7°	TCMT 110204N-LU	●	●	6.35	2.38	2.8	0.4
		110208N-LU	●	●	6.35	2.38	2.8	0.8
	7°	TCMT 110204N-LB	●	●	6.35	2.38	2.8	0.4
		110208N-LB	●	●	6.35	2.38	2.8	0.8
	7°	TCMT 110204N-SU	●	●	6.35	2.38	2.8	0.4
		110208N-SU	●	●	6.35	2.38	2.8	0.8
	7°	TCMT 16T304N-SU	●	●	9.525	3.97	4.3	0.4
		16T308N-SU	●	●	9.525	3.97	4.3	0.8
	11°	TPMT 090202N-LU	●	●	5.56	2.38	2.8	0.4
		090204N-LU	●	●	5.56	2.38	2.8	0.8
	11°	TPMT 110304N-LU	●	●	6.35	3.18	3.4	0.4
		110308N-LU	●	●	6.35	3.18	3.4	0.8
	11°	TPMT 080202N-LB	●	●	4.76	2.38	2.4	0.2
		080204N-LB	●	●	4.76	2.38	2.4	0.4
		TPMT 090202N-LB	●	●	5.56	2.38	2.8	0.2
		090204N-LB	●	●	5.56	2.38	2.8	0.4
		TPMT 110302N-LB	●	●	6.35	3.18	3.4	0.2
		110304N-LB	●	●	6.35	3.18	3.4	0.4
	11°	TPMT 110308N-LB	●	●	6.35	3.18	3.4	0.8
		TPMT 160304N-LB	●	●	9.525	3.18	4.4	0.4
	11°	TPMT 160308N-LB	●	●	9.525	3.18	4.4	0.8
		TPMT 160404N-LB	●	●	9.525	4.76	4.4	0.4
	11°	TPMT 110302N-SU	●	●	6.35	3.18	3.4	0.2
		110304N-SU	●	●	6.35	3.18	3.4	0.4
	11°	TPMT 110308N-SU	●	●	6.35	3.18	3.4	0.8
		TPMT 160404N-SU	●	●	9.525	4.76	4.4	0.4
	11°	TPMT 160408N-SU	●	●	9.525	4.76	4.4	0.8
		TPMT 110304N-MU	●	●	6.35	3.18	3.4	0.4
	11°	TPMT 110308N-MU	●	●	6.35	3.18	3.4	0.8
		TPMT 160404N-MU	●	●	9.525	4.76	4.4	0.4
	11°	TPMT 160408N-MU	●	●	9.525	4.76	4.4	0.8
		TPMH 110304N-SF	●	●	6.35	3.18	3.3	0.4
	11°	110308N-SF	●	●	6.35	3.18	3.3	0.8
		TPMT 160404N-SF	●	●	9.525	4.76	4.3	0.4
	11°	TPMT 160408N-SF	●	●	9.525	4.76	4.3	0.8





△ ポジティブ六角形 Positive Trigon Type

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	11°	WPMT 110204N-LB	●	●	6.35	2.38	2.8	0.4
		WPMT 160308N-LB	●	●	9.525	3.18	4.4	0.8











□ ポジティブ正方形 (穴なし) Square Type (Without Insert Hole)

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	11°	SPMR 090304N-SF	●	●	9.525	3.18	—	0.4
		090308N-SF	●	●	9.525	3.18	—	0.8
		SPMR 120304N-SF	●	●	12.7	3.18	—	0.4
		120308N-SF	●	●	12.7	3.18	—	0.8
	11°	SPMR 090304N-UJ	●	●	9.525	3.18	—	0.4
		090308N-UJ	●	●	9.525	3.18	—	0.8
	11°	SPMR 120304N-UJ	●	●	12.7	3.18	—	0.4
		120308N-UJ	●	●	12.7	3.18	—	0.8

△ ポジティブ三角形 (穴なし) Triangular Type (Without Insert Hole)





形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	11°	TPMR 110304N-SF	●	●	6.35	3.18	—	0.4
		110308N-SF	●	●	6.35	3.18	—	0.8
		TPMR 160304N-SF	●	●	9.525	3.18	—	0.4
		160308N-SF	●	●	9.525	3.18	—	0.8
	11°	TPMR 160312N-SF	●	●	9.525	3.18	—	1.2
		TPMR 110304N-UJ	●	●	6.35	3.18	—	0.4
	11°	TPMR 110308N-UJ	●	●	6.35	3.18	—	0.8
		TPMR 160304N-UJ	●	●	9.525	3.18	—	0.4
	11°	TPMR 160308N-UJ	●	●	9.525	3.18	—	0.8

◇ ポジティブ 35° 菱形 Positive 35° Diamond Type

形状 Appearance	逃げ角 Relief angle	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions			
			AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	穴径 Hole	ノーズ半径 Nose radius
	5°	VBMT 110304N-LU	●	●	6.35	3.18	2.8	0.4
		110308N-LU	●	●	6.35	3.18	2.8	0.8
		VBMT 160404N-LU	●	●	9.525	4.76	4.4	0.4
		160408N-LU	●	●	9.525	4.76	4.4	0.8
	5°	VBMT 110302N-LB	●	●	4.76	2.38	2.8	0.2
		110304N-LB	●	●	4.76	2.38	2.8	0.4
		110308N-LB	●	●	4.76	2.38	2.8	0.8
		VBMT 160404N-LB	●	●	9.525	4.76	4.4	0.4
	5°	VBMT 160408N-LB	●	●	9.525	4.76	4.4	0.8
		160412N-LB	●	●	9.525	4.76	4.4	1.2
	5°	VBMT 110304N-SU	●	●	6.35	3.18	2.8	0.4
		110308N-SU	●	●	6.35	3.18	2.8	0.8
		VBMT 160404N-SU	●	●	9.525	4.76	4.4	0.4
		160408N-SU	●	●	9.525	4.76	4.4	0.8
	5°	VBMT 160412N-SU	●	●	9.525	4.76	4.4	1.2
		VCMT 160404N-LU	●	●	9.525	4.76	4.4	0.4
	7°	VCMT 160408N-LU	●	●	9.525	4.76	4.4	0.8
		VCMT 080202N-LB	●	●	4.76	2.38	2.3	0.2
	7°	VCMT 080204N-LB	●	●	4.76	2.38	2.3	0.4
		VCMT 160404N-LB	●	●	9.525	4.76	4.4	0.4
	7°	VCMT 160408N-LB	●	●	9.525	4.76	4.4	0.8
		VCMT 110304N-SU	●	●	6.35	3.18	2.8	0.4
	7°	VCMT 110308N-SU	●	●	6.35	3.18	2.8	0.8
		VCMT 160404N-SU	●	●	9.525	4.76	4.4	0.4
	7°	VCMT 160408N-SU	●	●	9.525	4.76	4.4	0.8

T-REX チップ (倣い加工用) Inserts for T-REX

ネガティブ 頂角 55° Negative 55° Apex Angle SumiTurn T-REX


形状 Appearance	型番 Cat. No.	在庫 Stock		寸法 (mm) Dimensions		
		AC8025P	AC820P	内接円 Inscribed circle	厚さ Thickness	ノーズ半径 Nose radius
	TRM 551704-FL	●	●	10.0	5.0	0.4
	551708-FL	●	●	10.0	5.0	0.8
	TRM 551704-GU	●	●	10.0	5.0	0.4
	551708-GU	●	●	10.0	5.0	0.8
	551712-GU	●	●	10.0	5.0	1.2
	TRM 551704-LU	●	●	10.0	5.0	0.4
	551708-LU	●	●	10.0	5.0	0.8
	551712-LU	●	●	10.0	5.0	1.2
	TRM 551704-SU	●	●	10.0	5.0	0.4
	551708-SU	●	●	10.0	5.0	0.8
	551712-SU	●	●	10.0	5.0	1.2

●印：標準在庫品、無印：受注生産品
 ●mark：Standard stock item, Blank：Made to order item

自動車足回り部品 Axle end	SCr415 リングギア Ring gear
<p>AC8025Pはクレータ摩耗軽微 AC8025P ensures minimal crater wear.</p>  <p>AC8025P + MP (150個/C) 他社品 Comp's (150個/C)</p>	<p>AC8025Pは寿命1.5倍達成 AC8025P ensures an 1.5x extension of tool life</p>  <p>AC8025P + ME (150個/C) 他社品 Comp's (100個/C)</p>
<p>チップ : CNMM120416N-MP (AC8025P) Insert 切削条件 : $v_c=180-200\text{m/min}$ $f=0.43-0.55\text{mm/rev}$ $a_p=1.0-3.0\text{mm}$ Wet Cutting Conditions</p>	<p>チップ : WNMG080416N-ME (AC8025P) Insert 切削条件 : $v_c=250\text{m/min}$ $f=0.30-0.45\text{mm/rev}$ $a_p=2.5\text{mm}$ Wet Cutting Conditions</p>

SMnC420H ブッシュ Bush	SCM415 ツールホルダ Tool holder
<p>AC8025Pは逃げ面の耐摩耗性能良好 AC8025P ensures excellent flank wear resistance</p>  <p>AC8025P + ME (200個/C) 他社品 Comp's (200個/C)</p>	<p>AC8025Pは優れた耐チップング性能により損傷軽微 AC8025P's excellent chipping resistance ensures minimal damage</p>  <p>AC8025P + EM 他社品 Comp's</p>
<p>チップ : CNMG120416N-ME (AC8025P) Insert 切削条件 : $v_c=260\text{m/min}$ $f=0.5-1.0\text{mm/rev}$ $a_p=1.5-2.0\text{mm}$ Wet Cutting Conditions</p>	<p>チップ : DNMG150608N-EM (AC8025P) Insert 切削条件 : $v_c=150\text{m/min}$ $f=0.4\text{mm/rev}$ $a_p=4.0\text{mm}$ Wet Cutting Conditions</p>

S45C リング Ring	鉄板材 シリンダ Soft steel cylinder
<p>AC8025Pは寿命3倍達成 AC8025P ensures a 3x extension of tool life.</p>  <p>AC8025P + GE (450個/C) 他社品 Comp's (150個/C)</p>	<p>AC8025Pは優れた耐チップング性能により2倍寿命達成後も損傷が軽微 AC8025P's excellent chipping resistance ensures minimal damage after attaining a 2x life</p>  <p>AC8025P + SU (200個/C) 従来品 Conventional (100個/C)</p>
<p>チップ : CNMG120408N-GE (AC8025P) Insert 切削条件 : $v_c=200-250\text{m/min}$ $f=0.25\text{mm/rev}$ $a_p=1.0\text{mm}$ Wet Cutting Conditions</p>	<p>チップ : DCMT11T308N-SU (AC8025P) Insert 切削条件 : $v_c=210\text{m/min}$ $f=0.15\text{mm/rev}$ $a_p=1.0\text{mm}$ Wet Cutting Conditions</p>

鉄板材 フロントカバー Soft steel front cover
<p>AC8025PとFE型ブレーカの組合せでむしろ改善し1.2倍の寿命向上 AC8025P shows excellent finishing surface by the combination of FE type chipbreaker and ensures an 1.2x extension of tool life.</p>  <p>AC8025P+FE (62個/C) 従来品 Conventional (50個/C)</p>
<p>チップ : TNMG160408N-FE (AC8025P) Insert 切削条件 端面 Facing : $v_c=450-480\text{m/min}$ $f=0.25-0.32\text{mm/rev}$ $a_p=0.05-0.25\text{mm}$ Wet 切削条件 内径 Internal : $v_c=400\text{m/min}$ $f=0.2-0.3\text{mm/rev}$ $a_p=0.2-0.3\text{mm}$ Wet</p>

推奨切削条件

Recommended cutting conditions

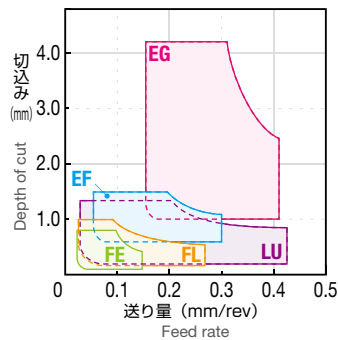
■ 推奨切削条件 Recommended cutting conditions

下限値 - 推奨値 - 上限値
Min. Optimum Max.

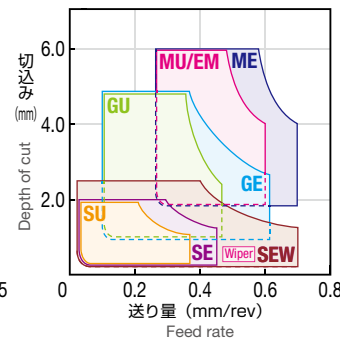
チップ形状・切刃長 Insert specification	ブレーカ Chipbreaker	軟鋼 (SS400など) 低炭素鋼 (S10Cなど) 低合金鋼 (SCM415など) 180HB以下 Soft steel (e.g., SS400), low carbon steel (e.g., S10C), and low alloy steel (e.g., SCM415) up to 180HB			高炭素鋼 (S45Cなど) 高合金鋼 (SCM435など) 180HB以上 High-carbon steel (e.g., S45C) and high-alloy steel (e.g., SCM435) in excess of 180HB		
		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	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
CNM□12 TNM□16 DNM□15 TNM□22 SNM□12 WNM□08	FE	0.1-0.4-1.2	0.10-0.25-0.45	150-250-350	0.1-0.4-1.2	0.10-0.25-0.45	120-210-300
	LU・SU・SE	0.5-1.5-2.0	0.10-0.20-0.40	150-250-350	0.5-1.5-2.0	0.10-0.20-0.40	120-210-300
	SEW	0.5-1.5-2.5	0.10-0.40-0.60	150-250-350	0.5-1.5-2.5	0.10-0.40-0.60	120-210-300
	GU・GE・UX	0.8-2.2-5.0	0.10-0.30-0.45	150-230-300	0.8-2.2-5.0	0.10-0.30-0.45	100-180-270
	MU	1.8-3.0-6.0	0.20-0.35-0.60	130-200-280	1.8-3.0-6.0	0.20-0.35-0.60	80-150-230
	ME	1.0-3.0-6.0	0.20-0.45-0.70	130-200-280	1.0-3.0-6.0	0.20-0.45-0.70	80-150-230
CNM□16 SNM□15	HG	3.0-4.5-8.0	0.35-0.50-0.80	100-180-260	3.0-4.5-8.0	0.35-0.50-0.80	60-130-200
	GU・GE・UX	0.8-3.5-5.0	0.15-0.30-0.45	130-200-280	0.8-3.5-5.0	0.15-0.30-0.45	100-160-230
	MU	1.8-4.5-6.0	0.20-0.40-0.60	100-180-260	1.8-4.5-6.0	0.20-0.40-0.60	80-140-210
	ME	1.5-4.5-7.0	0.20-0.50-0.70	100-180-260	1.5-4.5-7.0	0.20-0.50-0.70	80-140-210
CNM□19 SNM□19 CNM□25 SNM□25 DNM□19 TNM□27	HG	3.0-5.0-8.0	0.35-0.60-0.80	80-160-240	3.0-5.0-8.0	0.35-0.60-0.80	70-120-180
	MU	1.8-5.0-6.0	0.20-0.40-0.60	100-180-260	1.8-5.0-6.0	0.20-0.40-0.60	80-140-210
	ME	2.0-5.0-8.0	0.20-0.50-0.70	100-180-260	2.0-5.0-8.0	0.20-0.50-0.70	80-140-210
	HG	3.0-6.5-9.0	0.35-0.60-0.80	80-160-240	3.0-6.5-9.0	0.35-0.60-0.80	70-120-180
	HF	4.5-8.0-13.5	0.45-0.80-1.10	135-170-220	4.5-8.0-13.5	0.45-0.80-1.15	105-140-190

■ チップブレイカ適用領域 Chipbreaker Application Range

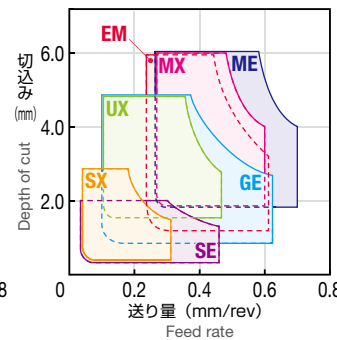
● 切りくず処理重視 Good chip control



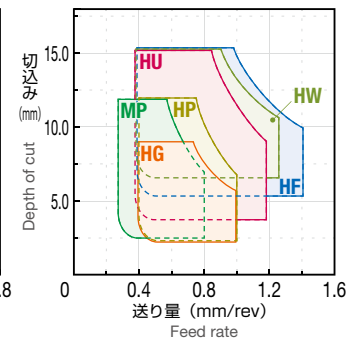
● 連続～弱断続切削 Continuous ~ Light Interrupted cut



● 弱断続～強断続切削 Light Interrupted ~ Heavy Interrupted cut



● 粗～重切削 Rough ~ Heavy cut



◆ 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。

● 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.

● 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。

● 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.

● 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。

● 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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