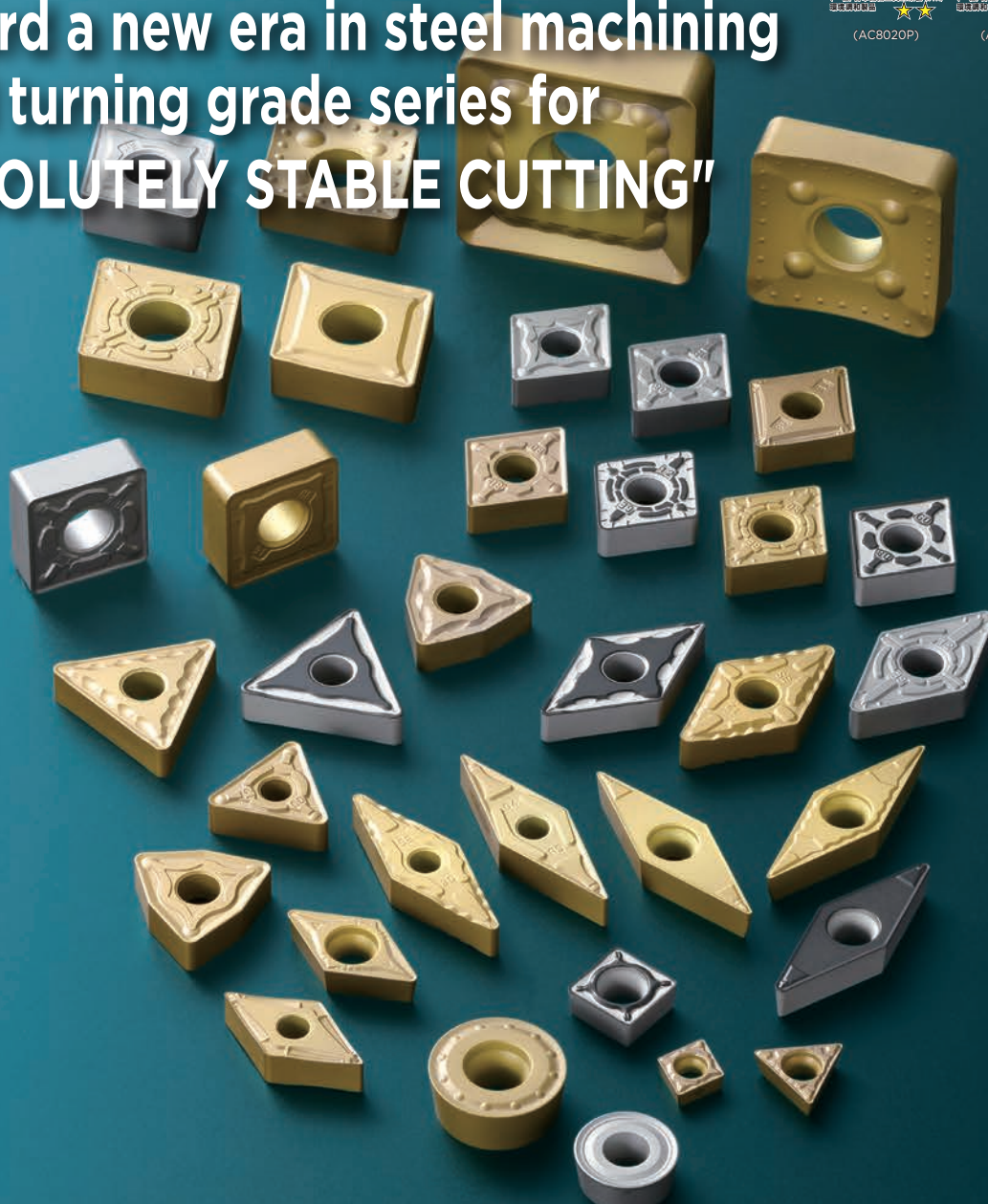


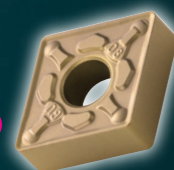
New

AC8115P/AC8020P/AC8025P/AC8035P

Toward a new era in steel machining
Steel turning grade series for
"ABSOLUTELY STABLE CUTTING"


New

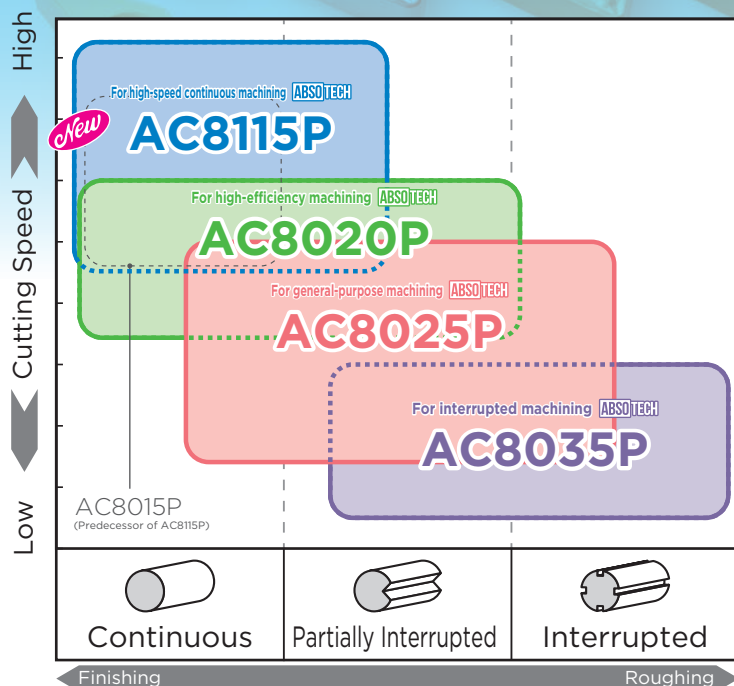
Introducing High-speed

 Machining Grade **AC8115P**




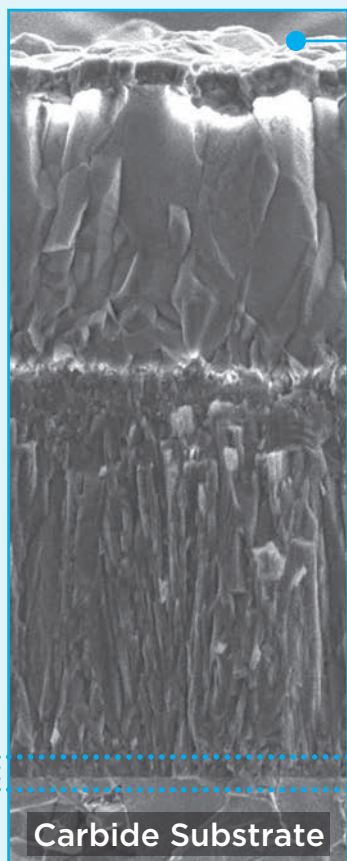
AC8115P / AC8020P / AC8025P / AC8035P

Application Range



AC8115P New	CVD ABSOTECH
Amazing Wear Resistance	Crater wear resistance 1.5x against conventional tools
AC8020P	CVD ABSOTECH
Standout Chipping Resistance	Chipping resistance in high-efficiency machining 2.5x against conventional tools
AC8025P	CVD ABSOTECH
Absolute Reliability	Adhesion resistance/chipping resistance 2x against conventional tools
AC8035P	CVD ABSOTECH
Exceptional Stability	Fracture resistance in interrupted machining 2x against conventional tools

Features of AC8020P / AC8025P / AC8035P



Special Surface Treatment

Chipping resistance and adhesion resistance are significantly improved by special surface treatments applied to suit the application

High Strength Alumina Layer

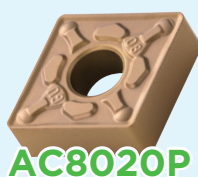
Significantly improves the coating strength by controlling crystal growth direction

High Hardness Fine Grained TiCN Layer

Significantly improves the coating hardness by creating a fine and uniform crystal structure

High Adhesion Technology

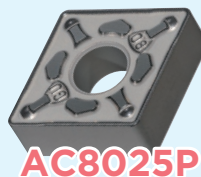
Significantly improves adhesion strength through a smooth interface between the coating and carbide substrate



AC8020P

Prestressed **Gold-colored Surface**

Chipping Suppressed /
Visibility Improved



AC8025P

Smoothing

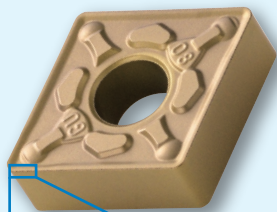
Adhesion /
Chipping Suppressed



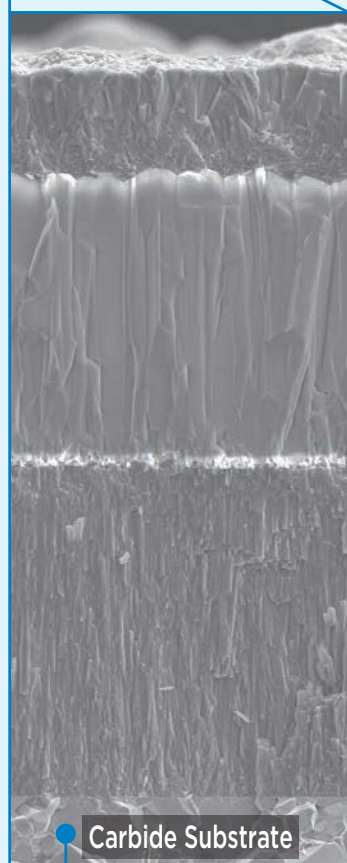
AC8035P

Prestressed

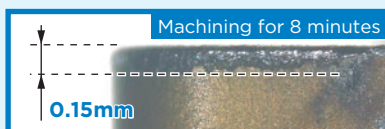
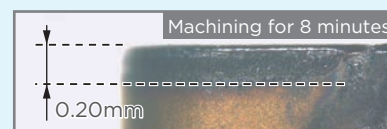
Fracture
Suppressed

■ Features of **AC8115P** *new***AC8115P****CVD ABSOTECH**

Thanks to a high-hardness layer, evolving fine crystal orientation control technology, and a new carbide substrate with excellent plastic deformation resistance, superb wear resistance is realised over a wide range of machining, including high-efficiency machining and dry machining

**Hard Surface Layer**

Initial wear is reduced while also providing both high compression stress and gold colour with excellent visibility for used corners

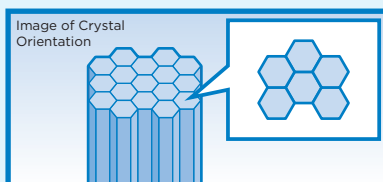
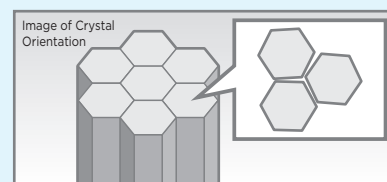
**AC8115P**

Competitor's Product A

Work Material: SCM435 Cutting Conditions: $vc=270\text{m/min}$ $f=0.3\text{mm/rev}$ $ap=1.5\text{mm}$ Wet

Crystal Orientation Control Ultra-fine Alumina Layer

Improved coating strength suppresses wear due to crystal fallout, achieving wear resistance improvement by at least 1.5x against conventional tools

**Crystal Orientation Control
Ultra-fine Alumina Layer**Conventional Orientation Al_2O_3 **High Hardness Fine Grained TiCN Layer**

Significantly improves the coating hardness by creating a fine and uniform crystal structure

New Carbide Substrate With Excellent Plastic Deformation Resistance

At least 2x the deformation resistance through improved high-temperature properties

**AC8115P**

Conventional Tool



Competitor's Product B

Work Material: SK85 Cutting Conditions: $vc=170\text{m/min}$ $f=0.6\text{mm/rev}$ $ap=1.5\text{mm}$ Dry

AC8115P/AC8020P/AC8025P/AC8035P

High-speed
Machining

AC8115P^{New}

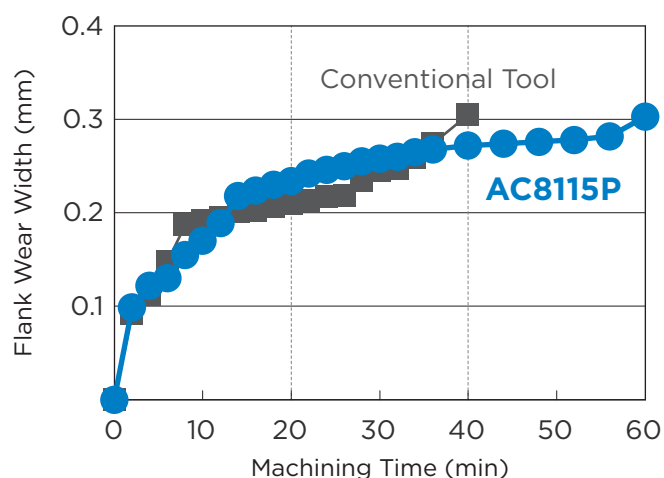
ABSOTECH

Crystal Orientation Control
Ultra-fine Alumina LayerAmazing Wear
Resistance

Crater wear is suppressed and tool life extended through improved alumina layer coating strength and higher carbide substrate plastic deformation resistance

■ AC8115P Cutting Performance (Conditions Same as Conventional)

1.5x better wear resistance through improved plastic deformation resistance



AC8115P

Machining for 20 minutes



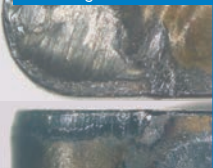
Minor wear

Machining for 40 minutes



Able to continue

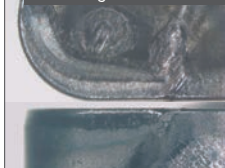
Machining for 60 minutes



Tool life

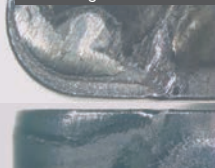
Conventional Tool

Machining for 20 minutes



Exposed substrate

Machining for 40 minutes



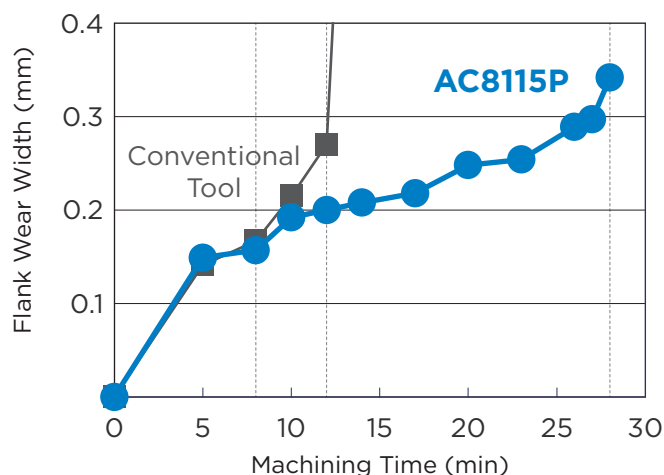
Plastic deformation

Unable to continue

Work Material: SCM435 Round Bar (External Turning) Insert: CNMG120408N-GE (AC8115P) Cutting Conditions: $v_c=270\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet

■ AC8115P Cutting Performance (High-speed Machining)

More than 2x better wear resistance during high-speed machining through improved alumina layer wear resistance



AC8115P

Machining for 8 minutes



Minor wear

Machining for 12 minutes



Alumina layer worn

Machining for 28 minutes



Tool life

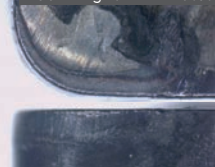
Conventional Tool

Machining for 8 minutes



Exposed substrate

Machining for 12 minutes



Plastic deformation

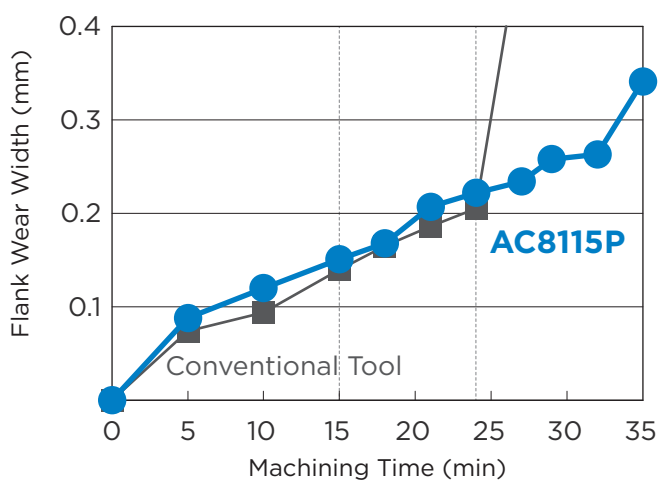
Unable to continue

Work Material: SCM435 Round Bar (External Turning) Insert: CNMG120408N-GE (AC8115P) Cutting Conditions: $v_c=350\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet

AC8115P/AC8020P/AC8025P/AC8035P

■ AC8115P Cutting Performance (Dry Machining)

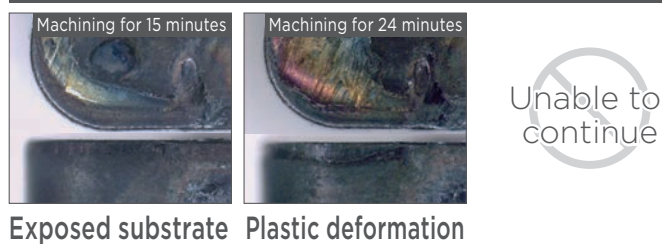
1.5x better wear resistance through improved alumina layer wear resistance and plastic deformation resistance



AC8115P



Conventional Tool



Work Material: SCM435 Round Bar (External Turning) Insert: CNMG120408N-GE (AC8115P) Cutting Conditions: $v_c=270\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Dry

■ AC8115P Recommended Cutting Conditions

Min. - Optimum - Max.

Insert Shape / Cutting Edge Length	Chipbreaker	Mild Steel (SS400, etc.) Low Carbon Steel (S10C, etc.) Low-alloy Steel (SCM415, etc.) 180HB or less			High Carbon Steel (S45C, etc.) High-alloy Steel (SCM435, etc.) 180HB or more		
		Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
CNM□12 TNM□16 DNM□15 TNM□22 SNM□12 WNM□08	FE	0.1- 0.4 -1.2	0.10- 0.20 -0.40	190- 310 -500	0.1- 0.4 -1.2	0.10- 0.20 -0.40	140- 260 -450
	LU/SU/SE	0.5- 1.5 -2.0	0.10- 0.20 -0.40	170- 310 -500	0.5- 1.5 -2.0	0.10- 0.20 -0.40	130- 260 -450
	SEW	0.5- 1.5 -2.5	0.10- 0.40 -0.60	170- 310 -500	0.5- 1.5 -2.5	0.10- 0.40 -0.60	130- 260 -450
	GU/GE/UX	0.8- 2.2 -5.0	0.10- 0.30 -0.45	170- 310 -500	0.8- 2.2 -5.0	0.10- 0.30 -0.45	130- 260 -450
	MU	1.8- 3.0 -6.0	0.20- 0.35 -0.60	140- 280 -440	1.8- 3.0 -6.0	0.20- 0.35 -0.60	110- 240 -380
	ME	1.0- 3.0 -6.0	0.20- 0.45 -0.70	140- 280 -440	1.0- 3.0 -6.0	0.20- 0.45 -0.70	110- 240 -380
	HG	3.0- 4.5 -8.0	0.35- 0.50 -0.80	140- 280 -440	3.0- 4.5 -8.0	0.35- 0.50 -0.80	110- 240 -380
CNM□16 SNM□15	GU/GE/UX	0.8- 3.5 -5.0	0.15- 0.30 -0.45	140- 280 -400	0.8- 3.5 -5.0	0.15- 0.30 -0.45	110- 240 -380
	MU	1.8- 4.5 -6.0	0.20- 0.40 -0.60	140- 240 -360	1.8- 4.5 -6.0	0.20- 0.40 -0.60	110- 200 -300
	ME	1.5- 4.5 -7.0	0.20- 0.50 -0.70	140- 240 -360	1.5- 4.5 -7.0	0.20- 0.50 -0.70	110- 200 -300
	HG	3.0- 5.0 -8.0	0.35- 0.60 -0.80	120- 210 -330	3.0- 5.0 -8.0	0.35- 0.60 -0.80	90- 170 -270
CNM□19 SNM□19 CNM□25 SNM□25 DNM□19 TNM□27	MU	1.8- 5.0 -6.0	0.20- 0.40 -0.60	140- 240 -360	1.8- 5.0 -6.0	0.20- 0.40 -0.60	110- 200 -300
	ME	2.0- 5.0 -8.0	0.20- 0.50 -0.70	140- 240 -360	2.0- 5.0 -8.0	0.20- 0.50 -0.70	110- 200 -300
	HG	3.0- 6.5 -9.0	0.35- 0.60 -0.80	120- 210 -330	3.0- 6.5 -9.0	0.35- 0.60 -0.80	90- 170 -270

AC8115P/AC8020P/AC8025P/AC8035P

High Efficiency

AC8020P

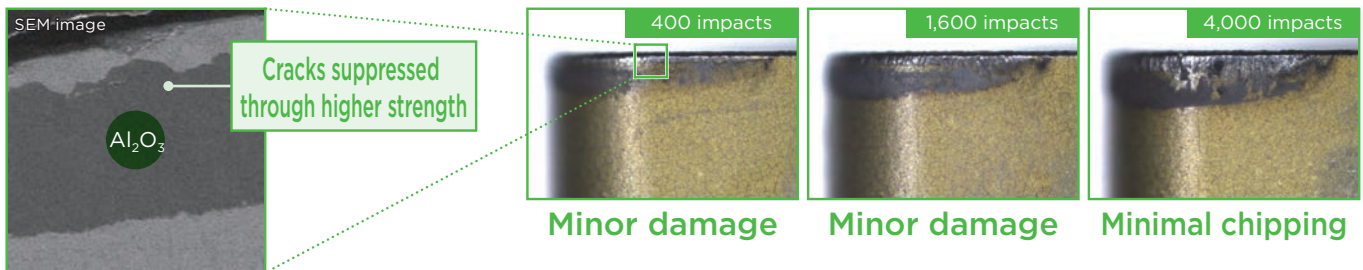
ABSOTECH

High Strength
Alumina LayerStandout Chipping
Resistance

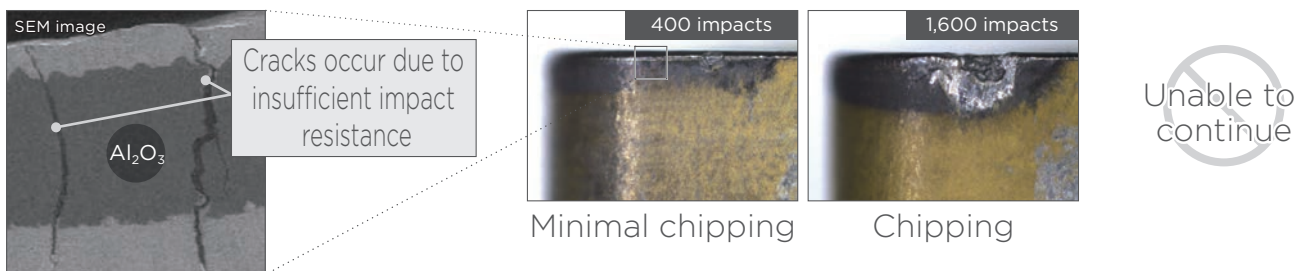
Alumina layer with even higher strength suppresses chipping

■ **AC8020P Cutting Performance** Balance of high wear resistance and stability. Chipping resistance **2.5x or more**

AC8020P



Conventional Tool



Work Material: SCM435 (Forged Part With Interrupted Sections) Insert: CNMG120408N-GU (AC8020P)
Cutting Conditions: $v_c = 250\text{m/min}$ $f = 0.3\text{mm/rev}$ $a_p = 1.5\text{mm}$ Wet

■ AC8020P Recommended Cutting Conditions

Min. - Optimum - Max.

Insert Shape / Cutting Edge Length	Chipbreaker	Mild Steel (SS400, etc.) Low Carbon Steel (S10C, etc.) Low-alloy Steel (SCM415, etc.) 180HB or less			High Carbon Steel (S45C, etc.) High-alloy Steel (SCM435, etc.) 180HB or more		
		Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
CNM□12 TNM□16 DNM□15 TNM□22 SNM□12 WNM□08	FE	0.1- 0.4 -1.2	0.10- 0.20 -0.40	180- 290 -450	0.1- 0.4 -1.2	0.10- 0.20 -0.40	130- 240 -400
	LU/SU/SE	0.5- 1.5 -2.0	0.10- 0.20 -0.40	160- 290 -420	0.5- 1.5 -2.0	0.10- 0.20 -0.40	120- 240 -370
	SEW	0.5- 1.5 -2.5	0.10- 0.40 -0.60	160- 290 -420	0.5- 1.5 -2.5	0.10- 0.40 -0.60	120- 240 -370
	GU/GE/UX	0.8- 2.2 -5.0	0.10- 0.30 -0.45	160- 290 -420	0.8- 2.2 -5.0	0.10- 0.30 -0.45	120- 240 -370
	MU	1.8- 3.0 -6.0	0.20- 0.35 -0.60	140- 250 -350	1.8- 3.0 -6.0	0.20- 0.35 -0.60	100- 220 -300
	ME	1.0- 3.0 -6.0	0.20- 0.45 -0.70	140- 250 -350	1.0- 3.0 -6.0	0.20- 0.45 -0.70	100- 220 -300
	HG	3.0- 4.5 -8.0	0.35- 0.50 -0.80	120- 230 -330	3.0- 4.5 -8.0	0.35- 0.50 -0.80	100- 220 -300
CNM□16 SNM□15	GU/GE/UX	0.8- 3.5 -5.0	0.15- 0.30 -0.45	110- 260 -350	0.8- 3.5 -5.0	0.15- 0.30 -0.45	100- 220 -300
	MU	1.8- 4.5 -6.0	0.20- 0.40 -0.60	120- 220 -300	1.8- 4.5 -6.0	0.20- 0.40 -0.60	100- 180 -250
	ME	1.5- 4.5 -7.0	0.20- 0.50 -0.70	120- 220 -300	1.5- 4.5 -7.0	0.20- 0.50 -0.70	100- 180 -250
	HG	3.0- 5.0 -8.0	0.35- 0.60 -0.80	110- 190 -270	3.0- 5.0 -8.0	0.35- 0.60 -0.80	80- 150 -220
CNM□19 SNM□19 CNM□25 SNM□25 DNM□19 TNM□27	MU	1.8- 5.0 -6.0	0.20- 0.40 -0.60	120- 220 -300	1.8- 5.0 -6.0	0.20- 0.40 -0.60	100- 180 -250
	ME	2.0- 5.0 -8.0	0.20- 0.50 -0.70	120- 220 -300	2.0- 5.0 -8.0	0.20- 0.50 -0.70	100- 180 -250
	HG	3.0- 6.5 -9.0	0.35- 0.60 -0.80	110- 190 -270	3.0- 6.5 -9.0	0.35- 0.60 -0.80	80- 150 -220

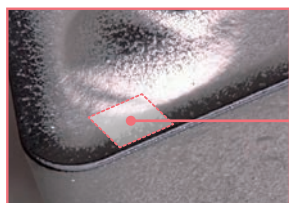
General
Machining**AC8025P****ABSOTECH**Surface Smoothing
Treatment

Absolute Reliability

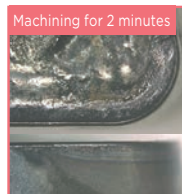


Surface smoothing treatment significantly
suppresses adhesion and chipping

■ **AC8025P Cutting Performance** Suppresses adhesion with ultra-smooth surface. Adhesion fracture resistance **2x or more**

AC8025P

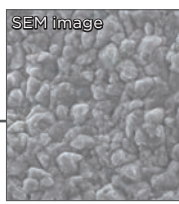
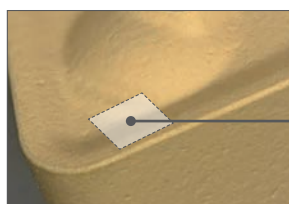
Ra0.04μm



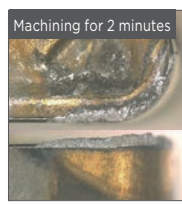
Normal wear



Minor damage only, able to continue

**Conventional Tool**

Ra0.4μm



Adhesion



Fracture

Unable to
continue

Work Material: SCM415 (Facing) Insert: CNMG120408N-GU (**AC8025P**)

Cutting Conditions: vc= 100 to 300m/min f= 0.3mm/rev ap= 1.5mm Wet

■ **AC8025P Recommended Cutting Conditions**Min. - **Optimum** - Max.

Insert Shape / Cutting Edge Length	Chipbreaker	Mild Steel (SS400, etc.) Low Carbon Steel (S10C, etc.) Low-alloy Steel (SCM415, etc.) 180HB or less			High Carbon Steel (S45C, etc.) High-alloy Steel (SCM435, etc.) 180HB or more		
		Depth of Cut ap (mm)	Feed Rate f (mm/rev)	Cutting Speed vc (m/min)	Depth of Cut ap (mm)	Feed Rate f (mm/rev)	Cutting Speed vc (m/min)
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
	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
CNM□16 SNM□15	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
	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
CNM□19 SNM□19 CNM□25 SNM□25 DNM□19 TNM□27	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

Interrupted
Machining

AC8035P

ABSOTECH

Stress Control
Within Coating

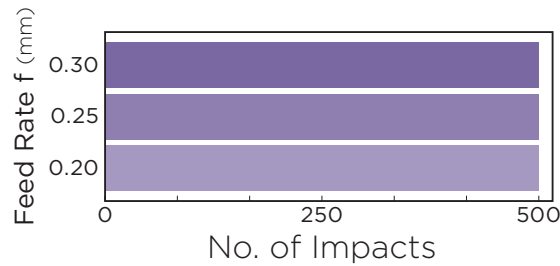
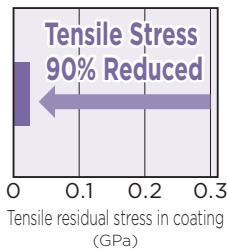
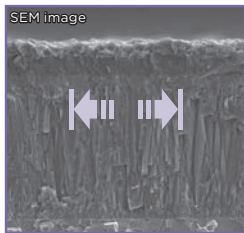
Exceptional Stability



Special surface treatment reduces tensile stress in the coating layer, significantly suppressing fractures

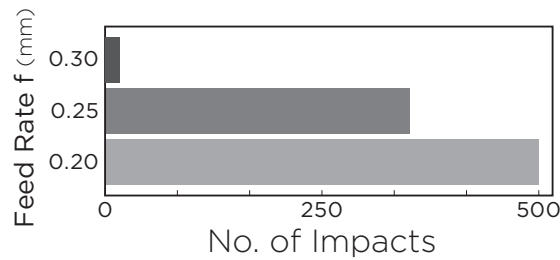
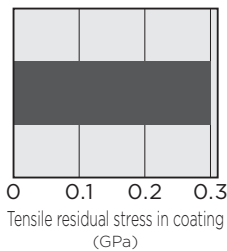
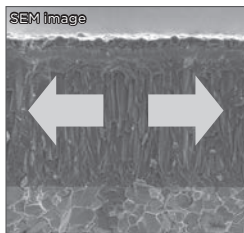
■ **AC8035P Cutting Performance** Suppresses crack growth and fractures by reducing tensile residual stress. Fracture resistance 2x or more

AC8035P



All corners able to continue

Conventional Tool



Unable to continue

Work Material: SCM435 (External Interrupted) Insert: CNMG120408N-GU (AC8035P)
Cutting Conditions: $vc = 160\text{m/min}$ $f = 0.2$ to 0.3mm/rev $ap = 2.0\text{mm}$ Dry

■ AC8035P Recommended Cutting Conditions

Min. - Optimum - Max.

Insert Shape / Cutting Edge Length	Chipbreaker	Mild Steel (SS400, etc.) Low Carbon Steel (S10C, etc.) Low-alloy Steel (SCM415, etc.) 180HB or less			High Carbon Steel (S45C, etc.) High-alloy Steel (SCM435, etc.) 180HB or more		
		Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed vc (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed vc (m/min)
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	120- 200 -300	0.1- 0.4 -1.2	0.10- 0.25 -0.45	120- 180 -250
	LU/SU/SE	0.5- 1.3 -2.0	0.10- 0.20 -0.40	120- 200 -300	0.5- 1.3 -2.0	0.10- 0.20 -0.40	120- 180 -250
	SEW	0.8- 2.2 -5.0	0.10- 0.30 -0.45	120- 200 -300	0.8- 2.2 -5.0	0.10- 0.30 -0.45	100- 150 -200
	GU/GE/UX	1.8- 3.0 -6.0	0.20- 0.35 -0.60	100- 180 -250	1.8- 3.0 -6.0	0.20- 0.35 -0.60	80- 130 -180
	MU	1.0- 3.0 -6.0	0.20- 0.45 -0.70	100- 180 -250	1.0- 3.0 -6.0	0.20- 0.45 -0.70	80- 130 -180
	ME	3.0- 4.5 -8.0	0.35- 0.50 -0.80	100- 150 -200	3.0- 4.5 -8.0	0.35- 0.50 -0.80	70- 100 -160
	HG	0.8- 3.5 -5.0	0.15- 0.30 -0.45	100- 180 -250	0.8- 3.5 -5.0	0.15- 0.30 -0.45	90- 130 -170
CNM□16 SNM□15	GU/GE/UX	1.8- 4.5 -6.0	0.20- 0.40 -0.60	100- 150 -200	1.8- 4.5 -6.0	0.20- 0.40 -0.60	70- 110 -150
	MU	1.5- 4.5 -7.0	0.20- 0.50 -0.70	100- 150 -200	1.5- 4.5 -7.0	0.20- 0.50 -0.70	70- 110 -150
	ME	3.0- 5.0 -8.0	0.35- 0.60 -0.80	80- 130 -180	3.0- 5.0 -8.0	0.35- 0.60 -0.80	60- 100 -140
	HG	1.8- 5.0 -6.0	0.20- 0.40 -0.60	100- 150 -200	1.8- 5.0 -6.0	0.20- 0.40 -0.60	70- 110 -150
CNM□19 SNM□19 CNM□25 SNM□25 DNM□19 TNM□27	MU	2.0- 5.0 -8.0	0.20- 0.50 -0.70	100- 150 -200	2.0- 5.0 -8.0	0.20- 0.50 -0.70	70- 110 -150
	ME	3.0- 6.5 -9.0	0.35- 0.60 -0.80	80- 130 -180	3.0- 6.5 -9.0	0.35- 0.60 -0.80	60- 100 -140
	HG	4.5- 8.0 -13.5	0.45- 0.80 -1.15	120- 150 -190	4.5- 8.0 -13.5	0.45- 0.80 -1.15	90- 120 -160
	HF	5.0- 8.0 -27.0	0.80- 1.20 -1.60	70- 110 -150	5.0- 8.0 -27.0	0.80- 1.20 -1.60	50- 80 -120

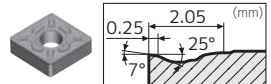
AC8115P/AC8020P/AC8025P/AC8035P

Application Guide

1st Recommended Grade

General-purpose
machining**AC8025P**

1st Recommended Chipbreaker

GU type

	Chipbreakers for High-efficiency Machining		Main Chipbreakers	Strong Cutting Edge Chipbreakers
Finishing to Small Depth of Cut	FE type 	SE type 	SU type 	SX type
General-purpose	GE type 	GU type 	UX type 	
Roughing to Large Depth of Cut	ME type 	MU type 	MX type 	

For high-speed and dry machining

High-speed
Machining**AC8115P***New*To improve tool
life at small
depths of cut**FE type**To increase
feed rate**GE type**

For heavy interrupted cutting emphasizing stability

Interrupted
Machining**AC8035P**To improve
tool life**GU type**To improve
machining stability**UX type**

For high-efficiency machining of hard steel and forgings

High
Efficiency**AC8020P**To increase
feed rate**GE type**To increase
cutting speed**GU type**

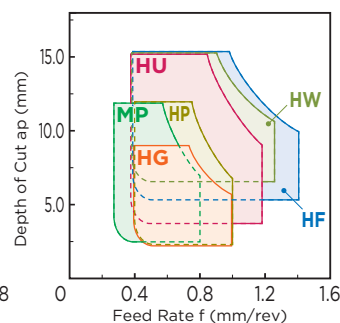
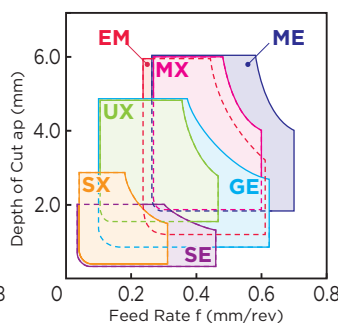
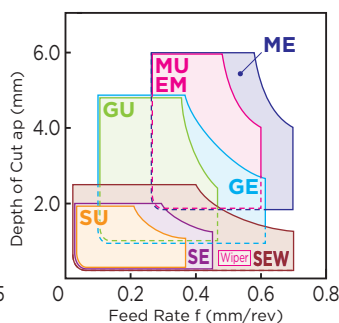
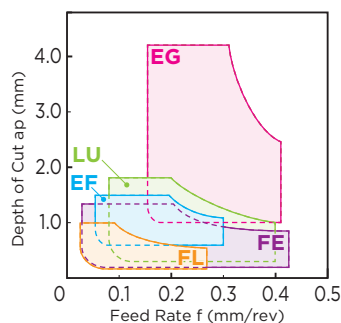
Chipbreaker Application Range

● Chip evacuation emphasised

● Continuous to light interrupted cutting

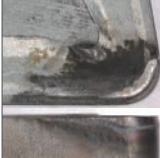
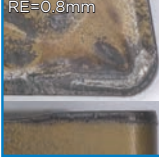
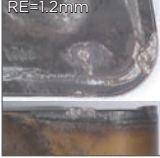
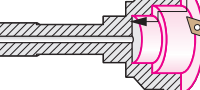
● Light interrupted to heavy interrupted cutting

● Rough to heavy cutting



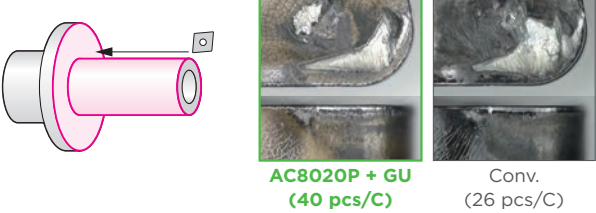
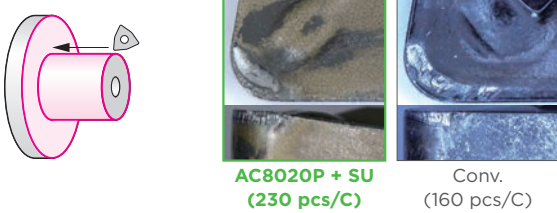
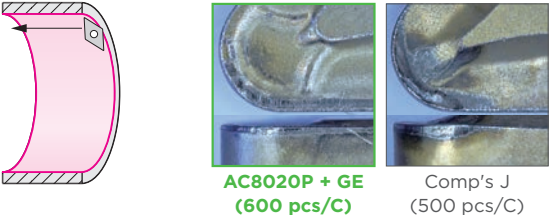
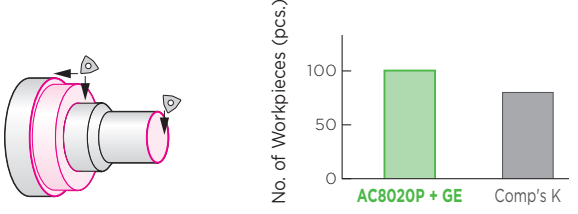
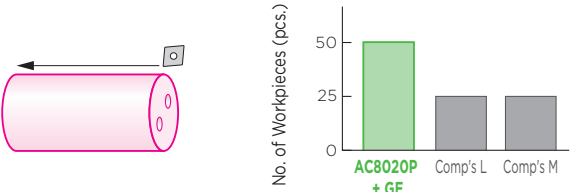
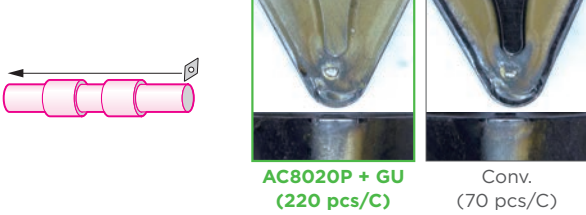
AC8115P/AC8020P/AC8025P/AC8035P

AC8115P Application Examples

SCM440 Rotor Shaft Suppresses crater wear for 1.3x longer tool life   AC8115P + MU (5 pcs/C)  Comp's A (4 pcs/C)	P110 Pipe 1.3x longer tool life even in high-load machining   AC8115P + EM (14 pcs/C)  Comp's B (11 pcs/C)
Insert: TNMG220412N-MU (AC8115P) Roughing Cutting Conditions: $vc=220\text{m/min}$ $f=0.4\text{mm/rev}$ $ap=2.5\text{mm}$ Wet	Insert: CNMG160616N-EM (AC8115P) Cutting Conditions: $vc=185\text{m/min}$ $f=0.6\text{mm/rev}$ $ap=4.0\text{mm}$ Wet
SCM440 Rotor Shaft Suppresses crater wear for 1.3x longer tool life   AC8115P + GE (150 pcs/C)  Comp's C (P05) (120 pcs/C)	SCM440 Rotor Shaft Suppresses wear for 2x longer tool life   AC8115P + MU (8 pcs/C)  Comp's D (4 pcs/C)
Insert: DNMG150612-GE (AC8115P) Roughing Cutting Conditions: $vc=310\text{--}340\text{m/min}$ $f=0.4\text{mm/rev}$ $ap=1.0\text{--}2.5\text{mm}$ Wet	Insert: CNMG120408N-MU (AC8115P) Cutting Conditions: $vc=240\text{m/min}$ $f=0.3\text{mm/rev}$ $ap=3.0\text{mm}$ Wet
Transmission Part Suppresses flank wear for 1.3x longer tool life   AC8115P + SU (100 pcs/C)  Comp's E (80 pcs/C)	S38C Motor Shaft Suppresses chipping and rake face wear   AC8115P + ME (250 pcs/C)  Comp's F (250 pcs/C)
Insert: DNMG150408N-SU (AC8115P) Finishing Cutting Conditions: $vc=300\text{m/min}$ $f=0.4\text{mm/rev}$ $ap=0.8\text{--}1.0\text{mm}$ Wet	Insert: CNMG120408N-ME (AC8115P) Roughing Cutting Conditions: $vc=280\text{m/min}$ $f=0.5\text{mm/rev}$ $ap=2.0\text{mm}$ Wet
SCM440 Rotor Shaft Suppresses cutting edge fractures for 1.2x longer tool life   AC8115P + SE (180 pcs/C)  Conventional Tool (150 pcs/C)	SKD61 Die Suppresses wear over the same machining time   AC8115P + GE (25 pcs/C)  Comp's G (25 pcs/C)
Insert: TNMG160408N-SE (AC8115P) Finishing Cutting Conditions: $vc=300\text{m/min}$ $f=0.45\text{mm/rev}$ $ap=0.2\text{--}0.3\text{mm}$ Wet	Insert: CNMG120408N-GE (AC8115P) Cutting Conditions: $vc=120\text{m/min}$ $f=0.2\text{mm/rev}$ $ap=1.5\text{mm}$ Wet

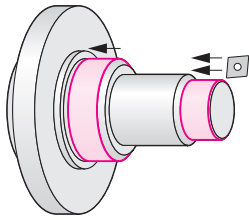
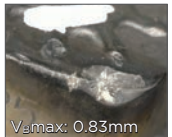
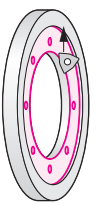
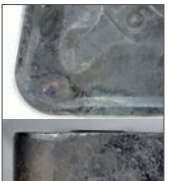
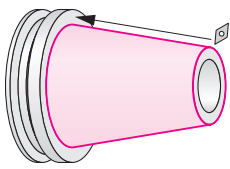
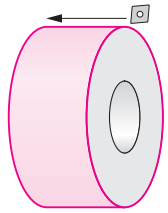
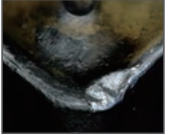
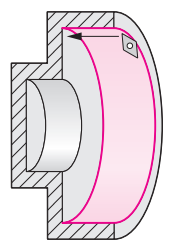
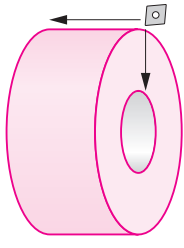
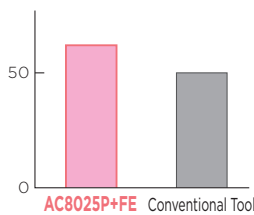
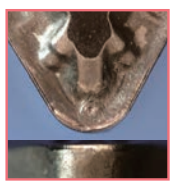
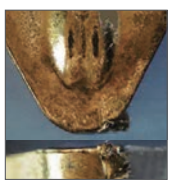
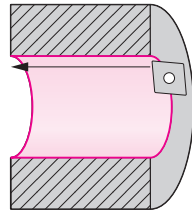
AC8115P/AC8020P/AC8025P/AC8035P

AC8020P Application Examples

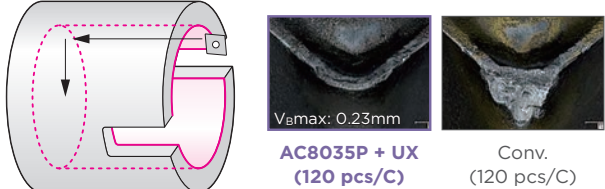
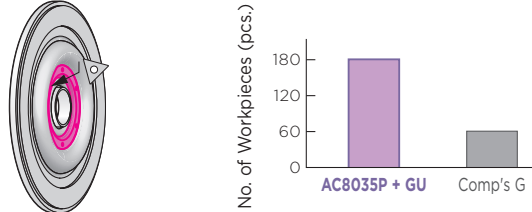
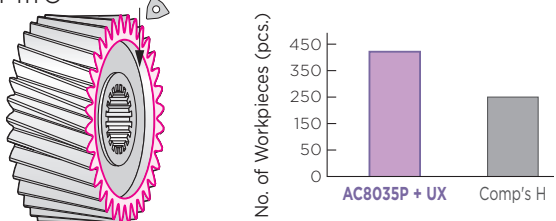
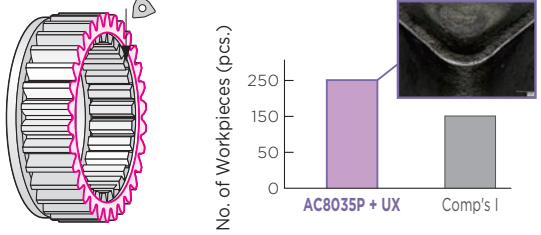
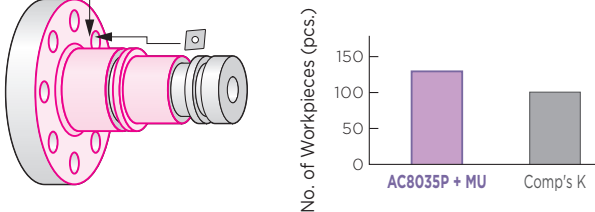
S53C CVJ Component	S35C Machine Tool Component
Suppresses chipping for 1.7x longer tool life  AC8020P + SE (100 pcs/C) Comp's H (60 pcs/C)	Suppresses both crater and flank wear for 2x longer tool life  AC8020P + SE (1,600 pcs/C) Comp's I (800 pcs/C)
Insert: DNMG150412N-SE (AC8020P) Cutting Conditions: $vc = 220\text{m/min}$ $f = 0.35\text{mm/rev}$ $ap = 1.00\text{mm}$ Wet	Insert: WNMG080408N-SE (AC8020P) Cutting Conditions: $vc = 240\text{m/min}$ $f = 0.25\text{mm/rev}$ $ap = 1.00\text{mm}$ Wet
SCM435 Equivalent Transmission Component	S45C Bearing
Suppresses crater wear for 1.5x longer tool life  AC8020P + GU (40 pcs/C) Conv. (26 pcs/C)	Suppresses crater wear and chipping for 1.4x longer tool life  AC8020P + SU (230 pcs/C) Conv. (160 pcs/C)
Insert: CNMG120408N-GU (AC8020P) Cutting Conditions: $vc = 250\text{m/min}$ $f = 0.3\text{mm/rev}$ $ap = 1.5\text{mm}$ Wet	Insert: WNMG080408N-SU (AC8020P) Cutting Conditions: $vc = 230\text{m/min}$ $f = 0.26\text{mm/rev}$ $ap = 1.00\text{mm}$ Wet
SUJ2 Bearing	S53C CVJ Component
Suppresses flank wear for 1.2x longer tool life and stable machining  AC8020P + GE (600 pcs/C) Comp's J (500 pcs/C)	1.3x longer tool life and stable machining  No. of Workpieces (pcs.) AC8020P + GE (100) Comp's K (80)
Insert: DNMG150412N-GE (AC8020P) Cutting Conditions: $vc = 300\text{m/min}$ $f = 0.3\text{mm/rev}$ $ap = 0.3\text{mm}$ Wet	Insert: WNMG080412N-GE (AC8020P) Cutting Conditions: $vc = 260\text{m/min}$ $f = 0.45\text{mm/rev}$ $ap = 1.50\text{mm}$ Wet
SCM440 Automotive Component	Boron Steel Shaft
Suppresses wear for 2x longer tool life and stable machining  No. of Workpieces (pcs.) AC8020P + GE (50) Comp's L (25) Comp's M (25)	Suppresses both crater wear and chipping for 3x longer tool life  AC8020P + GU (220 pcs/C) Conv. (70 pcs/C)
Insert: CNMG120408N-GE (AC8020P) Cutting Conditions: $vc = 190\text{m/min}$ $f = 0.3\text{mm/rev}$ $ap = 3.0\text{mm}$ Wet	Insert: DNMG150412N-UX (AC8020P) Cutting Conditions: $vc = 230\text{m/min}$ $f = 0.55\text{mm/rev}$ $ap = 1.00\text{mm}$ Wet

AC8115P/AC8020P/AC8025P/AC8035P

AC8025P Application Examples

S45C Automotive Chassis Component Suppresses crater wear   AC8025P + MP (150 pcs/C)  Comp's A (150 pcs/C) Insert: CNMM120416N-MP (AC8025P) Cutting Conditions: $v_c=180$ to 200m/min $f=0.43$ to 0.55mm/rev $a_p=1.00$ to 3.00mm Wet	SCr415 Ring Gear Suppresses chipping for 1.5x longer tool life   AC8025P + ME (150 pcs/C)  Comp's B (100 pcs/C) Insert: WNMG080416N-ME (AC8025P) Cutting Conditions: $v_c=250\text{m/min}$ $f=0.30$ to 0.45mm/rev $a_p=2.50\text{mm}$ Wet
SCM415 Tool Holder Suppresses adhesion fractures, enabling stable machining   AC8025P + EM (100 pcs/C)  Comp's C (100 pcs/C) Insert: DNMG150608N-EM (AC8025P) Cutting Conditions: $v_c=150\text{m/min}$ $f=0.4\text{mm/rev}$ $a_p=4.0\text{mm}$ Wet	S45C Ring Reduces crater wear for 3x longer tool life   AC8025P + GE (450 pcs/C)  Comp's D (150 pcs/C) Insert: CNMG120408N-GE (AC8025P) Cutting Conditions: $v_c=200$ to 250m/min $f=0.25\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet
Rolled Steel Cylinder Suppresses chipping for 2x longer tool life   AC8025P + SU (200 pcs/C)  Conv. (100 pcs/C) Insert: DCMT11T308N-SU (AC8025P) Cutting Conditions: $v_c=210\text{m/min}$ $f=0.15\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet	SMnC420H Bush Suppresses flank wear   AC8025P + ME (200 pcs/C)  Comp's E (200 pcs/C) Insert: CNMG120416N-ME (AC8025P) Cutting Conditions: $v_c=260\text{m/min}$ $f=0.5$ to 1.0mm/rev $a_p=1.5$ to 2.0mm Wet
Rolled Steel Front Cover Eliminates tearing in combination with FE type chipbreaker for 1.2x longer tool life   AC8025P + FE  Conv. Insert: TNMG160408N-FE (AC8025P) Cutting Conditions: Facing: $v_c=450$ to 480m/min $f=0.25$ to 0.32mm/rev $a_p=0.05$ to 0.25mm Wet Internal Boring: $v_c=400\text{m/min}$ $f=0.20$ to 0.30mm/rev $a_p=0.20$ to 0.30mm Wet	SCr415 Fastening Component Strong design realizes 1.5x longer tool life   AC8025P + GU  Comp's F Insert: CCMT09T308N-GU (AC8025P) Cutting Conditions: $v_c=190\text{m/min}$ $f=0.25\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet

AC8035P Application Examples

S35C Planetary Pinion Significantly suppresses fractures for 1.5x longer tool life  Insert: CNMG120412N-UX (AC8035P) Interrupted Machining Cutting Conditions: $vc = 180\text{m/min}$ $f = 0.3\text{mm/rev}$ $ap = 2.0\text{mm}$ Wet	S25C Equivalent Automotive Component Significantly suppresses fractures and extends tool life  Insert: CNMG120408N-UX (AC8035P) Interrupted Machining Cutting Conditions: $vc = 100$ to 130m/min $f = 0.2\text{mm/rev}$ $ap = 1.0$ to 3.2mm Wet
SPH440 Flange Suppresses chipping for 3x longer tool life  Insert: TNMG160408N-GU (AC8035P) Interrupted Roughing Cutting Conditions: $vc = 100\text{m/min}$ $f = 0.3\text{mm/rev}$ $ap = 1.5\text{mm}$ Wet	SNCN Gear Suppresses chipping for 1.7x longer tool life  Insert: WNMG080408N-UX (AC8035P) Interrupted Roughing Cutting Conditions: $vc = 180\text{m/min}$ $f = 0.15$ to 0.40mm/rev $ap = 1.00\text{mm}$ Wet
SCr420 Equivalent Reverse Gear Suppresses chipping for 1.6x longer tool life  Insert: WNMG080408N-UX (AC8035P) Interrupted Roughing Cutting Conditions: $vc = 230\text{m/min}$ $f = 0.15$ to 0.30mm/rev $ap = 1.00$ to 2.00mm Wet	SCr440 Flange Suppresses chipping for 1.5x longer tool life  Insert: WNMG080412N-GU (AC8035P) Interrupted Roughing Cutting Conditions: $vc = 80$ to 200m/min $f = 0.2\text{mm/rev}$ $ap = 1.5\text{mm}$ Dry
Alloy Steel Automotive Chassis Component Suppresses chipping for 1.3x longer tool life  Insert: CNMG190616N-MU (AC8035P) Mill-scale Work Continuous to Interrupted Machining Cutting Conditions: $vc = 140$ to 280m/min $f = 0.5\text{mm/rev}$ $ap = \text{Max. } 5.0\text{mm}$ Dry	

AC8115P/AC8020P/AC8025P/AC8035P

Negative 80° Diamond type

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	CNMG 090308N-FL					9.525	3.18	3.81	0.8
	CNMG 120404N-FL					12.7	4.76	5.16	0.4
	CNMG 120408N-FL								0.8
	CNMG 090304N-FE					9.525	3.18	3.81	0.4
	CNMG 090308N-FE					9.525	3.18	3.81	0.8
	CNMG 090404N-FE					9.525	4.76	3.81	0.4
	CNMG 090408N-FE					9.525	4.76	3.81	0.8
	CNMG 120402N-FE								0.2
	CNMG 120404N-FE					12.7	4.76	5.16	0.4
	CNMG 120408N-FE								0.8
	CNMG 090304N-LU					9.525	3.18	3.81	0.4
	CNMG 090308N-LU								0.8
	CNMG 120404N-LU					12.7	4.76	5.16	0.4
	CNMG 120408N-LU								0.8
	CNMG 120412N-LU								1.2
	CNMG 120404N-LUW					12.7	4.76	5.16	0.4
	CNMG 120408N-LUW								0.8
	CNMG 120412N-LUW								1.2
	CNMG 090304N-SU					9.525	3.18	3.81	0.4
	CNMG 090308N-SU					9.525	3.18	3.81	0.8
	CNMG 09T304N-SU					9.525	3.97	3.81	0.4
	CNMG 09T308N-SU								0.8
	CNMG 090404N-SU					9.525	4.76	3.81	0.4
	CNMG 090408N-SU					9.525	4.76	3.81	0.8
	CNMG 090412N-SU								1.2
	CNMG 120404N-SU					12.7	4.76	5.16	0.4
	CNMG 120408N-SU								0.8
	CNMG 120412N-SU								1.2
	CNMG 120404N-SE					12.7	4.76	5.16	0.4
	CNMG 120408N-SE								0.8
	CNMG 120412N-SE								1.2
	CNMG 090404N-SEW					9.525	4.76	3.81	0.4
	CNMG 090408N-SEW					9.525	4.76	3.81	0.8
	CNMG 120404N-SEW					12.7	4.76	5.16	0.4
	CNMG 120408N-SEW								0.8
	CNMG 120412N-SEW								1.2
	CNMG 120404N-EF					12.7	4.76	5.16	0.4
	CNMG 120408N-EF								0.8
	CNMG 120412N-EF								1.2
	CNMG 120404N-SX					12.7	4.76	5.16	0.4
	CNMG 120408N-SX								0.8
	CNMG 120412N-SX								1.2
	CNMG 090304N-GU					9.525	3.18	3.81	0.4
	CNMG 090308N-GU								0.8
	CNMG 090404N-GU					9.525	4.76	3.81	0.4
	CNMG 090408N-GU								0.8
	CNMG 090412N-GU								1.2
	CNMG 120404N-GU					12.7	4.76	5.16	0.4
	CNMG 120408N-GU								0.8
	CNMG 120412N-GU								1.2
	CNMG 120416N-GU								1.6
	CNMG 160608N-GU								0.8
	CNMG 160612N-GU					15.875	6.35	6.35	1.2
	CNMG 160616N-GU								1.6
	CNMG 120404N-GE					12.7	4.76	5.16	0.4
	CNMG 120408N-GE								0.8
	CNMG 120412N-GE								1.2
	CNMG 120416N-GE								1.6
	CNMG 160608N-GE					15.875	6.35	6.35	0.8
	CNMG 160612N-GE								1.2
	CNMG 160616N-GE								1.6
	CNMG 190612N-GE					19.05	6.35	7.94	1.2
	CNMG 190616N-GE								1.6
	CNMG 120408N-GUW					12.7	4.76	5.16	0.8
	CNMG 120412N-GUW								1.2
	CNMG 160612N-GUW					15.875	6.35	6.35	1.2
	CNMG 090304N-UX					9.525	3.18	3.81	0.4
	CNMG 090308N-UX								0.8
	CNMG 120404N-UX					12.7	4.76	5.16	0.4
	CNMG 120408N-UX								0.8
	CNMG 120412N-UX								1.2
	CNMG 120416N-UX								1.6
	CNMG 160608N-UX					15.875	6.35	6.35	0.8
	CNMG 160612N-UX								1.2
	CNMG 160616N-UX								1.6
	CNMG 190608N-UX								0.8
	CNMG 190612N-UX					19.05	6.35	7.94	1.2
	CNMG 190616N-UX								1.6

Negative 80° Diamond type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)				
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius	
	CNMG 090304N-UG			●	●	9.525	3.18	3.81	0.4	
	CNMG 090308N-UG			●	●				0.8	
	CNMG 09T304N-UG			●	●	9.525	3.97	3.81	0.4	
	CNMG 09T308N-UG			●	●				0.8	
	CNMG 090404N-UG			●	●	9.525	4.76	3.81	0.4	
	CNMG 090408N-UG			●	●				0.8	
	CNMG 120404N-UG			●	●				0.4	
	CNMG 120408N-UG			●	●	12.7	4.76	5.16	0.8	
	CNMG 120412N-UG			●	●				1.2	
	CNMG 120416N-UG			●	●				1.6	
UG	CNMG 160608N-UG			●	●				0.8	
	CNMG 160612N-UG			●	●	15.875	6.35	6.35	1.2	
	CNMG 160616N-UG			●	●				1.6	
	CNMG 190608N-UG			●	●	19.05	6.35	7.94	0.8	
UG	CNMG 190612N-UG			●	●				1.2	
	CNMG 190616N-UG			●	●				1.6	
		CNMG 120404N-EG	●	●	●	●	12.7	4.76	5.16	0.4
		CNMG 120408N-EG	●	●	●	●				0.8
CNMG 120412N-EG		●	●	●	●				1.2	
CNMG 160608N-EG		●	●	●	●	15.875	6.35	6.35	0.8	
CNMG 160612N-EG		●	●	●	●				1.2	
CNMG 160616N-EG		●	●	●	●				1.6	
EG	CNMG 190612N-EG	●	●	●	●	19.05	6.35	7.94	1.2	
	CNMG 190616N-EG	●	●	●	●				1.6	
		CNMG 120408N-MU	●	●	●	●	12.7	4.76	5.16	0.8
		CNMG 120412N-MU	●	●	●	●				1.2
CNMG 120416N-MU		●	●	●	●				1.6	
CNMG 160608N-MU		●	●	●	●	15.875	6.35	6.35	0.8	
CNMG 160612N-MU		●	●	●	●				1.2	
CNMG 160616N-MU		●	●	●	●				1.6	
CNMG 190608N-MU		●	●	●	●				0.8	
CNMG 190612N-MU		●	●	●	●	19.05	6.35	7.94	1.2	
CNMG 190616N-MU		●	●	●	●				1.6	
CNMG 190624N-MU		●	●	●	●				2.4	
MU	CNMG 250924N-MU	●	●	●	●	25.4	9.52	9.12	2.4	
		CNMG 120408N-EM	●	●	●	●	12.7	4.76	5.16	0.8
		CNMG 120412N-EM	●	●	●	●				1.2
		CNMG 120416N-EM	●	●	●	●				1.6
CNMG 160608N-EM		●	●	●	●	15.875	6.35	6.35	0.8	
EM	CNMG 160612N-EM	●	●	●	●				1.2	
	CNMG 160616N-EM	●	●	●	●				1.6	
	CNMG 190612N-EM	●	●	●	●	19.05	6.35	7.94	1.6	
	CNMG 190624N-EM	●	●	●	●				2.4	
EM	CNMG 250924N-EM	●	●	●	●	25.4	9.52	9.12	2.4	
		CNMG 120408N-ME	●	●	●	●	12.7	4.76	5.16	0.8
		CNMG 120412N-ME	●	●	●	●				1.2
		CNMG 120416N-ME	●	●	●	●				1.6
CNMG 160608N-ME		●	●	●	●	15.875	6.35	6.35	0.8	
CNMG 160612N-ME		●	●	●	●				1.2	
CNMG 160616N-ME		●	●	●	●				1.6	
ME	CNMG 190612N-ME	●	●	●	●	19.05	6.35	7.94	1.6	
	CNMG 190624N-ME	●	●	●	●				2.4	
	CNMG 250924N-ME	●	●	●	●	25.4	9.52	9.12	2.4	
		CNMG 120408N-MX	●	●	●	●	12.7	4.76	5.16	0.8
CNMG 120412N-MX		●	●	●	●				1.2	
CNMG 120416N-MX		●	●	●	●				1.6	
CNMG 160608N-MX		●	●	●	●	15.875	6.35	6.35	0.8	
CNMG 160612N-MX		●	●	●	●				1.2	
CNMG 160616N-MX		●	●	●	●				1.6	
MX	CNMG 190612N-MX	●	●	●	●	19.05	6.35	7.94	1.2	
	CNMG 190616N-MX	●	●	●	●				1.6	
		CNMG 120404N-UZ			●	●				0.4
		CNMG 120408N-UZ			●	●	12.7	4.76	5.16	0.8
CNMG 120412N-UZ				●	●				1.2	
CNMG 120416N-UZ				●	●				1.6	
CNMG 160608N-UZ				●	●	15.875	6.35	6.35	0.8	
CNMG 160612N-UZ				●	●				1.2	
UZ	CNMG 160616N-UZ			●	●				1.6	
	CNMG 190608N-UZ			●	●	19.05	6.35	7.94	0.8	
	CNMG 190612N-UZ			●	●				1.2	
	CNMG 190616N-UZ			●	●				1.6	
	CNMM 120408N-MP	●	●	●	●	12.7	4.76	5.16	0.8	
	CNMM 120412N-MP	●	●	●	●				1.2	
	CNMM 120416N-MP	●	●	●	●				1.6	
	CNMM 160608N-MP			●	●	15.875	6.35	6.35	0.8	
	CNMM 160612N-MP	●	●	●	●				1.2	
MP	CNMM 160616N-MP	●	●	●	●				1.6	

AC8115P/AC8020P/AC8025P/AC8035P

◇ Negative 80° Diamond type (continued)

Shape	Cat. No.	Stock			Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	CNMM 190608N-MP							0.8
	190612N-MP	●	●	●	19.05	6.35	7.94	1.2
	190616N-MP	●	●	●				1.6
	190624N-MP	●	●	●				2.4
	CNMM 250724N-MP		●		25.4	7.94	9.12	2.4
	CNMM 250924N-MP		●		25.4	9.52	9.12	2.4
	CNMM 120408N-HG	●	●	●				0.8
	120412N-HG	●	●	●	12.7	4.76	5.16	1.2
	120416N-HG		●	●				1.6
	CNMM 160612N-HG	●	●	●	15.875	6.35	6.35	1.2
	160616N-HG	●	●	●				1.6
	CNMM 190612N-HG	●	●	●				1.2
	190616N-HG	●	●	●	19.05	6.35	7.94	1.6
	190624N-HG	●	●	●				2.4
	CNMM 120408N-HP		●	●				0.8
	120412N-HP		●	●	12.7	4.76	5.16	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		●	●				0.8
	190612N-HP		●	●	19.05	6.35	7.94	1.2
	190616N-HF		●	●				1.6
	190624N-HF		●	●	19.05	6.35	7.94	2.4
	CNMM 250924N-HF		●	●				2.4
	250932N-HF		●	●	25.4	9.52	9.12	3.2

◇ Negative 55° Diamond type

	DNMG 150404N-FL		●					0.4
	150408N-FL		●		12.7	4.76	5.16	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	●	●	●				0.2
	150404N-FE	●	●	●	12.7	4.76	5.16	0.4
	150408N-FE	●	●	●				0.8
	150412N-FE	●	●	●				1.2
	DNMG 150602N-FE	●	●	●				0.2
	150604N-FE	●	●	●	12.7	6.35	5.16	0.4
	150608N-FE	●	●	●				0.8
	150612N-FE	●	●	●				1.2
	DNMG 110404N-LU	●	●	●	9.525	4.76	3.81	0.4
	110408N-LU	●	●	●				0.8
	110412N-LU	●	●	●				1.2
	DNMG 150402N-LU	●	●	●				0.2
	150404N-LU	●	●	●	12.7	4.76	5.16	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	●	●	●				0.4*
	150408N-SEW	●	●	●	12.7	4.76	5.16	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	●	●	●				0.4
	150408N-SX	●	●	●	12.7	4.76	5.16	0.8
	150412N-SX	●	●	●				1.2

◇ Negative 55° Diamond type (continued)

Shape	Cat. No.	Stock			Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	DNMG 110404N-GU	●	●	●				0.4
	110408N-GU	●	●	●	9.525	4.76	3.81	0.8
	110412N-GU	●	●	●				1.2
	DNMG 150404N-GU	●	●	●				0.4
	150408N-GU	●	●	●	12.7	4.76	5.16	0.8
	150412N-GU	●	●	●				1.2
	150416N-GU	●	●	●				1.6
	DNMG 150604N-GU	●	●	●				0.4
	150608N-GU	●	●	●	12.7	6.35	5.16	0.8
	150612N-GU	●	●	●				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
	150416N-GE	●	●	●				1.6
	DNMG 150604N-GE	●	●	●				0.4
	150608N-GE	●	●	●	12.7	6.35	5.16	0.8
	150612N-GE	●	●	●				1.2
	150616N-GE	●	●	●				1.6
	DNMG 110408N-UX	●	●	●	9.525	4.76	3.81	0.8
	110412N-UX	●	●	●				1.2
	DNMG 150404N-UX	●	●	●	12.7	4.76	5.16	0.4
	150408N-UX	●	●	●				0.8
	150412N-UX	●	●	●				1.2
	DNMG 150604N-UX	●	●	●				0.4
	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 150404N-UG		●	●	12.7	4.76	5.16	0.4
	150408N-UG		●	●				0.8
	150412N-UG		●	●				1.2
	DNMG 150604N-UG		●	●				0.4
	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
	150416N-MU	●	●	●				1.6
	DNMG 150608N-MU	●	●	●	12.7	6.35	5.16	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
	150416N-EM	●	●	●				1.6
	DNMG 150608N-EM	●	●	●	12.7	6.35	5.16	0.8
	150612N-EM	●	●	●				1.2
	DNMG 150408N-ME	●	●	●	12.7	4.76	5.16	0.8
	150412N-ME	●	●	●				1.2
	150416N-ME	●	●	●				1.6
	DNMG 150608N-ME	●	●	●	12.7	6.35	5.16	0.8
	150612N-ME	●	●	●				1.2
	150616N-ME	●	●	●				1.6
	DNMG 150408N-MX	●	●	●	12.7	4.76	5.16	0.8

AC8115P/AC8020P/AC8025P/AC8035P

◆ Negative 55° Diamond type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 MP	DNMM 150604N-MP					12.7	6.35	5.16	0.4
	150608N-MP	●	●	●	●				0.8
	150612N-MP	●	●	●	●				1.2
	150616N-MP	●	●	●	●				1.6
 HP	DNMM 150404N-HP					12.7	4.76	5.16	0.4
	150408N-HP								0.8
	150412N-HP								1.2
	150416N-HP								1.6
	DNMM 150604N-HP					12.7	6.35	5.16	0.4
	150608N-HP								0.8
	150612N-HP								1.2
	150616N-HP								1.6

○ Negative Square type

 FL	SNMG 120408N-FL					12.7	4.76	5.16	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
 SE	SNMG 120408N-SE	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-SE	●	●	●	●				1.2
 EF	SNMG 120404N-EF	●	●	●	●	12.7	4.76	5.16	0.4
	120408N-EF	●	●	●	●				0.8
 SX	SNMG 120408N-SX	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-SX	●	●	●	●				1.2
 GU	SNMG 090304N-GU				●	9.525	3.18	3.81	0.4
	090308N-GU	●	●	●	●				0.8
	SNMG 120404N-GU	●	●	●	●	12.7	4.76	5.16	0.4
	120408N-GU	●	●	●	●				0.8
	120412N-GU	●	●	●	●				1.2
	120416N-GU	●	●	●	●				1.6
	SNMG 150608N-GU	●	●	●	●	15.875	6.35	6.35	0.8
	150612N-GU	●	●	●	●				1.2
	150616N-GU	●	●	●	●				1.6
 GE	SNMG 120408N-GE	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-GE	●	●	●	●				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
 UX	SNMG 090308N-UX				●	9.525	3.18	3.81	0.8
	SNMG 120404N-UX				●				0.4
	120408N-UX	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-UX	●	●	●	●				1.2
	120416N-UX	●	●	●	●				1.6
	SNMG 190612N-UX	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-UX	●	●	●	●				1.6
 UG	SNMG 090308N-UG				●	9.525	3.18	3.81	0.8
	SNMG 120408N-UG				●				0.8
	120412N-UG				●	12.7	4.76	5.16	1.2
	120416N-UG				●				1.6
	SNMG 150612N-UG				●	15.875	6.35	6.35	1.2
	SNMG 190612N-UG				●				1.2
	190616N-UG				●				1.6
 EG	SNMG 250924N-UG				●	25.4	9.52	9.12	2.4
	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
 MU	SNMG 190612N-EG	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-EG	●	●	●	●				1.6
	SNMG 120408N-MU	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-MU	●	●	●	●				1.2
	120416N-MU	●	●	●	●				1.6
	SNMG 150608N-MU	●	●	●	●	15.875	6.35	6.35	0.8
	150612N-MU	●	●	●	●				1.2
	150616N-MU	●	●	●	●				1.6

● mark: Standard stocked item ● mark: Standard stocked item (new product) Blank: Made-to-order item

○ Negative Square type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)				
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius	
 MU	SNMG 190612N-MU	●	●	●	●	19.05	6.35	7.94	1.2	
	190616N-MU	●	●	●	●				1.6	
	190624N-MU	●	●	●	●				2.4	
 EM	SNMG 250924N-MU	●	●	●	●	25.4	9.52	9.12	2.4	
	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					
 EM	SNMG 190612N-EM	●	●	●	●	19.05	6.35	7.94	1.2	
	190616N-EM	●	●	●	●				1.6	
	190624N-EM	●	●	●	●				2.4	
 ME	SNMG 250924N-EM	●	●	●	●	25.4	9.52	9.12	2.4	
	SNMG 120408N-ME	●	●	●	●	12.7	4.76	5.16	0.8	
	120412N-ME	●	●	●	●				1.2	
	120416N-ME	●	●	●	●				1.6	
	SNMG 150608N-ME	●	●	●	●	15.875	6.35	6.35	0.8	
	150612N-ME	●	●	●	●				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					
 MX	SNMG 250924N-ME	●	●	●	●	25.4	9.52	9.12	2.4	
	SNMG 120408N-MX	●	●	●	●	12.7	4.76	5.16	0.8	
	120412N-MX	●	●	●	●				1.2	
	120416N-MX	●	●	●	●				1.6	
	SNMG 150612N-MX	●	●	●	●	15.875	6.35	6.35	1.2	
	150616N-MX	●	●	●	●				1.6	
 MX	SNMG 190612N-MX	●	●	●	●	19.05	6.35	7.94	1.2	
	190616N-MX	●	●	●	●				1.6	
	 UZ	SNMG 120408N-UZ			●	●	12.7	4.76	5.16	0.8
		120412N-UZ			●	●				1.2
120416N-UZ				●	●	1.6				
SNMG 150612N-UZ				●	●	15.875	6.35	6.35	1.2	
190612N-UZ				●	●				1.2	
190616N-UZ				●	●	1.6				
 HM	SNMG 120408R-HM	●	●	●	●	12.7	4.76	5.16	0.8	
	120408L-HM	●	●	●	●				0.8	
 MP	SNMM 120408N-MP	●	●	●	●	12.7	4.76	5.16	0.8	
	120412N-MP	●	●	●	●				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	
 HG	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	●	●	●	●	12.7	4.76	5.16	0.8	
	120412N-HG	●	●	●	●				1.2	
	120416N-HG	●	●	●	●				1.6	
	SNMM 150616N-HG	●	●	●	●	15.875	6.35	6.35	1.6	
190612N-HG	●	●	●	●	1.2					
 HP	190616N-HG	●	●	●	●	19.05	6.35	7.94	1.6	
	190624N-HG	●	●	●	●				2.4	
	SNMM 120408N-HP			●	●	12.7	4.76	5.16	0.8	
	120412N-HP			●	●				1.2	
	120416N-HP			●	●				1.6	
	SNMM 190612N-HP			●	●	19.05	6.35	7.94	1.2	
190616N-HP			●	●	1.6					
 HU	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	
 HW	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	
 HF	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	

AC8115P/AC8020P/AC8025P/AC8035P

△ Negative Triangular type

Shape	Cat. No.	Stock			Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	TNMG 160404N-FL		●		9.525	4.76	3.81	0.4
	160408N-FL		●					0.8
	TNMG 160402N-FE	●	●	●	9.525	4.76	3.81	0.2
	160404N-FE	●	●	●				0.4
	160408N-FE	●	●	●				0.8
	160412N-FE	●	●	●				1.2
	TNMG 160404N-LU	●	●	●	9.525	4.76	3.81	0.4
	160408N-LU	●	●	●				0.8
	160412N-LU	●	●	●				1.2
	TNMG 160404N-SU	●	●	●	9.525	4.76	3.81	0.4
	160408N-SU	●	●	●				0.8
	160412N-SU	●	●	●				1.2
	TNMG 160404N-SE	●	●	●	9.525	4.76	3.81	0.4
	160408N-SE	●	●	●				0.8
	160412N-SE	●	●	●				1.2
	TNMG 220404N-SE	●	●	●	12.7	4.76	5.16	0.4
	220408N-SE	●	●	●				0.8
	220412N-SE	●	●	●				1.2
	TNMG 160404N-EF	●	●	●	9.525	4.76	3.81	0.4
	160408N-EF	●	●	●				0.8
	TNMG 160304N-SX	●	●	●	9.525	3.18	3.81	0.4
	160308N-SX	●	●	●				0.8
	TNMG 160404N-SX	●	●	●	9.525	4.76	3.81	0.4
	160408N-SX	●	●	●				0.8
	TNMG 220404N-SX	●	●	●	12.7	4.76	5.16	0.4
	220408N-SX	●	●	●				0.8
	TNMG 160404N-GU	●	●	●	9.525	4.76	3.81	0.4
	160408N-GU	●	●	●				0.8
	160412N-GU	●	●	●				1.2
	TNMG 220404N-GU	●	●	●	12.7	4.76	5.16	0.4
	220408N-GU	●	●	●				0.8
	220412N-GU	●	●	●				1.2
	TNMG 160404N-GE	●	●	●	9.525	4.76	3.81	0.4
	160408N-GE	●	●	●				0.8
	TNMG 220408N-GE	●	●	●	12.7	4.76	5.16	0.8
	220412N-GE	●	●	●				1.2
	TNMG 160404N-UX	●	●	●	9.525	4.76	3.81	0.4
	160408N-UX	●	●	●				0.8
	TNMG 220408N-UX	●	●	●	12.7	4.76	5.16	0.8
	220412N-UX	●	●	●				1.2
	TNMG 160404N-UG		●	●	9.525	4.76	3.81	0.4
	160408N-UG		●	●				0.8
	TNMG 220408N-UG		●	●	12.7	4.76	5.16	0.8
	220412N-UG		●	●				1.2
	TNMG 160404N-EG	●	●	●	9.525	4.76	3.81	0.4
	160408N-EG	●	●	●				0.8
	160412N-EG	●	●	●				1.2
	TNMG 160408N-MU	●	●	●	9.525	4.76	3.81	0.8
	160412N-MU	●	●	●				1.2
	TNMG 220408N-MU	●	●	●	12.7	4.76	5.16	0.8
	220412N-MU	●	●	●				1.2
	TNMG 220416N-MU	●	●	●	15.875	6.35	6.35	1.6
	270612N-MU		●	●				1.2
	TNMG 160408N-EM	●	●	●	9.525	4.76	3.81	0.8
	160412N-EM	●	●	●				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	●	●	●				1.2
	TNMG 220408N-ME	●	●	●	12.7	4.76	5.16	0.8
	220412N-ME	●	●	●				1.2
	TNMG 160408N-MX	●	●	●	9.525	4.76	3.81	0.8
	160412N-MX	●	●	●				1.2
	TNMG 220408N-MX	●	●	●	12.7	4.76	5.16	0.8
	220412N-MX	●	●	●				1.2

△ Negative Triangular type (continued)

Shape	Cat. No.	Stock			Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	TNMG 160404N-UZ		●	●	9.525	4.76	3.81	0.4
	160408N-UZ		●	●				0.8
	160412N-UZ		●	●				1.2
	160416N-UZ		●	●				1.6
	TNMG 220408N-UZ		●	●	12.7	4.76	5.16	0.8
	220412N-UZ		●	●				1.2
	TNMG 270608N-UZ		●	●	15.875	6.35	6.35	0.8
	270612N-UZ		●	●				1.2
	TNMG 160404R-HM	●	●	●	9.525	4.76	3.81	0.4
	160404L-HM	●	●	●				0.4
	160408R-HM	●	●	●				0.8
	160408L-HM	●	●	●				0.8
	TNMG 220404R-HM	●	●	●	12.7	4.76	5.16	0.4
	220404L-HM	●	●	●				0.4
	220408R-HM	●	●	●				0.8
	220408L-HM	●	●	●				0.8
	TNMM 160404N-MP		●	●	9.525	4.76	3.81	0.4
	160408N-MP		●	●				0.8
	TNMM 220408N-MP		●	●	12.7	4.76	5.16	0.8
	220412N-MP		●	●				1.2
	TNMM 270612N-MP		●	●	15.875	6.35	6.35	1.2
	270616N-MP		●	●				1.6
	TNMM 220408N-HG		●	●	12.7	4.76	5.16	0.8
	220412N-HG		●	●				1.2
	220416N-HG		●	●				1.6
	TNMM 160408N-HP		●	●	9.525	4.76	3.81	0.8
	160412N-HP		●	●				1.2
	TNMM 220408N-HP		●	●	12.7	4.76	5.16	0.8
	220412N-HP		●	●				1.2
	TNMM 270612N-HP		●	●	15.875	6.35	6.35	1.2

● mark: Standard stocked item ● mark: Standard stocked item (new product) Blank: Made-to-order item

AC8115P/AC8020P/AC8025P/AC8035P

Negative 35° Diamond type

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner 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								0.4
	160408N-LU					9.525	4.76	3.81	0.8
	160412N-LU								1.2
 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					9.525	4.76	3.81	0.2
	160404N-EF								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								0.4
	160408N-GU					9.525	4.76	3.81	0.8
	160412N-GU								1.2
 GE	VNMG 160404N-GE								0.4
	160408N-GE					9.525	4.76	3.81	0.8
	160412N-GE								1.2
 UX	VNMG 160404N-UX								0.4
	160408N-UX					9.525	4.76	3.81	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								0.4
	160408N-EG					9.525	4.76	3.81	0.8
	160412N-EG								1.2
 UZ	VNMG 160404N-UZ								0.4
	160408N-UZ					9.525	4.76	3.81	0.8
	160412N-UZ								1.2

Negative Trigon type

 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
 LU	080412N-FE								1.2
	WNMG 060404N-LU								0.4
	060408N-LU					9.525	4.76	3.81	0.8
	060412N-LU								1.2
 LUW	WNMG 080404N-LU								0.4
	080408N-LU					12.7	4.76	5.16	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								0.4
	080408N-LUW					12.7	4.76	5.16	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								0.4
 SU	060408N-SU					9.525	4.76	3.81	0.8
	060412N-SU								1.2
	WNMG 080404N-SU								0.4
	080408N-SU					12.7	4.76	5.16	0.8
	080412N-SU								1.2

Negative Trigon type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 SE	WNMG 080404N-SE								0.4
	080408N-SE					12.7	4.76	5.16	0.8
 SEW	080412N-SE								1.2
	WNMG 060404N-SEW								0.4
 SEW	060408N-SEW					9.525	4.76	3.81	0.8
	080404N-SEW								0.4
	080408N-SEW					12.7	4.76	5.16	0.8
 EF	080412N-SEW								1.2
	WNMG 060404N-EF								0.4
 EF	060408N-EF					9.525	4.76	3.81	0.8
	080404N-EF								0.4
 SX	080408N-EF					12.7	4.76	5.16	0.8
	080412N-SX								1.2
 GU	WNMG 080404N-SX								0.4
	080408N-SX					12.7	4.76	5.16	0.8
	080412N-SX								1.2
 GE	WNMG 060404N-GU								0.4
	060408N-GU					9.525	4.76	3.81	0.8
	060412N-GU								1.2
 GU	WNMG 080404N-GU								0.4
	080408N-GU					12.7	4.76	5.16	0.8
	080412N-GU								1.2
 GE	WNMG 060408N-GE								0.8
	060412N-GE					9.525	4.76	3.81	1.2
 GE	WNMG 080404N-GE								0.4
	080408N-GE					12.7	4.76	5.16	0.8
	080412N-GE								1.2
 GUW	080416N-GE								1.6
	WNMG 060408N-GUW					9.525	4.76	3.81	0.8
	080408N-GUW					12.7	4.76	5.16	0.8
 GUW	080412N-GUW								1.2
	WNMG 080404N-UX								0.4
	080408N-UX					12.7	4.76	5.16	0.8
 UX	080412N-UX								1.2
	WNMG 06T304N-UG								0.4
 UG	06T308N-UG					9.525	3.97	3.81	0.8
	WNMG 060404N-UG								0.4
 UG	060408N-UG					9.525	4.76	3.81	0.8
	080404N-UG								0.4
	080408N-UG					12.7	4.76	5.16	0.8
 UG	080412N-UG								1.2
	WNMG 060408N-EG								0.8
 EG	060412N-EG					9.525	4.76	3.81	1.2
	WNMG 080404N-EG								0.4
 EG	080408N-EG					12.7	4.76	5.16	0.8
	080412N-EG								1.2
 MU	WNMG 060408N-MU								0.8
	060412N-MU					9.525	4.76	3.81	1.2
	WNMG 080408N-MU								0.8
 EM	080412N-MU					12.7	4.76	5.16	1.2
	080416N-MU								1.6
	WNMG 080408N-EM					12.7	4.76	5.16	0.8
 ME	080412N-EM								1.2
	WNMG 060408N-ME								0.8
 MX	060412N-ME					9.525	4.76	3.81	1.2
	WNMG 080408N-ME								0.8
	080412N-ME					12.7	4.76	5.16	1.2
 UZ	080416N-ME								1.6
	WNMG 080408N-MX					12.7	4.76	5.16	0.8
 UZ	080412N-MX								1.2
	WNMG 080404N-UZ								0.4
	080408N-UZ					12.7	4.76	5.16	0.8
	080412N-UZ								1.2

AC8115P/AC8020P/AC8025P/AC8035P

Positive 80° Diamond type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	7°	CCMT 060202N-LU	●	●	●	●	6.35	2.38	2.8	0.2
		060204N-LU	●	●	●	●	6.35	2.38	2.8	0.4
		CCMT 09T304N-LU	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-LU	●	●	●	●	9.525	3.97	4.4	0.8
	7°	CCMT 09T304N-LUW	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-LUW	●	●	●	●	9.525	3.97	4.4	0.8
	7°	CCMT 060202N-LB	●	●	●	●	6.35	2.38	2.8	0.2
		060204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		060208N-LB	●	●	●	●	6.35	2.38	2.8	0.8
		CCMT 09T302N-LB	●	●	●	●	9.525	3.97	4.4	0.2
	7°	09T304N-LB	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-LB	●	●	●	●	9.525	3.97	4.4	0.8
	7°	CCMT 060202N-SU	●	●	●	●	6.35	2.38	2.8	0.2
		060204N-SU	●	●	●	●	6.35	2.38	2.8	0.4
		060208N-SU	●	●	●	●	6.35	2.38	2.8	0.8
		CCMT 09T302N-SU	●	●	●	●	9.525	3.97	4.4	0.2
	7°	09T304N-SU	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-SU	●	●	●	●	9.525	3.97	4.4	0.8
	7°	CCMT 120404N-SU	●	●	●	●	12.7	4.76	5.5	0.4
		120408N-SU	●	●	●	●	12.7	4.76	5.5	0.8
	7°	CCMT 060204N-SC	●	●	●	●	6.35	2.38	2.8	0.4
		CCMT 080304N-SC	●	●	●	●	7.94	3.18	3.4	0.4
		CCMT 090308N-SC	●	●	●	●	9.525	3.18	4.4	0.8
		CCMT 120408N-SC	●	●	●	●	12.7	4.76	5.5	0.8
	7°	CCMT 060204N-GU	●	●	●	●	6.35	2.38	2.8	0.4
		060208N-GU	●	●	●	●	6.35	2.38	2.8	0.8
		CCMT 09T304N-GU	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-GU	●	●	●	●	9.525	3.97	4.4	0.8
	7°	CCMT 120408N-GU	●	●	●	●	12.7	4.76	5.5	0.8
	7°	CCMT 09T304N-MU	●	●	●	●	9.525	3.97	4.4	0.4
		09T308N-MU	●	●	●	●	9.525	3.97	4.4	0.8
	11°	CPMT 080204N-LU	●	●	●	●	7.94	2.38	3.4	0.4
		CPMT 090304N-LU	●	●	●	●	9.525	3.18	4.4	0.4
		090308N-LU	●	●	●	●	9.525	3.18	4.4	0.8
		CPMT 090304N-LUW	●	●	●	●	9.525	3.18	4.4	0.4
	11°	090308N-LUW	●	●	●	●	9.525	3.18	4.4	0.8
	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	●	●	●	●	9.525	3.18	4.4	0.8
	11°	CPMT 080204N-SU	●	●	●	●	7.94	2.38	3.4	0.4
		CPMT 080208N-SU	●	●	●	●	7.94	2.38	3.4	0.8
		CPMT 090304N-SU	●	●	●	●	9.525	3.18	4.4	0.4
		090308N-SU	●	●	●	●	9.525	3.18	4.4	0.8
	11°	CPMT 090304N-GU	●	●	●	●	9.525	3.18	4.4	0.4
		090308N-GU	●	●	●	●	9.525	3.18	4.4	0.8
	11°	CPMT 080204N-MU	●	●	●	●	7.94	2.38	3.4	0.4
		080208N-MU	●	●	●	●	7.94	2.38	3.4	0.8
		CPMT 090304N-MU	●	●	●	●	9.525	3.18	4.4	0.4
		090308N-MU	●	●	●	●	9.525	3.18	4.4	0.8

Positive 55° Diamond type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	7°	DCMT 070202N-LU	●	●	●	●	6.35	2.38	2.8	0.2
		070204N-LU	●	●	●	●	6.35	2.38	2.8	0.4
	7°	DCMT 11T302N-LU	●	●	●	●	9.525	3.97	4.4	0.2
		11T304N-LU	●	●	●	●	9.525	3.97	4.4	0.4
		11T308N-LU	●	●	●	●	9.525	3.97	4.4	0.8
	7°	DCMT 070202N-LB	●	●	●	●	6.35	2.38	2.8	0.2
		070204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		070208N-LB	●	●	●	●	6.35	2.38	2.8	0.8
		DCMT 11T302N-LB	●	●	●	●	9.525	3.97	4.4	0.2
	7°	11T304N-LB	●	●	●	●	9.525	3.97	4.4	0.4
		11T308N-LB	●	●	●	●	9.525	3.97	4.4	0.8
	7°	DCMT 070202N-SU	●	●	●	●	6.35	2.38	2.8	0.2
		070204N-SU	●	●	●	●	6.35	2.38	2.8	0.4
		070208N-SU	●	●	●	●	6.35	2.38	2.8	0.8
		DCMT 11T302N-SU	●	●	●	●	9.525	3.97	4.4	0.2
	7°	11T304N-SU	●	●	●	●	9.525	3.97	4.4	0.4
		11T308N-SU	●	●	●	●	9.525	3.97	4.4	0.8
	7°	DCMT 070204N-GU	●	●	●	●	6.35	2.38	2.8	0.4
		070208N-GU	●	●	●	●	6.35	2.38	2.8	0.8
		DCMT 11T302N-GU	●	●	●	●	9.525	3.97	4.4	0.2
		11T304N-GU	●	●	●	●	9.525	3.97	4.4	0.4
	7°	11T308N-GU	●	●	●	●	9.525	3.97	4.4	0.8
		11T312N-GU	●	●	●	●	9.525	3.97	4.4	1.2
	7°	DCMT 11T304N-MU	●	●	●	●	9.525	3.97	4.4	0.4
		11T308N-MU	●	●	●	●	9.525	3.97	4.4	0.8

Positive Round type

	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	—
	7°	2507M0N-RX	●	●	●	●	25.0	7.94	7.6	—
		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	—
	7°	2507M0N-RP	●	●	●	●	25.0	7.94	7.2	—
		3209M0N-RP	●	●	●	●	32.0	9.52	9.5	—

Positive Square type

	7°	SCMT 09T304N-LU 09T308N-LU	●●	●●		9.525	3.97	4.4	0.4 0.8
	7°	SCMT 09T304N-LB 09T308N-LB	●●	●●	●●	9.525	3.97	4.4	0.4 0.8
	7°	SCMT 09T304N-SU 09T308N-SU	●●	●●	●●	9.525	3.97	4.4	0.4 0.8
		SCMT 120404N-SU 120408N-SU	●●	●●	●●	12.7	4.76	5.5	0.4 0.8
	7°	SCMT 09T304N-GU 09T308N-GU	●●	●●	●●	9.525	3.97	4.4	0.4 0.8
	7°	SCMT 120408N-GU SCMT 09T308N-MU SCMT 120408N-MU	●●	●●	●●	9.525 12.7 12.7	3.97 4.76 4.76	4.4 5.5 5.5	0.8 0.4 0.8
	11°	SPMT 090304N-LU 090308N-LU	●●	●●	●●	9.525	3.18	3.4	0.4 0.8
	11°	SPMT 090304N-LB 090308N-LB	●●	●●	●●	9.525	3.18	3.4	0.4 0.8
	11°	SPMT 070208N-SS			●	7.94	2.38	3.4	0.8
	11°	SPMT 070308N-US			●	7.94	3.18	3.4	0.8
	11°	SPMT 090304N-SF 090308N-SF			●●	9.525	3.18	3.3	0.4 0.8

AC8115P/AC8020P/AC8025P/AC8035P

Positive Triangular type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	7°	TCMT 110204N-LU	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-LU	●	●	●	●				0.8
	7°	TCMT 110204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-LB	●	●	●	●				0.8
	7°	TCMT 110204N-SU	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-SU	●	●	●	●				0.8
	11°	TCMT 16T304N-SU	●	●	●	●	9.525	3.97	4.3	0.4
		16T308N-SU	●	●	●	●				0.8
	11°	TPMT 080204N-LU	●	●	●	●	4.76	2.38	2.4	0.4
		TPMT 090202N-LU	●	●	●	●	5.56	2.38	2.8	0.2
	11°	TPMT 090204N-LU	●	●	●	●				0.4
		TPMT 110304N-LU	●	●	●	●	6.35	3.18	3.4	0.4
	11°	TPMT 110308N-LU	●	●	●	●				0.8
		TPMT 080202N-LB	●	●	●	●	4.76	2.38	2.4	0.2
	11°	TPMT 080204N-LB	●	●	●	●				0.4
		TPMT 090202N-LB	●	●	●	●	5.56	2.38	2.8	0.2
	11°	TPMT 090204N-LB	●	●	●	●				0.4
		TPMT 110302N-LB	●	●	●	●	6.35	3.18	3.4	0.2
	11°	TPMT 110304N-LB	●	●	●	●				0.4
		TPMT 110308N-LB	●	●	●	●	6.35	3.18	3.4	0.4
	11°	TPMT 160304N-LB	●	●	●	●	9.525	3.18	4.4	0.4
		TPMT 160308N-LB	●	●	●	●				0.8
	11°	TPMT 160404N-LB	●	●	●	●	9.525	4.76	4.4	0.4
		TPMT 160408N-LB	●	●	●	●				0.8
	11°	TPMT 080204N-SU	●	●	●	●	4.76	2.38	2.4	0.4
		TPMT 110302N-SU	●	●	●	●				0.2
	11°	TPMT 110304N-SU	●	●	●	●	6.35	3.18	3.4	0.4
		TPMT 110308N-SU	●	●	●	●				0.8
	11°	TPMT 160404N-SU	●	●	●	●	9.525	4.76	4.4	0.4
		TPMT 160408N-SU	●	●	●	●				0.8
	11°	TPMT 110304N-GU	●	●	●	●	6.35	3.18	3.4	0.4
		TPMT 110308N-GU	●	●	●	●				0.8
	11°	TPMT 160404N-GU	●	●	●	●	9.525	4.76	4.4	0.4
		TPMT 160408N-GU	●	●	●	●				0.8
	11°	TPMT 110304N-MU	●	●	●	●	6.35	3.18	3.4	0.4
		TPMT 110308N-MU	●	●	●	●				0.8
	11°	TPMT 160404N-MU	●	●	●	●	9.525	4.76	4.4	0.4
		TPMT 160408N-MU	●	●	●	●				0.8
	11°	TPMH 110304N-SF	●	●	●	●	6.35	3.18	3.3	0.4
		TPMT 110308N-SF	●	●	●	●				0.8
	11°	TPMT 160404N-SF	●	●	●	●	9.525	4.76	4.3	0.4
		TPMT 160408N-SF	●	●	●	●				0.8

Positive 35° Diamond type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	5°	VBMT 110304N-LU	●	●	●	●	6.35	3.18	2.8	0.4
		VBMT 110308N-LU	●	●	●	●				0.8
	5°	VBMT 160404N-LU	●	●	●	●	9.525	4.76	4.4	0.4
		VBMT 160408N-LU	●	●	●	●				0.8
	5°	VBMT 110302N-LB	●	●	●	●	6.35	3.18	2.8	0.2
		VBMT 110304N-LB	●	●	●	●				0.4
	5°	VBMT 110308N-LB	●	●	●	●				0.8
		VBMT 160404N-LB	●	●	●	●	9.525	4.76	4.4	0.4
	5°	VBMT 160408N-LB	●	●	●	●				0.8
		VBMT 160412N-LB	●	●	●	●				1.2
	5°	VBMT 110304N-SU	●	●	●	●	6.35	3.18	2.8	0.4
		VBMT 110308N-SU	●	●	●	●				0.8
	5°	VBMT 160404N-SU	●	●	●	●	9.525	4.76	4.4	0.4
		VBMT 160408N-SU	●	●	●	●				0.8
	5°	VBMT 160412N-SU	●	●	●	●				1.2
		VBMT 110304N-GU	●	●	●	●	6.35	3.18	2.8	0.4
	5°	VBMT 110308N-GU	●	●	●	●				0.8
		VBMT 160404N-GU	●	●	●	●	9.525	4.76	4.4	0.4
	5°	VBMT 160408N-GU	●	●	●	●				0.8
	7°	VCMT 160404N-LU	●	●	●	●	9.525	4.76	4.4	0.4
		VCMT 160408N-LU	●	●	●	●				0.8
	7°	VCMT 080202N-LB	●	●	●	●	4.76	2.38	2.3	0.2
		VCMT 080204N-LB	●	●	●	●				0.4
	7°	VCMT 160404N-LB	●	●	●	●	9.525	4.76	4.4	0.4
		VCMT 160408N-LB	●	●	●	●				0.8
	7°	VCMT 110304N-SU	●	●	●	●	6.35	3.18	2.8	0.4
		VCMT 110308N-SU	●	●	●	●				0.8
	7°	VCMT 160404N-SU	●	●	●	●	9.525	4.76	4.4	0.4
		VCMT 160408N-SU	●	●	●	●				0.8
	7°	VCMT 160404N-GU	●	●	●	●	9.525	4.76	4.4	0.4
		VCMT 160408N-GU	●	●	●	●				0.8

● mark: Standard stocked item ● mark: Standard stocked item (new product) Blank: Made-to-order item

Positive Trigon type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	11°	WPMT 110204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		WPMT 160308N-LB	●	●	●	●	9.525	3.18	4.4	0.8

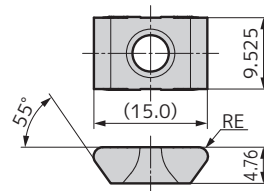
Positive Square type (Without Hole)

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	11°	SPMR 090304N-SF	●	●	●	●	9.525	3.18	—	0.4
		SPMR 090308N-SF	●	●	●	●				0.8
	11°	SPMR 120304N-SF	●	●	●	●	12.7	3.18	—	0.4
		SPMR 120308N-SF	●	●	●	●				0.8
	11°	SPMR 120312N-SF	●	●	●	●				1.2
		SPMR 090304N-UJ	●	●	●	●	9.525	3.18	—	0.4
	11°	SPMR 090308N-UJ	●	●	●	●				0.8
		SPMR 120304N-UJ	●	●	●	●	12.7	3.18	—	0.4
	11°	SPMR 120308N-UJ	●	●	●	●				0.8

Positive Triangular type (Without Hole)

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8115P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	11°	TPMR 110304N-SF	●	●	●	●	6.35	3.18	—	0.4
		TPMR 110308N-SF	●	●	●	●				0.8
	11°	TPMR 160304N-SF	●	●	●	●	9.525	3.18	—	0.4
		TPMR 160308N-SF	●	●	●	●				0.8
	11°	TPMR 160312N-SF	●	●	●	●				1.2
		TPMR 110304N-UJ	●	●	●	●	6.35	3.18	—	0.4
	11°	TPMR 110308N-UJ	●	●	●	●				0.8
		TPMR 160304N-UJ	●	●	●	●	9.525	3.18	—	0.4
	11°	TPMR 160308N-UJ	●	●	●	●				0.8

Inserts for SEC-XD type Tool Holders (For Crank Shaft Machining)



Cat. No.	Stock				Dimensions (mm)
	AC8115P	AC8020P	AC8025P	AC8035P	Corner Radius
XDM 150408-GU			●	●	0.8
150412-GU			●	●	1.2
150420-GU			●	●	2.0
XDM 150408-LU			●	●	0.8
150412-LU			●	●	1.2
150420-LU			●	●	2.0

AC8115P/AC8020P/AC8025P/AC8035P

Inserts for SEC-Grooving Tools GND type (For Grooving / Cut-off)

Fig 1

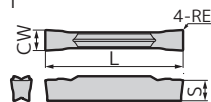


Fig 2 (Figure shows right-hand (R) tool.)

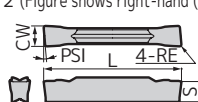
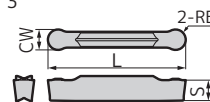


Fig 3



Grooving / Traverse Cutting

Cat. No.	Stock		Dimensions (mm)					Pcs/Pack	Fig
	AC8025P	AC8035P	Width of Cut CW		Corner Radius	Overall Length	Thickness		
			Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-MG	●	●	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	6.0	±0.03	0.8	26.4	4.5		1
GCM N7004-MG	●	●	7.0	±0.04	0.4	28.8	5.5		1
N7008-MG	●	●	7.0	±0.04	0.8	28.8	5.5		1
GCM N8004-MG	●	●	8.0	±0.04	0.4	28.8	6.0		1
N8008-MG	●	●	8.0	±0.04	0.8	28.8	6.0		1
GCM N3002-ML	●	●	3.0	±0.03	0.2	21.1	3.8	1	
N3004-ML	●	●	3.0	±0.03	0.4	21.1	3.8	1	
GCM N4002-ML	●	●	4.0	±0.03	0.2	26.4	4.0	1	
N4004-ML	●	●	4.0	±0.03	0.4	26.4	4.0	1	
N4008-ML	●	●	4.0	±0.03	0.8	26.4	4.0	1	
GCM N5004-ML	●	●	5.0	±0.03	0.4	26.4	4.1	1	
N5008-ML	●	●	5.0	±0.03	0.8	26.4	4.1	1	
GCM N6004-ML	●	●	6.0	±0.03	0.4	26.4	4.5	1	
N6008-ML	●	●	6.0	±0.03	0.8	26.4	4.5	1	
GCM N7004-ML	●	●	7.0	±0.04	0.4	28.8	5.5	1	
N7008-ML	●	●	7.0	±0.04	0.8	28.8	5.5	1	
GCM N8004-ML	●	●	8.0	±0.04	0.4	28.8	6.0	1	
N8008-ML	●	●	8.0	±0.04	0.8	28.8	6.0	1	

Grooving / Cut-off

Cat. No.	Stock		Dimensions (mm)					Pcs/Pack	Fig
	AC8025P	AC8035P	Width of Cut CW		Corner Radius	Overall Length	Thickness		
			Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-GG		●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GG		●	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GG		●	7.0	±0.04	0.4	28.8	5.5		1
GCM N8004-GG		●	8.0	±0.04	0.4	28.8	6.0	1	
GCM N2002-GL		●	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GL		●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GL		●	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GL		●	7.0	±0.04	0.4	28.8	5.5	5	1
GCM N8004-GL		●	8.0	±0.04	0.4	28.8	6.0		1
GCM N3002-GF		●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GF		●	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●	6.0	±0.03	0.4	26.4	4.5		1
GCM N7002-GF		●	7.0	±0.04	0.2	28.8	5.5		1
N7004-GF		●	7.0	±0.04	0.4	28.8	5.5		1
GCM N8002-GF		●	8.0	±0.04	0.2	28.8	6.0		1
N8004-GF		●	8.0	±0.04	0.4	28.8	6.0		1

Cut-off (Handed Edge)

Cat. No.	Stock		Lead Angle PSI	Dimensions (mm)					Pcs/Pack	Fig
	AC8035P			Width of Cut CW		Corner Radius RE	Overall Length L	Thickness S		
				Width of Cut	Tolerance					
GCM R2002-CG-05	●		5°	2.0	+0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●		5°	2.0	+0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●		5°	3.0	+0.03	0.2	21.3	3.8		2
L3002-CG-05	●		5°	3.0	+0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●		5°	4.0	+0.04	0.2	26.7	4.0		2
L4002-CG-05	●		5°	4.0	+0.04	0.2	26.7	4.0		2

GCMR: Right Handed, GCML: Left Handed

External Profiling / External Radius Grooving

Cat. No.	Stock		Dimensions (mm)					Pcs/Pack	Fig
	AC8025P	AC8035P	Width of Cut CW		Corner Radius RE	Overall Length L	Thickness S		
			Width of Cut	Tolerance					
GCM N3015-RG	●	●	3.0	±0.03	1.5	21.1	3.8	5	3
N4020-RG	●	●	4.0	±0.03	2.0	26.4	4.0		3
N5025-RG	●	●	5.0	±0.03	2.5	27.2	4.1		3
N6030-RG	●	●	6.0	±0.03	3.0	27.5	4.5		3
GCM N7035-RG	●	●	7.0	±0.04	3.5	29.1	5.5	5	3
N8040-RG	●	●	8.0	±0.04	4.0	29.3	6.0		3

Profiling / Radius Grooving / Necking

Cat. No.	Stock		Dimensions (mm)					Pcs/Pack	Fig
	AC8025P	AC8035P	Width of Cut CW		Corner Radius RE	Overall Length L	Thickness S		
			Width of Cut	Tolerance					
GCM N3015-RN	●	●	3.0	±0.03	1.5	22.6	3.8	5	3
N4020-RN	●	●	4.0	±0.03	2.0	28.2	4.0		3
N5025-RN	●	●	5.0	±0.03	2.5	28.3	4.1		3
N6030-RN	●	●	6.0	±0.03	3.0	28.3	4.5		3

Part Number Suffix Code (Chipbreakers)

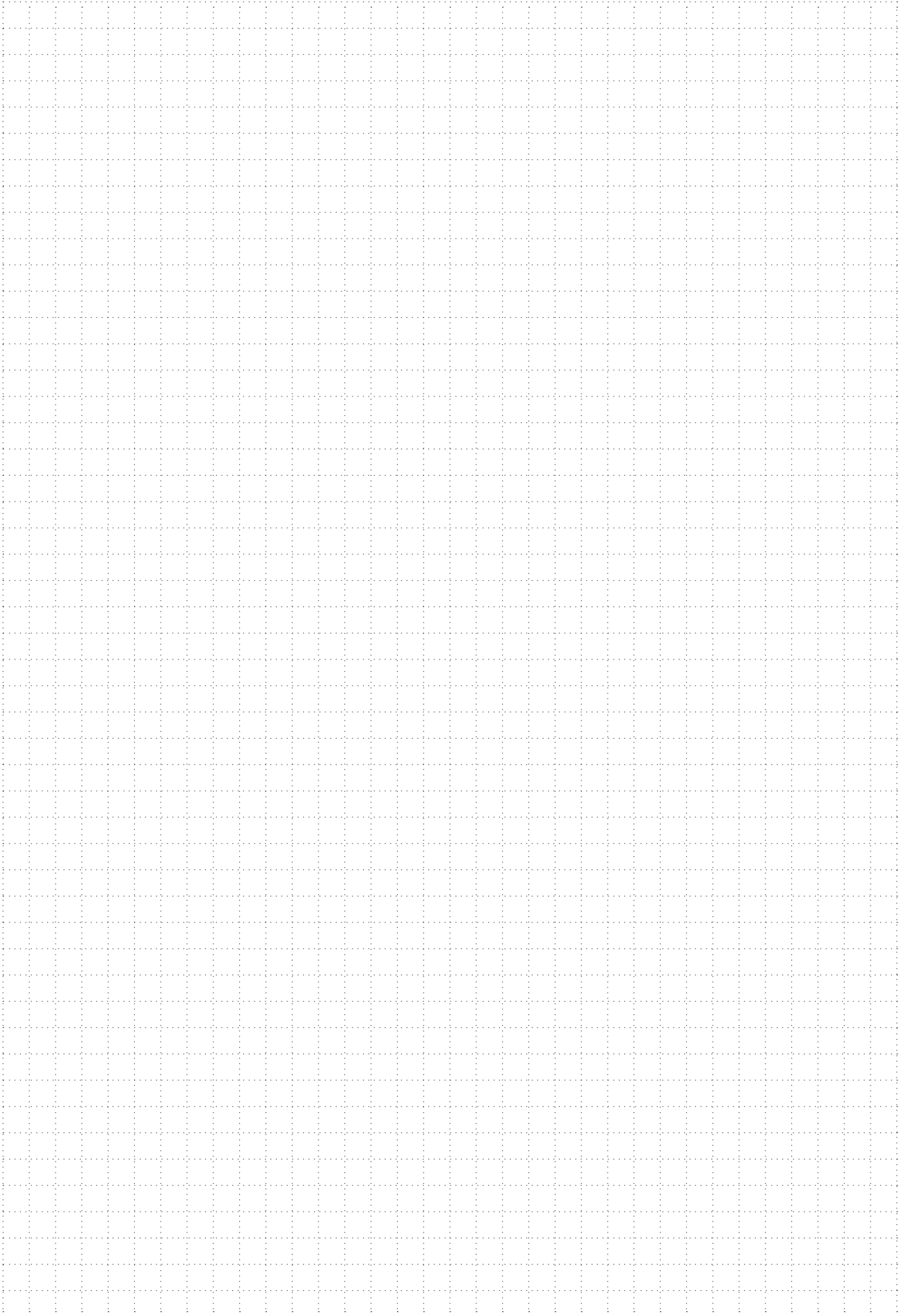
Type	Symbol	Applications	Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose	Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	ML	Multi-functional / Low-feed	External Profiling / External Radius Grooving	RG	Profiling / General-purpose
Grooving / Cut-off	GG	Grooving / General-purpose	Profiling / Radius Grooving / Necking	RN	Facing / Necking / General-purpose
	GL	Grooving / Low-feed			
	GF	Grooving / Low cutting force			

For details on the holders of the products listed on this page, refer to Tooling News No.482 "SEC-Grooving Tools GND type" and the General Catalogue.

Select holders and inserts with matching width of cut (CW). Not usable with GNDIS type holders.

● mark: Standard stocked item Blank: Made-to-order item

MEMO



MEMO

A large rectangular area filled with a uniform grid of small dots, intended for handwritten notes or a drawing.



- 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.

< SAFETY NOTES >

- 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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