

Coated Grades for Steel Turning

AC8015P/AC8020P^{New}/AC8025P/AC8035P

Rev. 2



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

New Introducing **AC8020P**
High-efficiency Turning Grade
349 more items now in stock



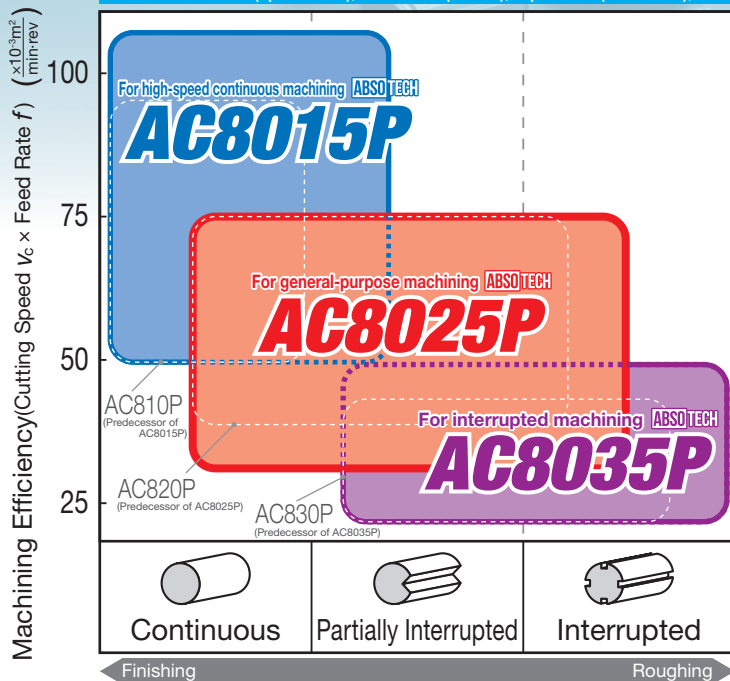
Coated grades for Steel Turning

AC8015P/AC8020P/AC8025P/AC8035P

Application Range

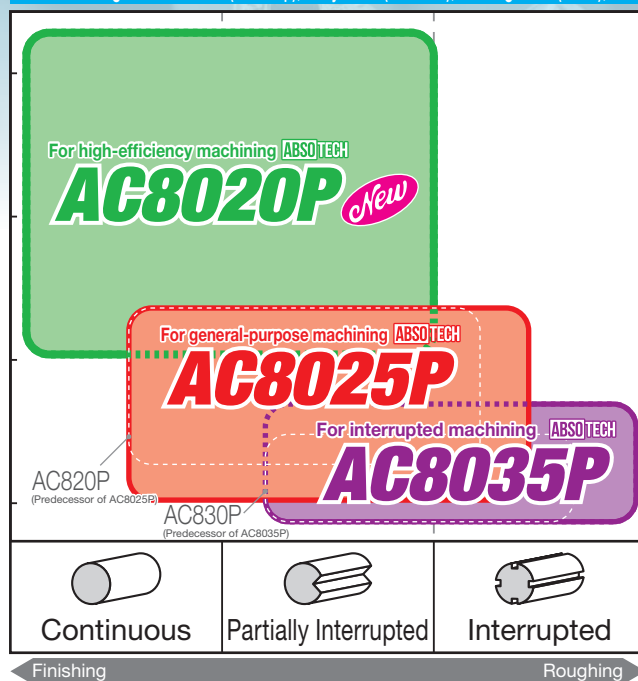
Mild Steel/Low Carbon Steel Machining

Low Carbon Steel (up to S25C), Mild Steel (SS400), Pipe Steel (STKM13A), etc.

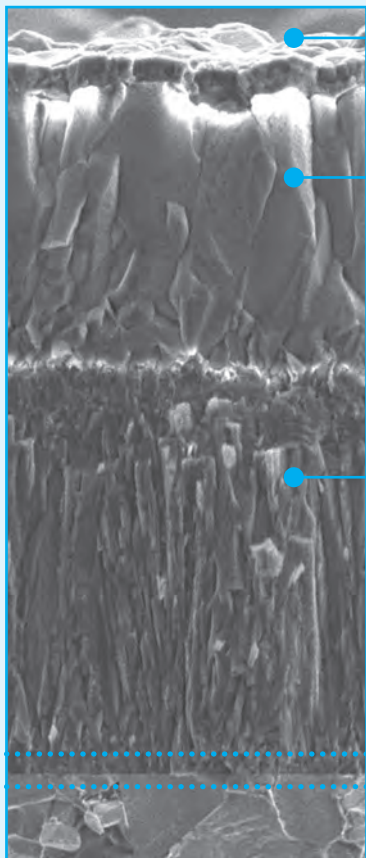


Hard Steel/Medium to High Carbon Steel Machining

Medium to High Carbon Steel (S30C up), Alloy Steel (SCM435), Bearing Steel (SUJ2), etc.



Features of AC8000P Series



Special Surface Treatment

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

High Strength Alumina Layer

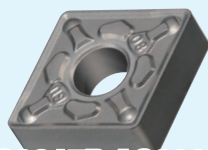
Significantly improves the coating strength by controlling crystal growth direction

High Hardness Fine grained TiCN Layer

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

High Adhesion Technology

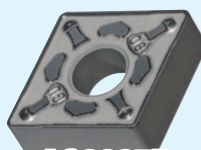
Significantly improves adhesion strength through a smooth interface between the coating and carbide substrate



AC8015P AC8035P

Prestressed

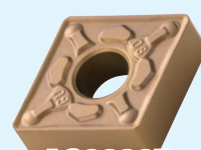
Crater Wear /
Fracture Suppressed



AC8025P

Smoothing

Adhesion /
Chipping Suppressed



AC8020P *New*

Prestressed Gold-colored Surface

Chipping Suppressed /
Visibility Improved

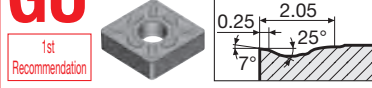
AC8015P/AC8020P/AC8025P/AC8035P

Application Guide

1st Recommended Grade

General-purpose machining **AC8025P**

GU Type Chipbreaker



	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 		

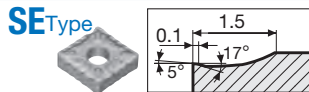
For high-speed continuous machining of mild steel

High-speed Machining **AC8015P**

To improve tool life at small depths of cut



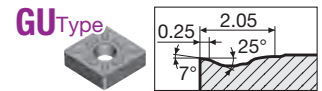
To improve finishing efficiency



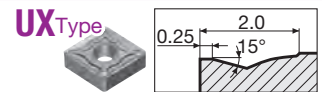
For heavy interrupted cutting emphasizing stability

Interrupted Machining **AC8035P**

To improve tool life



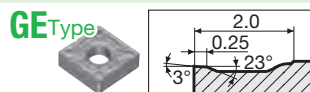
To improve machining stability



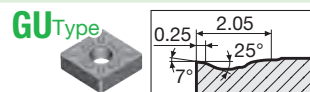
For high-efficiency machining of high-hardness and forged steels

High Efficiency **AC8020P** NEW

To increase feed rate

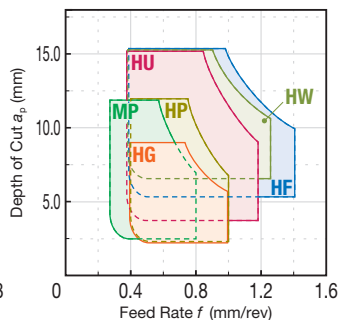
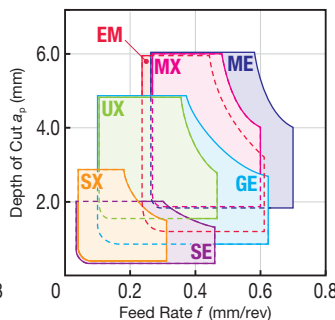
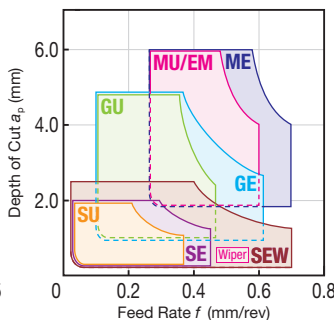
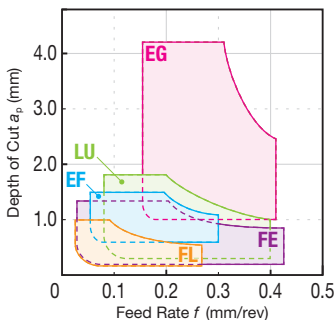


To increase cutting speed



Chipbreaker Application Range

- Chip evacuation emphasised
- Continuous to light interrupted cutting
- Light interrupted to heavy interrupted cutting
- Rough to heavy cutting



AC8015P/AC8020P/AC8025P/AC8035P

AC8015P Cutting Performance Suppresses crater damage due to chip abrasion. Crater wear resistance 2x

High-speed Machining

AC8015P

ABSOTECH

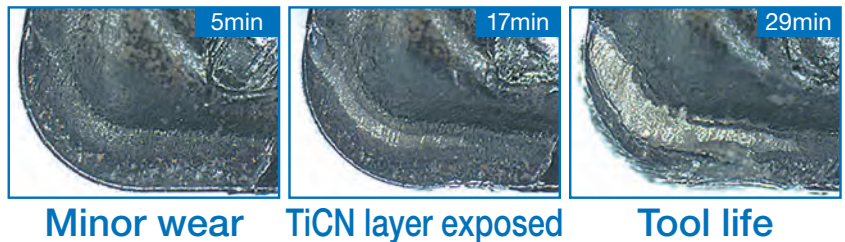
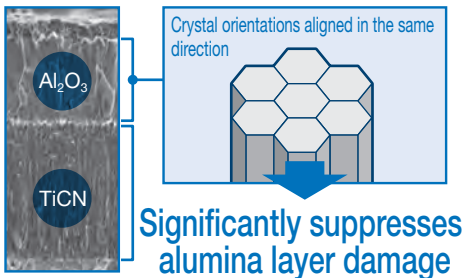
Controlled Crystal Alumina Layer

Excellent Wear Resistance

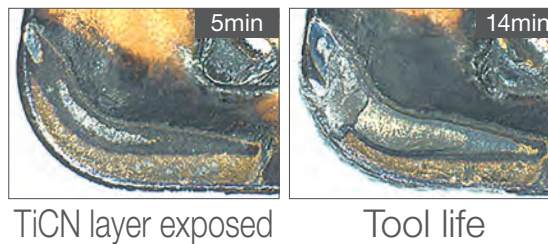
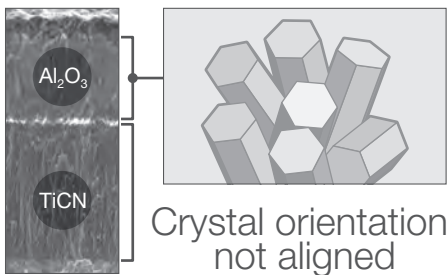


Control of the alumina layer crystal orientation suppresses crater damage due to chip abrasion

AC8015P



Conventional Tool



Crater damage progression due to peeling of alumina layer

Work Material: SUJ2 (External Continuous) Insert: CNMG120408N-GU (AC8015P)
Cutting Conditions: $v_c=300\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet

AC8015P 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	170-310-470	0.5-1.5-2.0	0.10-0.20-0.40	130-260-420
	SEW	0.5-1.5-2.5	0.10-0.40-0.60	170-310-470	0.5-1.5-2.5	0.10-0.40-0.60	130-260-420
	GU/GE/UX	0.8-2.2-5.0	0.10-0.30-0.45	170-310-470	0.8-2.2-5.0	0.10-0.30-0.45	130-260-420
	MU	1.8-3.0-6.0	0.20-0.35-0.60	140-280-400	1.8-3.0-6.0	0.20-0.35-0.60	110-240-350
	ME	1.0-3.0-6.0	0.20-0.45-0.70	140-280-400	1.0-3.0-6.0	0.20-0.45-0.70	110-240-350
	HG	3.0-4.5-8.0	0.35-0.50-0.80	140-280-400	3.0-4.5-8.0	0.35-0.50-0.80	110-240-350
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	110-240-350
	MU	1.8-4.5-6.0	0.20-0.40-0.60	140-240-330	1.8-4.5-6.0	0.20-0.40-0.60	110-200-280
	ME	1.5-4.5-7.0	0.20-0.50-0.70	140-240-330	1.5-4.5-7.0	0.20-0.50-0.70	110-200-280
	HG	3.0-5.0-8.0	0.35-0.60-0.80	120-210-300	3.0-5.0-8.0	0.35-0.60-0.80	90-170-250
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	140-240-330	1.8-5.0-6.0	0.20-0.40-0.60	110-200-280
	ME	2.0-5.0-8.0	0.20-0.50-0.70	140-240-330	2.0-5.0-8.0	0.20-0.50-0.70	110-200-280
	HG	3.0-6.5-9.0	0.35-0.60-0.80	120-210-300	3.0-6.5-9.0	0.35-0.60-0.80	90-170-250

AC8015P/AC8020P/AC8025P/AC8035P

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

High Efficiency

AC8020P ^{New}

ABSOTECH

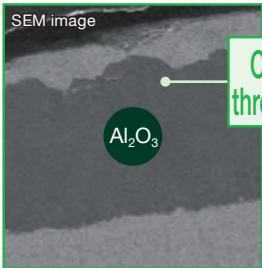
High Strength Alumina Layer

Excellent Chipping Resistance

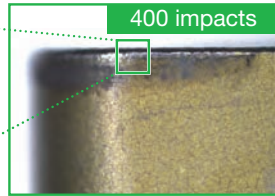


Alumina layer with even higher strength suppresses chipping

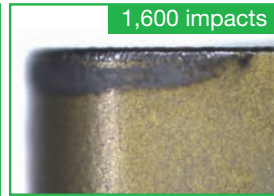
AC8020P



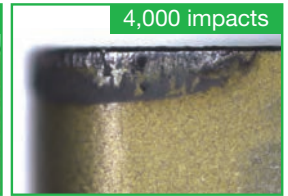
Cracks suppressed through higher strength



Minor damage

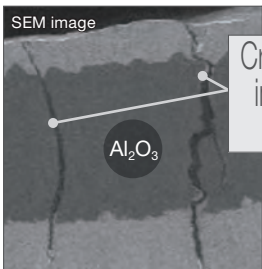


Minor damage

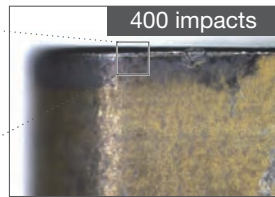


Minimal chipping

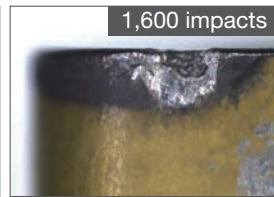
Conventional Tool



Cracks occur due to insufficient impact resistance



Minimal chipping



Tool life



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

AC8015P/AC8020P/AC8025P/AC8035P

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

General
Machining

AC8025P

ABSOTECH

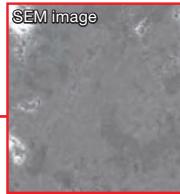
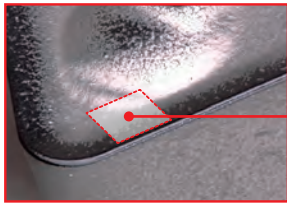
Surface Smoothing
Treatment

Absolute Reliability

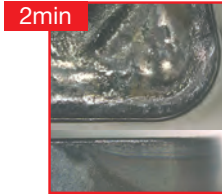


Surface smoothing treatment significantly suppresses adhesion and chipping

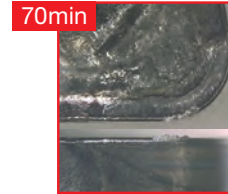
AC8025P



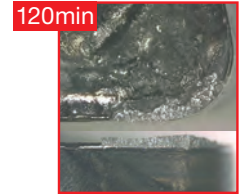
Ra0.04μm



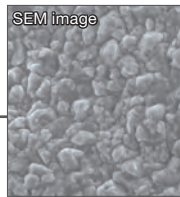
Normal wear



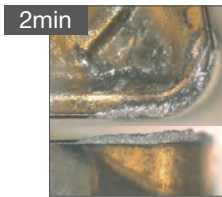
Minor damage only, able to continue



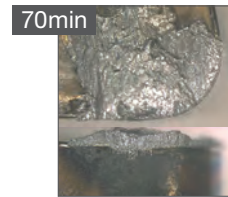
Conventional Tool



Ra0.4μm



Adhesion



Fracture

Unable to continue

Work Material: SCM415 (Facing) Insert: CNMG120408N-GU (AC8025P)
Cutting Conditions: $v_c = 100$ to 300 m/min $f = 0.3$ mm/rev $a_p = 1.5$ mm 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 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	0.10-0.25-0.45	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

AC8015P/AC8020P/AC8025P/AC8035P

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

Interrupted
Machining

AC8035P

ABSOTECH

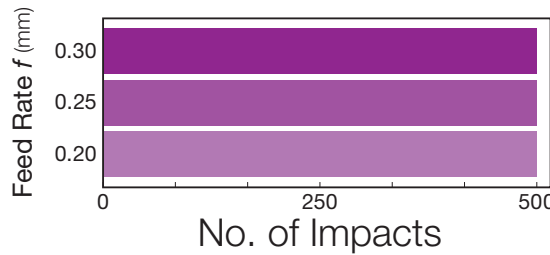
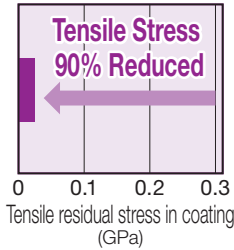
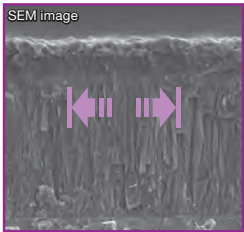
Stress Control
Within Coating

Exceptional Stability



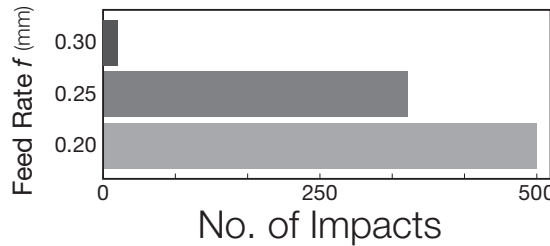
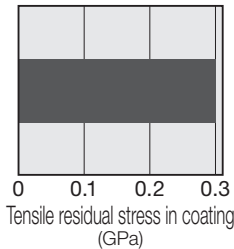
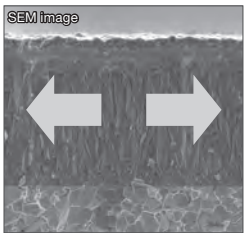
Special surface treatment reduces tensile stress in the coating layer, significantly suppressing fractures

AC8035P



All corners able to continue

Conventional Tool



Unable to continue



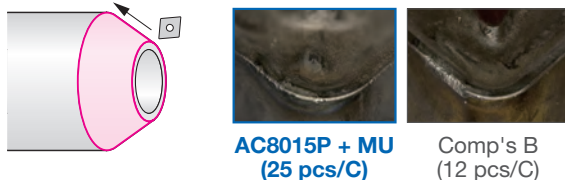

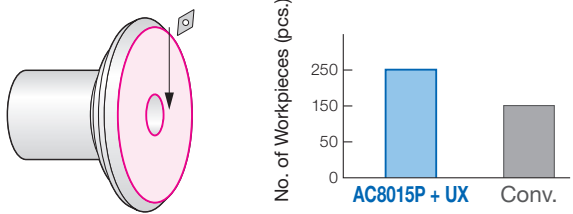
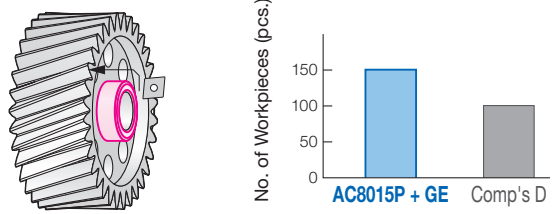
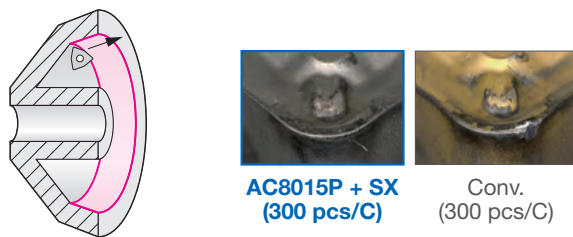

Work Material: SCM435 (External Interrupted) Insert: CNMG120408N-GU (AC8035P)
Cutting Conditions: $v_c = 160\text{m/min}$ $f = 0.2$ to 0.3mm/rev $a_p = 2.0\text{mm}$ Dry

AC8035P Recommended Cutting Conditions

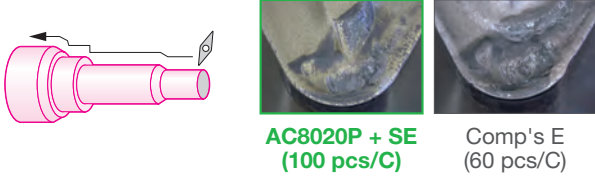

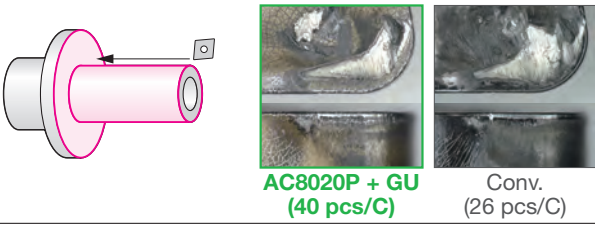
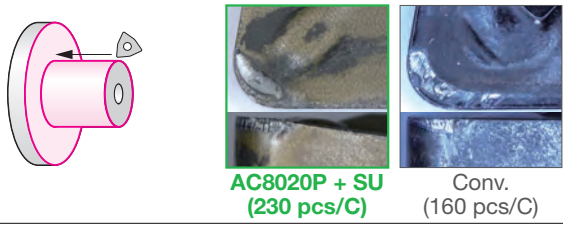
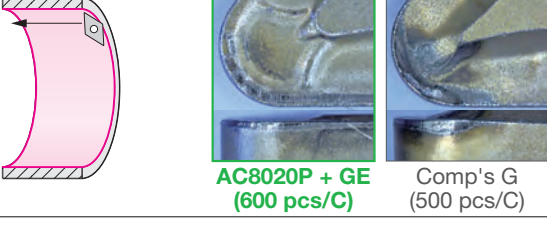
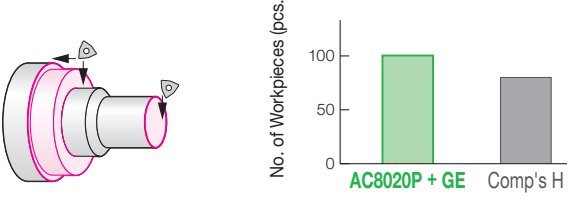
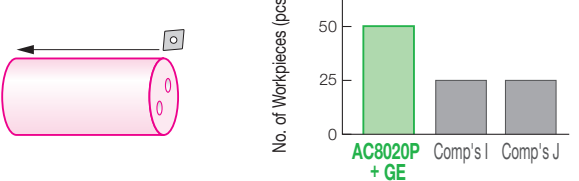

Min. - Optimum - Max.

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 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	0.10-0.25-0.45	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

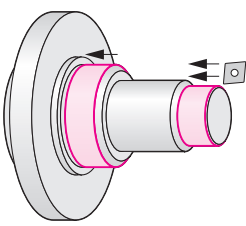

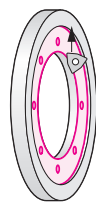
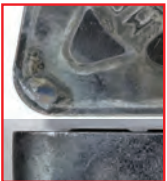
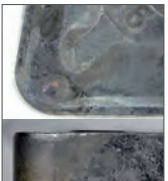
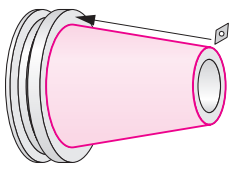


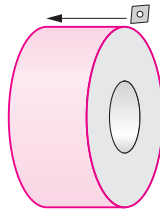

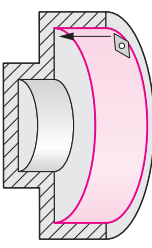


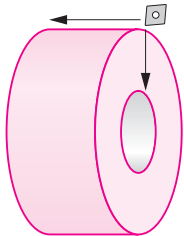
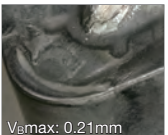
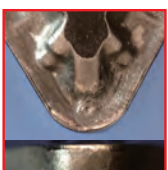
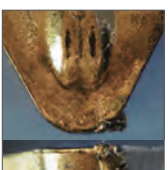
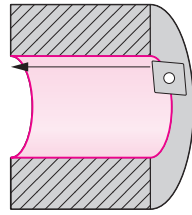

AC8015P Application Examples

<p>SCM421 Gear</p> <p>Suppresses wear for 1.5x longer tool life</p>  <p>V_{Bmax}: 0.148mm AC8015P + UX (150 pcs/C)</p> <p>V_{Bmax}: 0.155mm Comp's A (100 pcs/C)</p> <p>Insert: CNMG120412N-UX (AC8015P) Cutting Conditions: $v_c=280\text{m/min}$ $f=0.25\text{mm/rev}$ $a_p=2.00$ to 2.50mm Wet</p>	<p>SCM435H Ring Gear</p> <p>Suppresses crater wear for 1.5x longer tool life</p>  <p>AC8015P + GE (150 pcs/C)</p> <p>Conv. (100 pcs/C)</p> <p>Insert: CNMG120412N-GE (AC8015P) Cutting Conditions: $v_c=200$ to 260m/min $f=0.3$ to 0.4mm/rev $a_p=1.5\text{mm}$ Wet</p>								
<p>Carbon Steel Pipe</p> <p>Suppresses chipping for 2x longer tool life</p>  <p>AC8015P + MU (25 pcs/C)</p> <p>Comp's B (12 pcs/C)</p> <p>Insert: CNMG120412N-MU (AC8015P) Roughing Cutting Conditions: $v_c=160\text{m/min}$ $f=0.45\text{mm/rev}$ $a_p=2.50\text{mm}$ Wet</p>	<p>SUJ2 Tool Holder</p> <p>Suppresses fractures for 1.7x longer tool life</p>  <p>AC8015P + GE (500 pcs/C)</p> <p>Comp's C (300 pcs/C)</p> <p>Insert: TNMG160404N-GE (AC8015P) Cutting Conditions: $v_c=210$ to 270m/min $f=0.2\text{mm/rev}$ $a_p=3.3\text{mm}$ Wet</p>								
<p>S55C Hub</p> <p>Suppresses wear for 1.7x longer tool life</p>  <p>No. of Workpieces (pcs.)</p> <table border="1"> <tr> <td>AC8015P + UX</td> <td>250</td> </tr> <tr> <td>Conv.</td> <td>150</td> </tr> </table> <p>Insert: DNMG150412N-UX (AC8015P) Cutting Conditions: $v_c=240\text{m/min}$ $f=0.5\text{mm/rev}$ $a_p=1.0$ to 2.5mm Wet</p>	AC8015P + UX	250	Conv.	150	<p>SCM435H Gear</p> <p>Suppresses chipping for 1.5x longer tool life</p>  <p>No. of Workpieces (pcs.)</p> <table border="1"> <tr> <td>AC8015P + GE</td> <td>150</td> </tr> <tr> <td>Comp's D</td> <td>100</td> </tr> </table> <p>Insert: CNMG120412N-GE (AC8015P) Cutting Conditions: $v_c=200$ to 260m/min $f=0.3$ to 0.4mm/rev $a_p=2.0\text{mm}$ Wet</p>	AC8015P + GE	150	Comp's D	100
AC8015P + UX	250								
Conv.	150								
AC8015P + GE	150								
Comp's D	100								
<p>SCM420 Equivalent CVT Component</p> <p>Suppresses chipping</p>  <p>AC8015P + SX (300 pcs/C)</p> <p>Conv. (300 pcs/C)</p> <p>Insert: WNMG080412N-SX (AC8015P) Mill-scale Work Cutting Conditions: $v_c=300\text{m/min}$ $f=0.2$ to 0.3mm/rev $a_p=1.0\text{mm}$ Wet</p>	<p>SCM415 Automotive Drive Component</p> <p>Improves machining efficiency by reducing chip entanglement</p>  <p>AC8015P + GU</p> <p>Conv.</p> <p>Insert: DCMT11T308N-GU (AC8015P) Cutting Conditions: $v_c=180\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet</p>								

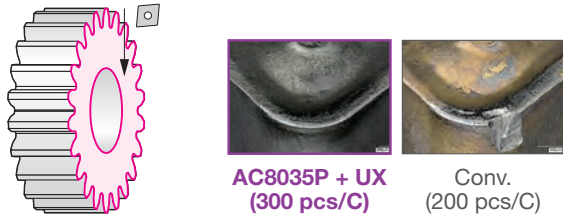
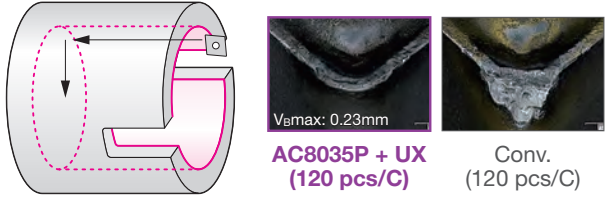
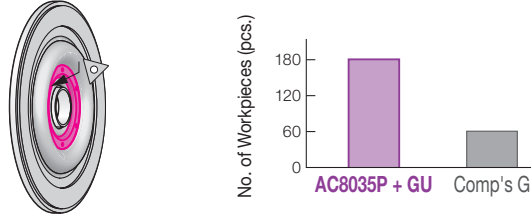
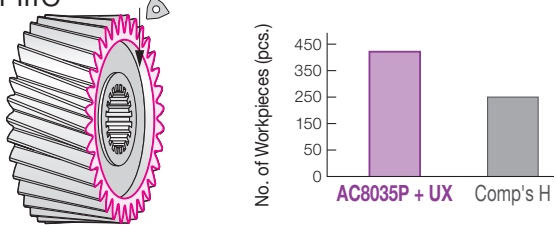
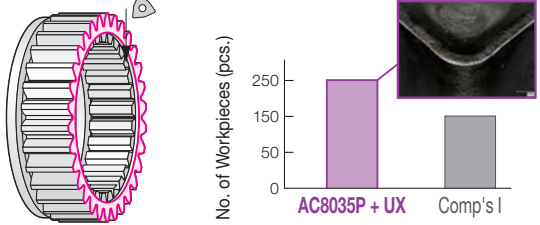
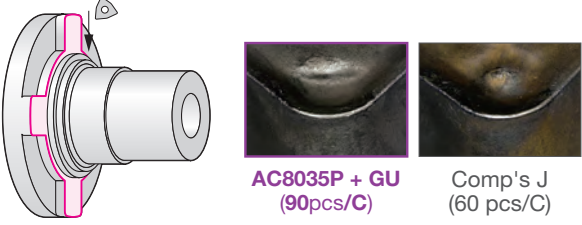
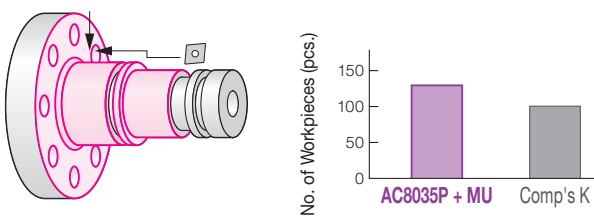
AC8020P Application Examples

<p>S53C CVJ Component</p> <p>Suppresses chipping for 1.7x longer tool life</p>  <p>Insert: DNMG150412N-SE (AC8020P) Cutting Conditions: $v_c=220\text{m/min}$ $f=0.35\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet</p>	<p>S35C Machine Tool Component</p> <p>Suppresses both crater and flank wear for 2x longer tool life</p>  <p>Insert: WNMG080408N-SE (AC8020P) Cutting Conditions: $v_c=240\text{m/min}$ $f=0.25\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet</p>
<p>SCM435 Equivalent Transmission Component</p> <p>Suppresses crater wear for 1.5x longer tool life</p>  <p>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</p>	<p>S45C Bearing</p> <p>Suppresses crater wear and chipping for 1.4x longer tool life</p>  <p>Insert: WNMG080408N-SU (AC8020P) Cutting Conditions: $v_c=230\text{m/min}$ $f=0.26\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet</p>
<p>SUJ2 Bearing</p> <p>Suppresses flank wear for 1.2x longer tool life and stable machining</p>  <p>Insert: DNMG150412N-GE (AC8020P) Cutting Conditions: $v_c=300\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=0.3\text{mm}$ Wet</p>	<p>S53C CVJ Component</p> <p>1.3x longer tool life and stable machining</p>  <p>Insert: WNMG080412N-GE (AC8020P) Cutting Conditions: $v_c=260\text{m/min}$ $f=0.45\text{mm/rev}$ $a_p=1.50\text{mm}$ Wet</p>
<p>SCM440 Automotive Component</p> <p>Suppresses wear for 2x longer tool life and stable machining</p>  <p>Insert: CNMG120408N-GE (AC8020P) Cutting Conditions: $v_c=190\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=3.0\text{mm}$ Wet</p>	<p>Boron Steel Shaft</p> <p>Suppresses both crater wear and chipping for 3x longer tool life</p>  <p>Insert: DNMG150412N-UX (AC8020P) Cutting Conditions: $v_c=230\text{m/min}$ $f=0.55\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet</p>

AC8025P Application Examples














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

AC8035P Application Examples









<h3>S35C Planetary Pinion</h3> <p>Significantly suppresses fractures for 1.5x longer tool life</p>  <p>AC8035P + UX (300 pcs/C) Conv. (200 pcs/C)</p> <p>Insert: CNMG120412N-UX (AC8035P) Interrupted Machining Cutting Conditions: $v_c=180\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=2.0\text{mm}$ Wet</p>	<h3>S25C Equivalent Automotive Component</h3> <p>Significantly suppresses fractures and extends tool life</p>  <p>AC8035P + UX (120 pcs/C) Conv. (120 pcs/C)</p> <p>Insert: CNMG120408N-UX (AC8035P) Interrupted Machining Cutting Conditions: $v_c=100\text{ to }130\text{m/min}$ $f=0.2\text{mm/rev}$ $a_p=1.0\text{ to }3.2\text{mm}$ Wet</p>
<h3>SPH440 Flange</h3> <p>Suppresses chipping for 3x longer tool life</p>  <p>AC8035P + GU Comp's G</p> <p>Insert: TNMG160408N-GU (AC8035P) Interrupted Roughing Cutting Conditions: $v_c=100\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet</p>	<h3>SNCN Gear</h3> <p>Suppresses chipping for 1.7x longer tool life</p>  <p>AC8035P + UX Comp's H</p> <p>Insert: WNMG080408N-UX (AC8035P) Interrupted Roughing Cutting Conditions: $v_c=180\text{m/min}$ $f=0.15\text{ to }0.40\text{mm/rev}$ $a_p=1.00\text{mm}$ Wet</p>
<h3>SCr420 Equivalent Reverse Gear</h3> <p>Suppresses chipping for 1.6x longer tool life</p>  <p>AC8035P + UX Comp's I</p> <p>Insert: WNMG080408N-UX (AC8035P) Interrupted Roughing Cutting Conditions: $v_c=230\text{m/min}$ $f=0.15\text{ to }0.30\text{mm/rev}$ $a_p=1.00\text{ to }2.00\text{mm}$ Wet</p>	<h3>SCr440 Flange</h3> <p>Suppresses chipping for 1.5x longer tool life</p>  <p>AC8035P + GU (90 pcs/C) Comp's J (60 pcs/C)</p> <p>Insert: WNMG080412N-GU (AC8035P) Interrupted Roughing Cutting Conditions: $v_c=80\text{ to }200\text{m/min}$ $f=0.2\text{mm/rev}$ $a_p=1.5\text{mm}$ Dry</p>
<h3>Alloy Steel Automotive Chassis Component</h3> <p>Suppresses chipping for 1.3x longer tool life</p>  <p>AC8035P + MU Comp's K</p> <p>Insert: CNMG190616N-MU (AC8035P) Mill-scale Work Continuous to Interrupted Machining Cutting Conditions: $v_c=140\text{ to }280\text{m/min}$ $f=0.5\text{mm/rev}$ $a_p=\text{Max. }5.0\text{mm}$ Dry</p>	

AC8015P/AC8020P/AC8025P/AC8035P

Negative 80° Diamond Type





Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 FL	CNMG 090308N-FL	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 120404N-FL	●	●	●	●	12.7	4.76	5.16	0.4
	120408N-FL	●	●	●	●				0.8
 FE	CNMG 090304N-FE	●	●	●	●	9.525	3.18	3.81	0.4
	090308N-FE	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 090404N-FE	●	●	●	●	9.525	4.76	3.81	0.4
	090408N-FE	●	●	●	●	9.525	4.76	3.81	0.8
	CNMG 120402N-FE	●	●	●	●				0.2
	120404N-FE	●	●	●	●	12.7	4.76	5.16	0.4
 LU	CNMG 090304N-LU	●	●	●	●	9.525	3.18	3.81	0.4
	090308N-LU	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 120404N-LU	●	●	●	●				0.4
 LU	120408N-LU	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-LU	●	●	●	●				1.2
	CNMG 120404N-LUW	●	●	●	●				0.4
 LUW	120408N-LUW	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-LUW	●	●	●	●				1.2
	CNMG 090304N-SU	●	●	●	●	9.525	3.18	3.81	0.4
 SU	090308N-SU	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 09T304N-SU	●	●	●	●	9.525	3.97	3.81	0.4
	09T308N-SU	●	●	●	●	9.525	3.97	3.81	0.8
	CNMG 090404N-SU	●	●	●	●				0.4
	090408N-SU	●	●	●	●	9.525	4.76	3.81	0.8
	090412N-SU	●	●	●	●				1.2
	CNMG 120404N-SU	●	●	●	●				0.4
	120408N-SU	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-SU	●	●	●	●				1.2
	CNMG 120404N-SE	●	●	●	●				0.4
	120408N-SE	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-SE	●	●	●	●				1.2
 SEW	CNMG 090404N-SEW	●	●	●	●	9.525	4.76	3.81	0.4
	090408N-SEW	●	●	●	●	9.525	4.76	3.81	0.8
	CNMG 120404N-SEW	●	●	●	●				0.4
	120408N-SEW	●	●	●	●	12.7	4.76	5.16	0.8
 EF	120412N-SEW	●	●	●	●				1.2
	CNMG 120404N-EF	●	●	●	●				0.4
	120408N-EF	●	●	●	●	12.7	4.76	5.16	0.8
 SX	120412N-EF	●	●	●	●				1.2
	CNMG 120404N-SX	●	●	●	●				0.4
	120408N-SX	●	●	●	●	12.7	4.76	5.16	0.8
 GU	120412N-SX	●	●	●	●				1.2
	CNMG 090304N-GU	●	●	●	●	9.525	3.18	3.81	0.4
	090308N-GU	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 090404N-GU	●	●	●	●				0.4
	090408N-GU	●	●	●	●	9.525	4.76	3.81	0.8
	090412N-GU	●	●	●	●				1.2
	CNMG 120404N-GU	●	●	●	●				0.4
	120408N-GU	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-GU	●	●	●	●				1.2
	120416N-GU	●	●	●	●				1.6
	CNMG 160608N-GU	●	●	●	●	15.875	6.35	6.35	0.8
	160612N-GU	●	●	●	●	15.875	6.35	6.35	1.2
160616N-GU	●	●	●	●				1.6	
 GE	CNMG 120404N-GE	●	●	●	●				0.4
	120408N-GE	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-GE	●	●	●	●				1.2
	120416N-GE	●	●	●	●				1.6
	CNMG 160608N-GE	●	●	●	●	15.875	6.35	6.35	0.8
 GUW	160612N-GE	●	●	●	●	15.875	6.35	6.35	1.2
	160616N-GE	●	●	●	●				1.6
	CNMG 190612N-GE	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-GE	●	●	●	●				1.6
	CNMG 120408N-GUW	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-GUW	●	●	●	●	12.7	4.76	5.16	1.2
 UX	CNMG 160612N-GUW	●	●	●	●	15.875	6.35	6.35	1.2
	CNMG 090304N-UX	●	●	●	●	9.525	3.18	3.81	0.4
	090308N-UX	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 120404N-UX	●	●	●	●				0.4
	120408N-UX	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-UX	●	●	●	●				1.2
	120416N-UX	●	●	●	●				1.6
	CNMG 160608N-UX	●	●	●	●	15.875	6.35	6.35	0.8
	160612N-UX	●	●	●	●	15.875	6.35	6.35	1.2
	160616N-UX	●	●	●	●				1.6
	CNMG 190608N-UX	●	●	●	●	19.05	6.35	7.94	0.8
	190612N-UX	●	●	●	●	19.05	6.35	7.94	1.2
190616N-UX	●	●	●	●				1.6	

Negative 80° Diamond Type (continued)








Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 UG	CNMG 090304N-UG	●	●	●	●	9.525	3.18	3.81	0.4
	090308N-UG	●	●	●	●	9.525	3.18	3.81	0.8
	CNMG 09T304N-UG	●	●	●	●	9.525	3.97	3.81	0.4
	09T308N-UG	●	●	●	●	9.525	3.97	3.81	0.8
	CNMG 090404N-UG	●	●	●	●				0.4
	090408N-UG	●	●	●	●	9.525	4.76	3.81	0.8
	CNMG 120404N-UG	●	●	●	●				0.4
	120408N-UG	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-UG	●	●	●	●				1.2
	120416N-UG	●	●	●	●				1.6
	CNMG 160608N-UG	●	●	●	●	15.875	6.35	6.35	0.8
	160612N-UG	●	●	●	●	15.875	6.35	6.35	1.2
160616N-UG	●	●	●	●				1.6	
 UG	CNMG 190608N-UG	●	●	●	●	19.05	6.35	7.94	0.8
	190612N-UG	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-UG	●	●	●	●				1.6
 EG	CNMG 120404N-EG	●	●	●	●				0.4
	120408N-EG	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-EG	●	●	●	●				1.2
	CNMG 160608N-EG	●	●	●	●	15.875	6.35	6.35	0.8
	160612N-EG	●	●	●	●	15.875	6.35	6.35	1.2
	160616N-EG	●	●	●	●				1.6
	CNMG 190612N-EG	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-EG	●	●	●	●				1.6
	CNMG 120408N-MU	●	●	●	●				0.8
	120412N-MU	●	●	●	●	12.7	4.76	5.16	1.2
	120416N-MU	●	●	●	●				1.6
	CNMG 160608N-MU	●	●	●	●	15.875	6.35	6.35	0.8
160612N-MU	●	●	●	●	15.875	6.35	6.35	1.2	
160616N-MU	●	●	●	●				1.6	
 MU	CNMG 190608N-MU	●	●	●	●				0.8
	190612N-MU	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-MU	●	●	●	●				1.6
	190624N-MU	●	●	●	●				2.4
 EM	CNMG 250924N-MU	●	●	●	●	25.4	9.52	9.12	2.4
	CNMG 120408N-EM	●	●	●	●				0.8
	120412N-EM	●	●	●	●	12.7	4.76	5.16	1.2
 EM	120416N-EM	●	●	●	●				1.6
	CNMG 160608N-EM	●	●	●	●	15.875	6.35	6.35	0.8
	160612N-EM	●	●	●	●	15.875	6.35	6.35	1.2
	160616N-EM	●	●	●	●				1.6
	CNMG 190612N-EM	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-EM	●	●	●	●	19.05	6.35	7.94	1.6
 EM	190624N-EM	●	●	●	●				2.4
	CNMG 250924N-EM	●	●	●	●	25.4	9.52	9.12	2.4
	CNMG 120408N-ME	●	●	●	●				0.8
	120412N-ME	●	●	●	●	12.7	4.76	5.16	1.2
	120416N-ME	●	●	●	●				1.6
	CNMG 160608N-ME	●	●	●	●	15.875	6.35	6.35	0.8
 EM	160612N-ME	●	●	●	●	15.875	6.35	6.35	1.2
	160616N-ME	●	●	●	●				1.6
	CNMG 190612N-ME	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-ME	●	●	●	●	19.05	6.35	7.94	1.6
	190624N-ME	●	●	●	●				2.4
	CNMG 250924N-ME	●							

AC8015P/AC8020P/AC8025P/AC8035P

Negative 80° Diamond Type (continued)








Shape	Cat. No.	Stock				Dimensions (mm)						
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius			
	CNMM 190608N-MP	●	●	●	●	19.05	6.35	7.94	0.8			
	190612N-MP	●	●	●	●				1.2			
	190616N-MP	●	●	●	●				1.6			
	190624N-MP	●	●	●	●				2.4			
	CNMM 250724N-MP	●	●	●	●				25.4	7.94	9.12	2.4
MP	CNMM 250924N-MP	●	●	●	●	25.4	9.52	9.12	2.4			
	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	●	●	●	●							1.2
HG	190616N-HG	●	●	●	●	19.05	6.35	7.94	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	●	●	●	●							0.8
	HP	190612N-HP	●	●	●				●	19.05	6.35	7.94
	190616N-HP	●	●	●	●				1.6			
	190624N-HP	●	●	●	●				2.4			
	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

Negative 55° Diamond Type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)							
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner 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	
	150416N-GU	●	●	●	●							1.6	
	GU	DNMG 150604N-GU	●	●	●				●	12.7	6.35	5.16	0.4
	150608N-GU	●	●	●	●				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	
	GE	DNMG 150604N-GE	●	●	●				●	12.7	6.35	5.16	0.4
	150608N-GE	●	●	●	●				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	
	150416N-UX	●	●	●	●							1.6	
	UX	DNMG 150604N-UX	●	●	●				●	12.7	6.35	5.16	0.4
	150608N-UX	●	●	●	●				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	
	150416N-UG	●	●	●	●							1.6	
	UG	DNMG 150604N-UG	●	●	●				●	12.7	6.35	5.16	0.4
	150608N-UG	●	●	●	●				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	
	150416N-EG	●	●	●	●							1.6	
	EG	DNMG 150604N-EG	●	●	●				●	12.7	6.35	5.16	0.4
	150608N-EG	●	●	●	●				0.8				
	150612N-EG	●	●	●	●				1.2				
	150616N-EG	●	●	●	●				1.6				
	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
	150412N-EM	●	●	●	●				1.2				
	150416N-EM	●	●	●	●				1.6				
	EM	DNMG 150608N-EM	●	●	●				●	12.7	6.35	5.16	
150612N-EM	●	●	●	●	1.2								
150616N-EM	●	●	●	●	1.6								
	DNMG 150408N-ME	●	●	●	●	12.7	4.76	5.16	0.8				
150412N-ME	●	●	●	●	1.2								
150416N-ME	●	●	●	●	1.6								
ME	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	
150412N-MX	●	●	●	●	1.2								
150416N-MX	●	●	●	●	1.6								
MX	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								
150412N-UZ	●	●	●	●	1.2								
UZ	DNMG 150608N-UZ	●	●	●	●				12.7	6.35	5.16	0.8	
150612N-UZ	●	●	●	●	1.2								
	DNMG 150404R-HM	●	●	●	●	12.7	4.76	5.16				0.4	
150404L-HM	●	●	●	●	0.4								
150408R-HM	●	●	●	●	0.8								
HM	150408L-HM	●	●	●	●				0.8				
	DNMM 150404N-MP	●	●	●	●	12.7	4.76	5.16	0.4				
	150408N-MP	●	●	●	●				0.8				
	150412N-MP	●	●	●	●				1.2				
	150416N-MP	●	●	●	●				1.6				

*Approximate values, not compliant with ISO standards.

Negative 55° Diamond Type

	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	
	150412N-FE	●	●	●	●							1.2	
	FE	DNMG 150602N-FE	●	●	●				●	12.7	6.35	5.16	0.2
	150604N-FE	●	●	●	●				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				
	DNMG 150402N-LU	●	●	●	●				12.7	4.76	5.16	0.2	
	150404N-LU	●	●	●	●							0.4	
	150408N-LU	●	●	●	●							0.8	
LU	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	●	●	●	●							0.4	
	SU	150608N-SU	●	●	●				●	12.7	6.35	5.16	0.8
150612N-SU	●	●	●	●	1.2								
	DNMG 110408N-SE	●	●	●	●	9.525	4.76	3.81	0.8				
	DNMG 150404N-SE	●	●	●	●				12.7	4.76	5.16	0.4	
	150408N-SE	●	●	●	●							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								
SEW													
	DNMG 110404N-EF	●	●</										

AC8015P/AC8020P/AC8025P/AC8035P

Negative 55° Diamond Type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	DNMM 150604N-MP	●	●	●	●	12.7	6.35	5.16	0.4
	150608N-MP	●	●	●	●				0.8
	150612N-MP	●	●	●	●				1.2
	150616N-MP	●	●	●	●				1.6
	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

	SNMG 120408N-FL	●	●	●	●	12.7	4.76	5.16	0.8
	SNMG 120404N-FE	●	●	●	●	12.7	4.76	5.16	0.4
	120408N-FE	●	●	●	●				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	●	●	●	●	12.7	4.76	5.16	0.4
	120408N-EF	●	●	●	●				0.8
	SNMG 120408N-SX	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-SX	●	●	●	●				1.2
	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				
	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				
	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				
	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
	SNMG 190612N-UG	●	●	●	●	1.2			
	190616N-UG	●	●	●	●	1.6			
SNMG 250924N-UG	●	●	●	●	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
	SNMG 190612N-EG	●	●	●	●				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				

Negative Square Type (continued)

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
	SNMG 190612N-MU	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-MU	●	●	●	●				1.6
	190624N-MU	●	●	●	●				2.4
	SNMG 250924N-MU	●	●	●	●				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				
	SNMG 190612N-EM	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-EM	●	●	●	●				1.6
	190624N-EM	●	●	●	●				2.4
	SNMG 250924N-EM	●	●	●	●				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
	SNMG 250924N-ME	●	●	●	●				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				
SNMG 190612N-MX	●	●	●	●	1.2				
190616N-MX	●	●	●	●	1.6				
	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
SNMG 190612N-UZ	●	●	●	●	1.2				
190616N-UZ	●	●	●	●	1.6				
	SNMG 120408R-HM	●	●	●	●	12.7	4.76	5.16	0.8
	120408L-HM	●	●	●	●				0.8
	SNMM 120408N-MP	●	●	●	●	12.7	4.76	5.16	0.8
	120412N-MP	●	●	●	●				1.2
	120416N-MP	●	●	●	●				1.6
	SNMM 120420N-MP	●	●	●	●	15.875	6.35	6.35	2.0
	SNMM 150612N-MP	●	●	●	●				1.2
	150616N-MP	●	●	●	●				1.6
	SNMM 190612N-MP	●	●	●	●	19.05	6.35	7.94	1.2
	190616N-MP	●	●	●	●				1.6
	SNMM 250724N-MP	●	●	●	●				2.4
	SNMM 250924N-MP	●	●	●	●				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
	SNMM 190612N-HG	●	●	●	●				1.2
190616N-HG	●	●	●	●	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
	SNMM 250724N-HP	●	●	●	●				2.4
SNMM 250924N-HP	●	●	●	●	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	●	●	●	●				2.4
	SNMM 310924N-HU	●	●	●	●				2.4
	SNMM 250724N-HW	●	●	●	●	25.4	7.94	9.12	2.4
	SNMM 250924N-HW	●	●	●	●				2.4
	SNMM 310924N-HW	●	●	●	●				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	●	●	●	●				2.4
250932N-HF	●	●	●	●	3.2				
SNMM 310924N-HF	●	●	●	●	31.75	9.52	8.8	2.4	

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

AC8015P/AC8020P/AC8025P/AC8035P

△ Negative Triangular Type

Shape	Cat. No.	Stock				Dimensions (mm)						
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius			
FL	TNMG 160404N-FL		●			9.525	4.76	3.81	0.4			
	160408N-FL		●						0.8			
FE	TNMG 160402N-FE	●	●	●		9.525	4.76	3.81	0.2			
	160404N-FE	●	●	●					0.4			
	160408N-FE	●	●	●					0.8			
	160412N-FE	●	●	●					1.2			
LU	TNMG 160404N-LU	●	●	●		9.525	4.76	3.81	0.4			
	160408N-LU	●	●	●					0.8			
	160412N-LU	●	●	●					1.2			
SU	TNMG 160404N-SU	●	●	●		9.525	4.76	3.81	0.4			
	160408N-SU	●	●	●					0.8			
	160412N-SU	●	●	●					1.2			
SE	TNMG 160404N-SE	●	●	●		9.525	4.76	3.81	0.4			
	160408N-SE	●	●	●					0.8			
	160412N-SE	●	●	●					1.2			
SE	TNMG 220404N-SE	●	●	●		12.7	4.76	5.16	0.4			
	220408N-SE	●	●	●					0.8			
	220412N-SE	●	●	●					1.2			
EF	TNMG 160404N-EF	●	●	●		9.525	4.76	3.81	0.4			
	160408N-EF	●	●	●					0.8			
SX	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
220412N-SX	●	●	●		1.2							
GU	TNMG 160404N-GU	●	●	●		9.525	4.76	3.81	0.4			
	160408N-GU	●	●	●					0.8			
	160412N-GU	●	●	●					1.2			
	160416N-GU	●	●	●					1.6			
	TNMG 220404N-GU	●	●	●					12.7	4.76	5.16	0.4
220408N-GU	●	●	●		0.8							
220412N-GU	●	●	●		1.2							
GE	TNMG 160404N-GE	●	●	●		9.525	4.76	3.81	0.4			
	160408N-GE	●	●	●					0.8			
	160412N-GE	●	●	●					1.2			
	TNMG 220408N-GE	●	●	●					12.7	4.76	5.16	0.8
220412N-GE	●	●	●		1.2							
UX	TNMG 160404N-UX	●	●	●		9.525	4.76	3.81	0.4			
	160408N-UX	●	●	●					0.8			
	160412N-UX	●	●	●					1.2			
	TNMG 220408N-UX	●	●	●					12.7	4.76	5.16	0.8
220412N-UX	●	●	●		1.2							
UG	TNMG 160404N-UG	●	●	●		9.525	4.76	3.81	0.4			
	160408N-UG	●	●	●					0.8			
	160412N-UG	●	●	●					1.2			
	160416N-UG	●	●	●					1.6			
UG	TNMG 220408N-UG	●	●	●		12.7	4.76	5.16	0.8			
	220412N-UG	●	●	●					1.2			
EG	TNMG 160404N-EG	●	●	●		9.525	4.76	3.81	0.4			
	160408N-EG	●	●	●					0.8			
	160412N-EG	●	●	●					1.2			
MU	TNMG 160408N-MU	●	●	●		9.525	4.76	3.81	0.8			
	160412N-MU	●	●	●					1.2			
	TNMG 220408N-MU	●	●	●					12.7	4.76	5.16	0.8
	220412N-MU	●	●	●								1.2
	220416N-MU	●	●	●								1.6
TNMG 270612N-MU	●	●	●		15.875	6.35	6.35	1.2				
270616N-MU	●	●	●					1.6				
EM	TNMG 160408N-EM	●	●	●		9.525	4.76	3.81	0.8			
	160412N-EM	●	●	●					1.2			
ME	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							
220416N-ME	●	●	●		1.6							
MX	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)						
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius			
UZ	TNMG 160404N-UZ	●	●	●		9.525	4.76	3.81	0.4			
	160408N-UZ	●	●	●					0.8			
	160412N-UZ	●	●	●					1.2			
	TNMG 160416N-UZ	●	●	●					12.7	4.76	5.16	1.6
	220412N-UZ	●	●	●								0.8
	TNMG 220416N-UZ	●	●	●					15.875	6.35	6.35	1.6
TNMG 270608N-UZ	●	●	●		0.8							
270612N-UZ	●	●	●		1.2							
270616N-UZ	●	●	●		1.6							
HM	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							
MP	TNMM 160404N-MP	●	●	●		9.525	4.76	3.81	0.4			
	160408N-MP	●	●	●					0.8			
	160412N-MP	●	●	●					1.2			
	TNMM 220408N-MP	●	●	●					12.7	4.76	5.16	0.8
	220412N-MP	●	●	●								1.2
220416N-MP	●	●	●		1.6							
TNMM 270612N-MP	●	●	●		15.875	6.35	6.35	1.2				
270616N-MP	●	●	●					1.6				
HG	TNMM 220408N-HG	●	●	●		12.7	4.76	5.16	0.8			
	220412N-HG	●	●	●					1.2			
	220416N-HG	●	●	●					1.6			
HP	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
	220416N-HP	●	●	●								1.6
TNMM 270612N-HP	●	●	●		15.875	6.35	6.35	1.2				
270616N-HP	●	●	●					1.6				









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

AC8015P/AC8020P/AC8025P/AC8035P


















Negative 35° Diamond Type

Shape	Cat. No.	Stock				Dimensions (mm)			
		AC8015P	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								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								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					9.525	4.76	3.81	0.4
	160408N-UZ								0.8
									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								0.4
	060408N-FE					9.525	4.76	3.81	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
 LW	WNMG 080404N-LU								0.4
	080408N-LU					12.7	4.76	5.16	0.8
	080412N-LU								1.2
 LW	WNMG 060404N-LUW					9.525	4.76	3.81	0.4
	060408N-LUW								0.8
 LW	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
	060408N-SU					9.525	4.76	3.81	0.8
	060412N-SU								1.2
 SU	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)			
		AC8015P	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
	080412N-SE								1.2
 SEW	WNMG 060404N-SEW								0.4
	060408N-SEW					9.525	4.76	3.81	0.8
	WNMG 080404N-SEW								0.4
	080408N-SEW					12.7	4.76	5.16	0.8
	080412N-SEW								1.2
 EF	WNMG 060404N-EF								0.4
	060408N-EF					9.525	4.76	3.81	0.8
	060412N-EF								1.2
 SX	WNMG 080404N-SX								0.4
	080408N-SX					12.7	4.76	5.16	0.8
	080412N-SX								1.2
 GU	WNMG 060404N-GU								0.4
	060408N-GU					9.525	4.76	3.81	0.8
	060412N-GU								1.2
	WNMG 080404N-GU								0.4
	080408N-GU					12.7	4.76	5.16	0.8
 GE	080412N-GU								1.2
	WNMG 060408N-GE								0.8
 GE	060412N-GE					9.525	4.76	3.81	1.2
	WNMG 080404N-GE								0.4
 GE	080408N-GE					12.7	4.76	5.16	0.8
	080412N-GE								1.2
	080416N-GE								1.6
 GUW	WNMG 060408N-GUW					9.525	4.76	3.81	0.8
	060412N-GUW								1.2
	WNMG 080408N-GUW					12.7	4.76	5.16	0.8
	080412N-GUW								1.2
 UX	WNMG 080404N-UX								0.4
	080408N-UX					12.7	4.76	5.16	0.8
	080412N-UX								1.2
	WNMG 06T304N-UG					9.525	3.97	3.81	0.4
	06T308N-UG								0.8
 UG	WNMG 060404N-UG								0.4
	060408N-UG					9.525	4.76	3.81	0.8
	060412N-UG								1.2
	WNMG 080404N-UG								0.4
	080408N-UG					12.7	4.76	5.16	0.8
 EG	080412N-UG								1.2
	WNMG 060408N-EG					9.525	4.76	3.81	0.8
	060412N-EG								1.2
 MU	WNMG 080404N-EG								0.4
	080408N-EG					12.7	4.76	5.16	0.8
	080412N-EG								1.2
	WNMG 060408N-MU								0.8
	060412N-MU					9.525	4.76	3.81	1.2
 EM	WNMG 080408N-MU								0.8
	080416N-MU					12.7	4.76	5.16	1.6
	WNMG 080408N-EM								0.8
	080412N-EM					12.7	4.76	5.16	1.2
 ME	WNMG 060408N-ME								0.8
	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
 MX	080416N-ME								1.6
	WNMG 080408N-MX								0.8
 UZ	080412N-MX					12.7	4.76	5.16	1.2
	WNMG 080404N-UZ								0.4
						12.7	4.76	5.16	0.8
									1.2

AC8015P/AC8020P/AC8025P/AC8035P




Positive 80° Diamond Type

Shape	Relief Angle	Cat. No.	Stock			Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 LU	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
 LW	7°	09T308N-LU	●	●	●	9.525	3.97	4.4	0.8
		CCMT 09T304N-LUW	●	●	●	9.525	3.97	4.4	0.4
		09T308N-LUW	●	●	●	9.525	3.97	4.4	0.8
 LB	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
		09T304N-LB	●	●	●	9.525	3.97	4.4	0.4
 SU	7°	09T308N-LB	●	●	●	9.525	3.97	4.4	0.8
		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
 SC	7°	09T304N-SU	●	●	●	9.525	3.97	4.4	0.4
		09T308N-SU	●	●	●	9.525	3.97	4.4	0.8
		CCMT 120404N-SU	●	●	●	12.7	4.76	5.5	0.4
		120408N-SU	●	●	●	12.7	4.76	5.5	0.8
		CCMT 060204N-SC	●	●	●	6.35	2.38	2.8	0.4
 GU	7°	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
		CCMT 060204N-GU	●	●	●	6.35	2.38	2.8	0.4
 MU	7°	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
		CCMT 120408N-GU	●	●	●	12.7	4.76	5.5	0.8
 LU	11°	CCMT 09T304N-MU	●	●	●	9.525	3.97	4.4	0.4
		09T308N-MU	●	●	●	9.525	3.97	4.4	0.8
 LW	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
 LB	11°	CPMT 090304N-LUW	●	●	●	9.525	3.18	4.4	0.4
		090308N-LUW	●	●	●	9.525	3.18	4.4	0.8
		CPMT 080204N-LB	●	●	●	7.94	2.38	3.4	0.4
 SU	11°	CPMT 090304N-LB	●	●	●	9.525	3.18	4.4	0.4
		090308N-LB	●	●	●	9.525	3.18	4.4	0.8
		CPMT 080204N-SU	●	●	●	7.94	2.38	3.4	0.4
 GU	11°	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
 MU	11°	CPMT 090304N-GU	●	●	●	9.525	3.18	4.4	0.4
		090308N-GU	●	●	●	9.525	3.18	4.4	0.8
		CPMT 080204N-MU	●	●	●	7.94	2.38	3.4	0.4
 MU	11°	CPMT 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)			
			AC8015P	AC8020P	AC8025P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
 LU	7°	DCMT 070202N-LU	●	●	●	6.35	2.38	2.8	0.2
		070204N-LU	●	●	●	6.35	2.38	2.8	0.4
 LW	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
 LB	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
		11T304N-LB	●	●	●	9.525	3.97	4.4	0.4
 SU	7°	11T308N-LB	●	●	●	9.525	3.97	4.4	0.8
		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
 GU	7°	11T304N-SU	●	●	●	9.525	3.97	4.4	0.4
		11T308N-SU	●	●	●	9.525	3.97	4.4	0.8
		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
 MU	7°	11T304N-GU	●	●	●	9.525	3.97	4.4	0.4
		11T308N-GU	●	●	●	9.525	3.97	4.4	0.8
		11T312N-GU	●	●	●	9.525	3.97	4.4	1.2
		DCMT 11T308N-MU	●	●	●	9.525	3.97	4.4	0.8

Positive Round Type

 RX	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	-
 RH	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	-
 RP	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	-

Positive Square Type

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

● mark: Standard stocked item ● mark: Standard stocked item (new product/expanded item) Blank: Made-to-order item  : Wiper Insert

AC8015P/AC8020P/AC8025P/AC8035P

△ Positive Triangular Type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
LU	7°	TCMT 110204N-LU	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-LU	●	●	●	●	6.35	2.38	2.8	0.8
LB	7°	TCMT 110204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-LB	●	●	●	●	6.35	2.38	2.8	0.8
SU	7°	TCMT 110204N-SU	●	●	●	●	6.35	2.38	2.8	0.4
		110208N-SU	●	●	●	●	6.35	2.38	2.8	0.8
LU	11°	TPMT 090202N-LU	●	●	●	●	5.56	2.38	2.8	0.2
		090204N-LU	●	●	●	●	5.56	2.38	2.8	0.4
LB	11°	TPMT 110302N-LB	●	●	●	●	6.35	3.18	3.4	0.2
		110304N-LB	●	●	●	●	6.35	3.18	3.4	0.4
SU	11°	TPMT 110302N-SU	●	●	●	●	6.35	3.18	3.4	0.2
		110304N-SU	●	●	●	●	6.35	3.18	3.4	0.4
GU	11°	TPMT 110304N-GU	●	●	●	●	6.35	3.18	3.4	0.4
		110308N-GU	●	●	●	●	6.35	3.18	3.4	0.8
MU	11°	TPMT 110304N-MU	●	●	●	●	6.35	3.18	3.4	0.4
		110308N-MU	●	●	●	●	6.35	3.18	3.4	0.8
SF	11°	TPMT 160404N-SF	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-SF	●	●	●	●	9.525	4.76	4.4	0.8

△ Positive Trigon Type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
LB	11°	WPMT 110204N-LB	●	●	●	●	6.35	2.38	2.8	0.4
		160308N-LB	●	●	●	●	9.525	3.18	4.4	0.8

■ Positive Square Type (Without Hole)

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
SF	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
UJ	11°	SPMR 090304N-UJ	●	●	●	●	9.525	3.18	-	0.4
		090308N-UJ	●	●	●	●	9.525	3.18	-	0.8
		SPMR 120304N-UJ	●	●	●	●	12.7	3.18	-	0.4
		120308N-UJ	●	●	●	●	12.7	3.18	-	0.8

△ Positive Triangular Type (Without Hole)

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
SF	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
UJ	11°	TPMR 110304N-UJ	●	●	●	●	6.35	3.18	-	0.4
		110308N-UJ	●	●	●	●	6.35	3.18	-	0.8
		TPMR 160304N-UJ	●	●	●	●	9.525	3.18	-	0.4
		160308N-UJ	●	●	●	●	9.525	3.18	-	0.8

T-REX Inserts (For Profiling)

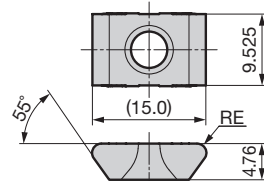
Negative 55° Apex Angle

Sumitomo T-REX

Shape	Cat. No.	Stock				Dimensions (mm)		
		AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Corner Radius
FL	TRM 551704-FL	●	●	●	●	10.0	5.0	0.4
	551708-FL	●	●	●	●	10.0	5.0	0.8
GU	TRM 551704-GU	●	●	●	●	10.0	5.0	0.4
	551708-GU	●	●	●	●	10.0	5.0	0.8
LU	TRM 551712-GU	●	●	●	●	10.0	5.0	1.2
	TRM 551704-LU	●	●	●	●	10.0	5.0	0.4
SU	551708-LU	●	●	●	●	10.0	5.0	0.8
	551712-LU	●	●	●	●	10.0	5.0	1.2
SU	TRM 551704-SU	●	●	●	●	10.0	5.0	0.4
	551708-SU	●	●	●	●	10.0	5.0	0.8
SU	551712-SU	●	●	●	●	10.0	5.0	1.2

Refer to the General Catalogue for details on the applicable holders for the inserts above.

Inserts for XD Type Tool Holders (For Crank Shaft Machining)



Cat. No.	Stock				Dimensions (mm)	
	AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Corner Radius
XDM 150408-GU	●	●	●	●	8.0	0.8
150412-GU	●	●	●	●	12.0	1.2
150420-GU	●	●	●	●	20.0	2.0
XDM 150408-LU	●	●	●	●	8.0	1.8
150412-LU	●	●	●	●	12.0	1.2
150420-LU	●	●	●	●	20.0	2.0

Contact your local sales office for details on the applicable holders for the inserts above.

◇ Positive 35° Diamond Type

Shape	Relief Angle	Cat. No.	Stock				Dimensions (mm)			
			AC8015P	AC8020P	AC8025P	AC8035P	Inscribed Circle	Thickness	Hole Dia.	Corner Radius
LU	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
LB	5°	VBMT 110302N-LB	●	●	●	●	6.35	3.18	2.8	0.2
		110304N-LB	●	●	●	●	6.35	3.18	2.8	0.4
		110308N-LB	●	●	●	●	6.35	3.18	2.8	0.8
SU	5°	VBMT 160404N-LB	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-LB	●	●	●	●	9.525	4.76	4.4	0.8
		160412N-LB	●	●	●	●	9.525	4.76	4.4	1.2
GU	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
SU	7°	VBMT 160408N-SU	●	●	●	●	9.525	4.76	4.4	0.8
		160412N-SU	●	●	●	●	9.525	4.76	4.4	1.2
		VBMT 110304N-GU	●	●	●	●	6.35	3.18	2.8	0.4
GU	7°	VBMT 110308N-GU	●	●	●	●	6.35	3.18	2.8	0.8
		VBMT 160404N-GU	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-GU	●	●	●	●	9.525	4.76	4.4	0.8
LU	7°	VCMT 160404N-LU	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-LU	●	●	●	●	9.525	4.76	4.4	0.8
		VCMT 080202N-LB	●	●	●	●	4.76	2.38	2.3	0.2
LB	7°	VCMT 080204N-LB	●	●	●	●	4.76	2.38	2.3	0.4
		VCMT 160404N-LB	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-LB	●	●	●	●	9.525	4.76	4.4	0.8
SU	7°	VCMT 110304N-SU	●	●	●	●	6.35	3.18	2.8	0.4
		110308N-SU	●	●	●	●	6.35	3.18	2.8	0.8
		VCMT 160404N-SU	●	●	●	●	9.525	4.76	4.4	0.4
GU	7°	VCMT 160408N-SU	●	●	●	●	9.525	4.76	4.4	0.8
		VCMT 160404N-GU	●	●	●	●	9.525	4.76	4.4	0.4
		160408N-GU	●	●	●	●	9.525	4.76	4.4	0.8

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

AC8015P/AC8020P/AC8025P/AC8035P

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

Fig 1

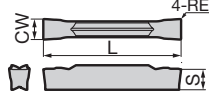


Fig 2 (Figure shows right-hand (R) tool.)

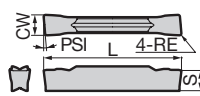
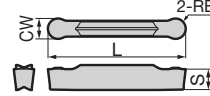


Fig 3



Grooving / Traverse Cutting

Cat. No.	Stock		Dimensions (mm)					Pcs/Pack	Fig
	AC8025P	AC8035P	Width of Cut CW		Corner Radius RE	Overall Length L	Thickness S		
			Width of Cut	Tolerance					
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	5	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	5	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	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	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	5	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	5	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	5	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	5	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	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	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	5	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 RE	Overall Length L	Thickness S		
			Width of Cut	Tolerance					
GCM N2002-GG	●	●	2.0	±0.03	0.2	21.1	3.6	5	1
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	5	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	5	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	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	5	1
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	5	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	5	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	5	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	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
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	5	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	5	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	5	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	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	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	5	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
	AC8025P	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	5	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	5	2
L4002-CG-05	●	●	5°	4.0	±0.04	0.2	26.7	4.0		2

GCMR: Right Handed, GCM L: 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	5	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	5	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			

Note: The values in red have been changed from the 2021-2022 General Catalogue.

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 (new product / expanded item) Blank: Made-to-order item

Sumitomo Electric Cutting Tools Official Apps for iOS/Android



Cutting calculation App

SumiTool Calculator



Grade & chipbreaker comparison App

SumiTool Converter



< SAFETY NOTES >



- Very hot or lengthy chips may be discharged while the machine is in operation. Therefore, machine guards, safety goggles or other protective covers must be used. Fire safety precautions must also be considered.

- Please handle with care as this product has sharp edges.
- Improper cutting conditions or mis-handling of the tool may result in breakages or projectiles. Therefore, please use the tool within its recommended conditions.

- When using non-water soluble cutting oil, precautions against fire must be taken and please ensure that a fire extinguisher is placed near the machine.

 Sumitomo Electric Industries, Ltd.

Hardmetal Division

Global Marketing Department : 1-1-1, Koyakita, Itami, Hyogo 664-0016, Japan

<https://www.sumitool.com/global>