

PR1725 / PR1705



Excellent surface finish and long tool life

Newly developed PVD coating MEGACOAT NANO PLUS

PR1725

Great for machining steel and other materials

Wide range of machining applications with various chipbreakers available

PR1705

Excellent wear resistance and high precision machining of free-cutting steel



For finishing: SKS chipbreaker



New PVD coating

PR1725

1st recommendation for steel machining. Excellent surface finish and long tool life. Great performance in small parts machining applications.



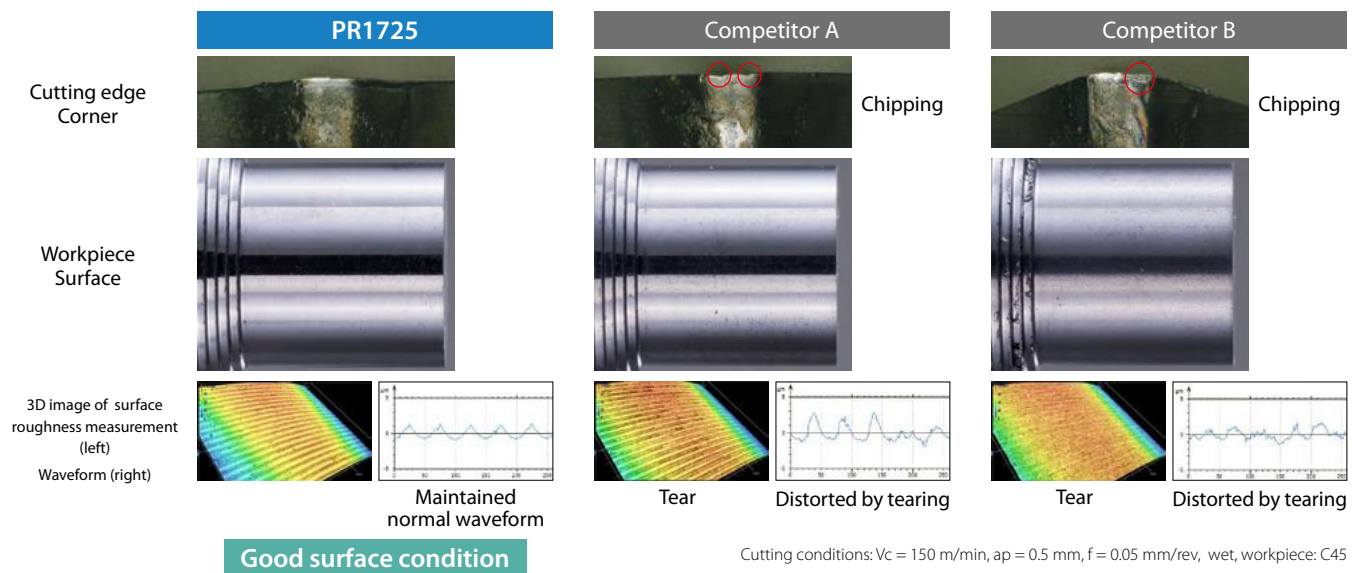
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MEGACOAT NANO PLUS maintains long tool life and excellent surface finish

Long tool life leads to improved machine operation ratio

Excellent surface finish with no tearing lowers quality control costs

Insert cutting edge wear and quality of surface finish comparison (C45) *After 20 min of machining (Internal evaluation)

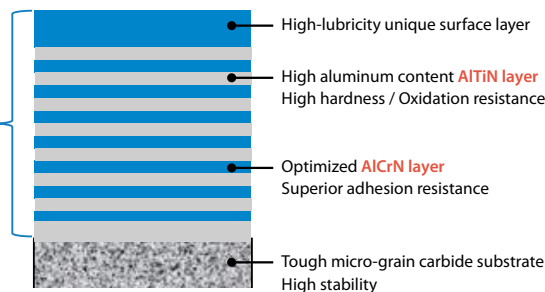


MEGACOAT NANO PLUS

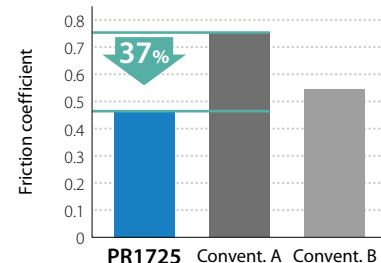
AlTiN/AlCrN Nano laminated film with superior wear resistance and adhesion resistance. Excellent surface finish and long tool life

Reduces cracking

Reduces abnormal damages such as chipping because of increased lamination layer with a thinner gap than conventional coatings



Friction coefficient comparison (Internal evaluation)



Superior wear and chipping resistance

High hardness with nano laminated film layer properties
Internal stress optimization reduces chipping.

Applicable to various workpiece materials

Excellent oxidation resistance. Superior high temperature properties maintains good performance in steel, stainless steel and free-cutting steel.

Excellent surface finish

Special surface layer with great lubricity reduces adhesion

High machining stability

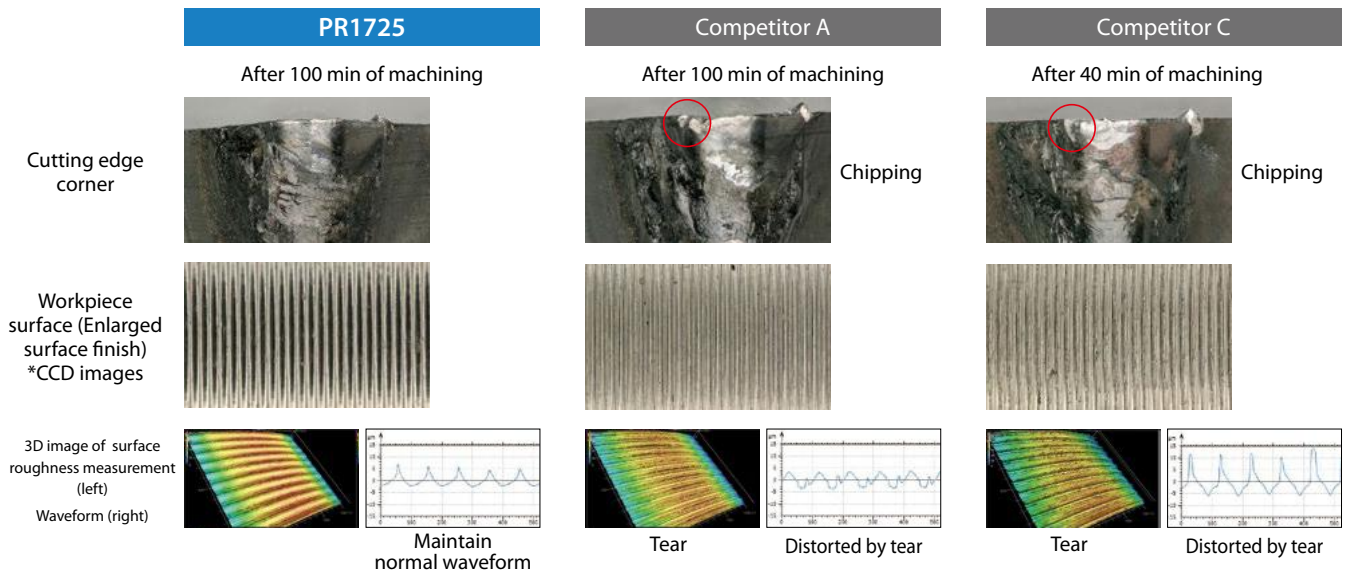
Tough micro-grain carbide substrate provides stable machining.

2 One solution can be used in various workpiece materials

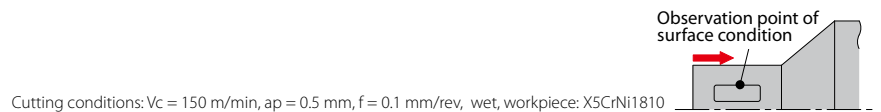
Long tool life for steel, stainless steel and free-cutting steel

Improved management of tools cut the cost

Wear on the cutting edge of insert and quality of the surface finish comparison (Stainless steel: X5CrNi1810) - Internal evaluation

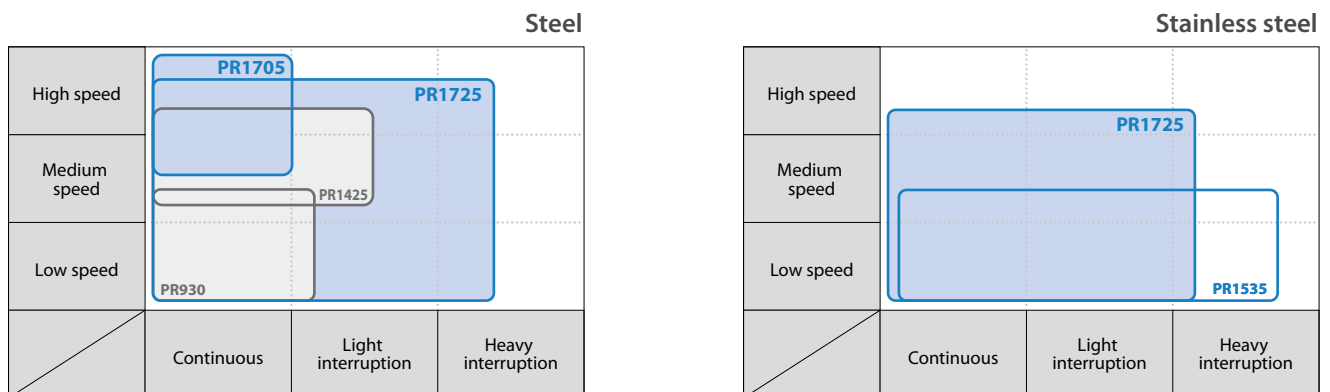


PR1725 shows less damage on the cutting edge and maintains stable tool mark on the workpiece surface



3 Applicable to a wide range of machining applications

Good performance in both steel and stainless steel from low to high speed machining



PR1725: 1st recommendation for steel machining

PR1705: 1st recommendation free-cutting steel

PR1725: For general purpose high-speed machining

PR1535: 1st recommendation for stainless steel machining
Long tool life and high quality machining

Case studies

Shaft 34CrMo4

Vc = 110 m/min
ap = ~1.5 mm
f = 0.06 mm/rev
Wet
DCGT11T302MFP-SK PR1725

Tool life

PR1725
SK chipbreaker

3,000 pcs/edge

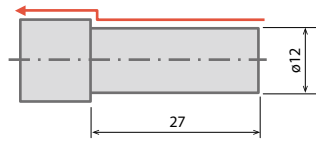
x2

Competitor D
(Molded Chipbr.)

1,500 pcs/edge

PR1725 SK chipbreaker showed 2 times longer tool life when compared to competitor D

User evaluation



Shaft 42CrMo4

Vc = 70 m/min
ap = 1.0 mm
f = 0.05 mm/rev
Wet
DCGT11T302MFP-SK PR1725

Tool life

PR1725
SK chipbreaker

250 pcs/edge

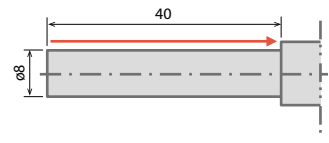
x1.6

Competitor E
(Molded chipbr.)

150 pcs/edge

PR1725 SK chipbreaker showed 1.6 times longer tool life when compared to competitor E

User evaluation



Shaft C35

Vc = 90 m/min
ap = 0.3 mm
f = 0.1 mm/rev
Wet
DCGT11T302MFP-SK PR1725

Tool life

PR1725
SK chipbreaker

300 pcs/edge

x1.5

Competitor F
(Molded chipbr.)

200 pcs/edge

PR1725 SK chipbreaker showed 1.5 times longer tool life when compared to competitor F

User evaluation



Pin 20CrMo5

Vc = 110 m/min
ap = 0.2~0.7 mm
f = 0.07 mm/rev
Wet
DCGT11T302MFP-GQ PR1725

Tool life

PR1725
GQ chipbreaker

200 pcs/edge

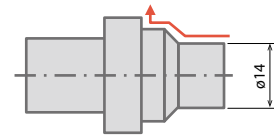
x1.3

Competitor G
(Molded Chipbr.)

150 pcs/edge

PR1725 GQ chipbreaker showed 1.3 times longer tool life when compared to competitor G

User evaluation



Shaft X30Cr13

Vc = 50 m/min
ap = 0.1 mm
f = 0.05 mm/rev
Wet
DCGT11T302MFP-GQ PR1725

Tool life

PR1725
GQ chipbreaker

600 pcs/edge

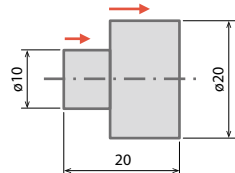
x2

Competitor H
(Molded Chipbr.)

300 pcs/edge

PR1725 GQ chipbreaker showed 2 times longer tool life when compared to competitor H

User evaluation



Shaft Free-cutting steel

Vc = 110 m/min
ap = ~2.0 mm
f = 0.05 mm/rev
Wet
CCET09T304MFR-J PR1725

Tool life

PR1725
J chipbreaker

3,000 pcs/edge

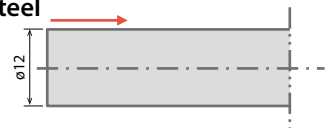
x3

Competitor I
(Molded Chipbr.)

1,000 pcs/edge

PR1725 J chipbreaker showed 3 times longer tool life when compared to competitor I

User evaluation



Shaft C45

Vc = 100 m/min
ap = 0.1 mm
f = 0.025 mm/rev
Wet
DCGT11T302MFP-GF PR1725

Tool life

PR1725
GF chipbreaker

3,000 pcs/edge

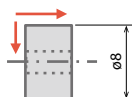
x2

Competitor J
(Molded Chipbr.)

1,500 pcs/edge

PR1725 GF chipbreaker showed 2 times longer tool life when compared to competitor J

User evaluation

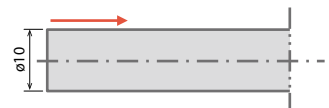


Pin Alloy tool steel

Vc = 110 m/min
ap = 0.2 mm
f = 0.05 mm/rev
Wet
DCGT11T302MFP-SK PR1725

PR1725 SK chipbreaker showed good surface finish and accuracy after machining same number of workpieces as the conventional C

User evaluation

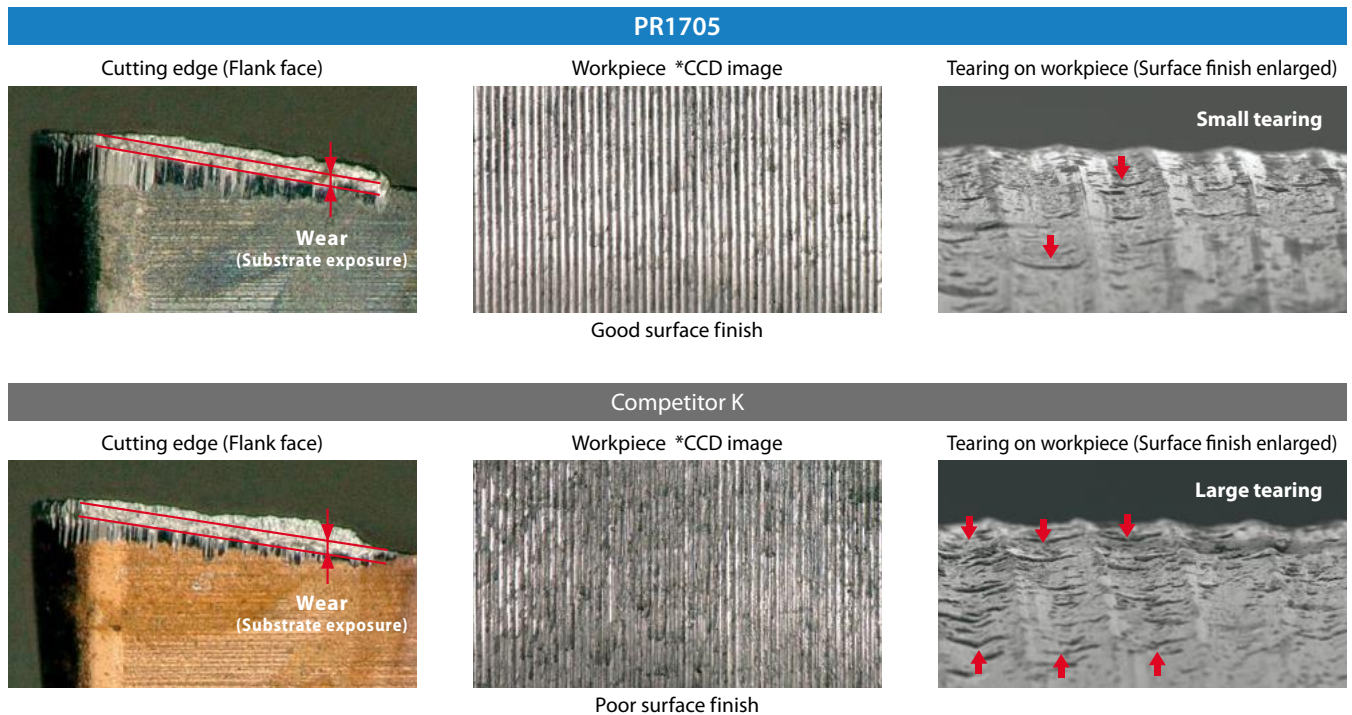


New PVD coating

PR1705

High-hardness ultrafine particle carbide substrates with MEGACOAT NANO PLUS offer excellent wear resistance and high precision machining

Insert wear and surface finish comparison (9SMnPb28) *After 40 min of machining (Internal evaluation)

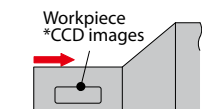


PR1705 showed little adhesion to the cutting edge and good surface finish on the workpiece without tearing

Cutting conditions: $V_c = 150$ m/min, $a_p = 0.5$ mm, $f = 0.05$ mm/rev, wet, workpiece: 9SMnPb28

PR1705 improved tool life in continuous machining for steel and electromagnetic soft iron

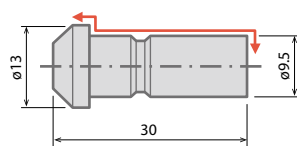
*For more stable machining, use PR1725



Case studies

Pin 9SMnPb28

$V_c = 200$ m/min
 $a_p = 0.12$ mm
 $f = 0.04$ mm/rev
 Wet
 CCGT09T301MF PR1705



Tool life

PR1705
 MF chipbreaker

4,800 pcs/edge

x1.5

Competitor L
 (Ground chipbr.)

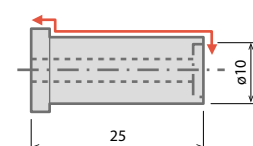
3,200 pcs/edge

PR1705 MF chipbreaker showed 1.5 times longer tool life when compared to competitor L

User evaluation

Shaft 9SMnPb28

$V_c = 100$ m/min
 $a_p = 1.4$ mm
 $f = 0.05$ mm/rev
 Wet
 DCGT11T302MFR-J PR1705



Tool life

PR1705
 J chipbreaker

5,800 pcs/edge

Approx. x1.4

Competitor M
 (Ground chipbr.)

4,000 pcs/edge

PR1705 J chipbreaker showed 1.4 times longer tool life when compared to competitor M

User evaluation

Molded chipbreaker series for small parts machining

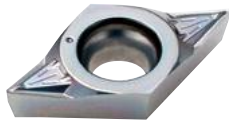
Molded sharp edge chipbreaker

Extensive lineup to solve various chip control issues. Utilizing PR1725 and PR1705 provides stable machining and extended tool life.

- 1 Excellent chip control in a wide range of machining applications
- 2 High-precision sharp edge with periphery grinding
- 3 Anti-welding properties for improved mirror surface finish

1st recommendation for finishing

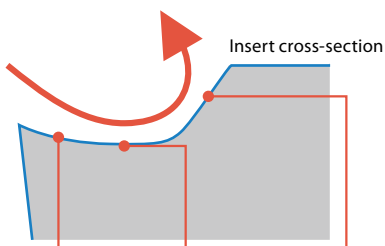
SKS chipbreaker



ap: 0.2 to 1.5 mm

Excellent chip control with good surface finish

Rake face, bottom face, and chipbreaker face ensure properly curled chips



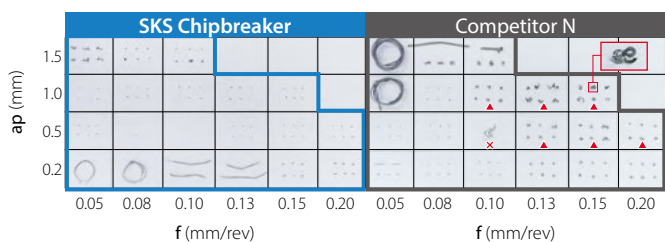
Rake face Bottom face Chipbreaker face

Optimized chipbreaker height

Stabilized chip control when machining at high feed rates
Improved chip evacuation when machining at large D.O.C.

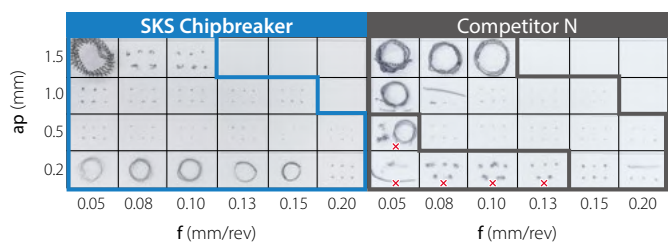
Chip Control Comparison (Internal evaluation)

C45



▲ : A little Unstable Chip Control ✕ : Unstable Chip Control

X5CrNi1810



✕ : Unstable Chip Control

Cutting Conditions : $V_c = 100$ m/min, Wet, DCGT11T302 Type

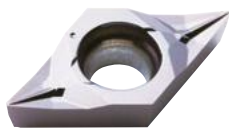
SKS chipbreaker showed greater chip control when compared to competitor N

1st recommendation for semi-finishing

SK chipbreaker

ap: 0.5 to 3.0 mm

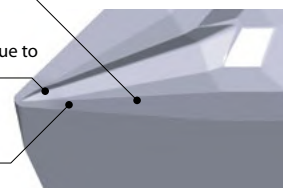
The molded chipbreaker maintains both sharpness and chip control



Stable chip evacuation in large D.O.C.
due to large rake angle

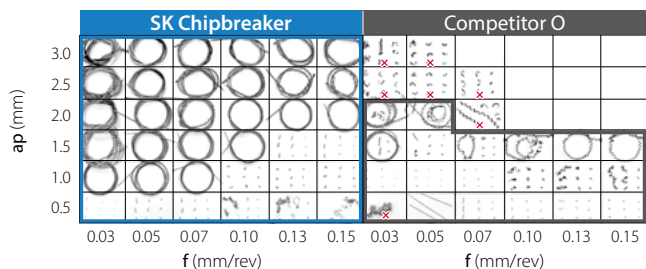
Chip control is improved in small depths of cut due to chipbreaker projecting out to the corner tip

Cutting force is reduced as the cutting edge is lowered towards the center of the workpiece



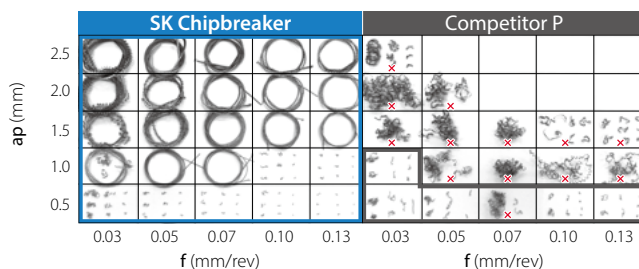
Chip control comparison (internal evaluation)

C45



✗ : Unstable Chip Control

X5CrNi1810



✗ : Unstable Chip Control

Cutting Conditions : Vc = 100 m/min, Wet, DCGT11T302 Type

Complementary chipbreakers (Chip control oriented)

GQ chipbreaker for small to large ap

ap: 0.8 to 5.0 mm (Steel)

0.8 to 3.0 mm (Stainless steel)

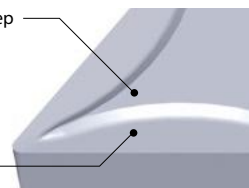
For a wide range of applications



Low cutting force design with a small chipbreaker step

Good chip control in small depths of cut with the breaker dot projecting out to the cutting edge

Wide range of acceptable chips is achieved by using an advanced chipbreaker design



GF chipbreaker for finishing

ap: 0.25 to 1.25 mm

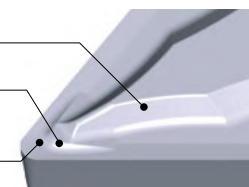
Controlled chips during finishing



High slope recedes away from the cutting edge
⇒ Minimizes chip clogging in large D.O.C.

Improved sharpness with large rake angle

Chipbreaker dot extends out to the cutting edge
⇒ Divides the chips into smaller pieces



CF chipbreaker for minute ap

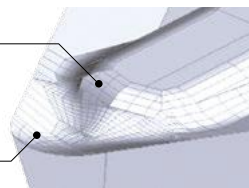
ap: 0.02 to 0.2 mm

Excellent chip formation in minute ap



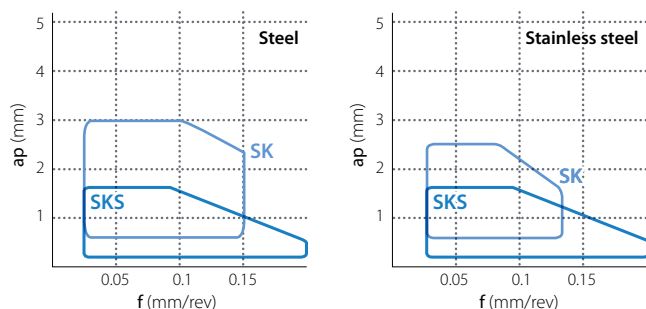
Properly curled chips with special dot design

Large rake angle improves sharpness
Suppresses burr formation and clouding of the workpiece by preventing welding onto the insert

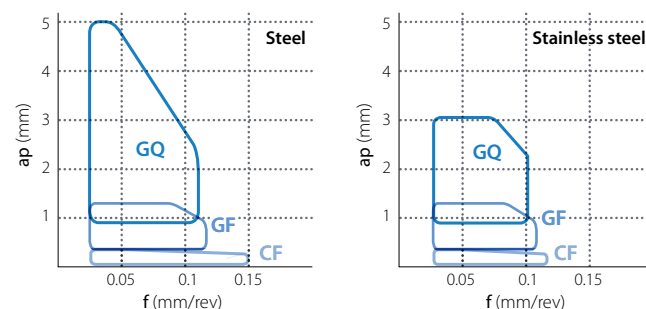


Chipbreaker map

1st recommendation for finishing (low cutting force)



Complementary chipbreakers (chip control oriented)



Inserts (Positive)

Shape	Description	Dimensions (mm)					MEGA COAT NANO PLUS		
		I.C.	Thick-ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535
	CCGT 030101MP-CF	3.5	1.4	1.9	< 0.1	7°	●	●	●
	030102MP-CF				< 0.2		●	●	●
	CCGT 040101MP-CF	4.3	1.8	2.3	< 0.1	7°	●	●	●
	040102MP-CF				< 0.2		●	●	●
	CCGT 030101MFP-PF	3.5	1.4	1.9	< 0.1	7°	●	●	●
	030102MFP-PF				< 0.2		●	●	●
	CCGT 040101MFP-PF	4.3	1.8	2.3	< 0.1	7°	●	●	●
	040102MFP-PF				< 0.2		●	●	●
	CCGT 060201MFP-PF	6.35	2.38	2.8	< 0.1	7°	●	●	●
	060202MFP-PF				< 0.2		●	●	●
	060204MFP-PF				< 0.4		●	●	●
	CCGT 060201MFP-GF	6.35	2.38	2.8	< 0.1	7°	●	●	●
	060202MFP-GF				< 0.2		●	●	●
	060204MFP-GF				< 0.4		●	●	●
	CCGT 09T301MFP-GF	9.525	3.97	4.4	< 0.1	7°	●	●	●
	09T302MFP-GF				< 0.2		●	●	●
	09T304MFP-GF				< 0.4		●	●	●
	CCGT 0602005MFP-SKS	6.35	2.38	2.8	< 0.05	7°	●	●	●
	060201MFP-SKS				< 0.1		●	●	●
	060202MFP-SKS				< 0.2		●	●	●
	CCGT 09T3005MFP-SKS	9.525	3.97	4.4	< 0.05	7°	●	●	●
	09T301MFP-SKS				< 0.1		●	●	●
	09T302MFP-SKS				< 0.2		●	●	●
	09T304MFP-SKS	9.525	3.97	4.4	< 0.4	7°	●	●	●
	CCGT 060201MFP-SK				< 0.1		●	●	●
	060202MFP-SK				< 0.2		●	●	●
	060204MFP-SK	6.35	2.38	2.8	< 0.4	7°	●	●	●
	CCGT 09T301MFP-SK				< 0.1		●	●	●
	09T302MFP-SK				< 0.2		●	●	●
	09T304MFP-SK	9.525	3.97	4.4	< 0.4	7°	●	●	●
	CCGT 060201MP-CK				< 0.1	7°	●	●	●
	060202MP-CK				< 0.2		●	●	●
	060204MP-CK	6.35	2.38	2.8	< 0.4	7°	●	●	●
	CCGT 09T301MP-CK				< 0.1		●	●	●
	09T302MP-CK				< 0.2		●	●	●
	09T304MP-CK	9.525	3.97	4.4	< 0.4	7°	●	●	●
	CCGT 060201MFP-GQ				< 0.1	7°	●	●	●
	060202MFP-GQ				< 0.2		●	●	●
	060204MFP-GQ	6.35	2.38	2.8	< 0.4	7°	●	●	●
	CCGT 09T301MFP-GQ				< 0.1		●	●	●
	09T302MFP-GQ				< 0.2		●	●	●
	09T304MFP-GQ	9.525	3.97	4.4	< 0.4	7°	●	●	●
	CCMT 060202WP				0.2	7°	●	●	●
	060204WP				0.4		●	●	●
	060208WP	6.35	2.38	2.8	0.8	7°	●	●	●
	CCMT 09T302WP				0.2		●	●	●
	09T304WP				0.4		●	●	●
	09T308WP	9.525	3.97	4.4	0.8	7°	●	●	●
	CCMT 060202PP				0.2	7°	●	●	●
	060204PP				0.4		●	●	●
	CCMT 09T302PP	9.525	3.97	4.4	0.2	7°	●	●	●
	09T304PP				0.4		●	●	●
	09T308PP				0.8		●	●	●
	CCMT 060202GK	6.35	2.38	2.8	0.2	7°	●	●	●
	060204GK				0.4		●	●	●
	CCMT 09T302GK	9.525	3.97	4.4	0.2	7°	●	●	●
	09T304GK				0.4		●	●	●
	CCMT 120404GK	12.7	4.76	5.5	0.4	7°	●	●	●
	120408GK				0.8		●	●	●
	120412GK	12.7	4.76	5.5	1.2	7°	●	●	●

Shape	Description	Dimensions (mm)					MEGACOAT NANO PLUS		MEGA COAT NANO
		I.C.	Thick-ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535
 <									

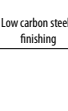
Inserts (Positive)

Shape Handed insert shows left-hand	Description	Dimensions (mm)					MEGACOAT NANO PLUS			MEGA COAT NANO
		I.C.	Thick- ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
 Medium	CPMH 080204	7.94	2.38	3.5	0.4	11°	●		●	
	080208				0.8		●		●	
	CPMH 090304	9.525	3.18	4.5	0.4	11°	●		●	
	090308				0.8		●		●	
 Low carbon steel / finishing	CPMT 080204XP	7.94	2.38	3.3	0.4	11°	●		●	
	CPMT 090304XP	9.525	3.18	4.4	0.4	11°	●		●	
	090308XP				0.8		●		●	
 Finishing-medium	CPMH 080204 ^R /L-Y	7.94	2.38	3.5	0.4	11°	●			
	CPMH 090304 ^R /L-Y	9.525	3.18	4.5	0.4	11°	●			
 Minute doc / Sharp edge / polished	DCGT 070201MP-CF	6.35	2.38	2.8	< 0.1	7°	●		●	
	070202MP-CF				< 0.2		●	●	●	
	DCGT 11T301MP-CF	9.525	3.97	4.4	< 0.1	7°	●	●	●	
	11T302MP-CF				< 0.2		●	●	●	
 Finishing / Sharp edge / polished	DCGT 070201MFP-GF	6.35	2.38	2.8	< 0.1	7°	●	●	●	
	070202MFP-GF				< 0.2		●	●	●	
	070204MFP-GF				< 0.4		●	●	●	
	DCGT 11T301MFP-GF	9.525	3.97	4.4	< 0.1	7°	●	●	●	
	11T302MFP-GF				< 0.2		●	●	●	
	11T304MFP-GF				< 0.4		●	●	●	
 Finishing / Sharp edge / polished	DCGT 0702005MFP-SKS	6.35	2.38	2.8	< 0.05	7°	●	●	●	
	070201MFP-SKS				< 0.1		●	●	●	
	070202MFP-SKS				< 0.2		●	●	●	
	DCGT 11T3005MFP-SKS	9.525	3.97	4.4	< 0.05	7°	●	●	●	
	11T301MFP-SKS				< 0.1		●	●	●	
	11T302MFP-SKS				< 0.2		●	●	●	
 Semi-finishing / Sharp edge / polished	DCGT 070201MFP-SK	6.35	2.38	2.8	< 0.1	7°	●	●	●	
	070202MFP-SK				< 0.2		●	●	●	
	070204MFP-SK				< 0.4		●	●	●	
	DCGT 11T301MFP-SK	9.525	3.97	4.4	< 0.1	7°	●	●	●	
	11T302MFP-SK				< 0.2		●	●	●	
	11T304MFP-SK				< 0.4		●	●	●	
 Finishing / Sharp edge / polished	DCGT 070201MP-CK	6.35	2.38	2.8	< 0.1	7°	●	●	●	
	070202MP-CK				< 0.2		●	●	●	
	DCGT 11T301MP-CK	9.525	3.97	4.4	< 0.1	7°	●	●	●	
	11T302MP-CK				< 0.2		●	●	●	
 Finishing-medium / sharp edge / polished	DCGT 070201MFP-GQ	6.35	2.38	2.8	< 0.1	7°	●	●	●	
	070202MFP-GQ				< 0.2		●	●	●	
	070204MFP-GQ				< 0.4		●	●	●	
	DCGT 11T301MFP-GQ	9.525	3.97	4.4	< 0.1	7°	●	●	●	
	11T302MFP-GQ				< 0.2		●	●	●	
	11T304MFP-GQ				< 0.4		●	●	●	
 Wiper edge / finishing	DCMX 070202WP	6.35	2.38	2.8	0.2	7°	●			
	070204WP				0.4		●			
	070208WP				0.8		●			
	DCMX 11T302WP	9.525	3.97	4.4	0.2	7°	●			
	11T304WP				0.4		●			
	11T308WP				0.8		●			
 Wiper edge / finishing	DCMX 070204 ^R /L-WP	6.35	2.38	2.8	0.4	7°	●			
	DCMX 11T304 ^R /L-WP	9.525	3.97	4.4	0.4	7°	●			
 Finishing	DCMT 070202PP	6.35	2.38	2.8	0.2	7°	●		●	
	070204PP				0.4		●		●	
	DCMT 11T302PP	9.525	3.97	4.4	0.2	7°	●		●	
	11T304PP				0.4		●		●	
 Finishing	DCMT 070202GP	6.35	2.38	2.8	0.2	7°	●		●	
	070204GP				0.4		●		●	
	DCMT 11T304GP	9.525	3.97	4.4	0.4	7°	●		●	
	11T308GP				0.8		●		●	

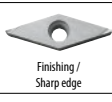
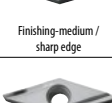
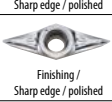
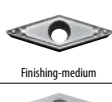
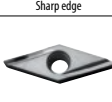
Shape Handed insert shows left-hand	Description	Dimensions (mm)					MEGACOAT NANO PLUS			MEGA COAT NANO
		I.C.	Thick- ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
 Finishing-medium	DCMT 070202GK	6.35	2.38	2.8	0.2	7°	●		●	
	070204GK				0.4		●		●	
	070208GK				0.8		●		●	
	DCMT 11T302GK	9.525	3.97	4.4	0.2	7°	●		●	
	11T304GK				0.4		●		●	
11T308GK	0.8				●			●		
 Finishing-medium	DCMT 070202HQ	6.35	2.38	2.8	0.2	7°	●		●	
	070204HQ				0.4		●		●	
	070208HQ				0.8		●		●	
	DCMT 11T302HQ	9.525	3.97	4.4	0.2	7°	●		●	
	11T304HQ				0.4		●		●	
11T308HQ	0.8				●			●		
 Medium	DCMT 11T308	9.525	3.97	4.4	0.8	7°	●			
 Medium	DCGT 0702005M	6.35	2.38	2.8	< 0.05	7°	●			
	070201M				< 0.1		●			
	070202M				< 0.2		●			
	070204M				< 0.4		●			
	DCGT 11T3005M	9.525	3.97	4.4	< 0.05	7°	●			
	11T301M				< 0.1		●			
	11T302M				< 0.2		●			
	11T304M				< 0.4		●			
 Medium / sharp edge	DCGT 0702005MF	6.35	2.38	2.8	< 0.05	7°	●		●	
	070201MF				< 0.1		●	●	●	
	070202MF				< 0.2		●	●	●	
	070204MF				< 0.4		●	●	●	
	DCGT 11T3005MF	9.525	3.97	4.4	< 0.05	7°	●		●	
	11T301MF				< 0.1		●	●	●	
	11T302MF				< 0.2		●	●	●	
	11T304MF				< 0.4		●	●	●	
 Low carbon steel / finishing	DCMT 070204XP	6.35	2.38	2.8	0.4	7°	●		●	
	DCMT 11T302XP	9.525	3.97	4.4	0.2	7°	●		●	
	11T304XP				0.4		●		●	
	11T308XP				0.8		●		●	
 Finishing / Sharp edge	DCET 0702005M ^R /L-F	6.35	2.38	2.8	< 0.05	7°	R	●	R	
	070201M ^R /L-F				< 0.1			●	●	
	070202M ^R /L-F				< 0.2		●		●	
	070204M ^R /L-F				< 0.4		●		●	
	DCET 11T3005MR-F	9.525	3.97	4.4	< 0.05	7°	R		R	
	11T301M ^R /L-F				< 0.1		●		●	
	11T302M ^R /L-F				< 0.2		●	●	●	
	11T304M ^R /L-F				< 0.4		●	●	●	
 Low feed / Sharp edge	DCET 0702005MFR-U	6.35	2.38	2.8	< 0.05	7°	R		R	
	070201MFR-U				< 0.1			●	●	
	070202MFR-U				< 0.2		●	R	●	
	DCET 11T3005MFR-U	9.525	3.97	4.4	< 0.05	7°	R	R	R	
	11T301MFR-U				< 0.1		●	R	●	
11T302MFR-U	< 0.2	●	●	●						
11T304MFR-U	< 0.4		R	R	R					
 Low feed / Honed edge	DCGT 070201MER-U	6.35	2.38	2.8	< 0.1	7°	R			
	070202ME ^R /L-U				< 0.2		●			
	070204ME ^R /L-U				< 0.4		●			
	DCGT 11T301ME ^R /L-U	9.525	3.97	4.4	< 0.1	7°	●			
	11T302ME ^R /L-U				< 0.2		●			
11T304ME ^R /L-U	< 0.4	●								
 Low feed / Sharp edge	DCET 0702005MFR-J	6.35	2.38	2.8	< 0.05	7°	R		R	
	070201MF ^R /L-J				< 0.1		●		●	
	070202MF ^R /L-J				< 0.2		●		●	
	DCET 11T3005MFR-J	9.525	3.97	4.4	< 0.05	7°	R		R	
	11T301MF ^R /L-J				< 0.1		●	●	R	
	11T302MF ^R /L-J				< 0.2		●	R	●	
11T304MF ^R /L-J	< 0.4		R	●	R					

Inserts (Positive)

Shape Handed insert shows left-hand	Description	Dimensions (mm)					MEGA COAT NANO PLUS			MEGA COAT NANO
		I.C.	Thick- ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
 Low feed / Honed edge	DCGT 11T3005MER-J	9.525	3.97	4.4	< 0.05	7°	R			
	11T301MER-J				< 0.1		R			
	11T302MER-J				< 0.2		R			
	11T304MER ^R /L-J				< 0.4		●			
 Finishing / Sharp edge / precision	DPET 070202MR ^R /L-FSF	9.525	3.97	4.4	< 0.2	11°	●			
	DPET 11T3005MR-FSF				< 0.05		R			
	11T301MR-FSF				< 0.1		R			
	11T302MR-FSF				< 0.2		R			
 Super fine	DPET 0702005MFR-USF	6.35	2.38	2.8	< 0.05	11°	R			
	070201MFR-USF				< 0.1		R			
	070202MFR-USF				< 0.2		R			
	DPET 11T3005MFR-USF	9.525	3.97	4.4	< 0.05	11°	R			
 Low feed / Sharp edge / precision	11T301MFR-USF				< 0.1		R			
	11T302MFR-USF				< 0.2		R			
	DPET 11T3005MFR-USF				< 0.05	11°	R			
	11T301MFR-USF				< 0.1		R			
 Super fine	JCET 030101MR ^R /L-FSF	3.5	1.4	1.9	< 0.1	7°	●			
	JCET 030102MR ^R /L-F				< 0.2		●		●	
	030104MR ^R /L-F				< 0.4		●		●	
	JCET 030104MR ^R /L-F				< 0.4		●		●	
 Finishing / sharp edge	TBGT 060101MP-CF	3.97	1.59	2.3	< 0.1	5°	●		●	
	060102MP-CF				< 0.2		●	●	●	
	TBGT 060101MFP-PF				< 0.1		●		●	
	060102MFP-PF				< 0.2		●		●	
 Finishing / Sharp edge / polished	060104MFP-PF	3.97	1.59	2.3	< 0.4	5°	●		●	
	TBET 0601005MR ^R /L				< 0.05		●		●	
	060101MR ^R /L				< 0.1		●		●	
	060102MR ^R /L				< 0.2		●	L	●	
 Finishing	060104MR ^R /L				< 0.4		●	●	●	
 Wiper edge / finishing	TCMX 090204WPP	5.56	2.38	2.5	0.4	7°	●			
	TCMX 110204WPP				0.4		●			
	TCET 1103005MFR-USF				< 0.05	7°	R			
	110301MFR-USF				< 0.1		R			
 Super Fine Low feed / Sharp edge / precision	110302MFR-USF				< 0.2		R			
	TCGT 080202MER-U	4.76	2.38	2.3	< 0.2	7°	R			
	TCGT 110302MR ^R /L-U				< 0.2		●			
	110304MER-U				< 0.4		R			
 Low feed / honed edge	TPGT 080201MP-CF	4.76	2.38	2.3	< 0.1	11°	●		●	
	080202MP-CF				< 0.2		●	●	●	
	TPGT 090201MP-CF				< 0.1		●		●	
	090202MP-CF				< 0.2		●	●	●	
 Minute doc / Sharp edge / polished	TPGT 090201MFP-PF	5.56	2.38	3.0	< 0.1	11°	●		●	
	090202MFP-PF				< 0.2		●		●	
	090204MFP-PF				< 0.4		●		●	
 Finishing / Sharp edge / polished	TPMX 090202WPP	5.56	2.38	2.8	0.2	11°	●			
	090204WPP				0.4		●			
	090208WPP				0.8		●			
	TPMX 110302WPP				0.2	11°	●			
 Wiper edge / finishing	110304WPP	6.35	3.18	3.3	0.4		●			
	110308WPP				0.8		●			
	TPMX 110304MR ^R /L-WP				0.4		●			
	TPMX 110308MR ^R /L-WP				0.8		●			

Shape Handed insert shows left-hand	Description	Dimensions (mm)					MEGACOAT NANO PLUS			MEGA COAT NANO
		I.C.	Thick- ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
 Finishing	TPMT 090202PP	5.56	2.38	2.8	0.2	11°	●		●	
	090204PP				0.4		●		●	
	TPMT 110302PP	6.35	3.18	3.3	0.2	11°	●		●	
	110304PP				0.4		●		●	
110308PP	0.8	●		●						
 Finishing	TPMT 090202GP	5.56	2.38	2.8	0.2	11°	●		●	
	090204GP				0.4		●		●	
	TPMT 110304GP	6.35	3.18	3.3	0.4	11°	●		●	
	110308GP				0.8		●		●	
TPMT 160304GP	9.525	3.18	4.4	0.4	11°	●		●		
 Finishing-medium	TPMT 090202HQ	5.56	2.38	2.8	0.2	11°	●		●	
	090204HQ				0.4		●		●	
	TPMT 110302HQ	6.35	3.18	3.3	0.2	11°	●		●	
	110304HQ				0.4		●		●	
	110308HQ	0.8	●		●					
	TPMT 160302HQ	9.525	3.18	4.4	0.2	11°	●		●	
	160304HQ				0.4		●		●	
	160308HQ				0.8		●		●	
 Low carbon steel / finishing	TPMT 090204XP	5.56	2.38	2.8	0.4	11°	●		●	
	TPMT 110304XP	6.35	3.18	3.3	0.4	11°	●		●	
	110308XP				0.8		●		●	
	TPMT 160304XP	9.525	3.18	4.4	0.4	11°	●		●	
	160308XP				0.8		●		●	
 Finishing / Sharp edge	TPGH 080201R/L	4.76	2.38	2.3	0.1	11°	●		●	
	080202R/L				0.2		●	●	●	
	080204R/L				0.4		●	●	●	
	TPGH 090201R/L	5.56	2.38	3.0	0.1	11°	●		●	
	090202R/L				0.2		●	●	●	
	090204R/L				0.4		●	●	●	
	TPGH 110202R/L	6.35	2.38	3.5	0.2	11°	●	L	●	
	110204R/L				0.4		●	L	●	
	TPGH 110302R/L	6.35	3.18	3.3	0.2	11°	●	●	●	
	110304R/L				0.4		●	●	●	
	110308R/L				0.8		●	L	●	
	TPGH 160302R/L	9.525	3.18	4.5	0.2	11°	●		●	
	160304R/L				0.4		●	L	●	
160308R/L	0.8				●			●		
 Medium	TPGH 090201L-H	5.56	2.38	3.0	0.1	11°	L		L	
	090202L-H				0.2		L		L	
	090204L-H				0.4		L		L	
	TPGH 110302R/L-H	6.35	3.18	3.3	0.2	11°	●		●	
	110304R/L-H				0.4		●		●	
	110308R/L-H				0.8		●		●	
	TPGH 160304R/L-H	9.525	3.18	4.5	0.4	11°	●		●	
	160308R/L-H				0.8		●		●	
 Super fine	TPET 080202L-FSF	4.76	2.38	2.3	0.2	11°	L			
	TPET 1103005L-FSF	6.35	3.18	3.3	0.05	11°	L			
	110301R/L-FSF				0.1		●			
	110302R/L-FSF				0.2		●			
 Finishing / Sharp edge	TPEH 080201MR/L-P	4.76	2.38	2.3	< 0.1	11°	●		●	
	080202MR/L-P				< 0.2		●		●	
	080204MR/L-P				< 0.4		●		●	
	TPEH 090201MR/L-P	5.56	2.38	3.0	< 0.1	11°	●		●	
	090202MR/L-P				< 0.2		●		●	
	090204MR/L-P				< 0.4		●		●	
	TPEH 110301MR/L-P	6.35	3.18	3.3	< 0.1	11°	●		●	
	110302MR/L-P				< 0.2		●		●	
110304MR/L-P	< 0.4				●			●		
 Super fine	TPET 080202ER/L-USF	4.76	2.38	2.3	0.2	11°	●			
	TPET 110301FL-USF	6.35	3.18	3.3	0.1	11°	L			
	110302ER/L-USF				0.2		●			

Inserts (Positive)

Shape	Description	Dimensions (mm)					MEGACOAT NANO PLUS			MEGACOAT NANO
		I.C.	Thick-ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
	VBMT 110302PP	6.35	3.18	2.8	0.2	5°	●	●	●	●
	110304PP				0.4		●	●	●	
	110308PP				0.8		●	●	●	
	VBMT 160404PP	9.525	4.76	4.4	0.4	5°	●	●	●	●
	160408PP				0.8		●	●	●	
	160412PP				1.2		●	●	●	
	VBMT 110304GP	6.35	3.18	2.8	0.4	5°	●	●	●	●
	VBMT 160404GP	9.525	4.76	4.4	0.4	5°	●	●	●	
	160408GP				0.8		●	●	●	
	VBMT 110302VF	6.35	3.18	2.8	0.2	5°	●	●	●	●
	110304VF				0.4		●	●	●	
	110308VF				0.8		●	●	●	
	VBMT 160402VF	9.525	4.76	4.4	0.2	5°	●	●	●	●
	160404VF				0.4		●	●	●	
	160408VF				0.8		●	●	●	
	VBMT 110304HQ	6.35	3.18	2.8	0.4	5°	●	●	●	●
	110308HQ				0.8		●	●	●	
	VBMT 160404HQ	9.525	4.76	4.4	0.4	5°	●	●	●	●
	VBMT 160408HQ				0.8		●	●	●	
	160412HQ				1.2		●	●	●	
	VBET 1103005M ^R /L-F	6.35	3.18	2.8	< 0.05	5°	●	●	●	●
	110301M ^R /L-F				< 0.1		●	R	●	
	110302M ^R /L-F				< 0.2		●	●	●	
	VBET 1103005M ^R /L-Y	6.35	3.18	2.8	< 0.05	5°	●	●	●	●
	110301M ^R /L-Y				< 0.1		●	●	●	
	110302M ^R /L-Y				< 0.2		●	●	●	
	VBGT 160402MR-Y	9.525	4.76	4.4	< 0.2	5°	●	R	●	●
	160404MR-Y				< 0.4		●	R	●	
	VCMT 110301MP-CF	6.35	3.18	2.8	< 0.1	7°	●	●	●	●
	VCMT 110302MP-CF				< 0.2		●	●	●	
	VCMT 110301MFP-GF	6.35	3.18	2.8	< 0.1	7°	●	●	●	●
	VCMT 110302MFP-GF				< 0.2		●	●	●	
	VCMT 110301MFP-SKS	6.35	3.18	2.8	< 0.1	7°	●	●	●	●
	VCMT 110302MFP-SKS				< 0.2		●	●	●	
	VCMT 110304MFP-SKS				< 0.4		●	●	●	
	VCMT 080202PP	4.76	2.38	2.3	0.2	7°	●	●	●	●
	VCMT 080204PP				0.4		●	●	●	
	VCMT 160404PP	9.525	4.76	4.4	0.4	7°	●	●	●	●
	VCMT 160408PP				0.8		●	●	●	
	VCMT 080202VF	4.76	2.38	2.3	0.2	7°	●	●	●	●
	VCMT 080204VF				0.4		●	●	●	
	VCMT 080202HQ	4.76	2.38	2.3	0.2	7°	●	●	●	●
	VCMT 080204HQ				0.4		●	●	●	
	VCET 110301M ^R /L-F	6.35	3.18	2.8	< 0.1	7°	●	●	●	●
	VCET 110302M ^R /L-F				< 0.2		●	●	●	
	VCET 110304M ^R /L-F				< 0.4		●	●	●	
	VCET 1103005M ^R /L-Y	6.35	3.18	2.8	< 0.05	7°	●	●	●	●
	VCET 110301M ^R /L-Y				< 0.1		●	●	●	
	VCET 110302M ^R /L-Y				< 0.2		●	●	●	
	VCET 110304M ^R /L-Y	6.35	3.18	2.8	< 0.4	7°	●	●	●	●
	VPMT 110301MP-CF	6.35	3.18	2.8	< 0.1	11°	●	●	●	●
	VPMT 110302MP-CF				< 0.2		●	●	●	

Shape	Description	Dimensions (mm)					MEGACOAT NANO PLUS			MEGA COAT NANO
		I.C.	Thick-ness	Hole	Corner-R (RE)	Relief angel	PR1725	PR1705	PR1535	
 Finishing / Sharp edge / polished	VPGT 110301MFP-GF	6.35	3.18	2.8	< 0.1	11°	●	●	●	
	110302MFP-GF				< 0.2		●	●	●	
 Finishing / Sharp edge / polished	VPGT 110301MFP-SKS	6.35	3.18	2.8	< 0.1	11°	●	●	●	
	110302MFP-SKS				< 0.2		●	●	●	
	110304MFP-SKS				< 0.4		●	●	●	
 Finishing / Sharp edge / polished	VPGT 080201MP-CK	4.76	2.38	2.3	< 0.1	11°	●	●	●	
	080202MP-CK				< 0.2		●	●	●	
	VPGT 110301MP-CK	6.35	3.18	2.8	< 0.1	11°	●	●	●	
	110302MP-CK				< 0.2		●	●	●	
 Finishing / Sharp edge	VPET 080201M ^R /L-F	4.76	2.38	2.3	< 0.1	11°	●		●	
	080202M ^R /L-F				< 0.2		●		●	
	VPET 1103005MR-F	6.35	3.18	2.8	< 0.05	11°	R		R	
	110301MR-F				< 0.1		R		R	
	110302M ^R /L-F				< 0.2		●		●	
 Low feed / Sharp edge	VPET 080201M ^R /L-U	4.76	2.38	2.3	< 0.1	11°	●		●	
	080202M ^R /L-U				< 0.2		●		●	
	VPET 1103005M ^R /L-U	6.35	3.18	2.8	< 0.05	11°	●		●	
	110301M ^R /L-U				< 0.1		●		●	
	110302M ^R /L-U				< 0.2		●		●	
 Low feed / Sharp edge	VPET 1103005MFR-J	6.35	3.18	2.8	< 0.05	11°	R		R	
	110301M ^R /L-J				< 0.1		●		●	
	110302M ^R /L-J				< 0.2		●		●	
 Minute doc / Sharp edge / polished	WBGT 060101M ^R /L-CF	3.97	1.59	2.3	< 0.1	5°	●		●	
	060102M ^R /L-CF				< 0.2		●	L	●	
 Finishing / Sharp edge / polished	WBGT 060101MFP ^R /L-PF	3.97	1.59	2.3	< 0.1	5°	●		●	
	060102MFP ^R /L-PF				< 0.2		●		●	
	WBGT 080201MFP ^R /L-PF	4.76	2.38	2.3	< 0.1	5°	●		●	
080202MFP ^R /L-PF	< 0.2				●			●		
 Finishing	WBMT 060102 ^R /L-DP	3.97	1.59	2.3	0.2	5°	●		●	
	060104 ^R /L-DP				0.4		●		●	
	WBMT 080202 ^R /L-DP	4.76	2.38	2.3	0.2	5°	●		●	
	080204 ^R /L-DP				0.4		●		●	
 Finishing / Sharp edge	WBET 0601005ML-F	3.97	1.59	2.3	< 0.05	5°	L		L	
	060101M ^R /L-F				< 0.1		●	L	●	
	060102M ^R /L-F				< 0.2		●	L	●	
	060104M ^R /L-F				< 0.4		●	L	●	
	WBET 080201ML-F	4.76	2.38	2.3	< 0.1	5°	L		L	
	080202ML-F				< 0.2		L		L	
	080204M ^R /L-F				< 0.4		●		●	
 Finishing / sharp edge	WBET 080201M ^R /L-P	4.76	2.38	2.3	< 0.1	5°	●		●	
	080202M ^R /L-P				< 0.2		●		●	
	080204M ^R /L-P				< 0.4		●		●	
 Finishing	WPMT 110204GP	6.35	2.38	2.8	0.4	11°	●			
	WPMT 160304GP	9.525	3.18	4.4	0.4	11°	●			
 Finishing-medium	WPMT 110202HQ	6.35	2.38	2.8	0.2	11°	●			
	110204HQ				0.4		●			
	WPMT 160304HQ	9.525	3.18	4.4	0.4	11°	●			
	160308HQ				0.8		●			
 Finishing-medium	WPGT 110204M ^R /L-Y	6.35	2.38	2.8	< 0.4	11°	L	●		

Inserts (Negative)

Shape Handed insert Shows right-hand	Description	Dimensions (mm)				MEGACOAT NANO PLUS		MEGA COAT NANO
		I.C.	Thick- ness	Hole	Corner-R (RE)	PR1725	PR1535	
 Finishing-medium / Sharp edge / polished	CNGG 120402MFP-SK	12.70	4.76	5.16	< 0.2	●	●	
	120404MFP-SK				< 0.4	●	●	
 Medium-roughing / sharp edge / polished	CNGG 120404FP-TK	12.70	4.76	5.16	0.4	●	●	
	120408FP-TK				0.8	●	●	
 Finishing-medium / Sharp edge / polished	DNGG 150402MFP-SK	12.70	4.76	5.16	< 0.2	●	●	
	150404MFP-SK				< 0.4	●	●	
 Large doc	DNMG 150402R-LD	12.70	4.76	5.16	0.2	R	R	
	150404R-LD				0.4	R	R	
 Medium-roughing / sharp edge / polished	DNGG 150404FP-TK	12.70	4.76	5.16	0.4	●	●	
	150408FP-TK				0.8	●	●	
 Finishing-medium / Sharp edge / polished	TNGG 160401MFP-SK	9.525	4.76	3.81	< 0.1	●	●	
	160402MFP-SK				< 0.2	●	●	
	160404MFP-SK				< 0.4	●	●	
 Large doc	TNMG 160402R-LD	9.525	4.76	3.81	0.2	R	R	
	160404R-LD				0.4	R	R	
 Medium-roughing / sharp edge / polished	TNGG 160404FP-TK	9.525	4.76	3.81	0.4	●	●	
	160408FP-TK				0.8	●	●	
 Finishing / Surface roughness oriented / Sharp edge	TNGG 160402 ^{R/L} -S	9.525	4.76	3.81	0.2	●	●	
	160404 ^{R/L} -S				0.4	●	●	
	160408 ^{R/L} -S				0.8	●	●	
 Finishing-medium / Sharp edge / polished	VNGG 160402MFP-SK	9.525	4.76	3.81	< 0.2	●	●	
	160404MFP-SK				< 0.4	●	●	

● : Available R : R-hand only

Insert with corner R (RE) dimension expressed with less than sign (e.g. <0.1, <0.2 etc.)
indicates models with minus tolerance for corner R (RE)

Inserts (Small double-sided tooling)

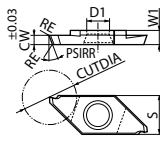
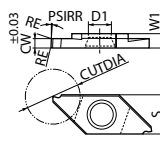
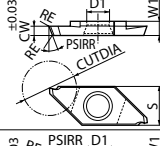
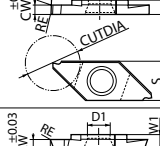
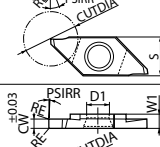
Shape Handed Insert shows Right-hand	Description	Dimensions (mm)				MEGACOAT NANO PLUS		MEGA COAT NANO
		I.C.	Thickness	Hole	Corner-R (RE)	PR1725	PR1705	PR1535
 Finishing-medium / Sharp edge / polished	CNGU 070301MFP-SK	7.5	3.18	3.6	< 0.1	●		●
	070302MFP-SK				< 0.2	●		●
 Medium-roughing / honed edge	CNMU 070302E-GK	7.5	3.18	3.6	0.2	●		●
	070304E-GK				0.4	●		●
 Finishing / sharp edge	CNGU 0703005MFR-F	7.5	3.18	3.6	< 0.05		R	
	070301MFR-F				< 0.1	R	R	R
	070302MFR-F				< 0.2	R	R	R
	070304MFR-F				< 0.4	R	R	R
 Low feed / sharp edge	CNGU 0703005MFR-U	7.5	3.18	3.6	< 0.05		R	
	070301MFR-U				< 0.1	R	R	R
	070302MFR-U				< 0.2	R	R	R
	070304MFR-U				< 0.4	R	R	R
 Finishing-medium / Sharp edge / polished	DNGU 080301MFP-SK	7.0	3.18	3.6	< 0.1	●		●
	080302MFP-SK				< 0.2	●		●
	080304MFP-SK				< 0.4	●		●
 Medium-roughing / honed edge	DNMU 080302E-GK	7.0	3.18	3.6	0.2	●		●
	080304E-GK				0.4	●		●
 Finishing / sharp edge	DNGU 080301MFR-F	7.0	3.18	3.6	< 0.1	R		R
	080302MFR-F				< 0.2	R	R	R
	080304MFR-F				< 0.4	R		R
 Low feed / sharp edge	DNGU 080301MFR-U	7.0	3.18	3.6	< 0.1	R	R	R
	080302MFR-U				< 0.2	R	R	R
	080304MFR-U				< 0.4	R		R
 Low feed / honed edge	DNGU 080301MER-U	7.0	3.18	3.6	< 0.1	R	R	
	080302MER-U				< 0.2	R	R	
	080304MER-U				< 0.4	R	R	
 Finishing / sharp edge	TNGU 090301MFR-F	5.56	3.18	3.0	< 0.1	R	R	R
	090302MFR-F				< 0.2	R	R	R
	090304MFR-F				< 0.4	R	R	R
 Low feed / sharp edge	TNGU 090301MFR-U	5.56	3.18	3.0	< 0.1	R		R
	090302MFR-U				< 0.2	R	R	R
	090304MFR-U				< 0.4	R	R	R
 Low feed / honed edge	TNGU 090304MER-U	5.56	3.18	3.0	< 0.4	R	R	

● : Available R : R-hand only

Insert with corner R (RE) dimension expressed with less than sign (e.g. <0.1, <0.2 etc.)
indicates models with minus tolerance for corner R (RE)

For more details on applicable toolholders, see the KYOCERA general product catalog

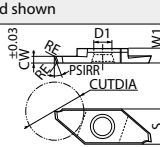
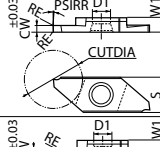
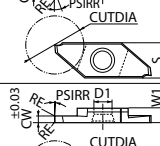
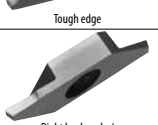
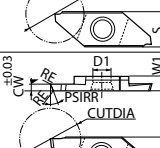
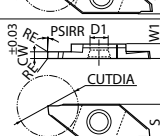
Inserts (Cut-off) TKF12

Shape Right-hand shown		Description	Dimensions (mm)						Angle PSIRR	MEGACOAT NANO PLUS		MEGACOAT NANO		Applicable toolholders
			CW	CUTDIA	RE	W1	S	D1		PR1725		PR1535		
										R	L	R	L	
 Right lead angle		TKF12 ^{R/L} 050-S-16DR	0.5	5	0.03	3	8.7	5	16°	●	●	●	●	KTKF ^{R/L} ...12
		070-S-16DR	0.7	8						●	●	●	●	
		100-S-16DR	1.0	12						●	●	●	●	
		125-S-16DR	1.25							●	●	●	●	
		150-S-16DR	1.5							●	●	●	●	
		200-S-16DR	2.0							●	●	●	●	
 Right lead angle		TKF12 ^{R/L} 050-S	0.5	5	0.03	3	8.7	5	0°	●	●	●	●	
		070-S	0.7	8						●	●	●	●	
		100-S	1.0	12						●	●	●	●	
		125-S	1.25							●	●	●	●	
		150-S	1.5							●	●	●	●	
		200-S	2.0							●	●	●	●	
 Right lead angle / tough edge		TKF12 ^{R/L} 100-T-16DR	1.0	12	0.08	3	8.7	5	16°	●	●	●	●	
		150-T-16DR	1.5							●	●	●	●	
		200-T-16DR	2.0							●	●	●	●	
 Tough edge		TKF12 ^{R/L} 100-T	1.0	12	0.08	3	8.7	5	0°	●	●	●	●	
		150-T	1.5							●	●	●	●	
		200-T	2.0							●	●	●	●	
 Right lead angle / Without chipbreaker		TKF12 ^{R/L} 050-NB-20DR	0.5	5	0	3	8.7	5	20°	●	●	●	●	
		070-NB-20DR	0.7	8						●	●	●	●	
		100-NB-20DR	1.0	12						●	●	●	●	
		150-NB-20DR	1.5							●	●	●	●	
		200-NB-20DR	2.0							●	●	●	●	
 Without chipbreaker		TKF12 ^{R/L} 050-NB	0.5	5	0	3	8.7	5	0°	●	●	●	●	
		070-NB	0.7	8						●	●	●	●	
		100-NB	1.0	12						●	●	●	●	
		150-NB	1.5							●	●	●	●	
		200-NB	2.0							●	●	●	●	

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available

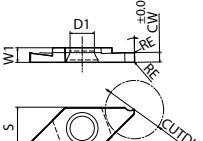
Inserts (Cut-off) TKF16

Shape Right-hand shown		Description	Dimensions (mm)						Angle PSIRR	MEGACOAT NANO PLUS		MEGACOAT NANO		Applicable toolholders
			CW	CUTDIA	RE	W1	S	D1		PR1725		PR1535		
										R	L	R	L	
 Right lead angle		TKF16 ^{R/L} 150-S-16DR	1.5	16	0.05	4	9.5	5	16°	●	●	●	●	KTKF ^{R/L} ...16
		200-S-16DR	2.0							●	●	●	●	
 Right lead angle / tough edge		TKF16 ^{R/L} 150-S	1.5	16	0.05	4	9.5	5	0°	●	●	●	●	
		200-S	2.0							●	●	●	●	
 Tough edge		TKF16 ^{R/L} 150-T-16DR	1.5	16	0.08	4	9.5	5	16°	●	●	●	●	
		200-T-16DR	2.0							●	●	●	●	
 Without chipbreaker		TKF16 ^{R/L} 150-T	1.5	16	0.08	4	9.5	5	0°	●	●	●	●	
		200-T	2.0							●	●	●	●	
 Without chipbreaker		TKF16 ^{R/L} 150-NB-20DR	1.5	16	0	4	9.5	5	20°	●	●	●	●	
		200-NB-20DR	2.0							●	●	●	●	
 Without chipbreaker		TKF16 ^{R/L} 150-NB	1.5	16	0	4	9.5	5	0°	●	●	●	●	
		200-NB	2.0							●	●	●	●	

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available

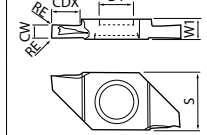
Inserts (Cut-off for sub spindle) TKFS

Shape Left-hand shown		Description	Dimensions (mm)						MEGACOAT NANO PLUS		MEGACOAT NANO		Applicable toolholders
			CW	CUTDIA	RE	W1	S	D1	PR1725		PR1535		
									R	L	R	L	
		TKFS12 ^R /L 100-S	1.0	6	0.05	2.2	8.7	4.4	●	●	●	●	KTKFS ^R /L...12
		150-S	1.5	9					●	●	●	●	
		200-S	2.0	12					●	●	●	●	
		TKFS16 ^R /L 150-S	1.5	14	0.05	2.2	9.5	4.4	●	●	●	●	KTKFS ^R /L...16
		200-S	2.0	16					●	●	●	●	

For more details on applicable toolholders, see the KYOCERA general product catalog

●: Available

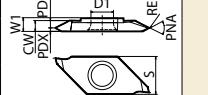
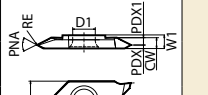
Inserts (grooving and traversing) TKF-GTP chipbreaker

Shape Right-hand shown		Description	Dimensions (mm)							Angle	MEGACOAT NANO PLUS PR1725	MEGACOAT NANO PR1535	Applicable toolholders
			CW	CDX	RE	W1	S	D1	PSIRR				
		TKF12R 200-GTP	2.0	4.6	0.08	3.0	8.7	5.0	0°	●	●	●	KTKFR...12
		TKF16R 300-GTP	3.0	6.0	0.08	4.0	9.5	5.0	0°	●	●	●	KTKFR...16

For more details on applicable toolholders, see the KYOCERA general product catalog

●: Available

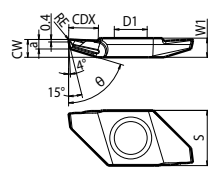
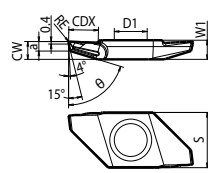
Inserts (Threading) TKFT

Shape		Description	Thread type	Pitch		Dimensions (mm)							Angle	MEGA COAT NANO PLUS	MEGA COAT NANO	Applicable toolholders
				mm	TPI	W1	CW	S	D1	RE	PDX	PDX1				
Right-hand shown																
Partial Profile 	 Right-hand shown	TKFT 12RA6000	M UN	0.2 ~ 0.6	64 ~ 48	3.0	2.5	8.7	5.2	Max 0.05 Flat	0.4	2.1	60°	●	●	KTKFR...12
		12RB6000									2.1	0.4		●	●	
		12RA6000S		0.5 ~ 1.25	48 ~ 24					0.05	0.8	1.7	●	●		
		12RB6000S									1.7	0.8				
		12RN6001		1 ~ 1.5	24 ~ 18					0.1	1.25	1.25	●	●		
		12RA5500S	G,R W	—	40 ~ 16					0.05	0.8	1.7	55°	●	●	
		12RB5500S									1.7	0.8		●	●	
	 Left-hand shown	TKFT 12LA6000	M UN	0.2 ~ 0.6	64 ~ 48	3.0	2.5	8.7	5.2	Max 0.05 Flat	2.1	0.4	60°	●	●	KTKFL...12
		12LB6000									0.4	2.1		●	●	
		12LA6000S		0.5 ~ 1.25	48 ~ 24					0.05	1.7	0.8	●	●		
		12LB6000S									0.8	1.7				
		12LN6001		1 ~ 1.5	24 ~ 18					0.1	1.25	1.25	●	●		
		12LA5500S	G,R W	—	40 ~ 16					0.05	1.7	0.8	55°	●	●	
		12LB5500S									0.8	1.7		●	●	

For more details on applicable toolholders, see the KYOCERA general product catalog

●: Available

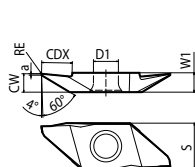
Inserts (Back turning) TKFB-GQ chipbreaker

Shape Right-hand shown		Description	Dimensions (mm)								MEGACOAT NANO PLUS	MEGACOAT NANO	Applicable toolholders
			CW	a	CDX	RE	W1	S	D1	θ	PR1725	PR1535	
 Polished		TKFB 12R28005P-GQ	2.8	1.5	4.6	0.05	3.0	8.7	5.2	74°	●	●	KTKFR...12
		12R28015P-GQ				0.15					●	●	
		TKFB 16R38005P-GQ	3.8	1.8	6.3	0.05	4.0	9.5	5.2	72°	●	●	KTKFR...16
		16R38015P-GQ				0.15					●	●	
		TKFB 12R28005-GQ	2.8	1.5	4.6	0.05	3.0	8.7	5.2	74°	●	●	KTKFR...12
		12R28015-GQ				0.15					●	●	
		TKFB 16R38005-GQ	3.8	1.8	6.3	0.05	4.0	9.5	5.2	72°	●	●	KTKFR...16
		16R38015-GQ				0.15					●	●	

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available

Inserts (Back turning) TKFB

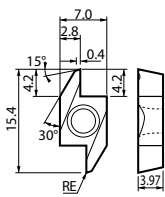
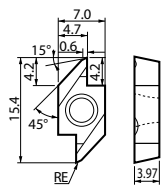
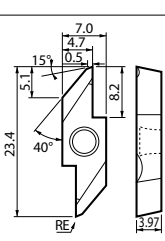
Shape Right-hand shown		Description	Dimensions (mm)							MEGACOAT NANO PLUS	MEGACOAT NANO	Applicable toolholders
			CW	a	CDX	RE	W1	S	D1	PR1725	PR1535	
		TKFB 12R15005M	1.5	0.25	2.6	< 0.05	3.0	8.7	5.2			KTKFR...12
		12R28005M	2.8	0.3	4.6	< 0.05						
		12R28010M				< 0.1						
		TKFB 16R38005M	3.8	0.3	6.3	< 0.05	4.0	9.5	5.2			KTKFR...16
		16R38010M				< 0.1						

Insert with corner R (RE) dimension expressed with less than sign (e.g. <0.05, <0.1 etc.) indicates models with minus tolerance for corner R (RE)

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available

Inserts (Back turning) ABS/ABW

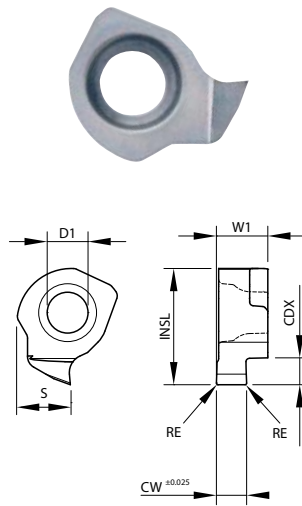
Shape Right-hand shown		Description	Dimensions (mm)	MEGACOAT NANO PLUS		Applicable toolholders
			RE	PR1725	PR1705	
		ABS 15R4005M	< 0.05	●	●	AABSR-40F SABSR-40F
		15R4015M	< 0.15	●	●	
		ABW 15R4005M	< 0.05	●	●	AABWR-40F SABWR-40F
		15R4015M	< 0.15	●	●	
		ABW 23R5005M	< 0.05	●	●	AABWR-50F SABWR-50F
		23R5015M	< 0.15	●	●	

Insert with corner R (RE) dimension expressed with less than sign (e.g. <0.05, <0.15 etc.) indicates models with minus tolerance for corner R (RE)

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available

Inserts (small internal grooving) GC

Shape Right-hand shown	Description	Dimensions (mm)							MEGACOAT NANO PLUS		MEGACOAT NANO		Applicable toolholders	
		CW	CDX	RE	W1	INSL	S	D1	PR1725		PR1535			
									R	L	R	L		
	GC08 ^{R/L}	100-005	1.00	1.5	0.05	3.4	7.7	3.5	2.7	●	●	●	●	SIGC ^{R/L} 10812-EH SIGC ^{R/L} 0806-WH
		120-005	1.20							●	●	●	●	
		125-005	1.25							●	●	●	●	
		150-010	1.50							●	●	●	●	
		200-010	2.00							●	●	●	●	
	GC10 ^{R/L}	100-005	1.00	2.2	0.05	4.7	9.6	4.4	3.5	●	●	●	●	SIGC ^{R/L} 1016-EH SIGC ^{R/L} 1008-WH-L85 SIGCR1008-WH-L100
		120-005	1.20							●	●	●	●	
		125-005	1.25							●	●	●	●	
		145-010	1.45		0.1					●	●	●	●	
		150-010	1.50							●	●	●	●	
		200-010	2.00							●	●	●	●	
		250-020	2.50		0.2					●	●	●	●	
		300-020	3.00							●	●	●	●	
		GC12 ^{R/L}	100-005		1.00					2.2	0.05	4.7	11.6	
	120-005		1.20	●	●	●	●							
	125-005		1.25	●	●	●	●							
	145-010		1.45	0.1	●	●	●	●						
	150-010		1.50		●	●	●	●						
	200-010		2.00		●	●	●	●						
	250-020		2.50	0.2	●	●	●	●						
	300-020		3.00		●	●	●	●						

CDX shows available grooving depth

For more details on applicable toolholders, see the KYOCERA general product catalog

● : Available