



MEGACOAT

Series for Small Part Machining

MEGACOAT NANO

For Steel Cutting

PR1425

High cutting speed and long tool life
with Special Multilayer Nano Coating

MEGACOAT

For Stainless Steel Cutting

PR1225

Consistent and reliable machining
with Kyocera's proprietary thin
coating technology

A graphic logo for MEGACOAT, consisting of a cluster of colorful spheres (blue, green, pink, purple) arranged in a circular pattern, with a red banner at the bottom containing the word "MEGACOAT" in white capital letters.

MEGACOAT

Two MEGACOAT Varieties



MEGACOAT NANO PR1425

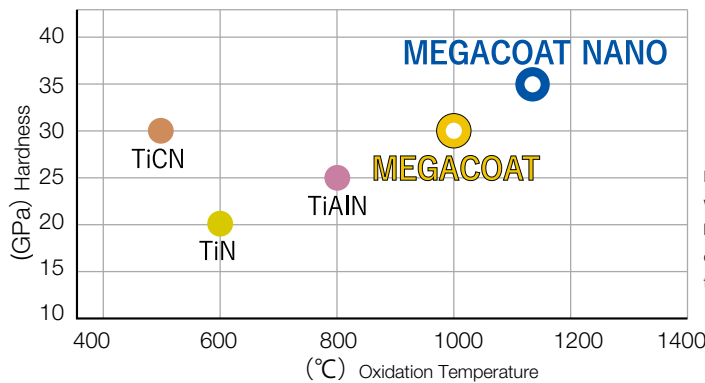
Superior performance in various steel cutting applications through the use of Kyocera's proprietary multi-layer MEGACOAT NANO coating



MEGACOAT PR1225

First choice for stainless steel machining. This first generation MEGACOAT grade maintains sharp cutting edges with its high bonding strength and smooth, thin coating

2 MEGACOAT Varieties for Long Tool Life

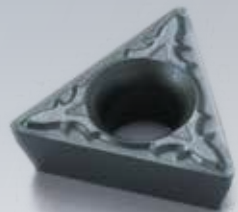
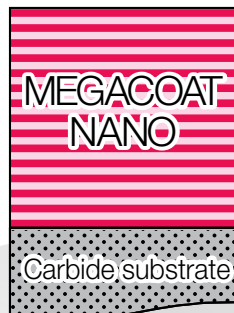


MEGACOAT NANO protects against wear and fracture with its high hardness (35GPa) and superior oxidation resistance (oxidation temperature: 1,150°C)

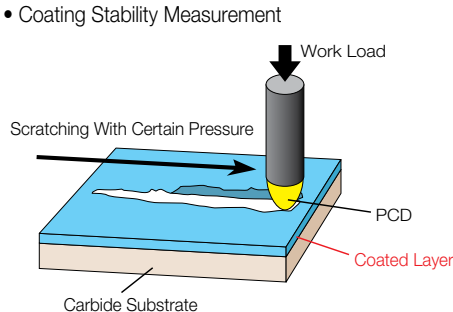
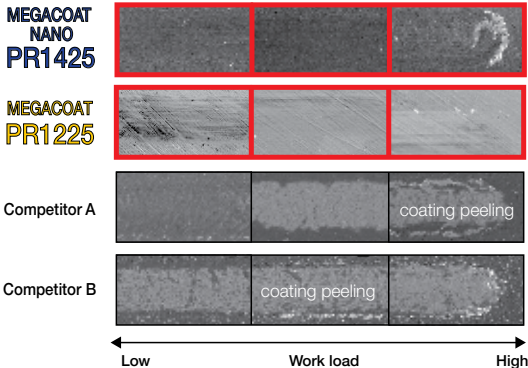
low Oxidation Resistance high



Cross-section: Special Multilayer Nano Coating



The high bonding strength of the MEGACOAT technology provides the coating stability required in Swiss machining



• Application range

• Steel

High speed [Vc=660sfm]	PR1425		
Medium speed [Vc=490sfm]	PR1225		
Low speed [Vc=160sfm]	PR930	PR1225	
	Continuous 	Light interruption 	Heavy interruption

PR1425 1st recommended grade
 PR1225 High reliability in interrupted cutting
 PR1225 Stable cutting at low to middle speed
 PR930 Stable cutting at low speed

• Stainless Steel

High speed [Vc=490sfm]	PR1425		
Medium speed [Vc=330sfm]	PR1225		
Low speed [Vc=160sfm]	PR930	PR1225	
	Continuous 	Light interruption 	Heavy interruption

PR1225 1st recommended grade
 PR1425 Extended tool life in high speed cutting
 PR930 Extended tool life in low speed cutting



Featured Chipbreakers

3 Featured Chipbreakers to Solve Chip Evacuation Problems

Excellent Chip Evacuation

3 Molded Sharp Edge Chipbreakers

GQ



General Purpose

GF



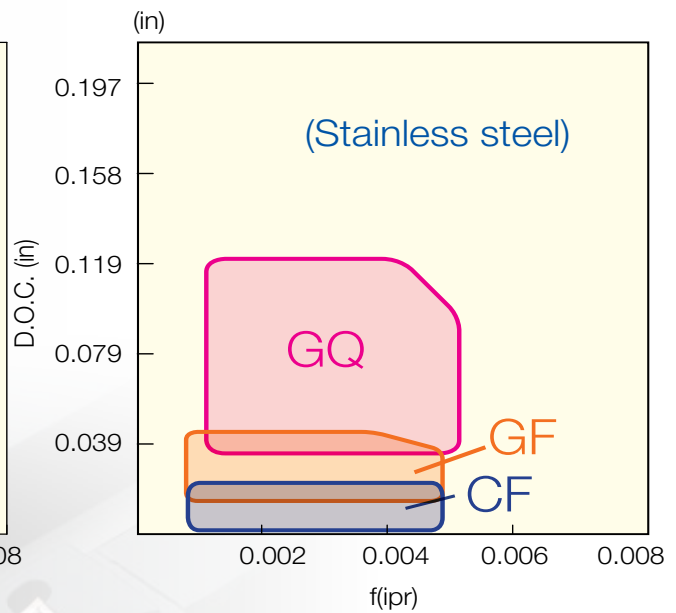
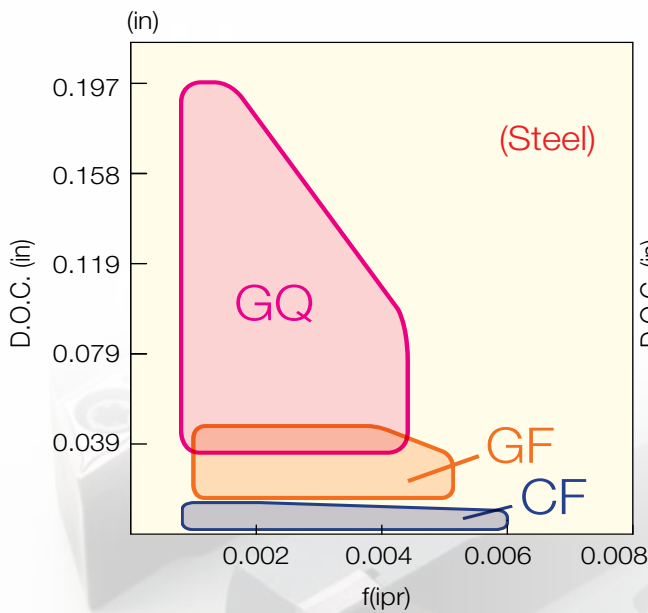
Finishing

CF



Micro Finishing

• Chipbreaker Application Map



Advantage 1

New chipbreaker series delivers excellent chip control in a wide range of cutting.

Advantage 2

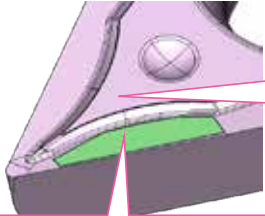
Sharp cutting performance due to the ground edge periphery.

Advantage 3

The mirror polished insert provides improved adhesion resistance and an improved surface finish.

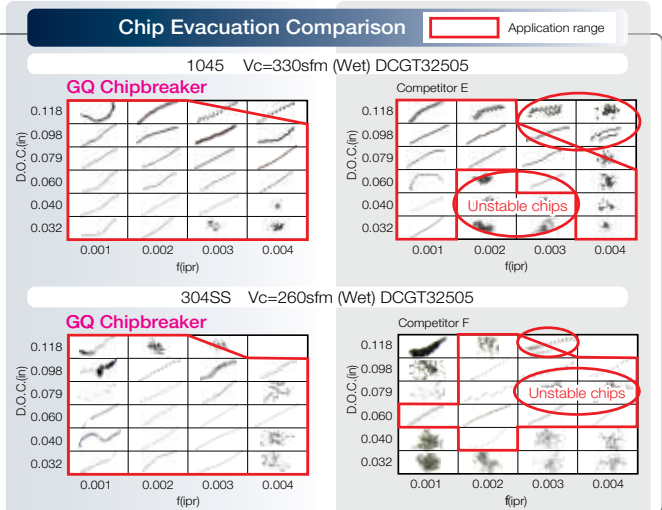


Available in wide a wide range of applications:
 D.O.C.=0.032-0.197" (steel)
 D.O.C.=0.032-0.119" (stainless steel)

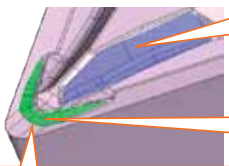


- Low cutting force design with small chipbreaker gap
- Achieves chip control at low depths of cut

• Enables cutting over a wide range of conditions by using the optimum chipbreaker width according to the cutting depth



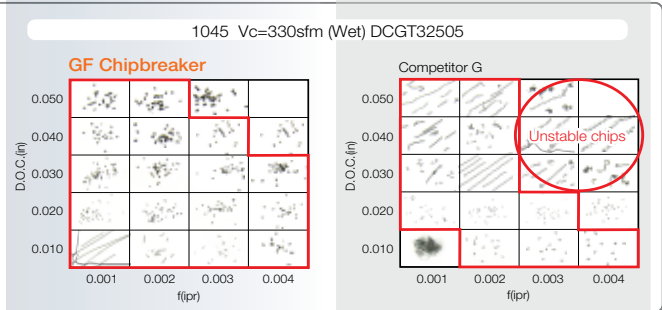
Applicable D.O.C. range from 0.010 to 0.049"



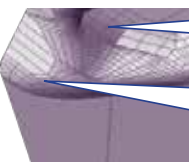
High breaker dot apart from ridge line of cutting edge
 Good heat resistance and chip control

Increased sharpness through the use of a large rake angle

Dot located close to ridge line of cutting edge on corner
 Chips broken into small pieces at small depths of cut

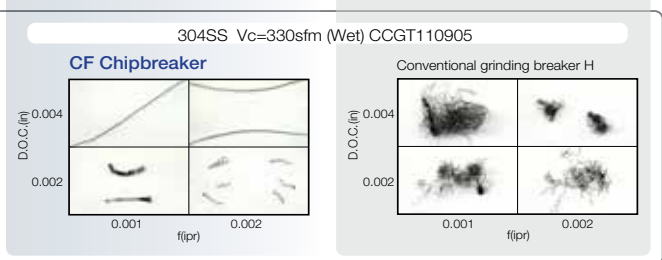


Applicable D.O.C. range from 0.001~0.008"



Consistent curled chips through the use of a unique chipbreaker geometry

Increased sharpness through the use of a large rake angle
 Prevents edge build-up and reduces burrs



Expanded MEGACOAT Series Lineup

Economical Double-sided Insert

Small Double-Sided Tooling
 for Automatic Lathes



Optimum Choice for Larger Swiss Lathes

Double Sided Tooling for
 Automatic Lathes



Expanded Lineup for Cut-off, Back
 Turning and Threading

KTKF Series for Automatic Lathes



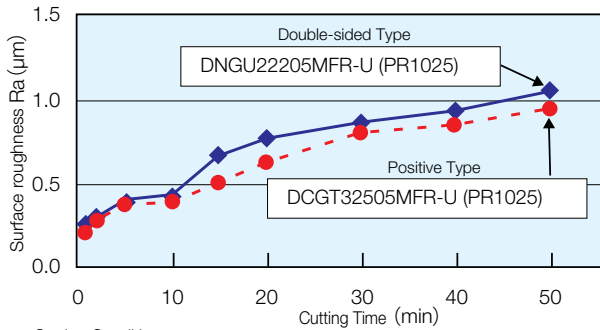
Specially designed economical double-sided insert for small diameter workpieces
 Sharp cutting performance equivalent to positive inserts, but with twice the number of cutting edges!



- Advantage 1** Newly developed double-sided inserts optimized for automatic lathes
- Advantage 2** Ground and molded chipbreakers are available for applications from roughing to finishing
- Advantage 3** Minus-only tolerance on ground insert corner radii

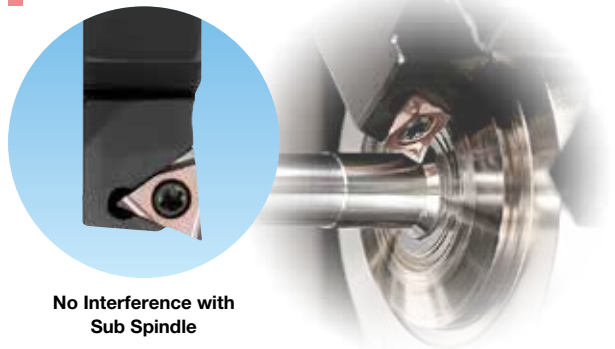
Surface Roughness Comparison (sharp edge)

Sharp cutting equivalent to positive inserts and excellent surface roughness



Cutting Condition
 Workpiece Material : 1045 Vc=330sfm, D.O.C.=0.059in f=0.001ipr (Wet)

Toolholder Without Offset



Double-Sided Tooling for Automatic Lathes

Polished Face and Sharp Edge TK Chipbreaker

Economical double-sided molded Chipbreaker with G-class accuracy



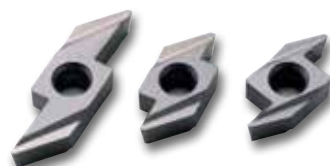
KTKF for Cut-off, Back Turning and Threading

For a wide range of applications



ABS/ABW for Back Turning

Long tool life through MEGACOAT technology



Extended tool life and stable cutting with MEGACOAT Series

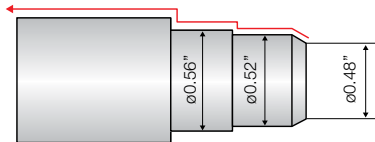
Case Studies

Bearing Steel

Cylinder

- Vc= 680~740sfm
- D.O.C.= 0.039in (External Turning)
- f = 0.005ipr (External Turning)
- Wet
- DCGT32505MFP-GF

(PR1425)



PR1425

700pcs/edge

Competitor I
(Molded Chipbreaker / PVD Coated)

250pcs/edge

PR1425 achieved 2.8 times longer tool life than the competitor I
(Molded Chipbreaker / PVD Coated)

Competitor I Vc=620-660sfm

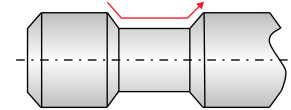
Evaluation by the Customer

1045

Shaft

- Vc= 670sfm
- D.O.C.=~0.060in
- f =0.004ipr
- Wet
- DCGT3251MFP-GQ

(PR1425)



PR1425

More than 2000 pcs/edge

Competitor J
(Molded Chipbreaker / PVD Coated)

Less than 800 pcs/edge

PR1425 achieved 2.5 times longer tool life than the competitor J
(Molded Chipbreaker / PVD Coated)

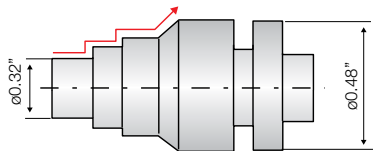
Evaluation by the Customer

304 SS

Flange

- Vc= 280sfm
- D.O.C.=~0.060in
- f =0.001~0.002ipr
- Wet
- DCGT32505MFP-GQ

(PR1225)



PR1225

14,500pcs/edge

Competitor K
(Molded Chipbreaker / PVD Coated)

4,000pcs/edge

PR1225 increased 3.6 times as many workpieces, compared to Competitor K
(Molded Chipbreaker / PVD Coated).

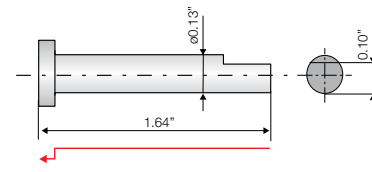
Evaluation by the Customer

404C SS

Clutch Shaft

- Vc= 200sfm
- D.O.C.=0.010~0.051in
- f =0.001ipr
- Wet
- CCGT215013MFR-U

(PR1225)



PR1225

400~450pcs/edge

Competitor L
(Ground chipbreaker / PVD Coated)

250~300pcs/edge

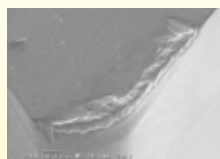
Partially interrupted cut due to a pre-machined flat on the OD

PR1225 increased 1.5 times as many workpieces, compared to Competitor L
(Ground produced / PVD Coated).

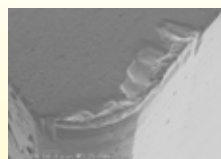
Evaluation by the Customer

Technical Tips

For free-cutting steel, the best combination is PR1425 with J Chipbreaker.



PR1425



Competitor

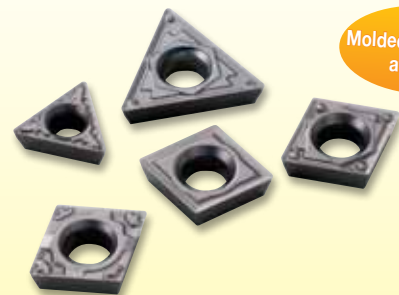
Maintained good edge condition with less crater wear and built-up edge

Cutting Condition

Vc=400sfm D.O.C.=0.02" f=0.0016ipr

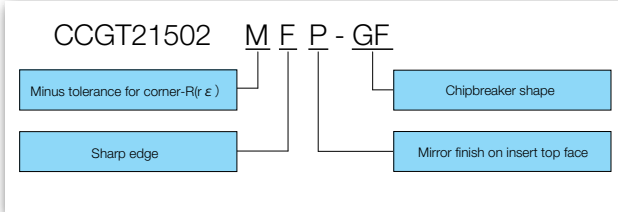
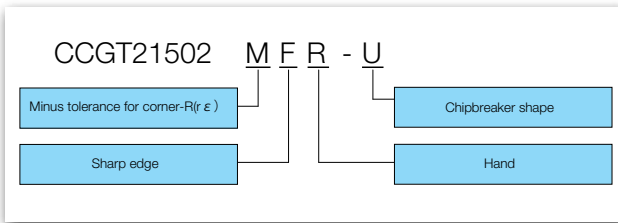
Workpiece Material SUM24L (Wet) Cutting Time 150

PR1425 offers extended tool life in large diameter workpiece machining at higher cutting speeds



Molded Inserts also available

Positive Insert Identification System



Use of Minus Tolerance for Corner-R(re)

The actual corner-R of the workpiece may become larger than R0.008" when machined by an insert whose corner-R(re) is 0.008".

In such case, an insert with a minus-only tolerance for the corner-R(re) is recommended.

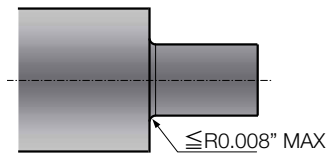


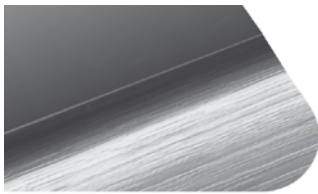
Fig. 1 Corner-R on the drawing

"Super Fine" Edge for High Quality and Long Tool Life

- Recommended for mechatronics, electronics, and high precision machined parts
- Sub-micron accuracy possible

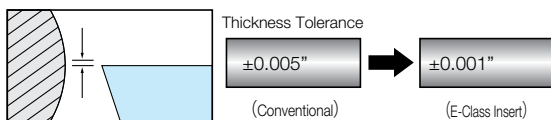
High Quality Ground Insert

- Reduction of micro-chipping at ground edge
- Less edge build-up • Long tool life



E-class Turning Insert










- Accuracy of index position after insert replacement







Positive Inserts

Shape Left-hand shown	Description	Dimension(in)					Grades				
		I.C.	Thickness	Hole	Corner R(re)	Relief Angle	PR1425	PR1225			
Minute ap Sharp Edge / Polished	CCGT 110902MP-CF 110905MP-CF	0.138	0.055	0.075	<0.004 <0.008	7°	●	●			
	CCGT 141102MP-CF 141105MP-CF	0.169	0.071	0.091	<0.004 <0.008		●	●			
Finishing Sharp Edge / Polished	CCGT 21502MFP-GF 21505MFP-GF 2151MFP-GF	0.250	0.094	0.110	<0.004 <0.008 <0.016	7°	●	●			
	CCGT 32502MFP-GF 32505MFP-GF 3251MFP-GF	0.375	0.156	0.173	<0.004 <0.008 <0.016		●	●			
	CCGT 21502MFP-GQ 21505MFP-GQ 2151MFP-GQ	0.250	0.094	0.110	<0.004 <0.008 <0.016		●	●			
Finishing-Medium Sharp Edge / Polished	CCGT 32502MFP-GQ 32505MFP-GQ 3251MFP-GQ	0.375	0.156	0.173	<0.004 <0.008 <0.016	7°	●	●			
	CCMT 21505GK 2151GK	0.250	0.094	0.110	0.008 0.016		7°	●	●		
	CCMT 32505GK 3251GK	0.375	0.156	0.173	0.008 0.016			●	●		
Finishing-Medium	CCMT 21505HQ 2151HQ	0.250	0.094	0.110	0.008 0.016	7°	●	●			
	CCMT 32505HQ 3251HQ 3252HQ	0.375	0.156	0.173	0.008 0.016 0.031		●	●			
Medium cutting	CCMT 3252	0.375	0.156	0.173	0.031	7°	●	●			
Medium cutting Sharp Edge	CCGT 212013MF 21502MF 21505MF 2151MF	0.250	0.094	0.110	<0.002 <0.004 <0.008 <0.016	7°	●	●			
	CCGT 325013MF 32502MF 32505MF 3251MF				<0.002 <0.004 <0.008 <0.016		●	●			
	CCET 1109013M%-FSF 110902M%-FSF 110905M%-FSF 11091M%-FSF				0.138		0.055	0.075	<0.002 <0.004 <0.008 <0.016	●	●
Finishing Sharp Edge / Precision	CCET 1411013M%-FSF 141102M%-FSF 141105M%-FSF 14111M%-FSF	0.169	0.071	0.091	<0.002 <0.004 <0.008 <0.016	7°	●	●			
	CCET 1109013M%-F 110902M%-F 110905M%-F 11091M%-F				0.138		0.055	0.075	<0.002 <0.004 <0.008 <0.016	●	●
	CCET 141102M%-F 141105M%-F 14111M%-F				0.169		0.071	0.091	<0.004 <0.008 <0.016	●	●
Finishing Sharp Edge	CCGT 1109013M%-F 110902M%-F 110905M%-F 11091M%-F	0.138	0.055	0.075	<0.002 <0.004 <0.008 <0.016	7°	●	●			
	CCGT 1411013M%-F 141102M%-F 141105M%-F 14111M%-F				0.169		0.071	0.091	<0.002 <0.004 <0.008 <0.016	●	●
	CCGT 1109013M%-F 110902M%-F 110905M%-F 11091M%-F								0.138	0.055	0.075


● : Standard Stock
















Shape Left-hand shown	Description	Dimension(in)					Grades		
		I.C.	Thickness	Hole	Corner R(re)	Relief Angle	PR1425	PR1225	
Low Feed  Sharp Edge Precision	CCET 215013MF%-USF	0.250	0.094	0.110	<0.002	7°	●	●	
	21502MF%-USF				<0.004		●	●	
	21505MF%-USF				<0.008		●	●	
Low Feed 	CCET 325013MF%-USF	0.375	0.156	0.173	<0.002	7°	●	●	
	32502MF%-USF				<0.004		●	●	
	32505MF%-USF				<0.008		●	●	
Low Feed 	CCET 215013MF%-U	0.250	0.094	0.110	<0.002	7°	●	●	
	21502MF%-U				<0.004		●	●	
	21505MF%-U				<0.008		●	●	
Low Feed 	CCET 325013MF%-U	0.375	0.156	0.173	<0.002	7°	●	●	
	32502MF%-U				<0.004		●	●	
	32505MF%-U				<0.008		●	●	
Low Feed 	CCGT 215013MF%-U	0.250	0.094	0.110	<0.002	7°	●	●	
	21502MF%-U				<0.004		●	●	
	21505MF%-U				<0.008		●	●	
Low Feed 	CCGT 325013MF%-U	0.375	0.156	0.173	<0.002	7°	●	●	
	32502MF%-U				<0.004		●	●	
	32505MF%-U				<0.008		●	●	
Low Feed 	CCET 215013MF%-J	0.250	0.094	0.110	<0.002	7°	R	R	
	21502MF%-J				<0.004		●	●	
	21505MF%-J				<0.008		●	●	
Low Feed 	CCET 32502MF%-J	0.375	0.156	0.173	<0.004	7°	●	●	
	32505MF%-J				<0.008		●	●	
	3251MF%-J				<0.016		●	●	
Finishing 	CPMT 25151GP	0.313	0.094	0.130	0.016	11°	●	●	
	CPMT 321GP 322GP	0.375	0.125	0.173	0.031		●	●	
Finishing-Medium 	CPMH 321HQ 322HQ	0.313	0.094	0.138	0.031	11°	●	●	
	CPMH 1821HQ 090308HQ	0.375	0.125	0.177	0.031		●	●	
Medium Cutting 	CPMH 25151 25152	0.313	0.094	0.138	0.031	11°	●	●	
	CPMH 321 322	0.375	0.125	0.177	0.031		●	●	
Low Carbon Steel 	CPMT 25151XP CPMT 321XP 322XP	0.313 0.375	0.094 0.125	0.130 0.173	0.016 0.031	11°	● ●	● ●	
	DCGT 21502MP-CF 21505MP-CF	0.250	0.094	0.110	<0.004 <0.008		7°	● ●	● ●
Micro Finishing 	DCGT 32502MP-CF 32505MP-CF	0.375	0.156	0.173	<0.004 <0.008	7°		● ●	● ●
	Finishing 	DCGT 21502MFP-GF 21505MFP-GF 2151MFP-GF	0.250	0.094	0.110		<0.004 <0.008 <0.016	7°	● ● ●
DCGT 32502MFP-GF 32505MFP-GF 3251MFP-GF		0.375	0.156	0.173	<0.004 <0.008 <0.016	7°	● ● ●		● ● ●
		DCGT 21502MP-CK 21505MP-CK	0.250	0.094	0.110		<0.004 <0.008		7°
Finishing 	DCGT 32502MP-CK 32505MP-CK		0.375	0.156	0.173	<0.004 <0.008	7°	● ●	

Shape Left-hand shown	Description	Dimension(in)					Grades					
		I.C.	Thickness	Hole	Corner R(re)	Relief Angle	PR1425	PR1225				
Finishing 	DCMT 21505GP 2151GP	0.250	0.094	0.110	0.008 0.016	7°	● ●	● ●				
	DCMT 3251GP 3252GP				0.016 0.031		● ●	● ●				
	DCGT 21502MFP-GQ 21505MFP-GQ 2151MFP-GQ				<0.004 <0.008 <0.016		● ● ●	● ● ●				
Finishing-Medium 	DCGT 32502MFP-GQ 32505MFP-GQ 3251MFP-GQ	0.375	0.156	0.173	<0.004 <0.008 <0.016	7°	● ● ●	● ● ●				
	DCMT 21505GK 2151GK 2152GK	0.250	0.094	0.110	0.008 0.016 0.031		7°	● ● ●	● ● ●			
					DCMT 32505GK 3251GK 3252GK			0.008 0.016 0.031	● ● ●	● ● ●		
DCMT 21505HQ 2151HQ 2152HQ					0.250	0.094		0.110	0.008 0.016 0.031	7°	● ● ●	● ● ●
	DCMT 32505HQ 3251HQ 3252HQ	0.008 0.016 0.031	● ● ●	● ● ●								
	Medium cutting 	DCGT 215013MF 21502MF 21505MF 2151MF	0.250	0.094			0.110		<0.002 <0.004 <0.008 <0.016		7°	● ● ● ●
DCGT 325013MF 32502MF 32505MF 3251MF		<0.002 <0.004 <0.008 <0.016			● ● ● ●	● ● ● ●						
Soft Steel 		DCMT 2151XP DCMT 32505XP 3251XP 3252XP			0.250 0.375	0.094 0.156		0.110 0.173	0.016 0.016 0.031	7°		● ● ● ●
	DCET 215013M%-FSF 21502M%-FSF 21505M%-FSF 2151M%-FSF	0.250	0.094	0.110	<0.002 <0.004 <0.008 <0.016	7°	● ● ● ●	● ● ● ●				
					DCET 325013M%-FSF 32502M%-FSF 32505M%-FSF 3251M%-FSF		<0.002 <0.004 <0.008 <0.016	● ● ● ●	● ● ● ●			
DCET 215013M%-F 21502M%-F 21505M%-F 2151M%-F					0.250		0.094	0.110	<0.002 <0.004 <0.008 <0.016	7°	R ● ● ●	R ● ● ●
	DCET 325013M%-F 32502M%-F 32505M%-F 3251M%-F	<0.002 <0.004 <0.008 <0.016	R ● ● ●	R ● ● ●								
	DCMT 21505GP 2151GP	0.250	0.094	0.110		0.008 0.016			7°		● ●	● ●
						DCMT 3251GP 3252GP					0.016 0.031	● ●

Inserts whose corner R(e) is expressed with less than symbol (Ex:<0.002,<0.004) indicate models with minus-only tolerance for the corner R(e).
● : Standard Stock
R : R-hand only

• Positive Inserts

Shape Left-hand shown	Description	Dimension(in)					Grades				
		I.C.	Thickness	Hole	Corner R(r)	Relief Angle	PR1425	PR1225			
Finishing 	DCGT 215013MF%-F 21502MF%-F 21505MF%-F 2151MF%-F	0.250	0.094	0.110	<0.002	7°	●	●			
	<0.004				●		●				
	<0.008				●		●				
	<0.016				●		●				
	DCGT 325013MF%-F 32502MF%-F 32505MF%-F 3251MF%-F				0.375		0.156	0.173	<0.002	●	●
<0.004	●	●									
<0.008	●	●									
<0.016	●	●									
DCET 215013MF%-USF 21502MF%-USF 21505MF%-USF	0.250	0.094	0.110	<0.002		7°			●	●	
<0.004				●	●						
<0.008				●	●						
DCET 325013MF%-USF 32502MF%-USF 32505MF%-USF				0.375	0.156		0.173	<0.002	●	●	
<0.004								●	●		
<0.008	●	●									
DCET 215013MF%-U 21502MF%-U 21505MF%-U	0.250	0.094	0.110			<0.002		7°	R	●	
<0.004						●			●		
<0.008				●	●						
DCET 325013MF%-U 32502MF%-U 32505MF%-U 3251MF%-U				0.375	0.156	0.173	<0.002		R	●	
<0.004							●		●		
<0.008	●	●									
<0.016	R	●									
DCGT 215013MF%-U 21502MF%-U 21505MF%-U 2151MF%-U	0.250	0.094	0.110				0.002	7°	●	●	
0.004				●	●						
0.008				●	●						
0.016				●	●						
DCGT 325013MF%-U 32502MF%-U 32505MF%-U 3251MF%-U				0.375	0.156	0.173	0.002		●	●	
0.004	●	●									
0.008	●	●									
0.016	●	●									
DCET 215013MF%-J 21502MF%-J 21505MF%-J	0.250	0.094	0.110				0.002	7°	R	R	
0.004				●	●						
0.008				●	●						
DCET 325013MF%-JSF 32502MF%-JSF 32505MF%-JSF				0.375	0.156	0.173	0.002		7°	●	●
0.004							●			●	
0.008	●	●									
DCET 325013MF%-J 32502MF%-J 32505MF%-J 3251MF%-J	0.375	0.156	0.173				0.002	7°		R	●
0.004							●			●	
0.008				●	●						
0.016				R	●						
DCGT 325013MF%-J 32502MF%-J 32505MF%-J 3251MF%-J				0.375	0.156	0.173	0.002		7°	●	●
0.004	●	●									
0.008	●	●									
0.016	●	●									
JCET 110905MF%-F 11091MF%-F	0.138	0.055	0.075				0.008	7°		●	●
0.016				●	●						
TBGT 12102MP-CF 12105MP-CF				0.156	0.063	0.091	0.004		5°	●	●
0.008							●			●	
TBET 121013M% 12102M% 12105M% 12111M%							0.156			0.063	0.091
0.004	●	●									
0.008	●	●									
0.016	●	●									

Shape Left-hand shown	Description	Dimension(in)					Grades				
		I.C.	Thickness	Hole	Corner R(r)	Relief Angle	PR1425	PR1225			
Low Feed 	TCGT 1515013MF%-U 151502MF%-U 151505MF%-U	0.187	0.094	0.091	<0.002	7°	●	●			
	<0.004				●		●				
	<0.008				●		●				
	TCGT 22013MF%-U 2202MF%-U 2205MF%-U 221MF%-U				0.250		0.125	0.110	<0.002	●	●
<0.004	●	●									
<0.008	●	●									
<0.016	●	●									
Micro Finishing 	TPGT 151502MP-CF 151505MP-CF	0.187	0.094	0.091	<0.004	11°	●	●			
	<0.008				●		●				
	TPGT 181502MP-CF 181505MP-CF				0.219		0.094	0.118	<0.004	●	●
<0.008	●	●									
<0.008	●	●									
Finishing 	TPGH 151502% 151505% 15151%	0.187	0.094	0.091	0.004	11°	●	●			
	0.008				●		●				
	0.016				●		●				
	TPGH 181502% 181505% 18151%	0.219	0.094	0.118	0.004		●	●			
	0.008				●		●				
	0.016				●		●				
	TPGH 21505% 2151%	0.250	0.094	0.138	0.008		●	●			
	0.016				●		●				
	TPGH 2205% 221% 222%	0.250	0.125	0.130	0.008		●	●			
	0.016				●		●				
0.031	●				●						
TPGH 3205% 321% 322%	0.375	0.125	0.177	0.008	●	●					
0.016				●	●						
0.031				●	●						
Medium Cutting 	TPGH 2205%-H 221%-H 222%-H	0.250	0.125	0.130	0.008	11°	●	●			
	0.016				●		●				
	0.031				●		●				
Finishing 	TPMT 181505GP 18151GP	0.219	0.094	0.110	0.008	11°	●	●			
	0.016				●		●				
	0.031				●		●				
Finishing 	TPMT 221GP 222GP	0.250	0.125	0.130	0.016	11°	●	●			
	0.031				●		●				
	0.031				●		●				
Finishing-Medium 	TPMT 321GP	0.375	0.125	0.177	0.016	11°	●	●			
	TPMT 181505HQ 18151HQ				0.219		0.094	0.110	0.008	●	●
	0.016								●	●	
Finishing-Medium 	TPMT 2205HQ 221HQ 222HQ	0.250	0.125	0.130	0.008	11°	●	●			
	0.016				●		●				
	0.031				●		●				
Finishing-Medium 	TPMT 3205HQ 321HQ 322HQ	0.375	0.125	0.177	0.008	11°	●	●			
	0.016				●		●				
	0.031				●		●				
Low Carbon Steel 	TPMT 18151XP TPMT 221XP 222XP	0.250	0.125	0.130	0.016	11°	●	●			
	0.031				●		●				
	0.031				●		●				
Finishing 	TPMT 321XP 322XP	0.375	0.086	0.177	0.016	11°	●	●			
	0.031				●		●				
Finishing 	VBMT 221GP	0.250	0.125	0.110	0.016	5°	●	●			
	0.016				●		●				
Finishing 	VBMT 2205VF 221VF 222VF	0.250	0.125	0.110	0.008	5°	●	●			
	0.016				●		●				
	0.031				●		●				
Finishing-Medium 	VBMT 221HQ 222HQ	0.250	0.125	0.110	0.016	5°	●	●			
	0.031				●		●				
Finishing 	VBET 22013M%-FSF 2202M%-FSF 2205M%-FSF	0.250	0.125	0.110	<0.002	5°	●	●			
	<0.004				●		●				
	<0.008				●		●				

An insert which corner R(e) dimension is shown with an inequality sign (Ex:<0.002,<0.004) indicates minus tolerance of corner R(e).

●Standard Stock

R: R-hand only

Shape Left-hand shown	Description	Dimension(in)					Grades	
		I.C.	Thickness	Hole	Corner R(re)	Relief Angle	PR1425	PR1225
Finishing Sharp Edge	VBET 22013M%-F 2202M%-F 2205M%-F	0.250	0.125	0.110	<0.002	5°	●	●
	<0.004				●		●	
	<0.008				●		●	
Finishing Sharp Edge	VBGT 22013M%-F 2202M%-F 2205M%-F	0.250	0.125	0.110	<0.002	5°	●	●
	<0.004				●		●	
	<0.008				●		●	
Finishing-Medium Sharp Edge	VBET 22013M%-Y 2202M%-Y 2205M%-Y 221M%-Y	0.250	0.125	0.110	<0.002	5°	●	●
	<0.004				●		●	
	<0.008				●		●	
	<0.016				●		●	
Finishing-Medium Sharp Edge	VBGT 22013M%-Y 2202M%-Y 2205M%-Y 221M%-Y 222M%-Y	0.250	0.125	0.110	<0.002	5°	●	●
	<0.004				●		●	
	<0.008				●		●	
	<0.031				●		●	
Finishing	VBGT 3305M%-Y 331M%-Y 332M%-Y	0.375	0.187	0.173	<0.008		●	●
	<0.016				●		●	
Finishing	VCMT 151505VF 15151VF	0.187	0.094	0.091	0.008	7°	●	●
	0.016				●		●	
Finishing-Medium	VCMT 151505HQ 15151HQ	0.187	0.094	0.091	0.008	7°	●	●
	0.016				●		●	
Micro Finishing	VPGT 2202MP-CF 2205MP-CF	0.250	0.125	0.110	<0.004	11°	●	●
	<0.008				●		●	
Finishing	VPGT 2202MFP-GF 2205MFP-GF	0.250	0.125	0.110	<0.004	11°	●	●
	<0.008				●		●	
Finishing	VPGT 151502MP-CK 151505MP-CK	0.187	0.094	0.091	<0.004	11°	●	●
	<0.008				●		●	
	VPGT 2202MP-CK 2205MP-CK	0.250	0.125	0.110	<0.004		●	●
<0.008	●				●			
Finishing Super Fine Sharp Edge / Precision	VPET 151502M%-FSF 151505M%-FSF	0.187	0.094	0.091	<0.004	11°	●	●
	<0.008				●		●	
	VPET 22013M%-FSF 2202M%-FSF	0.250	0.125	0.110	<0.002		●	●
	<0.004				●		●	
<0.008	●	●						




Shape Left-hand shown	Description	Dimension(in)					Grades	
		I.C.	Thickness	Hole	Corner R(re)	Relief Angle	PR1425	PR1225
Finishing Sharp Edge	VPET 151502M%-F 151505M%-F	0.187	0.094	0.091	<0.004	11°	●	●
	<0.008				●		●	
	VPET 22013M%-F 2202M%-F 2205M%-F				0.250		0.125	0.110
<0.004	R	●						
<0.008	●	●						
Low Feed Super Fine Sharp Edge / Precision	VPET 151502MF%-USF 151505MF%-USF	0.187	0.094	0.091	<0.004	11°	●	●
	<0.008				●		●	
	VPET 22013MF%-USF 2202MF%-USF	0.250	0.125	0.110	<0.002		●	●
	<0.004				●		●	
<0.008	●	●						
Low Feed Sharp Edge	VPET 151502MF%-U 151505MF%-U	0.187	0.094	0.091	<0.004	11°	●	●
	<0.008				●		●	
Low Carbon Steel	VPET 22012MF%-J 2202MF%-J 2205MF%-J	0.250	0.125	0.110	<0.002	11°	R	R
	<0.004				●		●	
	<0.008				●		●	
Minute ap Sharp Edge / Polished	WBGT 12102MP%-CF 12105MP%-CF	0.156	0.063	0.091	<0.004	5°	●	●
	<0.008				●		●	
Finishing	WBMT 12105%-DP 1211%-DP	0.156	0.063	0.091	0.008	5°	●	●
	0.016				●		●	
	WBMT 151505%-DP 15151%-DP	0.187	0.094	0.091	0.008		●	●
0.016	●				●			
Finishing Sharp Edge	WBET 121013M%-F 12102M%-F 12105M%-F 1211M%-F	0.156	0.063	0.091	<0.002	5°	L	●
	<0.004				●		●	
	<0.008				●		●	
	<0.016				●		●	
	WBET 151502M%-F 151505M%-F 15151M%-F	0.187	0.094	0.091	<0.004		L	●
<0.008	L				●			
<0.016	●	●						

An insert which corner R(e) dimension is shown with an inequality sign (Ex:<0.002,<0.004) indicates minus tolerance of corner R(e).

● : Standard Stock

R : R-hand only L : L-hand only

• Inserts for back turning toolholders (AABS/SABS/AABW/SABW)

Shape Right-hand shown	Description	Dimension(mm/in)	MEGACOAT NANO	MEGACOAT
		rε	PR1425	PR1225
	ABS 15R4005M 15R4015M	<0.05 (0.002") <0.15 (0.006")	● ●	● ●
	ABW 15R4005M 15R4015M	<0.05 (0.002") <0.15 (0.006")	● ●	● ●
	ABW 23R5005M 23R5015M	<0.05 (0.002") <0.15 (0.006")	● ●	● ●




• Inserts with corner R(re) dimension expressed in less than sign (e.g.<0.004, <0.006, etc.) indicate models with minus tolerance for corner R(re)




● : Standard Stock

• For applicable toolholders, refer to the General Catalog.

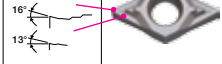
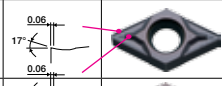
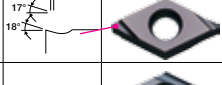
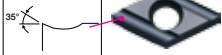
Small Double-Sided Tooling for Automatic Lathes

• Stock Items

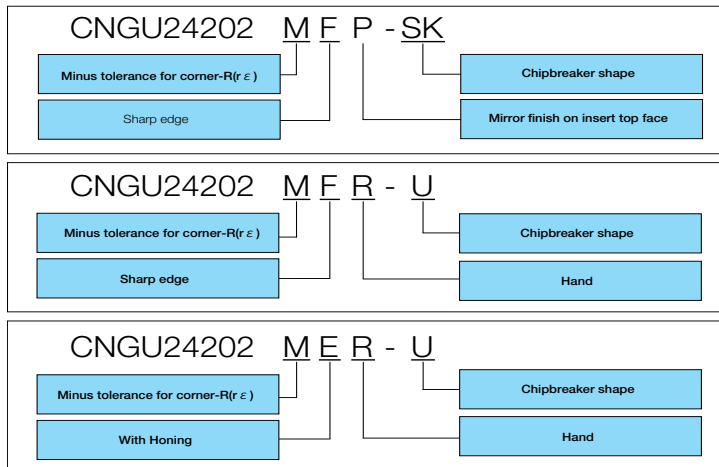
Shape Right-hand Shown	Description	Dimension(in)					Grades	
		I.C.	Thickness	Hole	Corner-R($r\epsilon$)	PR1425	PR1225	
Finishing-Medium  Sharp Edge / Polished	CNGU 24202MFP-SK	0.295	0.125	0.142	<0.004	●	●	
	24205MFP-SK				<0.008	●	●	
Medium-Roughing  With Honing	CNMU 24205E-GK	0.295	0.125	0.142	0.008	●	●	
	2421E-GK				0.016	●	●	
Finishing  Sharp Edge	CNGU 242013MFR-F	0.295	0.125	0.142	<0.002	●	●	
	24202MFR-F				<0.004	●	●	
	24205MFR-F				<0.008	●	●	
	2421MFR-F				<0.016	●	●	
Low Feed  Sharp Edge	CNGU 242013MFR-U	0.295	0.125	0.142	<0.002	●	●	
	24202MFR-U				<0.004	●	●	
	24205MFR-U				<0.008	●	●	
	2421MFR-U				<0.016	●	●	
Finishing-Medium  Sharp Edge / Polished	DNGU 22202MFP-SK	0.276	0.125	0.142	<0.004	●	●	
	22205MFP-SK				<0.008	●	●	
	2221MFP-SK				<0.016	●	●	
Medium-Roughing  With Honing	DNMU 22205E-GK	0.276	0.125	0.142	0.008	●	●	
	2221E-GK				0.016	●	●	
Finishing  Sharp Edge	DNGU 222013MFR-F	0.276	0.125	0.142	<0.002	●	●	
	22202MFR-F				<0.004	●	●	
	22205MFR-F				<0.008	●	●	
	2221MFR-F				<0.016	●	●	

Shape Right-hand Shown	Description	Dimension(in)					Grades	
		I.C.	Thickness	Hole	Corner-R($r\epsilon$)	PR1425	PR1225	
Low Feed  Sharp Edge	DNGU 222013MFR-U	0.276	0.125	0.142	<0.002	●	●	
	22202MFR-U				<0.004	●	●	
	22205MFR-U				<0.008	●	●	
	2221MFR-U				<0.016	●	●	
Finishing  Sharp Edge	TNGU 182013MFR-F	0.219	0.125	0.118	<0.002	●	●	
	18202MFR-F				<0.004	●	●	
	18205MFR-F				<0.008	●	●	
	1821MFR-F				<0.016	●	●	
Low Feed  Sharp Edge	TNGU 182013MFR-U	0.219	0.125	0.118	<0.002	●	●	
	18202MFR-U				<0.004	●	●	
	18205MFR-U				<0.008	●	●	
	1821MFR-U				<0.016	●	●	

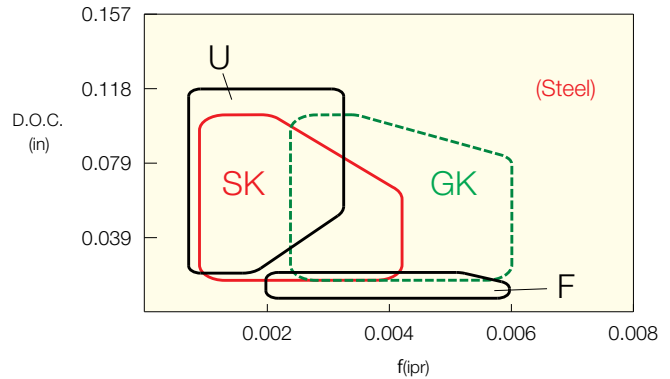
An insert which corner R(ϵ) dimension is shown with an inequality sign (Ex: <0.002, <0.004) indicates minus tolerance of corner R(ϵ).
 ● : Standard Stock
 R : R-hand only L : L-hand only

Cutting Range	Name	Design	Advantages
Finishing-Medium	SK		Superior chip evacuation and low cutting force for machining steel and stainless steel. Cutting performance comparable to positive insert.
Medium-Roughing	GK		Good chip evacuation at wide range through chipbreaker dot and wide chip pocket.
Finishing	F		Good chip control for finishing to light cutting with low cutting force.
Low Feed	U		Good chip control at low feed rate and varied D.O.C. with low cutting force.

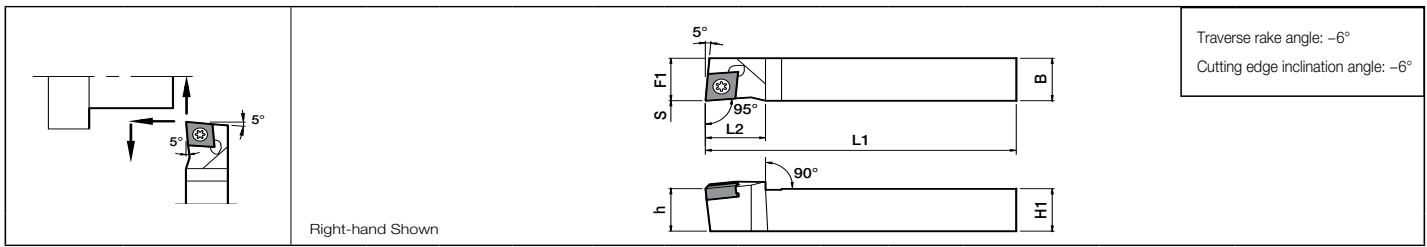
• Small Double-Sided Tooling Identification System



• Chipbreaker Application Map



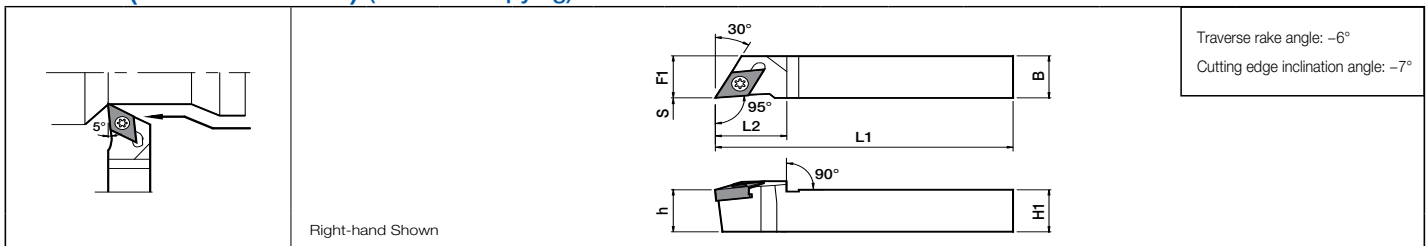
• **SCLN (Without Offset) (External/Facing)**



Toolholder Dimension

Description	Stock	Unit	H1=h	B	L1	L2	F1	S	Std. Corner-R (re)	Spare Parts		Applicable Insert
										Clamp Screw	Wrench	
SCLNR 1010K-07FF	●	mm	10	10	120	15	10	0	0.2	SB-3080TR	LTW-10SS	CNGU242.. CNMU242..
1212F-07FF	●		12	12	85		12					
1212K-07FF	●		16	16	120		16					
1616K-07FF	●											
SCLNR 6-2.4FF	●	inch	0.375	0.375	6.00	0.590	0.375	0	0.008	SB-3080TR	LTW-10SS	
8-2.4DF	●		0.500	0.500	6.00		0.500					
10-2.4CF	●		0.625	0.625	5.00		0.625					

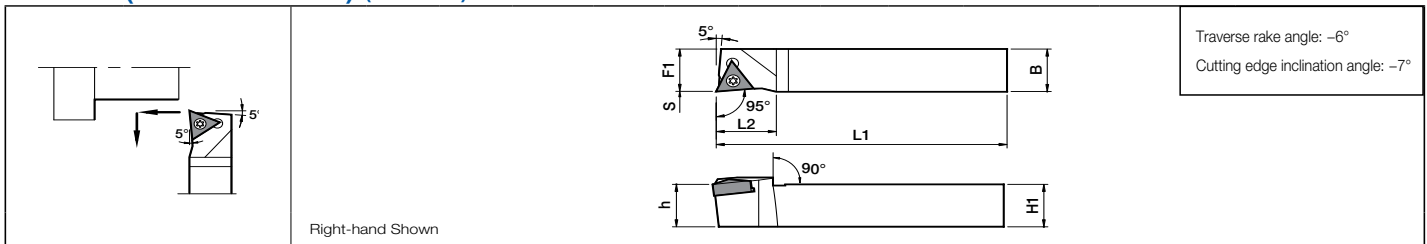
• **SDLN (Without Offset) (External/Copying)**



Toolholder Dimension

Description	Stock	Unit	H1=h	B	L1	L2	F1	S	Std. Corner-R (re)	Spare Parts		Applicable Insert
										Clamp Screw	Wrench	
SDLNR 1010K-08FF	●	mm	10	10	120	18	10	0	0.2	SB-3080TR	LTW-10SS	DNGU222.. DNM222..
1212F-08FF	●		12	12	85		12					
1212K-08FF	●		16	16	120		16					
1616K-08FF	●											
SDLNR 6-2.2FF	●	inch	0.375	0.375	6.00	0.708	0.375	0	0.008	SB-3080TR	LTW-10SS	
8-2.4DF	●		0.500	0.500	6.00		0.500					
10-2.2CF	●		0.625	0.625	5.00		0.625					

• **STLN (Without Offset) (External)**



Toolholder Dimension




Description	Stock	Unit	H1=h	B	L1	L2	F1	S	Std. Corner-R (re)	Spare Parts		Applicable Insert
										Clamp Screw	Wrench	
STLNR 1010K-09FF	●	mm	10	10	120	15	10	0	0.2	SB-2570TR	LTW-8SS	TNGU182..
1212F-09FF	●		12	12	85		12					
1212K-09FF	●		16	16	120		16					
1616K-09FF	●											
STLNR 6-1.8FF	●	inch	0.375	0.375	6.00	0.590	0.375	0	0.008	SB-2570TR	LTW-8SS	
8-1.8DF	●		0.500	0.500	6.00		0.500					
10-1.8CF	●		0.625	0.625	5.00		0.625					


● : Standard Stock

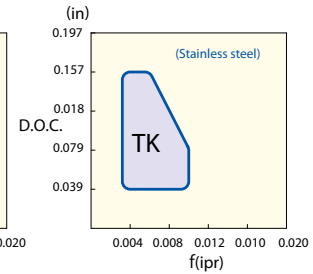
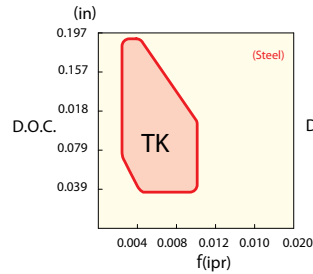
Double-Sided Tooling for Automatic Lathes

For workpiece diameter over 0.63"

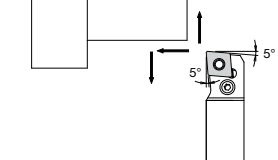
• Stock Items

Shape	Description	Dimension(in)				Grades	
		I.C.	Thickness	Hole	Corner-R(re)	PR1425	PR1225
Medium-Roughing 	CNGG 431FP-TK	0.500	0.187	0.203	0.016	●	●
	432FP-TK				0.031	●	●
Medium-Roughing 	DNGG 431FP-TK	0.500	0.187	0.203	0.016	●	●
	432FP-TK				0.031	●	●
Medium-Roughing 	TNGG 331FP-TK	0.375	0.187	0.150	0.016	●	●
	332FP-TK				0.031	●	●

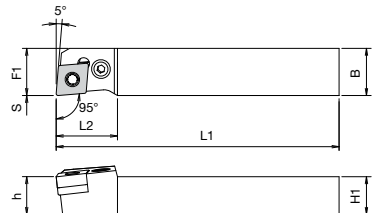
Shape	Description	Dimension(in)				Grades	
		I.C.	Thickness	Hole	Corner-R(re)	PR1425	PR1225
Finishing 	TNGG 3305%L-S	0.375	0.187	0.150	0.008	●	●
	331%L-S				0.016	●	●
	332%L-S				0.031	●	●



•PCLN-FF (Without Offset) (External Facing)



Right-hand Shown

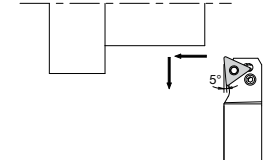


Traverse rake angle: -6°
Cutting edge inclination angle: -6°

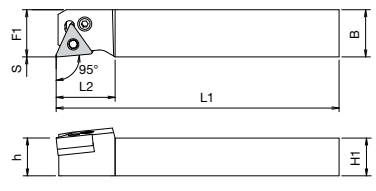
Toolholder dimensions (mm)

Description	Stock	Unit	H1-h	B	L1	L2	F1	S	Std. Corner-R (re)	Spare Parts						Applicable Inserts
										Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench	
PCLNR 1620JX-12FF	○	mm	16	20	120	26	20	0	0.8	LL-2N	LS-2N	LC-42N	LSP-2	PC-2	LW-3	CNGG43...

•PTLN-FF (Without Offset) (External/Up Facing)



Right-hand Shown



Traverse rake angle: -6°
Cutting edge inclination angle: -6°

Toolholder dimensions

Description	Stock	Unit	H1-h	B	L1	L2	F1	S	Std. Corner-R (re)	Spare Parts						Applicable Inserts
										Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench	
PTLNR 1620JX-16FF	○	mm	16	20	120	25	20	0	0.8	LL-1N	LS-1N	LC-32N *LC-32N-20	LSP-1	PC-1	FH-2.5	TNGG33...

When using inserts whose corner R(r) is larger than 0.063", please purchase a shim with * mark and use it in order to prevent workpiece and shim from interfering each other.

○ : World Express

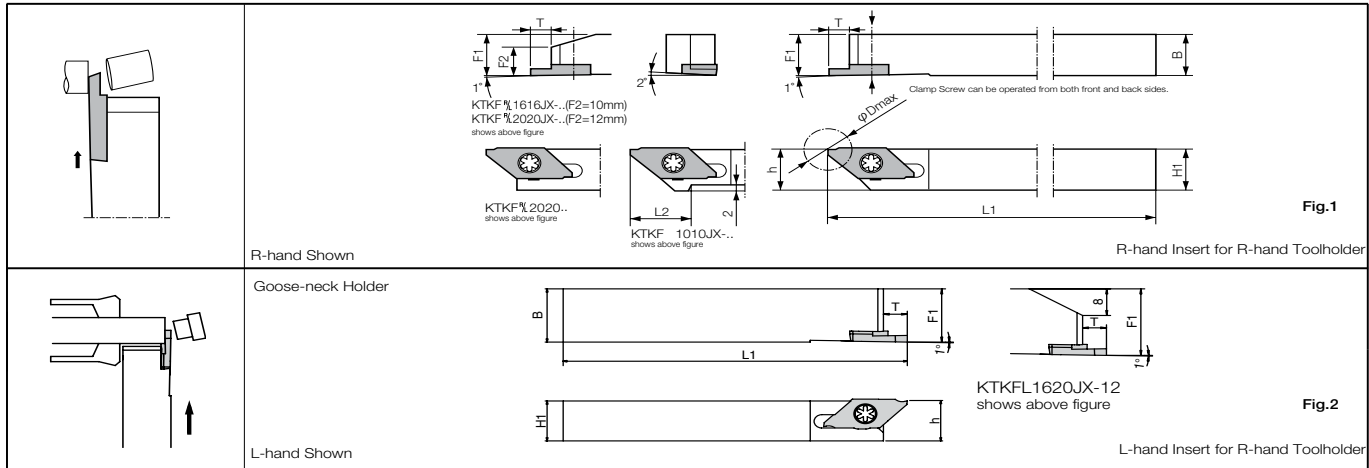
Cut-off, back turning and threading with one toolholder



TKF for Cut-off

TKFB for back Turning

TKFT for Threading



Toolholder Dimensions

Description	Stock		Unit	Dimension						Drawing	Spare Parts		Applicable Inserts
	R	L		H1=h	B	L1	L2	F1	T		Clamp Screw	Wrench	
KTKF [®] / _L 6-12JX	●	●	inch	0.375	0.375	4.750	0.590	0.375	0.236	Fig.1	SB-4590TRWN	LTW-10S	TKFB12% ...
	●	●		0.500	0.500		-	0.500					
	●	●		0.625	0.625		-	0.625					
KTKF [®] / _L 6-16JX	●	●	inch	0.375	0.375	4.750	0.787	0.375	0.315	Fig.1	SB-4590TRWN	LTW-10S	TKFB16% ...
	●	●		0.500	0.500		-	0.500					
	●	●		0.625	0.625		-	0.625					
KTKF [®] / _L 1010JX-12	○	○	mm	10	10	120	15	10	6	Fig.1	SB-4590TRWN	LTW-10S	TKFB12% ...
	●	○		12	12		-	12					
	○	○		16	16		-	16					
KTKF [®] / _L 1010JX-16	○	○	mm	10	10	120	20	10	8	Fig.1	SB-4590TRWN	LTW-10S	TKFB16% ...
	○	○		12	12		-	12					
	○	○		16	16		-	16					
KTKF [®] / _L 1212F-12	○	○	mm	12	12	85	-	12	6	Fig.1	SB-4590TRWN	LTW-10S	TKFB12% ...
	○	○		-	-		12	8					
KTKFL 52-12JX		●	inch	0.500	0.500	4.750	-	0.625	0.236	Fig.2	SB-4590TRWN	LTW-10S	TKFB12L ...
		●		0.625	0.625		-	0.750					
KTKFL 1216JX-12		○	mm	12	16	120	-	16	6	Fig.2	SB-4590TRWN	LTW-10S	TKFB12L ...
		○		16	20		-	20					

• Dimension T shows the distance from the Toolholder to the cutting edge.




● : Standard Stock

○ : World Express

TKF for Cut-off










Applicable Inserts for KTKF

• Dimension T shows the distance from the Toolholder to the cutting edge. For actual cutting diameter, see page 17
Cutting diameters of -12 type toolholders (ØDmax) are different depending on the insert grooving width.

Shape Handed Insert Shows R-hand.	Description	Dimension (mm)							(°) Angle	MEGACOAT NANO		MEGACOAT		Applicable Toolholders
		W	φD max	rε	T	H	φd	θ		PR1425		PR1225		
										R	L	R	L	
 Right lead angle	TKF12% 050-S-16DR	0.5	5	0.03	3	8.7	5	16°	●	●	●	●	KTKF% ...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							●	●	●	●		
 	TKF12% 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% 100-T-16DR	1.0	12	0.08	3	8.7	5	16°	●	●	●	●		
	150-T-16DR	1.5							●	●	●	●		
	200-T-16DR	2.0							●	●	●	●		

●: Standard Stock

● Applicable Inserts for KTKF

Shape Insert Shows R-hand	Description	Dimension (mm)							(°) Angle	MEGACOAT NANO		MEGACOAT		Applicable Toolholders
		W	φD max	rε	T	H	φd	θ		PR1425		PR1225		
										R	L	R	L	
 Tough Edge	TKF12% 100-T	1.0	12	0.08	3	8.7	5	0°	●	●	●	●	KTKF% ...12	
	150-T	1.5							●	●	●	●		
	200-T	2.0							●	●	●	●		
 Right lead angle	TKF12% 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% 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							●	●				
 Right lead angle	TKF16% 150-S-16DR	1.5	16	0.05	4	9.5	5	16°	●	●	●	●	KTKF% ...16	
	200-S-16DR	2.0							●	●	●	●		
 Right lead angle	TKF16% 150-S	1.5	16	0.05	4	9.5	5	0°	●	●	●	●		
	200-S	2.0							●	●	●	●		
 Right lead angle Tough Edge	TKF16% 150-T-16DR	1.5	16	0.08	4	9.5	5	16°	●	●	●	●		
	200-T-16DR	2.0							●	●	●	●		
 Tough Edge	TKF16% 150-T	1.5	16	0.08	4	9.5	5	0°	●	●	●	●		
	200-T	2.0							●	●	●	●		
 Right lead angle Without Chipbreaker	TKF16% 150-NB-20DR	1.5	16	0	4	9.5	5	20°	●	●				
	200-NB-20DR	2.0							●	●				
 Without Chipbreaker	TKF16% 150-NB	1.5	16	0	4	9.5	5	0°	●	●				
	200-NB	2.0							●	●				

● Lead angle (front cutting edge angle: θ) indicates the angle when placed in the toolholder.

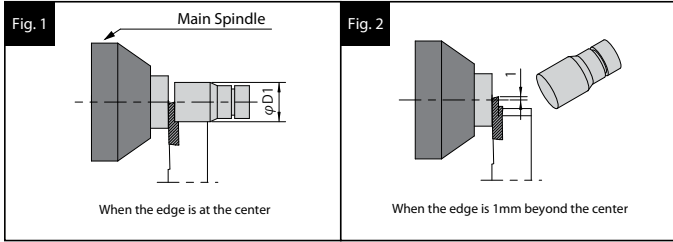
●: Standard Stock

Insert Cutting Diameter $\varnothing D_{max}$

When Using Main Spindle Only

Workpiece max, $D1=D_{max}$. Even if the cutting edge runs beyond the center line, the insert does not contact the workpiece, since the workpiece falls off.

(The clearance between the insert and the work is 0.2mm)

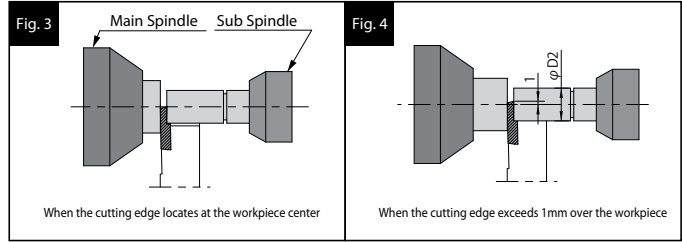


When using both Main and Sub Spindle

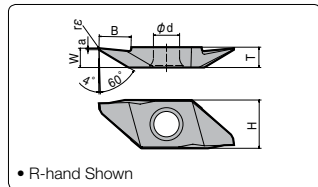
Workpiece max, $D2=D_{max}-(\text{Programmed distance beyond the center}) \times 2$

In this case, when the cutting edge runs beyond the center line, the insert will contact the workpiece, since the workpiece does not fall off. Therefore the programmed distance beyond the center must be considered.

When the cutting edge is programmed to run 1mm beyond the center, [$D2=D_{max}-1\text{mm} \times 2$]. (Max. clearance between insert and workpiece is 0.2mm in radius.)



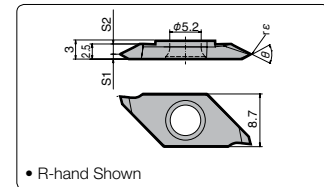
TKFB for back Turning



Description	Dimension (mm)							MEGA NANO	MEGA COAT	Applicable Toolholders
	W	a	B	rε	T	H	φd	PR1425	PR1225	
TKFB 12R15005M	1.5	0.25	2.6	<0.05				●	●	KTKFR ...12
12R28005M	2.8	0.3	4.6	<0.05	3.0	8.7	5.2	●	●	
12R28010M				<0.1						
TKFB 16R38005M	3.8	0.3	6.3	<0.05	4.0	9.5	5.2	●	●	KTKFR ...16
16R38010M				<0.1						
TKFB 12L28005MR	2.8	0.3	4.6	<0.05	3.0	8.7	5.2	●	●	KTKFL ...12
12L28010MR				<0.1						
TKFB 16L38005MR	3.8	0.3	6.3	<0.05	4.0	9.5	5.2	●	●	KTKFL ...16
16L38010MR				<0.1						

Inserts with corner R(rε) dimension expressed in less than sign (e.g. <0.05, <0.1, <0.2, etc.) indicate models with minus tolerance for corner R (rε).

TKFT for Threading

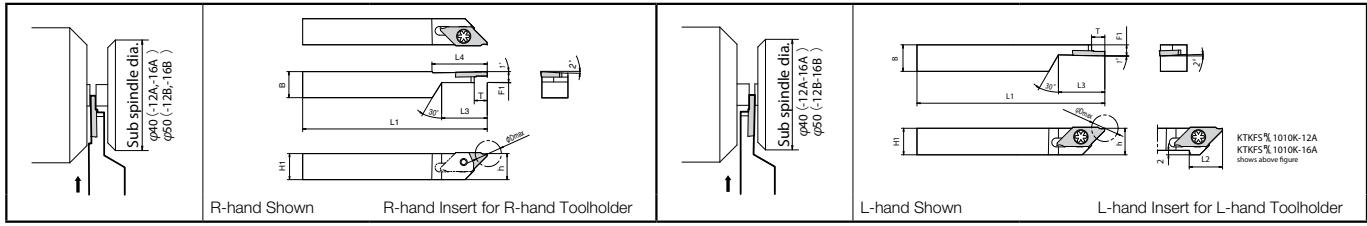


Description	Applicable Thread	Pitch		Dimension (mm)			(°) Angle	MEGA NANO	MEGA COAT	Applicable Toolholders			
		mm	ipt	rε	S1	S2	θ	PR1425	PR1225				
TKFT 12RA6000 12RB6000 12RA60005 12RB60005 12RN6001	M UN	0.2-0.6	64-48	Max 0.05 Flat	0.4	2.1	60°	●	●	KTKFR ...12			
		0.5-1.25	48-24	0.05	0.8	1.7		●	●				
		1-1.5	24-18	0.1	1.25	1.25		●	●				
		12RA55005	G,R W	-	40-16	0.05		0.8	1.7		55°	●	●
		12RB55005				1.7		0.8	●		●		
TKFT 12LA6000 12LB6000 12LA60005 12LB60005 12LN6001 12LA55005 12LB55005	M UN	0.2-0.6	64-48	Max 0.05 Flat	2.1	0.4	60°	●	●	KTKFL ...12			
		0.5-1.25	48-24	0.05	0.4	2.1		●	●				
		1-1.5	24-18	0.1	1.7	0.8		●	●				
		12LA60005	G,R W	-	40-16	0.05		0.8	1.7		55°	●	●
	12LN6001	1.25				1.25	●	●					
	12LA55005	1.7				0.8	●	●					
	12LB55005	0.8	1.7	●	●								

● : Standard Stock

Cut-off with Sub Spindle

• KTKFS for small diameter workpiece cut-off with sub spindle



• Toolholder Dimension

Description	Std.		Cutting Dia.	Dimension										Spare Parts		Applicable Inserts
	R	L		ØDmax	Unit	H1=h	B	L1	L2	L3	*L4	F1	T	Clamp Screw	Wrench	
KTKFS [®] / _L 6-12JX 8-12JX 6-16JX 8-16JX	●	●	0.236 ~ 0.472	inch	0.375	0.375	4.750	0.590	0.866	1.024	0.197	0.236	SB-4050TRN	LTW-10S	TKFS12 [®] / _L	
	●	●	0.500		0.500	4.750	-	1.024	1.024	0.197	0.236					
	●	●	0.551 ~ 0.630		0.375	0.375	4.750	0.787	0.866	1.181	0.197	0.315			TKFS16 [®] / _L	
	●	●	0.500		0.500	4.750	-	1.024	1.181	0.197	0.315					
KTKFS [®] / _L 1010K-12A 1212F-12A 1212K-12B	○	○	6~12	mm	10	10	120	15	22	26	5	6	SB-4050TRN	LTW-10S	TKFS12 [®] / _L	
	○	○			12	12	85	-	26							
	○	○			12	12	120	20	26							
KTKFS [®] / _L 1010K-16A 1212F-16A 1212K-16B	○	○	14~16	mm	10	10	120	20	22	30	5	8	SB-4050TRN	LTW-10S	TKFS16 [®] / _L	
	○	○			12	12	85	-	26							
	○	○			12	12	120	20	26							

Dimension T shows the distance from the Toolholder to the cutting edge. For actual cutting diameter, see page 17.

• Cutting diameters (ØDmax) are different depending on the insert grooving width.

※ L4 dimension is only for R-hand toolholders.

● : Standard Stock

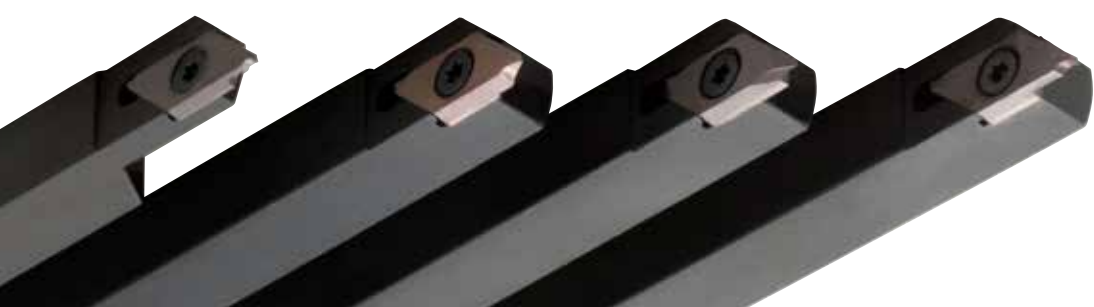
• Applicable Inserts

Shape Handed Insert Shows L-hand.	Description	Dimension (mm)							(°) Angle	MEGACOAT NANO		MEGACOAT	
		W	ØD max	rε	T	H	ød	θ	PR1425		PR1225		
									R	L	R	L	
	TKFS12 [®] / _L	100-S	1.0	6	0.05	2.2	8.7	4.4	0°	●	●	●	●
		150-S	1.5	9						●	●	●	●
		200-S	2.0	12						●	●	●	●
	TKFS16 [®] / _L	150-S	1.5	14	0.05	2.2	9.5	4.4	0°	●	●	●	●
		200-S	2.0	16						●	●	●	●

• As shown in Fig 2 (of page 17), ØD max indicates the cutting diameter of inserts where the top of the cutting edge progresses 1mm from the center.

• Lead angle (front cutting edge angle: θ) indicates the angle when a toolholder is attached.

● : Standard Stock



Kyocera Precision Tools

100 Industrial Park Road ■ Hendersonville, NC 28792
Email: cuttingtools@kyocera.com
Website: www.kyocera.com/cuttingtools
Distributor Website: <http://mykicc.kyocera.com>
Customer Service: 800.823.7284 - Option 1
Technical Support: 800.823.7284 - Option 2