

THE NEW VALUE FRONTIER



CERATIP®

KYOCERA Cutting Tools

CP165-E

Super Micro-Grain PCD

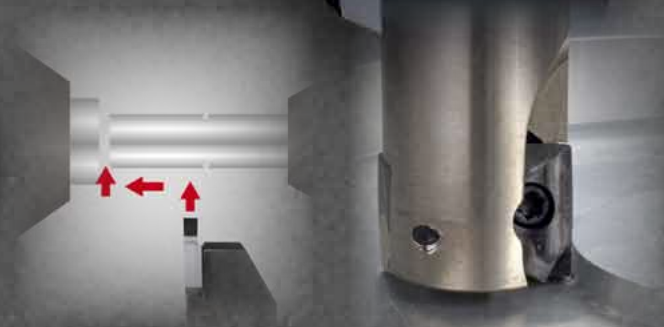
KPD001

Super Micro-Grain Sintered Diamond Tool

**Wear Resistance + Fracture Resistance +
Edge-Sharpening Performance**

**Expansion of
product lineup**

New!



New Value Edge



for Aluminum Wheel



for Small Diameter
Grooving and KTKF

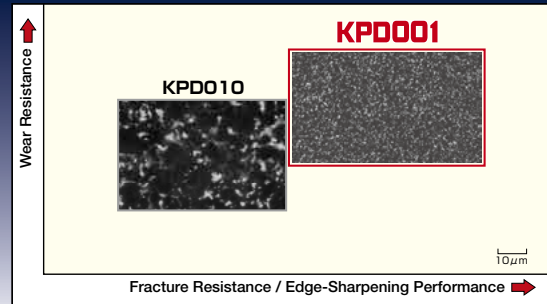


for Endmill MEC-Type

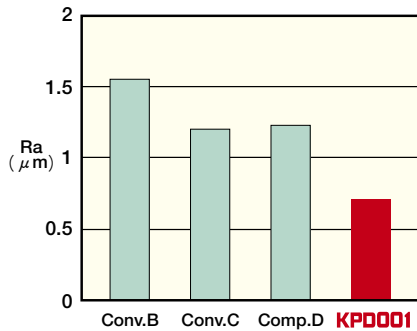
Advantages

- Good Edge-Sharpening Performance due to Super Micro-Grain and Good Surface Finish.
- Good Wear Resistance and Fracture Resistance with High Strength of Cutting Edge.
- Machining Efficiency Improvement by Long Life and Stable Machining.

KPD Tool's Positioning

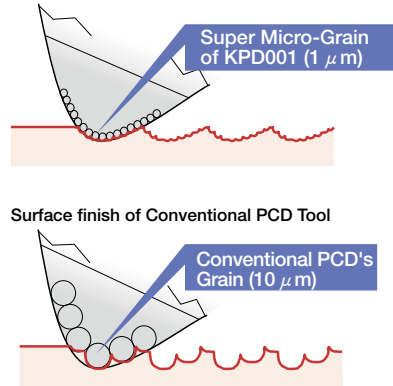


Finished Surface at Aluminum



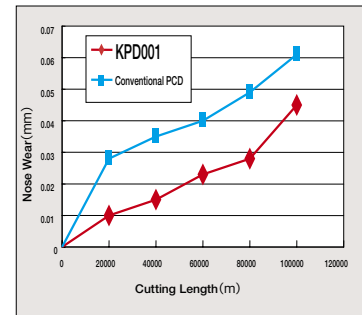
Grain size affects surface finish

Excellent surface finish of Super Micro-Grain KPD001



Internal evaluation

Wear Resistance Comparison



Workpiece: AC8A
Insert: CNMM120404M
V=540m/min
d=0.15mm
f=0.22mm/rev
Wet
*Cutting Length = Cutting Length that cutting edge runs on Workpiece Periphery

Internal evaluation

New Item

New Value Edge

Compared with conventional edge (Full Edge), reasonable price is realized.



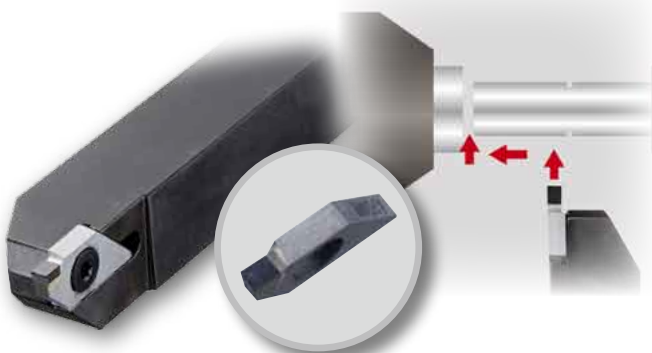
PCD for Aluminum Wheel

High strength and long tool life is realized by combination of super micro grain Polycrystalline Diamond KPD001 and high fracture carbide material.



PCD for small diameter grooving KTKF

PCD KPD001 is added to small diameter cut-off KTKF with low resistance



PCD for endmill MEC

Adding PCD KPD001 to endmill MEC with fine wall surface and favorable squareness



Case Studies

AC8A	
·Piston ·V=1000m/min ·d=2.0mm ·(Only spree d=5mm) ·f=0.25mm/rev ·Wet ·CNMM120408M	
Super Micro Grain KPD001	10,000 pcs/edge
Competitor PCD A (Super Micro-Grain PCD)	6,000 ~ 8,000 pcs/edge
· Interrupted machining at entry. · Competitor A shows chipping when interrupted machining and tool life was not stable. · KPD001 shows no chipping, and machined 10,000 pcs/edge.	
Evaluation from the user	

Aluminum wheel (aluminum alloy)	
·Roughing of rim ·V=2,000~2,700m/min ·d=3mm(max) ·f=0.5~0.8mm/rev ·Wet cutting ·GMGW8030-40R-HR (KPD001)	
Super Micro Grain KPD001	20,000 pcs/edge (stable machining)
Competitor B (Polycrystalline diamond)	10,000 less than pcs/edge Unstable tool life due to chipping
· With better machining stability than Competitor B, the tool life of KPD001 more than doubled.	
Evaluation from the user	

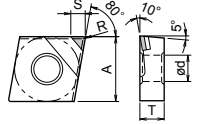
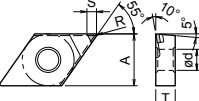
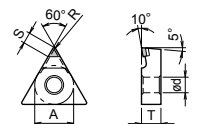
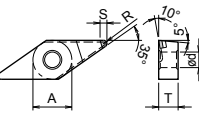
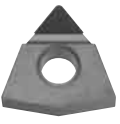
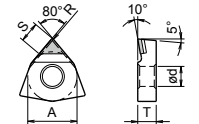
Sintered Metal (Cu)	
·Bushing ·V=350m/min ·d=0.08~0.1mm ·f=0.07mm/rev ·Wet ·TPGN160304SE	
Super Micro Grain KPD001	300 pcs/edge
Competitor PCD C (Super Micro-Grain PCD)	150 pcs/edge
· Interrupted machining. (Small interruptions due to sintered metal.) · Wear resistance was better than competitor C.	
Evaluation from the user	

BC6	
·Bushing (Connecting Rod) ·V=242m/min ·d=0.1mm(荒/仕上) ·f=0.07mm/rev(荒) ·=0.04mm/rev(仕上) ·Wet ·Brazed Round Shank (Corner R = 0.5mm)	
Super Micro Grain KPD001	1,350 pcs/edge
Competitor PCD D (Micro-Grain PCD)	500 ~ 1,060 pcs/edge
· Chipping occurred due to bad chip control. KPD001 machined with no chipping and no burrs. Tool life is improved.	
Evaluation from the user	

Recommended Cutting Conditions

Work Material	Recommended Cutting Conditions				Remarks
	Speed (m/min)	D.O.C. (mm)		Feed Rate (mm/rev)	
		Small Edge & Positive	Negative		
Aluminium Alloy, Zinc Alloy	300~1500	~1.0	~2.0	0.03~0.5	Both Dry and Wet Available
Copper, Brass, Bronze	300~1000	~1.0	~2.0	0.03~0.5	
Magnesium Alloy	400~1200	~1.0	~2.0	0.03~0.5	
Carbide	10~30	~0.3	~0.3	0.03~0.1	
Titanilum Alloy	100~200	~1.0	~2.0	0.05~0.2	Wet
Glass Fiber Reinforced Plastic, Carbon Fiber	100~600	~1.0	~2.0	0.05~0.5	Dry
Silica Filling Plastic, Particle Board	400~800	~1.0	~2.0	0.05~0.5	

Negative Insert

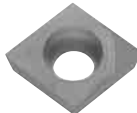
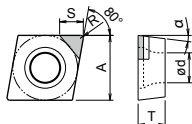
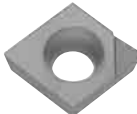
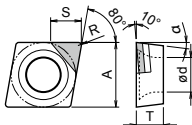
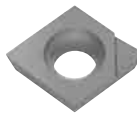
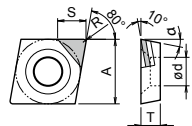
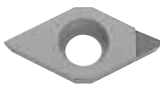
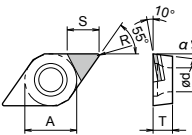
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			A	T	ϕd	R	S	α		KPD001
 Small Edge		CNMM 120402M-SE 120404M-SE 120408M-SE	12.70	4.76	5.16	0.2 0.4 0.8	2.8 2.8 2.7	-	1	● ● ●
		CNMM 120402M-NE 120404M-NE 120408M-NE	12.70	4.76	5.16	0.2 0.4 0.8	5.1 5.0 4.9	-	1	● ● ●
		CNMM 120402M 120404M 120408M				0.2 0.4 0.8	5.8 5.8 5.7	-		● ● ●
 Small Edge		DNMM 150402M-SE 150404M-SE 150408M-SE	12.70	4.76	5.16	0.2 0.4 0.8	2.8 2.6 2.2	-	1	● ● ●
		DNMM 150402M-NE 150404M-NE 150408M-NE	12.70	4.76	5.16	0.2 0.4 0.8	5.2 5.0 4.6	-	1	● ● ●
		DNMM 150402M 150404M 150408M				0.2 0.4 0.8	5.9 5.8 5.4	-		● ● ●
 Small Edge		TNMM 160402M-SE 160404M-SE 160408M-SE	9.525	4.76	3.81	0.2 0.4 0.8	2.7 2.6 2.3	-	1	● ● ●
		TNMM 160402M-NE 160404M-NE 160408M-NE	9.525	4.76	3.81	0.2 0.4 0.8	3.2 3.1 2.8	-	1	● ● ●
		TNMM 160402M 160404M 160408M				0.2 0.4 0.8	3.8 3.6 3.3	-		● ● ●
 Small Edge		VNMM 160402M-SE 160404M-SE 160408M-SE	9.525	4.76	3.81	0.2 0.4 0.8	2.9 2.5 1.6	-	1	● ● ●
		VNMM 160402M-NE 160404M-NE 160408M-NE	9.525	4.76	3.81	0.2 0.4 0.8	4.7 4.2 3.4	-	1	● ● ●
		VNMM 160402M 160404M 160408M				0.2 0.4 0.8	5.3 4.8 4.0	-		● ● ●
		WNMM 080402M-NE 080404M-NE	12.70	4.76	5.16	0.2 0.4	5.0 5.0	-	1	● ●

*The edge specification of KPD001 is sharp edge.

*Last type number of SE stands for small edge and NE stands for New Value Edge.

● : Standard Stock

Positive Insert

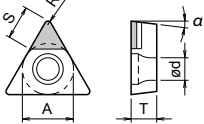
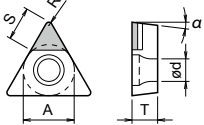
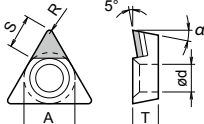
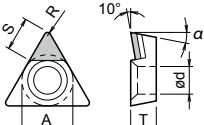
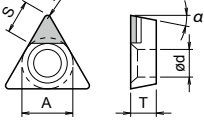
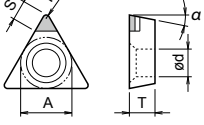
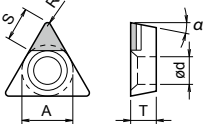
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			A	T	ϕd	R	S	α		KPD001
		CCGW 040101NE 040102NE 040104NE	4.3	1.8	2.3	0.1 0.2 0.4	1.7 1.6 1.6	7°	1	● ● ●
		CCGW 040101 040102 040104				0.1 0.2 0.4	1.9 1.9 1.9			● ● ●
		CCGW 060201NE 060202NE 060204NE	6.35	2.38	2.8	0.1 0.2 0.4	3.1 3.0 3.0			● ● ●
		CCGW 09T301NE 09T302NE 09T304NE 09T308NE	9.525	3.97	4.4	0.1 0.2 0.4 0.8	3.4 3.4 3.4 3.3			● ● ● ●
		CCGW 09T301 09T302 09T304				0.1 0.2 0.4	3.8 3.8 3.7			● ● ●
		CCMT 060201NE 060202NE 060204NE	6.35	2.38	2.8	0.1 0.2 0.4	2.8 2.8 2.8	7°	1	● ● ●
		CCMT 060201 060202 060204				0.1 0.2 0.4	3.3 3.3 3.2			● ● ●
		CCMT 09T301NE 09T302NE 09T304NE 09T308NE	9.525	3.97	4.4	0.1 0.2 0.4 0.8	3.4 3.4 3.4 3.3			● ● ● ●
		CCMT 09T301 09T302 09T304				0.1 0.2 0.4	3.9 3.9 3.9			● ● ●
		CPMH 080201NE 080202NE 080204NE 080208NE	7.94	2.38	3.5	0.1 0.2 0.4 0.8	3.2 3.2 3.2 3.2	11°	1	● ● ● ●
		CPMH 080201 080202 080204				0.1 0.2 0.4	3.7 3.7 3.7			● ● ●
		CPMH 090301NE 090302NE 090304NE 090308NE	9.525	3.18	4.5	0.1 0.2 0.4 0.8	3.4 3.4 3.4 3.3			● ● ● ●
		CPMH 090301 090302 090304				0.1 0.2 0.4	4.0 3.9 3.9			● ● ●
		DCMT 070201NE 070202NE 070204NE	6.35	2.38	2.8	0.1 0.2 0.4	3.4 3.4 3.2	7°	1	● ● ●
		DCMT 070201 070202 070204				0.1 0.2 0.4	4.0 3.9 3.7			● ● ●
		DCMT 11T301NE 11T302NE 11T304NE 11T308NE	9.525	3.97	4.4	0.1 0.2 0.4 0.8	3.4 3.3 3.2 2.8			● ● ● ●
		DCMT 11T301 11T302 11T304 11T308				0.1 0.2 0.4 0.8	4.0 3.9 3.7 3.3			● ● ● ●

*The edge specification of KPD001 is sharp edge.

*Last type number of SE stands for small edge and NE stands for New Value Edge.

● : Standard Stock

Positive Insert

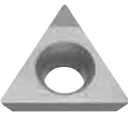
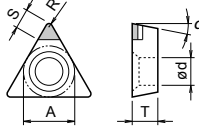
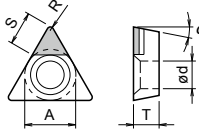
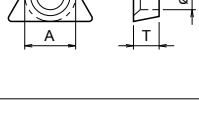
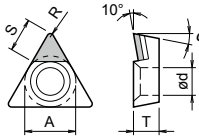
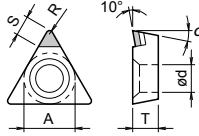
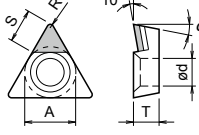
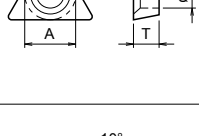
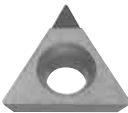
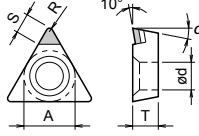
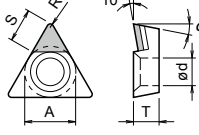
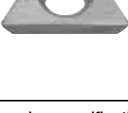
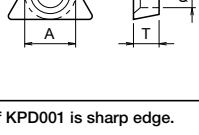
Shape		Description	Dimension (mm)					Angle	No. of corners	Stock Grade
			A	T	ϕd	R	S	α		KPD001
		TBGW 060102NE 060104NE	3.97	1.59	2.3	0.2 0.4	2.1 1.9	5°	1	● ●
		TBGW 060102 060104				0.2 0.4	2.4 2.2			● ●
		TCGW 110302NE 110304NE 110308NE	6.35	3.18	2.8	0.2 0.4 0.8	3.3 3.2 2.9	7°	1	● ● ●
		TBMT 060101NE 060102NE 060104NE 060108NE	3.97	1.59	2.3	0.1 0.2 0.4 0.8	2.2 2.1 2.0 1.7	5°	1	● ● ● ●
		TBMT 060102 060104 060108				0.2 0.4 0.8	2.5 2.3 2.0			● ● ●
		TCMT 080202NE 080204NE 080208NE	4.76	2.38	2.3	0.2 0.4 0.8	2.1 2.0 1.7	7°	1	● ● ●
		TCMT 110302NE 110304NE 110308NE	6.35	3.18	2.8	0.2 0.4 0.8	3.4 3.3 3.0	7°	1	● ● ●
		TPGB 080202NE 080204NE 080208NE	4.76	2.38	2.5	0.2 0.4 0.8	2.2 2.1 1.8	11°	1	● ● ●
		TPGB 080202 080204				0.2 0.4	2.6 2.4			● ●
		TPGB 090202NE 090204NE 090208NE	5.56	2.38	3.0	0.2 0.4 0.8	2.7 2.6 2.3			● ● ●
		TPGB 090202 090204				0.2 0.4	3.2 3.0			● ●
		TPGB 110302SE 110304SE	6.35	3.18	3.5	0.2 0.4	2.6 2.5	11°	1	● ●
		TPGB 110302NE 110304NE 110308NE				0.2 0.4 0.8	3.4 3.3 3.0			● ● ●
		TPGB 110302 110304 110308				0.2 0.4 0.8	3.9 3.7 3.4			● ● ●

*The edge specification of KPD001 is sharp edge.

*Last type number of SE stands for small edge and NE stands for New Value Edge.

● : Standard Stock

Positive Insert

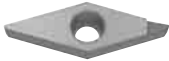
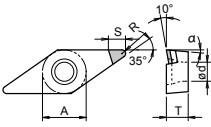
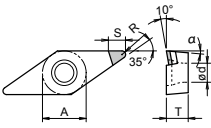
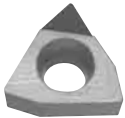
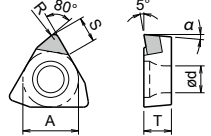
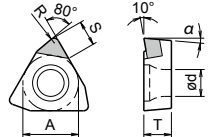
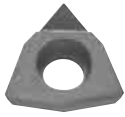
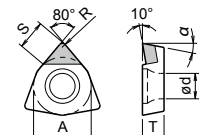
Shape		Description	Dimension (mm)					Angle	No. of corners	Stock Grade
			A	T	ϕd	R	S	α		KPD001
		TPGB 160302SE 160304SE	9.525	3.18	4.5	0.2 0.4	2.6 2.4	11°	1	● ●
		TPGB 160302NE 160304NE 160308NE				0.2 0.4 0.8	3.3 3.2 2.9			● ● ●
		TPGB 160302 160304 160308				0.2 0.4 0.8	3.9 3.7 3.4			● ● ●
		TPMH 080201NE 080202NE 080204NE 080208NE	4.76	2.38	2.5	0.1 0.2 0.4 0.8	2.3 2.2 2.1 1.8	11°	1	● ● ● ●
		TPMH 080202 080204 080208				0.2 0.4 0.8	2.5 2.3 2.0			● ● ●
		TPMH 090201NE 090202NE 090204NE 090208NE	5.56	2.38	3.0	0.1 0.2 0.4 0.8	2.7 2.6 2.5 2.2			● ● ● ●
		TPMH 090201 090202 090204 090208				0.1 0.2 0.4 0.8	3.0 2.9 2.3 2.5			● ● ● ●
		TPMH 110302SE 110304SE	6.35	3.18	3.5	0.2 0.4	2.6 2.5	11°	1	● ●
		TPMH 110301NE 110302NE 110304NE 110308NE				0.1 0.2 0.4 0.8	3.4 3.3 3.2 2.9			● ● ● ●
		TPMH 110301 110302 110304 110308				0.1 0.2 0.4 0.8	3.9 3.9 3.7 3.4			● ● ● ●
		TPMH 160302SE 160304SE	9.525	3.18	4.5	0.2 0.4	2.6 2.4	11°	1	● ●
		TPMH 160301NE 160302NE 160304NE 160308NE				0.1 0.2 0.4 0.8	3.5 3.4 3.3 3.0			● ● ● ●
		TPMH 160302 160304				0.2 0.4	4.0 3.8			● ●

*The edge specification of KPD001 is sharp edge.

● : Standard Stock

*Last type number of SE stands for small edge and NE stands for New Value Edge.

Positive Insert

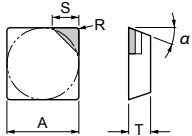
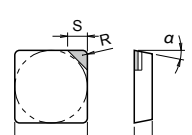
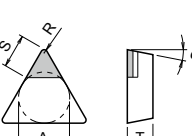
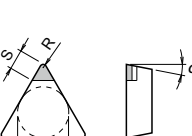
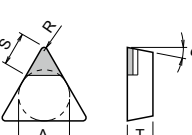
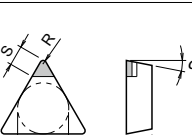
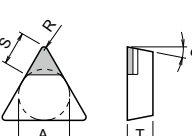
Shape		Description	Dimension (mm)					Angle	No. of corners	Stock Grade
			A	T	ϕd	R	S	α		KPD001
		VBMT 110301NE 110302NE 110304NE 110308NE	6.35	3.18	2.8	0.1 0.2 0.4 0.8	2.6 2.4 2.0 3.1	5°	1	● ● ● ●
		VBMT 110301 110302 110304 110308				0.1 0.2 0.4 0.8	3.0 2.8 2.4 3.5			● ● ● ●
		VBMT 160401NE 160402NE 160404NE 160408NE				0.1 0.2 0.4 0.8	2.8 2.6 2.2 3.0			● ● ● ●
		VBMT 160401 160402 160404 160408				0.1 0.2 0.4 0.8	3.2 3.0 2.6 3.5			● ● ● ●
		VCMT 080201NE 080202NE 080204NE 080208NE	4.76	2.38	2.3	0.1 0.2 0.4 0.8	1.7 1.7 1.8 1.9	7°	1	● ● ● ●
		VCMT 080202 080204 080208				0.2 0.4 0.8	1.9 1.9 1.9			● ● ●
		WBMT 060101L-NE 060102L-NE 060104L-NE	3.97	1.59	2.3	0.1 0.2 0.4	1.7 1.6 1.6	5°	1	● ● ●
		WBMT 060101L 060102L 060104L				0.1 0.2 0.4	1.9 1.9 1.9			● ● ●
		WBMT 080202L-NE 080204L-NE	4.76	2.38	2.3	0.2 0.4	2.1 2.1			● ●
		WBMT 080202L 080204L				0.2 0.4	2.4 2.3			● ●
		WPMT 110201NE 110202NE 110204NE	6.35	2.38	2.8	0.1 0.2 0.4	2.7 2.7 2.7	11°	1	● ● ●

*The edge specification of KPD001 is sharp edge.

*Last type number of SE stands for small edge and NE stands for New Value Edge.

● : Standard Stock

Positive Insert

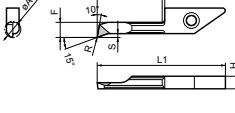
Shape		Description	Dimension (mm)					Angle	No. of corners	Stock Grade
			A	T	ϕd	R	S	α		KPD001
		SEGN 120304NE	12.70	3.18	-	0.4	3.6	20°	1	●
		SPGN 120304NE	12.70	3.18	-	0.4	3.6	11°	1	●
		TPGN 090202NE 090204NE 090208NE	5.56	2.38	-	0.2 0.4 0.8	3.3 3.2 2.9	11°	1	● ● ●
 スモールエッジ Small Edge		TPGN 110302SE 110304SE	6.35	3.18	-	0.2 0.4	2.5 2.4			● ●
		TPGN 110302NE 110304NE 110308NE				0.2 0.4 0.8	3.4 3.2 2.9			● ● ●
 スモールエッジ Small Edge		TPGN 160302SE 160304SE				0.2 0.4	2.6 2.4			● ●
		TPGN 160302NE 160304NE 160308NE	9.525	3.18	-	0.2 0.4 0.8	3.3 3.2 2.9			● ● ●
		TPGN 160302 160304				0.2 0.4	3.9 3.7			● ●

*The edge specification of KPD001 is sharp edge.

*Last type number of SE stands for small edge and NE stands for New Value Edge.

● : Standard Stock

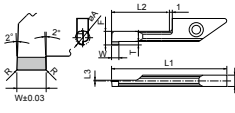
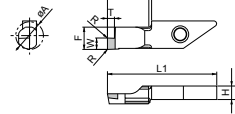
System tip-bars

Shape	Description	Min. Cutting Dia.	Dimension (mm)						No. of corners	Stock Grade
		ϕA	H	L1	L2	F	S	R		
Right hand shown										KPD001
 For micro boring	VNBR 0411-02NB 0420-02NB	4	3.9	30.8 39.8	11 20	3.5	0.5	0.2	1	R R
	VNBR 0511-02NB 0520-02NB	5		30.8 39.8	11 20	4.5	0.7	0.2		R R
	VNBR 0620-02NB 0630-02NB	6		39.8 49.8	20 30	5.3	1.0	0.2		R R
	VNBR 0720-02NB 0730-02NB	7		39.8 49.8	20 30	6.2	1.0	0.2		R R

*The edge specification of KPD001 is sharp edge.

R: Right Hand Only

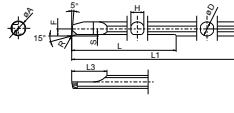
System tip-bars

Shape	Description	Min. Cutting Dia.	Dimension (mm)								No. of corners	Stock Grade
		ϕA	W	R	H	L1	L2	L3	F	T		
Right hand shown												KPD001
 For micro grooving	VNGR 0410-11NB 0420-11NB	4	1.0 2.0	0.05 0.10	3.9	30.8	11	0.1	3.5	0.8	1	受 受
	VNGR 0510-11NB 0520-11NB	5	1.0 2.0	0.05 0.10					4.4	1.0		受 受
	VNGR 0610-20NB 0620-20NB	6	1.0 2.0	0.05 0.10		39.8	20	0.3	5.2	1.8		受 受
	VNGR 0710-20NB 0720-20NB	7	1.0 2.0	0.05 0.10					6.2	2.0		受 受
 For micro internal face grooving	VNFRG 0810-10NB	8	1.0	0.05	3.9	39.8	10	-	7.3	2.0	1	-
	0820-10NB	8	2.0							3.0		受
	0830-10NB	8	3.0							3.0		受

*The edge specification of KPD001 is sharp edge.

受: Production by order

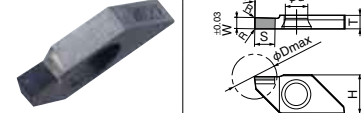
Tip-bars

Shape	Description	Min. Cutting Dia.	Dimension (mm)								No. of corners	Stock Grade
		ϕA	ϕD	H	L1	L2	L3	F	S	R		KPD001
Right hand shown												
	PSB^{R/L} 0303-50NBS	3	2.8	-	50	-	7	1.4	0.25	0.05	1	-
	0404-60NBS	4	3.8	3.6	60	30	10	1.9	0.3			R
	0505-70NBS	5	4.8	4.4	70	40	12	2.4	0.5			R
	0606-70NBS	6	5.8	5.2		45		2.9				R
	0707-80NBS	7	6.8	6.2		80		3.4				R

*The edge specification of KPD001 is sharp edge.

R: Right Hand Only

Grooving inserts (1-corner)

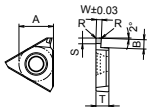
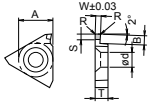
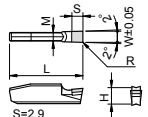
Shape	Description	Dimension (mm)								Angle	No. of corners	Stock Grade	
		W	ϕD_{max}	R	T	H	ϕd	S	θ°			R	L
Right hand shown												KPD001	
 External grooving (traversing)	TKF12 ^{R/L} 150-NB	1.5	7	0.1 ^{+0.05}	3	8.7	5	2.0	0°	1		●	●
	200-NB	2.0	8					3.0				●	●
	250-NB	2.5	8					3.0				●	●
	250-NB4.5	2.5	10					4.5				●	●

*Lead angle (front cutting edge angle: θ) indicates after installation of toolholder

●: Standard Stock

*The edge specification of KPD001 is sharp edge.

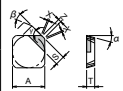
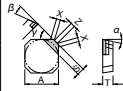
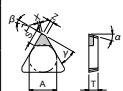
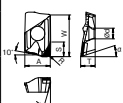
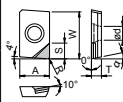
Grooving inserts (1-corner)

Shape Right hand shown		New Description	Previous Description	Dimension (mm)							No. of corners	Stock Grade	
				W	B	R	A	T	ϕd	S		KPD001	
												R	L
 For external and internal grooving		GBA43 ^{R/L} 150-010	GBA43 ^{R/L} 150	1.50	3.5	0.1	12.70	4.76	5.5	1.9	1	●	●
		200-010	200	2.00								●	●
		250-010	250	2.50	4.0							●	●
		300-010	300	3.00								●	●
 For external grooving		TGF32 ^{R/L} 125	-	1.25	2.0	C0.1	9.525	3.18	4.5	1.7	1	●	
		150	-	1.50								●	
		200	-	2.00	2.5					1.9		●	
Shape Right hand shown		New Description	Previous Description	Dimension (mm)							No. of corners	Stock Grade	
				W	R	L	H	M	S			KPD001	
 For external deep grooving		3	-	2.0	0.2	20	4.3	1.8	2.9		1	●	
		4	-	3.0				2.3				●	
		5	-	4.0				3.3				●	
			-	5.0				4.2				●	

*The edge specification of KPD001 is sharp edge.

● : Standard Stock

Milling inserts

Shape		Description	Dimension (mm)						Angle			No. of corners	Stock Grade
			A	T	X	Z	S		α	β	γ		KPD001
		SDKN 1203AUFN-NE	12.70	3.18	0.5	1.2	3.1		15°	23°	45°	1	●
		1203AUFN					3.6						●
		SEEN 1203AFFN-NE	12.70	3.18	0.5	1.4	3.0		20°	25°	45°	1	●
		1203AFFN					3.5						●
		TEEN 1603PTFR-NE	9.525	3.18	0.6	1.4	4.1		20°	22°	30°	1	●
		1603PTFR					4.7						●
		TEKN 2204PTFR-NE	12.70	4.76	0.7	1.8	4.2		20°	22°	30°	1	●
		2204PTFR					4.8						●
Shape		Description	Dimension (mm)						Angle			No. of corners	Stock Grade
			A	T	ϕd	W	R	S	α	β			KPD001
		BDMT 11T302FR	6.7	3.8	2.8	11.0	0.2	3.6	18°	13°		1	●
		11T304FR					0.4						●
		BDMT 170402FR	9.6	4.9	4.4	17.0	0.2	4.4					●
		170404FR					0.4						●
		NDCW 150302FRX-NE	9.525	3.18	4.4	15.0	0.2	5.1	15°	-		1	●
		150302FRX						5.7					●

*The edge specification of KPD001 is sharp edge.

● : Standard Stock

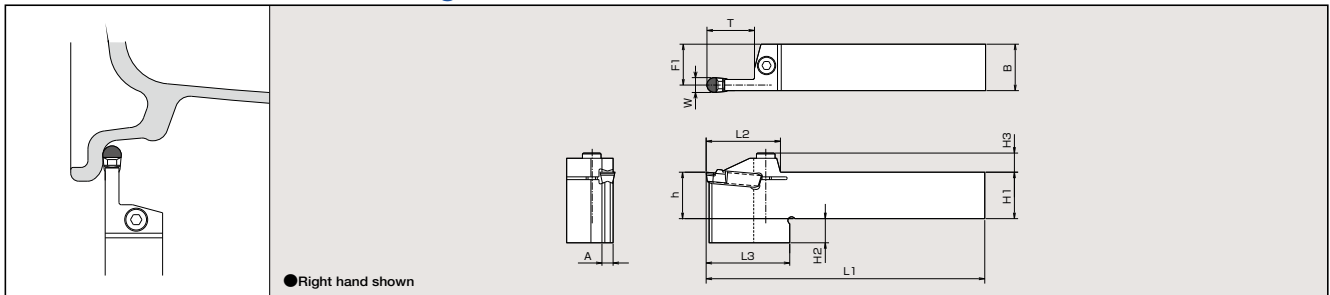


Insert dimension

Shape	Description	Dimension (mm)						Corner number	Stock Grade
		W	R	L	H	M	S		
	GMGW 6030-30R	6	3	30	5.5	5	4.5	1	●
	8030-40R	8	4			6	6		●
	GMGW 8030-40R-HR	8	4	30	5.5	6	5	1	●

● : Standard Stock

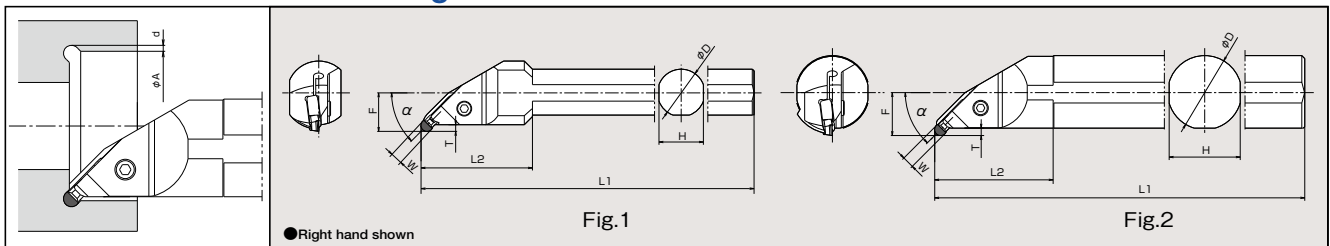
Holders for external cutting



Description	Stock		Dimension (mm)										Spare Parts		Applicable insert
	R	L	H1=h	H2	H3	B	L1	L2	L3	F1	A	T	Screw	Wrench	
KGMW ^{R/L} 2525M-6	●	●	25	13	10.3	25	150	40	55	22.8	4.4	25	HH6X25	LW-5	GMGW6030-30R
2525M-8	●	●								22	6				GMGW8030-40R GMGW8030-40R-HR

● : Standard Stock

Holders for internal cutting



Description	Stock		Min. Cutting Dia.	Dimension (mm)								Width		Shape	Spare Parts		Applicable insert
	R	L	φA	φD	H	L1	L2	F	T	d	α	MIN.	MAX.		Screw	Wrench	
KIGMW ^{R/L} 7532B45-6				32	30	350	70	29	4	3	45°	6.0	6.0	Fig.1	HH6X16	LW-5	GMGW6030-30R
7540B45-6			75	40	36					4				Fig.2			
7550B45-6				50	48					4	45°	8.0	8.0	Fig.1	HH6X20	LW-5	GMGW8030-40R GMGW8030-40R-HR
7532B45-8				32	30	350	70	29	4	3				Fig.1			
7540B45-8			75	40	36					4				Fig.2			
7550B45-8				50	48					4							

T-dimension shows the distance from toolholder to cutting edge.