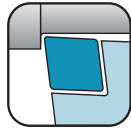


Tools for turning mill



N

Polygon taper shank (KPC series)		N2
CN insert		N4
DN insert		N6
TN insert		N8
VN insert		N10
WN Insert		N12
VB/VC insert		N13
GBA insert		N15
GDM/GDG insert		N16
16E ⁹ / ₁₆ type threading insert		N17
HSK-T tooling (ICTM standard)		N18
Toolholder for square shank	External/Facing	N20
CN insert		N22
DN insert		N24
TN insert		N26
WN Insert		N28
VB insert		N30
GBA insert (Grooving) / Threading		N32
Toolholder for boring bar / drill		N33
Quick change system of petal-shaped adapter		N34
Cartridge		N36

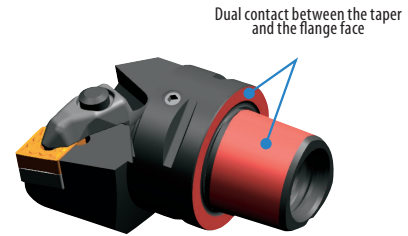
PSC Shank tools

Polygon taper shank

PSC Shank Tools
 JIS B 6066-1
 ISO26623-1 Polygonal taper interface with flange contact surface

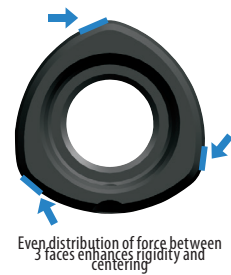
1 High rigidity

Polygon taper design and dual contact between the taper and the flange face for high rigidity



2 High precision

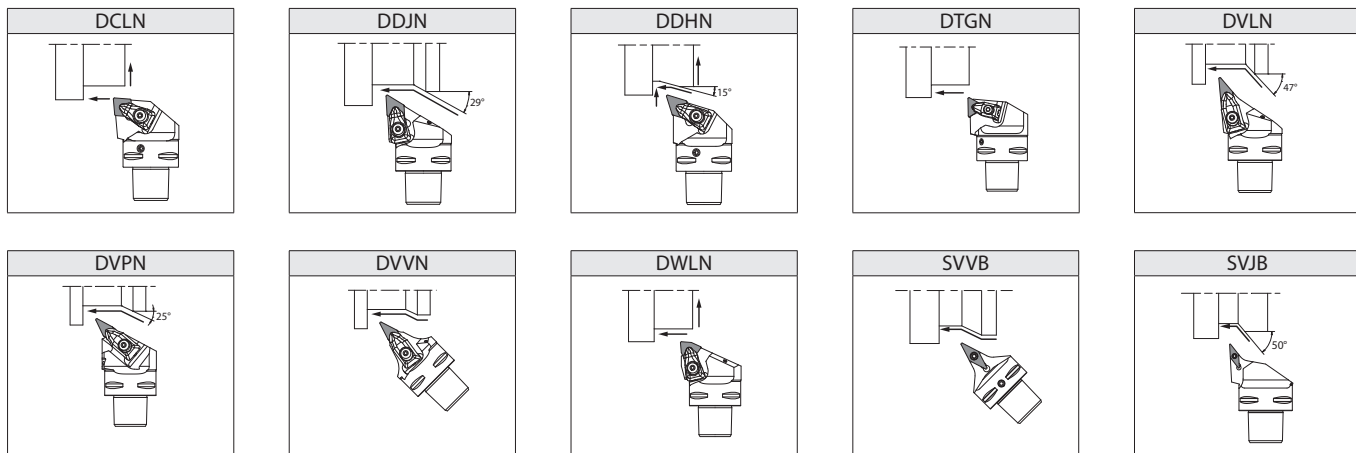
Locational accuracy within $\pm 2\mu\text{m}$
 Distributes cutting forces evenly between 3 faces for enhanced rigidity and centering accuracy



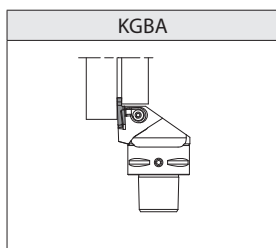
N



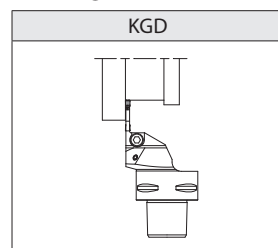
Tools for turning mill



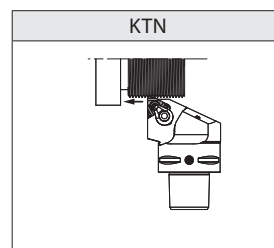
Grooving



Grooving / Cut-off

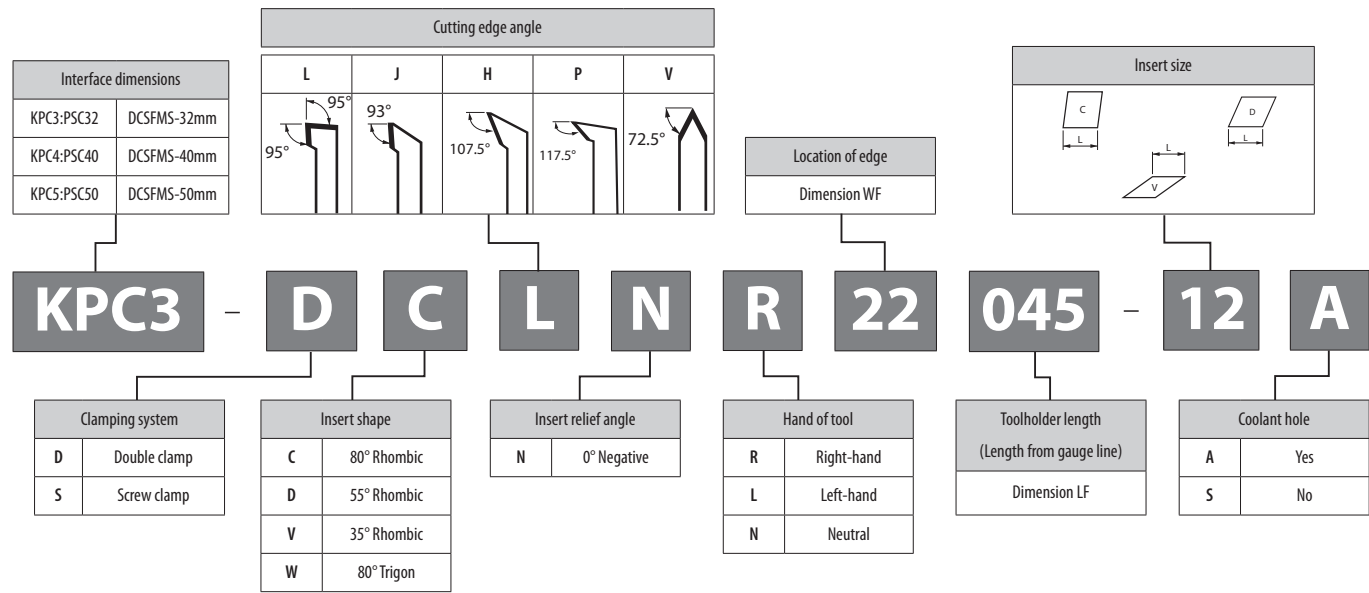


Threading



N2

Identification System (External)

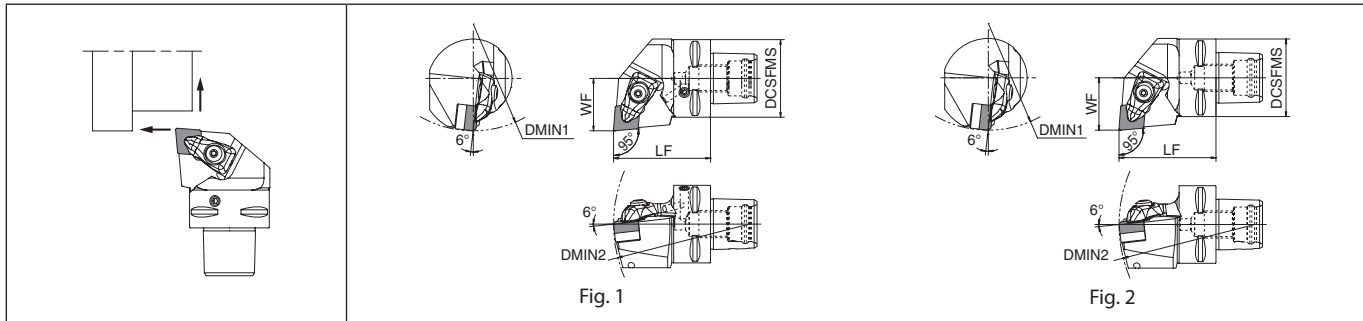


N



Tools for turning mill

DCLN (External turning)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)					Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2					
KPC3-DCLN%L 22045-12A	●	●	Yes	32	45	22	60	121	0.8	-6	-6	1	CN□A1204... CN□G1204... CN□M1204...
KPC4-DCLN%L 27050-12A	●	●		40	50	27	110	140					
KPC5-DCLN%L 35060-12A	●	●		50	60	35	165	165					
KPC3-DCLN%L 22045-12S	●	●	No	32	45	22	60	121	0.8	-6	-6	2	
KPC4-DCLN%L 27050-12S	●	●		40	50	27	110	140					
KPC5-DCLN%L 35060-12S	●	●		50	60	35	165	165					

Description	Spare parts									
	Clamp	Screw (for clamp)	Spring	Shim	Shim*	Shim	Shim*	Shim screw	Shim screw	Wrench
KPC3-DCLN%L 22045-12A	CP-3D-S	CS-3D-TR	SP-3D	-	-	SP-441P	SP-441P-C	-	M3X8	FT-15
KPC4-DCLN%L 27050-12A				DC-44	DC-44-C	-	-	SB-4085TR	-	
KPC5-DCLN%L 35060-12A				-	-	SP-441P	SP-441P-C	-	M3X8	
KPC3-DCLN%L 22045-12S	CP-3D-S	CS-3D-TR	SP-3D	-	-	SP-441P	SP-441P-C	-	M3X8	FT-15
KPC4-DCLN%L 27050-12S				DC-44	DC-44-C	-	-	SB-4085TR	-	
KPC5-DCLN%L 35060-12S				-	-	-	-	-	-	

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

When using the inserts with SX chipbreaker, prepare a shim (-C type) separately.

Recommended tightening torque : 3.9 N·m

● : Standard item

N4

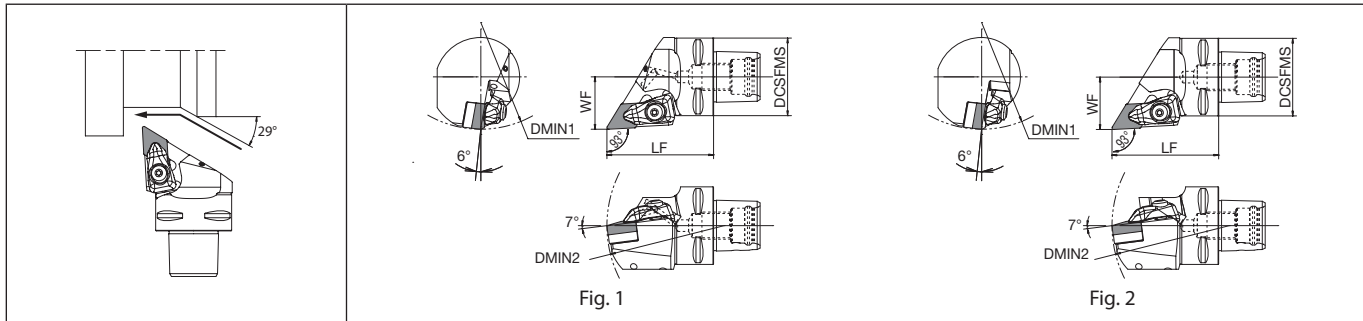
Applicable inserts

Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing	Finishing	Finishing - Medium	Finishing - Medium
Insert								
Chipbreaker type	WF	WP	WE	WQ	PP	GP	PQ	HQ
Page	B16	B16	B16	B16	B16	B16	B16	B17
Applications	Finishing - Medium	Finishing - Medium	Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing
Insert								
Chipbreaker type	CQ	CJ	TN-V	GS	PG	PS	PT	GT
Page	B17	B17	B17	B17	B17	B18	B18	B18
Applications	Roughing	Roughing	Roughing	Medium	Medium - Roughing	Medium - Roughing	Low carbon steel	Low carbon steel
Insert								
Chipbreaker type	STD	PH	PX	R/L	P/L-25R	Z	XF	XP
Page	B18	B18	B19	B23	B23	B23	B19	B19
Applications	Low carbon steel	Low carbon steel	Finishing - Medium	Medium - Roughing	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	XQ	XS	SK	FP-TK	TK	MQ	MS	MU
Page	B19	B19	B19	B19	B20	B20	B20	B20
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron / Hard materials
Insert								
Chipbreaker type	KQ	KG	KH	C	ZS	GC	No CB	Ceramic
Page	B21	B21	B21	B22	B22	B22	B22	B113
Applications	Non-Ferrous Metals	Non-Ferrous Metals	Non-Ferrous Metals	Heat-resistant alloys	Heat-resistant alloys	Heat-resistant alloys	Hard materials / Cast iron	Hard materials
Insert								
Chipbreaker type	P/L-A3	AH	PCD	SQ	SG	P/L-SX	CBN	HH
Page	B23	B23	C34	B20	B21	B21	C8	C9
Applications	Hard materials	Hard materials						
Insert								
Chipbreaker type	HL	HD						
Page	C9	C9						



Tools for turning mill

DDJN (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)					Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Spare parts						Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2					Clamp	Screw (for clamp)	Spring	Shim	Screw	Wrench	
	KPC3-DDJN%L 22050-15A	●		●		32	50	22					121				1	CP-3D-S	
KPC4-DDJN%L 27055-15A	●	●	Yes	40	55	27	110	145	0.8	-6	-7	1	CP-3D-S	CS-3D-TR	SP-3D	DD-44 (DD-43*)	SB-4085TRP	FT-15	DN□A1504... DN□G1504... DN□M1504...
KPC5-DDJN%L 35060-15A	●	●		50	60	35	165												
KPC3-DDJN%L 22050-15S	●	●		32	50	22	121												
KPC4-DDJN%L 27055-15S	●	●	No	40	55	27	110	145	0.8	-6	-7	2	CP-3D-S	CS-3D-TR	SP-3D	DD-44 (DD-43*)	SB-4085TRP	FT-15	DN□A1504... DN□G1504... DN□M1504...
KPC5-DDJN%L 35060-15S	●	●		50	60	35	165												

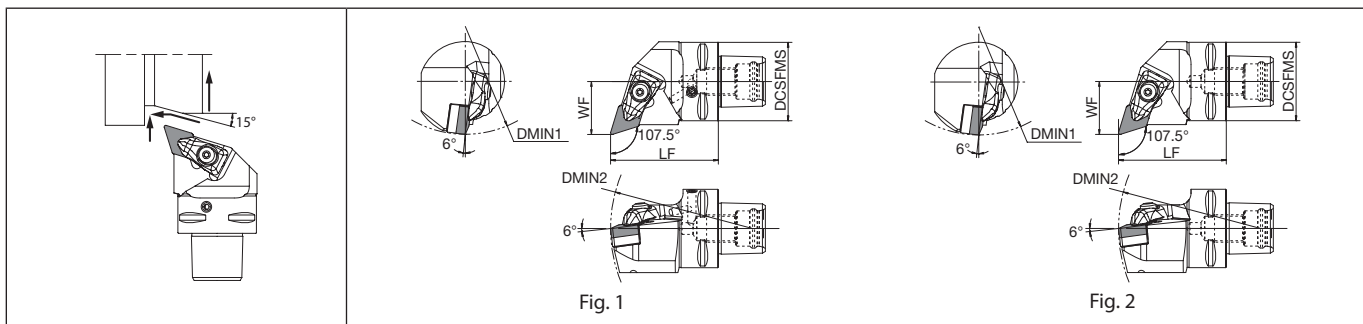
Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Shims indicated * are not included with the toolholder. To change insert thickness, please purchase it separately.

Recommended tightening torque : 3.9 N·m

DDHN (External turning / External facing / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)					Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Spare parts						Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2					Clamp	Screw (for clamp)	Spring	Shim	Screw	Wrench	
	KPC3-DDHN%L 22050-15A	●		●		32	50	22					121				1	CP-3D-S	
KPC4-DDHN%L 27055-15A	●	●	Yes	40	55	27	110	145	0.8	-6	-6	1	CP-3D-S	CS-3D-TR	SP-3D	DD-44 (DD-43*)	SB-4085TRP	FT-15	DN□A1504... DN□G1504... DN□M1504...
KPC5-DDHN%L 35060-15A	●	●		50	60	35	165												
KPC3-DDHN%L 22050-15S	●	●		32	50	22	121												
KPC4-DDHN%L 27055-15S	●	●	No	40	55	27	110	145	0.8	-6	-6	2	CP-3D-S	CS-3D-TR	SP-3D	DD-44 (DD-43*)	SB-4085TRP	FT-15	DN□A1504... DN□G1504... DN□M1504...
KPC5-DDHN%L 35060-15S	●	●		50	60	35	165												

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Shims indicated * are not included with the toolholder. To change insert thickness, please purchase it separately.

Recommended tightening torque : 3.9 N·m

● : Standard item

N6

Tools for turning mill

N

Applicable inserts

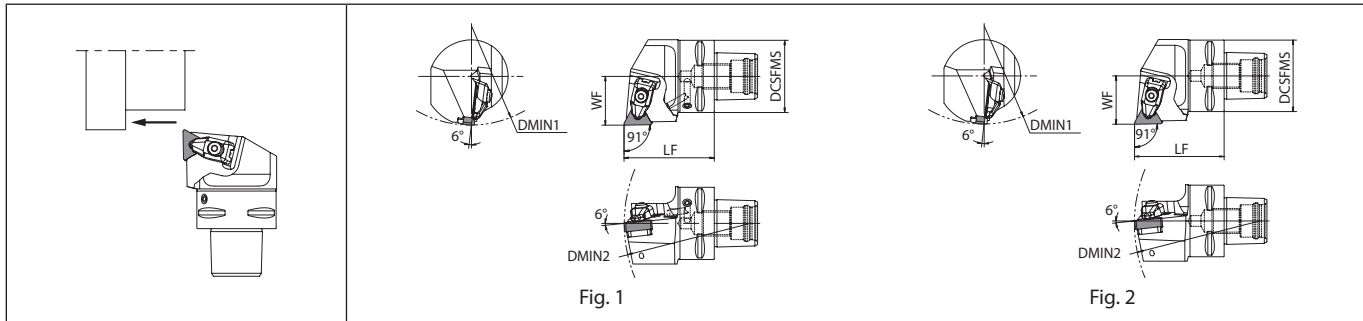
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Medium	Medium - Roughing
Insert								
Chipbreaker type	PP	GP	PQ	HQ	CQ	CJ	TN-V	GS
Page	B24	B24	B24	B25	B25	B25	B25	B25
Applications	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Roughing	Roughing	Roughing	Medium
Insert								
Chipbreaker type	PG	PS	PT	GT	STD	PH	PX	R/L
Page	B26	B26	B26	B26	B27	B27	B27	B31
Applications	Low carbon steel	Low carbon steel	Low carbon steel	Low carbon steel	Finishing - Medium	Large ap	Medium - Roughing	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	XF	XP	XQ	XS	SK	R-LD	FP-TK	TK
Page	B27	B27	B27	B27	B28	B28	B28	B28
Applications	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron
Insert								
Chipbreaker type	MQ	MS	MU	KQ	KG	KH	C	ZS
Page	B28	B29	B29	B30	B30	B30	B30	B30
Applications	Cast iron	Cast iron	Cast iron / Hard materials	Non-Ferrous Metals	Non-Ferrous Metals	Non-Ferrous Metals	Heat-resistant alloys	Heat-resistant alloys
Insert								
Chipbreaker type	GC	No CB	Ceramic	%-A3	AH	PCD	SQ	SG
Page	B30	B31	B114	B31	B31	C35	B29	B29
Applications	Hard materials / Cast iron	Hard materials	Hard materials	Hard materials				
Insert								
Chipbreaker type	CBN	HH	HL	HD				
Page	C10	C11	C11	C11				

N



Tools for turning mill

DTGN (External turning)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)					Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2					
KPC3-DTGN [®] L 22040-16A	●	●		32	40	22	116						TN□A1604... TN□G1604... TN□M1604...
KPC4-DTGN [®] L 27050-16A	●	●	Yes	40	50	27	110	140	0.8	-6	-6	1	
KPC5-DTGN [®] L 35060-16A	●	●		50	60	35	165						
KPC3-DTGN [®] L 22040-16S	●	●		32	40	22	116						TN□A1604... TN□G1604... TN□M1604...
KPC4-DTGN [®] L 27050-16S	●	●	No	40	50	27	110	140	0.8	-6	-6	2	
KPC5-DTGN [®] L 35060-16S	●	●		50	60	35	165						

Description	Spare parts						
	Clamp	Screw (for clamp)	Spring	Wrench (for clamp)	Shim	Screw	Wrench (for shim / sold separately)
KPC3-DTGN [®] L 22040-16A							
KPC4-DTGN [®] L 27050-16A	CP-2D	CS-2D	SP-2D	LW-2.5	DT-32	SB-3080TR	FT-10
KPC5-DTGN [®] L 35060-16A							
KPC3-DTGN [®] L 22040-16S							
KPC4-DTGN [®] L 27050-16S	CP-2D	CS-2D	SP-2D	LW-2.5	DT-32	SB-3080TR	FT-10
KPC5-DTGN [®] L 35060-16S							

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.6 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Recommended tightening torque : 1.7 N·m

● : Standard item

N8

Tools for turning mill



N

Applicable inserts

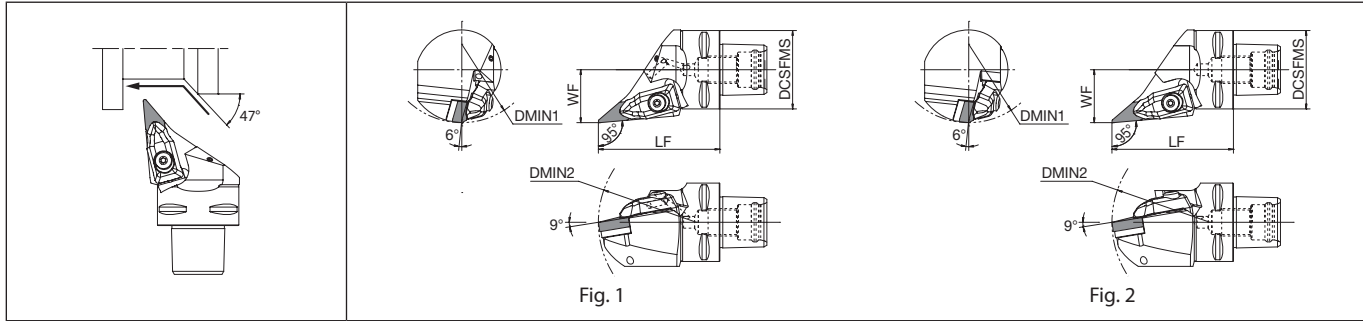
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing
Insert								
Chipbreaker type	PP	GP	PQ	HQ	CQ	GS	PG	PS
Page	B39	B39	B39	B39	B39	B40	B40	B40
Applications	Medium - Roughing	Medium - Roughing	Roughing	Roughing	Roughing	Finishing	Finishing	Finishing - Medium
Insert								
Chipbreaker type	PT	GT	STD	PH	PX	P/L-SSF	P/L-S	P/L-B
Page	B40	B40	B40	B41	B41	B45	B45	B45
Applications	Medium - Roughing	Medium - Roughing	Low carbon steel	Low carbon steel	Low carbon steel	Low carbon steel	Finishing - Medium	Large ap
Insert								
Chipbreaker type	P/L-C	P/L-25R	XF	XP	XQ	XS	SK	R-LD
Page	B46	B46	B41	B41	B41	B41	B42	B42
Applications	Medium - Roughing	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel	Cast iron	Cast iron
Insert								
Chipbreaker type	FP-TK	TK	MQ	MS	MU	P/L-ST	KQ	KG
Page	B42	B42	B42	B42	B42	B43	B43	B43
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron / Hard materials	Non-Ferrous Metals	Non-Ferrous Metals
Insert								
Chipbreaker type	KH	C	ZS	GC	No CB	Ceramic	P/L-A3	AH
Page	B43	B43	B43	B43	B44	B118	B44	B44
Applications	Non-Ferrous Metals	Heat-resistant alloys	Hard materials / Cast iron					
Insert								
Chipbreaker type	PCD	SG	CBN					
Page	C36	B43	C13					

N



Tools for turning mill

DVLN (External turning / External copying)



Right-hand shown

Toolholder dimensions

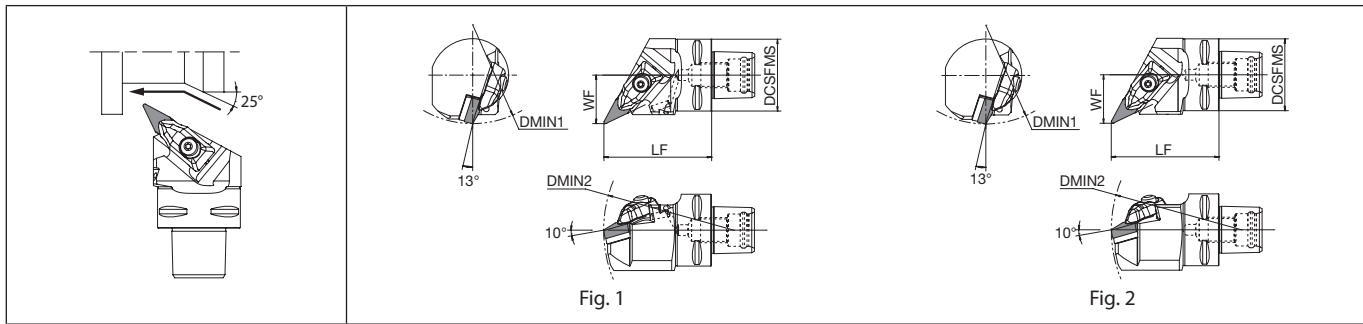
Description	Availability		Coolant hole	Dimension (mm)						Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Spare parts						Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2	Clamp					Screw (for clamp)	Spring	Shim	Screw	Wrench		
	KPC3-DVLN% 22058-16A	●		●		32	58	22							0.8	-6	-9	1	CP-5D-S	
KPC4-DVLN% 27062-16A	●	●	Yes	40	62	27	80	100	0.8	-6	-9	1	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC5-DVLN% 35065-16A	●	●		50	65	35														
KPC3-DVLN% 22058-16S	●	●		32	58	22			0.8	-6	-9	2	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC4-DVLN% 27062-16S	●	●	No	40	62	27	80	100	0.8	-6	-9	2	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC5-DVLN% 35065-16S	●	●		50	65	35														

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Recommended tightening torque : 3.9 N·m

DVPN (External turning / External facing / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)						Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Spare parts						Applicable inserts
	R	L		DCSFMS	LF	WF	DMIN1	DMIN2	Clamp					Screw (for clamp)	Spring	Shim	Screw	Wrench		
	KPC3-DVPN% 22055-16A	●		●		32	55	22	130						0.8	-13	-10	1	CP-5D-S	
KPC4-DVPN% 27060-16A	●	●	Yes	40	60	27	110	145	0.8	-13	-10	1	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC5-DVPN% 35065-16A	●	●		50	65	35	165													
KPC3-DVPN% 22055-16S	●	●		32	55	22	130		0.8	-13	-10	2	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC4-DVPN% 27060-16S	●	●	No	40	60	27	110	145	0.8	-13	-10	2	CP-5D-S	CS-3D-TR	SP-3D	DV-33	SB-4085TR	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC5-DVPN% 35065-16S	●	●		50	65	35	165													

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Recommended tightening torque : 3.9 N·m

● : Standard item

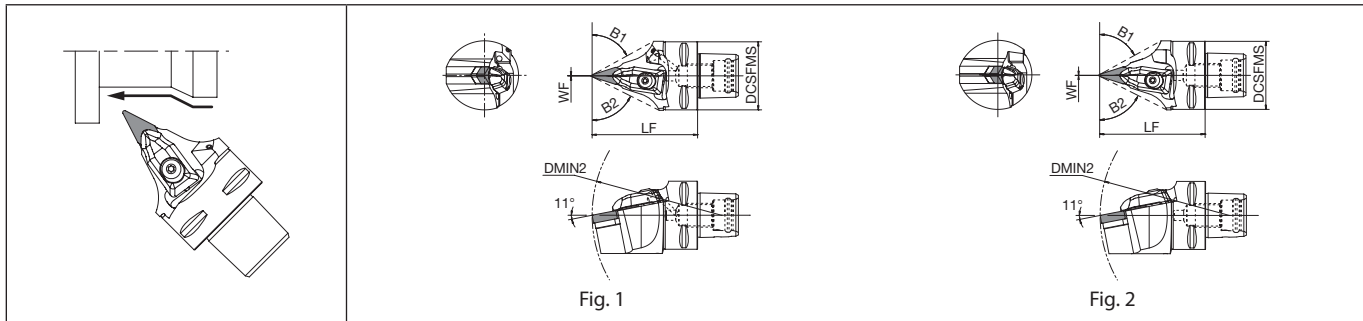
N10

Tools for turning mill

N



DVVN (External copying)



Right-hand shown

Toolholder dimensions

Description	Availability	Coolant hole	Dimension (mm)						Angle (°)	Standard corner-R(RE)	Fig.	Spare parts						Applicable inserts
			DCSFMS	LF	WF	DMIN2	B1	B2				Clamp	Screw (for clamp)	Screw	Shim	Spring	Wrench	
KPC4-DVVNN 00062-16A	●	Yes	40	62	0	152	61	63	0.8	1	CP-5D-S	CS-3D-TR	SB-4085TR	DV-33	SP-3D	FT-15	VN□A1604... VN□G1604... VN□M1604...	
KPC5-DVVNN 00065-16A	●		50	65	0	170	59	59										
KPC3-DVVNN 00058-16S	●	No	32	58	0	140	68	68	0.8	2	CP-5D-S	CS-3D-TR	SB-4085TR	DV-33	SP-3D	FT-15		
KPC4-DVVNN 00062-16S	●		40	62	0	152	61	63										
KPC5-DVVNN 00065-16S	●		50	65	0	170	59	59										

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

Recommended tightening torque : 3.9 N·m

Angle B1 and B2 show the interference angle from the line of cutting edge and toolholder.

Applicable inserts

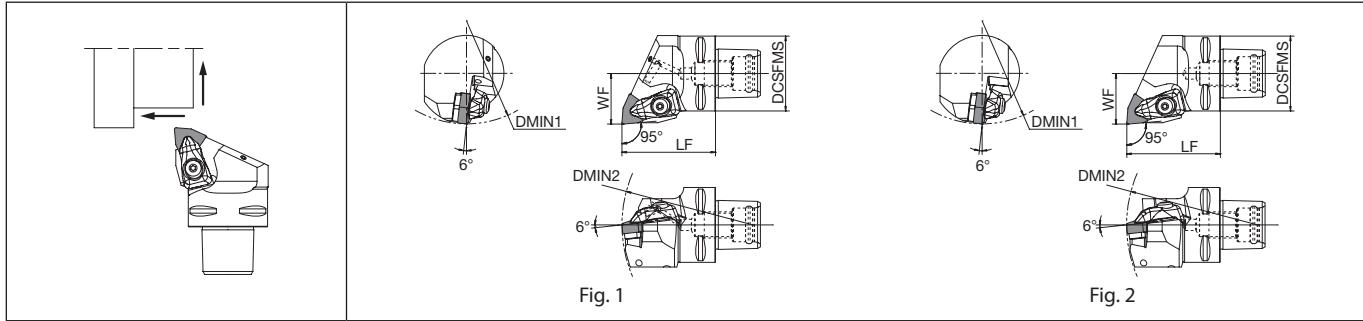
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Medium	Roughing
Insert								
Chipbreaker type	PP	GP	1/2-VC	VF	PQ	HQ	TN-V	STD
Page	B47	B47	B47	B47	B47	B47	B47	B47
Applications	Finishing - Medium	Finishing	Medium	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Cast iron	Cast iron
Insert								
Chipbreaker type	SK	1/2-S	R/L	MQ	MS	MU	KG	KH
Page	B48	B49	B49	B48	B48	B48	B48	B48
Applications	Cast iron	Cast iron / Hard materials	Non-Ferrous Metals	Heat-resistant alloys	Hard materials / Cast iron			
Insert								
Chipbreaker type	No CB	Ceramic	PCD	SG	CBN			
Page	B49	B119	C37	B48	C14			

● : Standard item



Tools for turning mill

DWLN (External turning / External facing)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)				Standard corner-R(RE)	Side rake angle (°)	Inclination angle (°)	Fig.	Spare parts						Applicable inserts		
	R	L		DCSFMS	LF	WF	DMIN1					DMIN2	Clamp	Screw (for clamp)	Spring	Shim	Screw		Wrench	
	KPC3-DWLN%L 22047-08A	●		●		32	47					22	121						CP-3D-S	CS-3D-TR
KPC4-DWLN%L 27050-08A	●	●	Yes	40	50	27	110	140	0.8	-6	-6	1	CP-3D-S	CS-3D-TR	SP-3D	DW-42	SB-4085TR	FT-15	WN□A0804... WN□G0804... WN□M0804...	
KPC5-DWLN%L 35060-08A	●	●		50	60	35	165													
KPC3-DWLN%L 22047-08S	●	●		32	47	22	121													WN□A0804... WN□G0804... WN□M0804...
KPC4-DWLN%L 27050-08S	●	●	No	40	50	27	110	140	0.8	-6	-6	2	CP-3D-S	CS-3D-TR	SP-3D	DW-42	SB-4085TR	FT-15	WN□A0804... WN□G0804... WN□M0804...	
KPC5-DWLN%L 35060-08S	●	●		50	60	35	165													

Applicable Pressure : ~7MPa
Recommended tightening torque : 3.9 N·m

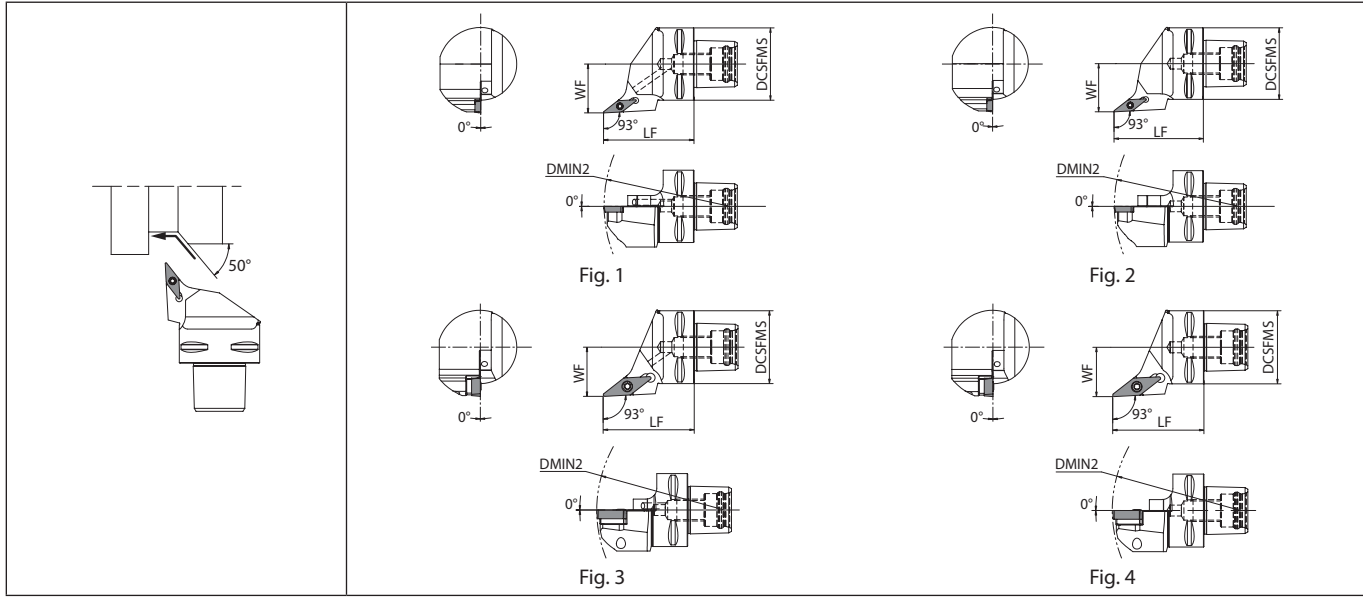
Applicable inserts

Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing	Finishing	Finishing - Medium	Finishing - Medium
Insert								
Chipbreaker type	WF	WP	WE	WQ	PP	GP	PQ	HQ
Page	B50	B50	B50	B50	B50	B50	B50	B51
Applications	Finishing - Medium	Finishing - Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Roughing
Insert								
Chipbreaker type	CQ	CJ	GS	PG	PS	PT	GT	STD
Page	B51	B51	B51	B51	B51	B51	B52	B52
Applications	Roughing	Low carbon steel	Low carbon steel	Low carbon steel	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	PH	XP	XQ	XS	TK	MQ	MS	MU
Page	B52	B52	B52	B52	B52	B53	B53	B53
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Non-Ferrous Metals
Insert								
Chipbreaker type	KQ	KG	KH	C	ZS	GC	No CB	AH
Page	B53	B53	B53	B54	B54	B54	B54	B54
Applications	Non-Ferrous Metals	Heat-resistant alloys	Hard materials / Cast iron					
Insert								
Chipbreaker type	PCD	SG	CBN					
Page	C38	B53	C15					

● : Standard item

N12

SVJB (External turning / External copying)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)				Standard corner-R(RE)	Fig.	Spare parts						Applicable inserts	
	R	L		DCSFMS	LF	WF	DMIN2			Screw	Wrench	Wrench	Shim	Shim screw	Wrench		
KPC3-SVJB% 22040-11A	●	●		32	40	22	116										
KPC4-SVJB% 27050-11A	●	●	Yes	40	50	27	140	0.4	1	SB-2570TR	-	FT-8	-	-	-	-	VB-T1103... VB-W1103...
KPC5-SVJB% 35060-11A	●	●		50	60	35	165										
KPC3-SVJB% 22040-11S	●	●		32	40	22	116										
KPC4-SVJB% 27050-11S	●	●	No	40	50	27	140	0.4	2	SB-2570TR	-	FT-8	-	-	-	-	VB-T1103... VB-W1103...
KPC5-SVJB% 35060-11S	●	●		50	60	35	165										
KPC3-SVJB% 22047-16A	●	●		32	47	22	116										
KPC4-SVJB% 27050-16A	●	●	Yes	40	50	27	140	0.8	3	SB-40125TRN	FT-15	-	SVN-32N (SVN-32S*)	SS-4N	LW-4	-	VB-T1604... VB-W1604... VC-T1604...
KPC5-SVJB% 35060-16A	●	●		50	60	35	165										
KPC3-SVJB% 22047-16S	●	●		32	47	22	116										
KPC4-SVJB% 27050-16S	●	●	No	40	50	27	140	0.8	4	SB-40125TRN	FT-15	-	SVN-32N (SVN-32S*)	SS-4N	LW-4	-	VB-T1604... VB-W1604... VC-T1604...
KPC5-SVJB% 35060-16S	●	●		50	60	35	165										

Applicable Pressure : ~7MPa

Recommended tightening torque is 1.2N·m for VB 1103 type and 3.5N·m for VB(C) 1604 type.

When using inserts whose corner-R(RE) is greater than 0.8 mm, additional modifications to the toolholder are necessary in order to prevent workpiece and shim from interfering each other.

When using inserts whose corner-R(RE) is greater than 1.2 mm, additional modifications to the toolholder or the shim are necessary in order to prevent workpiece and shim from interfering each other.

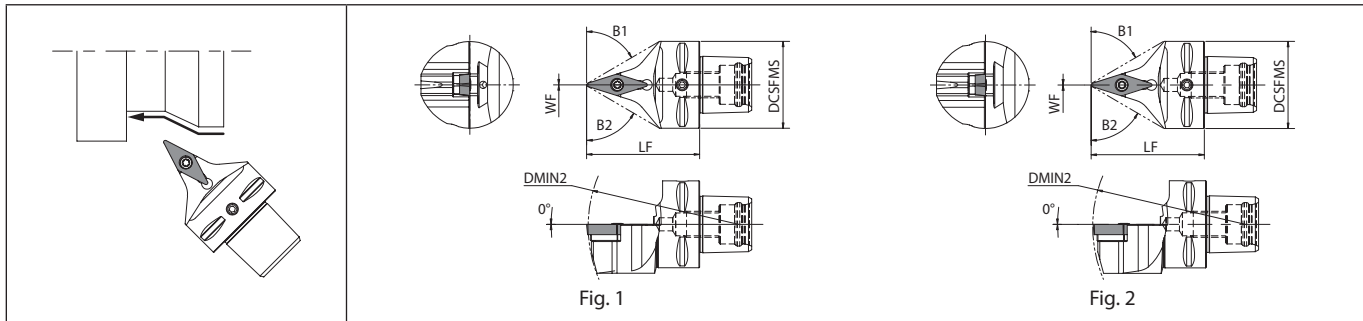
When using inserts whose corner-R(RE) is 0.2 or 0.4mm, shim (SVN-32S*) is recommended (sold separately).

● : Standard item



Tools for turning mill

SVVB (External copying)



Toolholder dimensions

Description	Availability	Coolant hole	Dimension (mm)					Angle (°)	Standard corner-R(RE)	Fig.	Spare parts					Applicable inserts	
			DCSFMS	LF	WF	DMIN2	B1				B2	Screw	Wrench	Shim	Shim screw		Wrench
KPC3-SVVBN 00048-16A	●	Yes	32	48	0	116	62	62	0.8	1	SB-40125TRN	FT-15	SVN-32N (SVN-32S*)	SS-4N	LW-4	VB-T1604... VB-W1604... VC-T1604...	
KPC4-SVVBN 00052-16A	●		40	52	0	140	59	59									
KPC5-SVVBN 00060-16A	●		50	60	0	165	56	56									
KPC3-SVVBN 00048-16S	●	No	32	48	0	116	62	62	0.8	2	SB-40125TRN	FT-15	SVN-32N (SVN-32S*)	SS-4N	LW-4	VB-T1604... VB-W1604... VC-T1604...	
KPC4-SVVBN 00052-16S	●		40	52	0	140	59	59									
KPC5-SVVBN 00060-16S	●		50	60	0	165	56	56									

Applicable Pressure : ~7MPa

When using inserts whose corner-R(RE) is 0.2 or 0.4mm, shim (SVN-32S*) is recommended (sold separately).

Angle B1 and B2 show the interference angle from the line of cutting edge and toolholder.

Recommended tightening torque : 3.5 N·m

N

Applicable inserts



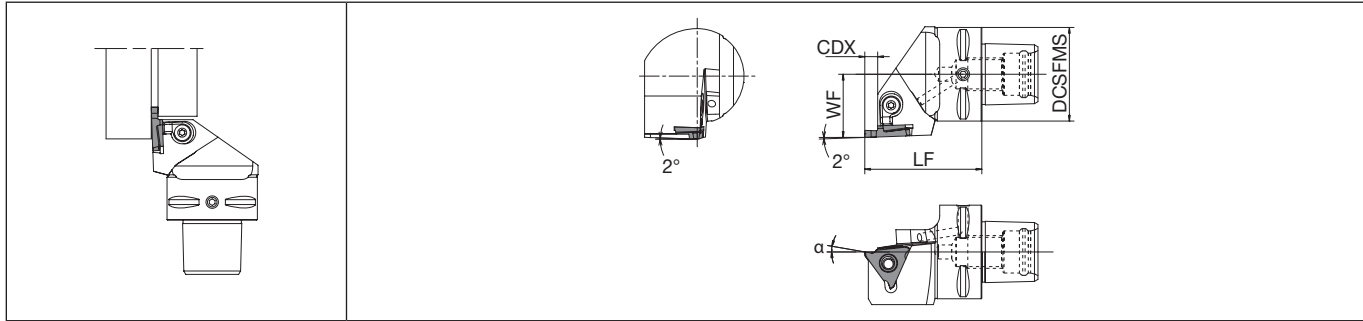
Tools for turning mill

Applications	Finishing	Finishing	Finishing	Finishing - Medium	Finishing	Finishing	Finishing - Medium	Non-Ferrous Metals
Insert								
Chip Breaker Type	PP	GP	VF	HQ	FL-F	FL-FSF	FL-Y	PCD
Page	B97, B100	B97	B97	B97	B98	B98	B99, B101	C49
Applications	Hard materials							
Insert								
Chip Breaker Type	CBN							
Page	C26							

● : Standard item

N14

KGBA (Shallow grooving)



Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)				Spare parts		Applicable inserts G6~G12
	R	L		DCSFMS	LF	WF	CDX	Clamp set	Wrench	
KPC3-KGBA ^{R/L} 22040-16	●	●		32	40	22		LGBA-16 ^{R/L} S	FT-15	GBA32 ^{R/L} type
KPC4-KGBA ^{R/L} 27050-16	●	●	Yes	40	50	27	2.5			
KPC5-KGBA ^{R/L} 35060-16	●	●		50	60	35				
KPC3-KGBA ^{R/L} 22040-2215	●	●		32	40	22		LGBA-22 ^{R/L} S	FT-15	GBA43 ^{R/L} type
KPC4-KGBA ^{R/L} 27050-2215	●	●	Yes	40	50	27	4			
KPC5-KGBA ^{R/L} 35060-2215	●	●		50	60	35				
KPC3-KGBA ^{R/L} 22040-2225	●	●		32	40	22		LGBA-22 ^{R/L} S	FT-15	
KPC4-KGBA ^{R/L} 27050-2225	●	●	Yes	40	50	27	5.5			
KPC5-KGBA ^{R/L} 35060-2225	●	●		50	60	35				
KPC3-KGBA ^{R/L} 22040-2235	●	●		32	40	22		LGBA-22 ^{R/L} S	FT-15	
KPC4-KGBA ^{R/L} 27050-2235	●	●	Yes	40	50	27	5.5			
KPC5-KGBA ^{R/L} 35060-2235	●	●		50	60	35				

Applicable Pressure : ~7MPa

CDX shows the distance from the toolholder to the cutting edge. Available Groove Depth : „CDX“ of Insert.

Clamp Set : LGBA-○○RS for Right-hand Toolholder and LGBA-○○LS for Left-hand Toolholder.

Rake Angle (α) after Installment of Insert (Ref. to the table below.)

Rake Angle (α) after Installment of GBA-GM insert

α	Insert Description
10°	GBA43 ^{R/L} .150-020GM
15°	GBA43 ^{R/L} .175-020GM ~ GBA43 ^{R/L} .265-030GM
12°	GBA43 ^{R/L} .300-030GM ~ GBA43 ^{R/L} .400-040GM

α shows the rake angle at the center of the edge width after installing insert

Rake Angle (α) after Installment of GBA-MY insert

α	Insert Description
15°	GBA43 ^{R/L} .175-020MY ~ GBA43 ^{R/L} .350-030MY
14°	GBA43 ^{R/L} .400-040MY

α shows the rake angle at the center of the edge width after installing insert

Rake Angle (α) after Installment of GBA insert

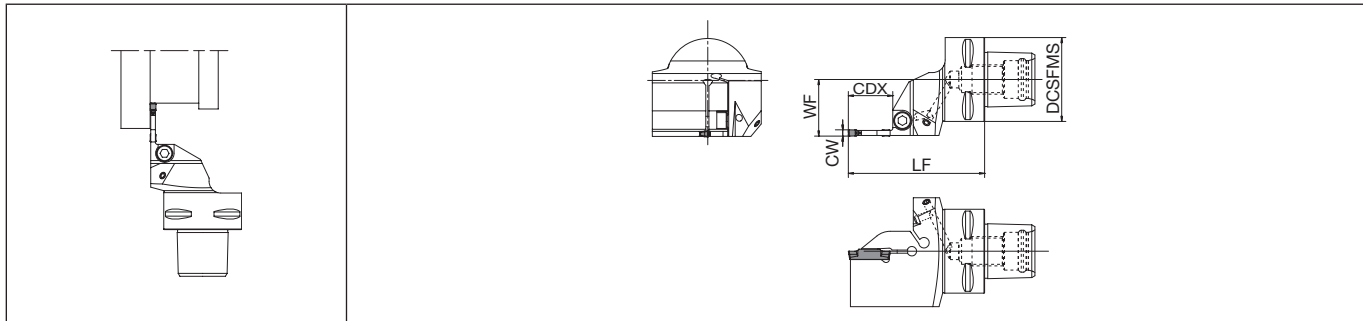
GBA32 ^{R/L} ○○○-○○○		GBA43 ^{R/L} ○○○-○○○		GBA43 ^{R/L} ○○○-○○○R (Full-R)	
α	Insert Grades	α	Insert Grades	α	Full-R Description
10°	TN620, TN90, PV7040 PR930, PR1215, PR1625, PR905 KPD001, KPD010	0°	KBN510, KBN525	10°	TN620, TN90, PV7040 PR930, PR1215, PR1625, PR905 050R ~ 150R
		10°	TN620, TC40N, TN90, PV7040 PR930, PR1215, PR1625, PR905 KPD001, KPD010		200R
20°	KW10	20°	KW10	14°	TN620, TN90, PV7040 PR930, PR1215, PR1625, PR905 KW10 050R ~ 200R

● : Standard item



Tools for turning mill

KGD (External grooving)



Right-hand shown

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)						Spare parts		Applicable inserts G30~G33
	R	L		DCSFMS	LF	WF	CDX	CW min.	CW max.	Clamp bolt	Wrench	
	●	●										
KPC3-KGD [®] /L 22050-2T10	●	●		32	50	22						GD..2020... GD..2220... GD..2420... GD..2520... GD..3020...
KPC4-KGD [®] /L 27055-2T10	●	●	Yes	40	55	27	10			HH5X16	LW-4	
KPC5-KGD [®] /L 35060-2T10	●	●		50	60	35						
KPC3-KGD [®] /L 22055-2T17	●	●		32	55	22						GD..2020... GD..2220... GD..2420... GD..2520... GD..3020...
KPC4-KGD [®] /L 27060-2T17	●	●	Yes	40	60	27	17			HH5X16	LW-4	
KPC5-KGD [®] /L 35060-2T17	●	●		50	60	35						
KPC3-KGD [®] /L 22050-3T10	●	●		32	50	22						GD..3020... GD..3520... GD..4020...
KPC4-KGD [®] /L 27055-3T10	●	●	Yes	40	55	27	10			HH5X16	LW-4	
KPC5-KGD [®] /L 35060-3T10	●	●		50	60	35						
KPC3-KGD [®] /L 22060-3T20	●	●		32	60	22						GD..3020... GD..3520... GD..4020...
KPC4-KGD [®] /L 27065-3T20	●	●	Yes	40	65	27	20			HH5X16	LW-4	
KPC5-KGD [®] /L 35065-3T20	●	●		50	65	35						
KPC3-KGD [®] /L 22050-4T10	●	●		32	50	22						GD..4020... GD..5020...
KPC4-KGD [®] /L 27055-4T10	●	●	Yes	40	55	27	10			HH5X16	LW-4	
KPC5-KGD [®] /L 35060-4T10	●	●		50	60	35						
KPC4-KGD [®] /L 27065-4T20	●	●	Yes	40	65	27	20			HH5X16	LW-4	GD..4020... GD..5020...
KPC5-KGD [®] /L 35065-4T20	●	●		50	65	35						
KPC4-KGD [®] /L 27070-4T25	●	●	Yes	40	70	27	25			HH5X16	LW-4	
KPC5-KGD [®] /L 35070-4T25	●	●		50	70	35						
KPC4-KGD [®] /L 27055-5T10	●	●	Yes	40	55	27	10			HH5X16	LW-4	GD..5020... GD..6020...
KPC5-KGD [®] /L 35060-5T10	●	●		50	60	35						
KPC4-KGD [®] /L 27060-5T17	●	●	Yes	40	60	27	17			HH5X16	LW-4	
KPC5-KGD [®] /L 35060-5T17	●	●		50	60	35						

Applicable Pressure : ~7MPa

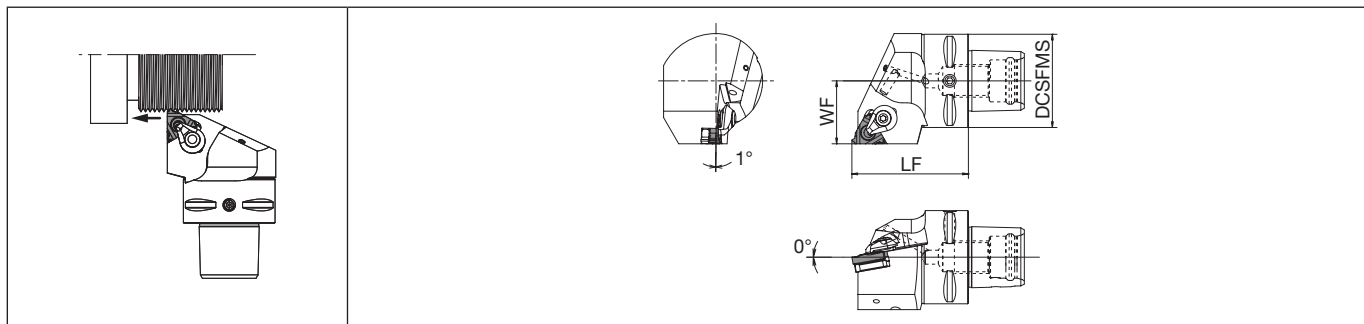
Recommended tightening torque : 6.5 N·m

CDX : Maximum depth to which processing can be made. (If the CDX is 20 mm or more, the maximum groove-depth of groove made by the 2-edge insert will be 18 mm.)

● : Standard item





N16

KTN (External threading)



Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Coolant hole	Dimension (mm)			Spare parts				Applicable inserts ● J6, J8, J10 J12, J14, J16 J18, J20
	R	L		DCSFMS	LF	WF					
	Yes										
KPC3-KTN%L 22040-16	●	●		32	40	22					
KPC4-KTN%L 27050-16	●	●	Yes	40	50	27	CPS-5S	TN-32	SP3X8	FT-15	16E% type
KPC5-KTN%L 35060-16	●	●		50	60	35					

Applicable Pressure : ~7MPa

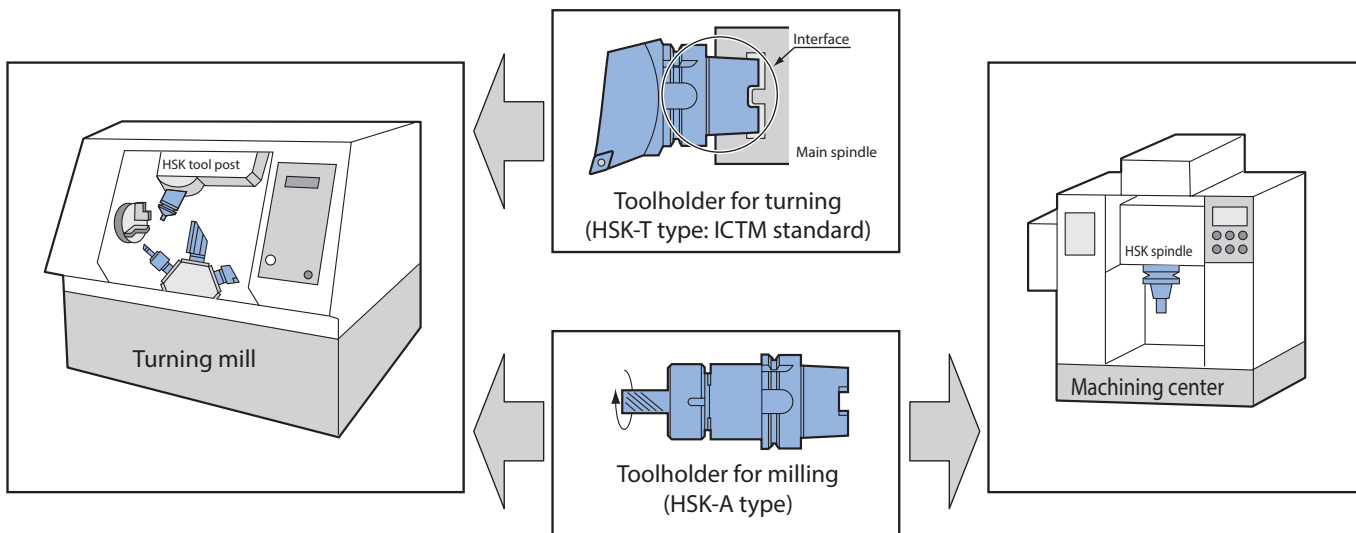


Tools for Turning Mill

HSK-T

- The turning mill is a machine that combines turning and milling functions. Now an interface (between workpiece and toolholder - equivalent to the arbor for milling) is available for the turning mill that fulfils the ICTM standard.
- ICTM standard was developed by 16 companies in Japan, as the interface between turning mill machines. It is based on the two-face restraint type standard "ISO 12164-1:2001 HSK Standard Shank"
- This standard became an International Standard as ISO Standard "ISO12164-3:2008" in 2008. Description is indicated as HSK-T \odot .

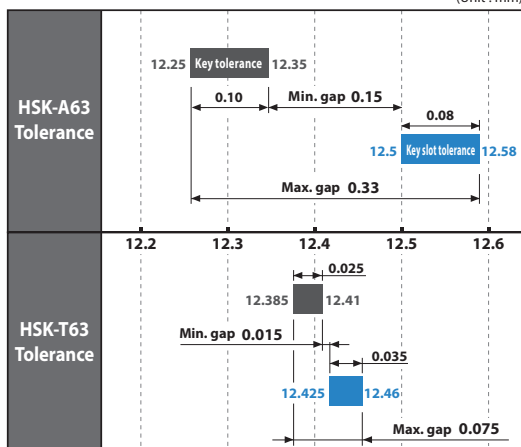
1 The interface is compatible with HSK-A type for milling tools



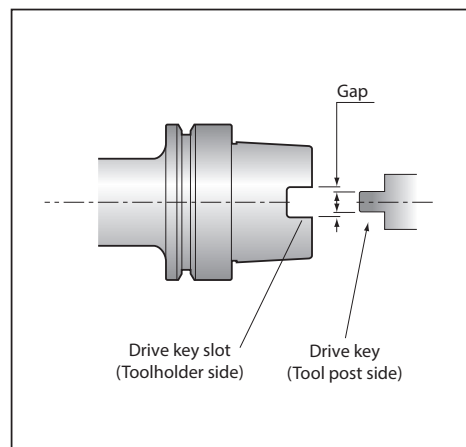
2 Machining precision

Machining precision for turning has improved by minimizing the gap between the drive key slot on toolholder side and the drive key on toolpost side.

Comparison of the gap of a key and key slot (Unit : mm)

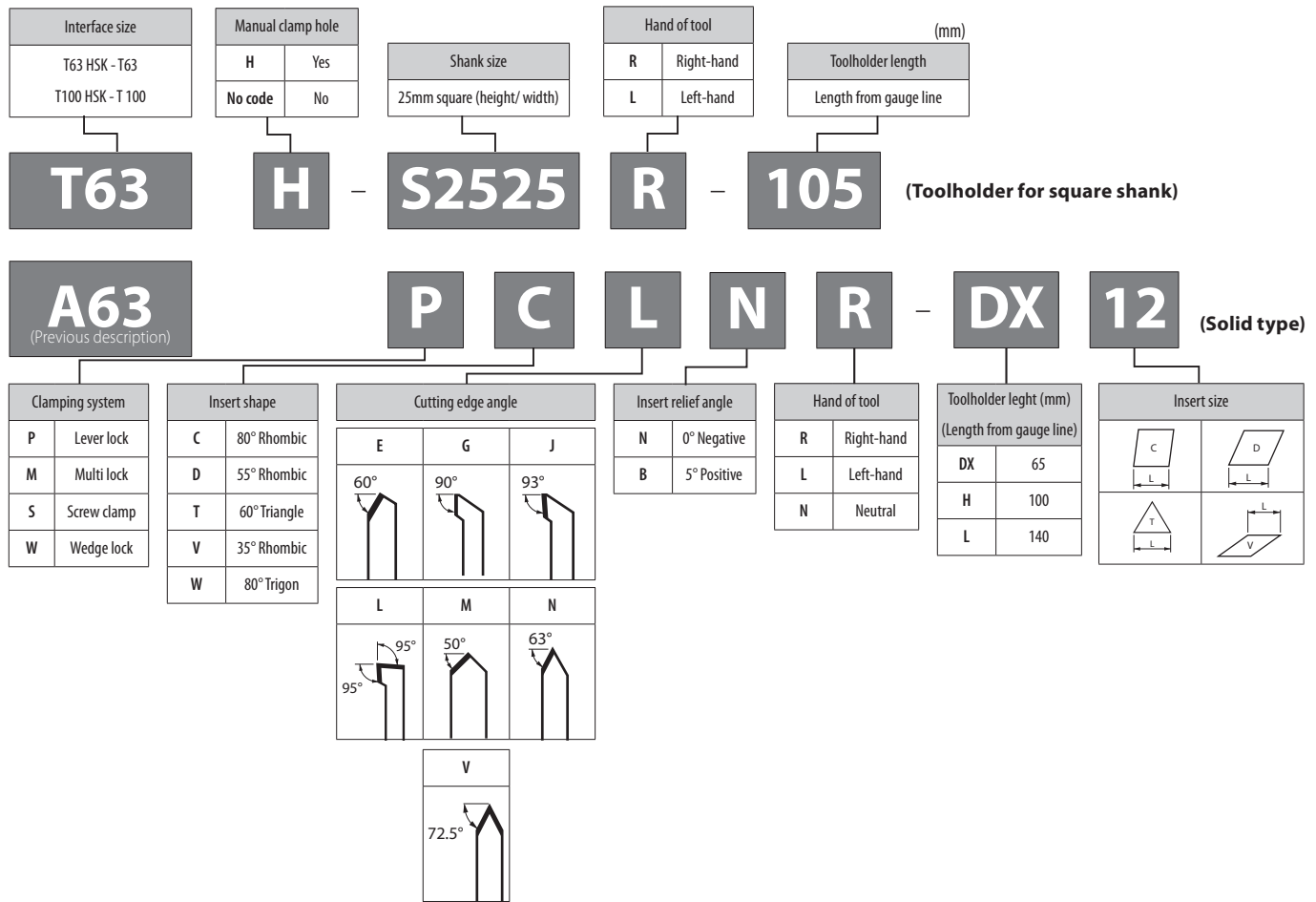


Effect of the gap



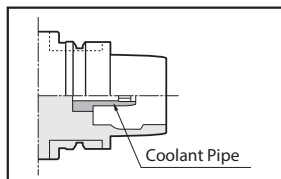
N18

Identification System (External)



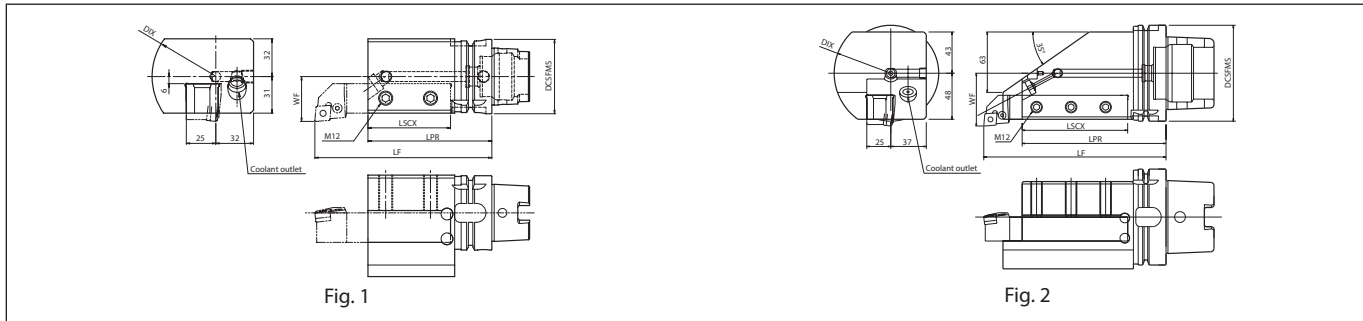
Coolant Pipe

Coolant pipe is built into toolholder.






Tools for turning mill

Toolholder for square shank (External turning / External facing)



Right-hand shown

Toolholder dimensions

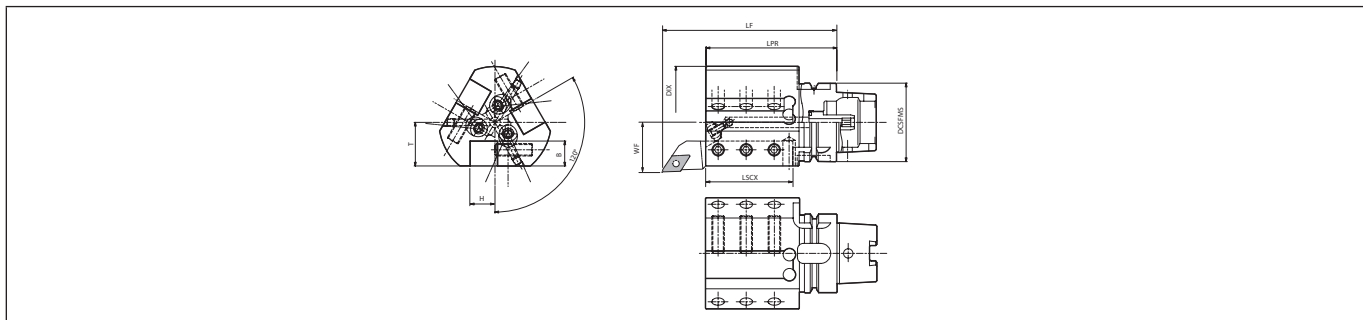
Description	Availability		Dimension (mm)							Fig.	Spare parts		
											Screw	Coolant pipe	Wrench
	R	L	DCSFMS	DIX	LF	LPR	LSCX	WF					
T63H- S2525%-105	●	●	63	108	150	105	70	38	1	HS12X25	CL63-1	LW-6	
T100H- S2525%-150	●	●	100	118	190	150	110	55	2	HS12X30	CL100-1	LW-6	

Coolant outlet direction is adjustable.

For 25mm square shank.




These toolholders are not compatible with Yamazaki Mazak INTRGEX i and j series.

Toolholder for square shank (External turning / External facing)



Right-hand shown

Toolholder dimensions

Description	Availability		Dimension (mm)										Fig.	Spare parts		
														Screw	Coolant pipe	Wrench
	R	DCSFMS	DIX	H	B	T	LF	LPR	LSCX	WF						
T63H- S2020R-105T	●	●	63	90	20	20	35	150	105	70	40	1	HS12X30	CL63-1	LW-6	
T100H- S2525R-150T	●	●	100	118	25	25	48	190	150	110	55	2	HS12X35	CL100-1	LW-6	

Coolant outlet direction is adjustable.

● : Standard item

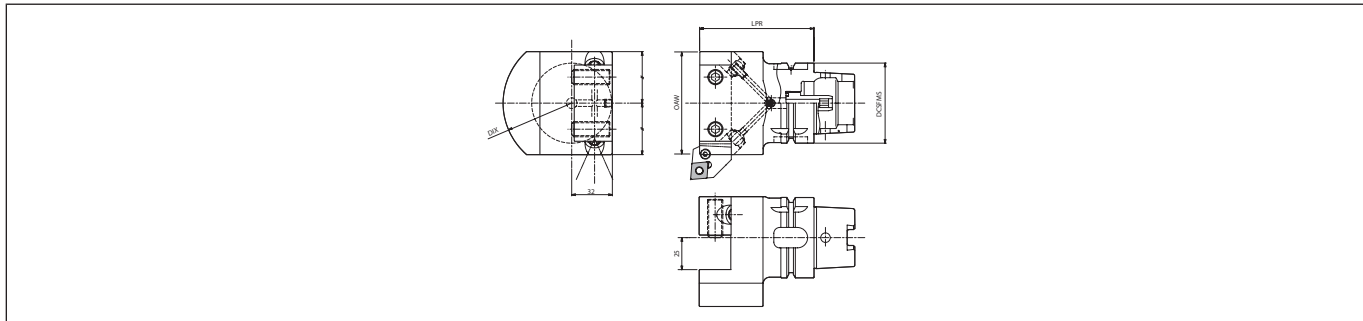
N20

Tools for turning mill





N

Toolholder for square shank (External facing / External turning)



Right-hand shown

Toolholder dimensions

Description	Availability	Dimension (mm)				Spare parts		
						Screw	Coolant pipe	Wrench
		N	DCSFMS	DIX	LPR	OAW		
T63H- S2525-90F S2525-120F	●	63	108	90	81	HS12X30	CL63-1	LW-6
	●			120				
T100H- S2525-105F S2525-150F	●	100	118	105	96	HS12X30	CL100-1	LW-6
	●			150				

Coolant outlet direction is adjustable.

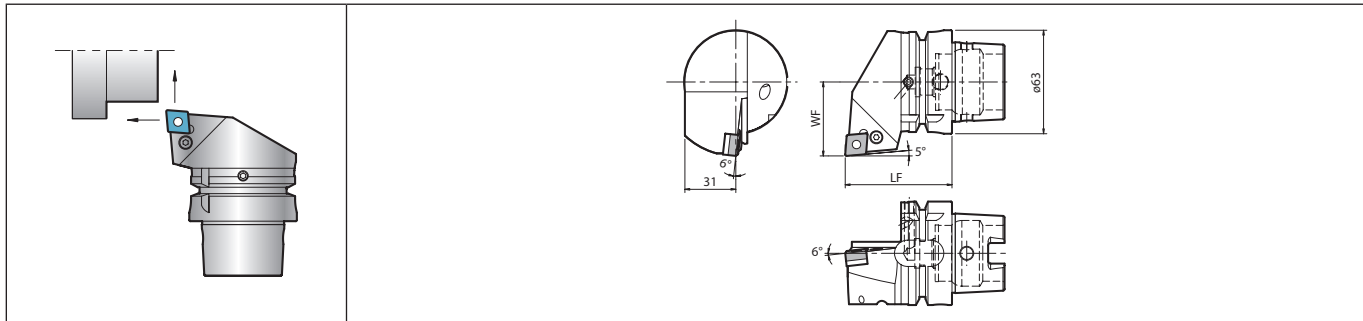
These toolholders are not compatible with Yamazaki Mazak INTRGEX i and j series.



Tools for turning mill

● : Standard item

PCLN (External turning / External facing)



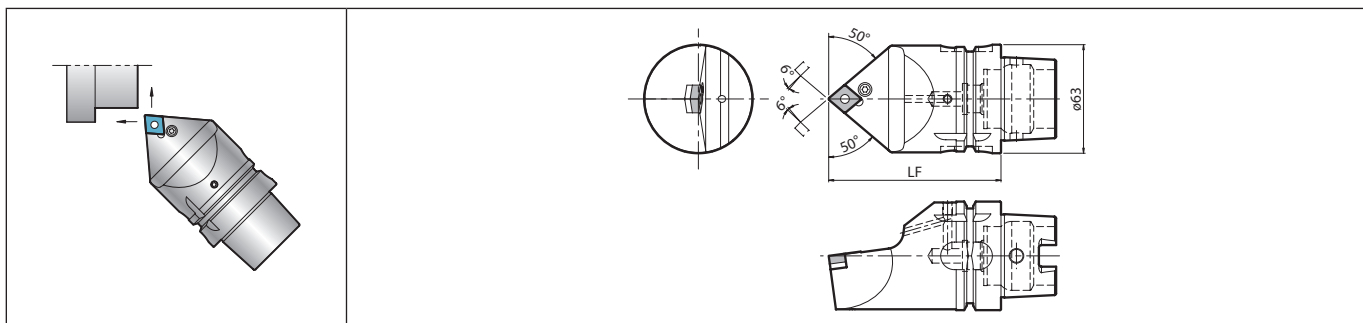
Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts							Applicable inserts
					Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Wrench	
	R	L	LF	WF								
T63H- PCLN%-DX12	●	●	65	45								CN□A1204..., CN□G1204... CN□M1204...

When using the inserts with SX chipbreaker, prepare a shim (-C type) separately.

PCMN (External turning / External facing)



Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts							Applicable inserts
					Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Shim*	
	N	LF										
T63H- PCMNN-H12	●	100	CL63-1	LL-2N	LS-2N	PC-2	LSP-2	LC-42N	LC-42N-C	LW-3	CN□A1204..., CN□G1204... CN□M1204...	
PCMNN-L12	●	140										

When using the inserts with SX chipbreaker, prepare a shim (-C type) separately.

● : Standard item

N22

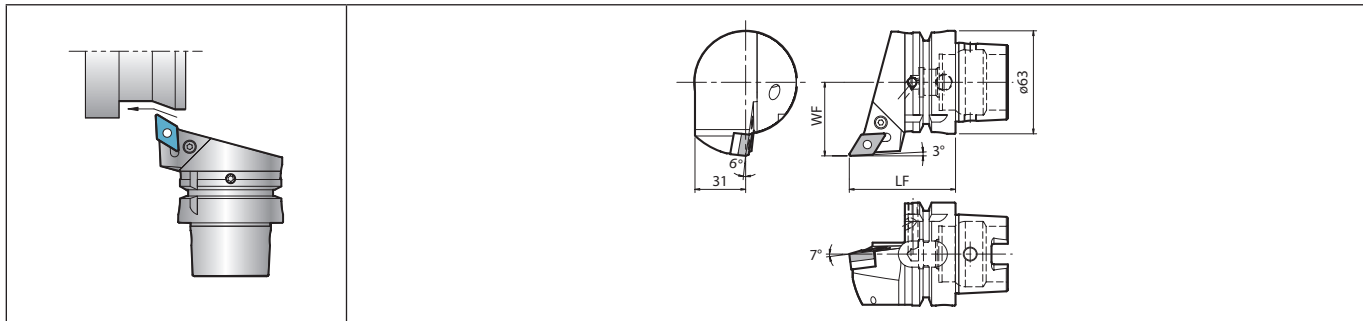
Applicable inserts

Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing	Finishing	Finishing - Medium	Finishing - Medium
Insert								
Chipbreaker type	WF	WP	WE	WQ	PP	GP	PQ	HQ
Page	B16	B16	B16	B16	B16	B16	B16	B17
Applications	Finishing - Medium	Finishing - Medium	Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing
Insert								
Chipbreaker type	CQ	CJ	TN-V	GS	PG	PS	PT	GT
Page	B17	B17	B17	B17	B17	B18	B18	B18
Applications	Roughing	Roughing	Roughing	Medium	Medium - Roughing	Medium - Roughing	Low carbon steel	Low carbon steel
Insert								
Chipbreaker type	STD	PH	PX	R/L	P/L-25R	Z	XF	XP
Page	B18	B18	B19	B23	B23	B23	B19	B19
Applications	Low carbon steel	Low carbon steel	Finishing - Medium	Medium - Roughing	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	XQ	XS	SK	FP-TK	TK	MQ	MS	MU
Page	B19	B19	B19	B19	B20	B20	B20	B20
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron / Hard materials
Insert								
Chipbreaker type	KQ	KG	KH	C	ZS	GC	No CB	Ceramic
Page	B21	B21	B21	B22	B22	B22	B22	B113
Applications	Non-Ferrous Metals	Non-Ferrous Metals	Non-Ferrous Metals	Heat-resistant alloys	Heat-resistant alloys	Heat-resistant alloys	Hard materials / Cast iron	Hard materials
Insert								
Chipbreaker type	P/L-A3	AH	PCD	SQ	SG	P/L-SX	CBN	HH
Page	B23	B23	C34	B20	B21	B21	C8	C9
Applications	Hard materials	Hard materials						
Insert								
Chipbreaker type	HL	HD						
Page	C9	C9						



Tools for turning mill

PDJN (External turning / External copying)



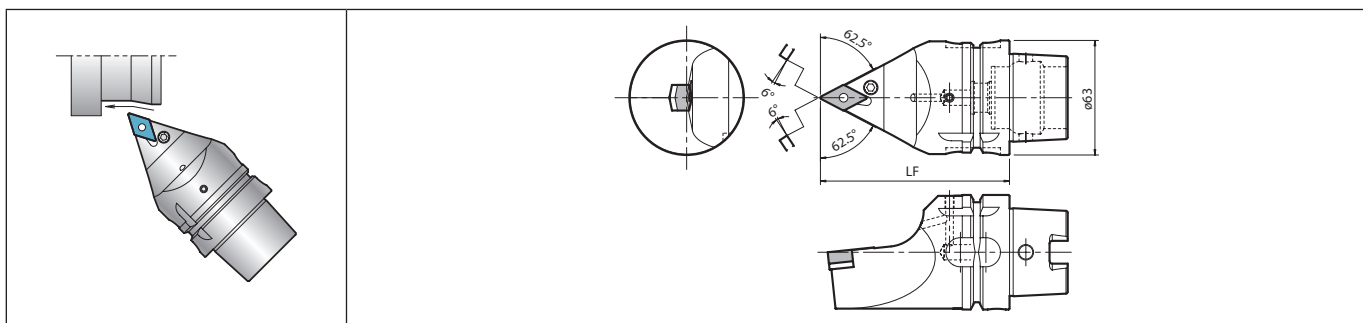
Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts								Applicable inserts
	R	L	LF	WF	Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Shim*	Wrench	
T63H- PDJN%-DX15	●	●	65	45	CL63-1	LL-3N	LS-2N	PC-2	LSP-2	LD-42	LD-42-20	LW-3	DN□A1504..., DN□G1504... DN□M1504...

When using inserts whose corner-R(RE) is greater than 1.6 mm, please purchase a shim* and use it in order to prevent workpiece and shim from interfering each other.

PDNN (External turning / External copying)



Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts								Applicable inserts
	N	LF	LF	WF	Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Shim*	Wrench	
T63H- PDNNN-H15 PDNNN-L15	●	●	100	140	CL63-1	LL-3N	LS-2N	PC-2	LSP-2	LD-42	LD-42-20	LW-3	DN□A1504..., DN□G1504... DN□M1504...

When using inserts whose corner-R(RE) is greater than 1.6 mm, please purchase a shim* and use it in order to prevent workpiece and shim from interfering each other.

● : Standard item

N24

Applicable inserts

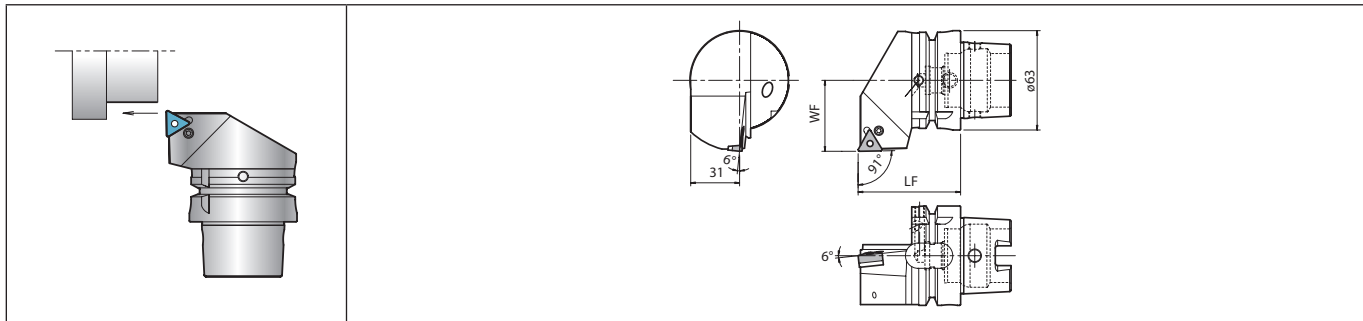
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Finishing - Medium	Medium	Medium - Roughing
Insert								
Chipbreaker type	PP	GP	PQ	HQ	CQ	CJ	TN-V	GS
Page	B24	B24	B24	B25	B25	B25	B25	B25
Applications	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Roughing	Roughing	Roughing	Medium
Insert								
Chipbreaker type	PG	PS	PT	GT	STD	PH	PX	R/L
Page	B26	B26	B26	B26	B27	B27	B27	B31
Applications	Low carbon steel	Low carbon steel	Low carbon steel	Low carbon steel	Finishing - Medium	Large ap	Medium - Roughing	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	XF	XP	XQ	XS	SK	R-LD	FP-TK	TK
Page	B27	B27	B27	B27	B28	B28	B28	B28
Applications	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron
Insert								
Chipbreaker type	MQ	MS	MU	KQ	KG	KH	C	ZS
Page	B28	B29	B29	B30	B30	B30	B30	B30
Applications	Cast iron	Cast iron	Cast iron / Hard materials	Non-Ferrous Metals	Non-Ferrous Metals	Non-Ferrous Metals	Heat-resistant alloys	Heat-resistant alloys
Insert								
Chipbreaker type	GC	No CB	Ceramic	¾-A3	AH	PCD	SQ	SG
Page	B30	B31	B114	B31	B31	C35	B29	B29
Applications	Hard materials / Cast iron	Hard materials	Hard materials	Hard materials				
Insert								
Chipbreaker type	CBN	HH	HL	HD				
Page	C10	C11	C11	C11				

N



Tools for turning mill

PTGN (External turning)



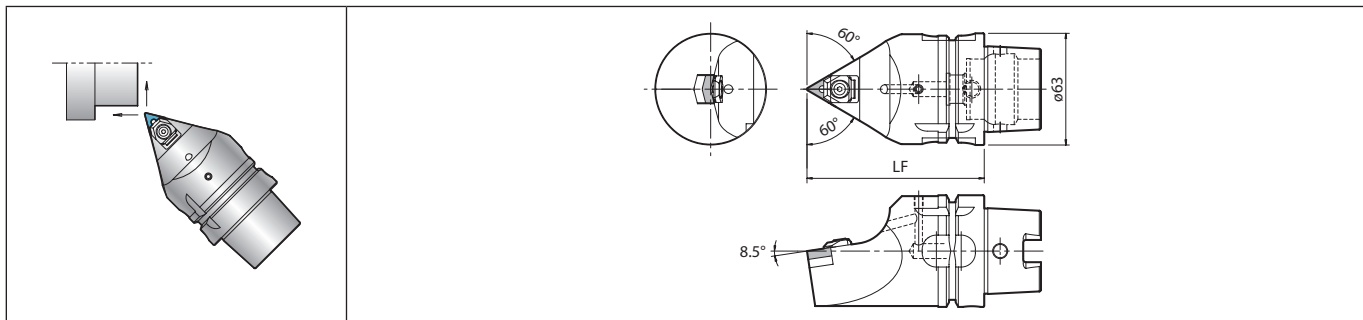
Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts								Applicable inserts
	R	L	LF	WF	Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Shim*	Wrench	
T63H- PTGN ^{N/L} -DX16	●	●	65	45	CL63-1	LL-1N	LS-1N	PC-1	LSP-1	LT-32N	LT-32N-20	FH-2.5	TN□A1604..., TN□G1604... TN□M1604...

When using inserts whose corner-R(RE) is greater than 1.6 mm, please purchase a shim* and use it in order to prevent workpiece and shim from interfering each other.

WTEN (External turning / External facing)



Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts						Applicable inserts
	N	LF	Clamp set	Coolant pipe	Nut	Shim pin	Shim	Spacer	Wrench		
T63H- WTENN-H16	●	100	WCS-1N	CL63-1	WN-1	WP-1S	WTN-33	WSP-1	LW-3	TN□A1604..., TN□G1604... TN□M1604...	
WTENN-L16	●	140									

● : Standard item

N26

Applicable inserts

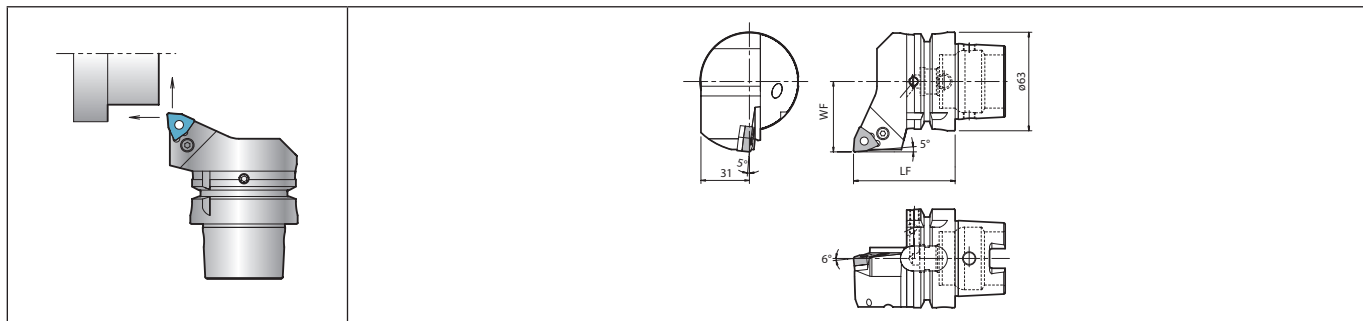
Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing - Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing
Insert								
Chipbreaker type	PP	GP	PQ	HQ	CQ	GS	PG	PS
Page	B39	B39	B39	B39	B39	B40	B40	B40
Applications	Medium - Roughing	Medium - Roughing	Roughing	Roughing	Roughing	Finishing	Finishing	Finishing - Medium
Insert								
Chipbreaker type	PT	GT	STD	PH	PX	7/8-SSF	7/8-S	7/8-B
Page	B40	B40	B40	B41	B41	B45	B45	B45
Applications	Medium - Roughing	Medium - Roughing	Low carbon steel	Low carbon steel	Low carbon steel	Low carbon steel	Finishing - Medium	Large ap
Insert								
Chipbreaker type	7/8-C	7/8-25R	XF	XP	XQ	XS	SK	R-LD
Page	B46	B46	B41	B41	B41	B41	B42	B42
Applications	Medium - Roughing	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel	Cast iron	Cast iron
Insert								
Chipbreaker type	FP-TK	TK	MQ	MS	MU	7/8-ST	KQ	KG
Page	B42	B42	B42	B42	B42	B43	B43	B43
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron / Hard materials	Non-Ferrous Metals	Non-Ferrous Metals
Insert								
Chipbreaker type	KH	C	ZS	GC	No CB	Ceramic	7/8-A3	AH
Page	B43	B43	B43	B43	B44	B118	B44	B44
Applications	Non-Ferrous Metals	Heat-resistant alloys	Hard materials / Cast iron					
Insert								
Chipbreaker type	PCD	SG	CBN					
Page	C36	B43	C13					

N










Tools for turning mill

PWLN (External turning / External facing)

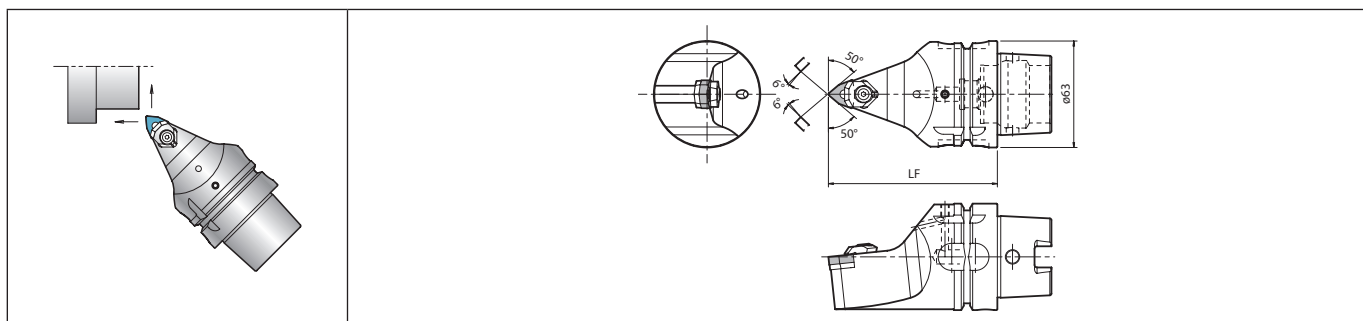


Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.







Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts							Applicable inserts
	R	L	LF	WF	Coolant pipe	Lever	Lock screw	Punch	Shim pin	Shim	Wrench	
												
T63H- PWLN%-L-DX08	●	●	65	45	CL63-1	LL-2N	LS-2N	PC-2	LSP-2	LW-42N	LW-3	WN□A0804..., WN□G0804... WN□M0804...

WWMN (External turning / External facing)



































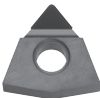


Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts						Applicable inserts
	N	LF	Clamp set	Coolant pipe	Nut	Shim pin	Shim	Wrench			
											
T63H- WWMN-H08 WWMN-L08	●	●	100 140	WCS-8	CL63-1	WN-1	WP5X15	WWN-42	LW-3	WN□A0804..., WN□G0804... WN□M0804...	

● : Standard item

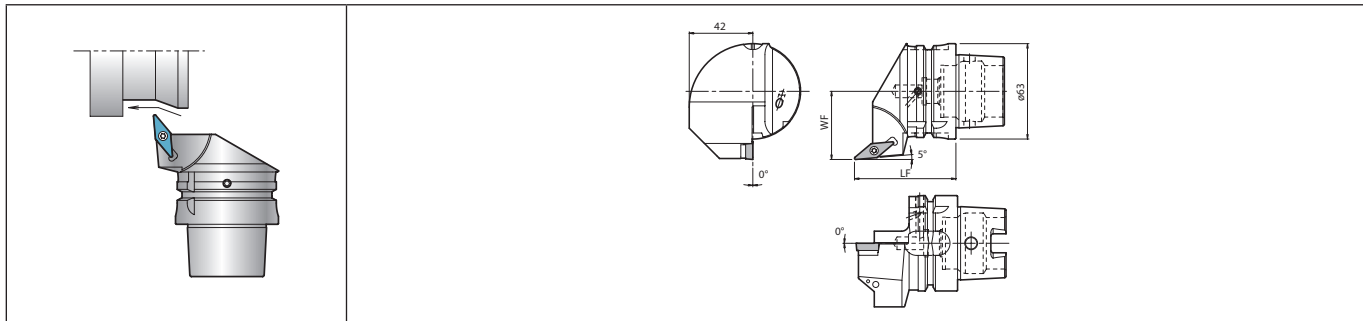
N28

Applicable inserts

Applications	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Finishing	Finishing	Finishing - Medium	Finishing - Medium
Insert								
Chipbreaker type	WF	WP	WE	WQ	PP	GP	PQ	HQ
Page	B50	B50	B50	B50	B50	B50	B50	B51
Applications	Finishing - Medium	Finishing - Medium	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Medium - Roughing	Roughing
Insert								
Chipbreaker type	CQ	CJ	GS	PG	PS	PT	GT	STD
Page	B51	B51	B51	B51	B51	B51	B52	B52
Applications	Roughing	Low carbon steel	Low carbon steel	Low carbon steel	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys	Stainless steel / Heat-resistant alloys
Insert								
Chipbreaker type	PH	XP	XQ	XS	TK	MQ	MS	MU
Page	B52	B52	B52	B52	B52	B53	B53	B53
Applications	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Cast iron	Non-Ferrous Metals
Insert								
Chipbreaker type	KQ	KG	KH	C	ZS	GC	No CB	AH
Page	B53	B53	B53	B54	B54	B54	B54	B54
Applications	Non-Ferrous Metals	Heat-resistant alloys	Hard materials / Cast iron					
Insert								
Chipbreaker type	PCD	SG	CBN					
Page	C38	B53	C15					









SVLB (External turning / External copying)

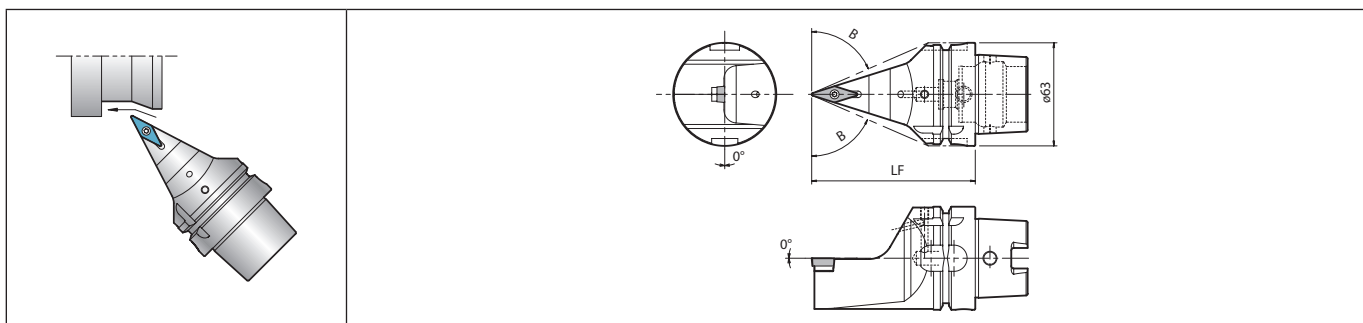


Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.







Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts						Applicable inserts
	R	L	LF	WF	Coolant pipe	Screw	Shim screw	Shim	Wrench	Wrench	
											
T63H- SVLB ⁵ /-DX16N	●	●	65	45	CL63-1	SB-40125TRN	SS-4N	SVN-32N	LW-4	FT-15	VB□T1604..., VB□W1604... VC□T1604...

SVVB (External turning / External copying)



Toolholder dimensions








Description	Availability		Dimension (mm)		Spare parts						Applicable inserts
	N	LF	B (°)	LF	WF	Screw	Shim screw	Shim	Wrench	Wrench	
											
T63H- SVVBN-H16N	●	100	66.5	45	CL63-1	SB-40125TRN	SS-4N	SVN-32N	LW-4	FT-15	VB□T1604..., VB□W1604... VC□T1604...
SVVBN-L16N	●	140	72.5								

Angle B show the interference angle from the line of cutting edge and toolholder.

● : Standard item

N30

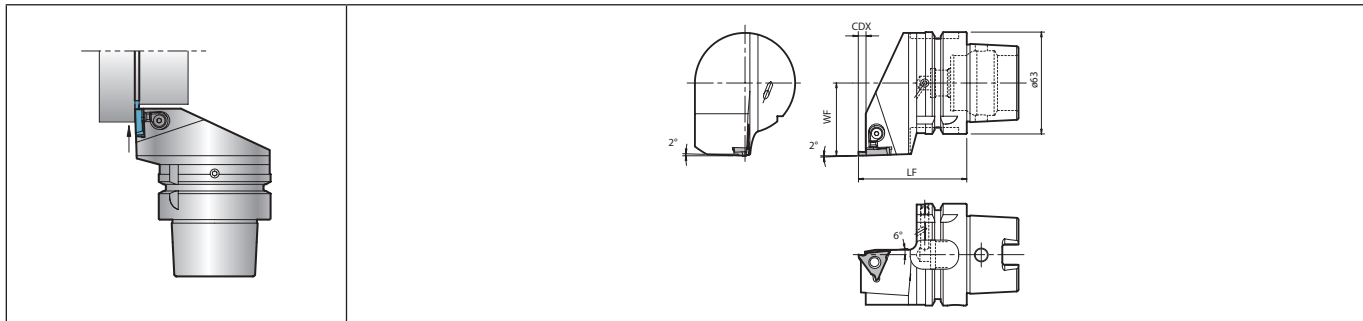
Applicable inserts

Applications	Finishing	Finishing	Finishing	Finishing - Medium	Finishing - Medium	Non-Ferrous Metals	Hard materials
Insert							
Chip Breaker Type	PP	GP	VF	HQ	%-Y	PCD	CBN
Page	B97, B100	B97	B97	B97	B99	C49	C26



Tools for turning mill

KGBA (Shallow grooving)



Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

Toolholder dimensions

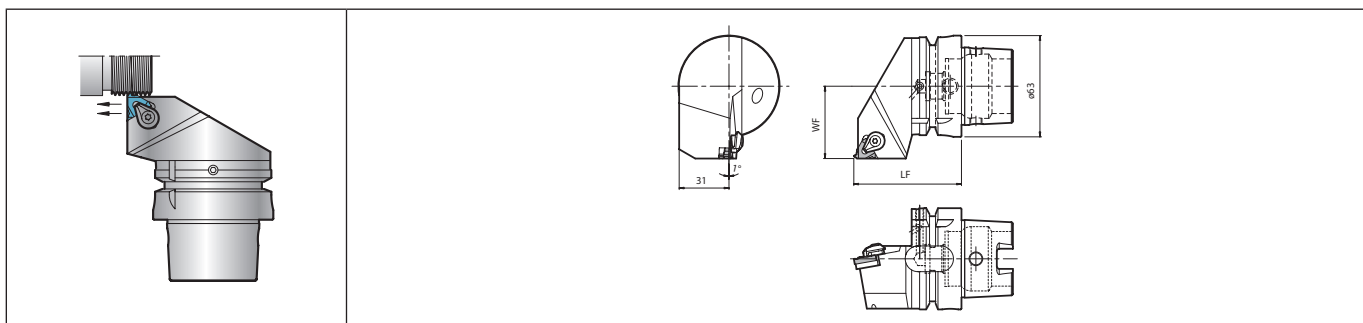
Description	Availability		Dimension (mm)			Spare parts			Applicable inserts G6~G12
	R	L	LF	WF	CDX	Clamp set	Coolant pipe	Wrench	
	T63H- KGBA ^{R/L} -16 KGBA ^{R/L} -22-15 KGBA ^{R/L} -22-25 KGBA ^{R/L} -22-35	●	●	67	45	2.5	LGBA-16LS	CL63-1	
●	●	4	GBA43 ^{R/L} type						
●	●	4.5	LGBA-22LS						
●	●	5.5							

CDX shows the distance from the toolholder to the cutting edge. Available Groove Depth : „CDX“ of Insert.

KTN (External threading)



Tools for turning mill



Right-hand shown | Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder.

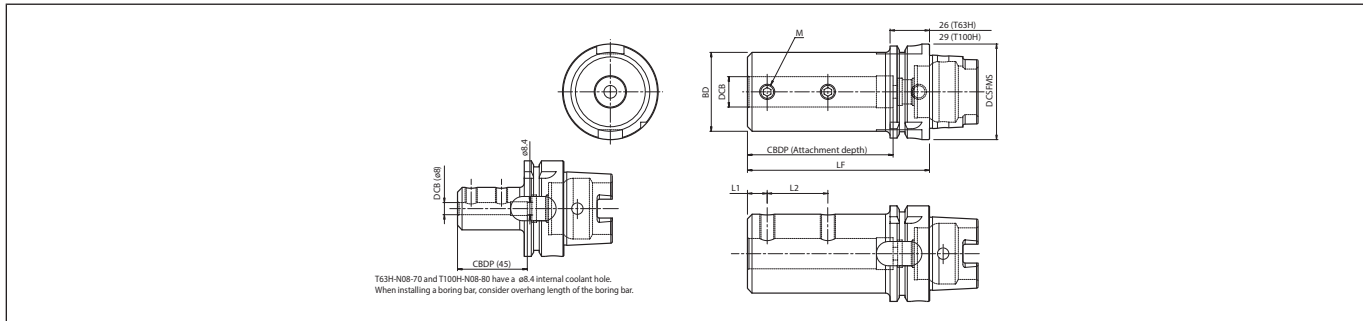
Toolholder dimensions

Description	Availability		Dimension (mm)		Spare parts						Applicable inserts J6, J8, J10 J12, J14, J16 J18, J20
	R	LF	WF	Clamp set	Clamp set	Coolant pipe	Shim screw	Shim	Wrench	Wrench	
	T63H- KTNR-16 KTNR-22	●	67	45	CPS-5S	-	CL63-1	SP3X8	TN-32	-	
●	-	CPS-6S			TN-43	LW-3			22ER type		

● : Standard item

N32

Toolholder for boring bar / drill

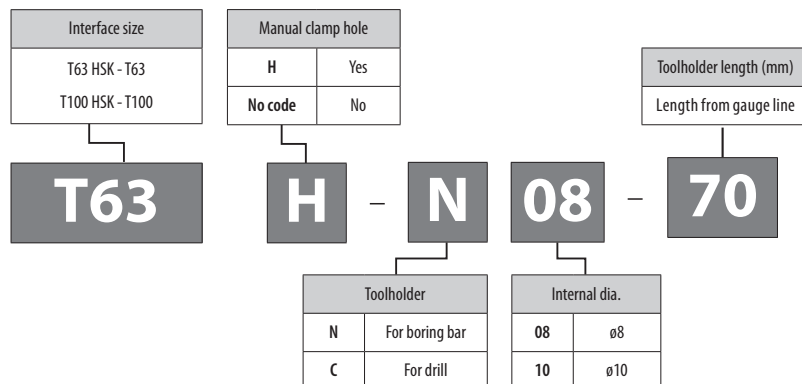


Toolholder dimensions

Description	Availability		Dimension (mm)						M	Spare parts			Remarks		
	N	DCB	DCSFMS	BD	LF	CBDP	L1	L2		Screw	Coolant pipe	Wrench			
T63H- N08-70 N10-80 N12-90 N16-100 N20-120 N25-140 N32-160	●	8	63	28	70	45	9	20	M8	HS8X10	CL63-1	LW-4	For Boring Bar		
	●	10		35	80	55		22		HS8X12					
	●	12		42	90	65		11	30	M10		HS10X16		LW-5	
	●	16		48	100	75	M12					HS12X16		LW-6	
	●	20		52	120	95				40		HS12X12			
	●	25		56	140	115	13			50		HS12X12			
	●	32		56	160	135	60	60							
T63H- C20-75 C25-85 C32-90 C40-100	●	20	63	52	75	50	13	22	M10	HS10X16	CL63-1	LW-5	*For Drill		
	●	25		56	85	58				15				28	M12
	●	32		56	90	62	18	35	M16			HS12X12			
	●	40		68	100	72				18		35		HS16X12	LW-8
T100H- N08-80 N10-90 N12-100 N16-110 N20-130 N25-150 N32-170	●	8	100	28	80	45	9	20	M8	HS8X10	CL100-1	LW-4	For Boring Bar		
	●	10		35	90	55				22				HS8X12	
	●	12		42	100	65		11	30	M10		HS10X16		LW-5	
	●	16		48	110	75	M12					HS12X18			LW-6
	●	20		52	130	95				40		HS12X20			
	●	25		62	150	115	13			50					
	●	32		72	170	135	60	60							
T100H- C20-85 C25-90 C32-95 C40-105	●	20	100	52	85	50	13	22	M10	HS10X16	CL100-1	LW-5	*For Drill		
	●	25		62	90	58				15				20	M16
	●	32		72	95	62	25	25	M16			HS16X20			
	●	32		72	95	62						15			
	●	40		82	105	72	25	25	HS16X20						

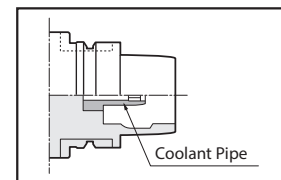
* Shorter than the toolholder for boring bar.

Identification System (For boring bar / Drill)



● : Standard item

Coolant Pipe
Coolant pipe is built into toolholder.

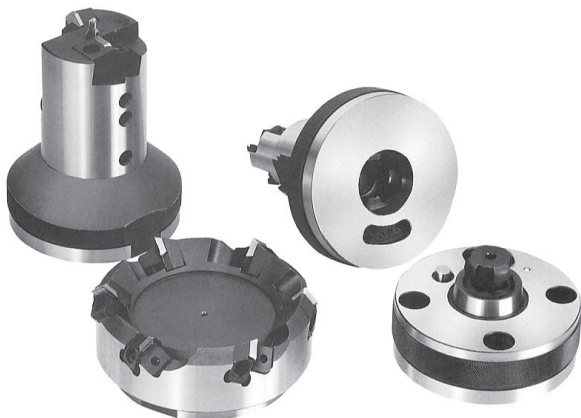


Tools for turning mill

Quick change system

Quick change system of petal-shaped adapter

KQC Series



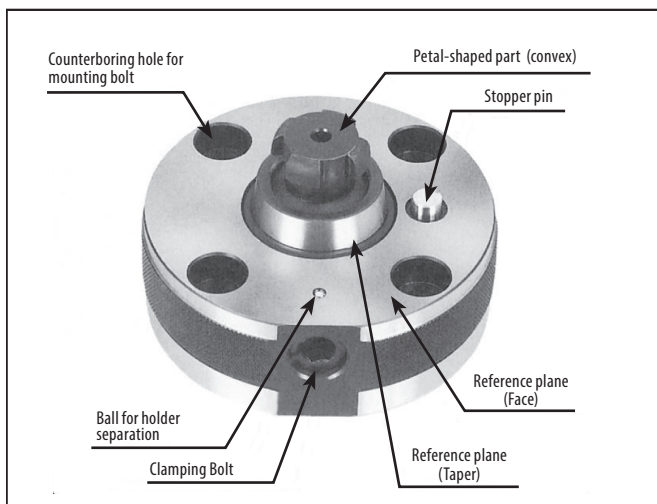
Features

1. The way to assemble holder is turn the clamping bolt 1 round.
Tool exchange time is less than 1 minute.
2. Junction of adapter and attachment touch both taper part and face part.
And repeatability is less than 2 μ m.
3. Applicable to various tools.
 - Boring tool (Rough & Fine)
 - Face milling (Min. ϕ 63, Max. ϕ 160 is possible)
 - Centering tool
 - External turning
 - Combination tool
 - Applicable to tools with coolant hole

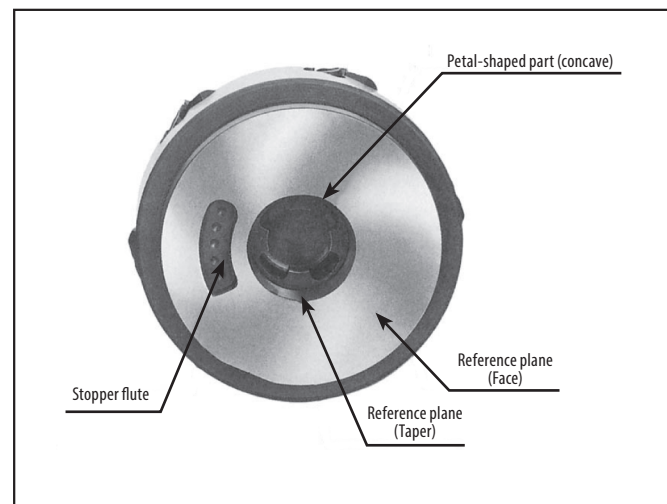
Clamping system

N

Adapter side



Attachment side

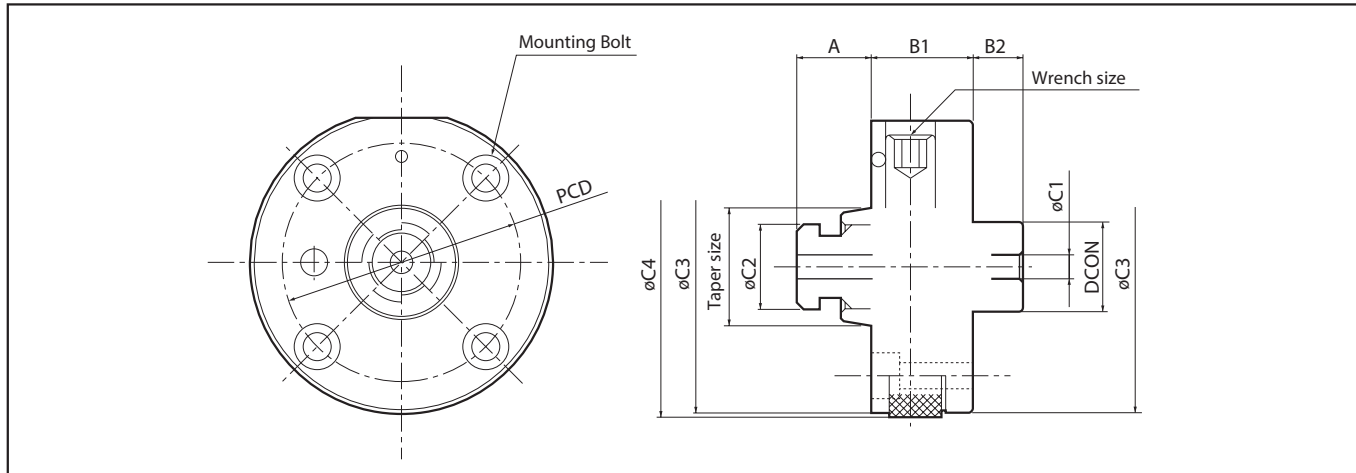


How to use clamping system

1. Combine petal-shaped part of adapter side with that of attachment side and insert the attachment.
2. Turn the attachment 45 degrees until stop (Clockwise direction).
3. Turn the clamp bolt attached to adapter side 1 round and tighten by Hexagon wrench.

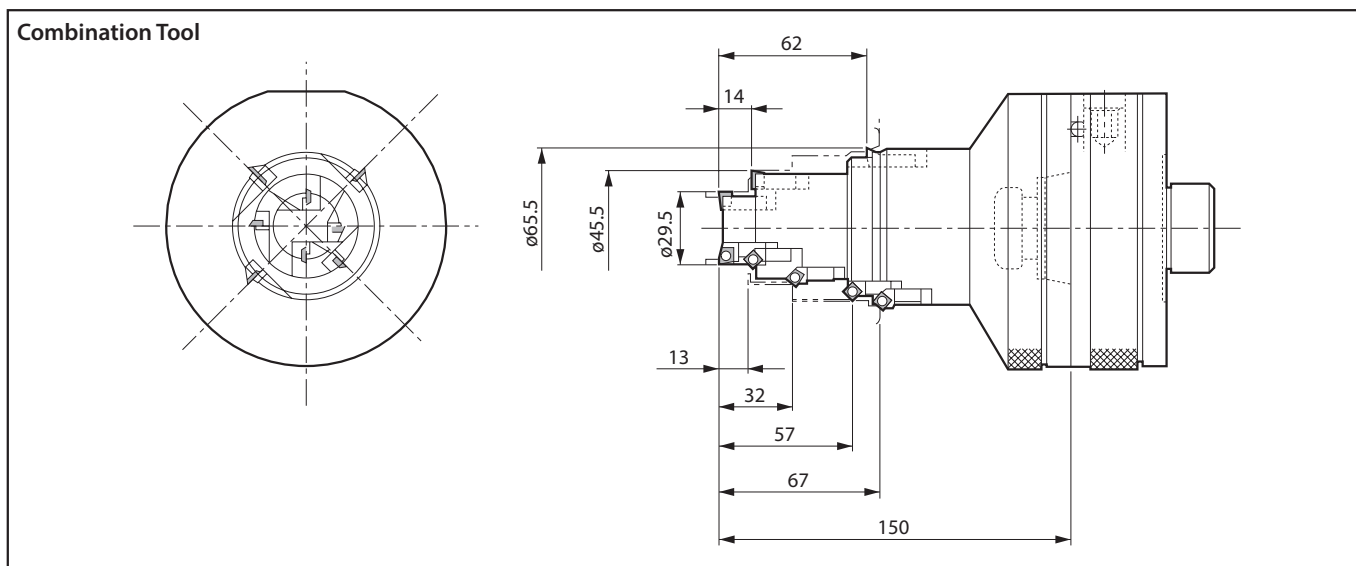
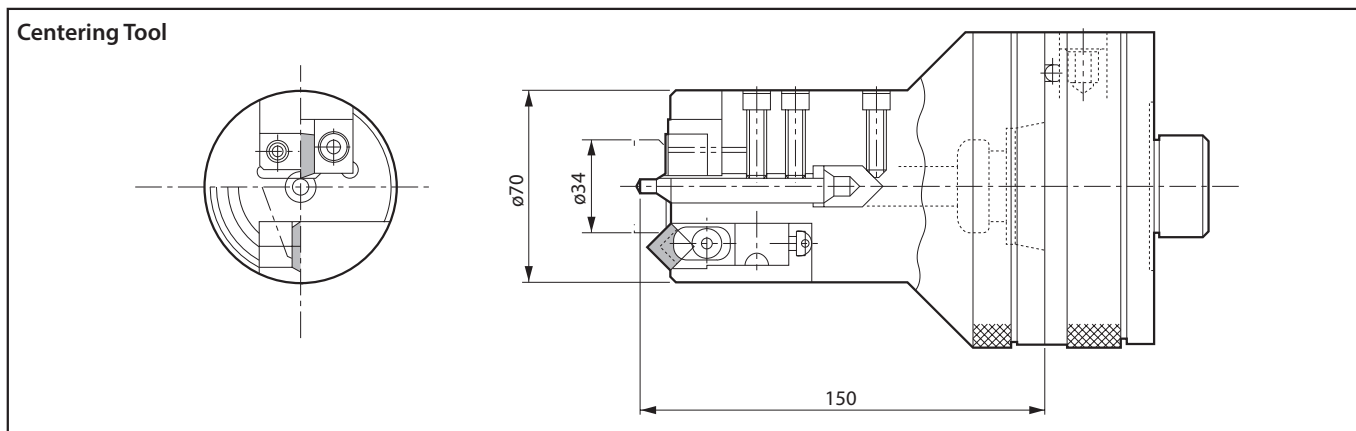
N34

Adapter



Description	Taper size	A	B1	B2	øC1	øC2	øC3	øC4	DCON	PCD	Wrench size	Mounting Bolt
KQC28	ø28	23	25 over	15 over	4	24	60 over	62 over	20	43 over	6	6 ~ 8
KQC35	ø35	27	30 over	15 over	6	28	75 over	77 over	25	54 over	8	8 ~ 10
KQC45	ø45	30	40 over	15 over	8	32	90 over	92 over	25	66 over	10	8 ~ 12
KQC70	ø70	33	50 over	15 over	10	40	130 over	132 over	25	100 over	12	10 ~ 16

Toolholder (attachment) reference example

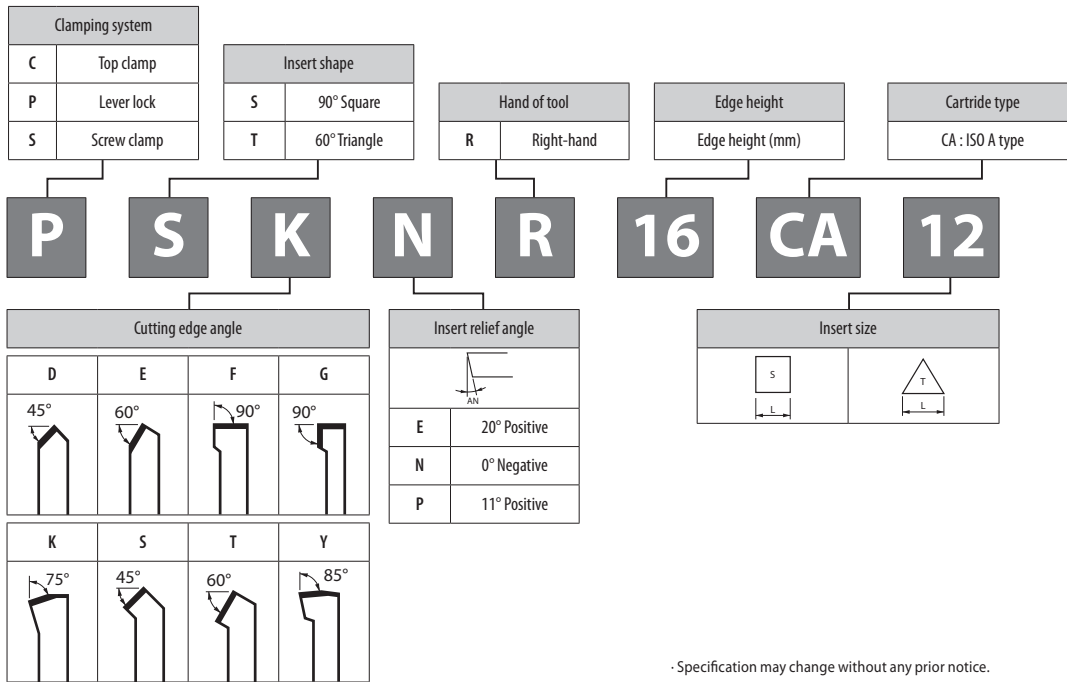


Applicable to various tooling (also with coolant hole)

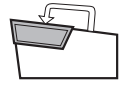
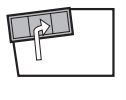
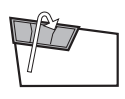


Tools for turning mill

Identification System (Square Shank)



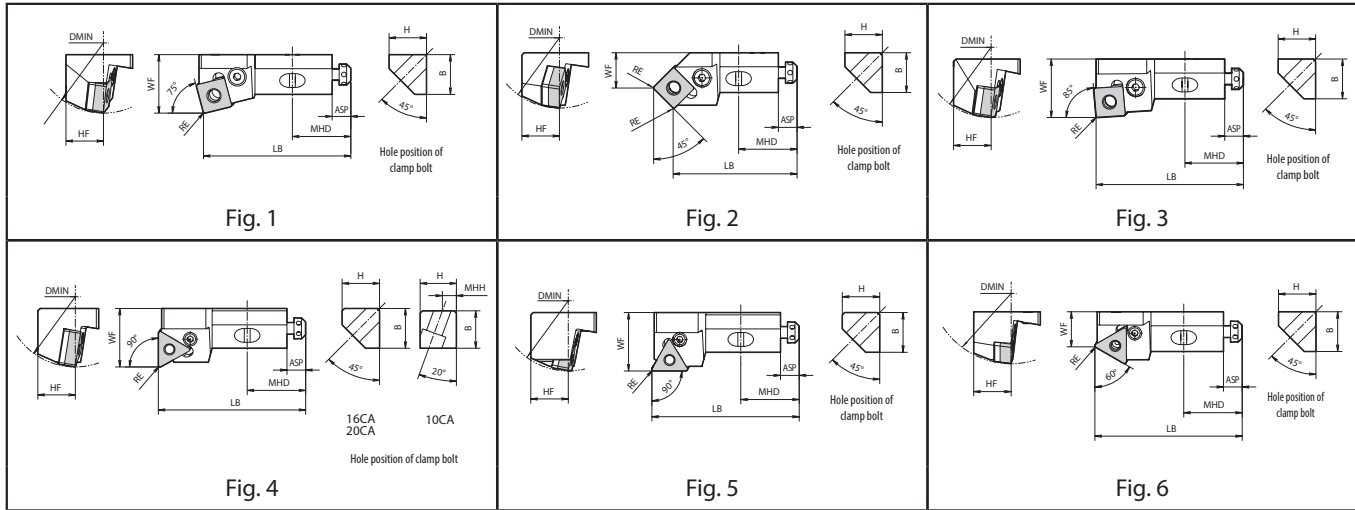
Clamping System

Series	Design	Features	Series	Design	Features
Top Clamp (C)		<ul style="list-style-type: none"> · Rigid clamping · Positive inserts · Low cutting force 	Lever Lock (P)		<ul style="list-style-type: none"> · Easy insert replacement · General purpose
Screw Clamp (S)		<ul style="list-style-type: none"> · Simple mechanism · Fewer parts · Finishing to medium machining 			

Tools for turning mill

Lever Lock

Shape (Right-hand shown)



Toolholder Dimensions

Description	Availability	Dimension (mm)								Std. Corner-R (RE)	Min. Bore Dia. DMIN (mm)	Fig.	Applicable Inserts	* See Page for Applicable Inserts		
		H	B	LB	MHD	ASP	MHH	HF	WF							
PSKNR 16CA12	MTO	16	17	63	25	8	-	16	25	0.8	60	1	SN□A SN□G SN□M	1204..	B34 B37 B117 C12	
PSSNR 16CA12	MTO			53					15			2				
PSYNR 16CA12	MTO			63					25			3				
PTFNR 10CA11	MTO	12.5	11	50	20	8	5	10	14	0.4	40	4	TN□A TN□G	1103..	B44 B45	
	MTO	15.5	16	63	25	8	-	16	25				60	TN□A TN□G	1604..	B39 B46 B118 C13 C36
	MTO	20	19	70	30	10		20	25				70	2204..		
PTGNR 16CA16	MTO	16	17	63	25	8	-	16	25	0.8	60	5	TN□G TN□M	1604..		
PTTNR 16CA16	MTO								15			70				6

* See Page for Applicable Inserts (TN□G2204., TN□M2204.) B39, B40, B41, B43, B46

Spare Parts

Description	Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench	Radial adjustment screw	Axial adjustment screw	Wrench	Axial screw driver	Plate	Clamp Bolt	Wrench
PSKNR 16CA12	LL-2N	LS-2N	LS-42	LSP-2	PC-2	LW-3	HS4X4	AJM5F	LW-2	SW-1.8	SM0816B SM1016B	HH8X25	LW-6
PSSNR 16CA12													
PSYNR 16CA12													
PTFNR 10CA11	LL-03N	LS-03N	-	P-03	-	FH-2	HS4X4	AJM5F	LW-2	SW-1.8	SM0810A SM1010A	HH6X16	LW-5
	16CA16	LL-1N	LS-1N	LT-32N	LSP-1	PC-1	FH-2.5	HSSX5	LW-2.5		SM0816B SM1016B	HH8X25	LW-6
	20CA22	LL-2N	LS-2N	LT-42N	LSP-2	PC-2	LW-3				AJM6	SM0820B SM1020B	
PTGNR 16CA16	LL-1N	LS-1N	LT-32N	LSP-1	PC-1	FH-2.5	HSSX5	AJM5F	LW-2.5	SW-1.8	SM0816B SM1016B	HH8X25	LW-6
PTTNR 16CA16								AJM5F					

Note 1 : Plate is included with different two pieces one set of the size.
MTO : Made to order

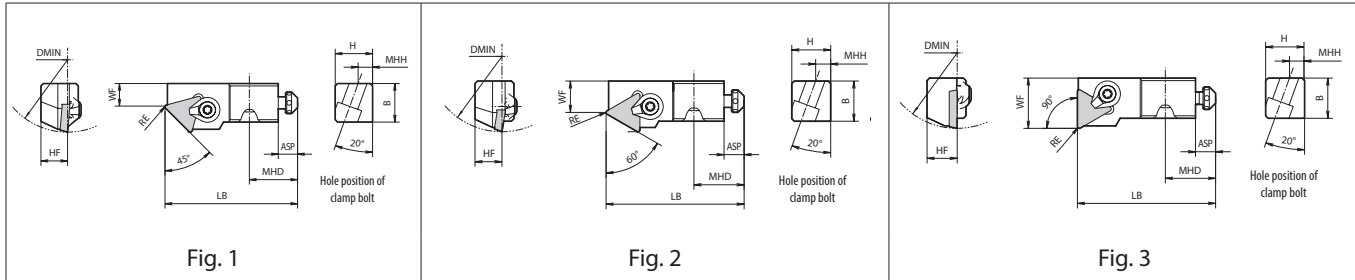


Tools for turning mill

Cartridge

Top Clamp

Shape (Right-hand shown)



Toolholder Dimensions

Description	Availability	Dimension (mm)								Std. Corner-R (RE)	Min. Bore Dia. DMIN (mm)	Fig.	Applicable Inserts	See Page for Applicable Inserts	
		H	B	LB	MHD	ASP	MHH	HF	WF						
CTDPR	10CA11	MT0	12.5	11	50	20	8	5	10	7	0.4	38	1	TP□IN TP□R	B95 B96 B122 C25 C48
	12CA16	MT0	15.5	16	55			6	12	10	0.8	50			
CTEPR	10CA11	MT0	12.5	11	50			5	10	9	0.4	38	2		
	12CA16	MT0	15.5	16	55			6	12	13	0.8	50			
CTFPR	10CA11	MT0	12.5	11	50			5	10	14	0.4	38	3		
	12CA16	MT0	15.5	16	55			6	12	20	0.8	50			

Spare Parts

Description		Clamp Set	Wrench	Radial adjustment screw	Axial adjustment screw	Wrench	Axial screw driver	Plate	Clamp Bolt	Wrench
CTDPR	10CA11	CPS-4V	FT-10	HS4X4	AJMSF	LW-2	SW-1.8	SM0810A SM1010A	HH6X16	LW-5
	12CA16	CPS-5V	FT-15	HS5X5		LW-2.5		SM0812A SM1012A	HH6X20	
CTEPR	10CA11	CPS-4V	FT-10	HS4X4		LW-2		SM0810A SM1010A	HH6X16	
	12CA16	CPS-5V	FT-15	HS5X5		LW-2.5		SM0810A SM1010A	HH6X20	
CTFPR	10CA11	CPS-4V	FT-10	HS4X4		LW-2		SM0810A SM1010A	HH6X16	
	12CA16	CPS-5V	FT-15	HS5X5		LW-2.5		SM0812A SM1012A	HH6X20	

Note 1 : Plate is included with different two pieces one set of the size.

N



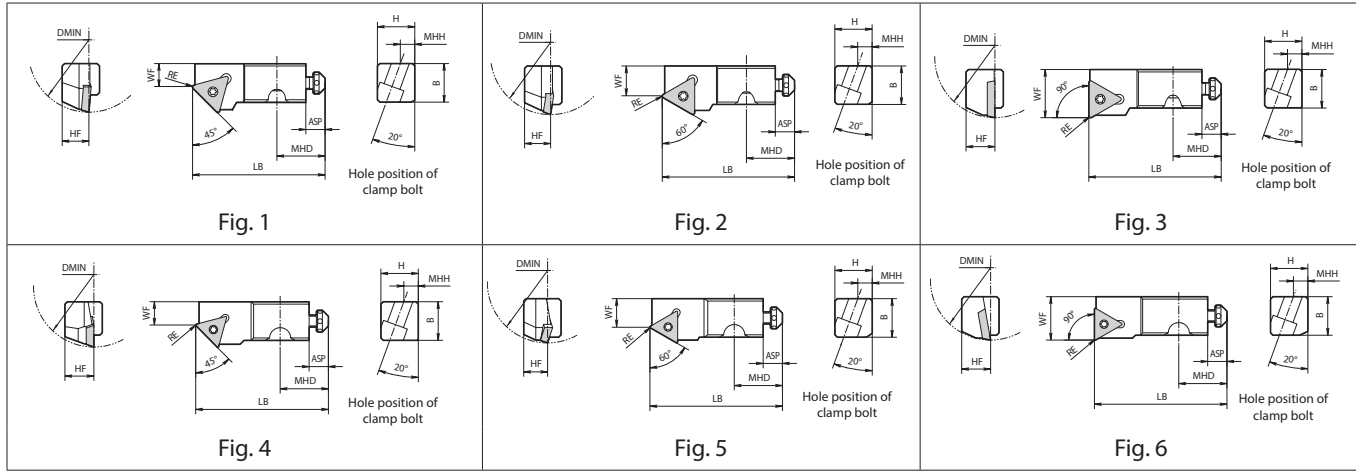
Tools for turning mill

MT0 : Made to order

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Screw Clamp

Shape (Right-hand shown)



Toolholder Dimensions

Description	Availability	Dimension (mm)								Std. Corner-R (RE)	Min. Bore Dia. DMIN (mm)	Fig.	Applicable Inserts	See Page for Applicable Inserts		
		H	B	LB	MHD	ASP	MHH	HF	WF							
STDPR	10CA11	MT0	12.5	11	50	20	8	5	10	7	0.4	38	1	1103..	B88 B94 C23 C46 C47	
	12CA16	MT0	15.5	16	55			6	12	10	0.8	50				
STEPR	10CA11	MT0	12.5	11	50			5	10	9	0.4	38	2	TP□H TP□T		1103..
	12CA16	MT0	15.5	16	55			6	12	13	0.8	50		TPGB		1603..
STFPR	10CA11	MT0	12.5	11	50			5	10	14	0.4	38	3	1103..		
	12CA16	MT0	15.5	16	55			6	12	20	0.8	50		1603..		
STDER	12CA13	MT0	15.5	16	55	20	8	6	12	10	0.4	50	4	TEGW	1303..	-
STEER	12CA13	MT0								12			5			
STFER	12CA13	MT0								18			6			

Spare Parts

Description		Clamp Screw	Wrench	Radial adjustment screw	Axial adjustment screw	Wrench	Axial screw driver	Plate	Clamp Bolt	Wrench
STDPR	10CA11	SB-3TR	FT-10	HS4X4	AJM5F	LW-2	SW-1.8	SM0810A SM1010A	HH6X16	LW-5
		12CA16	SB-4TR	FT-15		HS5X5		LW-2.5	SM0812A SM1012A	
STEPR	10CA11	SB-3TR	FT-10	HS4X4		LW-2		SM0810A SM1010A	HH6X16	
		12CA16	SB-4TR	FT-15		HS5X5		LW-2.5	SM0812A SM1012A	
STFPR	10CA11	SB-3TR	FT-10	HS4X4		LW-2		SM0810A SM1010A	HH6X16	
		12CA16	SB-4TR	FT-15		HS5X5		LW-2.5	SM0812A SM1012A	
STDER	12CA13	SB-3080TR	FT-10	HS4X4	AJM5F	LW-2	SW-1.8	SM0812A SM1012A	HH6X20	LW-5
STEER	12CA13									
STFER	12CA13									

Note 1 : Plate is included with different two pieces one set of the size.

MT0 : Made to order



Tools for turning mill

