

KPK series



Unique design for superior performance in cut-off operations

Easy insert replacement

Strong clamping mechanism for added safety and security

Long tool life and stable machining with unique chipbreaker designs

Jet coolant-through styles available (JCT)

 **NEW**

Toolholder (blade type, shank type) added to the lineup



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High-performance cut-off solutions

KPK series

Easy insert replacement reduces downtime. High performance, long tool life and stable machining with strong clamping mechanism.

CUT-OFF SOLUTION

During cut-off operations, insert cutting widths of only a few millimeters are used to cut to the center of the workpiece.

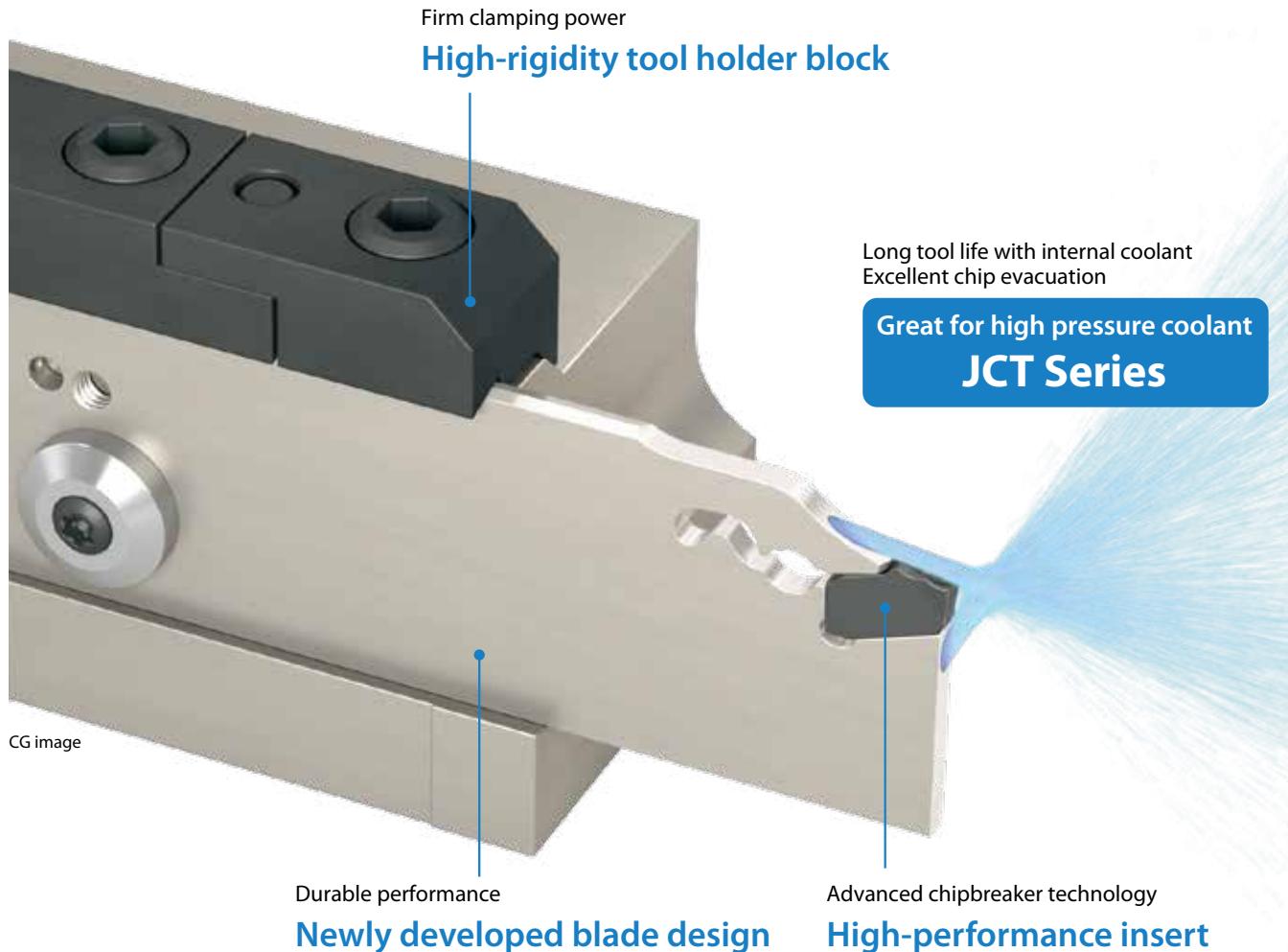
Cut-off process is typically a bottleneck process or final process, requiring a trouble-free machining environment.

Challenges

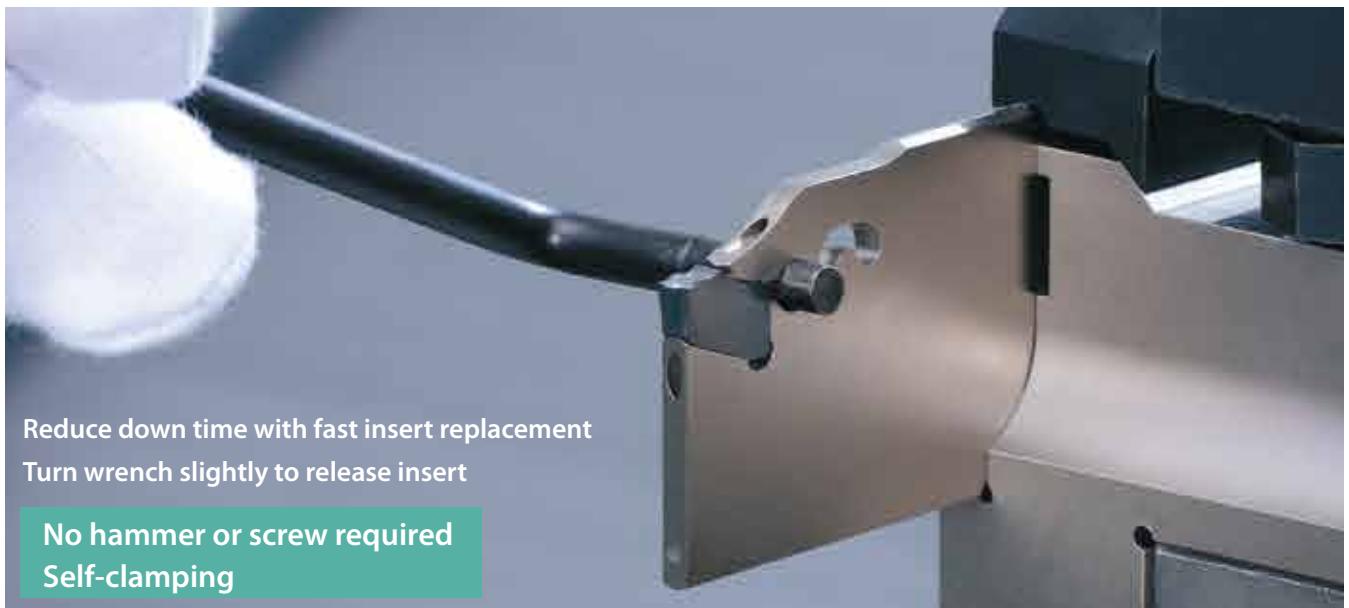
The shape of the workpiece can be difficult to secure, thus creating rigidity and chattering issues. Big load due to low/zero cutting speed at the workpiece rotation center. Tool tend to be broken easily by chip troubles.

SOLUTION

The KPK Series features new insert, blade, and tool block designs for rigid, safe, and secure cut-off operations.

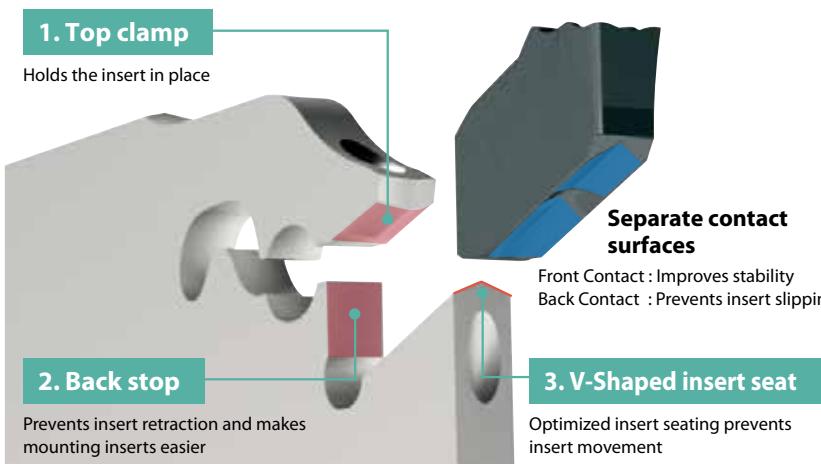


1 Easy insert replacement

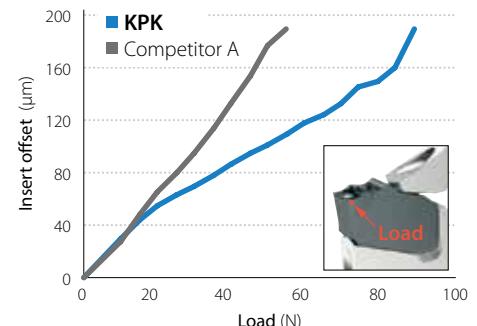


2 Firm insert clamp ensures added safety and security

The firmly secured insert uses three contact surfaces to eliminate sliding or chattering

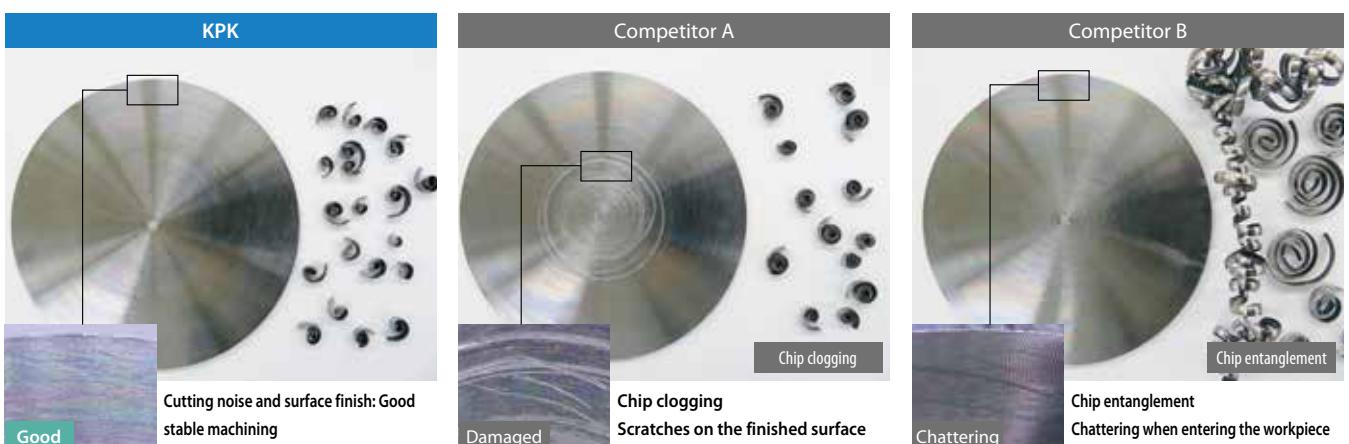


Insert deviation comparison (internal evaluation)



Measured tool: KPKB32-3 PKM30N-025PM

Cutting performance comparison (Internal evaluation)



Cutting conditions : $n = 320 \text{ min}^{-1}$ (constant), $V_c = \sim 100 \text{ m/min}$, $f = 0.12 \text{ mm/rev}$, Wet (External coolant) Workpiece: 34CrMo4 ($\varnothing 100$) Cutting width: 3 mm (PM chipbreaker)

3

Unique chipbreaker for long tool life and stable machining

Advanced chipbreaker technology inherited from KGD lineup provides excellent chip control



General use
PM Chipbreaker

Insert grade

For steel: PR1625
For stainless steel: PR1535
For cast iron and aluminum: GW15

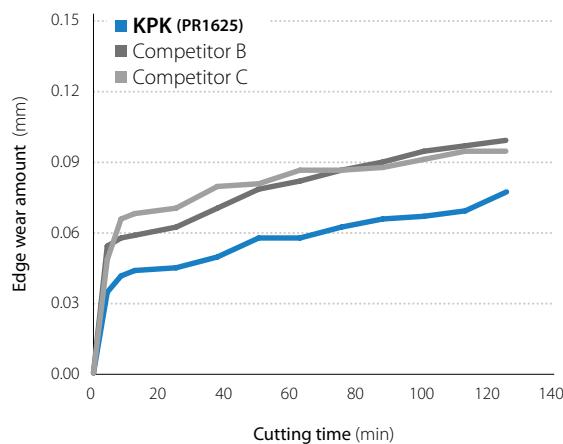


For tough edge and
high-feed machining
PH Chipbreaker

Insert grade

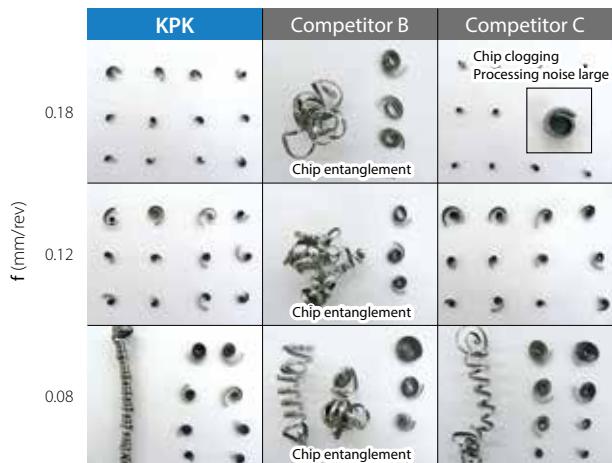
For steel: PR1625
For stainless steel: PR1535

Wear resistance comparison (internal evaluation)



Cutting conditions : $n = 955 \text{ min}^{-1}$ (constant), $V_c = \sim 150 \text{ m/min}$
 $f = 0.12 \text{ mm/rev}$ ($\sim \phi 10$: $f = 0.05 \text{ mm/rev}$) Wet (External coolant)
Workpiece : 15CrMo4 ($\phi 50$) cutting width: 3 mm (PM chipbreaker)

Chip control comparison (internal evaluation)



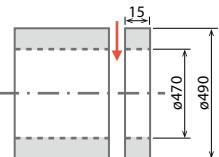
Cutting conditions : $n = 780 \text{ min}^{-1}$ (constant), $V_c = \sim 120 \text{ m/min}$, wet (External coolant)
Workpiece : 15CrMo4 ($\phi 50$) cutting width: 3 mm (PM chipbreaker)

SOLUTION 1

Tool life x1.3
Stable chip curl

Rings
100Cr6

External coolant



KPK

34 pcs/corner



Competitor D

25 pcs/corner



Cutting Conditions : $n = 90 \text{ min}^{-1}$ (Constant), $V_c = \sim 140 \text{ m/min}$, $f = 0.06 \text{ mm/rev}$,
Wet (External Coolant) KPKB32-3 PKM30N-025PM PR1625

(User evaluation)

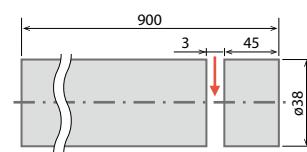
SOLUTION 2

Machining efficiency double in stainless steel
Achievement of stable machining

Adaptor

X5CrNiMo17-12-2

External coolant



KPK

Low vibration and good cutting noise

KPK

Cutting Conditions : $n = 1,450 \text{ min}^{-1}$ (Constant), $V_c = \sim 173 \text{ m/min}$, $f = 0.05 \text{ mm/rev}$,
(Pecking: 1 mm pitch), Wet (External coolant) KPKB32-3 PKM30N-025PM PR1535



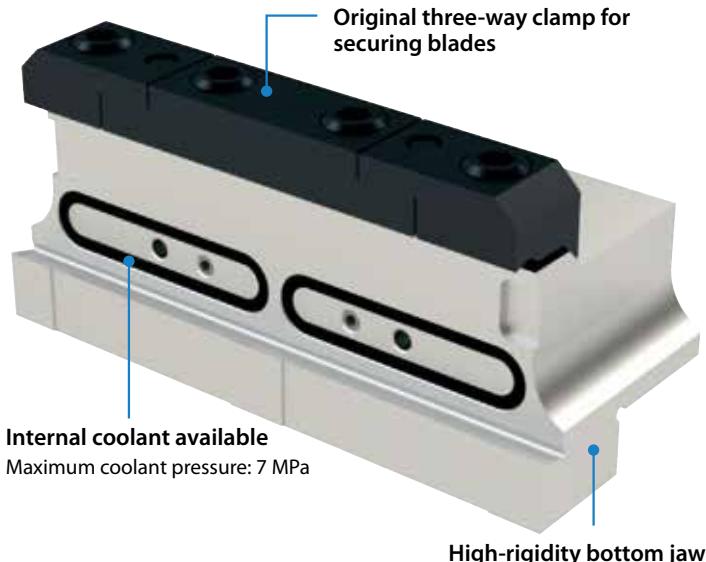
Competitor E

(User evaluation)

4

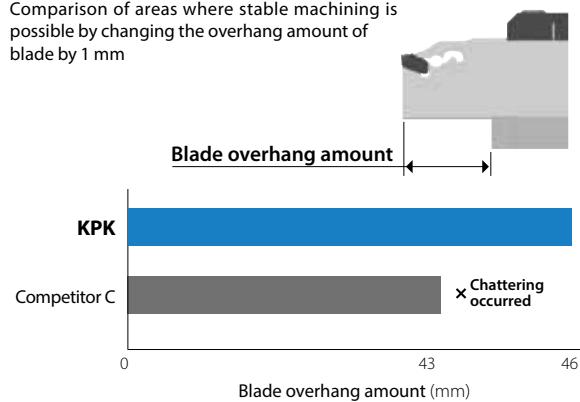
Rigid tool holder block prevents chattering and provides internal coolant

KPKTB-JCT



Chatter resistance comparison (internal evaluation)

Comparison of areas where stable machining is possible by changing the overhang amount of blade by 1 mm



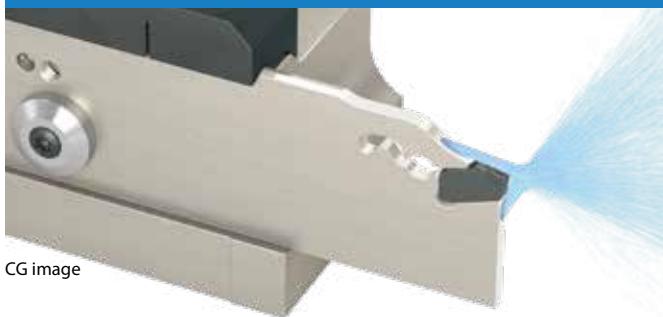
Cutting Conditions : $n = 650 \text{ min}^{-1}$ (Constant), $V_c = \sim 100 \text{ m/min}$, $f = 0.12 \text{ mm/rev}$
Wet (Internal Coolant : Normal pressure) Workpiece : SCM 435 ($\phi 50$), cutting width: 3 mm (PM chipbreaker)

Note

KTKTB type is compatible with internal coolant with an optional internal connector. (~ 1 MPa)

*Refer to page 11 for the supply method (Type C).

JCT series supports internal coolant. Improved tool life even under normal pressure

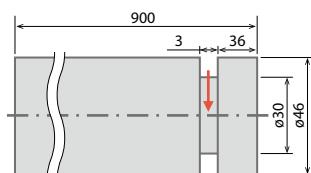


KPKB-JCT maximum overhang length while using internal coolant is as follows:
Size 26: 40 mm Size 32: 59 mm

SOLUTION 3

Double tool life
Reduce fracturing

Machine part
X5CrNi1810



KPK

60 pcs/corner (Stable)

Competitor F

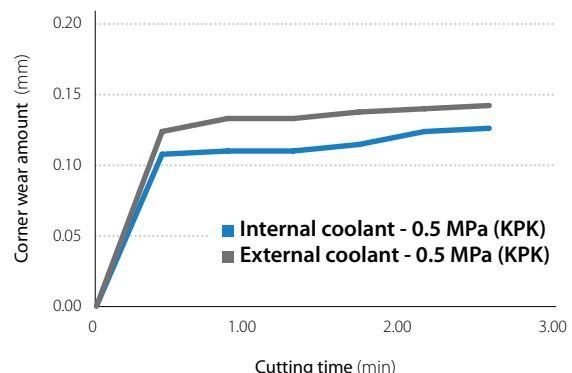
30 pcs/corner (Unstable)

Cutting conditions : $V_c = 65 \text{ m/min}$ (Constant), $f = 0.06 \text{ mm/rev}$, Wet (Internal coolant 3.5MPa) KPKB32-3JCT PKM30N-025PM PR1535

(User evaluation)

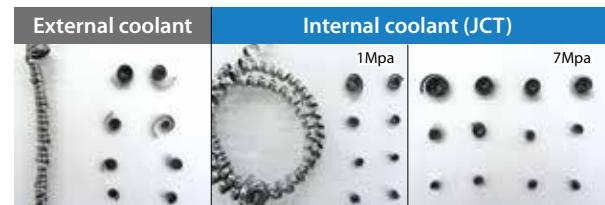
Coolant is supplied directly to the rake and the flank face of the cutting edge for increased tool life and improved chip control

Wear resistance comparison (internal evaluation)



Cutting Conditions : $V_c = 30 \text{ m/min}$ (Constant), $f = 0.1 \text{ mm/rev}$, Machining depth : 10 mm, wet, workpiece : Inconel 718 ($\phi 100$) Cutting width: 3 mm (PM chipbreaker)

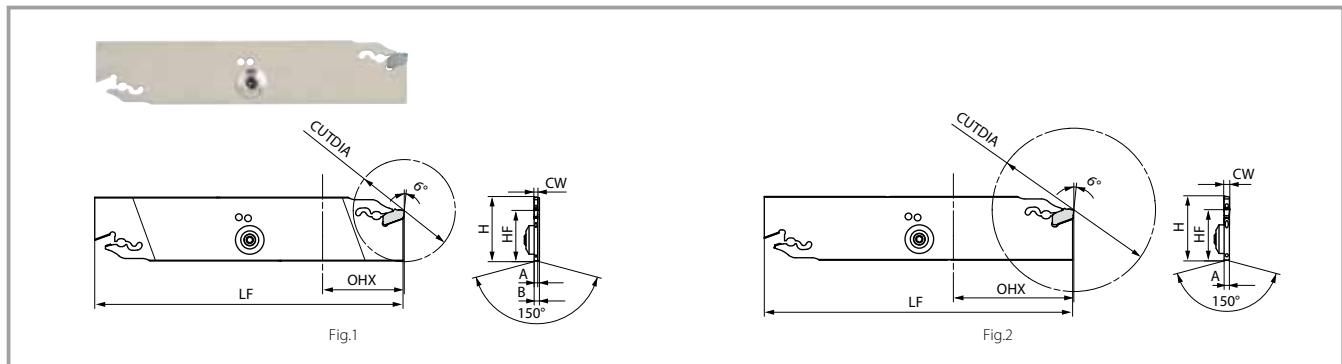
Chip control comparison (internal evaluation)



Cutting conditions : $n = 780 \text{ min}^{-1}$ (Constant), $V_c = 120 \text{ m/min}$, $f = 0.08 \text{ mm/rev}$, Wet, workpiece: 15CrMo4 ($\phi 50$) cutting width: 3 mm (PM chipbreaker)

Blades

KPKB - JCT with coolant holes



Blade dimensions

Max. coolant pressure: ~7 MPa

Description	Availability	Cutting dia.	Dimensions (mm)					Edge width (mm)	Drawing	Parts				Applicable inserts	Applicable toolholder block				
			*H	HF	B	LF	A			Insert wrench	Coolant plug	Screw	Wrench						
KPKB	26-1JCT	●	35	26	21.4	110	1.4	1.6	Fig. 1	LPW-5	CCP-4	SB-4065TR	FT-15	PKM16...	KPKTB○○-26JCT KTKTB○○-26				
	26-2JCT	●	50				1.8	2.0						PKM20...					
	26-3JCT	●	75				2.6	3.0	Fig. 2					PKM24...					
	26-4JCT	●	80				3.4	4.0						PKM30...					
	26-5JCT	●	80				4.2	4.8						PKM40...					
KPKB	32-1JCT	●	35	32	25.0	150	1.4	1.6	Fig. 1	LPW-5	CCP-4	SB-4065TR	FT-15	PKM48...	KPKTB○○-32JCT KTKTB○○-32 KTKTBF○○-32				
	32-2JCT	●	50				1.8	2.0						PKM50...					
	32-3JCT	●	100				2.6	3.0	Fig. 2					PKM16...					
	32-4JCT	●	100				3.4	4.0						PKM20...					
	32-5JCT	●	120				4.2	4.8						PKM24...					
	32-6JCT	●	120				5.4	6.0						PKM30...					
							Coolant plug screw tightening torque 3.0 N·m							PKM40...					

See page 14 for how to attach insert.

When using internal coolant with KTKTB, KTKTBF type tool holder blocks, coolant supply piping (CCN-5) sold separately.

*H : Length between virtual vertices

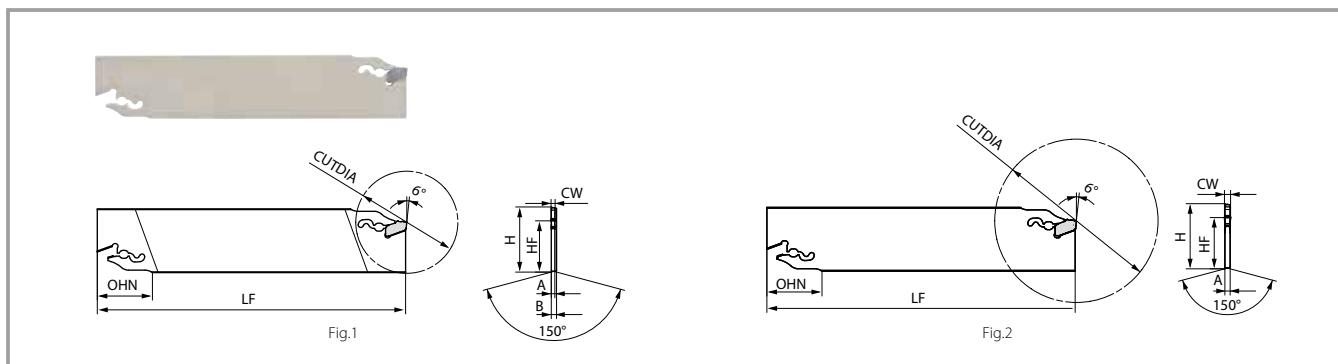
● : Available

Minimum /maximum overhang length while using internal coolant

Blade	Toolholder block	Overhang length	
		Min.	Max.
KPKB26-1JCT		15	34.5
KPKB26-2/3/4JCT	KPKTB20-26JCT	20	40
KPKB26-5JCT		23	43
KPKB20-32JCT		18	49
KPKTB25-32JCT		13	
KPKTB32-32JCT			59
KPKTB20-32JCT	KPKTB20-32JCT	27.5	
KPKTB25-32JCT		22.5	
KPKTB32-32JCT	KPKTB32-32JCT		63
KPKTB20-32JCT		31.5	
KPKTB25-32JCT		26.5	
KPKTB32-32JCT	KPKTB32-32JCT		

Blades

KPKB without coolant holes



Blade dimensions

Description	Availability	Cutting dia.	Dimensions (mm)					Edge width (mm)	Drawing	Parts	Applicable inserts	Applicable toolholder block	
			*H	HF	B	LF	A						
KPKB 19-1	●	32	19	15.7	2.6	86	1.4	1.6	Fig.1	PKM16...	KTKTB○○-19		
19-2	●	40			-		1.8	2.0 2.4	Fig.2				
KPKB 26-1	●	35	26	21.4	2.6	110	1.4	1.6	Fig.1	PKM16... PKM20... PKM24... PKM30... PKM40... PKM48... PKM50...	KPKTB○○-26JCT KTKTB○○-26		
26-2	●	50			-		1.8	2.0 2.4	Fig.2				
26-3	●	75			-		2.6	3.0					
26-4	●	80			-		3.4	4.0					
26-5	●	80			-		4.2	4.8 5.0					
32-1	●	35			2.6		1.4	1.6	Fig.1				
KPKB 32-1	●	50	32	25.0	-	150	1.8	2.0 2.4	Fig.1	PKM16... PKM20... PKM24... PKM30... PKM40... PKM48... PKM50... PKM60...	KPKTB○○-32JCT KTKTB○○-32 KTKTBF○○-32		
32-2	●	100			-		2.6	3.0					
32-3	●	100			-		3.4	4.0					
32-4	●	120			-		4.2	4.8 5.0					
32-5	●	120			-		5.4	6.0					
32-6	●	120			-								

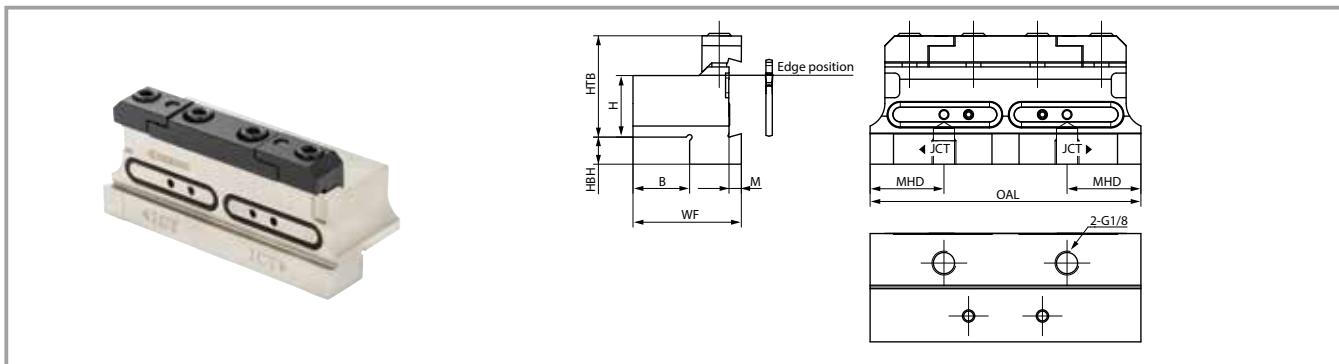
See page 14 for how to attach insert.

*H : Length between virtual vertices

● : Availability

Tool holder block

KPKTB-JCT with coolant holes



Tool holder block dimensions

Pressure: ~7 MPa

Description	Availability	Dimensions (mm)								Parts					Applicable blade	
		H	HTB	HBH	B	WF	M	MHD	OAL	Clamp set	Screw	Wrench	O-ring	Plug 1	Plug 2	
KPKTB 20-26JCT	●	20	33	12.4	41	39	4	23.5	86	BCS-2	HH6x16	LW-5	GR-020	HS3x4	HSG1/8X8.0	KPKB26-○JCT KTKB26-○
20-32JCT	●	20	16	40		5	25	100	BCS-3	GR-026			HS4x4	KPKB32-○JCT KTKB32-○		
25-32JCT	●	25	11	23			44	BCS-4	GR-029							
32-32JCT	●	32	5	29			50									

Includes only one HSG1/8X8.0 plug.

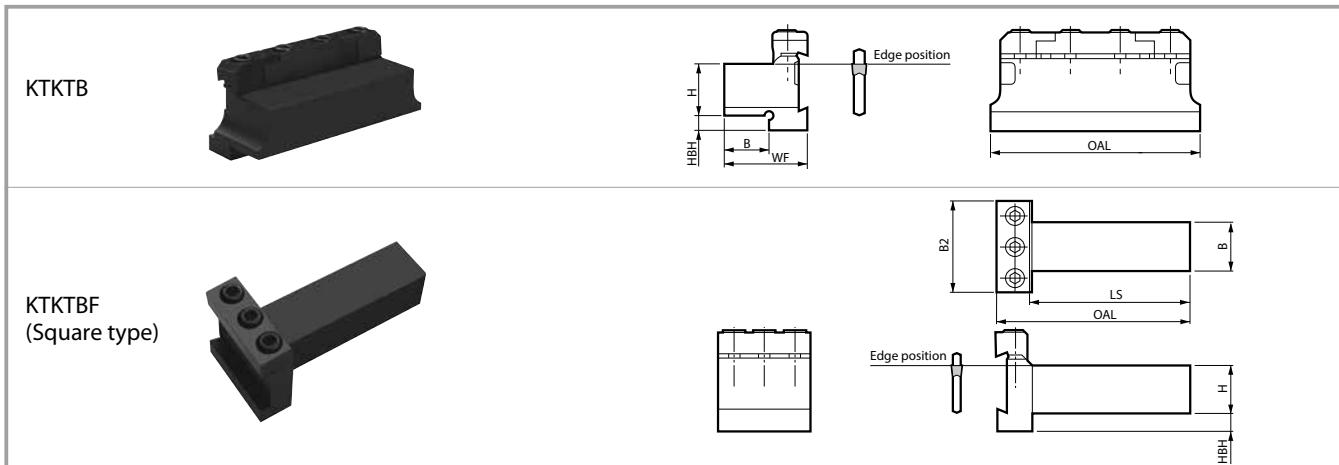
KPKTB-JCT type block is also compatible with conventional KTKB type blades.

See page 13 for coolant piping parts.

When using internal coolant, the coolant may appear to leak slightly, but this should not affect machining performance. (If the O-ring is damaged, order separately.)

● - Available

KTKTB / KTKTBF Without coolant holes



Tool holder block dimensions

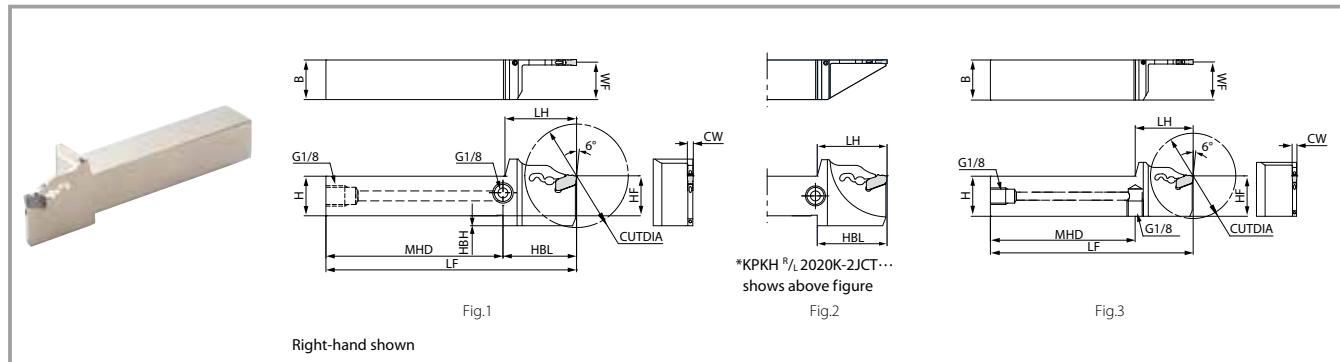
Description	Availability	Dimensions (mm)						Parts				Applicable blade
		H	HBH	B	WF B2	OAL	LS	Clamp set	Screw	Wrench		
KTKTB	●	16	4	15.5	29.5	76	—	—	BCS-1	HH5X25	LW-4	KPKB19-○
	●	20		19	34		—					
	●	16	13	15.5	31.5	86	—	BCS-2	—	HH6x30	LW-5	KPKB26-○ KPKB26-○JCT
	●	20	9	19	36		—					
	●	20	13	19	38	100	—	BCS-3	—	HH6x30	LW-5	KPKB32-○ KPKB32-○JCT
	●	25	8	23	42		—					
	●	32	5	29	48		110	BCS-4	—	HH6x30	LW-5	KPKB32-○ KPKB32-○JCT
KTKTBF	●	25-32	25	9.5	25	48	102	84.5	BCS-5	HH6x30	LW-5	KPKB32-○ KPKB32-○JCT
	●	32-32	32	2.5	32		117	99.5				

Can be used with internal coolant by utilizing compatible coolant piping (CCN-5).

● - Available

Toolholder

KPKH - JCT with coolant holes



Toolholder dimensions

Pressure Resistance : ~15 MPa

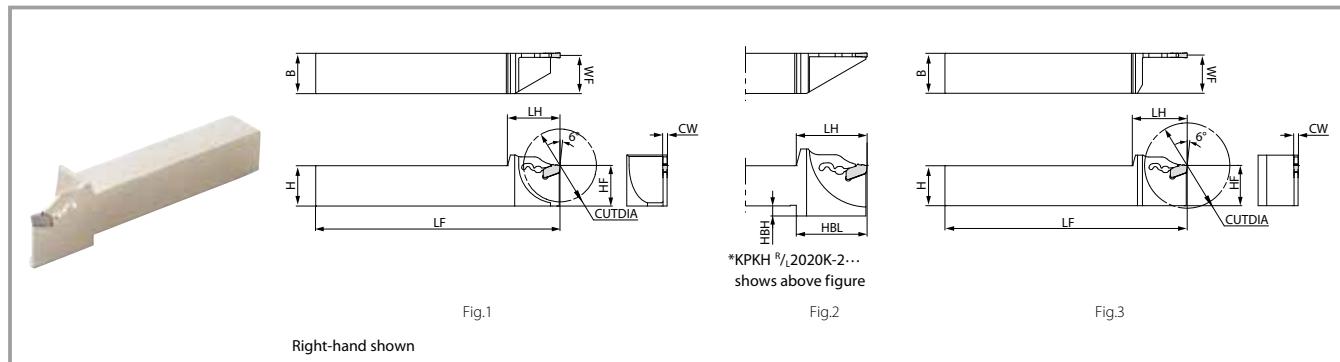
Description	Availability		Cutting dia.	Dimensions (mm)								Edge width (mm)	Drawing	Parts		Applicable inserts		
	R	L		H	HF	HBH	B	LF	LH	WF	HBL	MHD		Insert wrench	Plug			
	KPKH R/L	2020K-2JCT	●	●	38	20	20	5	20	35.1	19.15	35.1	89	2.0	Fig.2	LPW-5	HSG1/8X8.0	PKM20...
		2020K-3JCT	●	●	52	125	20	20	5	36	18.75	37	88	3.0	Fig.1			PKM30...
		2525K-3JCT	●	●	53		25	25	-	25	23.75	-	89		Fig.3			PKM40...
		2020K-4JCT	●	●	62		20	20	5	42.5	18.35	42	83	4.0	Fig.1			PKM40...
		2525K-4JCT	●	●	68		25	25	-	25	23.35	-	82		Fig.3			PKM40...

See page 14 for insert mounting and removal instructions.

See page 13 for coolant piping parts.

● : Available

KPKH without coolant holes



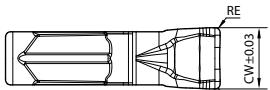
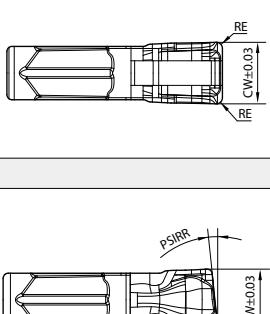
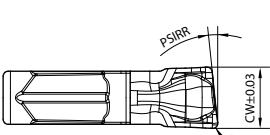
Toolholder dimensions

Description	Availability		Cutting dia.	Dimensions (mm)								Edge width (mm)	Drawing	Parts		Applicable inserts							
	R	L		H	HF	HBH	B	LF	LH	WF	HBL			Insert wrench	Plug								
	KPKH R/L	2020K-2	●	●	38	5	20	20	20	33.1	19.15	33.1	2.0	Fig.2	LPW-5	HSG1/8X8.0	PKM20...						
		2020K-3	●	●	52		25	25	25	34	18.75	3.0	Fig.3				PKM30...						
		2525M-3	●	●	53			25	150	23.75	PKM40...												
		2020K-4	●	●	62		20	20	20	40.5	18.35	4.0					PKM48... PKM50...						
		2525M-4	●	●	68			25	25	23.35	PKM40...												
		2525M-5	●	●	79			25	150	45.9	22.95	4.8 5.0					PKM40...						
	KPKH R/L	2020K-3D35	●	●	35	-	20	20	20	20	125	32.5	18.75 23.75	Fig.1	Fig.1	LPW-5	PKM30...						
		2525M-3D45	●	●	45		25	25	25	25	150	35	18.35 23.35				PKM40...						
		2020K-4D45	●	●	45		20	20	20	20	125	35	18.35 23.35				PKM40...						
		2525M-4D45	●	●	45		25	25	25	25	150	4.0	PKM40...										

See back cover for insert mounting and removal instructions.

● : Available

Applicable inserts

Shape Right-hand shown			Description	Dimensions (mm)		Angle	MEGACOAT NANO		Carbide	
				CW	RE		PSIR ^{R/L}	PR1625	PR1535	GW15
Without lead angle	General use		PKM	16N-015PM	1.6	0.15	-	●	●	●
				20N-020PM	2.0	0.20		●	●	●
				24N-020PM	2.4	0.20		●	●	●
				30N-025PM	3.0	0.25		●	●	●
				40N-030PM	4.0	0.30		●	●	●
				48N-030PM	4.8	0.30		●	●	●
				50N-030PM	5.0	0.30		●	●	●
				60N-035PM	6.0	0.35		●	●	●
With lead angle	Tough edge		PKM	20N-020PH	2.0	0.20	-	●	●	
				30N-030PH	3.0	0.30		●	●	
				40N-030PH	4.0	0.30		●	●	
				50N-030PH	5.0	0.30		●	●	
				60N-040PH	6.0	0.40		●	●	
								R	L	R
			PKM	16 ^{R/L} -015PM-6D	1.6	0.15	6°	●	●	●
				20 ^{R/L} -020PM-6D	2.0	0.20		●	●	●
				24 ^{R/L} -020PM-6D	2.4	0.20		●	●	●
				30 ^{R/L} -025PM-6D	3.0	0.25		●	●	●
				40 ^{R/L} -030PM-6D	4.0	0.30		●	●	●
				50 ^{R/L} -030PM-6D	5.0	0.30		●	●	●
								●	●	●

● Available

Recommended cutting conditions ★1st recommendation ☆2nd recommendation

PM Chipbreaker

Workpiece	Cutting speed Vc (m/min)			Feed f (mm/rev)			Remarks	
	MEGACOAT NANO		Carbide	Edge width CW (mm)				
	PR1625	PR1535	GW15	1.6	2 ~ 4	4.8 ~ 6		
Carbon steel	80 – 220	☆	80 – 220	—	0.03 – 0.12	0.08 – 0.18	0.10 – 0.22	
Alloy steel	70 – 200	☆	70 – 200	—				
Stainless steel	60 – 150	★	60 – 150	—	0.03 – 0.08	0.06 – 0.12	0.08 – 0.15	
Cast iron	—	—	★ 50 – 100	0.03 – 0.08	0.08 – 0.18	0.10 – 0.22	Wet	
Aluminum alloy	—	—	★ 200 – 450	0.03 – 0.08	0.08 – 0.18	0.10 – 0.22		
Brass	—	—	★ 100 – 200	—				

Reduce feed to 1/2 ~ 1/3 at the center of the workpiece.

PH Chipbreaker

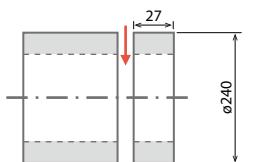
Workpiece	Cutting speed Vc (m/min)			Feed f (mm/rev)			Remarks	
	MEGACOAT NANO		Carbide	Edge width CW (mm)				
	PR1625	PR1535	GW15	2	3 ~ 4	5 ~ 6		
Carbon steel	★ 80 – 220	☆ 80 – 220	—	0.10 – 0.22	0.15 – 0.28	0.15 – 0.35	Wet	
Alloy steel	★ 70 – 200	☆ 70 – 200	—					
Stainless steel	60 – 150	★ 60 – 150	—	0.05 – 0.12	0.08 – 0.15	0.08 – 0.18		
Cast iron	—	—	—	—	—	—		
Aluminum alloy	—	—	—	—	—	—		
Brass	—	—	—	—	—	—		

Reduce feed to 1/2 ~ 1/3 at the center of the workpiece.

Case studies

Rings Forging

$V_c = 90 \text{ m/min}$
 $f = 0.18 \text{ mm/rev}$
 Wet (External coolant)
 Overhang length: 70 mm
 KPKB32-3 PKM30N-025PM PR1535



Chip control
Surface finish

Machining efficiency

KPK

$f = 0.18 \text{ mm/rev}$



Good
Machining
efficiency
 $\uparrow 2.0$

Comp. G

$f = 0.09 \text{ mm/rev}$

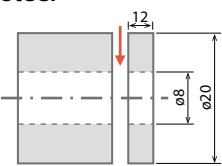
KPK showed good chip control and finished surface with increased feed rates.

The machining efficiency ratio was doubled. KPK improves insert mounting speeds.

(User evaluation)

Machine part Structural alloy steel

$n = 1,530 \text{ min}^{-1}$ (Constant)
 $V_c = \sim 100 \text{ m/min}$
 $f = 0.09 \text{ mm/rev}$
 Wet (External coolant)
 Overhang length: 22 mm
 KPKB26-3 PKM30N-025PM PR1625



Tool life

KPK

1,500 pcs/corner (Stable)

Tool life
 $\uparrow 1.8$

Comp. H

800 pcs/corner (Unstable)

Competitor H was unstable with a sudden fracture. KPK increased tool life by 1.8 times that of competitor. Stable machining with good cutting edge.

(User evaluation)

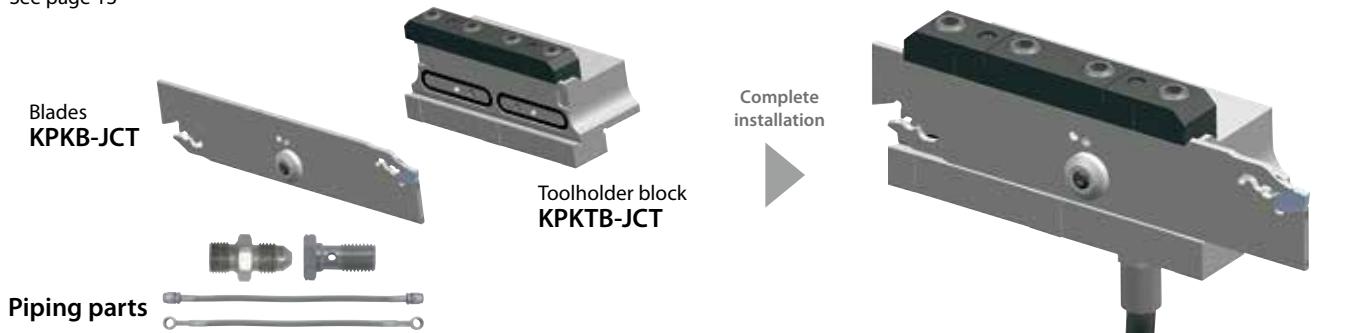
Stable cut-off for your work



Internal coolant supply method (Blade type) Supplies according to machine specifications and requirements

A : Coolant hose assembly

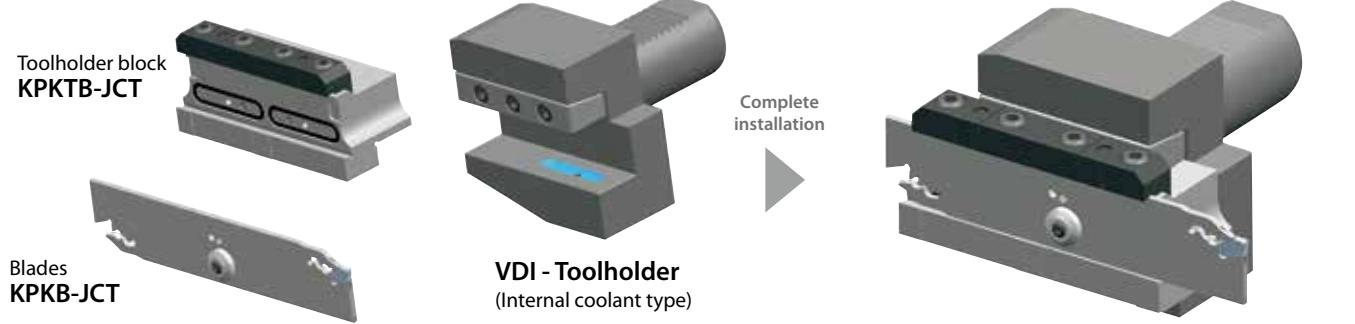
See page 13



B : VDI holder assembly

(Internal coolant type)

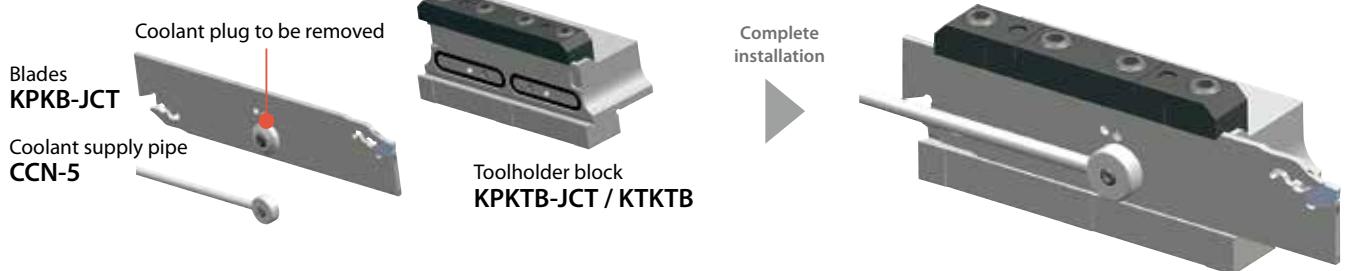
Maximum coolant pressure : 7 MPa



C : Coolant pipe assembly

Maximum coolant pressure : 1 MPa

See page 13



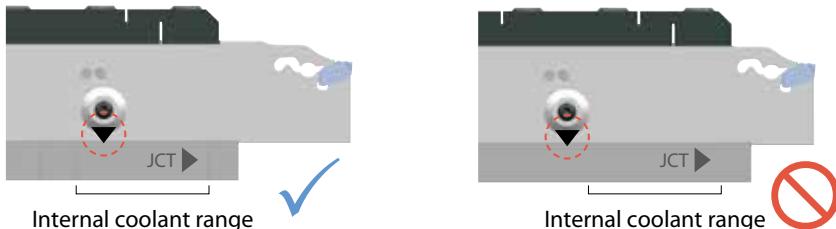
Coolant supply pipe mounting method

Attach to the blade with the supplied screw
Form pipe to the required shape and connect it to the piping of the machine.

Precautions

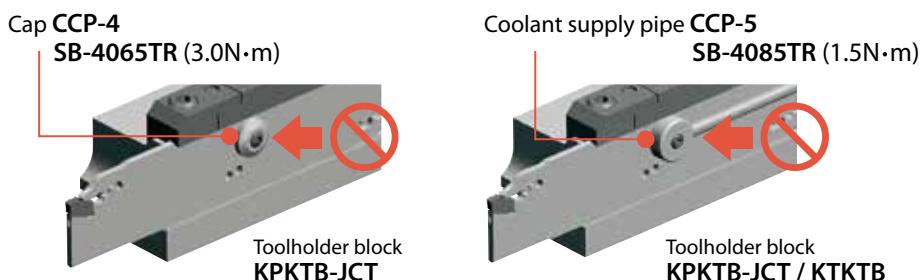
When mounting KPKB-JCT blade

When using internal coolant, keep the arrow (▼) on the blade within the range marked on the tool holder block.



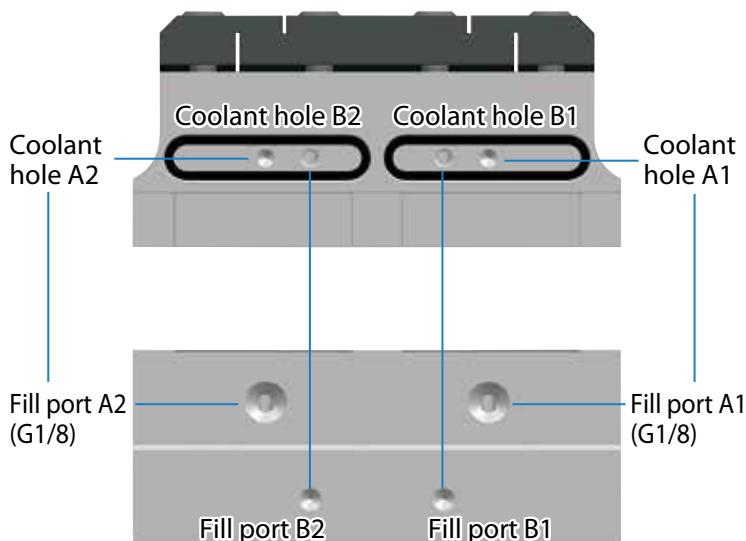
When the cap and coolant supply pipe are mounted

Coolant cannot be supplied correctly if it is mounted in the wrong position.



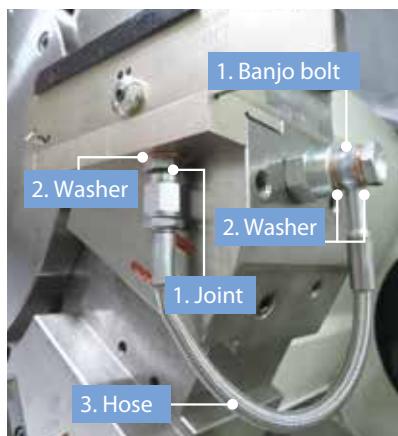
When using a tool holder block

When using the discharge port B1 (B2), use a sealant for the filler cap (HSG 1/8 X 8.0) provided as an accessory and attach it to the coolant supply port A1 (A2).



A : Coolant hose assembly

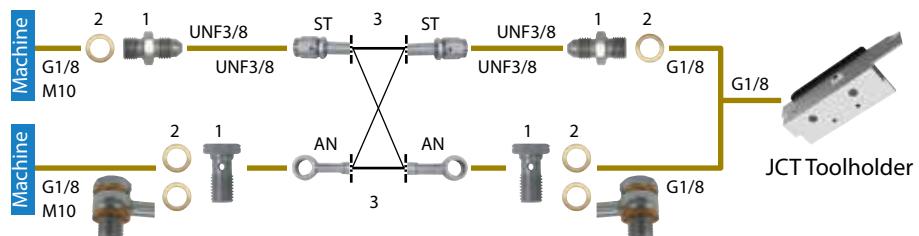
Connection method and piping parts



Easy to use with high-pressure hose and joint

Can be used for internal coolant at normal pressure without a high pressure pump unit
Banjo bolts (for angled hoses) are also available.

<Piping installation guide>



Depending on machine specifications and piping methods, 1.Joint/Banjo bolt x2 2.Washer x2-4 3.Hose x1

1. Joint/banjo bolt (Sold separately)

Shape		Description	Availability	Thread standard
Banjo bolt (for angled hoses)		J-G1/8-UNF3/8	●	G1/8
		J-M10X1.5-UNF3/8	●	M10X1.5
Banjo bolt (for angled hoses)		BB-G1/8	●	G1/8
		BB-M10X1.5	●	M10X1.5

Pressure resistance: ~ 30 MPa

2. Washer (Sold separately)

Shape		Description	Availability
Washer		WS-10	●

Pressure resistance: ~ 30 MPa

*if you are using a banjo bolt, two washers are needed.

● : Available

3. Hose (Sold separately)

Shape		Description	Availability	Thread standard		Dimensions (mm)
				L		
Straight/Straight		HS-ST-ST-200	●	UNF3/8	UNF3/8	200
		HS-ST-ST-250	●			250
Straight/Angled		HS-ST-AN-200	●	UNF3/8	– (Banjo bolt)	200
		HS-ST-AN-250	●			250
Angled/Angled		HS-AN-AN-200	●	– (Banjo bolt)	– (Banjo bolt)	200
		HS-AN-AN-250	●			250

Pressure resistance: ~ 30 MPa

● : Available

Precautions

1. Make sure machine door is completely closed before use of these parts.
2. Use appropriate seal for the male thread of the piping parts and make sure the connection is secure. Use plugs to seal off unused coolant holes.
3. Connect and fasten the coolant hose firmly.
4. The use of copper washers may cause leakage but will have no effect on the performance.
5. Commercial piping parts can be used if the thread standards are same. Check the pressure resistance before use.
6. Regularly changing the coolant filter is recommended.

C: Coolant pipe assembly

Piping parts

Coolant supply pipe (Sold separately)

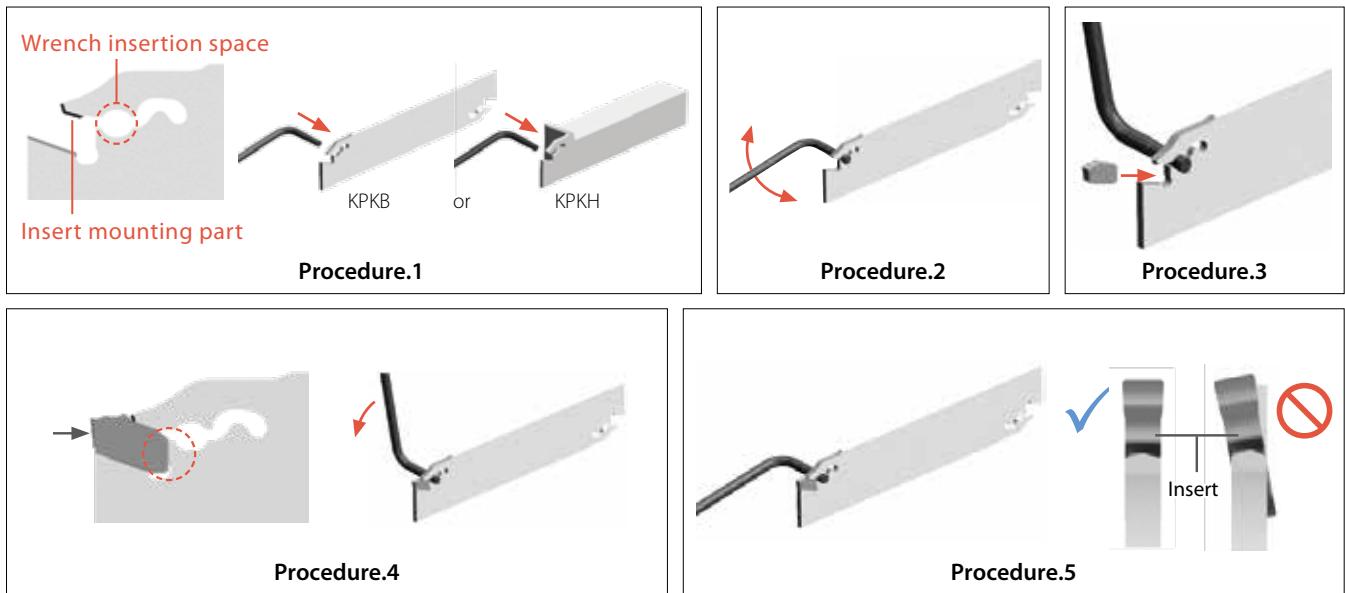
Shape	Description	Stock	Dimension				Parts (Screw)
			A	B	C	D	
Coolant supply pipe	CCN-5	●	190	16	5	6	SB-4085TR

Pressure resistance: 1 MPa

Use wrench (FT-15) supplied with the blade when connecting.

● : Available

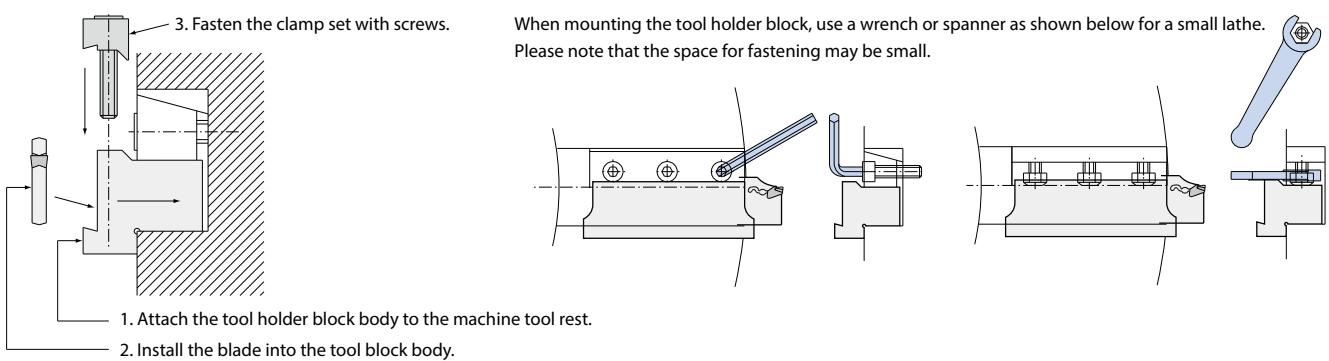
How to attach insert



Procedure

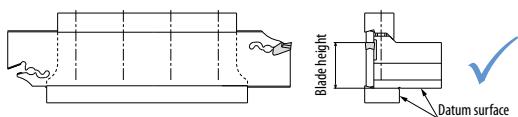
1. Use compressed air or other measures to remove chips from the insert mounting part and wrench insertion space and put in the wrench.
2. Turn the wrench.
3. Put in the insert into insert mounting part. (When removing the insert, follow the same procedure and remove it at step 3.)
4. Please clamp it while gently pressing until it makes contact with the back end of the blade's surface.
5. Make sure that the insert is set straight.

Installation guide

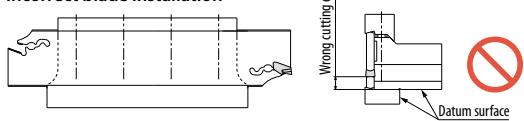


How to install the tool holder block and blade

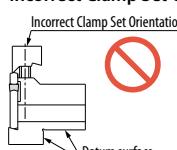
Correct blade installation



Incorrect blade installation



Incorrect Clamp Set Orientation



If the clamp set is mounted in the reverse direction, a large gap is created between the tool holder block main body and the clamp set as shown in the left figure.

If you continue to use the product, the blade may break off. Reinstall in the correct orientation.

Lead angle direction and usage

1. If there is no restriction on the finished shape, use an insert without lead angle.
2. Insert with lead angle is recommended to prevent remaining boss.
3. If you want to make the remaining boss smaller when machining small or thin parts, use insert with lead angle.

Handed insert with lead angle	N (Neutral)	R (Right hand)	L (Left hand)
<ul style="list-style-type: none"> • Inserts with lead angle (PSIR θ/L) reduce burrs at cut-off machining. • The larger the lead angle (PSIR θ/L), the smaller the cutting force. The feed also needs to be smaller. 			

Solid Workpiece	Right hand (R) Lead Neutral	Neutral	Hollow Workpiece (Pipe)	Right hand (R) Lead Neutral	Neutral

Machining precautions

1. Set cutting edge height 0.1 mm above core height.
2. Machining with ample supply of coolant is recommended
3. Machine at constant speeds to gain stable tool life
4. Make the cut-off as close as possible to the chuck
5. To prevent impacts, reduce feed rate by 1/2 ~ 1/3 when nearing the center of the workpiece
Excessive use of the insert may cause chipping or damage to the holder

