

Boring Tools Catalog

2026-2027



Make it Simple

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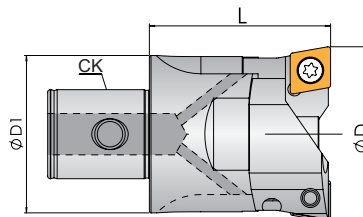
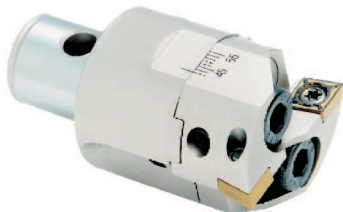


Rough Boring
Blind Hole Type

Blind hole type rough boring head

Processing range $\varnothing 20$ - $\varnothing 203$

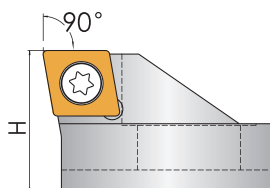
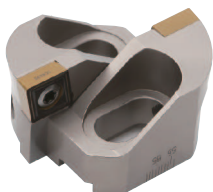
- ◆ Suitable for single and double edge boring, min processing diameter is 20
- ◆ According to various processing requirements, the boring tool can be easily adjusted to make small amount but various processing, the processing depth can be extended to the required length with the extension rod
- ◆ Clear side scales allow the user to adjust to the required range easily, eliminating the need for use on a tool presetter



Processing range ØD	Order Model No.	CK NO.	Cutter body model	Insert seat model	ØD1	L	Lock Screw	Weight
20-26	CMR20-26CK1(RSC2026)	1	CMR20-26CK1	RSC-2026	18.7	32.5	RMM4X16	0.06
25-33	CMR25-33CK2(RSC2533)	2	CMR25-33CK2	RSC-2533	23.5	35.5	RMM5X20	0.11
32-42	CMR32-42CK3(RSC3242)	3	CMR32-42CK3	RSC-3242	30.5	40.0	RMM6X20	0.19
41-51	CMR32-42CK3(RSC4151)			RSC-4151				0.21
41-54	CMR41-54CK4(RSC4154)	4	CMR41-54CK4	RSC-4154	38.5	47.0	RMM8X25	0.38
53-66	CMR41-54CK4(RSC5366)			RSC-5366				0.42
53-70	CMR53-70CK5(RSC5370)	5	CMR53-70CK5	RSC-5370	49.5	57.0	RMM10X30	0.75
69-86	CMR53-70CK5(RSC6986)			RSC-6986				0.87
68-90	CMR68-110CK6(RSC6890)	6	CMR68-110CK6	RSC-6890	64.0	71.0	RMM10X35	1.6
88-110	CMR68-110CK6(RSC88110)			RSC-88110				1.73
98-126	CMR98-153CK6(RSC98126)	6	CMR98-153CK6	RSC-98126	93.0	71.0	RMM12X40	2.32
125-153	CMR98-153CK6(RSC125153)			RSC-125153				2.58
98-126	CMR98-153CK7(RSC98126)	7	CMR98-153CK7	RSC-98126	93.0	87.0		3.85
125-153	CMR98-153CK7(RSC125153)			RSC-125153				4.11
148-176	CMR148-203CK6(RSC98126)	6	CMR148-203CK6	RSC-98126	138.0	71.0		2.9
175-203	CMR148-203CK6(RSC125153)			RSC-125153				3.15

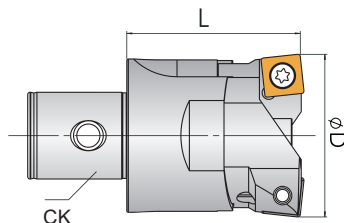
- ◆ Attached with a set of locking screw, shim and an L-shaped wrench
- ◆ No inserts attached, please purchase according to your needs
- ◆ All the CMR boring tools with internal coolant
- ◆ Blind hole type tool holder is included as standard

Blind hole type rough boring insert seat



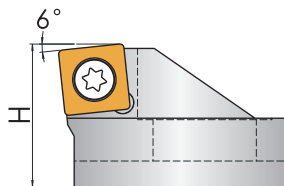
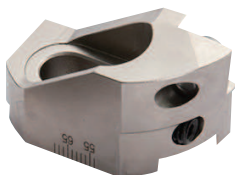
Designation	Adapts to cutter body model	H	Insert	Screw
RSC-2026	CMR20-26CK1	13.0	CC 06	DM2.5X6 -T8
RSC-2533	CMR25-33CK2	14.0		
RSC-3242	CMR32-42CK3	19.5	CC 09	DM4X10 -T15
RSC-4151				
RSC-4154	CMR41-54CK4	21.5		
RSC-5366				
RSC-5370	CMR53-70CK5	27.5	CC 12	DM5X12-T20
RSC-6986				
RSC-6890	CMR68-110CK6	30.0		
RSC-88110				
RSC-98126	CMR98-153CK6 CMR98-153CK7 CMR148-203CK6	30.0		
RSC-125153				

Through hole type rough boring cutter



Processing diameter	Order Model No.	CK NO.	Cutter body model	Blade seat model	ØD1	L	Lock Screw	Weight
20-26	CMR20 -26CK1(RSS2026 -B)	1	CMR20-26CK1	RSS-2026 -B	18.7	32.5	RMM4X16	0.06
25-33	CMR25-33CK2(RSS2533-B)	2	CMR25-33CK2	RSS-2533-B	23.5	35.5	RMM5X20	0.11
32-42	CMR32-42CK3(RSS3242-B)	3	CMR32-42CK3	RSS-3242-B	30.5	40.0	RMM6X20	0.19
41-54	CMR41-54CK4(RSS4154-B)	4	CMR41-54CK4	RSS-4154-B	38.5	47.0	RMM8X25	0.38
53-70	CMR53-70CK5(RSS5370 -B)	5	CMR53-70CK5	RSS-5370-B	49.5	57.0	RMM10X30	0.75
68-90	CMR68-110CK6(RSS6890 -B)	6	CMR68-110CK6	RSS-6890-B	64.0	71.0	RMM10X35	1.60
88-110	CMR68-110CK6(RSS88110 -B)			RSS-88110-B				1.73
98-126	CMR98-153CK6(RSS98126 -B)	6	CMR98-153CK6	RSS-98126-B	93.0	71.0	RMM12X40	2.32
125-153	CMR98-153CK6(RSS125153 -B)			RSS-125153-B				2.58
98-126	CMR98-153CK7(RSS98126 -B)	7	CMR98-153CK7	RSS-98126-B	93.0	87.0		3.85
125-153	CMR98-153CK7(RSS125153 -B)			RSS-125153-B				4.11
148-176	CMR148-203CK6(RSS98126 -B)	6	CMR148-203CK6	RSS-98126-B	138.0	71.0		2.90
175-203	CMR148- 203CK6(RSS125153 -B)			RSS-125153-B				3.15

Through hole type rough boring insert seat



Designation	Cutter body model	H	Insert	Screw
RSS-2026-B	CMR20-26CK1	13.6	SC 06	DM2.5X6 -T8
RSS-2533-B	CMR25-33CK2	14.6		
RSS-3242-B	CMR32-42CK3	20.5	SC 09	DM4X10 -T15
RSS-4154-B	CMR41-54CK4	22.5		
RSS-5370-B	CMR53-70CK5	27.7	SC 12	DM5X12-T20
RSS- 6890-B	CMR68-110CK6	30.3		
RSS-88110-B				
RSS-98126-B	CMR98-153CK6	30.3		
RSS-125153-B	CMR98-153CK7 CMR148-203CK6			

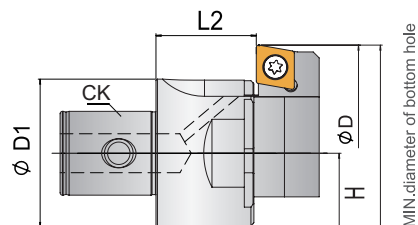
- ◆ No inserts attached, please purchase according to your needs
- ◆ Attached with screw and wrench



Rough Boring
Reverse Boring

Rough boring head(reverse boring)

Processing range $\varnothing 25$ - $\varnothing 153$



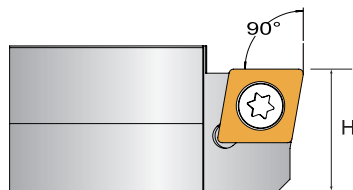
MIN.diameter of bottom hole= $H + (\text{Count Bore Diameter}/2)$

Processing range $\varnothing D$	Cutter body model	CK.NO.	Insert seat model	$\varnothing D1$	L2	Locking Screw	H	Weight
25-31	CMR20-26CK1	CK1	RSC-F2531	18.7	21.5	RMN4X16	10.0	0.06
30-35			RSC-F3035					0.06
32-40	CMR25-33CK2	CK2	RSC-F3240	23.5	23.5	RMN5X20	12.5	0.11
39-47			RSC-F3947					0.11
41-51	CMR32-42CK3	CK3	RSC-F4151	30.5	23.5	RMN6X20	16.0	0.18
50-60			RSC-F5060					0.19
50-63	CMR41-54CK4	CK4	RSC-F5063	38.5	28.5	RMN8X25	20.0	0.36
61-74			RSC-F6174					0.38
65 - 82	CMR53-70CK5	CK5	RSC-F6582	49.5	33.5	RMN10X30	25.5	0.7
78 - 95			RSC-F7895					0.75
80-102	CMR68-110CK6	CK6	RSC-F80102	63.0	45.5	RMN10X35	32.5	1.5
100-122			RSC-F100122					1.6
98-126	CMR98-153CK6	CK6	RSC-F98126	93.0	45.5	RMN12X40	46.5	2.25
125-153			RSC-F125153					2.45

◆ No inserts attached, please purchase according to your needs

◆ Attached with screw and wrench

Rough boring insert seat (reverse boring)



Desingnation	Cutter body model	H	Insert	Screw
RSC-F2531	CMR20-26CK1	9.5	CC 0602	DM2.5X6-T8
RSC-F3035				
RSC-F3240	CMR25-33CK2	11.0		
RSC-F3947				
RSC-F4151	CMR32-42CK3	13.5	CC 09T3	DM4X10-T15
RSC-F5060				
RSC-F5063	CMR41-54CK4	17.5		
RSC-F6174				
RSC-F6582	CMR53-70CK5	20.5		
RSC-F7895				
RSC-F80102	CMR68-110CK6	22.5	CC 1204	DM5X12-T20
RSC-F100122				
RSC-F98126	CMR98-153CK6	25.0		
RSC-F125153				

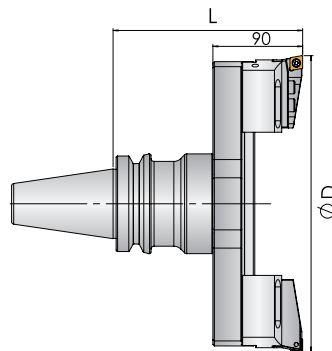
◆ No inserts attached, please purchase according to your needs

◆ Attached with screw and wrench

Rough boring head (large aperture)

Processing range $\varnothing 150$ - $\varnothing 850$

- ◆ Modular design simplifies tool management, for it only needs to combine the components to meet various ranges of processing
- ◆ Aluminum alloy bridge rough boring tool are available to reduce the tool's weight



Standard type steel bridge rough boring tool

Processing range $\varnothing D$	Designation	Weight	Link plate		Rough boring slide		Rough boring slide		Insert seat(2 Pcs)		Insert
			Designation	Weight	Designation	Weight	Designation	Weight	Designation	Weight	
150-210	CLR 150-210	5.50	/	/	CL 150-210	2.50	LR 150	1.9	RS 150	0.6	CC 1204
210-290	CLR 210-290	6.70			CL 210-290	3.70					
290-370	CLR 290-370	8.05			CL 290-370	5.05					
370-450	CLR 370-450	9.80			CL 370-450	6.80					
450-530	CLR 450-530	11.40			CL 450-530	8.40					
530-610	CLR 530-610	17.20	CL40 -200	4.7	CL 530-610	9.50					
610-690	CLR 610-690	18.70			CL 610-690	11.00					
690-770	CLR 690-770	20.40			CL 690-770	12.70					
770-850	CLR 770-850	22.70			CL 770-850	15.00					

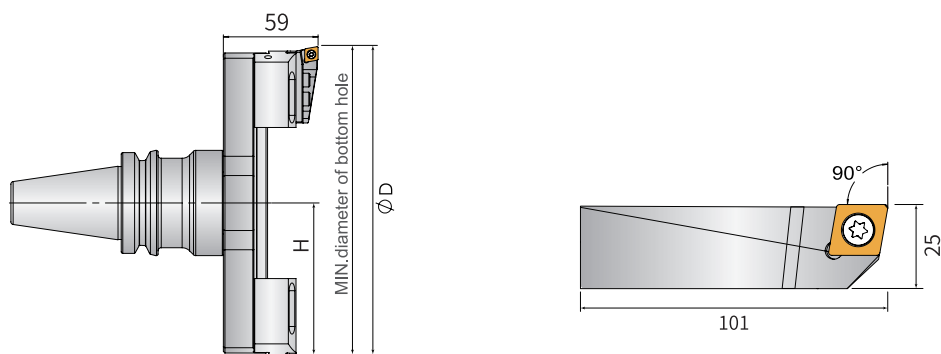
- ◆ No inserts attached, please purchase according to your needs
- ◆ No rivets attached. Please note that different machines use different type rivets
- ◆ If needed, extended bridge type shank(Non-standard) is available.
- ◆ The tip and direction of rotation of the standard product are in the same phase

Lightweight aluminum bridge rough boring tool

Processing range ØD	Designation	Weight	 Aluminum bridge		 Rough boring slide		 Insert seat(2 Pcs)		Insert
			Designation	Weight	Designation	Weight	Designation	Weight	
150-210	CLR 150-210 AL	3.9	CL 150-210 AL	0.9	LR 150	1.9	RS 150	0.6	CC 12
210-290	CLR 210-290 AL	4.3	CL 210-290 AL	1.3					
290-370	CLR 290-370 AL	5.0	CL 290-370 AL	2.0					
370-450	CLR 370-450 AL	5.5	CL 370-450 AL	2.5					
450-530	CLR450-530 AL	6.0	CL 450-530 AL	3.0					

- ◆ Componets can be sold separately
- ◆ OEM service available

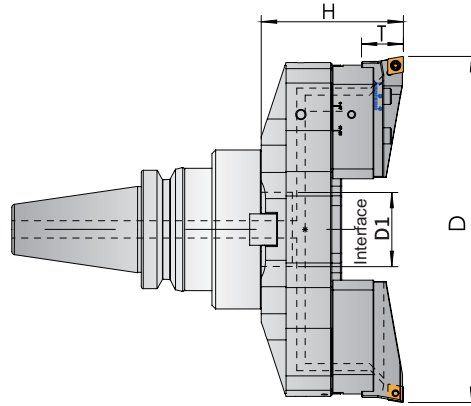
Rough boring head (large aperture) reverse boring



MIN.diameter of bottom hole=H+(Count Bore Diameter/2)

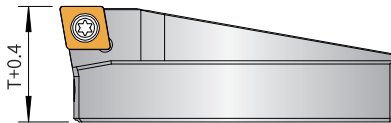
Processing range ØD	 Steel Bridge		H	 Rough boring slide		 Insert seat(1 Pcs)		Insert
	Designation	Weight		Designation	Weight	Designation	Weight	
165-205	CL 150-210	2.50	75	LR 150	1.9	RSC-F150-A	0.6	CC 12
225-265	CL 210-290	3.70	105					
305-345	CL 290-370	5.05	145					
385-425	CL 370-450	6.80	185					
465-505	CL 450-530	8.40	225					

Large aperture rough boring tool with internal coolant (full range of aluminum-based bridges)



Processing range ØD	Designation	Weight	Interface	Height	Aluminum bridge		Rough boring slide		Insert seat(2PCS)		Insert
					Designation	Weight	Designation	Weight	Designation	Weight	
200-280	CNR 200-280AL	6.9	CL40	115	NL 200-280AL	2.8	NR 200	3.2	RNC 200	0.9	CC 1204
280-360	CNR 280-360AL	8.1	FMB60	115	NL 280-360AL	4.0					
360-440	CNR 360-440AL	10.3		125	NL 360-440AL	6.2					
440-520	CNR 440-520AL	11.8		125	NL 440-520AL	7.7					
520-600	CNR 520-600AL	13.8		135	NL 520-600AL	9.7					
600-680	CNR 600-680AL	15.3		135	NL 600-680AL	11.2					
680-760	CNR 680-760AL	18.2		145	NL 680-760AL	14.1					
760-840	CNR 760-840AL	19.5		145	NL 760-840AL	15.4					

Segment difference rough boring insert seat



Rough boring insert seat	Insert
RNC 200H	CC 1204

◆When used in large margin cutting, with the standard RNC 200 toolholder, it is possible to achieve a height difference of 0.4mm

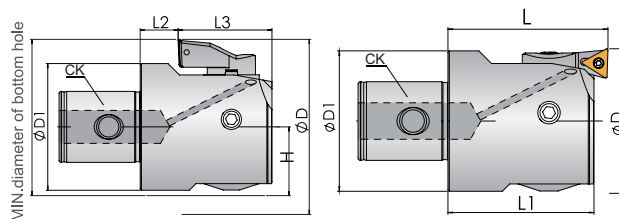


Fine Boring
Fine Boring Head

Fine boring head

Processing range $\varnothing 20$ - $\varnothing 203$

- ◆ Standard corresponds to the reverse processing, which has a wide range of use and increases the added value.
- ◆ CMP series is suitable for precision boring, min processing diameter is $\varnothing 20$,
- ◆ The precision screw is located inside, so it won't be affected by iron filings, abrasion, rust, etc. Internal lubrication makes it precise and durable.

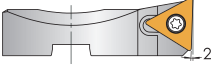
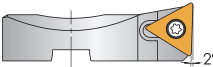
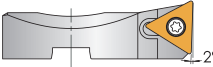


MIN.diameter of bottom hole = $H + (\text{Count Bore Diameter} / 2)$

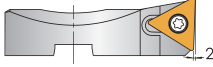
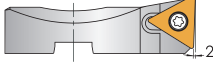
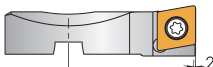
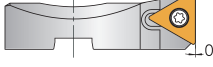
Designation	CK NO.	Insert seat	Boring				Reverse boring				Weight	Insert	
			Processing range $\varnothing D$	L	L1	D1	Processing range $\varnothing D$	L2	L3	H			
CMP20-36CK1	1	FS* -1A	20-26	32.5	30.5	19	/	10.5	20.0	10.0	0.07	TP 0802	/
		FS* -1B	25-31				30-31						
		FS* -1C	30-36				30-36						
CMP25-47CK2	2	FS* -2A	25-33	35.5	33.0	24	/	11.5	21.5	12.5	0.12	TP 0802	/
		FS* -2B	32-40				36-40						
		FS* -2C	39-47				39-47						
CMP32-60CK3	3	FS* -3A	32-42	40.0	37.0	31	/	10.0	27.0	16.0	0.22	TP 0802	/
		FS* -3B	41-51				46-51						
		FS* -3C	50-60				50-60						
CMP41-74CK4	4	FS* -4A	41-54	47.0	43.0	40	/	12.0	31.0	20.0	0.42	TP 0802	/
		FS* -4B	50-63				53-63						
		FS* -4C	61-74				61-74						
CMP53-95CK5	5	FS* -5A	53-70	57.0	52.0	50	62-70	15.0	37.0	25.5	0.85	TP 0802	/
		FS* -5B	65-82				65-82						
		FS* -5C	78-95				78-95						
CMP68-150CK6	6	FS* -6A	68-100	71.0	67.0	64	80-100	23.0	44.0	32.5	1.85	TC1102	/
		FS* -6B	94-126				94-126						
		FS* -6C	118-150				118-150						
CMP100-203CK6	6	FS* -6A	100-153	71.0	67.0	64	112-153	23.0	44.0	46.5	2.70	TC1102	/
		FS* -6B	126-179				126-179						
		FS* -6C	150-203				150-203						
CMP100-203CK7	7	FS* -6A	100-153	87.0	83.0	90	112-153	39.0	44.0	46.5	4.05	TC1102	/
		FS* -6B	126-179				126-179						
		FS* -6C	150-203				150-203						

- ◆ Processing range refers to the value of insert tip radius R0.2 and R0.4
- ◆ No inserts attached, please purchase according to your needs
- ◆ All the CMP boring tools with internal coolant

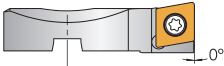
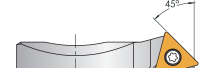
Fine boring insert seat

Drawings	Designation	Adapted boring head	Processing range ØD	Insert	Screw
	FST-1A	CMP20 -36CK1	/	TP 0802	DM2X4-T6
	FST-1B				
	FST-1C				
	FST-2A	CMP25 -47CK2			
	FST-2B				
	FST-2C				
	FST-3A	CMP32 - 60CK3			
	FST-3B				
	FST-3C				
	FST-4A	CMP41 - 74CK4	/	TC 1102	DM2.5X6 -T8
	FST-4B				
	FST-4C				
	FST-5A	CMP53 - 95CK5			
	FST-5B				
	FST-5C				
	FST-6A	CMP68 - 150CK6 CMP100 -203CK6			
	FST-6B				
	FST-6C				
	FST-1A(TC06)	CMP20 -36CK1	20-26	TC 06T1	DM2X4-T6
	FST-1B(TC06)		25-31		
	FST-1C(TC06)		30-36		
	FST-2A(TC06)	CMP25-47CK2	25-33		
	FST-2B(TC06)		32-40		
	FST-2C(TC06)		39-47		
	FST-3A(TC06)	CMP32- 60CK3	32-42		
	FST-3B(TC06)		41-51		
	FST-3C(TC06)		50-60		
	FST-3A(TP09)	CMP32- 60CK3	32-42	TP 0902	DM2 . 5X6 -T8
	FST-3B(TP09)		41-51		
	FST-3C(TP09)		50-60		
	FST-4A(TP09)	CMP41 - 74CK4	41-54		
	FST-4B(TP09)		50-63		
	FST-4C(TP09)		61-74		
	FST-5A(TP09)	CMP53-90CK5	53-70		
	FST-5B(TP09)		65-82		
	FST-5C(TP09)		78-95		
	FST- 6A(TP09)	CMP68-150CK6	68-100/100-153		
	FST- 6B(TP09)		94-126/126-179		
	FST- 6C(TP09)	CMP100-203CK6	118-150/150-203		
		FST-4A(TC1103)	CMP41-74CK4		
FST-4B(TC1103)		50-63			
FST-4C(TC1103)		61-74			

Fine boring insert seat

Drawings	Designation	Adapted boring head	Processing range $\varnothing D$	Insert	Screw
	FST-5A(TC1103)	CMP53-90CK5	53-70	TC 1103	DM2 .5X6 -T8
	FST-5B(TC1103)		65-82		
	FST-5C(TC1103)		78-95		
	FST-6A(TC1103)	CMP68-150CK6 CMP100-203CK6	68-100/100-153		
	FST-6B(TC1103)		94-126/126-179		
	FST-6C(TC1103)		118-150/150-203		
	FST-4A(TP1103)	CMP41-74CK4	41-54	TP 1103	DM3 .0X7-T10
	FST-4B(TP1103)		50-63		
	FST-4C(TP1103)		61-74		
	FST-5A(TP1103)	CMP53-90CK5	53-70		
	FST-5B(TP1103)		65-82		
	FST-5C(TP1103)		78-95		
	FST-6A(TP1103)	CMP68-150CK6 CMP100-203CK6	68-100/100-153		
	FST-6B(TP1103)		94-126/126-179		
	FST-6C(TP1103)		118-150/150-203		
	FSC-2A+2(CC06)	CMP25-47CK2	27-33	CC 0602	DM2 .5X6 -T8
	FSC-2B(CC06)		32-40		
	FSC-2C(CC06)		39-47		
	FSC-3A(CC06)	CMP32-60CK3	32-42		
	FSC-3B(CC06)		41-51		
	FSC-3C(CC06)		50-60		
	FSC-4A(CC06)	CMP41-74CK4	41-54		
	FSC-4B(CC06)		50-63		
	FSC-4C(CC06)		61-74		
	FSC-5A(CC06)	CMP53-95CK5	53-70		
	FSC-5B(CC06)		65-82		
	FSC-5C(CC06)		78-95		
	FSC-6A(CC09)	CMP68-150CK6 CMP100-203CK6	68-100/100-153	CC 09T3	DM4.0X10 -T15
	FSC-6B(CC09)		94-126/126-179		
	FSC-6C(CC09)		118-150/150-203		
	FST-1A0	CMP20-36CK1	20-26	TP 0802	DM2X4-T6
	FST-2A0	CMP25-47CK2	25-33		
	FST-3A0	CMP32-60CK3	32-42		
	FST-3B0		41-51		
	FST-3C0		50-60		
	FST-4A0	CMP41-74CK4	41-54	TC 1102	DM2 .5X6 -T8
	FST-4B0		50-63		
	FST-4C0		61-74		
	FST-5A0	CMP53-95CK5	53-70		
	FST-5B0		65-82		
	FST-5C0		78-95		
	FST-6A0	CMP68-150CK6 CMP100-203CK6	68-100/100-153		
	FST-6B0		94-126/126-179		
	FST-6C0		118-150/150-203		

Fine boring insert seat

Drawings	Designation	Adapted boring head	Processing range $\varnothing D$	Insert	Screw
	FSC-4A0	CMP41-74CK4	41-54	CC 0602	DM2.5X6 -T8
	FSC-4B0		50-63		
	FSC-4C0		61-74		
	FSC-5A0	CMP53-95CK5	53-70	CC 09T3	DM4.0X10 -T15
	FSC-5B0		65-82		
	FSC-5C0		78-95		
	FSC-6A0	CMP68-150CK6	68-100/100-153	CC 09T3	DM4.0X10 -T15
	FSC-6B0	CMP100-203CK6	94-126/126-179		
	FSD-3A30+2.5	CMP32-60CK3	37-42	DC 0702	DM2.5X6 -T8
	FSD-3B30		41-51		
	FSD-3C30		50-60		
	FSD-4A30+1.5	CMP41-74CK4	44-54		
	FSD-4B30		50-63		
	FSD-4C30		61-74		
	FSD-5A30	CMP53-95CK5	53-70		
	FSD-5B30		65-82		
	FSD-5C30		78-95		
	FSD-6A30	CMP68-150CK6 CMP100-203CK6	68-100/100-153		
	FSD-6B30		94-126/126-179		
	FSD-6C30		118-150/150-203		
	FST-4A45	CMP41-74CK4	41-54	TC 1102	DM2.5X6 -T8
	FST-5A45	CMP53-95CK5	53-70		
	FST-6A45	CMP68-150CK6	68-100		
		CMP100-203CK6	100-153		
	FST-3A25	CMP32-60CK3	32-42	TP 0802	DM2X4-T6
	FST-4A25	CMP41-74CK4	41-54		
	FST-5A25	CMP53-95CK5	53-70		
	FST-6A25	CMP68-150CK6	68-100	TC 1102	DM2.5X6 -T8
		CMP100-203CK6	100-153		

- ◆ No inserts attached, please purchase according to your needs
- ◆ Attached with screw and wrench

Fine boring head (large aperture)

Processing range $\varnothing 150$ - $\varnothing 530$

- ◆ The CLP series of large aperture modular fine boring heads offer good balance and high accuracy.
- ◆ Rough and fine boring tools use the same basic components and can be used with additional optional accessories.
- ◆ Aluminum alloy bridges and counterweights are also available for purchase, which can be used to reduce the weight of the tool.

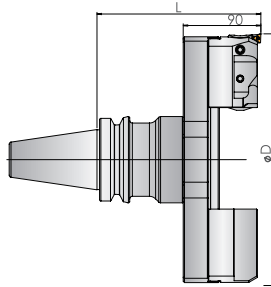


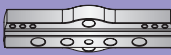
The standard type of steel bridge of fine boring

Processing range ØD	Designation	Weight									Adapted insert seat							
			Model	Weight	Model	Weight	Model	Weight	Model	Weight	Insert seat	Insert	Insert seat	Insert				
150-210	CLP 150-210	6.2	-	-	CL 150-210	2.50	LP 150	1.6	LM 150	1.05	FST- 6A	TC 1102	FSC- 6A	CC 09T3				
210-290	CLP 210-290	7.5			CL 210-290	3.70												
290-370	CLP 290-370	8.5			CL 290-370	5.05												
370-450	CLP 370-450	10.2			CL 370-450	6.80												
450-530	CLP 450-530	11.6			CL 450-530	8.40									LM 200	1.60	FST- 6B	FSC- 6B
530-610	CLP 530-610	17.5	CL40 -200	4.7	CL 530-610	9.50			FST- 6C	FSC- 6C								
610-690	CLP 610-690	19.0			CL 610-690	11.00												
690-770	CLP 690-770	20.8			CL 690-770	12.70												
770-850	CLP 770-850	23.0			CL 770-850	15.00												

- ◆ No inserts attached, please purchase according to your needs
- ◆ No rivets attached, rivet type is different for different machines
- ◆ OEM service available

Lightweight aluminum bridge fine boring



Processing range ØD	Designation	Kg Weight							Adapted insert seat							
			Aluminum bridge		Fine boring slide		Balance block									
			Designation	Weight	Designation	Weight	Designation	Weight	Insert seat	Insert	Insert seat	Insert				
150-210	CLP 150-210 AL	4.6	CL 150-210 AL	0.9	LP 150	1.6	LM 150	1.05	FST-6A FST-6B FST-6C	TC 1102	FSC-6A FSC-6B FSC-6C	CC 09T3				
210-290	CLP 210-290 AL	5.1	CL 210-290 AL	1.3			LM 200	1.60								
290-370	CLP 290-370 AL	5.5	CL 290-370 AL	2												
370-450	CLP 370-450 AL	5.9	CL 370-450 AL	2.5												
450-530	CLP 450-530 AL	6.2	CL 450-530 AL	3												

OEM service available

The expanding function of LP 150 fine boring head

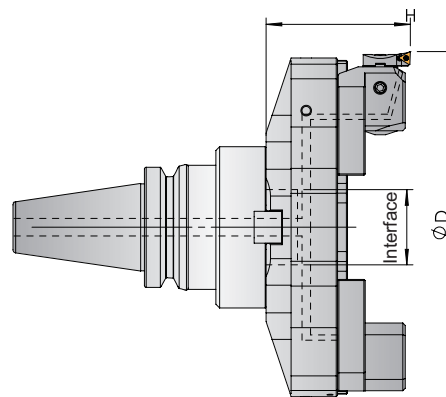
The processing range will increase by exchanging insert seat. A reverse installation achieves reverse boring, to improve efficiency and accuracy

The machining range of the exchange insert holder

Processing range ØD	Bridge	Insert seat	Processing range	Bridge	Insert seat	Processing range	Bridge	Insert seat
150-210	CL 150 -210	FS* - 6A	370-450	CL 370-450	FS* - 6A	610-690	CL 610-690	FS* - 6A
176-236		FS* - 6B	396-476		FS* - 6B	636-716		FS* - 6B
200-260		FS* - 6C	420-500		FS* - 6C	660-740		FS* - 6C
210-290	CL 210 -290	FS* - 6A	450-530	CL 450-530	FS* - 6A	610-770	CL 690-770	FS* - 6A
236-315		FS* - 6B	476-556		FS* - 6B	716-746		FS* - 6B
260-340		FS* - 6C	500-580		FS* - 6C	740-820		FS* - 6C
290-370	CL 290 -370	FS* - 6A	530-610	CL 530-610	FS* - 6A	770-850	CL 770-850	FS* - 6A
316-396		FS* - 6B	556-636		FS* - 6B	796-876		FS* - 6B
340-420		FS* - 6C	580-660		FS* - 6C	820-900		FS* - 6C

OEM service available

Internal cooled large bore fine boring tool (full range of aluminum-based bridges)

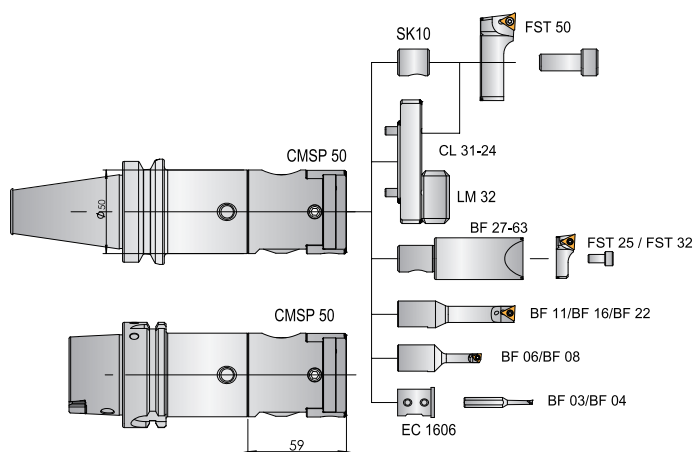


Processing range ØD	Designation	kg Weight	D1	H	Aluminum bridge		Fine boring fine adjustment slider		Fine boring balance block		Processing diameter		
					Designation	Weight	Designation	Weight	Designation	Weight	Insert seat	Insert	Other inserts
200-280	CNP 200-280AL	6.3	CL40	115	NL 200-280AL	2.8	LNP 200	1.75	LNM 200	1.75	FST-6A	TC 1102	TP 1103 TP 0902 DC 0702
280-360	CNP 280-360AL	7.5	FMB60	115	NL 280-360AL	4.1							
360-440	CNP 360-440AL	9.7		125	NL 360-440AL	6.2							
440-520	CNP 440-520AL	11.2		125	NL 440-520AL	7.7							
520-600	CNP 520-600AL	13.2		135	NL 520-600AL	9.7							
600-680	CNP 600-680AL	14.7		135	NL 600-680AL	11.2							
680-760	CNP 680-760AL	17.5		145	NL 680-760AL	14.1							
760-840	CNP 760-840AL	18.8		145	NL 760-840AL	15.4							

Fine boring head with small bore

Processing range $\varnothing 6$ - $\varnothing 108$

- ◆ CMSP Micro adjustment boring head is suitable for fine boring.
- ◆ The adjustment size of each division of the adjustment scale is 0.01mm in diameter.
- ◆ The insert seat is fixed by a tooth structure, which ensures stable cutting and a wide processing range.



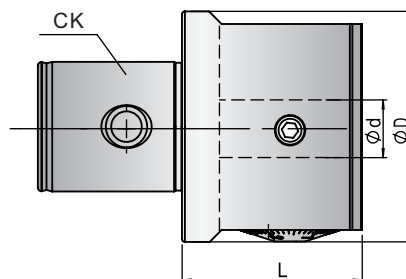
Name	Designation	Processing range $\varnothing D$	Depth	Insert	Screw	Wrench	Weight
Fine boring head	CMSP 50	6-108	59	-	-	-	0.95
Conversion sleeve	EC1 606	For use with BF03 or BF04	-	-	-	-	0.03
Alloy boring bar	BF 03	3-4	15	-	-	-	0.03
Alloy boring bar	BF 04	4-6	20	-	-	-	0.03
Boring bar	BF 06	6-9	21	WBG 0601...L	DM2x4	T6	0.04
Boring bar	BF 08	8-12	28				0.04
Boring bar	BF 11	11-17	40	TPGT 0902...L	DM2.5x6	T8	0.06
Boring bar	BF 16	16-23	50				0.08
Boring bar	BF 22	22-28	68				0.11
Removable boring bar	BF 27-63	For use with FST 25 or FST 32	52				0.22
Fine boring tool seat	FST 25	28-42	52+11				0.01
Fine boring tool seat	FST 32	36-54	52+11				0.02
Fine boring tool seat	FST 50	54-84	59+20	TPGT 1103...L	DM3x7	T10	0.08
Connecting bridge block	CL 31-24	For use with FST 25 80-108	59+13+20	-	-	-	0.15
Small counterweight	LM 32		-	-	-	-	0.04
Locking block	SK 10		-	-	-	-	0.03



Fine Boring

Fine Boring Head with Small Bore

Fine boring head with small bore

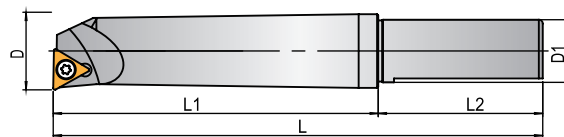
Processing range $\varnothing 6$ - $\varnothing 50$ 

Designation	Processing range $\varnothing D$	CK NO.	D	d	L	Tap	kg weight
MBJ10	6-20	4	40	10	28.5	1.5	0.35
MBJ16	6-50	6	64	16	50	6	1.25

Steel boring bar

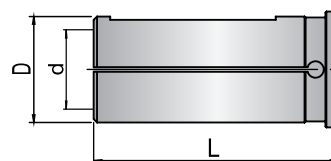
Designation	Processing range ØD	D	D1	L1	L2	L	Insert	Insert screw	Insert wrench	kg weight
BJ1006-23	6- 8	6	10	23	30	53	WBGT 0601	DM2x4	T6	0.05
BJ1008-25	8-10	8		25	30	55	TBGT 0601			0.06
BJ1010-30	10-12	10		30	30	60				0.07
BJ1012-36	12-14	12		36	30	66	TPGH 0902	DM2.5x6	T8	0.09
BJ1014-42	14-16	14		42	30	72				0.12
BJ1016-48	16-18	16		48	30	78	TPGH 1103	DM3x7	T10	0.14
BJ1018-54	18-20	18		54	30	84				0.2

Steel boring bar



Designation	Processing range ØD	D	D1	L1	L2	L	Insert	Insert screw	Insert wrench	kg weight
BJ1606-24	6-8	6	16	24	49	73	WBGT 0601	DM2X4	T6	0.07
BJ1608-32	8-11	8		32	48	80	TBGT 0601			0.08
BJ1610-40	10-13	10		40	47	87				0.08
BJ1612-53	12-17	12		53	45	98	TPGH 0902	DM2.5X6	T8	0.11
BJ1616-68	16-21	16		68	42	110				0.14
BJ1620-83	20-26	20		83	42	125	TPGH 1103	DM3X7	T10	0.21
BJ1625-90	25-32	25		90	38	128				0.3
BJ1630-90	30-42	30		90	38	128				0.32
BJ1640-90	40-50	40		90	38	128				0.41

Conversion sleeve



Designation	D	d	L	Combined tungsten steel tool holder
EC1608	16	8	37	WC08 * M5
EC1610	16	10	37	WC10 * M6
EC1612	16	12	37	WC12 * M6
EC1614	16	14	37	WC14* M6



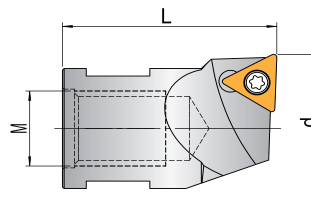
Fine Boring

Fine Boring Head with Small Bore

Carbide anti-vibration tool holder



Designation	D	L	M	Conversion sleeve	Weight	Combined boring head
WC08H100M5	8	100	M5	EC1608	0.08	BN09 , BN10.5
WC10H100M6	10	100	M6	EC1610	0.15	BN12
WC10H150M6	10	150			0.23	
WC12H100M6	12	100		EC1612	0.24	BN14
WC12H150M6	12	150			0.33	
WC14H150M6	14	150		EC1614	0.43	BN16
WC14H200M6	14	200			0.58	
WC16H100M10	16	100	M10	-	0.42	BN18 , BN20, BN22, BN24, BN26, BN28, BN30, BN32, BN34, BN36, BN38, BN40, BN42 , BN46,
WC16H150M10	16	150	M10		0.61	
WC16H200M10	16	200	M10		0.82	



Designation	Processing range ØD	d	L	M	Insert	Insert screw	Insert wrench	Weight
BN09	9-10.5	9	18	M5	TPGT 0802	DM2X4	T6	0.03
BN10.5	10.5-12	10.5	18	M5				0.03
BN12	12-14	12	23	M6				0.03
BN14	14-16	14						0.03
BN16	16-18	16						0.04
BN18	18-20	18	27	M10				0.04
BN20	20-22	20						0.05
BN22	22-24	22						0.05
BN24	24-26	24						0.05
BN26	26-28	26						0.05
BN28	28-30	28						0.06
BN30	30-32	30						0.06
BN32	32-34	32						0.07
BN34	34-36	34						0.09
BN36	36-38	36						0.11
BN38	38-40	38						0.15
BN40	40-42	40						0.16
BN42	42-46	42						0.19
BN46	46-50	46						0.26



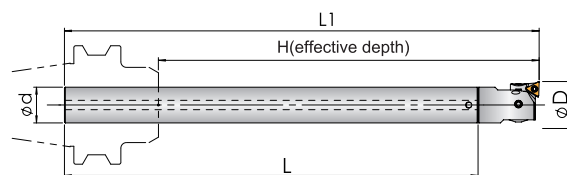
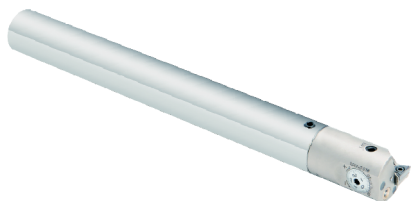
Fine Boring

Fine Boring Head with Small Bore

Carbide anti-vibration tool holder

Processing range $\varnothing 20$ - $\varnothing 60$

- ◆ Super-hard tungsten carbide boring bar, hard and durable, high hardness, high rigidity, high shock resistance, can be used for deep hole boring.
- ◆ All specifications have internal cooling holes, which have low leakage and good internal cooling effects during deep hole processing.
- ◆ Straight shank, the machining depth can be adjusted according to your needs.



Designation	$\varnothing d$	Processing range $\varnothing D$	L1	L	H	Fine boring head
WC19H150CK1	19	20-36	182.5	150	130	CMP 20-36CK1
WC19H200CK1			232.5	200	170	
WC19H250CK1			282.5	250	210	
WC24H200CK2	24	25-47	235.5	200	170	CMP 25-47CK2
WC24H250CK2			285.5	250	210	
WC24H300CK2			335.5	300	260	
WC32H250CK3	32	32.5-60	290	250	180	CMP 32-60CK3
WC32H300CK3			340	300	230	
WC32H350CK3			390	350	300	

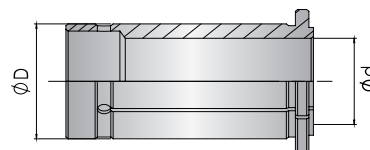
◆ No CMP fine boring head, please purchase

◆ Note: The machining depth may not reach the effective machining depth depending on the material of the workpiece.

Powerful collets for carbide straight shanks

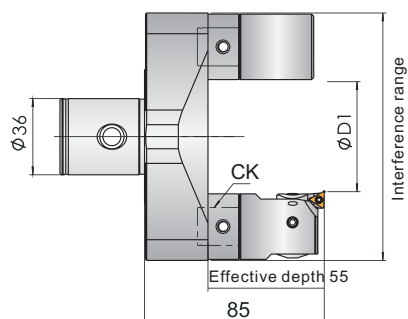
Designation	$\varnothing d$	$\varnothing D$
C32-19	19	32
C32-24	24	
C42-19	19	42
C42-24	24	
C42-32	32	

◆ Collet should be used on the powerful milling shank



External sleeve boring tool

Processing range $\varnothing 25$ - $\varnothing 102$

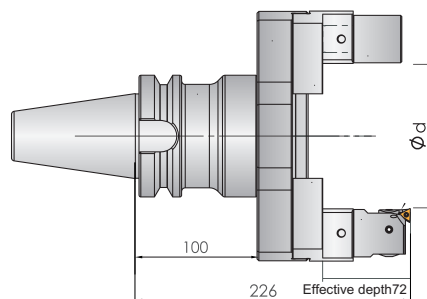
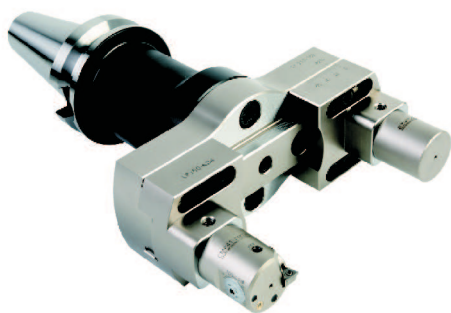


Processing range ØD1	Connection bracket			Fine boring head		Balance block		Insert seat	Insert
	Designation	kg weight	Interference range	Designation	kg weight	Designation	kg weight		
25-34	CMPT 25-52CK6	1.5kg	Ø118	CMP 32- 60CK3	0.22kg	BZ-CK3	0.22kg	FS* -3C	TP 0802
34-43								FS* -3B	
43-52								FS* -3A	
50-59	CMPT 50-77CK6	1.8kg	Ø143					FS* -3C	
59-68								FS* -3B	
68-77								FS* -3A	
75-84	CMPT 75-102CK6	1.9kg	Ø168					FS* -3C	
84-93								FS* -3B	
93-102								FS* -3A	

- ◆ Inserts are not included, please order them separately.
- ◆ Please reverse the spindle when machining the outer circle
- ◆ When boring head is installed in the opposite direction it can be used for boring. At this time, the spindle should be rotated forward

External sleeve boring tool

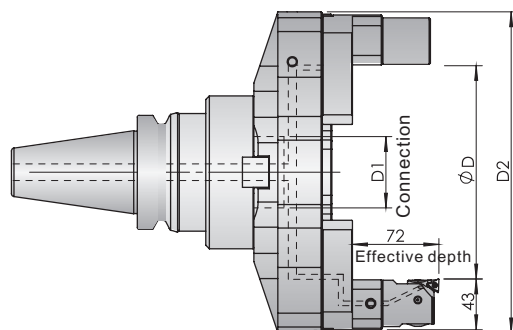
Processing range $\varnothing 41$ - $\varnothing 724$



Processing range $\varnothing d$	Bridge		Set block		Fine boring head		Balance block	
	Designation	kg weight	Designation	kg weight	Designation	kg weight	Designation	kg weight
41-96	CL 150-210	2.50	LP 150 -CK4	0.75	CMP 41 -74CK4 Insert seat FST-4A Insert TC 1102	0.42	BZ-CK4	0.43
84-164	CL 210-290	3.70						
164-244	CL 290-370	5.05						
244-324	CL 370-450	6.80						
324-404	CL 450-530	8.40						

- ◆ Inserts are not included, please order them separately.
- ◆ Please reverse the spindle when machining the outer circle
- ◆ When boring head is installed in the opposite direction, it can be used for boring. At this time, the spindle should be rotated forward.
- ◆ When machining the minimum stroke of the outer circle, it is necessary to adjust the stroke with CMP41-72CK4 fine boring cutter.

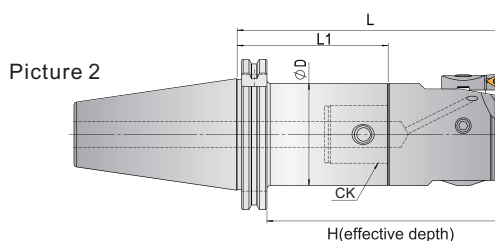
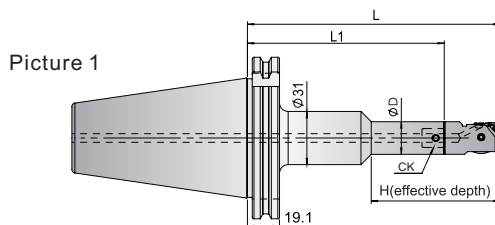
External tool set with internal coolant



Processing range Ød	Aluminum bridge				Set block		Balance block		Fine boring head		Insert seat and insert		
	Designation	kg weight	Interface D1	D2	Designation	kg weight	Designation	kg weight	Designation	kg weight	Matching insert seat	Matching insert	Other insert
100-180	NL 200-280AL	2.8	CL40	195	NP 200-CK4	1.3 (1 Piece)	BZ- CK4	0.43	CMP 41 - 74CK4	0.42	FST-4A (Standard)	TC 1102	CC 0602 TC 1103 TP 1103 TP 0902 DC 0702
180-260	NL 280-360AL	4.1	FMB60	275									
260-340	NL 360-440AL	6.2		355									
340-420	NL 440-520AL	7.7		435									
420-500	NL 520-600AL	9.7		515									
500-580	NL 600-680AL	11.2		595									
580-660	NL 680-760AL	14.1		675									
660-740	NL 760-840AL	15.4		755									

- ◆ Inserts are not included, please order them separately
- ◆ Please reverse the spindle when machining external round
- ◆ When the boring head is installed reversely, it can be used for boring holes.
At this time, the spindle should be rotated forward

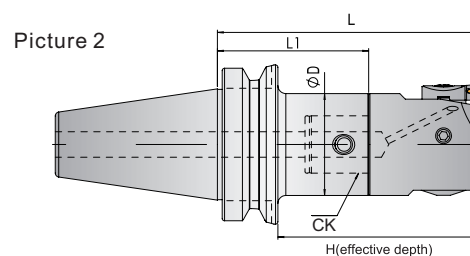
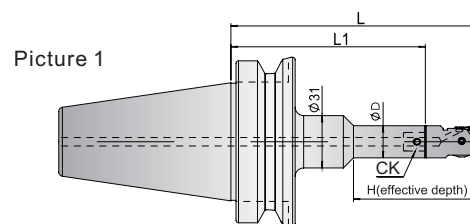
SK boring holder DIN69871 boring cutter holder



Designation	Picture	CK NO.	ØD	L	L1	H H(effective depth)	kg weight (kg)
SK40H075CK1	Picture 2	1	19	107.5	75	88.0	0.80
SK40H085CK2		2	24	120.5	85	101.0	1.05
SK40H095CK3		3	31	135	95	115.5	1.00
SK40H125CK3				165	125	145.5	1.30
SK40H085CK4		4	39	132	85	112.5	1.20
SK40H130CK4				177	130	157.5	1.80
SK40H075CK5		5	50	132	75	112.5	1.20
SK40H125CK5				182	125	162.5	2.30
SK40H065CK6		6	64	136	65	116.5	1.25
SK40H115CK6				186	115	166.5	2.65
SK40H165CK6				236	165	216.5	3.85
SK50H115CK1	Picture1	1	19	147.5	115	75.0	3.20
SK50H085CK2	Picture 2	2	24	120.5	85	101.0	3.10
SK50H110CK2				145.5	110	126.0	3.20
SK50H090CK3		3	31	130	90	110.5	3.20
SK50H125CK3				165	125	145.5	3.40
SK50H115CK4		4	39	162	115	142.5	3.80
SK50H145CK4				192	145	172.5	4.00
SK50H105CK5		5	50	162	105	142.5	3.90
SK50H150CK5				207	150	187.5	4.50
SK50H180CK5				237	180	217.5	5.00
SK50H240CK5				297	240	277.5	5.80
SK50H095CK6		6	64	166	95	146.5	4.00
SK50H170CK6				241	170	221.5	5.80
SK50H230CK6				301	230	281.5	7.20

Remark: The thickened holder of item SK50H350CK6-80 is also standing stock, if the machining holder diameter over 80mm, depth over 340mm, it can be considered.

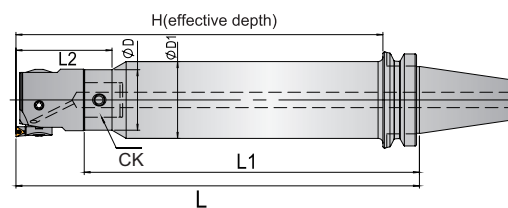
BT boring holder



Designation	Picture	CK.NO.	ØD	L	L1	H H(effective depth)	kg weight
BT30H070CK1	Picture 2	1	19	102.5	70	80.5	0.5
BT30H080CK2		2	24	115.5	80	93.5	0.6
BT30H080CK3		3	31	120.0	80	98.0	0.7
BT30H070CK4		4	39	117.0	70	95.0	0.8
BT30H070CK5		5	50	127.0	70	105.0	0.8
BT30H070CK6		6	64	141.0	70	119.0	1.2
BT40H075CK1	Picture 2	1	19	107.5	75	80.5	1.0
BT40H105CK1				137.5	105	110.5	1.2
BT40H085CK2		2	24	120.5	85	93.5	1.1
BT40H115CK2				150.5	115	123.5	1.4
BT40H095CK3		3	31	135.0	95	108.0	1.2
BT40H125CK3				165.0	125	138.0	1.5
BT40H085CK4		4	39	132.0	85	105.0	1.3
BT40H130CK4				177.0	130	150.0	1.9
BT40H175CK4				222.0	175	195.0	2.2
BT40H050CK5		5	50	107.0	50	80.0	1.2
BT40H075CK5				132.0	75	105.0	1.3
BT40H125CK5				182.0	125	155.0	2.4
BT40H175CK5				232.0	175	205.0	3.0
BT40H065CK6		6	64	136.0	65	109.0	1.3
BT40H115CK6				186.0	115	159.0	2.7
BT40H165CK6				236.0	165	209.0	3.9

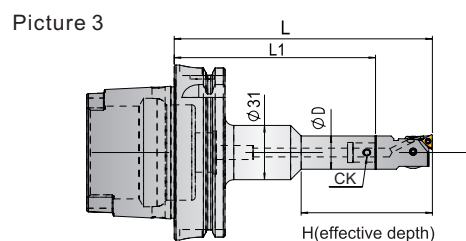
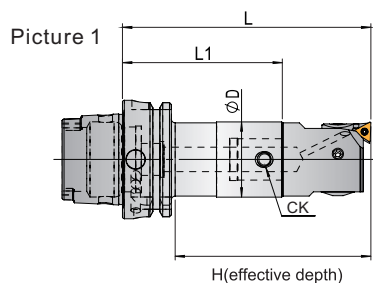
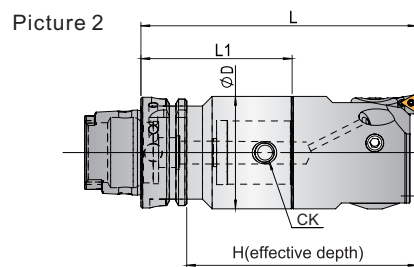
Designation	Picture	CK NO.	ØD	L	L1	H (effective depth)	kg weight
BT50H115CK1	Picture 1	1	19	147.5	115	75	4
BT50H085CK2	Picture 2	2	24	120.5	85	82.5	3.8
BT50H110CK2				145.5	110	107.5	3.9
BT50H090CK3	Picture 2	3	31	130	90	92	3.9
BT50H125CK3				165	125	127	4.1
BT50H115CK4	Picture 2	4	39	162	115	124	4.3
BT50H145CK4				192	145	154	4.5
BT50H175CK4				222	175	184	4.8
BT50H065CK5	Picture 2	5	50	122	65	84	3.85
BT50H105CK5				162	105	124	4.5
BT50H150CK5				207	150	169	5.1
BT50H180CK5				237	180	199	5.5
BT50H240CK5				297	240	259	6.2
BT50H095CK6	Picture 2	6	64	166	95	128	4.5
BT50H170CK6				241	170	203	6.3
BT50H230CK6				301	230	263	7.7
BT50H290CK6				361	290	323	9
BT50H170CK7	Picture 2	7	90	257	170	219	9.1
BT50H230CK7				317	230	279	11.8
BT50H290CK7				377	290	339	14.6
BT50H350CK7				437	350	399	17.45

Thickening boring holder



Designation	CK NO.	ØD	ØD1	L	L1	L2	H (effective depth)	kg weight
BT50H190CK4-46	4	39	46	237	190	65	199	5.6
BT50H235CK4-46				282	235		244	6.2
BT50H240CK5-61	5	50	61	297	240	80	259	8.2
BT50H300CK5-61				357	300		319	9.6
BT50H260CK6-71	6	64	71	331	260	100	293	10.3
BT50H315CK6-71				386	315		348	12.2
BT50H290CK6-80			80	361	290		323	13.2
BT50H350CK6-80				421	350		383	15.3

HSK boring holder

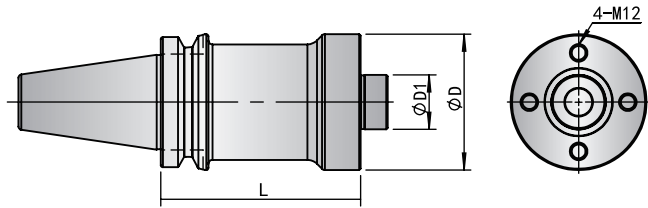


Designation	Picture	CK NO.	ØD	L	L1	H (effective depth)	kg weight
HSK63AH075CK1	Picture 1	CK1	19	107.5	75	81.5	0.9
HSK63AH100CK1				132.5	100	106.5	1.3
HSK63AH085CK2		CK2	24	120.5	85	94.5	1.7
HSK63AH115CK2				150.5	115	124.5	2.2
HSK63AH095CK3		CK3	31	135	95	109	2.3
HSK63AH125CK3				165	125	139	2.6
HSK63AH085CK4		CK4	39	132	85	106	2.1
HSK63AH130CK4				177	130	151	2.7
HSK63AH075CK5		CK5	50	132	75	106	2.3
HSK63AH100CK5				157	100	131	2.7
HSK63AH135CK5				192	135	166	2.8
HSK63AH075CK6	Picture 2	CK6	64	146	75	120	2.3
HSK63AH115CK6				186	115	160	2.8
HSK63AH165CK6				236	165	210	3.1
HSK100AH105CK1	Picture 3	CK1	19	137.5	105	75	2.6
HSK100AH115CK2	Picture 1	CK2	24	150.5	115	121.5	2.7
HSK100AH125CK3		CK3	31	165	125	136	2.9
HSK100AH120CK4		CK4	39	167	120	138	3.1
HSK100AH180CK4				227	180	198	3.7
HSK100AH110CK5		CK5	50	167	110	138	3.5
HSK100AH185CK5				242	185	213	4.6
HSK100AH095CK6		CK6	64	166	95	137	3.6
HSK100AH170CK6				241	170	212	5.5
HSK100AH230CK6				301	230	272	7.1



Boring Holder
Bridge Boring Holder

BT bridge boring holder



Designation	ØD	ØD1	L	Fixing screw set	kg weight
BT40H070CL40	100	40	70	CLM12X35	2.8
BT50H100CL40			100		6.1
BT50H150CL40			150		7.9
BT50H200CL40			200		9.7
BT50H250CL40			250		10.9
BT50H300CL40			300		12.5
BT50H350CL40			350		13.9

SK bridge boring holder

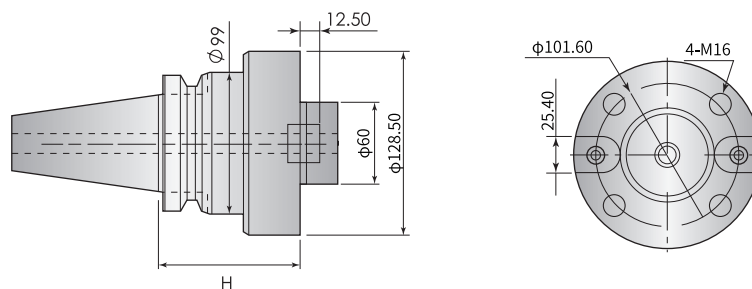


Designation	ØD	ØD1	L	Fixing screw set	kg weight
SK40H070CL40	100	40	70	CLM12X35	2.8
SK50H080CL40			80		5.1
SK50H150CL40			150		7.3
SK50H200CL40			200		9.4
SK50H250CL40			250		10.5

HSK bridge boring holder

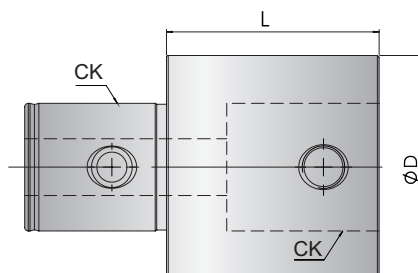


Designation	ØD	ØD1	L	Fixing screw set	kg weight
HSK63AH070CL40	100	40	70	CLM12X35	2.8
HSK100AH080CL40			80		5.1
HSK100AH150CL40			150		7.3
HSK100AH200CL40			200		9.3
HSK100AH250CL40			250		10.5

BT bridge boring holder with internal coolant

Designation	L	Fixing screw	kg weight
BT50H100FMB60	100	M16	9.2
BT50H150FMB60	150	M16	12.1
BT50H200FMB60	200	M16	14.9
BT50H250FMB60	250	M16	17.9
BT50H300FMB60	300	M16	20.8
BT50H350FMB60	350	M16	23.7

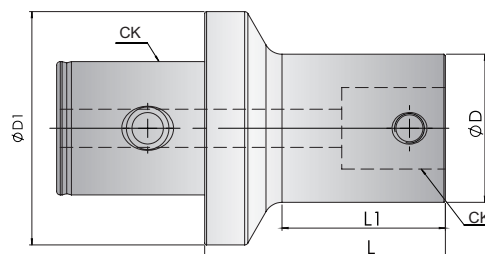
Extension rod



Designation	CK NO.	L	ØD	kg weight
CK11-30	1	30	19	0.07
CK22-30	2	30	24	0.10
CK33-30	3	30	31	0.15
CK44-45	4	45	39	0.40
CK44-60		60		0.53
CK55-60	5	60	50	0.80
CK55-90		90		1.25
CK66-60	6	60	64	1.40
CK66-100		100		2.33

- ◆ Please note that after using the extension rod, length to diameter ratio will become larger, which may affect processing conditions.
- ◆ With internal coolant

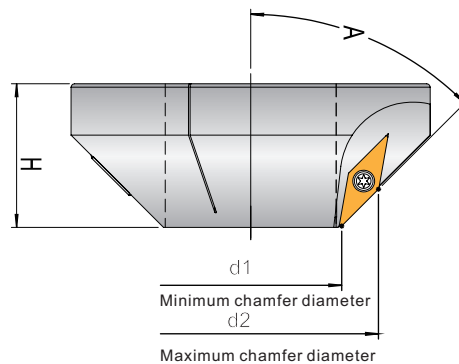
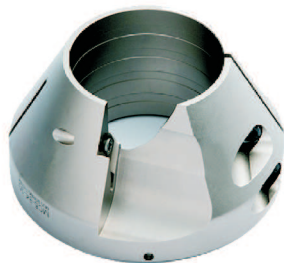
Reducing rod



Designation	CK NO.(Spindle side)	CK NO.(Hole side)	ØD	ØD1	L	L1	kg weight
CK21-36	2	1	19	24	36	30	0.10
CK31-41	3	2	24	31	41	25	0.15
CK32-37		1	19	39	37	36	
CK41-58	4	2	24	50	58	40	0.30
CK42-50		3	31		50	37	
CK43-50		1	19		60	40	
CK51-60	5	2	24	64	54	35	0.45
CK52-54		3	31		75	55	
CK52-75		4	39		47	29	0.50
CK53-47		1	19		75	55	
CK53-75		2	24		42	25	0.50
CK54-42		3	31		75	55	
CK54-75		4	39		70	40	0.90
CK61-70		1	19		63	45	
CK62-63	6	2	24	90	90	72	0.72
CK62-90		3	31		56	39	
CK63-56		4	39		90	73	0.88
CK63-90		5	50		51	35	
CK64-51		1	19		90	75	1.08
CK64-90		2	24		41	25	
CK65-41		3	31		90	74	1.45
CK65-90		4	39		60	25	
CK76-60-A90	7	6	64	90	60	25	2.30

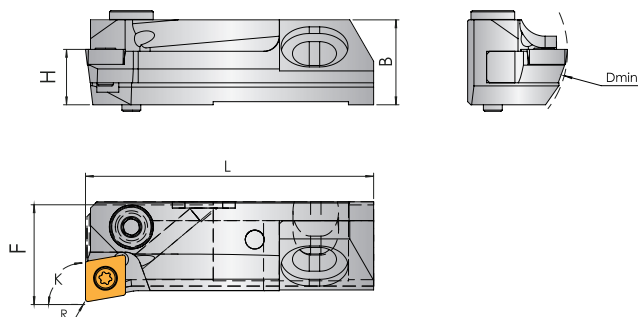
- ◆ Please note that after using the extension rod, length to diameter ratio will become larger, which may affect processing conditions.
- ◆ With internal coolant
- ◆ A90 indicates that the locking screw hole of the head and the locking taper hole of the holder are 90° staggered design, which is convenient for special situations.

Chamfer ring



Designation	Teeth	A Angle A	d1	d2	H	Holder	Insert	Insert screw set	Locking screw	kg weight
MC1-34-45	1	45	21	34	22	CK1	VCGT 110302	DM3X7-T10	M5x16	0.06
MC2-39-45			26	39	25	CK2				0.12
MC3-54-45			34	54	35	CK3	VCGT 160404	DM4X10-T15	M6x20 M6x25 M8x25	0.52
MC4-62-45			42	62	38	CK4				0.7
MC5-93-45			53	93	43	CK5				1.31
MC6-107-45			67	107	46	CK6				1.82
MC6-138-45			98	138						3.85
MC6-160-45			120	160						5.58
MC1-41-30	2	30	23	41	30	CK1	VCGT 110302	DM3X7-T10	M5x16 M6x20	0.11
MC2-46-30			28	46	35	CK2				0.22
MC3-53-30			35	53		CK3				0.35
MC4-61-30			43	61		CK4				0.42
MC5-84-30			56	84	48	CK5	VCGT 160404	DM4X10-T15	M8x25	1.3
MC6-98-30			70	98		CK6				1.2
MC6-120-30			92	120						3.05
MC6-142-30			114	142						4.1

Micro-adjustable insert seat



The picture is the right hand insert seat

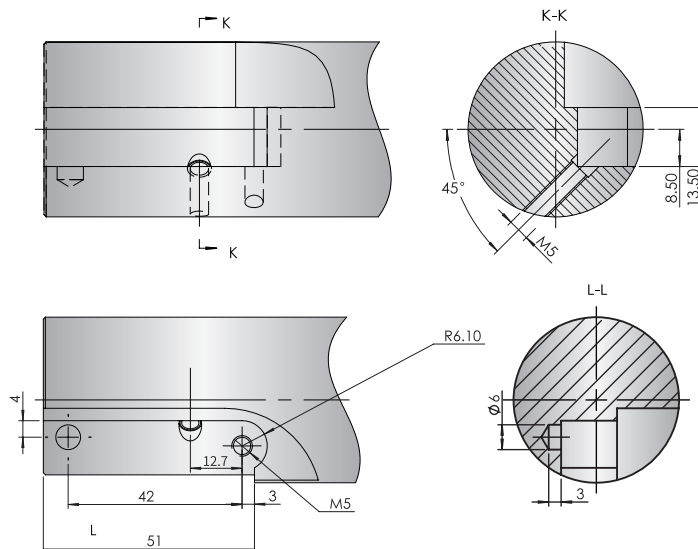
Designation	Dmin	L	F	B	H	K	R	Insert	Insert screw set
FSC-8516A0-06-R/L	28	45.8	16	13.5	8.8	90°	0.4	CC 0602	DM2.5X6 -T8
FSC-8516A5-06-R/L						95°		TP 0902	DM2.5X6 -T8
FST-8516A0-09-R/L						90°			
FST-8516A5-09-R/L						95°			
FSD-8516A30-07-R/L		47.5	20			120°		DC 0702	DM2.5X6 -T8
FST-8520A0-11C-R/L	45.8	90°				TC 1102			
FST-8520A5-11C-R/L		95°							
FST-8520A0-11P-R/L		90°				TP 1103		DM3X6 -T10	
FST-8520A5-11P-R/L		95°							

- ◆Please order the insert separately
- ◆Micro adjustment accuracy is diameter is $\varnothing 0.01\text{mm}$
- ◆Radial range:0- $\varnothing 6\text{mm}$, Axial range:0-10mm

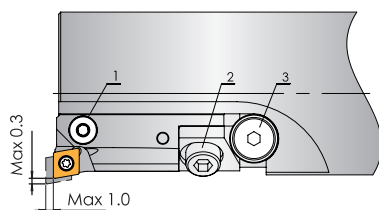
Spare parts	Name	Designation
	Axial adjustment block	SV- 12
	Axial adjustmentscrew	SVM5 -20
	Insert seat fixing screw	RMM5 -20
	Insert seat fixing wrench	PS-4B
	Radial adjustment wrench	PS-2 .5B
	Radial adjustment wrench	PS-3B

Micro-adjustable insert seat instructions

Insert seat installing dimension instruction



Insert seat adjustment instruction



1. Screw for radial adjustment
2. Screw for tool holder fixing
3. Screw for adjust the axis direction

Adjust axis direction operation

- ◆ Slightly loosen the screw 2
- ◆ Turn clockwise the screw 3, Move the insert seat forward to the required size.
- ◆ Tighten the screw 2.

Adjust axis direction operation

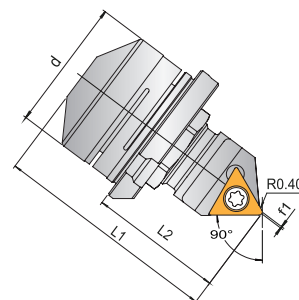
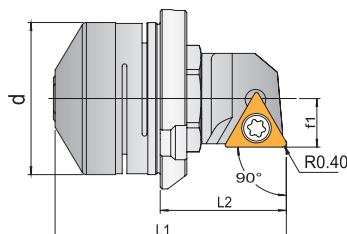
- ◆ Turn the screw 1 clockwise, tool diameter becomes larger (0.01mm/grid)
- ◆ Turn the screw 1 counterclockwise, tool diameter becomes smaller (0.01mm/grid)

Notice: If the insert seat needs to be adjusted the axis direction backwards, you should loosen the screw 2 and move the insert seat to the needed position, gradually move forward to the desired position

TOTIME

Micro-adjustable Tool/Reverse tool
Trimming Unit

Trimming unit



Installation Method	Designation	Approach angle	Cutting edge	Dmin Minimum machining diameter	d	L1	L2	f1	Insert	Screw
Side angle installation 	R/L148C-31-CC06	90°	0°	25.5	16	25.15	14.3	0.45	CC 0602	DM2.5X6 -T8
	R/L148C-31-TC06			24.8		25.3	14.3	0.49	TC 06T1	DM2X4-T6
	R/L148C-31-TB06								TB 0601	
	R/L148C-32-TC09			32.5	20	33.7	19.1	0.9	TC 0902	DM2.2X6 -T6
	R/L148C-32-TP09								TP 0902	DM2.5X6 -T8
	R/L148C-33-TC1102								TC 1102	
	R/L148C-33-TP1103			42	22	45.3	23	1.1	TP 1103	DM3X7 -T10
	R/L148C-34-TC16								59.5	32

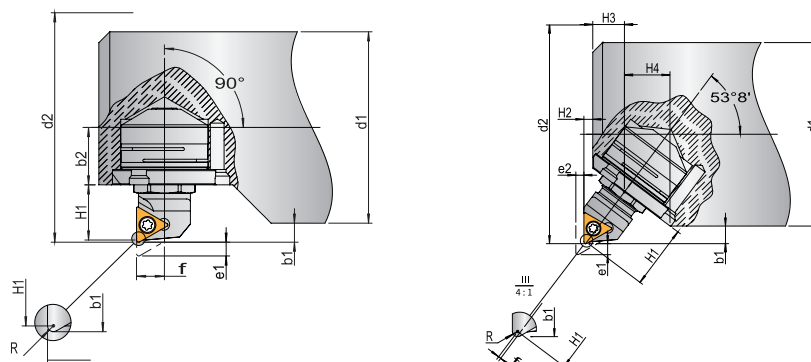
Right angle installation 	R/L148C-11-CC06	90°	0°	27	16	24.2	13.3	5.1	CC 0602	DM2.5X6 -T8
	R/L148C-11-TC06								DM2X4-T6	TC 06T1
	TB 0601									
	R/L148C-12-TC09			36.5	20	32.9	18.3	6.3	TC 0902	DM2.2X6 -T6
	R/L148C-12-TP09								TP 0902	DM2.5X6 -T8
	R/L148C-13-TC1102								TC 1102	
	R/L148C-13-TP1103			48.5	22	44.3	22.1	7.2	TP 1103	DM3X7 -T10
	R/L148C-14-TC16								68.4	32

◆ Inserts are not included, please order it separately.

◆ Please refer to P37 for installation dimensions.

◆ For the choice of tool tip and minimum machining diameter, please refer to P38.

Trim unit mounting dimensions



Installation	Insert			d1	d2	b1	e1	e2	b2	H1	H2	H3	H4	f
		IC	R	min	min	min	max	max	min	min				
Right angel installation 	06	6.35	0.2	26	27.9	0.6	2.5	-	3.6	9.8	-	-	-	5.1
			0.4		27.6	0.55				9.6				
			0.8		27	0.5				9.1				
	06	3.96	0.2	24	25.9	0.6		-	3.6	8.8	-	-	-	5.1
			0.4		25.6	0.55				8.6				
			0.8		25	0.5				8.1				
	09	5.56	0.2	34.5	37.4	1.45	3.5	-	4.55	13.95	-	-	-	6.3
			0.4		37.1	1.3				13.6				
			0.8		36.5	1				12.9				
	11	6.35	0.2	46.5	49.7	1.45	6	-	7.75	16.75	-	-	-	7.2
			0.4		49.1	1.3				16.4				
			0.8		48.5	1				15.7				
	16	9.53	0.4	67	69.6	1.3	10	-	9.4	25	-	-	-	10.3
			0.8		69	1				24.3				
			1.2		68.4	0.7				23.6				

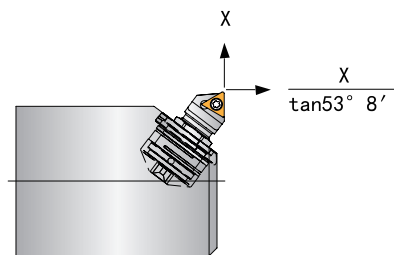
Side angel installation 	06	6.35	0.2	22	26.2	1.7	2	1.5	-	11.0	0.5	6.6	9.55	0.4
			0.4		25.9	1.65				10.7				0.4
			0.8		25.3	1.6				10.1				0.45
	06	3.96	0.2		25.7	1.5			-	10.9	0.5	6.6	9.55	0.4
			0.4		25.4	1.45				10.6				0.4
			0.8		24.8	1.4				10.0				0.45
	09	5.56	0.2	28.5	33.4	2.45	2.8	2.1	-	14.9	0.5	9.4	12.15	0.95
			0.4		33.1	2.3				14.5				1
			0.8		32.5	2				13.7				1.1
	11	6.35	0.2	38	42.9	2.45	4.8	3.6	-	17.6	0.5	11.2	14.85	1.15
			0.4		42.6	2.3				17.2				1.2
			0.8		42.0	2				16.4				1.3
	16	9.53	0.4	55	60.6	2.8	8	6	-	26.2	0.5	16.65	12.7	1.3
			0.8		60.0	2.5				25.4				1.4
			1.2		59.4	2.2				24.6				1.5

◆Please refer to P36 for installation dimensions

Fine tuning unit application

Fine tuning device applied to boring of nonstandard cutting tools

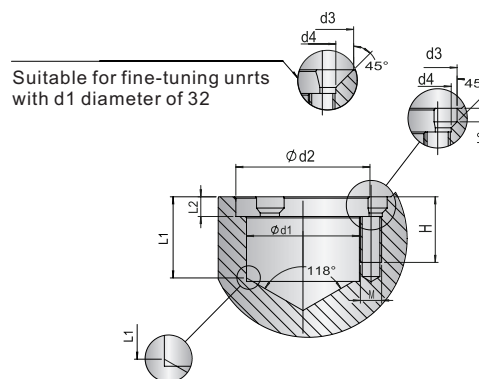
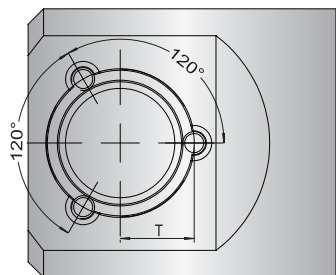
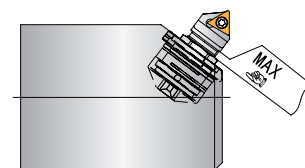
Blind hole installation, not affected by the diameter of the machining
Size can be adjusted at the front end, easy to operate
The fine tuning device can be self-locking, no need to unlock when adjusting the size,
and no need to lock after adjustment
The fine-tuning nut has a scale plate, and the radial adjustment of each scale is $\varnothing 0.02\text{mm}$



Notice:

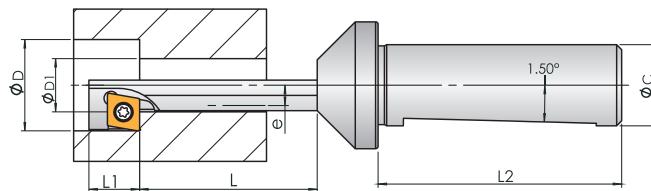
Axial movement amount of side angle installation's fine tuning unit = Radial movement amount / $\tan 53^\circ 8'$

Never loosen the cutter head beyond the adjustment range indicated by the wrench corresponding the fine adjustment unit. If this happens, it will cause the fine tuning unit can't be repaired



$\varnothing D$ diameter	d1 H7	d2	d3	d4	L1	L2	L3	H	T	M
16	16	19	4.6	3.2	11.5	2.8	1.6	9	9.65 $\pm$ 0.02	M3
20	20	25	4.6	3.2	15.5	4	1.6	9	12.5 $\pm$ 0.05	M3
22	22	30	6.5	4.3	24	5	1.8	13	15.4 $\pm$ 0.05	M4
32	32	46	11.9	5.4	33	6.3	-	16	23 $\pm$ 0.05	M5

Machine clamp reverse broach



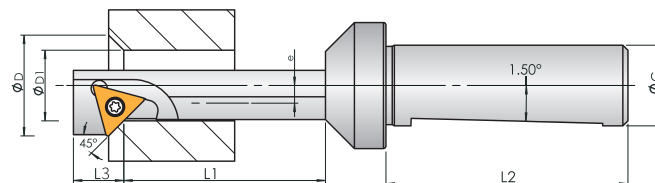
Designation	D	D1	C	L2	L	L1	e	Insert
MRF-18-W16	18	10.5	16	48	35	10	4	CC 0602
MRF-20-W16	20	13	16	48	40		4	
MRF-23-W20	23	15	20	50	50		4.5	
MRF-26-W20	26	17	20	50	50	13	5	CC 09T3
MRF-33-W25	33	21	25	56	70		6.5	
MRF-40-W25	40	25	25	56	80		8	

- ◆ Avoid secondary clamping to ensure accurate position of the hole
- ◆ One direction turning to reduce the chance of damage
- ◆ Non-standard design body with best rigidity
- ◆ Non-standard customization is acceptable

Reverse pulling process step

1. Spindle orientation
2. Eccentric shift (e value)
3. Z axis down
4. Displacement to the center of the hole (e value)
5. Spindle makes upward rotation and reverse pulling process
6. Spindle orientation
7. Eccentric shift (e value)
8. Move up to a safe position and finish processing

Machine clamp type reverse chamfer cutter



Designation	D	D1	C	L2	L1	L3	e	Insert
MCF-14-W16	20	14	16	48	40	10	3.5	TC 1102
MCF-17-W20	23	17	20	50	50			
MCF-21-W25	27	21	25	56	70			
MCF-24-W25	31	24	25	56	80		4	

- ◆ Avoid secondary clamping to ensure accurate position of the hole.
- ◆ One direction turning to reduce the chance of damage
- ◆ Non-standard design body with best rigidity
- ◆ Non-standard customization is acceptable

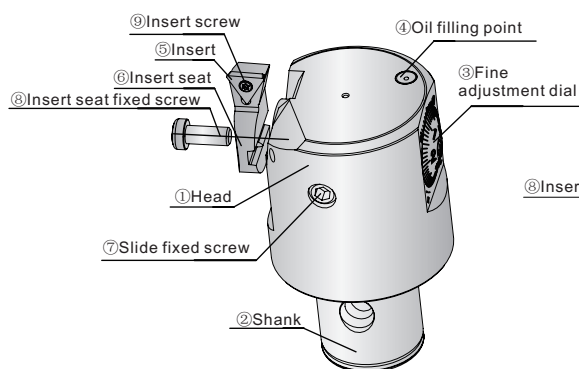
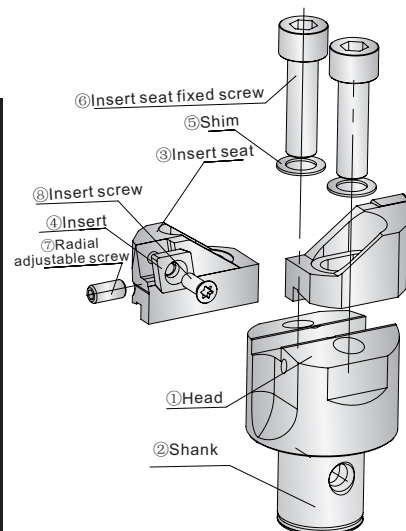
Reverse pulling process step

1. Spindle orientation
2. Eccentric shift (e value)
3. Z axis down
4. Displacement to the center of the hole (e value)
5. Spindle makes upward rotation and reverse pulling process.
6. Spindle orientation
7. Eccentric shift (e value)
8. Move up to a safe position and finish processing

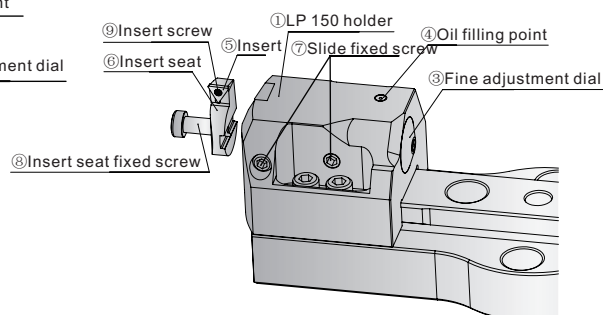
Spare parts model number

CMR rough boring head

Designation	⑧ Insert screw	⑦ Radial Adjustable screw	Radial Adjustable wrench
RSC-2026	DM2.5X6 (CC06)	PMM3X6	PS-1.5B
RSC-2533			
RSC-3242	DM4X10 (CC09)	PMM4X8	PS-2B
RSC-4154		PMM5X10	PS-2.5B
RSC-5370	DM5X12 (CC12)	PMM6X12	PS-3B
RSC-6890		PMM6X14	
RSC-88110		PMM6X20	
RSC-98126		PMM8X20	PS-4B
RSC-125153		PMM8X25	



CMP Fine Bore head

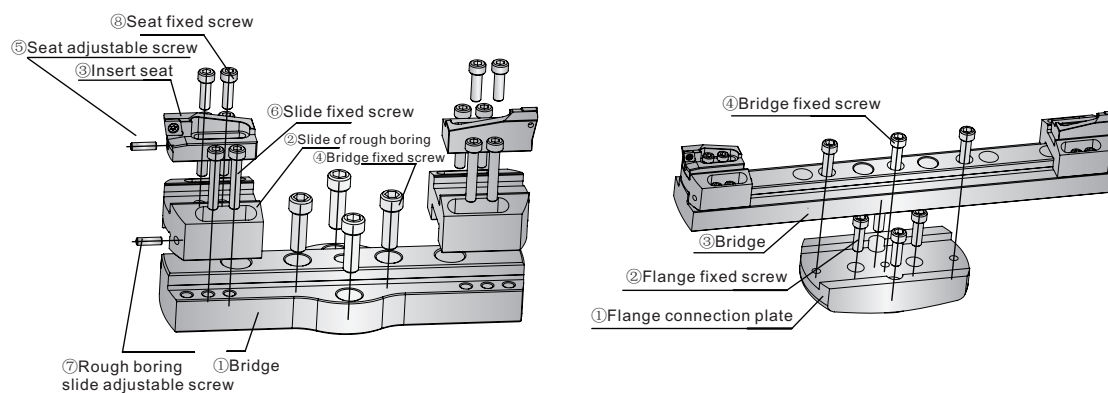


CLP Fine Bore head

CMR/CLP fine boring head

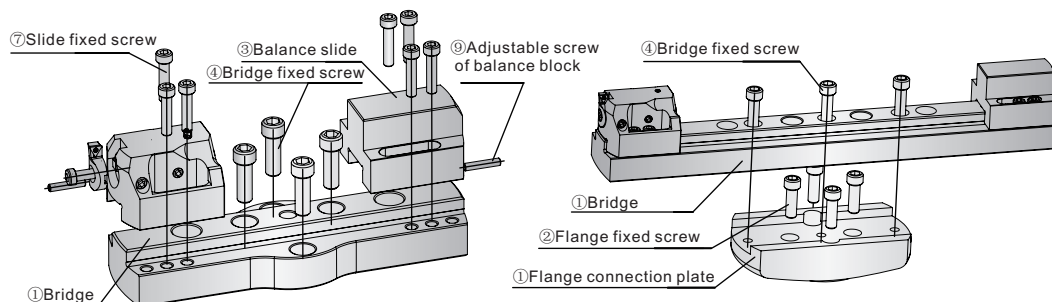
Designation	⑦ Slide Fixed screw	Slide Fixed wrench	⑧ seat Fixed wrench	Seat Fixed wrench	⑨
CMP20-36CK1	PMM4X4	TS2	SFM3X4.5	TS2	DM2X4 (TP08)
CMP25-47CK2	PFM4X6(CK2)		SFM3X6		
CMP32-60CK3	PFM5X8 (CK3)	TS2.5	SFM4X8	TS2.5	
CMP41-74CK4	PFM6X10(CK4)	TS3	SFM5X10	TS3	DM2.5X6 (TC1102)
CMP53-95CK5	PFM8X12(CK5)	TS4	SFM5X12	TS4	
CMP68-150CK6	PFM10X16(CK6)	TS5	SFM8X12	TS5	
CMP100-203CK6			SFM8X20		
LP 150	PFM10X16(CK6)	PS-5B	SFM8X20	PS-5B	
	PMM10X8				

CLR rough boring head



Designation	② Flange Fixed screw	④ Bridge Fixed screw	⑥ Slide Fixed screw	⑧ Seat Fixed screw	⑦ Slide Adjustable screw	⑤ Seat Adjustable screw
CLR150-530	/	CLM12X35	LM8X45	LRM8X30	PMM6X20	PMM6X20
CLR530-850	CLM12X35	CLM12X70				

CLP fine boring head



Designation	② Flange Fixed screw	④ Bridge Fixed screw	⑦ Slide Fixed screw	⑧ Adjustable screw of fine-tuning Block	⑨ Adjustable screw of Balance Block
CLP150-210	/	CLM12X35	LM8X45	PMM6X30	PMM6x16
CLP210-530	/				PMM6X20
CLP530-850	CLM12X35	CLM12X70			PMM6X20



Damped Boring
Damped Fine Boring Head

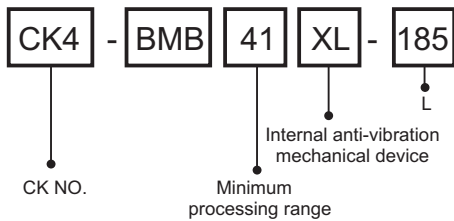
Damped fine boring head

1. Internal anti-vibration mechanical device
2. Processing range $\varnothing 20\text{-}\varnothing 203$

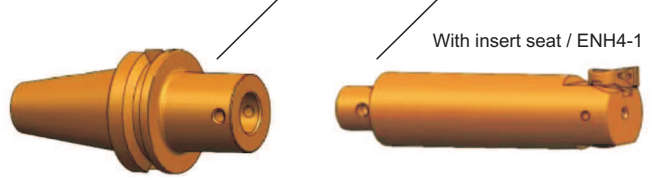


Center Cooling

Model Description

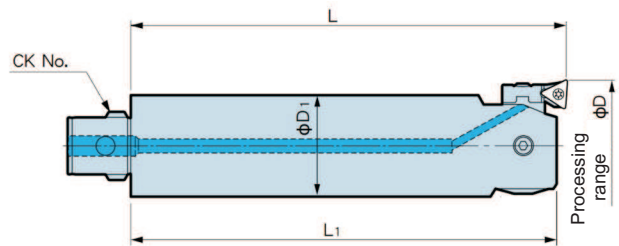


Please select the same model of CK interface



CK connection
(BBT BT IV DV ST SK HSK)
BBT40-CK4-90

Anti-vibration boring head
CK4-BMB41XL-185



Designation	CK connection	Insert seat CK No.	Processing range ØD	ØD1	L	Weight(Kg)	Insert
CK1-BMB20XL-100	CK1	ENH1-1	20-26	19	100	0.3	TP08
		ENH1-2	25-31				
		ENH1-3	30-36				
CK2-BMB25XL-125	CK2	ENH2-1	25-33	24	125	0.6	
		ENH2-2	32-40				
		ENH2-3	39-47				
CK3-BMB32XL-160	CK3	ENH3-1	32-42	29	160	1.2	
		ENH3-2	41-57				
		ENH3-3	50-60				
CK4-BMB41XL-185	CK4	ENH4-1	41-54	39	185	2.3	TC11
		ENH4-2	50-63				
		ENH4-3	61-74				
CK5-BMB53XL-210	CK5	ENH5-1	53-70	50	210	4.4	
		ENH5-2	65-82				
		ENH5-3	78-95				
CK6-BMB68XL-240	CK6	ENH6-1	68-100	64	240	8.3	
		ENH6-2	94-126				
		ENH6-3	118-150				
CK6-BMB100XL-240	CK6	ENH6-1	100-153	64	240	8.8	
		ENH6-2	126-179				
		ENH6-3	150-203				
CK7-BMB100XL-240	CK7	ENH6-1	100-153	90	240	16.4	
		ENH6-2	126-179				
		ENH6-3	150-203				

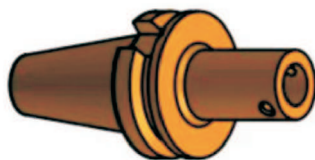
- ◆ The maximum and minimum machining diameters are when insert tip radius R is 0.4
- ◆ ENHO-1 insert seat is included, please order ENHO-2 and 3 separately
- ◆ Insert is not included

Damped rough boring head

1. Internal anti-vibration mechanical device
2. Processing range $\varnothing 20\text{--}\varnothing 164$
3. Anti-vibration RB rough head



Center Cooling



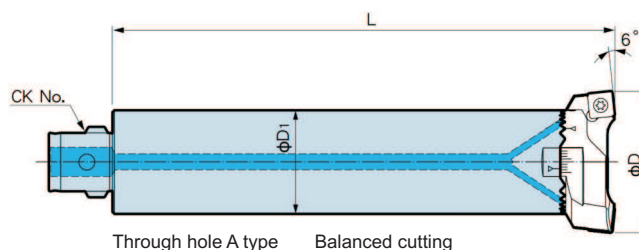
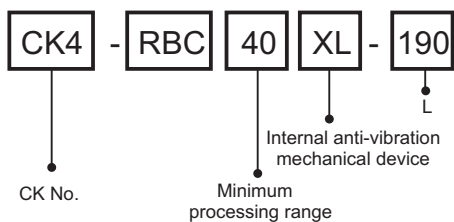
BT40-CK4-90



CK4-RBC40XL-190

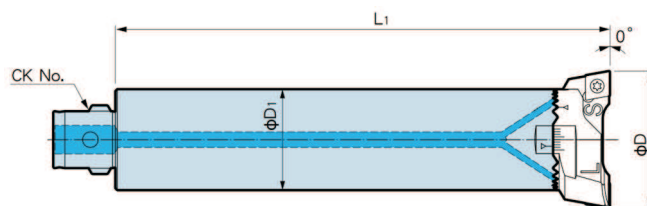
RBC4055

Model Description



Through hole A type

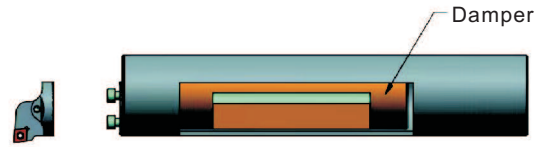
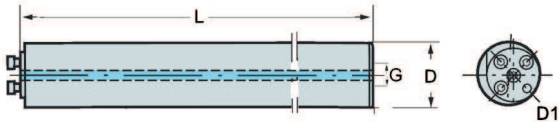
Processing range $\varnothing d$	Boring head No.	CK No.	Insert seat model	Insert	$\varnothing D1$	L	KG
20~25	CK1-RBS20XL-105	CK1	RBS2025A	SC06	19	105	0.3
25~35	CK2-RBS25XL-130	CK2	RBS2535A		24	130	0.6
32~45	CK3-RBS32XL-165	CK3	RBS3245A		31	165	1.2
40~50	CK4-RBS40XL-190	CK4	RBS4055A	SC09	39	190	2.3
52~75	CK5-RBS52XL-220	CK5	RBS5275A		50	220	4.4
68~92	CK6-RBS68XL-245	CK6	RBS6895A	SC12	64	245	8.3
90~122	CK6-RBS90XL-245	CK6	RBS90122A		64	245	8.8
120~164	CK7-RBS120XL-245	CK7	RBS122164A		88	245	16.4



Blind hole E type

Processing range $\varnothing d$	Boring head No.	CK No.	Insert seat model	Insert	$\varnothing D1$	L	KG
20~25	CK1-RBC20XL-105	CK1	RBC2025E	CC06	19	105	0.3
25~35	CK2-RBC25XL-130	CK2	RBC2535E		24	130	0.6
32~45	CK3-RBC32XL-165	CK3	RBC3245E		31	165	1.2
40~50	CK4-RBC40XL-190	CK4	RBC4055E	CC09	39	190	2.3
52~75	CK5-RBC52XL-220	CK5	RBC5275E		50	220	4.4
68~92	CK6-RBC68XL-245	CK6	RBC6895E	CC12	64	245	8.3
90~122	CK6-RBC90XL-245	CK6	RBC90122E		64	245	8.8
120~164	CK7-RBC120XL-245	CK7	RBC122164E		88	245	16.4

Damped turning tool holder

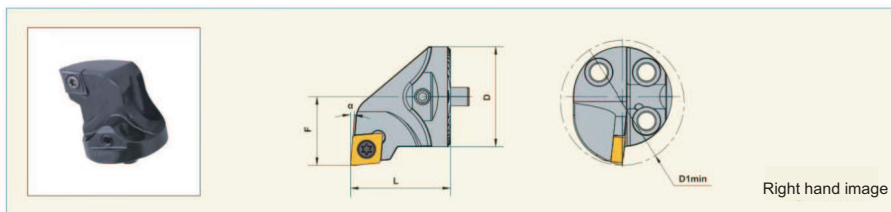


The clamping part is 4 times longer than holder's diameter

Designation	D	D1	L	G	Head		
WT16 C16-156	16	16	156	G1/8	WT16		
WT16 C16-204			204				
WT20 C20-200	20	20	200	G1/4	WT20		
WT20 C20-260			260				
WT20 C20-320S			320				
WT25 C25-255	25	25	255		WT25		
WT25 C25-330			330				
WT25 C25-380S			380				
WT25 C25-430S			430				
WT32 C32-320	32	32	320	G3/8		WT32	
WT32 C32-416			416				
WT32 C32-480S			480				
WT32 C32-544S			544				
WT40 C40-408	40	40	408	G1/2	WT40		
WT40 C40-528			528				
WT40 C40-608S			608				
WT40 C40-688S			688				
WT40 C50-518	50		518			G1/2	
WT40 C50-668			668				
WT40 C50-768S			768				
WT40 C50-868			868				
WT40 C60-628	60		628	G3/4			
WT40 C60-808			808				
WT40 C60-920			920				
WT40 C60-1040			1040				
WT40 C80-880	80		880			G3/4	
WT40 C80-1200			1200				
WT40 C80-1400			1400				
WT40 C100-1100	100		1100				G3/4
WT40 C100-1500			1500				
WT40 C120-1900			1900				
WT40 C130-2000	130		2000				
WT40 C140-2200	140		2200				
WT40 C150-2400	150		2400				
WT40 C160-2600	160		2600				

Cartridge for Damping Turning Tool Holder

Positive Type 95° Boring

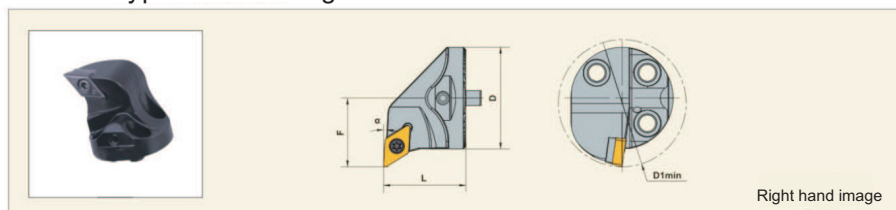


Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT16 SCLCR-06	16	20	11	20	5°	0.02	CC..0602..	○
WT20 SCLCR-09	20	25	13	20	5°	0.03	CC..09T3..	○
WT25 SCLCR-09	25	32	17	20	5°	0.04	CC..09T3..	○
WT32 SCLCR-09	32	40	22	32	5°	0.1	CC..09T3..	○
WT40 SCLCR-12T	40	50	27	38	5°	0.2	CC..1204..	○
WT16 SCLCL-06	16	20	11	20	5°	0.02	CC..0602..	○
WT20 SCLCL-09	20	25	13	20	5°	0.03	CC..09T3..	○
WT25 SCLCL-09	25	32	17	20	5°	0.04	CC..09T3..	○
WT32 SCLCL-09	32	40	22	32	5°	0.1	CC..09T3..	○
WT40 SCLCL-12T	40	50	27	38	5°	0.2	CC..1204..	○

Designation	Screw for insert	Wrench	Shim	Sleeve for shim	Wrench for shim	Locating pin
WT16...06	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D4-3x7
WT20...09	SR21 M4x9.5	KET02 T15	-	-	-	FT39 D6-5x8
WT25...09	SR21 M4x9.5	KEY02 T15	-	-	-	FT39 D6-5x9
WT32...09	SR21 M4x9.5	KEY02 T15	-	-	-	FT39 D6-5x11
WT40...12T	SR21 M5x12.8	KEY02 T20	ST01 CC12x2.8	SRT M7-M5x13	KEY01 M3	FT39 D6-5x11

Cartridge for Damping Turning Tool Holder

Positive Type 93° Boring

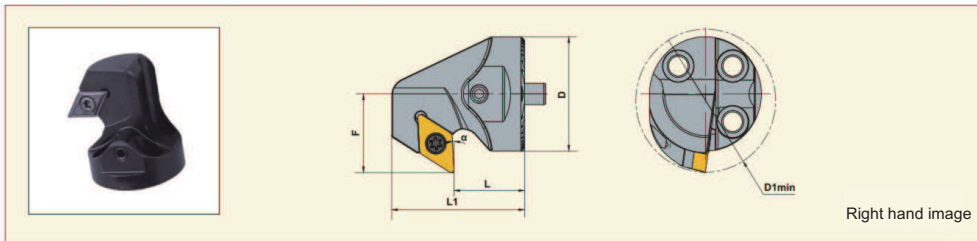


Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT16 SDUCR-07	16	20	11	20	3°	0.02	DC..0702..	○
WT20 SDUCR-11	20	25	13	20	3°	0.03	DC..11T3..	○
WT25 SDUCR-11	25	32	17	20	3°	0.04	DC..11T3..	○
WT32 SDUCR-11T	32	40	22	32	3°	0.1	DC..11T3..	○
WT40 SDUCR-11T	40	50	27	32	3°	0.2	DC..11T3..	○
WT16 SDUCL-07	16	20	11	20	3°	0.02	DC..0702..	○
WT20 SDUCL-11	20	25	13	20	3°	0.03	DC..11T3..	○
WT25 SDUCL-11	25	32	17	20	3°	0.04	DC..11T3..	○
WT32 SDUCL-11T	32	40	22	32	3°	0.1	DC..11T3..	○
WT40 SDUCL-11T	40	50	27	32	3°	0.2	DC..11T3..	○

Designation	Screw for insert	Wrench	Shim	Sleeve for shim	Wrench for shim	Locating pin
WT16...07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D4-3x7
WT20...11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x8
WT25...11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x9
WT32...11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
WT40...11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

Cartridge for Damping Turning Tool Holder

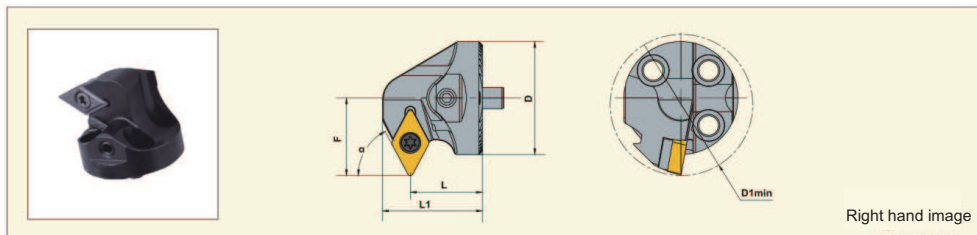
Positive Type 93° Back Boring



Designation	D	D1min	F	L	L1	α°	Kg	Insert	Stock
WT16 SDZCR-07	16	22	13	15	27	3°	0.03	DC..0702..	○
WT20 SDZCR-07	20	27	15	15	27	3°	0.05	DC..0702..	○
WT25 SDZCR-07	25	33	18	15	27	3°	0.12	DC..0702..	○
WT32 SDZCR-11T	32	40	22	20	38	3°	0.14	DC..11T3..	○
WT40 SDZCR-11T	40	50	27	20	38	3°	0.19	DC..11T3..	○
WT16 SDZCL-07	16	22	13	15	27	3°	0.03	DC..0702..	○
WT20 SDZCL-07	20	27	15	15	27	3°	0.05	DC..0702..	○
WT25 SDZCL-07	25	33	18	15	27	3°	0.12	DC..0702..	○
WT32 SDZCL-11T	32	40	22	20	38	3°	0.14	DC..11T3..	○
WT40 SDZCL-11T	40	50	27	20	38	3°	0.19	DC..11T3..	○

Designation	Screw for insert	Wrench	Shim	Sleeve for shim	Wrench for shim	Locating pin
WT16...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D4-3x7
WT20...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x8
WT25...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x9
WT32...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
WT40...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

Positive Type 62.5° Profile-turning

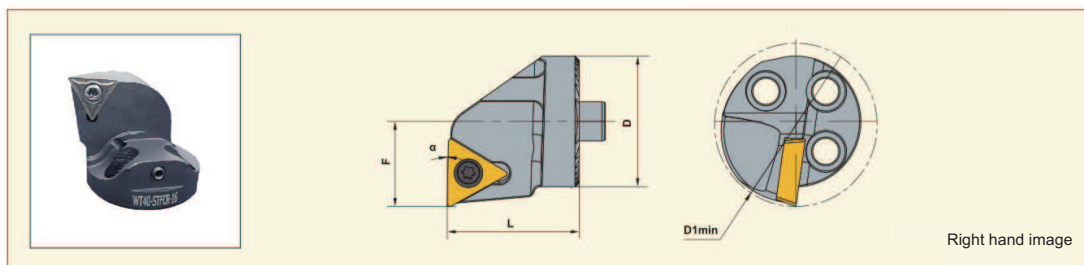


Designation	D	D1min	F	L	L1	α°	Kg	Insert	Stock
WT16 SDPCR-07	16	22	13	15	19	62.5°	0.01	DC..0702..	○
WT20 SDPCR-07	20	27	15	15	19	62.5°	0.02	DC..0702..	○
WT25 SDPCR-07	25	33	18	15	19	62.5°	0.03	DC..0702..	○
WT32 SDPCR-11T	32	40	22	20	28	62.5°	0.09	DC..11T3..	○
WT40 SDPCR-11T	40	50	27	20	28	62.5°	0.14	DC..11T3..	○
WT16 SDPCL-07	16	22	13	15	19	62.5°	0.01	DC..0702..	○
WT20 SDPCL-07	20	27	15	15	19	62.5°	0.02	DC..0702..	○
WT25 SDPCL-07	25	33	18	15	19	62.5°	0.03	DC..0702..	○
WT32 SDPCL-11T	32	40	22	20	28	62.5°	0.09	DC..11T3..	○
WT40 SDPCL-11T	40	50	27	20	28	62.5°	0.14	DC..11T3..	○

Designation	Screw for insert	Wrench	Shim	Sleeve for shim	Wrench for shim	Locating pin
WT16...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D4-3x7
WT20...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x8
WT25...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x9
WT32...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
WT40...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

Cartridge for Damping Turning Tool Holder

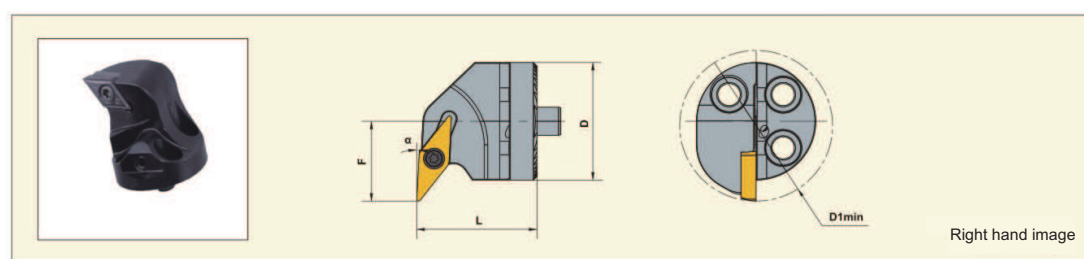
Positive Type 91° Profile-turning



Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT16 STFCL-09	16	20	11	20	1°	0.02	TC..0902..	○
WT16 STFCL-11	16	20	11	20	1°	0.02	TC..1102..	○
WT20 STFCL-11	20	25	13	20	1°	0.03	TC..1102..	○
WT25 STFCL-11	25	32	17	20	1°	0.04	TC..1102..	○
WT32 STFCL-16	32	40	22	32	1°	0.10	TC..16T3..	○
WT40 STFCL-16	40	50	27	32	1°	0.20	TC..16T3..	○
WT16 STFCR-09	16	20	11	20	1°	0.02	TC..0902..	○
WT16 STFCR-11	16	20	11	20	1°	0.02	TC..1102..	○
WT20 STFCR-11	20	25	13	20	1°	0.03	TC..1102..	○
WT25 STFCR-11	25	32	17	20	1°	0.04	TC..1102..	○
WT32 STFCR-16	32	40	22	32	1°	0.10	TC..16T3..	○
WT40 STFCR-16	40	50	27	32	1°	0.20	TC..16T3..	○

Designation	Screw for insert	Wrench	Locating pin
WT16..-09	SR20 M2.2x5.6	KEY02 T7	FT39 D4-3x7
WT16..-11	SR20 M2.5x6	KEY02 T8	FT39 D4-3x7
WT20..-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x8
WT25..-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x9
WT32..-16	SR21 M4x9.5	KEY02 T15	FT39 D6-5x11
WT40..-16	SR21 M4x9.5	KEY02 T15	FT39 D6-5x11

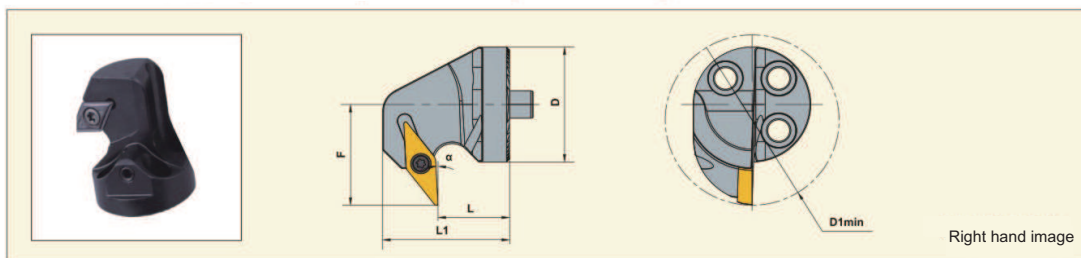
Positive Type 93° Boring and Profile-turning



Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT20 SVUCR-11	20	27	16	20	3°	0.02	VC..1103..	○
WT25 SVUCR-11	25	31	17	25	3°	0.04	VC..1103..	○
WT20 SVUCL-11	20	27	16	20	3°	0.02	VC..1103..	○
WT25 SVUCL-11	25	31	17	25	3°	0.04	VC..1103..	○

Designation	Screw for shim	Wrench for shim	Locating pin
WT20..-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x8
WT25..-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x9

Positive Type 93° Back Boring and Profile-turning



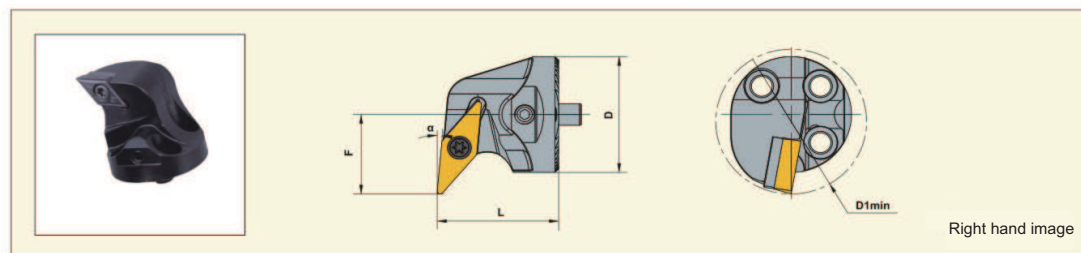
Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT20 SVZCR-11	20	32	20	15	3°	0.03	VC..1103..	○
WT25 SVZCR-11	25	37	22	15	3°	0.05	VC..1103..	○
WT20 SVZCL-11	20	32	20	15	3°	0.03	VC..1103..	○
WT25 SVZCL-11	25	37	22	15	3°	0.05	VC..1103..	○

Spare Parts

Designation	Screw for insert	Wrench	Locating pin
WT20...-11	SR20 M2.5x6	KEY02 T8	FT38 D6-5x8
WT25...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x9

Cartridge for Damping Turning Tool Holder

Positive Type 95° Boring and Profile-turning

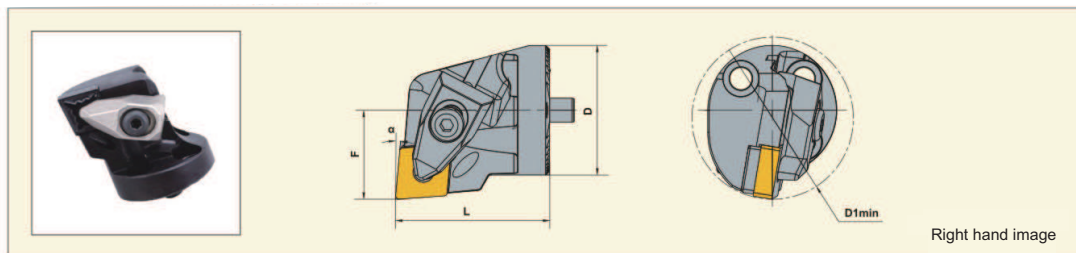


Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT32 SVLCR-16T	32	40	22	32	5°	0.1	VC..1604..	○
WT40 SVLCR-16T	40	50	27	32	5°	0.15	VC..1604..	○
WT32 SVLCL-16T	32	40	22	32	5°	0.1	VC..1604..	○
WT40 SVLCL-16T	40	50	27	32	5°	0.15	VC..1604..	○

Spare Parts

Designation	Screw for insert	Wrench	Shim	Sleeve for shim	Wrench for shim	Locating pin
WT32...-16T	SR21 M4x11	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
WT40...-16T	SR21 M4x11	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

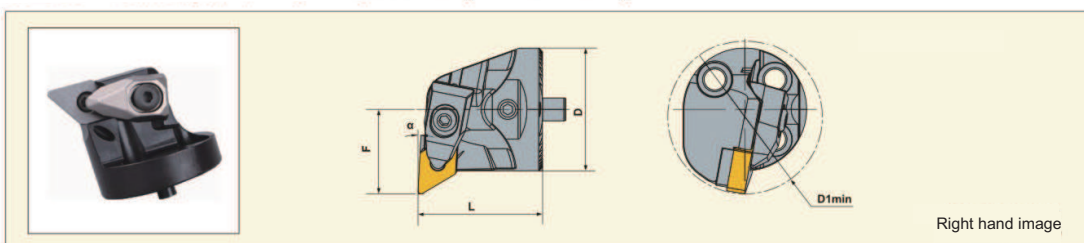
Negative Type 95° Boring



Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT32 DCLNR-12T	32	40	22	38	5°	0.12	CN..1204..	○
WT40 DCLNR-12T	40	50	27	38	5°	0.21	CN..1204..	○
WT32 DCLNL-12T	32	40	22	38	5°	0.12	CN..1204..	○
WT40 DCLNL-12T	40	50	27	38	5°	0.21	CN..1204..	○

Designation	Clamp	Spring for clamp	Screw for clamp	Shim	Wrench for clamp	Screw for shim	Wrench for shim	Locating pin
WT32...-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY02 T20	FT39 D6-5x11
WT40...-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY02 T20	FT39 D6-5x11

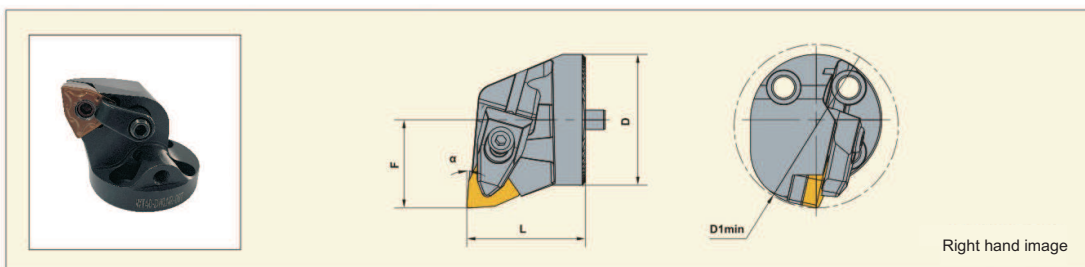
Negative Type 93° Boring and Profile-turning



Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT32 DDUNL-11T	32	40	22	32	3°	0.11	DN..1104..	○
WT40 DDUNL-15T	40	50	27	38	3°	0.18	DN..1506..	○
WT32 DDUNR-11T	32	40	22	32	3°	0.11	DN..1104..	○
WT40 DDUNR-15T	40	50	27	38	3°	0.18	DN..1506..	○
WT40 DVUNR-16T	40	56	34	38	3°	0.2	VN..1604..	○
WT40 DVUNL-16T	40	56	34	38	3°	0.2	VN..1604..	○

Designation	Clamp	Spring for clamp	Screw for clamp	Shim	Wrench for clamp	Screw for shim	Wrench for shim	Locating pin
WT32...-11T	PB10 DDN11	YH 7x0.6x13	SR59 M4x16	ST01 DN11x3.18	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	FT39 D6-5x11
WT40...-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15	FT39 D6-5x11
WT40...-16T	PB10 DVN16	YH 9x0.8x14	SR59 M6x26.5	ST01 VN16x3.2	KEY01 M4	SR20 M3.5x8.5	KEY02 T10	FT39 D6-5x11

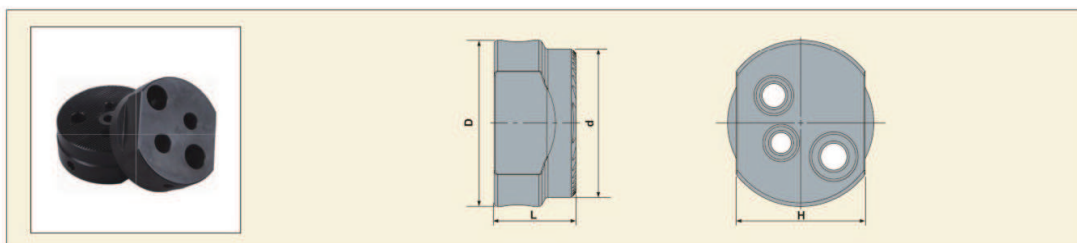
Positive Type 95° Profile-turning



Designation	D	D1min	F	L	α°	Kg	Insert	Stock
WT32 DWLNR-06T	32	40	22	32	5°	0.11	WN..0604..	○
WT32 DWLNR-08T	32	46	24	36	5°	0.12	WN..0804..	○
WT40 DWLNR-08T	40	50	27	36	5°	0.23	WN..0804..	○
WT32 DWLNL-06T	32	40	22	32	5°	0.11	WN..0604..	○
WT32 DWLNL-08T	32	46	24	36	5°	0.12	WN..0804..	○
WT40 DWLNL-08T	40	50	27	36	5°	0.23	WN..0804..	○

Designation	Clamp	Spring for clamp	Screw for clamp	Shim	Wrench for clamp	Screw for shim	Wrench for shim	Locating pin
WT32..-06T	PB10 DDN11	YH 7x0.6x13	SR59 M4x16	ST01 WN06x3.18	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	FT39 D6-5x11
WT32..-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08x3.18	KEY01 M3	SR20 M5x10	KEY02 T20	FT39 D6-5x11
WT40..-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08x6.35	KEY01 M3	SR20 M4x9.5	KEY02 T15	ST39 D6-5x11

Centre Calibration Block



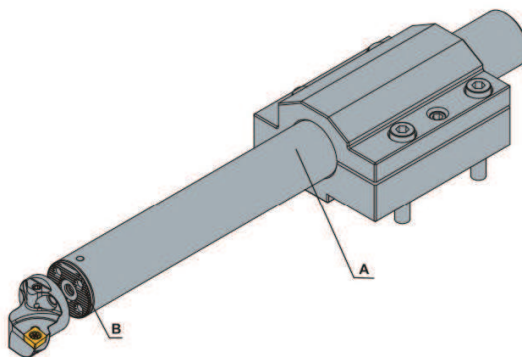
Designation	D	d	H	L	Boring holder	Kg	Stock
WTXZ 16-25	28	25	22	14	WT16/WT20/WT25	0.05	○
WTXZ 32-60	62	60	52	25	WT32/WT40/WT50/WT60	0.45	○

User Guide for Damping Turning Tool

Assembly and Adjusting

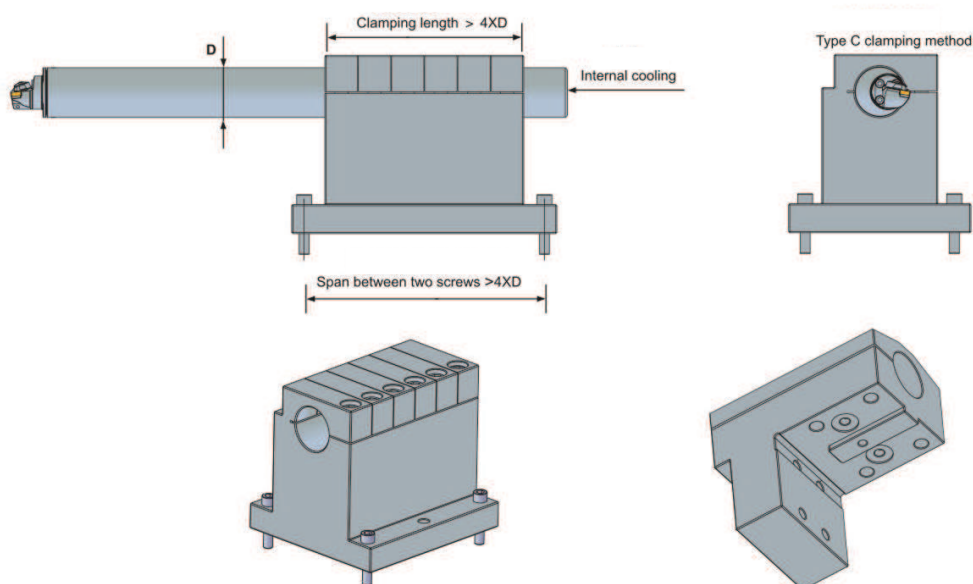
Preparation

Wipe clean the positions which need to be assembled, like V-shaped locating slot on the cartridge and shank, the end of the shank which will be connected with adaptor, and internal hole on the clamping holder. See A and B positions in the following visual.

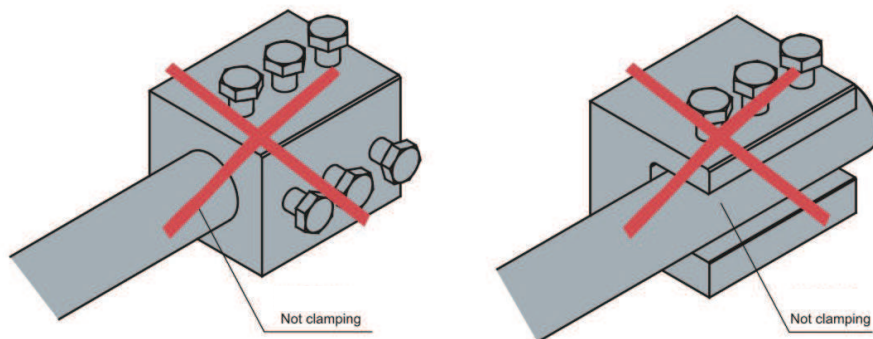


Assembly for the Shank

The clamping length should not be less than 4 L/D ratio. Suggest using the clamping cover with opening method and other holding clamping methods. Do not use screw clamping method. Use inner cooling please when working a long time.

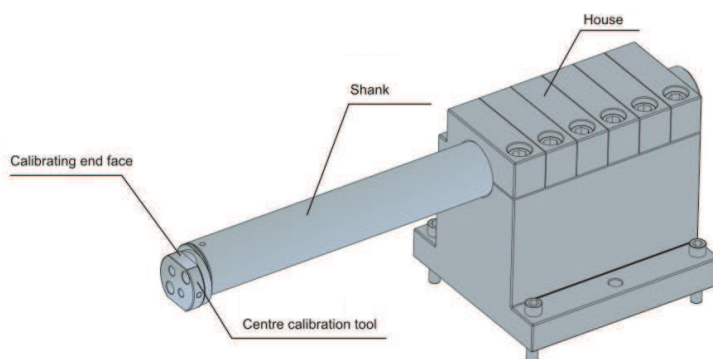


User Guide for Damping Turning Tool

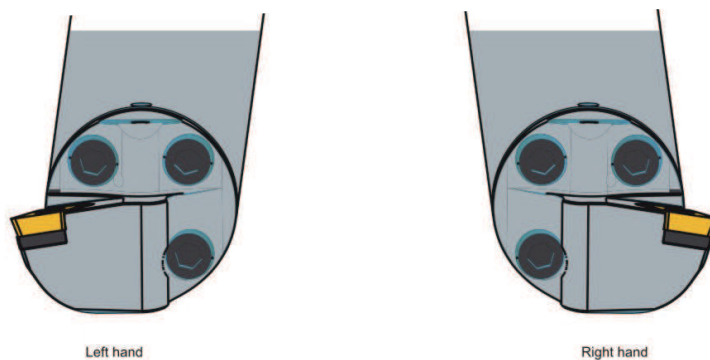


Adjusting the Height of Centre

Exclusive calibration tool for the height of centre should be used when assembling the shank for the first time. Assemble the shank into the V geometric slot firstly, then calibrate it within 0.01 tolerance on the X-axis direction.



Assemble the right cartidge, as below picture



User Guide for Damping Turning Tool

Adjusting the Length of the Shank

1.Recommended minimum clamping length 4XD

2.The boring bar can be modified,and length after cutting is as shown in the following table

Type	Min.length after cutting off (L)	
D (mm)	4-7xD (mm)	7-10xD (mm)
16	100	-
20	125	-
25	155	255
32	190	320
40	240	410
50	305	520
60	380	630

Environment for Damping Turning Tool

Designation	Overhang length	MAX (Bar) MAX : Internal cooling pressure	MAX (℃) Operating temperature
WT16 C16X156	7	30	100
WT16 C16X204	10	30	100
WT20 C20X200	7	30	100
WT20 C20X260	10	30	100
WT25 C25X255	7	40	100
WT25 C25X330	10	40	100
WT32 C32X320	7	50	100
WT32 C32X416	10	50	100
WT40 C40X408	7	70	100
WT40 C40X528	10	70	100
WT40 C50X518	7	70	100
WT40 C50X668	10	70	100
WT40 C60X628	7	70	100
WT40 C60X808	10	70	100
WT40 C80X880	7	70	100
WT40 C80X1200	10	70	100

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