



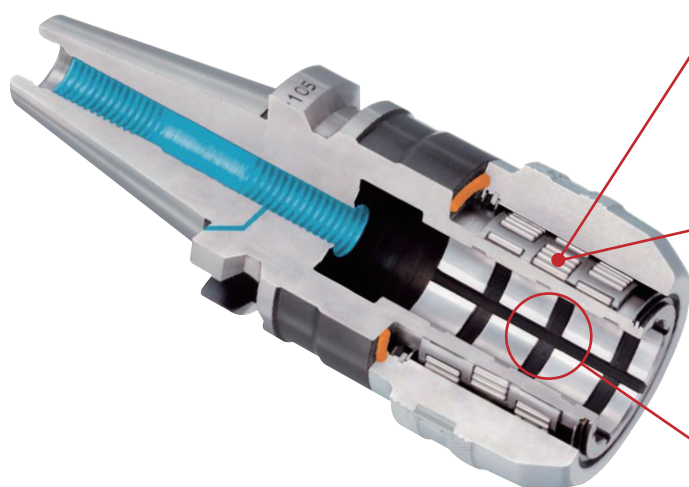
MC Milling Chuck

Roughing and Finishing Milling & Drilling



**POWERFUL & RIGID,
FINE ACCURACY!**

Features



❖ Roller Bearing System

Retainer sleeve system filled with symmetrically placed needle roller bearings provides smooth operation. 4 needle roller bearings per cell provide maximum contact area and heavy duty gripping capability.

❖ Powerful Gripping Torque

4-row retainer sleeve is used for the 50 taper models(except for SK50-MC32-085). This system allows the MC to achieve 5,000 N/m clamping torque in MC42 milling chuck.

❖ X-GROOVE System (PAT)

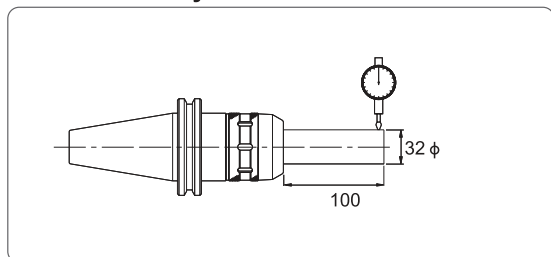
Combination of the Radial and Axial grooves

❖ Ultra-low temperature treatment



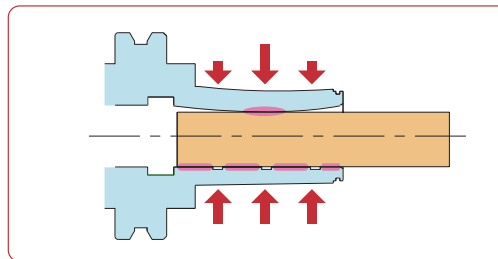
Sub-zero temperature treatment at -100°C to remove the residual austenite from the holder and provides long lasting performance.

❖ Fine accuracy



5 μm at 100mm away from nose.

Radial Grooves



The radial grooves provide more uniform collapse capability and allows the chuck to collapse evenly all the way to the nose. It provides reliable gripping and run-out capability, and also minimizes cutter vibration and chatter.

Axial Grooves



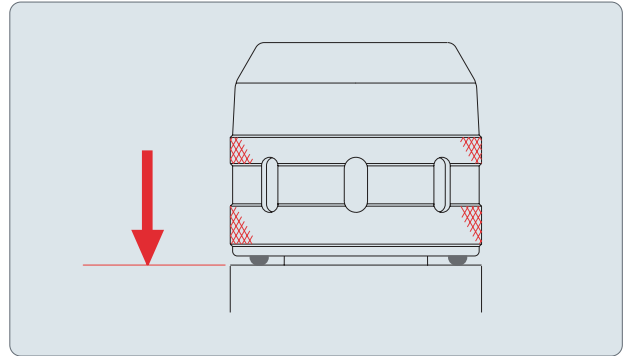
The axial grooves provide more even collapse capability. It distributes gripping power more evenly all the way around the shank or collet and as a result provides better concentricity.



Information

How to use MC

1. Clean up the I.D. of the MC, I.D. and O.D. of the collet and the cutter shank.
2. Insert the collet or the cutter shank in the I.D. of the MC.
3. Tighten the nut using MCW wrench. Tighten the nut clockwise all the way until the o-ring located in the groove at the upper face of the nut kisses the flange of the body.
4. Do not tighten the nut after o-ring kisses the flange.



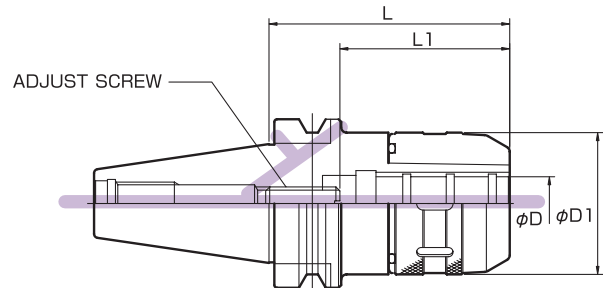


MC Milling Chuck

Kraftspannfutter
Mandrins A Fort Serrage
Mandrini A Forte Serraggio



- Min. 80% taper fit
- 5290Nm gripping power with BT50-MC42-105
- 5 μ m runout capability at 100mm from nose
- Special alloy steel case-hardened and treated at -100°C to remove residual austenite and ensure stable molecule structure.
- "-S" : Taper 30 with balanceable
Taper 40 & 50 with DIN AD/B & balanceable.
- Taper 30 & 40 dynamically balanced body to G6.3 at 20,000rpm.
- Taper 50 dynamically balanced body to G6.3 at 15,000rpm.



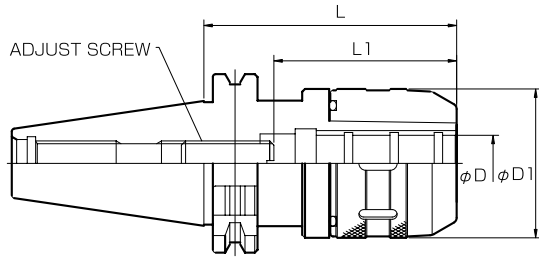
Taper	Code No.	φD	L	φD1	L1	Collet	DIN AD/B flange coolant ENTRY	Balanceable
BT30	BT30-MC20-080	20	80	53	70	MC20		
	BT30-MC20-085-S		85					○
BT40	BT40-MC20-075	20	75	53	70	MC20		
	BT40-MC20-075-S						○	○
	BT40-MC20-090 *		90					
	BT40-MC20-105		105					
	BT40-MC20-120 *	20	120	53	70	MC20	○	○
	BT40-MC20-120-S							
	BT40-MC25-085	25	85	62	74	MC25	○	○
	BT40-MC25-085-S							
	BT40-MC25-105		105					
	BT40-MC25-120-S	32	120	70	78	MC32	○	○
	BT40-MC32-085		85					
	BT40-MC32-090-S		90				○	○
	BT40-MC32-105		105					
	BT40-MC32-120		120					
	BT40-MC32-120-S						○	○
BT50	BT50-MC20-105	20	105	53	70	MC20		
	BT50-MC20-105-S						○	○
	BT50-MC20-135		135					
	BT50-MC20-165		165					
	BT50-MC20-165-S	25		62	74	MC25	○	○
	BT50-MC25-105		105					
	BT50-MC25-105-S						○	○
	BT50-MC25-135		135					
	BT50-MC25-165		165					
	BT50-MC25-165-S	32		74	95	MC32	○	○
	BT50-MC32-105		105					
	BT50-MC32-105-S						○	○
	BT50-MC32-135		135					
	BT50-MC32-165		165					
	BT50-MC32-165-S						○	○
	BT50-MC42-105	42	105	92	98	MC42		
	BT50-MC42-135		135					

* Not regular stock items. Please check for availability.

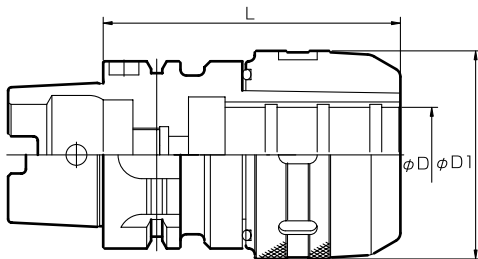


MC Milling Chuck

SK / HSK



Taper	Code No.	φD	L	φD1	L1	Collet	DIN AD/B flange coolant ENTRY	Balanceable
SK40	SK40-MC20-085	20	85	53	70	MC20		
	SK40-MC20-085-S						○	○
	SK40-MC20-105		105					
	SK40-MC20-120	25	120	62	74	MC25		
	SK40-MC25-085		85				○	○
	SK40-MC25-095-S		95					
	SK40-MC25-120	32	120	70	78	MC32		
	SK40-MC32-105		105					
	SK40-MC32-120		120				○	○
	SK40-MC32-120-S						○	○
SK50	SK50-MC20-90-S	20	90	53	70	MC20	○	○
	SK50-MC20-105		105					
	SK50-MC20-135		135					
	SK50-MC20-165		165					
	SK50-MC20-165-S	25		62	74	MC25	○	○
	SK50-MC25-090-S		90				○	○
	SK50-MC25-105		105					
	SK50-MC25-135		135					
	SK50-MC25-165	32	165	74	95	MC32		
	SK50-MC25-165-S						○	○
	SK50-MC32-90-S		90				○	○
	SK50-MC32-105		105					
	SK50-MC32-135	42	135	92	98	MC42		
	SK50-MC32-165		165					
	SK50-MC32-165-S						○	○
	SK50-MC42-105		105					
	SK50-MC42-135		135					

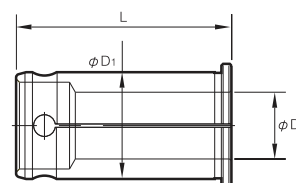


Taper	Code No.	φD	L	φD1	L1	Collet	Balanceable
HSK63A	HSK 63A-MC20-095	20	95	53	66	MC20	
	HSK 63A-MC20-110		110				
	HSK 63A-MC20-110-S						○
	HSK 63A-MC25-100	25	100	62	70	MC25	
	HSK 63A-MC25-120		120				
	HSK 63A-MC32-100	32	100	70	76	MC32	
	HSK 63A-MC32-120		120				
	HSK 63A-MC32-120-S						○



Straight collet for Milling Chuck

MC straight collet

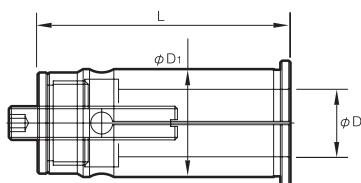


standard ϕD	MC20	MC25	MC32	MC42
6.0	MC20-M060	MC25-M060	MC32-M060	MC42-M060
8.0	MC20-M080	MC25-M080	MC32-M080	MC42-M080
10.0	MC20-M100	MC25-M100	MC32-M100	MC42-M100
12.0	MC20-M120	MC25-M120	MC32-M120	MC42-M120
16.0	MC20-M160	MC25-M160	MC32-M160	MC42-M160
20.0		MC25-M200	MC32-M200	MC42-M200
25.0			MC32-M250	MC42-M250
32.0				MC42-M320

STYLE	L
MC20	53
MC25	61
MC32	64
MC42	78

* Collets in odd size 1mm ID increment available from stock.

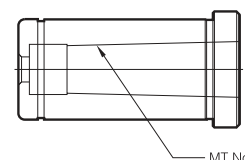
NC height adjustable straight collet



standard ϕD	NC20	NC32	STYLE	L
6.0	NC20-M060	NC32-M060	NC20	63
8.0	NC20-M080	NC32-M080	NC32	75
10.0	NC20-M100	NC32-M100		
12.0	NC20-M120	NC32-M120		
16.0	NC20-M160	NC32-M160		
20.0		NC32-M200		
25.0		NC32-M250		
32.0				

* Collets in odd size 1mm ID increment available from stock.

Morse taper collet

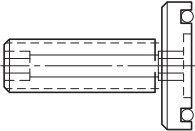


MT	MC32	MC42
MT1	MC32-MT1	MC42-MT1
MT2	MC32-MT2	MC42-MT2
MT3	MC32-MT3	MC42-MT3



Accessories for Milling Chuck

Parts

MC	Adjust screw coolant thru standard	Wrench
		
MC20	ASC-MC20	MCW20
MC25	ASC-MC25	MCW25
MC32	ASC-MC32	MCW32
MC42	ASC-MC42	MCW42

Coolant caps

MC Coolant Caps allow you to seal MC collets for thru tool coolant applications by sealing coolant from slots of MC collet.

- Works with all MC standard Collets.
- Requires MCN Nut & MCC Cap to fit the cutting tool.
- Order Cap to match Collet ID size
Example: MCC20-M100 for MC20-M100



Nut Code No.	Collet
MCN20	MC20
MCN25	MC25
MCN32	MC32

Cap Code No.	Available Sizes
MCC20-	6, 8, 10, 12, 14, 16
MCC25-	6, 8, 10, 12, 14, 16, 18, 20
MCC32-	6, 8, 10, 12, 14, 16, 18, 20, 22, 25





Accessories for Milling Chuck

❖ Coolant caps - How to assemble



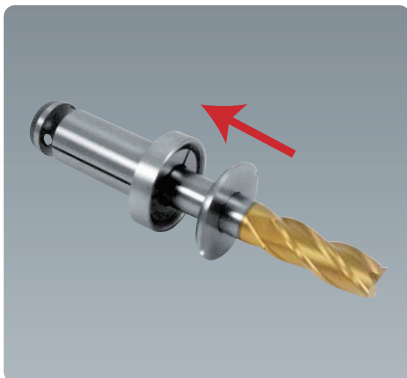
1. Prepare MC collet(①), MCN nut(②) & MCC cap(③).



2. Insert a cutting tool into MCC cap.



3. Assemble MC collet into MCN nut.



4. Thread MCC cap ass'y built in 2. into MCN nut ass'y built in 3, and get MC collet ass'y with MCN nut & MCC cap with a cutting tool.

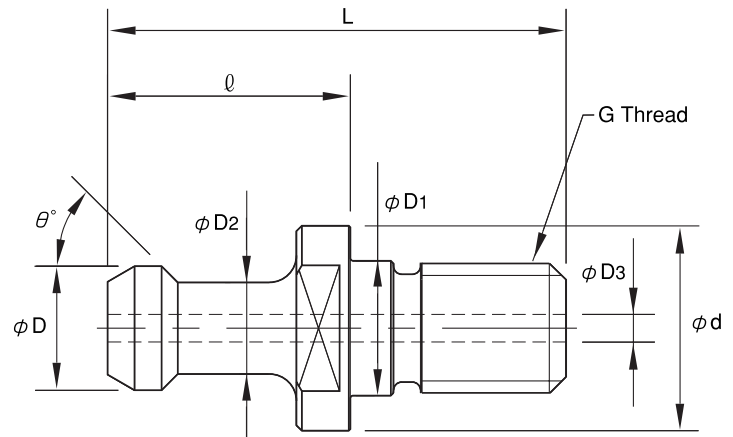


5. Set the assy built in 4. into MC milling chuck.



Pull Studs

Anzugsbolzen
Tirant de Rappel
Codolo di Aggancio



Spindle	Order No.	ϕD	L	l	D2	D1	G	θ°	D3	Note
BT30	HPS-16	11	43	23	7	12.5	M12	45	-	MAS P30T-1
	HPS-16C	11	43	23	7	12.5	M12	45	2.5	HPS-16, Coolant
	HPS-17	11	43	23	7	12.5	M12	60	-	MAS P30T-2
	HPS-17C	11	43	23	7	12.5	M12	60	2.5	HPS-17, Coolant
BT40	HPS- 1	15	60	35	10	17	M16	45	-	MAS P40T-1
	HPS- 2	15	60	35	10	17	M16	60	-	MAS P40T-2
	HPS-806-1	19	54	29	14	17	M16	75	6	JIS B6339, Coolant
	HPS-G51	18.796	44.106	19.106	12.446	17	M16	45	7	Mazak type. Coolant
	HPS-O8	15	60	35	10	17	M16	90	-	90 degree angle type
	HPS-301	15	60	35	11	17	M16	60	-	
	HPS-302	19	54	26	14	17	M16	75	-	DIN69872 without coolant
	HPS-366E-1	19	54	29	14	17	M16	75	7	w/ P-9, S-15 O-ring
	HPS-805	19	54	29	14	17	M16	75	-	JIS B6339-89
	HPS-813-1	19	54	29	14	17	M16	75	6	JIS B6339-89
	HPS-B62-1	19	54	29	14	17	M16	75	4	w/ S15 O-ring
BT50	HPS- 5	23	85	45	17	25	M24	45	-	MAS P50T-1
	HPS- 6	23	85	45	17	25	M24	60	-	MAS P50T-2
	HPS-G41	28.956	65.2	25.2	20.828	25	M24	45	10	
SK30	HPS-122	13	44	24	9	13	M12	75	-	DIN69872 SK30 FORM A
SK40	HPS-302	19	54	26	14	17	M16	75	-	DIN69872 SK40 FORM A
	HPS-309	19	54	26	14	17	M16	75	7	DIN69872 SK40 FORM A Coolant
	HPS-309C	19	54	26	14	17	M16	75	7	DIN69872 SK40 FORM B
	HPS-A1	19	54	26	14	17	M16	75	7	ISO-7388/2-1984-A
	HPS-A4	18.95	44.5	16.4	12.95	17	M16	45	7.35	ISO-7388/2-1984-B
SK50	HPS-581	28	74	34	21	25	M24	75	-	DIN69872 SK50 FORM A
	HPS-512	28	74	34	21	25	M24	75	11.5	DIN69872 SK50 FORM A Coolant
	HPS-512B	28	74	34	21	25	M24	75	11.5	DIN69872 SK50 FORM B
	HPS-A3	28	74	34	21	25	M24	75	11.5	ISO-7388/2-1984-A
	HPS-A6	29.1	65.5	25.55	19.6	25	M24	45	11.55	ISO-7388/2-1984-B

*Other Pull Stud are available upon request.