### BT30 New Drill Mill Chucks

### ■Wide Range of Use

Various cutting tools including drill bits, tapping drills, reamers, and end mills can be chucked.

### High Gripping Force

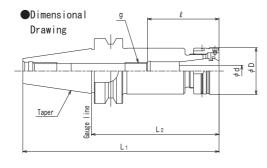
That is an advantage of double taper collets.

### ■ Applicable to high-pressure coolant

Coolant of high pressure up to 7.0MPa is usable.

### ■ High Balancing

Grinding of the external surface of the holder secures a high balancing.



Mode	t: mm_
-NDC7S-90 -NDC7S-120 BT30 -NDC7-60 -NDC7-120 BT30 -NDC10-120 BT30 -NDC10-60 -NDC10-120 BT30 -N	(kg)
-NDC75-120 BT30 -NDC7-90 -NDC7-120 BT30 -NDC10-60 -NDC10-120 BT30 -NDC10-90 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 BT30 -NDC10-80 -NDC10-120 -N	.5
BT30 -NDC7-60 -NDC7-90 -NDC7-120 BT30 -NDC10-60 -NDC10-60 -NDC10-90 -NDC10-120	.6
108.4   60   108.7   60   108.4   90   108.4   90   108.4   108.4   120   120.4   120   120.4   120   120.4	7
-NDC7-120	.5
BT30 -NDC10-60 -NDC10-90 0.5~10.0 33 138.4 90 M12×1.5 50 BT30 -NDC10-120 BT30 -NDC13-60  BT30 -NDC13-60  BT30 -NDC13-60  BT30 -NDC13-60  DT30 -NDC13-60  BT30 -NDC13-60  DT30 -NDC13-60  BT30 -NDC13-60  DT30	.6
-NDC10-90 0.5~10.0 33 138.4 90 M12×1.5 50 BT30 NDN10 FS33 APM10-2 CSH10 0.7 0.9 BT30 NDC13-60 108.4 60 7/24	7
-NDC10-120 168.4 120 BT30 BT30 BT30 BT30 D.13	.5
BT30 -NDC13-60 108.4 60 7/24 0.5	7
	9
NDC12 00 0 5 129 4 00 M15 V1 5 62 VCC12 NDN12 ES26 ADM12 2 CSL12 0.7	.5
-NDC13-80   0.0 - 130.4   80   N13/1.5   02   10013   NDN13   F330   AFN13-2   C3/13   0.7	.7
-NDC13-120 168.4 120 0.9	.9
BT30 -NDC16-75 123.4 75 0.7	.7
NDC16-105 2.5~16.0 42 153.4 105 M18×1.5 68 YCC16 NDN16 FS42 APM16-2 CSH16 0.9	9
-NDC16-120 168.4 120 1.1	.1
BT30 -NDC20-75 123.4 75 M15×1.5 60 APM13-1 — 0.7	.7
** -NDC20-105 3.5~20.0 52 153.4 105 M22×1.5 73 YCC20 NDN20 FS52 APM20-2 CSH20 1.0	.0
-NDC20-120   168.4   120   MIZZ 1.3   73         AF MIZU-Z   031120   1.2	2
** BT30 -NDC25-90 5.0~25.0 62 138.4 90 M15×1.5 80 YCC25 NDN25 FS62 APM13-2 — 1.0	.0
** NDC25-120 5.0~25.0 62 168.4 120 M15×1.5 80 YCC25 NDN25 FS62 APM13-2 — 1.7	7

‰Coolant seal screw cannot be used. ♦Dimensions of the Taper Shank are in accordance with MAS 4003-1982 BT Tapered Shank ♦Dimensions of Max. I are those when length adjustment bolt -APM type is used. • Collet, spanner, retention knob, coolant sealing back up screw, length adjustment bolt are not included the above. They are separate accessories.

### **Drill Mill Collets**



Model	Bore Size	Collet Gripping Capacity d	Outside Diameter	Length	Applicable Main Body
YCC7-	1、1.5、2、2.5、3、3.5、4、5、6、7	0.5~7.0	13	20	NDC7、7S
YCC10-	1、1.5、2、2.5、3、3.5、4、5、6、7、8、9、10	0.5~10.0	18	28	NDC10
YCC13-	1、1.5、2、2.5、3、3.5、4、5、6、7、8、9、10、11、12、13	0.5~13.0	22	32	NDC13
YCC16-	3、3.5、4、5、6、7、8、9、10、11、12、13、14、15、16	2.5~15.0	26	35	NDC16
YCC20-	4、5、6、7、8、9、10、11、12、13、14、15、16、17、18、19、20	3.5~20.0	34	45	NDC20
YCC25-	6、7、8、9、10、11、12、13、14、15、16、17、18、19、20、21、22、23、24、25	5.0~25.0	42	56	NDC25

- In addition to the standard collets. AA-class collets of higher runout accuracy are also available. When to order AA-class. it must be specified accordingly.
- 0.5~1.0mm of chucking capacity.
- ₩ When chucking an end-mill, please use the collet of which maximum capacity is equal to the dia. of the end-mill shank.
- Special sizes of collets are also available.

## **NDN Lock Nuts**



Mode I	М	Applicable Main Body	Applicable Collet
NDN7S	M16×1.0	NDC7S	YCC7
NDN7	M18×1.0	NDC7	1007
NDN10	M24×1.0	NDC10	YCC10
NDN13	M28×1.0	NDC13	YCC13
NDN16	M33×1.5	NDC16	YCC16
NDN20	M42×1.5	NDC20	YCC20
NDN25	M50×1.5	NDC25	YCC25

### **Hook Spanners**



	9	
Mode I	Applicable Main Body	Applicable Lock Nut
FS22	NDC7S	NDN7S
FS26	NDC7	NDN7
FS33	NDC10	NDN10
FS36	NDC13	NDN13
FS42	NDC16	NDN16
FS52	NDC20	NDN20
FS62	NDC25	NDN25

### \*\*Hook spanners are separate accessories.

# Spanners with Torque Limiters



Mode I	Recommended Torque (Nm)	Applicable Main Body	Applicable Lock Nut
FS22T	13	NDC7S	NDN7S
FS26T	13	NDC7	NDN7
FS33T	20	NDC10	NDN10
FS36T	30	NDC13	NDN13

\*Torque-fixed type with recommendable torque. \*\*Hook spanners are separate accessories

# **BT30 Power Lock Milling Chucks**

### ■High gripping torque

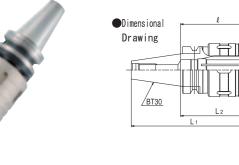
Gripping torque was increased by making the tightening collar thicker, and by strengthening tightening of the opening by modifying chuck ID with straight slit.

### ■Coolant can be used

Coolant can be used, regardless of tool with or without coolant-thru hole.

### ■High Rigidity • High Accuracy

High rigidity thanks to tightening collar end holding system (duplex holding) and it is manufactured with concentricity within 0.005mm



Model	Grip Diameter d	Nut Outside Diameter D	Total Length L1	Length from the Gauge Line L2	Maximum l	Taper	Applicable Collet (option)	Applicable Spanner (option)	Weight (kg)
BT30 -PMC20-75	20	FO	123.4	75	75	BT30	SCR20 SCA20	FS55	0.96
-PMC20-120	20	52	168.4	120	75	7/24	SCC20	F333	1.55

For coolant-thru tool

Suitable when using tool

\*Please use a tool of which shank diameter tolerance h7.

\*Dimensions of tapered shank are in accordance with MAS4003-1982 BT Tapered shank.

\*\*Straight collet and Spanner are not included in the above. They are separate accessories

# **Straight Collets**

### •For normal use

Collet for chucking straight Collet with adjustment bolt shank of small diameter



For adjustment use

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Mode I	Bore Size
SCA20-	6,8,10,12,1

# with coolant-thru hole.

Model	Bore Size
SCC20-	6,8,10,12,16

# **Hook Spanners**



- X Please use a tool of which shank diameter tolerance h7
- X Tool must be inserted into collet deep enough to secure retaining length.
- X Straight collet of size 6, 8, 10, 12 are made to order.

### **BT30 Pencil Mill Chucks**

### ■Slim head

The slim head of the chuck will prevent unnecessary collision with workpiece and will improve the operation efficiency. ■ Method to secure a stable high precision

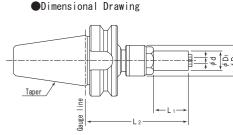
The pencil mill chuck draws collet straight without screwing the draw-bar without the collet being twisted which will keep the accuracy to be stable.

### $\blacksquare$ Runout within 5 $\mu$ (Special specifications)

Super precision type guarantees the runout accuracy to be within  $5\mu$  at 25mm distance from the holder's head



Unit: mm



									Unit: mm
Model	Collet Gripping Capacity d	Taper	D1	D2		L2	Applicable Collet (option)	Applicable Spanner (option)	Weight (kg)
BT30 -PCH6-90	3~6	BT30	17	27	31	90	YPC6	KS 6	0.56
-PCH10-100	3~10	D130	23	34	45	100	YPC10	KS10	0.67

\*Collet, retention knob and spanner are not included in the above. They are separate accessories. \*\*Special sizes of pencil mill chucks are also available by special order

### Pencil Mill Chucks



Model	Bore Size	Outside Diameter	Length	Inside Screw	Applicable Main Body
YPC 6-	3、4、6	13	39	M8 ×1.25	PCH6
YPC10-	3、4、6、8、10	18	54	M10×1.25	PCH10

# Single Head Spanners

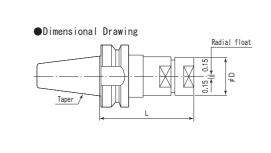


Mode I	Applicable Main Body
KS 6	PCH6
KS10	PCH10

# BT30 Floating Tap Holders

■The built-in radial float mechanism compensates the centering deviation, if any, between the spindle and the workpiece, which will eventually secure the precise tapping work.







TSC10-M10

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Tapping Capacity	Taper		D	Applicable Collet (option)	
M2 - M10	DT20	75	20	TSC10	
IVIS. SIVITO	D130	90	29	15010	
	Tapping Capacity M3~M10		- M3∼M10 BT30 75	- M3~M10 BT30 75 29	

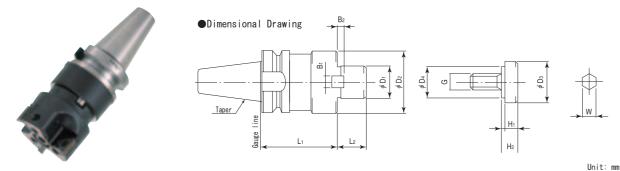
Collet, spanner and retention knob are not included in the above. They are separate accessories.

Tap Collets



Mode I	Applicable Main Body
TSC10-M3	
TSC10-M4	
TSC10-M5	FTH10
TSC10-M6	FIRIU
TSC10-M8	

# BT30 Face Mill Arbors



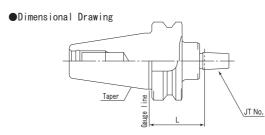
Mode I	Taper	D <sub>1</sub>		D2	L2				Dз	D4		H2		Weight (kg)		
BT30 -FMA22-40		00.0	40	45	40		_	1440		(Hexagon s	ocket head o	ap screw		0.70		
-FMA22-60		22.0	60	45	18	φ10	5	M10		-			× 350)	0.90		
BT30 -FMA22.225-40			40											0.70		
-FMA22.225-60	BT30	22.225	60	45	18	8	3.5	M8	13	–	8	_	6	0.90		
-FMA22.225-90					90											1.30
BT30 -FMA25.4-60		25.4	60	50	22	9.5	5	M12	33	23	10	12	10	1.00		
-FMA25.4-90		25.4	90	30		9.5	3	IVITZ	33	23	'0	12	'0	1.50		

Special sizes are also available.

# **BT30 Jacobs Taper Arbors**

■These arbors are manufactured by using prototype of the taper gage in high quality control to achieve taper contact better than 85%, thus, enabling to assure the superior endurance and the high accuracy

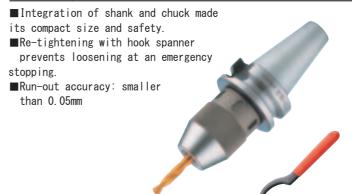


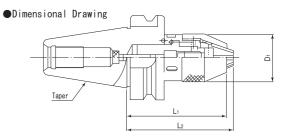


Unit: mm

Mode I	Jacobs Taper	Taper	L	Weight (kg)
BT30-JTA1-30	JTNo.1	BT30	30	0.40
BT30-JTA2S-30	JTNo.2S	BT30	30	0.50
BT30-JTA6-30	JTNo.6	BT30	30	0.50

# CNC Keyless Drill Chucks with BT30 Shank

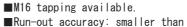




Model	Gripping Capacity	D <sub>1</sub>	Lı	L2	Taper	Applicable Spanner	Weight (kg)
BT30-LC6.5F-70	0.5~6.5	34	70	76	BT30	FS6.5LC	0.60
BT30-LC13F-90	0.5~13	50	90	102	Б130	FS13LC	1.15

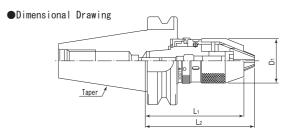
# Super Keyless Drill Chucks with BT30 Shank

■The sleeve-lock mechanism working in reverse rotation.









Mode I	Capacity	D <sub>1</sub>	Lı	L2	Taper	Spanner	(kg)
BT30-SLC13-110	0.5~13	51	110	122.5	BT30	FS13LC	1.38

# **Keyless Drill Chucks**

■World highest precision, manufactured with integration of our production technology and quality control.

■Run-out accuracy: smaller than 0.05mm

<Gold> Less than 0.03mm <Silver> Less than 0.05mm

							Un	it: mm
	Utraprecise Type	Precise Type	Gripping Capacity	Taper	Outside Diameter	Length (closed claws)	Length (open claws)	Weight (kg)
	LC3-JO gold	LC3-JO silver	0.3~3	JTNo.0	24	48	44	0.10
	LC3-J1 gold	LC3-J1 silver	0.3~3	JTNo.1	24	48	44	0.10
	LC6.5 gold	LC6.5 silver	0.5~6.5	JTNo.1	34	68	62	0.30
	LC8 gold	LC8 silver	0.5~8	JTNo.2S	38	76	68.5	0.40
	LC10 gold	LC10 silver	0.5~10	JTNo.2S	43	91	80	0.63
Ī	LC13 gold	LC13 silver	0.5~13	JTNo.6	50	103	91	0.94
	LC16 gold	LC16 silver	3~16	JTNo.6	56	109	96	1.25

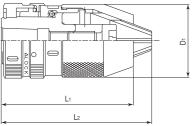
# Super Keyless Dream Chucks

■The sleeve-lock mechanism working in reverse rotation.

■M16 tapping available.

■Run-out accuracy: smaller than 0.05mm

Dimensional Drawing



ripping apacity	D <sub>1</sub>	Lı	L2	Taper	Applicable Spanner	(kg)
0.5~13	51	90.5	103	JT6	FS13LC	1.04
0.5~13	51	90.5	103	JT33	FS13LC	1.05
	apacity .5~13	apacity D1 1.5~13 51	apacity D1 L1 .5~13 51 90.5	apacity D1 L1 L2 1.5~13 51 90.5 103	apacity D1 L1 L2 Taper 1.5~13 51 90.5 103 JT6	apacity D1 L1 L2 Taper Spanner

Retention knob is a separate accessory