

CYLINDRICAL SHANK

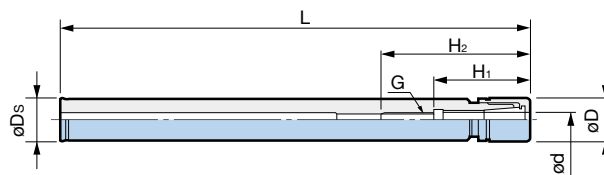


■ COLLET CHUCK.....	D1
■ MILLING CHUCK	D5
■ HYDRAULIC CHUCK	D6
■ SHRINK CHUCK.....	D7
■ CK BORING SYSTEM	D8
■ TAPPER	D11



- Achieves high-precision machining in combination with the Mega New Baby Chuck.

Center through



● Model Description

ST10 - **MEGA** **3** **S** - **120**

- L dimension
- MICRO CHUCK
- MEGA CHUCK
- Cylindrical shank diameter

Model	Clamping diameter $\varnothing d$	$\varnothing D$	$\varnothing D_s$	L	H ₁	H ₂	G	Collet Model	Weight (kg)
ST10-MEGA3S-120	0.45 - 3.25	10	10	120	22	38	M4 P0.7	NBC3S-□	0.06
ST12-MEGA4S-130	0.45 - 4.05	12	12	130	26.5	47	M5 P0.8	NBC4S-□	0.11
-160				160					0.13
ST14-MEGA6S-160	0.45 - 6.05	14	14	160	28.5	49	M7 P0.75	NBC6S-□	0.18
-200				200					0.21
ST16-MEGA8S-160	2.95 - 8.05	18	16	160	31	50.5	M9 P0.75	NBC8S-□	0.23
-200				200					0.25

1. Nut is included. Collet and wrench must be ordered separately.
2. Weight includes the nut but not the collet.

■ Cylindrical Shank Set

- With a set box convenient for storage



Set Contents

Model **SST12-MEGA4S-130**< $\varnothing 12$ shank type accessories>

- Body/ST12-MEGA4S-130 (with MGN4S nuts)
- Micro Collet/NBC4S-3 and 4 ($\varnothing 3$, $\varnothing 4$)
- Mega Wrench/MGR12 ● Exclusive set box

Model **SST16-MEGA8S-160**< $\varnothing 16$ shank type accessories>

- Body/ST16-MEGA8S-160 (with MGN8S nuts)
- Micro Collet/NBC8S-3, 4, 6 and 8 ($\varnothing 3$, $\varnothing 4$, $\varnothing 6$, $\varnothing 8$)
- Mega Wrench/MGR18 ● Exclusive set box

Model **SST14-MEGA6S-160**< $\varnothing 14$ shank type accessories>

- Body/ST14-MEGA6S-160 (with MGN6S nuts)
- Micro Collet/NBC6S-3, 4, 5 and 6 ($\varnothing 3$, $\varnothing 4$, $\varnothing 5$, $\varnothing 6$)
- Mega Wrench/MGR14 ● Exclusive set box

Standard Accessory	Optional Accessories				
MEGA NUT  For Spares 	Mega Wrench  	Micro Collet  	Mega Micro Seal Nut (for 6S and 8S) Mega Micro Coolant Nut (for 6S)  	Collet Case  	Adjusting Screw  

Clamping diameter: $\varnothing 0.25 - \varnothing 20$

COLLET CHUCK NEW BABY CHUCK

Cylindrical
ST
SHANK

Handles interference issues flexibly when combined with the
NEW Hi-POWER MILLING CHUCK.

Center through

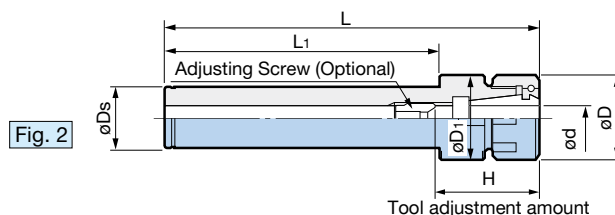
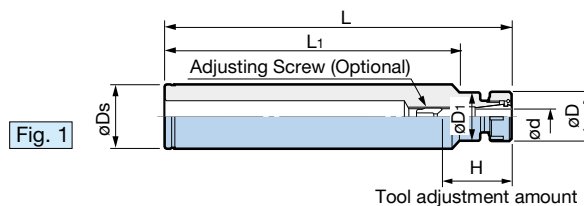
- Enables easy tool layout for horizontal machining center prone to interference with workpieces and jigs.



● Model Description

ST20 - **NBS** **6** - **100**

- L1 dimension ※
- Maximum clamping diameter
- NEW BABY CHUCK System
- Cylindrical shank diameter



※ Note that the 3rd digit in the model number does not correspond to the L dimension (overall length).

Model	Fig.	ød	øD	øD ₁	øDs	L	L ₁	H	Collet Model	Weight (kg)
ST20-NBS 6-100	1	0.25 - 6	20	19.5	20	124	100	20 - 40	NBC 6-□	0.27
-150						174	150			0.39
-250						274	250			0.64
-NBS 8-100	2	0.5 - 8	25	24.5		126	100	23 - 42	NBC 8-□	0.29
-150						176	150			0.41
-250						276	250			0.66
-NBS10-100		1.5 - 10	30	29.5		128	100	35 - 45	NBC10-□	0.32
-150						178	150			0.44
-250						278	250			0.69
-350						378	350			0.93
ST25-NBS 6-150	1				0.25 - 6	20	19.5			174
-NBS 8-150		0.5 - 8	25	24.5	176	150	23 - 42	NBC 8-□	0.62	
-200					226	200			0.81	
-250					276	250			1.00	
-NBS10-150	2	1.5 - 10	30	29.5	178	150	35 - 45	NBC10-□	0.65	
-200					228	200			0.84	
-250					278	250			1.03	
-NBS13-150		2.5 - 13	35	34.5	184	150	41 - 60	NBC13-□	0.67	
-200					234	200			0.86	
-250					284	250			1.05	

- The nut is included but the collet, wrench and Adjusting Screw must be ordered separately.
- Weight includes the nut but not the collet.

- Tool adjustment amount "H" indicates the adjustment length with an Adjusting Screw (NBA).

- BIG** ST LOCK is available for mounting and removing tools. **H4**

Standard Accessory	Optional Accessories				
New Baby Nut For Spares	New Baby Wrench 	Collet 	BABY PERFECT SEAL 	Adjusting Screw 	Tap Adjusting Screw

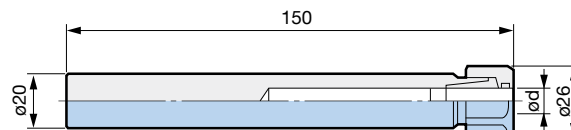
Clamping diameter: $\varnothing 6$ - $\varnothing 10$ **BABY CHUCK**

- Small-diameter endmill holder that prevents interference.



- Model Description

- MB** **20** - **6**
- Clamping diameter
 - Shank diameter
 - BABY CHUCK



Model	Standard Accessory (collet with nut)	
	Model	$\varnothing d$
MB20- 6	BC- 6	6
- 8	- 8	8
-10	-10	10

1. When spare collet is required, order the collet with nut model BC-x.
2. **BIG** ST LOCK is available for mounting and removing tools.



■ BABY CHUCK Set

- Model Description

- SMB** - **20**
- Shank diameter
 - BABY CHUCK Set

Model	Standard Accessory (Collet with nut)
SMB-20	BC-6, 8, 10

1. The set includes 3 types of collet with nut.

■ Straight Collet



- Model Description

- C6** - **3**
- Collet inner diameter
 - Collet outer diameter

Model	$\varnothing d$	$\varnothing D$
C6-3	3	6
-4	4	
-5	5	

Model	$\varnothing d$	$\varnothing D$
C10-4	4	10

D

COLLET CHUCK

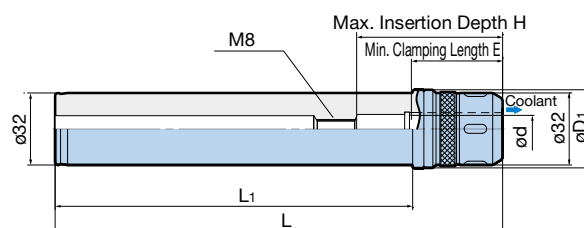
[HMC12J Type]

Center through

- Slim milling chuck with high rigidity.
- Nut diameter of $\varnothing 32$ avoids interference.



Jet Through Coolant



● Model Description

- ST32** - **HMC** **12** **J** - **120**
- L dimension
 - Jet Through Type
 - Chuck bore
 - NEW Hi-POWER MILLING CHUCK
 - Cylindrical shank diameter

Model	Clamping diameter $\varnothing d$	$\varnothing D_1$	L	L ₁	H	E	Wrench Model	Weight (kg)
ST32-HMC12J-120	12	35	120	80	65	43	FK31-33	0.7
-160			160	120				0.9
-200			200	160				1.1

1. Wrench is not included. Please order separately.
2. MEGA WRENCH cannot be used.

Straight Collets **G25****Optional Accessories**

Straight Collet

PJC Collet
G25

Wrench



G30

For versatile high-precision machining including molds and automotive components.

- Cylindrical shank type that prevents interference with workpieces.

[Super Slim Type]

Center through



● Model Description

- ST20 - HDC 4 S - 180**
- L dimension
 - SUPER SLIM Type
 - Clamping diameter
 - HYDRAULIC CHUCK
 - Cylindrical shank diameter

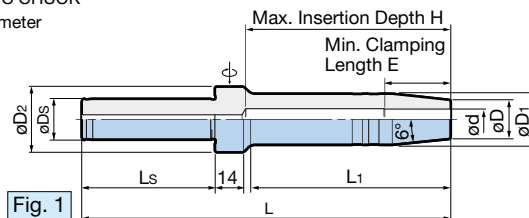


Fig. 1

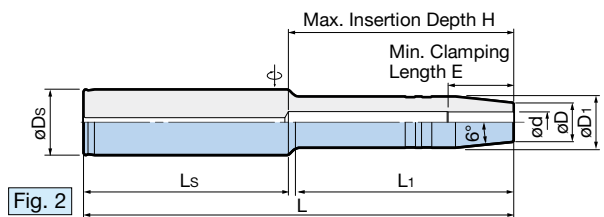


Fig. 2

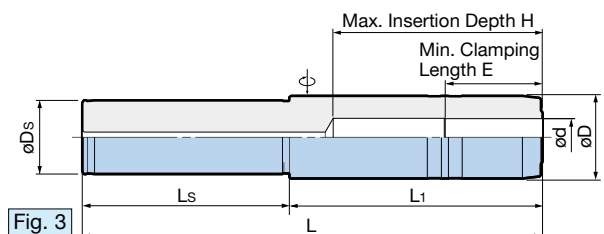


Fig. 3

Model	Fig.	Clamping diameter øD	øD	øD ₁	øD ₂	øD _s	L	L ₁	L _s	H	E	Weight (kg)
ST20-HDC 4S-180	1	4	14	18	32	20	180	94	65	—	19	0.40
-HDC 6S-180		6		20				95			25	0.43
-HDC 8S-180		8	17	23				96		101	31	0.50
-HDC10S-180		10	19	25				97		100	33	0.54
-HDC12S-180		12	21	28				99			36	0.61
ST32-HDC10S-210		2	10	19				25		—	32	210
-HDC12S-210	12		21	28	108	109	36	1.06				
-HDC16 -200	3	16	36	—	200	110	90	91	43			1.27
-HDC20 -200		20	38					90				1.28

1. Adjusting Screw cannot be used.

- It is recommended to use a Grip Bar to periodically confirm the gripping force of the Hydraulic Chuck.  **G30**

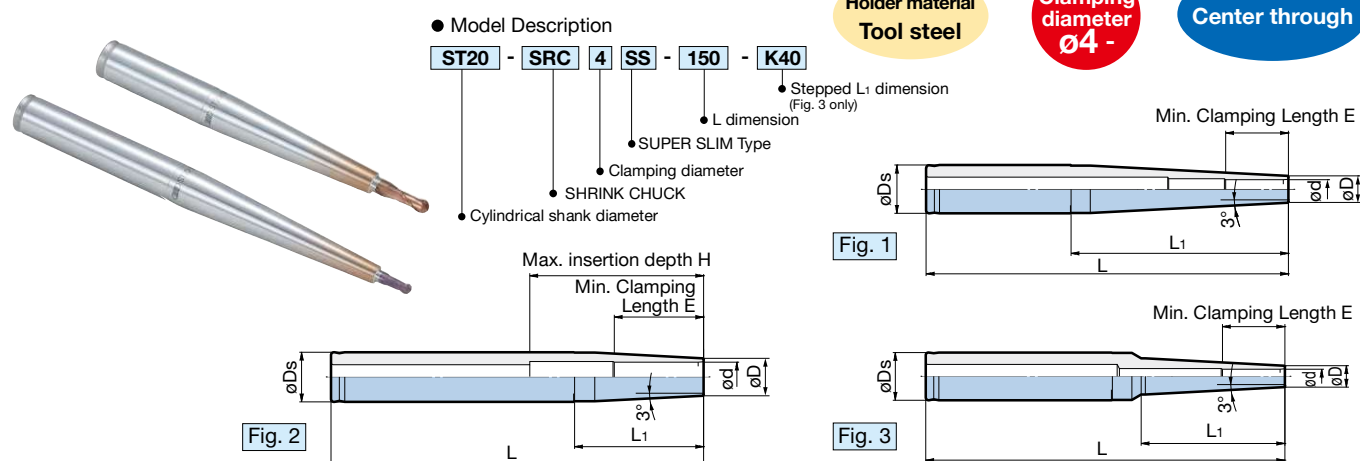


Caution

- Use only cutting tools that have a shank tolerance within h6.
- Do not use with cutting tools made with a flat on the shank. (ie: Weldon type shank)
- We do not recommend use with roughing endmills.
- Do not clamp without a tool.
- Always insert the cutting tool into the holder beyond min. clamping length E.

D

HYDRAULIC CHUCK

[SUPER SLIM Type] Clamping diameter: $\phi 4 - \phi 12$ 

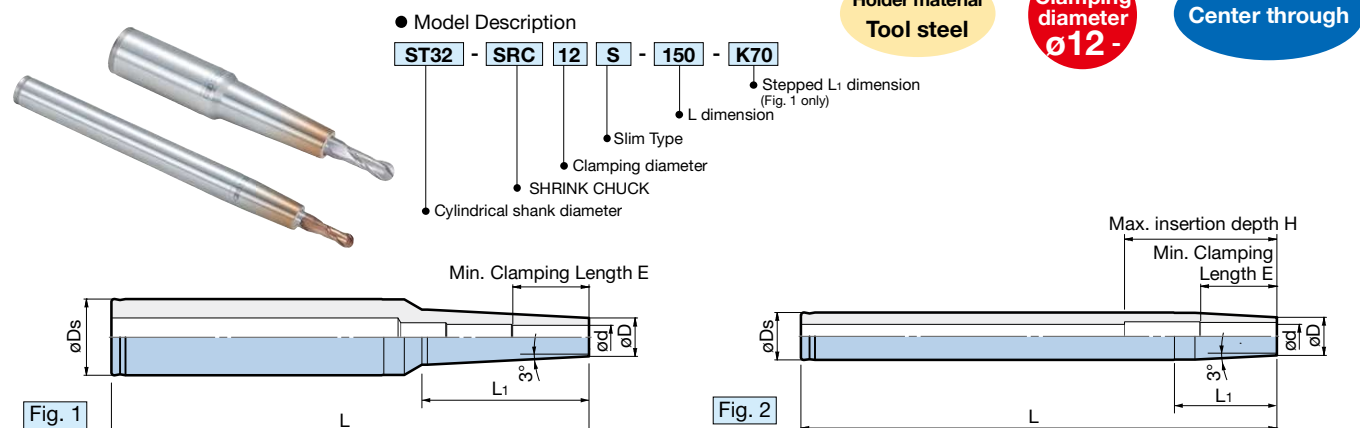
Model	Fig.	Clamping diameter ød	øD	øDs	L	L ₁	H	E	Weight (kg)
ST12-SRC 4SS-120 ※	1	4	7	12	120	51	—	16	0.10
-SRC 6SS-120	2	6	9			32	52	26	0.10
ST20-SRC 4SS-150-K40 ※	3	4	7	20	150	40	—	16	0.25
-SRC 6SS-150-K60		6	9	20	150	60	—	26	0.25
-200	200				110	0.30			
-250	250					0.35			
-SRC 8SS-150	1	8	11	20	150	90	—	26	0.25
-200					200				0.30
-250					250				0.40
-SRC10SS-150	2	10	13	20	150	71	60	32	0.25
-200					200				0.35
-250					250				0.40
-SRC12SS-150	2	12	15	20	150	52	70	36	0.25
-200					200				0.35
-250					250				0.45

1. Use a carbide shank cutter within a tolerance of h6.

For models marked with ※, use a carbide shank with a tolerance within h5.

2. Center through coolant supply is available with tools with oil holes.

<Some shrink fit machines may not be compatible with the Shrink Chuck. Please refer to the shrink fit machine operation manual.>

[Slim Type] Clamping diameter: $\phi 12 - \phi 20$ 

Model	Fig.	Clamping diameter øD	øD	øDs	L	L ₁	H	E	Weight (kg)
ST32-SRC12S-150-K70	1	12	19	32	150	70	—	36	0.55
-200-K70					200				0.80
-300-K70					300				1.25
-SRC16S-150	2	16	24	32	150	83	70	38	0.60
-200					200		80		0.85
-300					300		1.30		
-SRC20S-150	2	20	28	32	150	50	80	38	0.60
-200					200				0.85
-300					300				1.30

1. Use a carbide shank cutter within a tolerance of h6.

2. Center through coolant supply is available with tools with oil holes.

<Some shrink fit machines may not be compatible with the Shrink Chuck. Please refer to the shrink fit machine operation manual.>

Diameter: $\phi 16$ - $\phi 21$

BORING SYSTEM **BIG** + KAISER **CK BORING SYSTEM**

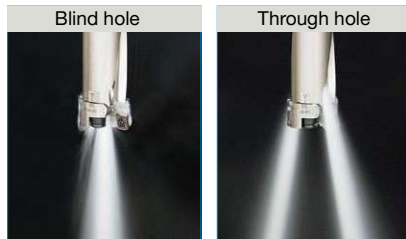
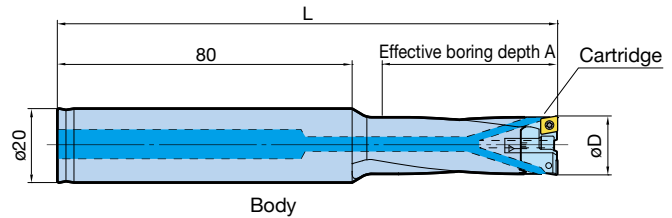
Cylindrical
ST
SHANK

MW BORING HEAD PAT. (for roughing)

Achieves high efficiency small diameter rough boring with 2 inserts.

For
Roughing

Center through



Threads for plug screws are prepared in the coolant holes to change the coolant directions.

Diameter ϕD	Model	Cartridge Model	L	A	Spare Clamp Bolt Set	Spare Belleville Spring(4pcs)	Weight (kg)
16 - 19	ST20-MW1619-45	MW1619E	136	45	MW16SS	MW16BS	0.24
	-60		151	60			0.26
18 - 21	-MW1821-50	MW1821E	141	50			0.26
	-65		156	65			0.28

Cartridge models are a 2-piece set.

✎ Cutting Conditions **A49**

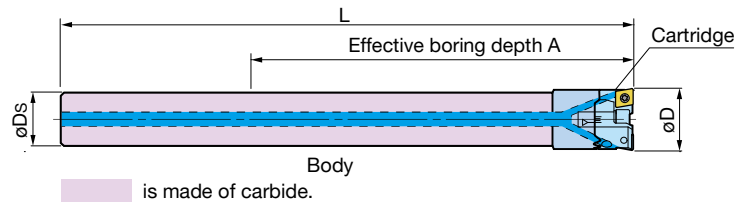
✎ Spare parts **A101**

1. Clamp Bolts and Belleville Springs are included with the body. However, cartridges are not included and must be ordered separately.
2. Cartridge includes insert clamping screws and wrench.
3. The weight is that of the body and cartridge combined.
4. Inserts must be ordered separately.
5. The spare Clamp Screw Set contains two clamping screws and two washers.

[Carbide shank type]

NEW

- Carbide shank for enhanced deep hole boring performance (for through-hole)



is made of carbide.

Diameter ϕD	Model	Cartridge Model	ϕD_s	L	A	Spare Clamp Bolt Set	Spare Belleville Spring(4pcs)	Weight (kg)
16 - 19	ST14W-MW16-110	MW1619E	14	151	110	MW16SS	MW16BS	0.36
18 - 21	ST16W-MW18-115	MW1821E	16	172	115			0.54

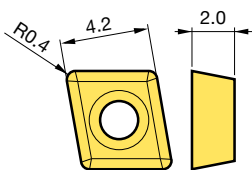
Cartridge models are a 2-piece set.

✎ Cutting Conditions **A49**

✎ Spare parts **A101**

1. Clamp Bolts and Belleville Springs are included with the body. However, cartridges are not included and must be ordered separately.
2. Cartridge includes insert clamping screws and wrench.
3. The weight is that of the body and cartridge combined.
4. Inserts must be ordered separately.
5. The carbide shank and boring head are integrated and cannot be sold separately.
6. **Exclusive for use with through holes. Do not use it with blind holes.**
7. The spare Clamp Screw Set contains two clamping screws and two washers.

Insert (optional)



Workpiece material	Insert Model	Materials
Steel/Stainless steel	MW0404F Z30P	P30 equivalent carbide substrate TiAlN + AlCrN coating
Cast iron/ Ductile	MW0404S Z30K	K20 equivalent carbide substrate TiAlN + AlCrN coating
Non-ferrous metal/ Aluminum	MW0404E D15N	K15 equivalent carbide substrate DLC coating

1. Inserts sold in packets of 10 pcs.

Example: MW0404F Z30P... 10 pcs

Insert Clamping Screw Set (optional)



Set Model	Thread size	Wrench
S1.6S-T6	M1.6 x 4.2	FA-T6

1. The set contains ten screws and a wrench.

※ Wrenches are also sold individually.

Improves thread quality and tap life by reducing thrust loads caused by synchronization errors up to 90%.

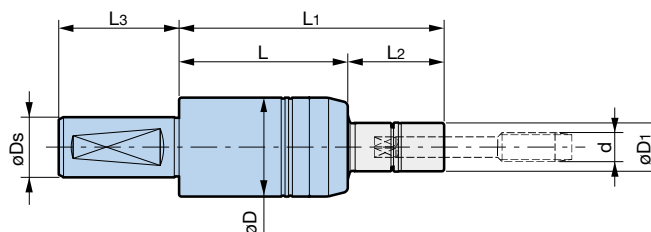
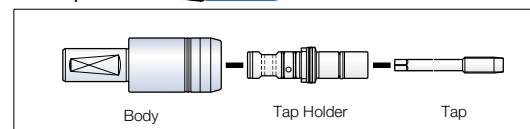
- Long tap holder now available as standard in addition to various tap sizes.

Center through



● Model Description (Body)

- ST20** - **MGT6** - **65**
- L dimension
 - MEGA SYNCHRO No.
 - Cylindrical shank No.

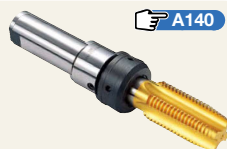
For tap holders **A134**.※ Use the **BIG** Side Lock Holder (TSL). **A127**

Model	Tap Holder Model	Tapping range d	øD	øD ₁	øDs	L	L ₁	L ₂	L ₃	Weight (kg)
ST20-MGT 6-65	MGT 6-□- 30	M2 - M6	36	16	20	65	95	30	40	0.5
	□- 70	No.3 - U1/4					135	70		
	□-100						165	100		
ST25-MGT12-70	MGT12-□- 30	M6 - M12	41	20	25	70	100	30	50	0.8
	□- 70	U1/4 - U7/16					140	70		
	□-100	P1/8					170	100		
ST32-MGT20-90	MGT20-□- 35	M12 - M20	54	30	32	90	125	35	55	1.5
	□- 85	U1/2 - U3/4					175	85		
	□-115	P1/4 - P3/8					205	115		

1. MGT Set Screw is included.
2. Tap holder is not included. Please order separately.

Cannot be used with machining center without synchronized tapping function.

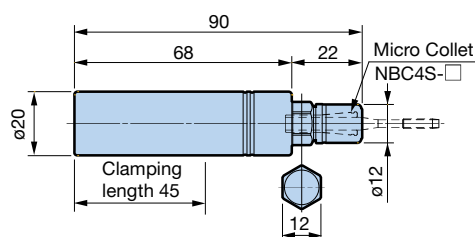
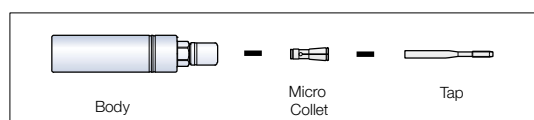
M39 - M52
**SYNCHRONIZED
TAP HOLDER
STD52**

 **A140** Tap holders **A134** Accessories **G31**

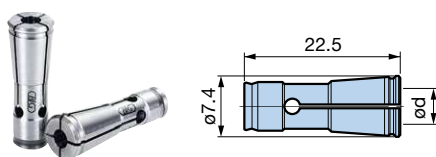
L₂=**150, 200mm** tap holders are also available. For details, see **A134 - A135**

[Small Diameter Tap MGT3 Type PAT.] M1 - M3Model **ST20-MGT3-90**

1. Nut is included. Wrench and collet must be ordered separately.
 2. When attaching or detaching the tap, a commercially available flat wrench (12mm width) is also required. Prepare this on your own.
- Cannot be used with machining center without synchronized tapping function.
 - Cannot be used with center through.

 Mega Wrench **G33**

■ Micro Collet



Model	Tapping range			Tap shank diameter ød
	JIS-M	JIS-U	DIN371	
NBC4S - 2.5AA			M1-M1.8	2.5
2.8AA			M2-M2.6	2.8
3.0AA	M1 - M2.6	No.0 - 4		3.0
3.5AA			M3	3.5
4.0AA	M3	No.5, 6		4.0