

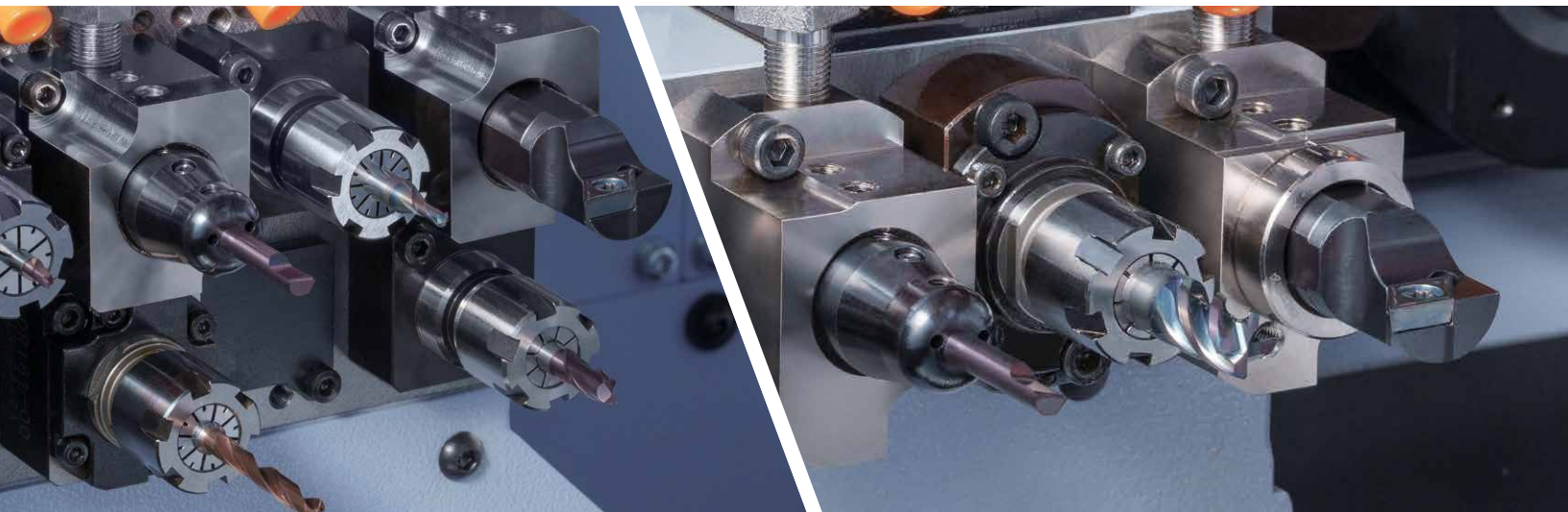


For Star Micronics Co., Ltd. Machines



Sub-Spindle Holders

Back Side Machining Holders



Sub-Spindle Holders for Back Side Machining Provide High Rigidity and Accuracy

4A-HA type for 4-spindle tool post with unique center height adjustment mechanism

Easy adjustment by simply rotating the adjustable sleeve with excellent adjustment accuracy

Suppresses vibration by increasing rigidity

Supports internal coolant



Back machining holder for Star Micronics Co., Ltd.'s machines

Sub-Spindle Holders

Highly rigid and supports internal coolant

Holders with center height adjustment mechanism are available

1 Lineup: Holders for 4- and 8-spindle tool post styles

For 4-spindle tool post

4A-HA type

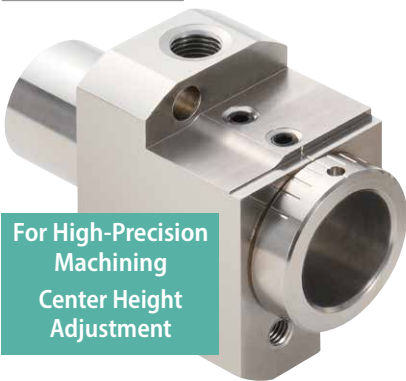
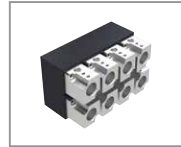


4A type



For 8-spindle tool post

8A type



For High-Precision
Machining
Center Height
Adjustment



2 Features

Feature 1

*Only the 4A-HA type for 4-spindle tool post supports the center height adjustment mechanism.

Adjustable sleeve enables easy adjustment of the center height with superior adjustment accuracy.

Feature 2

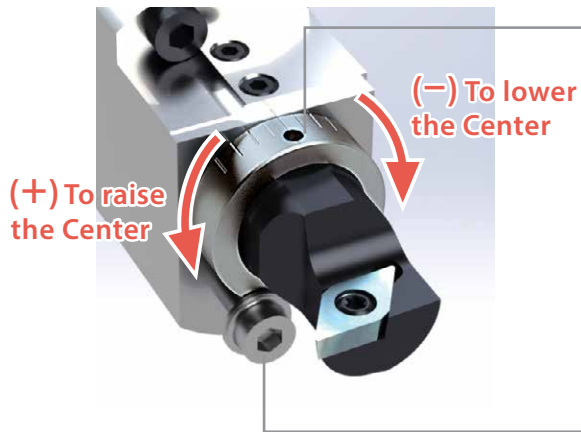
Supports internal coolant

Feature 3

**For large shank diameter tools.
High rigidity enhances chattering resistance and provides stable machining.**

Easy and Accurate Center Height Adjustment

Adjustable sleeve makes it easy to adjust the center height
Easy to operate with excellent adjustment accuracy



Scale of adjustable sleeve

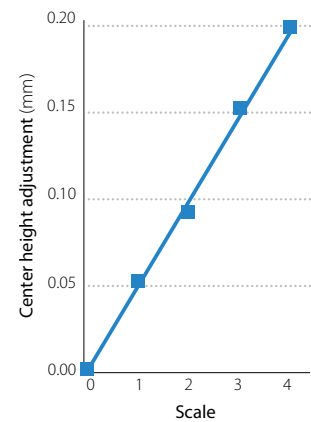


Adjust the scale of the adjustable sleeve to the reference position of the body (Center height adjustment range : $\pm 0.2\text{mm}$)
Please check the machining diameter after adjusting the center height.

Screw for temporarily fixing adjustable sleeve

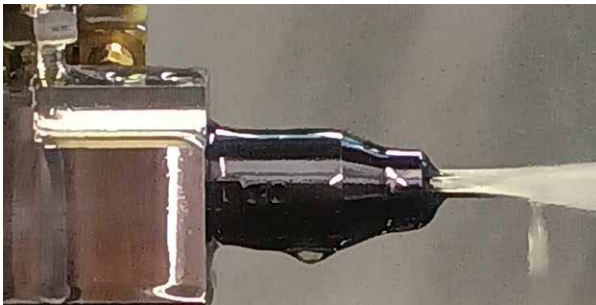
- Temporarily fix after adjusting center height
- Remove before machining

Center height adjustment scale
(Internal evaluation)



Supports internal coolant

Accelerates chip evacuation and supports extended tool life
Special sealing discs provide more stable coolant supply



Coolant piping part (Commercial product: Rc1/8)

Use the supplied plug (GP-1) if internal coolant is not used.

Sealing disc for sub-spindle holder (Sold separately)

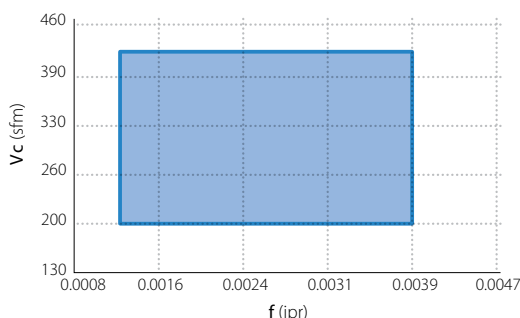
For coolant leakage
Using with internal coolant

High rigidity enhances chatter resistance

Increased rigidity for tools with large shank diameter

Suppresses chattering and provides stable machining under a wide range of cutting conditions

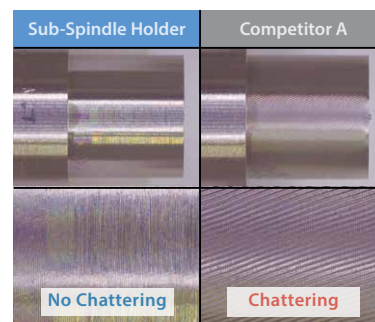
Cutting condition range for stable machining (No chattering)



Cutting conditions: $V_c = 200 \sim 430 \text{ sfm}$, $f = 0.0012 \sim 0.0039 \text{ ipr}$, D.O.C. = $0.079''$,
Wet, 304 SF22H-SH20-4A-HA S20K-SDUCL11 DCGT32505MFP-SK

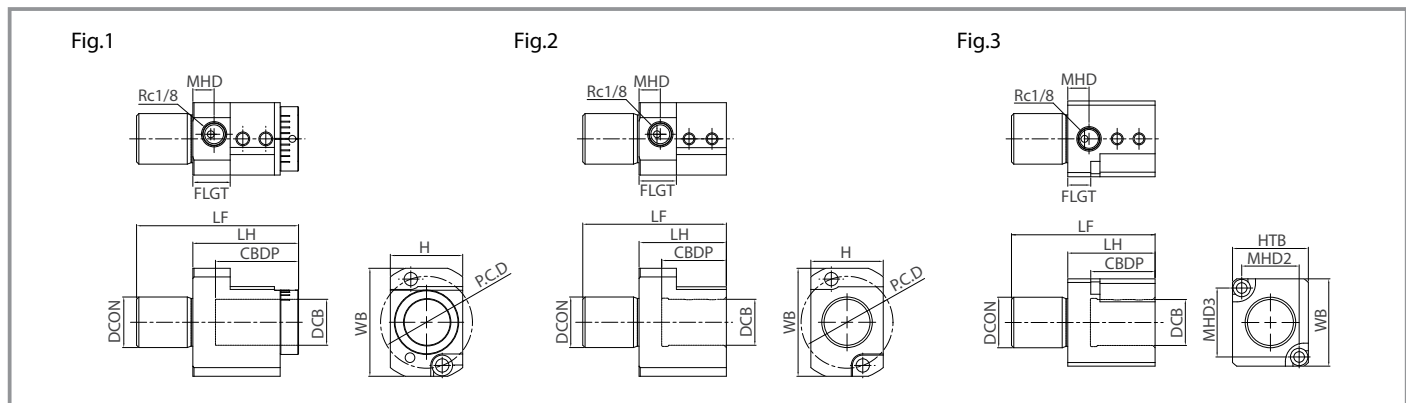
The sub-spindle holders had no chattering and good machining sound in a wide range of cutting conditions.
Work surface after machining was also good.

Chattering Resistance Comparison (Internal Evaluation)



Cutting conditions: $V_c = 330 \text{ sfm}$, $f = 0.002 \text{ ipr}$, D.O.C. = $0.079''$
Wet, 304

Holders



Part Number	Stock	Tool post type	Center height adjustment	Dimensions (mm)													Shape
				CBDP	DCB	DCON	FLGT	H	HTB	LF	LH	WB	MHD	MHD2	MHD3	P.C.D	
SF22F-SH20-4A-HA*	●	4-spindle tool post	Yes	36.2	20	22	16.3	31.5	-	70.5	46	47	9.3	-	-	40	Fig.1
SF22F-SH20-4A	●		-	28.2						62.5	38						Fig.2
SF22F-SH20-8A	●	8-spindle tool post	-	28.2	20	22	10	-	33	62.5	38	38	9.3	25	30	-	Fig.3

*SF22F-SH20-4A-HA is a combined unit with holder body (SF22-FH23-4A) + sleeve (SHE2023-27). Holder body and sleeve are also available to purchase separately.

● : Standard Stock

Assembly		Holder Body		Adjustable Sleeve		Screw
SF22F-SH20-4A-HA	=	SF22-FH23-4A	+	SHE2023-27	+	HH5X12-FL

Parts & Assembly

Part Number	Parts								
	Holder Body	Adjustable Sleeve	Screw	Screw	Wrench	Plug	Screw	Wrench	Disc
SF22F-SH20-4A-HA*									
SF22F-SH20-4A	-	-	-	HS5X5	LW-2.5	GP-1	HH5X25	LW-4	
SF22F-SH20-8A	-	-	-				HH4X16	LW-3	

Compatible Machines

Referenced the general catalog of Star Micronics Co., Ltd.

(4-spindle tool post) SP-20, SR-20JⅡ(A), SB-16Ⅲ, SB-12/16/20R series, SR-32JⅢ(A)

(8-spindle tool post) SV-20R, SW-20 / 12RⅡ, SD-26(S / C / E / G), SR-38(B) / 20RⅣ(A / B), SR-32JⅢ(B)/20JⅡ(B), SL-10

Precautions)

1. Be careful not to interfere with nearby tools.
2. Depending on the shape of the workpiece, special chucks may be required.
3. You may need to change the limits (soft limits) on the machine.
4. A short wrench is required for close proximity.
5. When the sub-spindle holders for 8-spindle tool post are mounted up and down on the tool post, the internal coolant cannot be used at the lower part.
6. When the sub-spindle holders for 4-spindle tool post is attached to the upper part of 8-spindle tool post, other tools cannot be attached to the lower part.



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