

CNC SWISS TYPE AUTOMATIC LATHE

SB-16III





The latest SB series, redesigned for minimal size with necessary and sufficient functions.

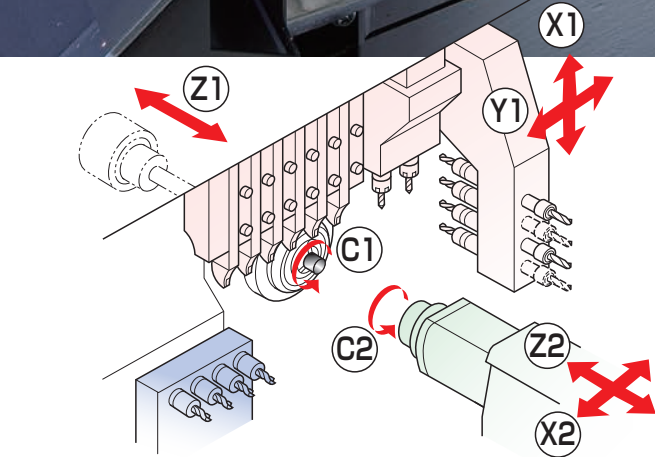
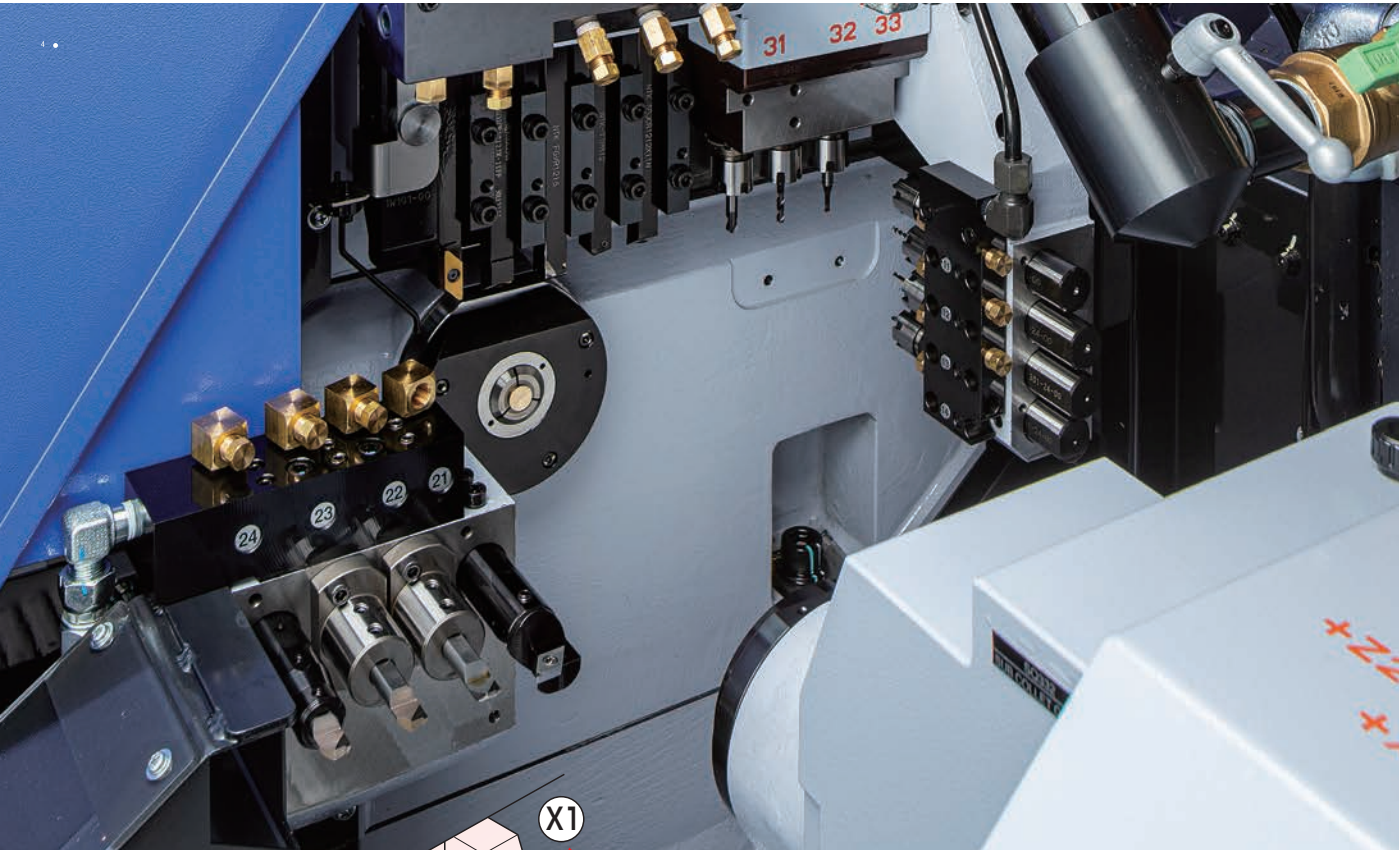
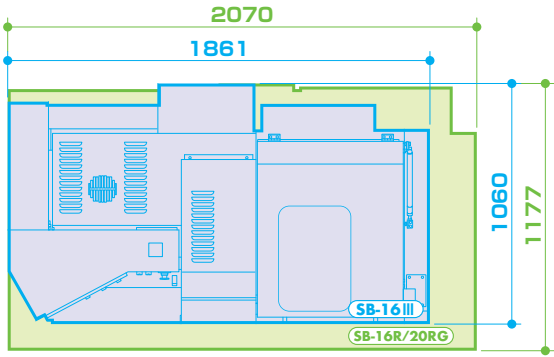


Illustration of Tool Post :
Gang-type tool holder for fixed 6 tools (for 12 mm sq.) + 2-spindle cross drilling unit



SB-16III and SB-16R/20RG Footprint Comparison

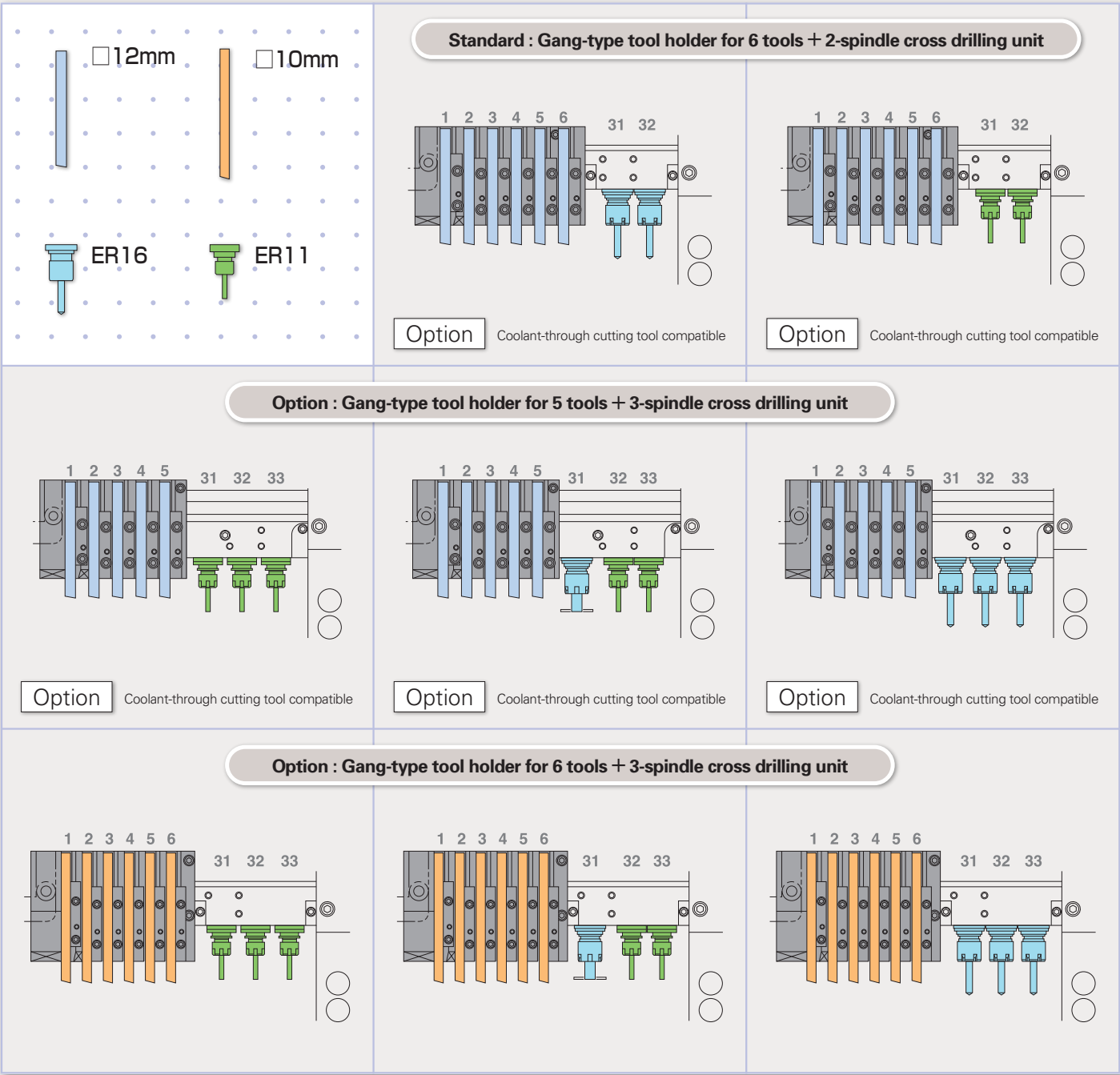
The machine born to provide all you need to fit your shop floor

- The high-rigidity tool post with the slanted dovetail slideway structure extends the tool life and allows extended, continuous operation with stable accuracy.
- The latest CNC unit, FANUC 0i-TF Plus, has a variety of help features.
- The 10.4-inch color display has improved visibility and operability.
- The display panel is mounted at an appropriate angle to the operator to ensure improved visibility of the control panel.
- C-axis control is standard on the main and sub spindles.
- Enhanced sub spindle capabilities such as main/sub spindle phase synchronization and sub spindle threading function.



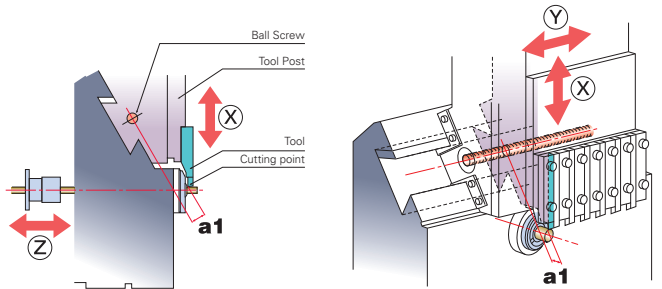
VARIATION of TOOLING SYSTEM

Optimum tooling layout



A rigid tool post with a slant-type slide guideway structure

The Y axis guideway of the tool post employs a slant-type slide guideway. This structure allows the X and Y axis guideways to be arranged radially around the cutting point in order to further improve machine rigidity. In addition, a linear line passing the ball screw center and in parallel with the Y axis guideway can be close (a 1) to the cutting point and therefore further increases rigidity and helps improve both accuracy and surface finish on your mill/turn components.



□ Standard Machine Specifications

OP : Option

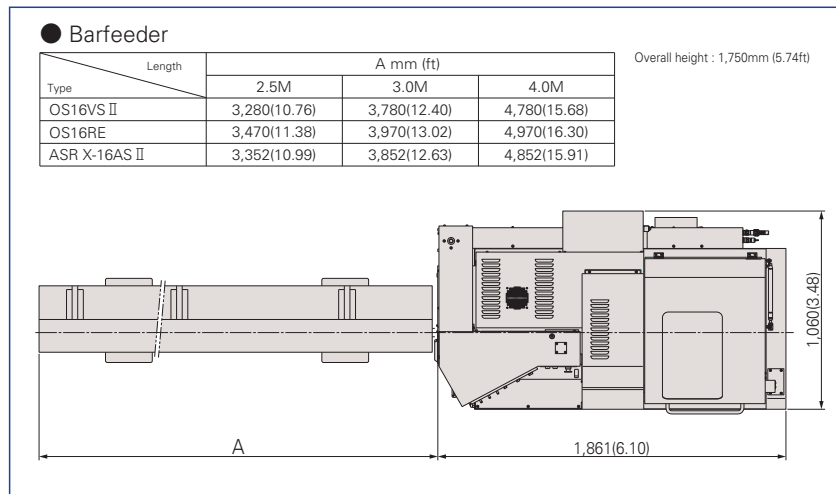
Item		Specifications
Max. machining diameter		φ 16mm (5/8in)
Max. headstock stroke	Stationary G.B.	205mm (8in)
	Revolving G.B.	155mm (6-3/32in)
Tools		Standard : 6 tools (□12 mm)/OP : 5 tools (□12 mm)/OP : 6 tools (□10 mm)
4-Spindle sleeve holder	Number of tools	Front 4 tools
		Rear 2 tools (Max. 4 tools)
	Max. drilling capability	φ 10mm (25/64in)
	Max. tapping capability	M8×P1.25
Power driven att.	Number of tools	Standard : 2 tools / OP : 3 tools
		Max. drilling capability
	Max. drilling capability	φ 6mm (15/64in)
	Max. tapping capability	M5×P0.8
Main spindle indexing angle		Standard : C-axis control / OP: 15°
Main spindle speed		Max. 10,000min ⁻¹
Main spindle motor		2.2kW (continuous) / 3.7kW (15min. / 60%ED)
Rapid feed rate		35m/min (X1,Y1,Z1,X2,Z2)
Power-driven att. spindle speed		ER11 : Max. 7,500min ⁻¹ / ER16 : Max. 5,000min ⁻¹
Power-driven att. drive motor		0.5kW
Coolant tank capacity		153 ℓ
Dimensions (W×D×H)		1,861×1,060×1,750mm
Center height		1,060mm
Weight		1,700kg
Power consumption		3.0kVA
A-weighted sound pressure : note-1		Max. 70dB (A)

□ Backworking Attachment Specifications

Item		Specifications
Max. chucking diameter		φ 16mm (5/8in)
Max. length for front ejection		80mm (3-5/32in)
Max. parts projection length		30mm (1-3/16in)
Back 4-spindle unit	Number of tools	4 tools
		Max. drilling capability
	Max. drilling capability	φ 8mm (5/16in)
	Max. tapping capability	M6×P1.0
Sub spindle indexing angle		Standard : C-axis control
Sub spindle speed		Max. 9,000min ⁻¹
Sub spindle motor		0.55kW (continuous) / 1.1kW (15min. / 50%ED)

□ External Dimensions

Unit : mm(ft)



□ Standard Accessories and Functions

1. CNC unit FANUC 0i-TF Plus
2. Operation panel 10.4-inch color LCD display
3. Pneumatic unit
4. Coolant level detector
5. Automatic centralized lubrication unit
6. Door interlock system
7. Broken cutoff tool detector
8. Parts ejection detector
9. Drive unit for revolving guide bush
10. Revolving guide bush unit
11. Main/Sub collet
12. C-axis control (Main/Sub)
13. Gang-type tool holder for fixed 6 tools (□12mm)
14. 2-spindle cross drilling unit (for ER11 or ER16)
15. 4-spindle sleeve holder
16. Back 4-Spindle unit
17. Air purge for revolving guide bush
18. Sub spindle air purge unit
19. Sub spindle air blow unit
20. I/O module extension unit
21. Terminal block
22. Work light
23. Leakage breaker

□ Optional Accessories and Functions

1. Coolant flow detector
2. Water removal unit
3. Beacon
4. Chip conveyor
5. Parts conveyor
6. Parts receptacle in the machine
7. Parts separator unit A
8. Parts ejector (Air cylinder type)
9. Parts ejector with guide tube
10. Parts stopper unit
11. Spindle indexing 15° type (main spindle)
12. Main spindle inner tube
13. Sub spindle clamping device
14. Revolving magic guide bush unit
15. Gang-type tool holder (□10mm×6 tools, □12mm×5 tools)
16. Gang-type tool holder for coolant through tool (□12mm×5 tools / □12mm×6 tools)
17. 3-spindle cross drilling unit for ER11
18. 3-spindle cross drilling unit for ER11/16
19. 3-spindle cross drilling unit for ER16
20. Coolant unit 2.5MPa
21. Coolant unit signal cable
22. Coolant unit power cable
23. Coolant valve
24. Coolant pipings
25. Automatic bar feeder interface
25. LAN/RS232C interface
27. Transformer
28. Manual pulse generator

Note)

The machining capacities apply to SUS303 material. The machining capacities may differ from listed values depending on the machining conditions, such as the material to be machined or the tools to be used.

note-1 : ● Measures conforming to ISO standard.
● A-weighted sound pressure is a general assessment standard characteristic that corrected the sound level to human acoustic sense.

※ Design features, specifications and technical execution are subject to change without prior notice.

※ This product is an export control item subject to the foreign exchange and foreign trade laws. Thus, before exporting this product, or taking it overseas, contact your STAR MICRONICS dealer.

STAR MICRONICS CO., LTD.

Machine Tools Division

1500-34 Kitanoya, Misawa, Kikugawa, Shizuoka, 439-0023 Japan

TEL.+81-537-36-5594 FAX.+81-537-36-5607

<http://www.star-m.jp/eng/>

Star CNC Machine Tool Corporation

123 Powerhouse Road, Roslyn Heights, NY 11577, U.S.A.
TEL.+1-516-484-0500 FAX.+1-516-484-5820

Star Micronics GB Limited

Unit 1 Riverlands Business Park Raynesway DERBY DE21 7BZ
TEL.+44-1332-86-44-55 FAX.+44-1332-86-40-05

Star Micronics GmbH

Robert-Grob-Str. 1, D-75305 Neuenburg, Germany
TEL.+49-7082-7920-0 FAX.+49-7082-7920-20

Star Micronics AG

Lautstrasse 3, CH-8112 Otelfingen, Switzerland
TEL.+41-43-411-60-60 FAX.+41-43-411-60-66

Star Machine Tool France

90 Allée de Glaisy, ZI 74300 Thyez Haute Savoie, France
TEL.+33-450-96-05-97 FAX.+33-450-96-91-54

Shanghai Xingang Machinery Co., Ltd.

2F, 229 Fute Rd. N. The China (Shanghai) Pilot Free Trade Zone
TEL.+86-21-5868-2100 FAX.+86-21-5868-2101

Star Micronics (Thailand) Co., Ltd.

289/23 M.13 Soi Kingkaew 25/1, Kingkaew Rd., T.Rachathewa A.Bangplee Samutprakarn 10540, Thailand
TEL.+66-2-186-8945-47 FAX.+66-2-183-7845

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2021.03_Ver1.0_1