

Up to 41 tools can be mounted, yielding a versatile tooling system for complex machining.

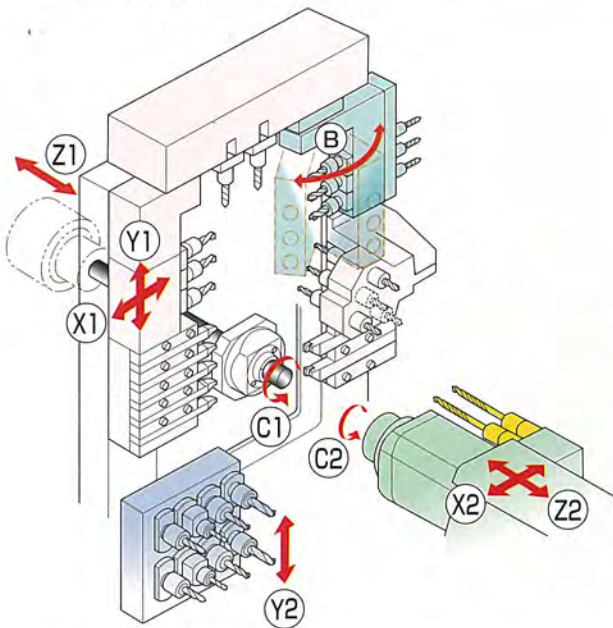
B-axis controlled power-driven tools realize varied machining.*

CNC SWISS TYPE AUTOMATIC LATHE [type A]
 SWISS TYPE AUTOMATIC LATHE [type B]
 equipped with star motion control system

SR-20RV



*Function of Type B



Tool post : Type B



Introducing Star's newest model - SR-20RV. Complex machining functions adaptable to multiple industries

Broad range of machining variations

- The 27-position tool station can accommodate up to 41 tools to yield a variety of tooling options.
- A tool post especially designed for backworking is equipped with a Y-axis control function is standard.
- Capable of deep-hole drilling(max. 100mm).
- The B-axis power-driven tool unit (Type B) with adjustable angle to the Z-axis and an adjustable angle power-driven tool unit (Type A) are available.
- Various tool units used for polygon turning and thread whirling are available.

Improved machining capability

- The sub spindle employs a spindle motor with output power equivalent to that of the main spindle.
- The power-driven attachment motor for cross milling and backworking has improved output power.

High rigidity and high accuracy

- The gang-type tool post incorporates a "uniform load cross guide structure" which minimizes momentary load applied to the LM guide bearing and improves tool post rigidity.
- Both the main and sub spindles use a built-in motor and built-in sensor for improving indexing accuracy.

Reduced machining time

- The Star Motion Control System ensures an uninterrupted tool path. (type B)
- The latest CNC unit reduces the time required for program processing.

Environmental measures

- The residual material length reduced by 15.5mm from that of Version III. Reduced waste oil amount and power consumption with no hydraulic structure. Powder coating method and RoHS-compliant design are combined to contribute to effective environmental measures.

The 27-positioned tool station ensures an easy and flexible tooling layout.



Standard Machine Specifications

Item	Specifications	
Max. machining diameter	φ20mm(25/32in)	
Max. headstock stroke	Standard 205mm(8in) Non-guide bush type Bar diameter×2.5(Max.50mm)(Max.1-31/32in)	
Tool	5 tools on the front + 2 tools on the rear (□12mm) Front 4 tools Rear 2 tools(Max.4 tools)	
4-Spindle sleeve holder	Number of tools	
	Max. drilling capability	φ12mm(1/2in)
	Max. tapping capability	M10×P1.5
Power driven att.	Number of tools	Cross milling : 3 tools Cartridge type : At 2 position
	Number of tools [type A]	Power-driven tool : At 1 position (Front 3 tools+Rear 3 tools)
	Number of tools [type B]	Power-driven tool with B axis : At 1 position (Front 3 tools+Rear 3 tools)
	Max. drilling capability	φ10mm(25/64in)
	Max. tapping capability	M8×P1.25
Rapid feed rate	35m/min ¹ (X1,X2,Y1,Z1,Z2), 15m/min ¹ (Y2) 198,000 ¹ /min(C), 27,000 ¹ /min(B) : type B only	
Main spindle indexing angle	C-axis control	
Main spindle speed	Max. 10,000min ⁻¹	
Main spindle motor	2.2kw(continuous)/3.7kw(10min./25%ED)	
2-spindle front sleeve holder	Number of tools(sleeve)	2 tools
	Max. drilling capability	φ10mm(25/64in)
	Max. depth of hole	100mm (3-15/16in)
Power-driven att. spindle speed	Max. 8,000min ⁻¹	
Power-driven att. drive motor	2.2kw	
Coolant tank capability	170ℓ	
Dimensions (W×D×H)	2,334×1,200×1,695mm	
Weight	2,600kg	
Power consumption	4.7KVA	

Backworking Attachment Specifications

Item	Specifications	
Max. chucking diameter	φ20mm(25/32in)	
Max. length for front ejection	80mm(3-5/32in)	
Max. parts projection length	30mm(1-3/16in)	
Back 8-Spindle unit	Number of tools	8 tools
	Max. drilling capability Stationary tool	φ12mm(1/2in)
	Power driven tool	φ6mm(15/64in)
	Max. tapping capability Stationary tool	M10×P1.5
Power driven tool	M5×P0.8	
Sub spindle indexing angle	C-axis control	
Sub spindle speed	Max. 10,000min ⁻¹	
Sub spindle motor	Built-in motor drive 2.2kw(continuous)/3.7kw(10min./25%ED)	

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.

※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.

Standard Accessories and Functions

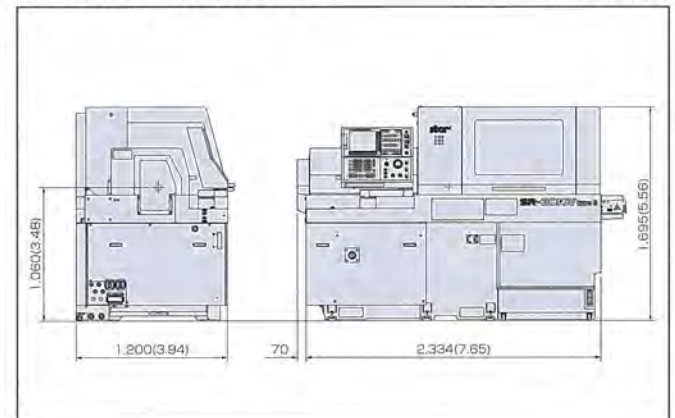
- CNC unit FANUC 32i-B (typeA)
- CNC unit FANUC 31i-B5 (typeB)
- Pneumatic unit
- Coolant level detector (lower limit)
- Automatic centralized lubrication unit
- Door interlock system
- Revolving guide bush unit
- Spindle clamp unit (Main/Sub)
- Cs contouring control (main/sub spindle)
- 5-station tool holder □12mm
- 2-station tool holder □12mm
- 4-spindle sleeve holder
- Main tool post tool rotation drive unit
- Angle adjustable power-driven tool unit (Type A)
- Power-driven tool unit with B axis (Type B)
- Cross milling tool unit (3-tool type)
- Parts conveyor
- Parts ejection detector
- Broken cutoff tool detector
- Back 8-spindle unit
- Parts separator
- Sub spindle air purge unit
- Sub spindle air blow unit
- Leakage breaker
- Tool kit

Optional Accessories and Functions

- Coolant flow detector
- Transformer
- Chip conveyer
- Parts separator unit A
- Barstock gripping unit
- Beacon
- Main spindle inner tube
- High-pressure coolant types (2.5MPa/6.9MPa)
- Oil-hole drill type
- Parts ejector with guide tube
- Parts stopper unit
- Parts ejector (Air cylinder type)
- Transformer CE marking specifications
- Program utility Jr.
- Transformer CE marking version

External Dimensions

unit : mm(ft)



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