

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

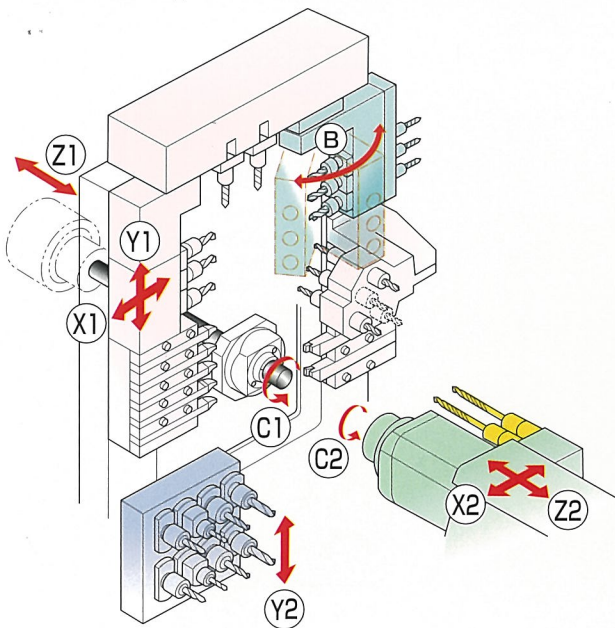
B-axis controlled power-driven tools realize varied machining.*

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
4-Spindle sleeve holder	Number of tools
	Max. drilling capability
	Max. tapping capability
Power driven att.	Number of tools
	Number of tools [type A]
	Number of tools [type B]
	Max. drilling capability
	Max. tapping capability
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)
	Max. drilling capability
	Max. depth of hole
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
	Max. drilling Stationary tool capability
	Power driven tool
	Max. tapping Stationary tool capability
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**

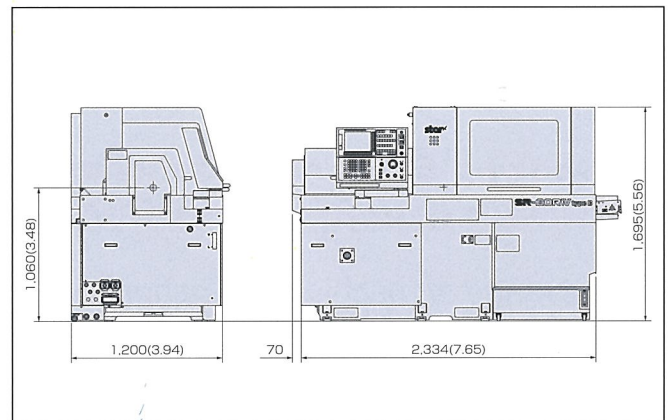
- CNC unit FANUC 32i-B (typeA)
- Pneumatic unit
- Coolant level detector (lower limit)
- Automatic centralized lubrication unit
- Door interlock system
- Revolving guide bush unit
- Spindle clamp unit (Main/Sub)
- Cs contouring control (main/sub spindle)
- 5-station tool holder □12mm
- 2-station tool 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)



STAR MICRONICS CO., LTD.

Machine Tools Division

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

America, Europe Sales TEL.+81-537-36-5594 FAX.+81-537-36-5607

Asia Sales TEL.+81-537-36-5574 FAX.+81-537-36-5607

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
 Chapel Street, Melbourne, Derbyshire DE73 8JF, U.K.
 TEL.+44-1332-86-44-55 FAX.+44-1332-86-40-05

Star Micronics GmbH
 Robert-Grob-Str. 1, D-75305 Neuenbürg, Germany
 TEL.+49-7082-7920-0 FAX.+49-7082-7920-20

Star Micronics AG
 Lauetstrasse 3, CH-8112 Otelfingen, Switzerland
 TEL.+41-43-411-60-60 FAX.+41-43-411-60-66

Star Machine Tool France SAS
 55 Avenue du Mont Blanc, F-74950 Scionzier, France
 TEL.+33-450-96-05-97 FAX.+33-450-96-91-54

Shanghai Xingang Machinery Co., Ltd.
 229 Fute Road(N) Waigaoqiao F. T. Z. Shanghai 200131, P.R. China
 TEL.+86-21-5868-2100 FAX.+86-21-5868-2101

Star Micronics (Thailand) Co., Ltd.
 26/59 1st&3rd Floor, M7 Soi Kingkaew 62/2 Kingkaew Road, T.Rachathewa A. Bangplee Samutprakarn 10540
 TEL.+66-(0)2-175-1923-25 FAX.+66-(0)2-175-1926



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