AUTOMATIC LATHE

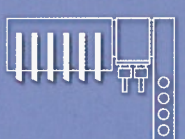
star

SC-20

CNC AUTOMATIC LATHE [Non-Guide-Bush Type]

Pursuing an absolutely cost effective machine.

- TOOL POST
- WORK SIZE (MAX.)
- CONTROL SYSTEM



CNC AUTOMATIC LATHE (Non-Guide-Bush Type)

SC-20

Machine Specifications

Gang Tool Post
Turning tool 6tools

4-Spindle sleeve holder
Front-end working stationary tool 4tools
Rear-end working stationary tool 2tools *

* Depending of condition, maximum 4 rear-end working stationary tolls can be attached.

Building on the reliable performance of the SB-16 machine, the non-guide-bush SC-20 realizes further cost savings to be a cost effective machine.

01 Total Cost Savings

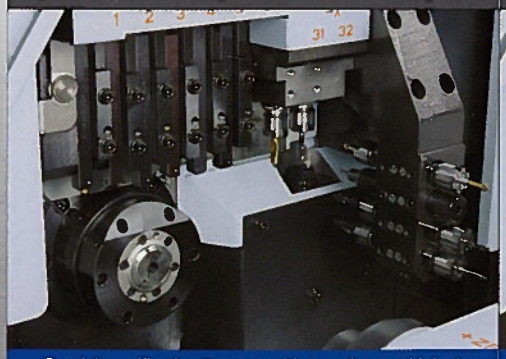
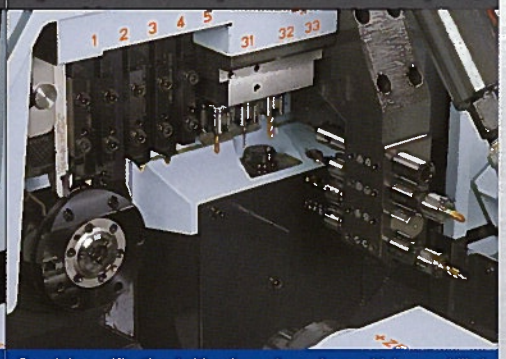
- Low price and satisfactory standard specifications.
- Material cost reduction and energy savings with non-guide-bush and non-hydraulic system.
- Durable configuration employing centralized lubrication system and belt-closed spindle.

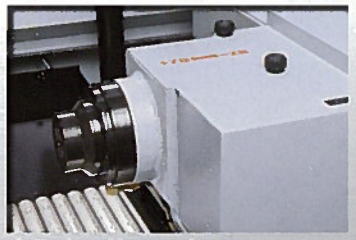
02 Machining Performance

- Complex machining capability achieved by the headstock and tool post configuration of high rigidity.
- Precision machining capability achieved by the pull-type collet chuck.
- Stable performance achieved by the headstock and tool post configuration controlling thermal deflection.

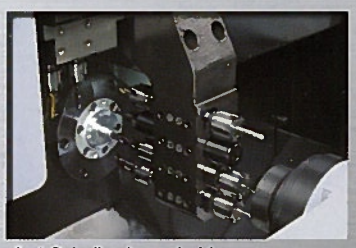
There are two types of model in the SC range. The choice rests with you to select your favoured specification.

Optional Accessories and Functions

Specification with 2 power-driven tools (Option)	Specification with 3 power-driven tools (Option)
	
Special specification (to cope with complex machining)	Special specification (with enhanced complex machining capability)
Gang Tool Post	**Gang Tool Post**
Turning tool 6 tools	Turning tool 5 tools
Power-driven tool 2 tools	Power-driven tool 3 tools
4-Spindle sleeve holder	**4-Spindle sleeve holder**
Front-end working stationary tool 4 tools	Front-end working stationary tool 4 tools
Rear-end working stationary tool 2 tools *	Rear-end working stationary tool 2 tools *

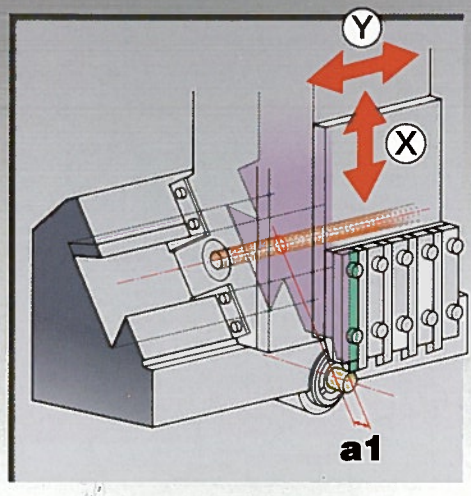


▲ Backworking attachment



▲ 4-Spindle sleeve holder

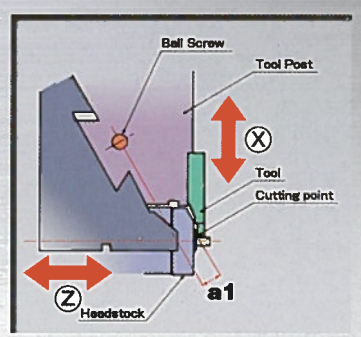
* Depending of condition, maximum 4 rear-end working stationary tolls can be attached.



Star original rigid "slanted dovetail slideway structure" for improved dimensional accuracy and tool life.

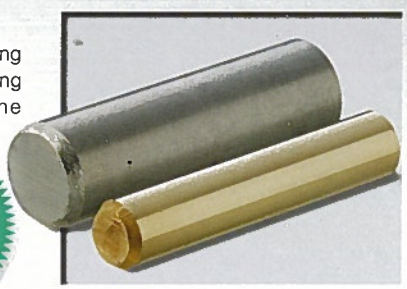
The Y-axis slideway of the tool post incorporates a slanted dovetail structure. Because of this, the X- and Y-axis slideways can be arranged in a radial pattern close to the cutting point, increasing machine rigidity. In addition, a straight line, passing through the ball screw center, in parallel with the Y-axis slideway and the cutting point are close to each other (a1), reducing the moment load caused by cutting resistance and improving rigidity.

This enhanced rigidity leads to dynamic stability during cutting, improves dimensional accuracy during long continuous operation, and contributes to the productivity increases.



SC-20 (Non-Guide-Bush Type) reduces Material Cost

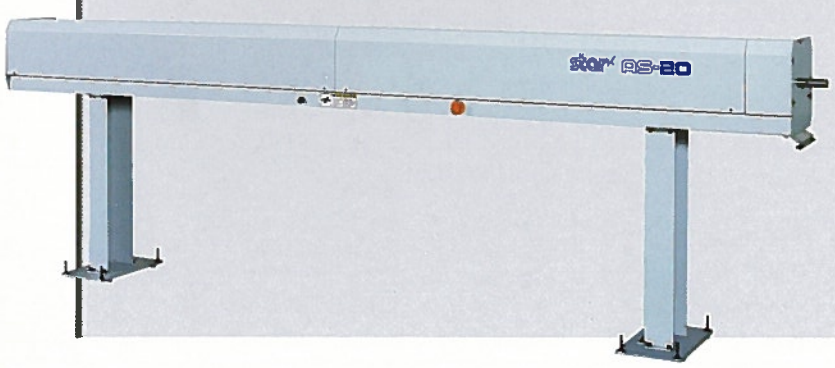
The remnant length is reduced since material is gripped near the machining position. Cold-finished bar can be also used.



The remnant length minimum 50mm

Exclusive Automatic Bar Feeder

AS-20/ASO-20



	AS-20	ASO-20
Bar diameter	φ4~φ20mm(φ5/32in~φ25/32in)	
Bar storage capacity	φ4→45pieces	φ20→9pieces
Bar length	1,000mm~3,045mm (3.28ft~9.99ft)	
Power source	200 / 220 VAC、50/60Hz	
Air source	0.5Mpa 20L/min(ANR)	0.5Mpa 50L/min(ANR)
Machine dimensions		
[2.5m]	W3,164×D450mm (W10.38×D1.48ft)	W3,172×D450mm (W10.40×D1.48ft)
[3.0m]	W3,664×D450mm (W12.02×D1.48ft)	W3,672×D450mm (W12.04×D1.48ft)
Machine weight		
[2.5m]	230kg	270kg
[3.0m]	250kg	300kg

CNC AUTOMATIC LATHE (Non-Guide-Bush Type) SC-20

■Machine Specifications

Item		Specifications
Max. machining diameter		φ20mm (25/32in)
Max. headstock stroke		Bar diameter×2.5 (Max.55mm)
Tool		6 tools or 5 tools (□12mm) : selectable *
4-spindle sleeve holder	Number of tools	4 tools
	Max. drilling capability	φ10mm (25/64in)
	Max. tapping capability	M8×P1.25
Power-driven attachment	Number of tools	2 tools or 3 tools : selectable *
	Max. drilling capability	φ6mm (15/64in)
	Max. tapping capability	M5×P0.8
Main spindle speed		Max.10,000min^{-1}
Main spindle motor		2.2kw/3.7kw
Power-driven att. spindle speed		Max.5,000min^{-1}
Power-driven att. drive motor		0.4kw
Coolant tank capacity		152 ℓ
Dimensions (W×D×H)		1,855×1,060×1,750mm
Weight		1,600Kg
Power consumption		3.0KVA

■Backworking Attachment Specifications

Item		Specifications
Max. chucking diameter		φ20mm (25/32in)
Max. length for front ejection		55mm (2-11/64in)
Max. parts projection length		30mm (1-3/16in)
4-spindle sleeve holder	Number of tools	2 tools (Max.4 tools)
	Max. drilling capability	φ8mm (5/16in)
	Max. tapping capability	M6×P1.0
Sub spindle speed		Max.8,000min^{-1}
Sub spindle motor		1.0kw

■Standard Accessories and Functions

1. Pneumatic unit
2. Stand alone type coolant tank
3. Coolant level detector (low level)
4. Automatic centralized lubrication unit (with level detector)
5. Door interlock unit
6. Broken cut-off tool detector
7. Parts separator
8. 6-station tool holder
9. 4-spindle sleeve holder
10. Main spindle 15° indexing unit
11. Main spindle air purge unit
12. Sub spindle air blow unit
13. Sub spindle air purge unit
14. Parts ejection detector
15. Main collet
16. Sub collet
17. Work light
18. Leakage braker

■Optional Accessories and Functions

1. Transformer
2. Parts conveyor
3. Long parts ejector(Air cylinder type)
4. Automatic barfeeder interface
5. 5-station tool holder
6. 3-spindle cross drilling unit
7. 2-spindle cross drilling unit
8. Coolant unit 1.5MPA
9. Coolant oil flow sensor
10. Warning light
11. Main spindle C-axis control unit
12. Main spindle 1° indexing unit

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.

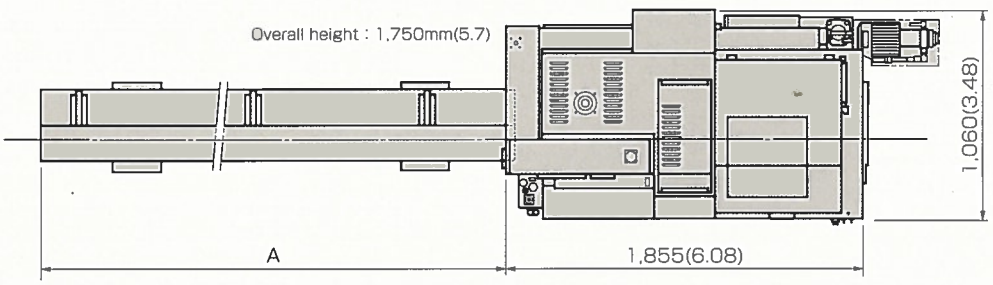
* Selectable specifications.

■External Dimensions and Floor Space

Unit : mm(ft)

●Bar Feeder

Length / Type	Amm (ft) 3.0M	2.5M
AS- 20	3,664 (12.02)	3,164 (10.38)
ASO-20	3,672 (12.04)	3,172 (10.40)



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

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