

CNC Swiss Type Automatic Lathe



CNC SWISS TYPE AUTOMATIC LATHE

SR-32 (€ marked

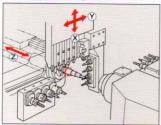
Star has the philosophy that its design machine tools should meet the needs of the users and utilise the most advanced technology available in order to continue its long history of producing superior CNC automatic lathes.

So it is that the SR series has proved to be such a popular choice.



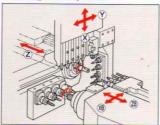
■The SR-32 is a fast producer. High rapid traverse rates, fast control response, simple tool setting and overlapped operations all contribute to its productivity. ■It has the power and the rigidity to work with 32mm dia. steels. 5.5/7.5kw (main) and 2.2/3.7kw (sub) spindle motors generate the power. Water-based coolant removes the heat. ■It has space for a lot of cutting tools. 6-turning, 4-front and 4-rear-end working, plus 4-cross-working tools are equal to most requirements. ■It has as standard what some consider optional. The main spindle has 1° indexing, the main and sub-spindles can be precisely synchronized both in rotation and traverse and material can be fed while the spindle rotates.

Turning-Main Spindle



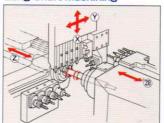
The tool-change time is reduced to the minimum by using the gang tool post design. Heavy cuts can be absorbed by the 16mm shank tools.

Turning-Sub Spindle



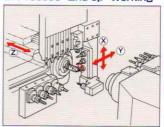
The sub-spindle accommodates all needs. Its forward position is just 17mm from the guide bush for short parts; parts up to 125mm can be forward ejected and longer parts can be fed through.

Long Shaft Machining



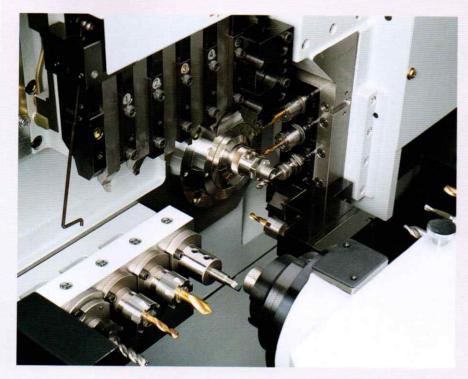
With material held in the headstock collet, supported by the guide bush and with the sub-spindle collet, long shafts can be machined very accurately.

In Process "2nd-op" Working



Having 4 cross-working spindles increases machining versatility, combining the possibility for drilling, tapping, milling, even to fitting a front-end working toolholder.

Star's user-friendly SR-32 makes producing turned parts easy yet efficient and environmentally friendly yet cost effective. It is packed with real user advantages.



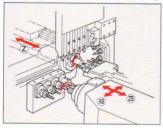
 The front-end off-center drilling option provides extra capability.



C-Axis Control is equipped as an standard function.

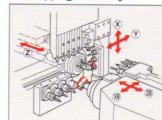


Simultaneous Front and Back End Machining



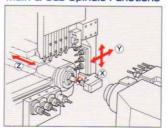
By having the capability to simultaneously perform front and back end on-center drilling, tapping and boring operations, even using different feed rates, the production time is optimized.

Overlapping Flexibility



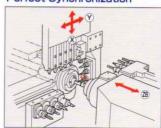
The design features of the SR-32 make it possible to carry out certain machining operations on the main spindle while doing something entirely different on the sub-spindle, for example, cross-milling with back end threading. Another time saver.

Main & Sub-Spindle Functions



Secondary machining operations on the surface of parts are facilitated by the possibility to precisely coordinate the rotation, indexing and motion of the main and sub-spindles.

Perfect Synchronization



Because phase control is perfect, the sub-spindle can clamp onto the workpiece without reducing its speed of rotation, once again giving a saving in production time.



Standard Machine Specifications

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Item		Sp	pecificatio	ns	
Max. turning d	liameter	φ 32mm (1-1/4in)			
Max. headstock	Standard	310mm (12-13/64in)		1 chuck stroke	
stroke	With gripping unit	295mm (11-39/64in)		1 chuck stroke	
Max. drilling	Stationary tool	φ 14mm (35/64in)		Max.chucking diameter	
capacity	Power-driven tool	φ 8mm (5/16in)		ER11: \$7	
Max. tapping	Stationary tool	M12XP1.75		ER16: φ10	
capacity	Power-driven tool	M6×P1.0		ER20: \$13	
Max. milling capacity		φ 10mm (25/64in)		T7: φ7	
Max. die cutting capacity		M10×P1.5			
Max. slotting capacity		2mm(W) ×3.5mm(D) (Max. woodruff slotter dia :			
Main spindle speed		7.000min ⁻¹			
Main spindle min. indexing angle					
Main spindle motor		5.5kw (Continuous)/7.5kw (30min.)			
Number of tools		6 Tools + 4 Power-driven tools			
Tool shank		□16×100~135mm (□5/8×4~5-5/16in)			
Power-driven	Speed	5,000min ⁻¹			
attachment	Motor	0.75kw (Inverter motor)			
Dimension (LXWXH)		2,515×1,505×1,870mm (Except for leveling pad)			
Main spindle center height		1,070mm	(Exce	(Except for leveling pad)	
Weight		2,800kg			
4-Spindle endworking attachment	Number of tools	4 Tools	Max.	chucking diameter	
	Max. drilling capacity	φ 14mm	ER11	ER11 : φ7, ER16 : φ10 ER20 : φ13, T7 : φ7	
	Max. tapping capacity	M12×P1.75	ER20		
	Max. die cutting capacity	M10×P1.5	Max. c	Max. die dia : φ 30	
Coolant tank capacity		120ℓ			
Coolant motor		0.25kw			
Coolant used		Oil-based coolant, Water-based coolant			
Hydraulic tank capacity		30 ℓ			
Hydraulic pump motor		1.5kw			
Power consum	ption	7.0 KVA			

Backworking Specifications

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Item		Specifications		
Max. chucking diameter		φ 32mm (1-1/4in)		
Max. length for fro	ont ejection	125mm (4-29/32in)		
Max. parts project	tion length	45mm (1-49/64in) Distance from collet end		
4-Spindle unit for backworking	Number of tools	4 Tools		
	Max. drilling capacity	φ 13mm Max. chucking dia. ER20 : φ 13		
	Max. tapping capacity	M10×P1.5 Max. chucking dia. ER16: φ		
Sub-spindle moto	r	2.2kw/3.7kw (15min.)		
Sub-spindle min. indexing angle		1" (360 divisions) : OP/15" (24 divisions) : C		
Sub-spindle spee	d	7,000min ⁻¹		

Standard Accessories and Functions

- 1. Hydraulic unit
- 2. Separate type coolant tank,
- 3. Coolant oil level detector
- 4. Auto. centralized lubrication unit (with oil level detector)
- 5. Revolving guide bushing
- 6. Door interlock
- 7. C-axis control function Main spindle

- 8. Parts ejection detector
- 9. Main spindle inner tube 11.7mm
- 10. Backworking attachment
- 11. Tool holder (1 set)
- 12. Leveling bolts and leveling pads
- 13. Work light

(Fluorescent bulb 100V/15W)

Optional Accessories and Functions

- 1. Warning light
- 2. Air unit
- 3. Main spindle 15° indexing
- 4. Sub-spindle 15° indexing
- 5. Sub-spindle 1° indexing
- 6. Sub-spindle indexing unit
- 7. Long part ejector with guide tube
- 8. Air blow version A
- 9. Air blow version B

Barfeeder

- 10. Single barfeeder
- 11. Broken cut-off tool detector
- 12. Parts separator
- 13. Barstock gripping unit
- 14. Parts conveyor 15. Parts stocker base
- 16. Tool setter
- 17. Leakage breaker 18. Chip conveyor

Note) When sub-spindle 1° or 15° indexing is used, sub-spindle indexing unit is required.

External Dimensions and Floor Space Unit: mm(ft)

Chip conveyor Bmm (ft) Туре

Type 4.0M 3.0M Type 1 S32NR Type2 Overall height: 1.880mm (6.2) 300 0.3

Note)

The above machining capacities apply to S45C (AISI 1045, DIN c45) 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 feature, specifications and technical execution are subject to change without prior notice.

This machine is controlled under foreign exchange and foreign trade control law.

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