

CNC Automatic Lathe  
**SG-42**

High Functionality

- A wider range of machining fulfilled by the turret tool post with Y-axis.
- Back machining achieved by the sub spindle and turret tool post.
- High-pressure coolant for deep-hole machining.

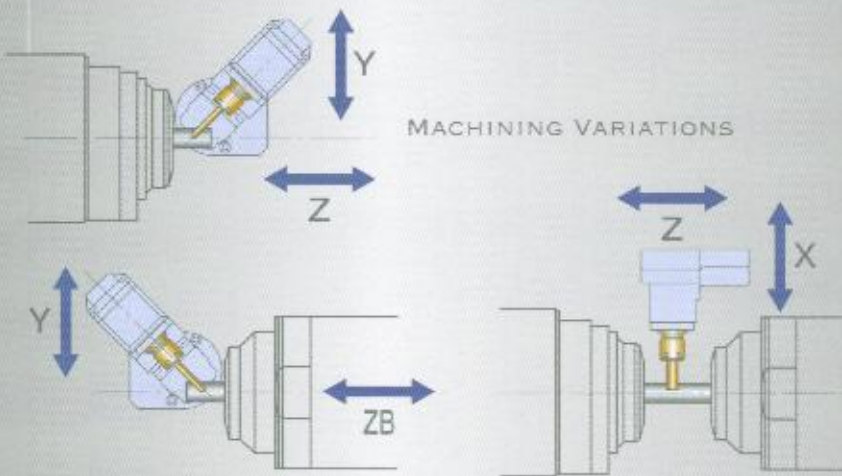
High Precision

- Rigid base and tool post ensures continuous machining with stable accuracy over long periods of time.
- The built-in spindle allows highly accurate indexing.

High Productivity

- Reduced tool selection time achieved by the turret tool post with Y-axis.
- Reduced bar supplying time achieved by the bar feeding method.

*High Productivity and a Broad Range of Machining Variations Achieved by the Turret Tool Post & Sub Spindle.*



**The New Fixed Head CNC Automatic Lathe  
Launched by STAR MICRONICS**



## Standard Machine Specifications

Item	Specifications
Max. machining diameter	φ42mm (1-21/32in)
Max. machining length	Bar diameter×2.5 (Max.100mm)
Turret tool post	10 station turret
Number of tools	1 tool/station (□20mm)
	Max. 2 tools/station (□16mm)
Sleeve holder	Number of tools
	Max. drilling capability
	Max. tapping capability
Power-driven att.	Number of tools
	Max. drilling capability
	Max. tapping capability
Main spindle indexing angle	C-axis control
Main spindle speed	Max. 7,000min <sup>-1</sup>
Main spindle motor	7.5kw(continuous)/11kw(10min./25%ED)
Power-driven att. spindle speed	Max. 5,700min <sup>-1</sup>
Power-driven att. drive motor	2.7kw(continuous)/4.0kw(5min./30%ED)
Coolant tank capacity	245ℓ
Dimensions (Width x Depth x Height)	2,615 x 1,430 x 1,700mm
Center height	1,100mm (3.61ft) [including leveling pads]
Weight	3,050kg
Power consumption	7.8KVA

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.

## Backworking Attachment Specifications

Item	Specifications
Max. chucking diameter	φ42mm (1-21/32in)
Max. part length for pick-up	100mm (4)
Max. parts projection length	75mm (2-15/16in)
Max. parts insertion length	100mm (4)
Sub spindle indexing angle	C-axis control
Sub spindle speed	Max. 7,000min <sup>-1</sup>
Sub spindle motor	5.5kw(continuous)/7.5kw(10min./40%ED)

## Optional Accessories and Functions

1. Main spindle inner tube
2. Water separator
3. Coolant flow detector
4. Tool presetter
5. Beacon
6. Parts ejector A (Air cylinder type)
7. Parts ejector B (Spring type)
8. Parts ejection detector
9. Parts separator type A
10. Parts receptacle
11. Stopper
12. Coolant unit 6.9MPa
13. Coolant unit 1.5MPa
14. Coolant unit power cable
15. Coolant unit signal cable
16. Coolant unit piping: 6.9MPa
17. Coolant unit piping: 1.5MPa
18. Coolant unit piping (for turret)
19. Coolant discharge for back att.
20. Reducing valve
21. Transformer
22. Transformer CE marking version
23. Transformer CE marking specifications

NOTE)  
The sub spindle air blow function is available as an option according to the customer specifications.

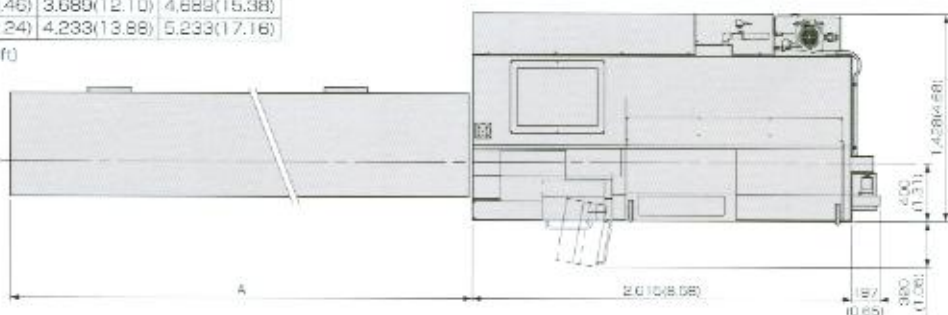
## External Dimensions and Floor Space

unit : mm(ft)

### Bar Feeder

Type	Length	A(mm)		
		2.5M	3.0M	4.0M
ASR X-45/51PN2	3,752(12.31)	4,252(13.95)	5,252(17.23)	
PF-V33	3,189(10.46)	3,689(12.10)	4,689(15.38)	
DS455E-42	3,733(12.24)	4,233(13.88)	5,233(17.16)	

● Overall height : 1,700mm(5.58ft)



\*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.

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