

Machine standard specifications

Item		Specifications
Machining capability	Swing over bed	260 mm
	Spindle center height from X-side surface	50 mm
	Distance between spindle end and X-side edge	Max 423 to Min 123 mm
Spindle	Max. spindle speed	6,000 min <sup>-1</sup>
	Spindle end face configuration	φ140 mm flat
	Max. bar stock diameter	φ38 mm
	Chuck size	6 inch
Tool post	Type	Gang-type tool post (with T-groove)
	X-axis stroke	300 mm
	Z-axis stroke	300 mm
	Rapid traverse speed	X-axis 24 m/min
		Z-axis 24 m/min
	Tool size	16 mm square
Motor	Spindle	5.5/7.5 kW
	X axis	1.2 kW
	Z axis	1.2 kW
	Coolant pump	180 W
	Spindle cooling pump	100 W
	Lubricating oil tank	1.8 L
Tank capacity	Spindle cooling oil tank	8 L
	Coolant tank	130 L
Dimension	Width x Depth x Height	1,610 mm x 1,535 mm x 1,600 mm
	Weight	1,900 kg

NC Standard Specifications

Item		Specifications
NC unit		FANUC OiMate-TD
Display unit		8.4" color LCD
Least input increment		0.0001 mm (X axis: diameter designation)
Feedrate command		mm/rev, mm/min
Command input method		Absolute/Incremental
Interpolation		Linear, Circular
Miscellaneous function M		M3 digits
Spindle function S		S4 digits (Direct command)
Tool function T		T4 digits
Tool compensation memory		64 pairs
Part program storage size		512 kbyte
Feedrate override		0 to 150 % (By 10 % steps)
Optional block skip		1
Backlash compensation		
Program number search		04 digits
Sequence number search		N5 digits
Canned cycle		
English display		
Cutter and tool nose radius compensation, Tool geometry offset, Tool wear offset, Custom macro, Multiple repetitive cycles, Background editing, Direct drawing dimension programming, Inch/metric conversion, Run-hour & parts count display, Spindle speed fluctuation detection		

Standard Accessories

Tool holder (1)
Tool holder (2)
Transit clamps
Spindle cooling unit
Height gauge

Options

Air chuck
Collet chuck
Hydraulic unit
Work conveyor
Hydraulic cylinder
Hydraulic chuck
Illumination light
Automatic fire extinguisher
Spindle air blow
Tool post air blow
Pneumatic unit for chuck

PRECISION TSUGAMI

TSUGAMI

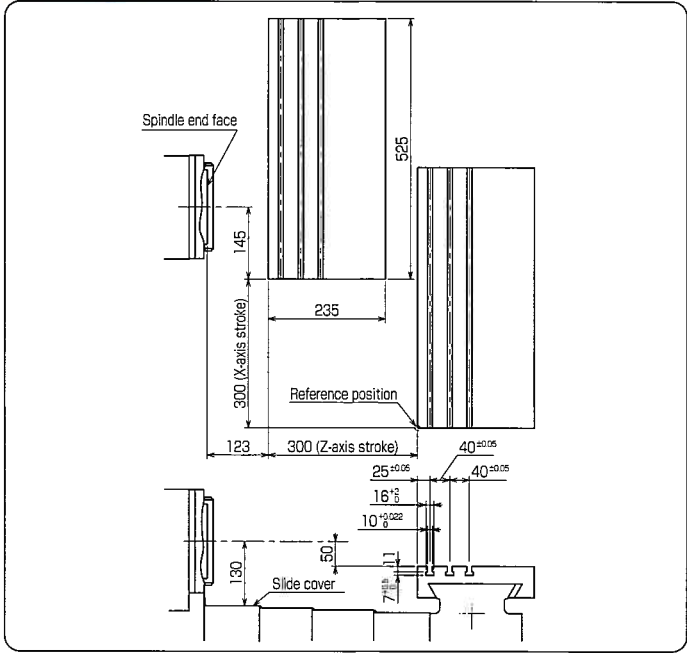
CNC High Precision Automatic Lathe

C300-IV

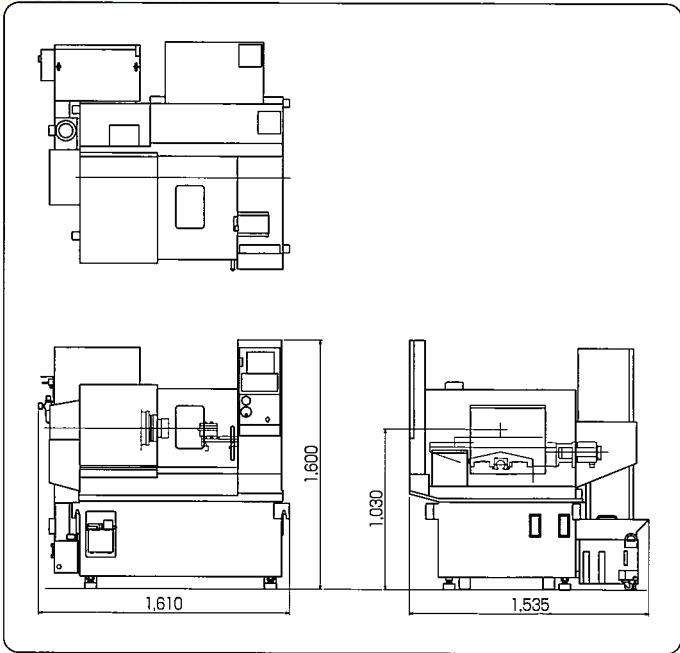


Gang-Type tool Concept, most suitable for high precision machining.  
Accommodate both bar and chucker

Tooling Zone



Appearance



Export permission by the Japanese Government may be required for exporting our products in accordance with the Foreign Exchange and Foreign Trade Law. Please contact our sales office before exporting our products.

The specifications of this catalogue are subject to change without prior notice.

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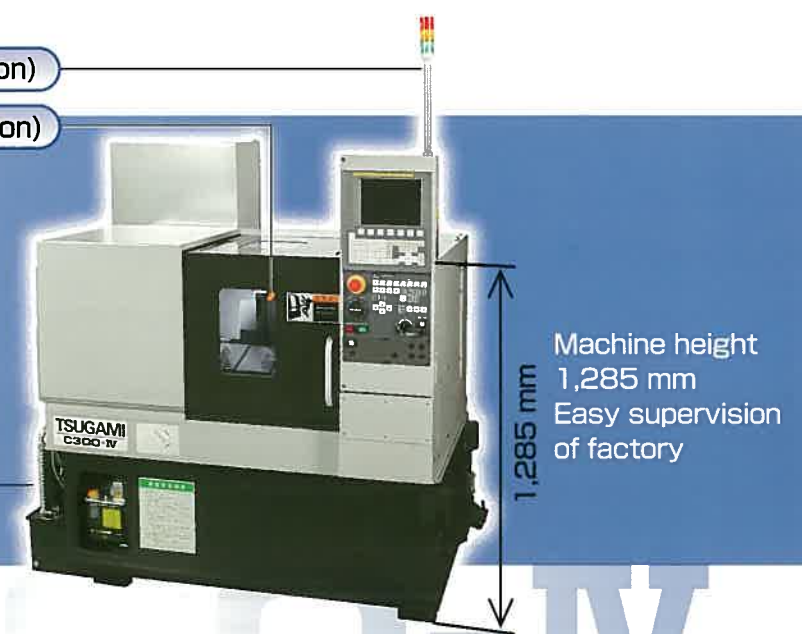
## PRECISION TSUGAMI

Gang-Type tool Concept,  
most suitable for high precision machining.  
Flexibly correspond to both bar and  
chucker according to the workpieces.

Signal indicator (option)

Illumination light (option)

Spindle cooling unit



Machine height  
1,285 mm  
Easy supervision  
of factory

### Powerful and high precision spindle (5.5/7.5 kW)

- Built-in motor spindle minimizes vibration and improves surface finishes.
- Standard-equipped spindle cooling unit reduces thermal displacement.
- Improving surface roughness, prolonging tool life
- Cooling by the oil cooler

### High-rigidity Slide

- High rigidity sliding guide ways improve machining accuracy and absorb heavy cutting loads.

### Pretensioned Ball Screw

- Pretension is applied to X and Z-axis ball screws to reduce thermal displacement from cold start.

### A Variety of Tooling

- Tooling system selections are available for both bar and chucker to meet a wide variety of workpieces.

### Automation

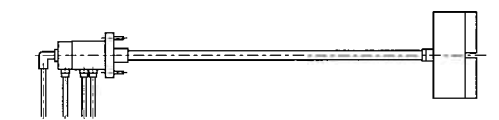
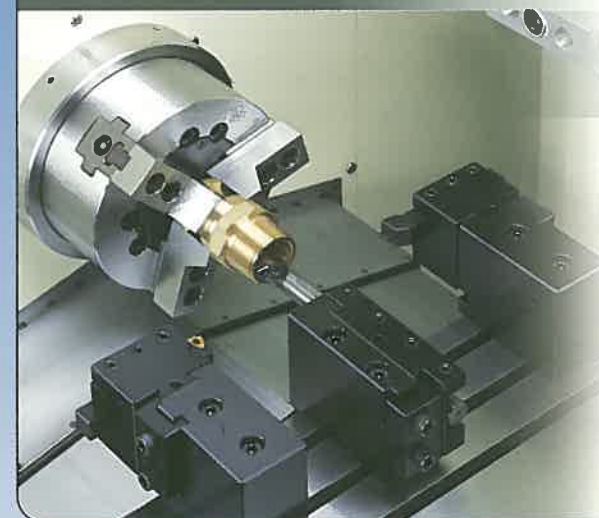
- The loader is easy to be installed since height from the spindle center to the top of the cover is 255 mm. It is also possible to mount through-machine type loader.
- Oi Mate-TD is adopted for NC and it can control the loader together.

### Improvement of operability

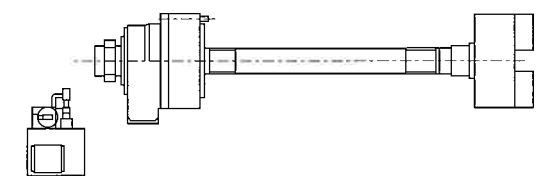
- Extending the door opening width to 470 mm to improve the operability.
- Above the spindle, energy-saving LED internal illumination light is provided as option.

## Accommodate both bar work and chuck work

### Chuck work

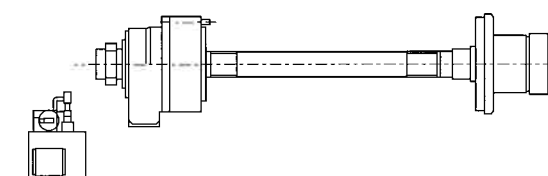
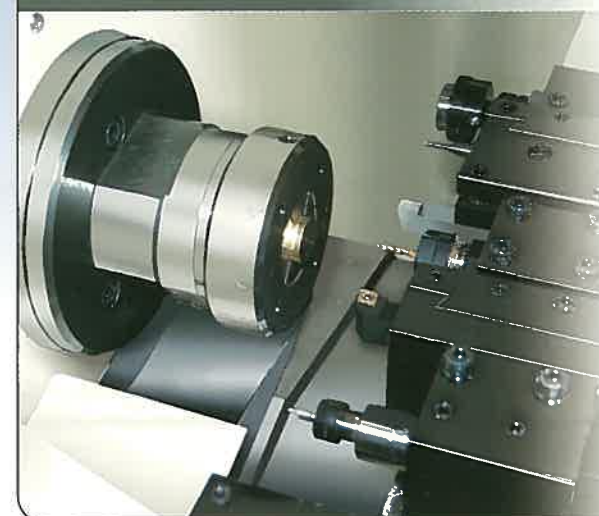


Built-in air cylinder type air chuck

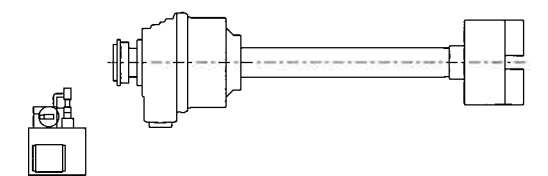


Hydraulic chuck + Hydraulic cylinder +  
Hydraulic unit

### Bar work



Collet chuck + Hydraulic cylinder +  
Hydraulic unit



3-jaw chuck + Hydraulic cylinder +  
Hydraulic unit