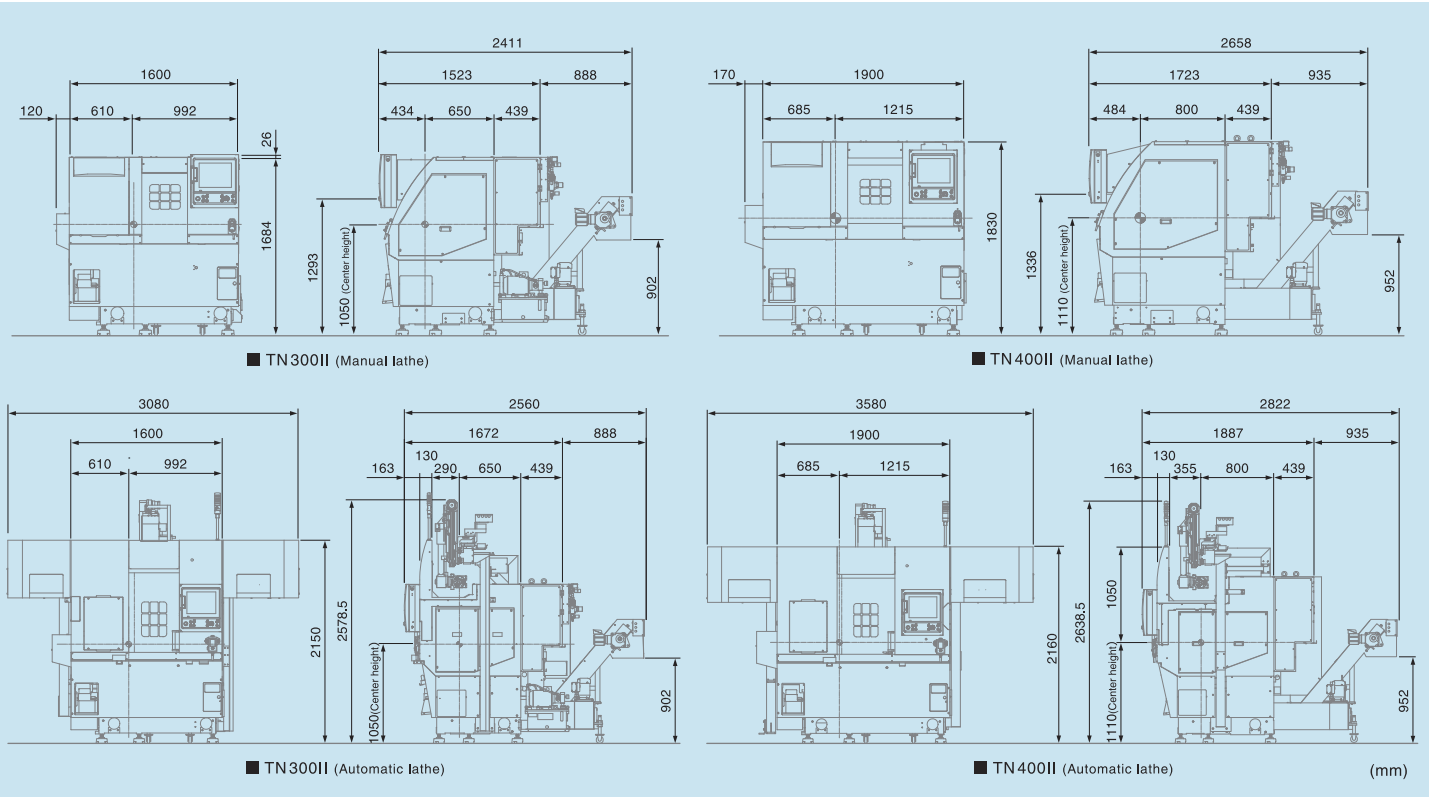


TN300II / TN400II SERIES

Specifications

Machine Specifications			TN300 II	TN400 II / TN400 II R	
Maximum work size			inch	8~10	
Spindle dia			mm	φ 100	
Spindle nose				A2-6	
Spindle bore			mm	φ 56	
Spindle speed			min ⁻¹	Max. 4000	
Spindle motor			kw	11 / 7.5 / 7.5 (15Min / 60 Min / Cont.)	
Number of tool stations			Position	10	
Tool type			mm	Square shank : □25	
				Boring bar : φ 32 (Option : φ 40)	
NC control				FANUC 0i-TF Plus	
Slide stroke	X-axis	mm		205	
	Z-axis	mm		385	
Rapid traverse	X-axis	m/min		24	
	Z-axis	m/min		24	
Servo setup unit	X-axis	mm		0.001	
	Z-axis	mm		0.001	
Servo motor	X-axis	kw		1.2	
	Z-axis	kw		1.2	
Power capacity			KVA	22 (Automatic : 29)	
Machine size					
Footprint			mm x mm	1600 x 1607 (Automatic : 1600 x 1757)	
Center height			mm	1050	
Machine height			mm	1710 (Automatic : 2578)	
Machine weight			kg	2500 (Automatic : 3000)	
Robot Specifications					
Robot				L672H II	L673H II
Object work	Work size	mm		φ 200 x 80	
	Max. load	kg		5 + 5	

Machine Overview



FUJI CORPORATION

Machine Tools Div. HQ/Plant
Address : 480 Tojiri, Hasama-cho, Toyota, Aichi 470-0452 Japan
Phone : +81(565)76-5485 Fax: +81(565) 76-5704

■ Specifications are subject to change without notice.
■ The photos include options.
■ The mentioned data on this catalog is actual value, but not a performance guarantee.

202202_TN300 II /TN400 II_II_A3_E_00



Upgraded NC Increases Productivity

High Speed Robot with Fanuc Control

High Efficiency with Proven Reliability



Operation Panel

User Friendly Operation

"Easier to Setup and Operate."

■FANUC Oi-TF Plus

- Enhanced productivity with version up NC
- Improved program process speeds up to 57% results in faster parts cycle times.

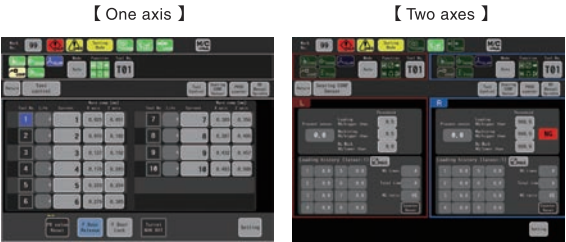
	0i-TD		0i-TF Plus
Program memory	512K byte	⇒	2M byte
Program quantity	400	⇒	1000
Tool offset quantity	64	⇒	128



15 inch monitor

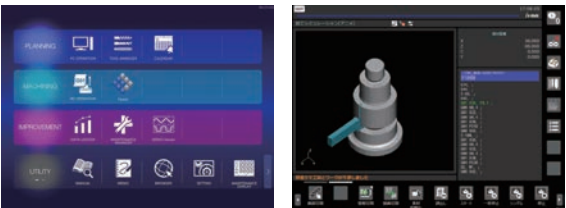
■User friendly FUJI operation display

- New Control Panel and Design improves operator efficiency
- Intuitive operation with integrated status lamp and button
- Multi language system : 7 available languages



■iHMI standard feature

- Iterative programming enhances productivity and supports flexible parts production.



High rigidity

■ Zero-center Type Headstock

The zero-center type headstock has a thermally symmetrical design, which keeps thermal displacement to the absolute minimum.

This mechanism, along with grease lubrication, assures long-term parts processing accuracy and reliability.



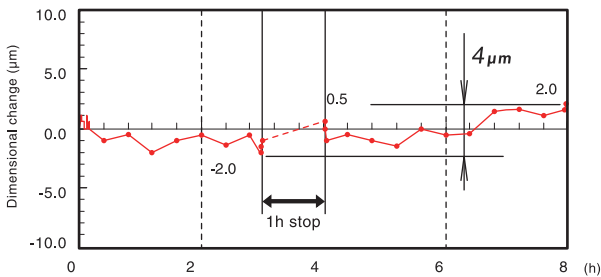
■ High rigidity slide

Box way design with high rigidity and proven reliability. Upgraded Support Bearings for heavy duty cutting , increased accuracy and reliability.



Excellent Thermal Displacement Properties

TN300 II



Dimensional change after 8h running **4 μm**

Dimensional change after 1h stop **2 μm**

(O.D. cutting dia. φ50 mm)

Cutting speed (min ⁻¹)	1200(O.D.)
Feed speed (mm/rev)	0.1
Cutting depth (mm)	0.1
Cycle time (sec)	45
Material	AL

Room temperature:23°C±1°C
Machining with coolant

TN400 II

Dimensional change after 8h running **6 μm**

Dimensional change after 1h stop **2 μm**

(O.D. cutting dia. φ50mm)

Cutting speed (min ⁻¹)	1200(O.D.)
Feed speed (mm/rev)	0.1
Cutting depth (mm)	0.1
Cycle time (sec)	45
Material	AL

Room temperature:23°C±1°C
Machining with coolant

The above-mentioned data is actual values, but not a performance guarantee.

High speed Gantry Robot with Fanuc Control

- The robot gantry loader is controlled by Fanuc
- Main and sub slide work in tandem for the vertical axis, minimizing the height of the gantry above the machine.
- The robot hand is hydraulically actuated improving clamping force on the work piece.
- The robot is capable of handling shaft work.



Options

■Tailstock

Shaft work is possible with Tail-stock

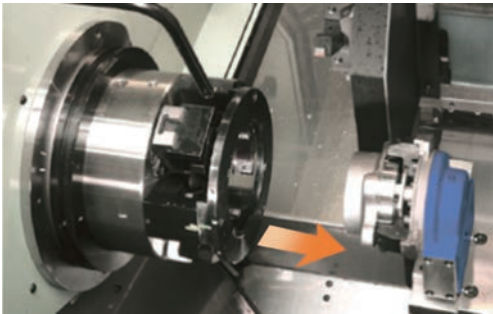
TN300 II	
Quill stroke	180 or 230 mm
Center type	Live Center MT.4
	Built-in Center MT.3

TN400 II	
Quill stroke	180 or 230 mm
Center type	Live Center MT.5
	Built-in Center MT.4



■Auxiliary loader

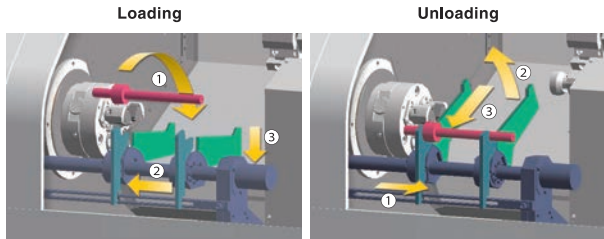
Mounted on the Z axis slide, the auxiliary loader unloads the processed work from the spindle chuck, which allows the cleaning of the work holding (option) prior to a raw part being loaded into the work holding.



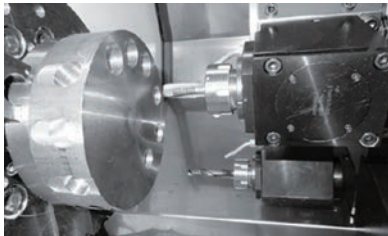
■SWS type loading / unloading device

The loading & unloading is operated by swinging and sliding the device.

The mechanism which all motions are actuated by one cylinder is simple and reliable.



TN400 II R



Live tool specification TN400II R

Max. clamping tool dia.	φ20 [mm]
Number of station	12 [position]
Spindle speed	Max. 4000 [min ⁻¹]
Spindle motor	4.5kw [6.0HP]

Performance (Drill / Tapping)

	Drill	Tapping
Max. Cut dia (φ)	φ20 [mm]	M16 x 2.0 [mm]
Spindle speed	65 [m/min]	9 [m/min]
Cutting speed	1035 [min ⁻¹]	179 [min ⁻¹]
Cutting feed	0.22 [mm/rev]	358 [mm/min]