



NC ROTARY
TABLE

Tilting NC Rotary Table TT251・TT321

※TW is the side motor type tilting table

High rigidity tilting tables to suit 5 axis machining on large work pieces with heavy cutting

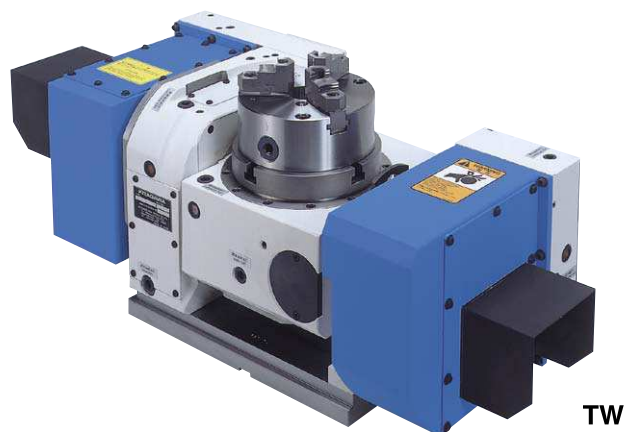
- Minimum size in its class
- High rigidity for heavy cutting
- High accuracy
- Rotary Joint built in as option
- Cylinder mountable
- Hydraulic clamping method
- Integrated air booster provides high clamping torque (comparable to hydraulic) from a standard air supply

*CE correspondence

※In specification with the foreign trade control ordinance, permission of the ministry of economy, trade and industry is required when exporting twin axis products overseas.

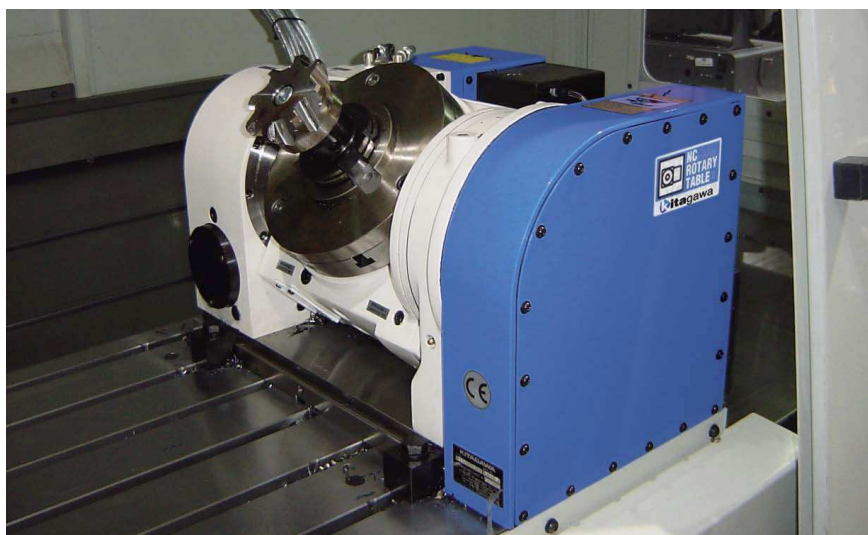


TT251



TW

Sample Application



▲Allows the complex machining of large work pieces.

4th axis specifications

TT 251 B * * * *

Table Size
251·321

Type

TT:STD type
TW:Tilting straight type

Design No.

Tilting axis motor type
Rotary axis motor type

Clamping method

B:External air hydraulic booster
H:Hydraulic

M signal specification

TT 251 H V * *

Table Size
251·321

Type

TT:STD type
TW:Tilting straight type

Design No.

Quinte specification

B: Air-Hydraulic
(external air hydraulic booster)
H: Hydraulic

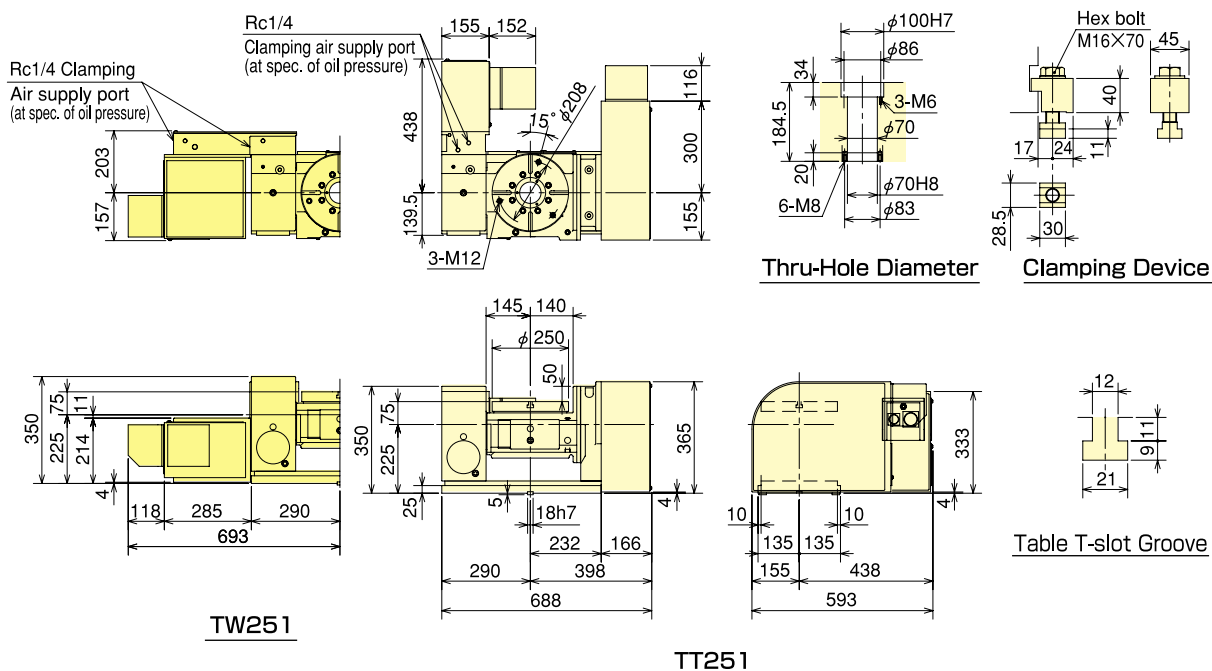
Specifications

Model			TT251／TTS251	TT321／TTS321
Tilting angle			−35° ∼ +110°	−35° ∼ +110°
Table dia (mm)			φ 250	φ 320
Register diameter on Face Plate (mm)			φ 100 H 7	φ 135 H 7
Spindle through hole diameter (mm)			φ 70	φ 110
Centre Height (mm)			225	255
Clamping method			Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic
Clamping torque (N・m) (In pneumatic 0.45MPa/hydraulic 3.5MPa)	Rotating axis		900	2600
	Tilting axis		1200	2600
Motor axis reduced inertia (kg・m ²)	Rotating axis		0.00070	0.00083
	Tilting axis		0.00054	0.00046
Servomotor (for FANUC specification)			α iF 4/5000	α iF 8/3000
Gear ratio	for FANUC specification	Rotating axis	1／90	1／120
		Tilting axis	1／180	1／360
	M signal specification	Rotating axis	1／90	1／180
		Tilting axis	1／180	1／360
Max. spindle speed	for FANUC specification	Rotating axis (for min ^{−1} /motor3000min ^{−1})	33.3	25
		Tilting axis (for min ^{−1} /motor3000min ^{−1})	16.6	8.3
	M signal specification	Rotating axis (for min ^{−1} /motor3000min ^{−1})	33.3	16.6
		Tilting axis (for min ^{−1} /motor3000min ^{−1})	16.6	8.3
Allowable work inertia (kg・m ²)			0.78	1.92
Indexing accuracy (sec)		Rotating axis	20	20
		Tilting axis	45	45
Repeatability (sec)			4	4
Mass of product TT/TTS (kg)			260 / 270	350 / 360
Rotary Joint (Option・P97 reference)			RJ70H25T02 Hydraulic/Pneumatic6-port	RJ70H32T03 Hydraulic/Pneumatic6-port
Allowable Load		at horizontal (kg) 	100	150
		at tilted (kg) 	60	100
Allowable load (When clamped to table)		F (kN) 	12	16
		F×L (N・m) 	1200	2600
		F×L (N・m) 	900	2600
Allowable cutting torque		T (N・m) 	600	1000
Moment of tilting weight capacity		W×L (kgf・m) 	26	75

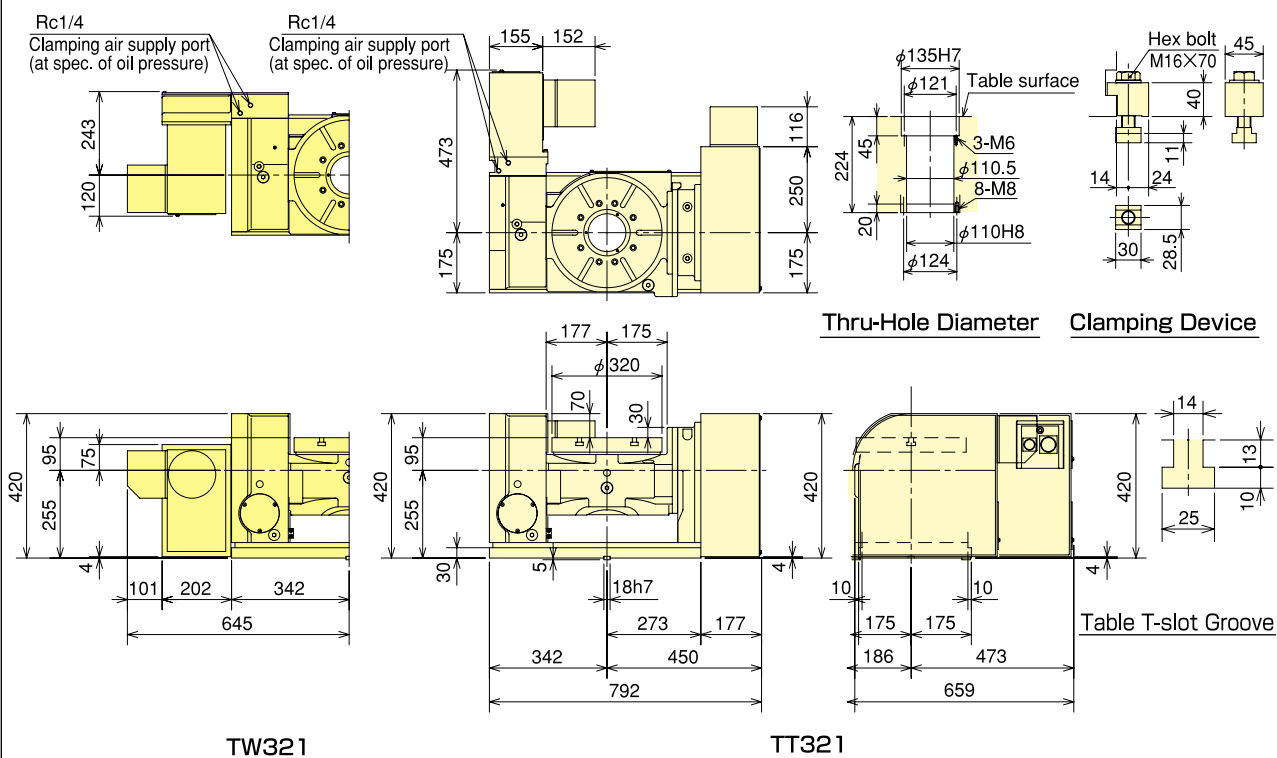
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. In case of hydraulic clamp specification, the solenoid valve for the table clamp not incorporated. Consequently, customer shall prepare it. 3. Neither cable nor hose is fitted between NC rotary table and machine tool... 4. Each product mass is determined by a Kitagawa M signal spec.

■Dimensions [4th axis specifications]

TT251 (TW)



TT321 (TW)



※The above dimensions are the same as FANUC spec.
Those dimensions may vary from motor to motor that is mounted.

