



Dear customer,

September, 2025

Introducing TWB-450 and Mega-workpiece Milling Model

We are pleased to announce the addition of the TWB-450, to our NC Tilting Rotary Table TWB Series. Alongside this, we are unveiling a new NC Tilting Rotary Table model designed for mega-workpiece machining.

1. NC Tilting Rotary Table TWB-450

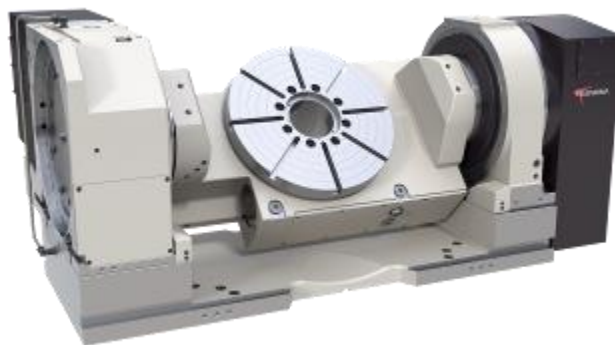
In response to the growing demand for larger workpieces, we have enhanced our basic model and launched the new TWB-450.

Key Features

1. Expanded lineup: The new 450-size model joins the TWB Series alongside the TWB-320, TWB-630, and TWB-1000.
2. Successor to the TN-450
3. Expanded swing diameter: $\phi 630$ mm
4. High-performance clamping mechanism, increasing tilt-axis clamping torque by approximately 1.5 times
5. Maximum rotation speed of the tilt axis increased by approximately 1.5 times
6. Tilt-axis allowable work moment improved by approximately 3 times
7. Wider tilt angle range: -30° to $+110^{\circ}$

* Item 3) to 7) are comparisons with the TN-450

With the launch of the TWB-450, the TN-450 will be discontinued.






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Specifications

Tilt range		deg	-30~+110		axis	Rotary axis	Tilt axis	
Table diameter		mm	φ450		Speed Reduction ratio	1/90	1/120	
Table height at 0°position		mm	415		Table max. rpm (Motor rpm: 2,000)	min ⁻¹	22.2	16.6
Center height at 90°position		mm	415		Clamp system	Hydraulic or air-hydraulic (option)	Hydraulic or air-hydraulic (option)	
Center bore	Nose dia.	mm	φ150H7		Clamp torque(3.5/4.9MPa)	N · m	3,100/4,700	11,000/16,000
	Through-bore		φ120		Indexing accuracy(the sum)	arcsec	15	-
Table T slot width		mm	14H7		Tilting accuracy (the sum)	Tilt 0° to 90° arcsec	-	60
Guide block width		mm	18h7		Net weight	kg	1,300	
Servo motor (for FANUC)	axis	Rotary axis	Tilt axis	Allowable work weight		kg	500	
	Model	αiF12	αiF22				kg	300
Inertia converted into motor shaft		x10 ⁻³ kg · m ²	5.31	5.55	Allowable work moment		N · m	866

2. New NC Tilting Rotary Table: Mega-workpiece Milling Model

In response to the growing use of Mega/Giga Casting in the automotive industry, which has led to larger, more integrated workpieces, we are proud to introduce our newly developed NC Tilting Rotary Table.

This model offers exceptional flexibility and can be customized to meet a wide range of machining requirements. A reference exhibit will be on featured at [MECT2025](#).

Key Features

- 1. Large-Diameter Workpiece Machining** Supports a maximum swing diameter of φ800 mm.
- 2. High Flexibility** Select from three driving mechanisms—Worm drive, Balldrive[®], and Direct Drive—based on required rigidity, precision, and rotation speed. These elements can be optimally combined through a block-build approach to create the ideal application. The cradle design can also be customized to prevent interference during automatic workpiece loading/unloading.
- 3. Automation Ready** Compatible with rotary joints for pneumatic and hydraulic supply to automated jigs.
- 4. Environmentally Conscious Design** Compatible with existing general-purpose machines, enabling the reuse of idle equipment and supporting flexible line reconfiguration. The compact design helps reduce both initial and operational costs.

