



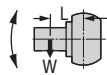

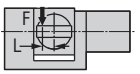

TTNC-451, 631, 1001, 1500

LARGE, HIGH POWER TILTING TABLE

These large tilting tables feature massive hydraulic clamping torque and enable 5-face and slanted-hole machining with single chucking of workpiece. They are suitable for machining of component parts for heavy industries such as aerospace, power generator and construction.



TTNC-1500

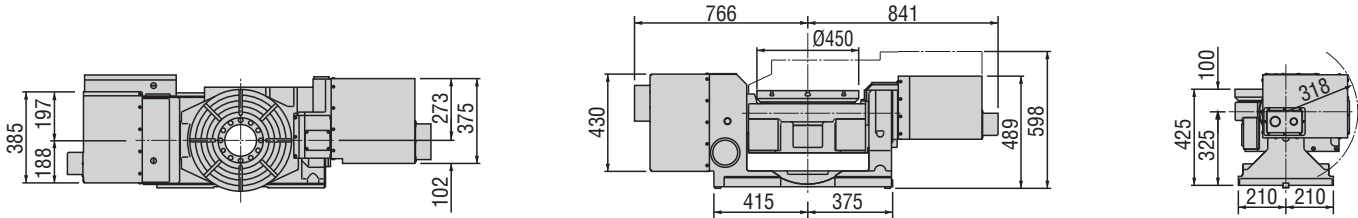
Model		TTNC-451		TTNC-631		TTNC-1001		TTNC-1500		
Tilt Range		-10° ~ +95°		-10° ~ +95°		-20° ~ +110°		-30° ~ +95°		
Table diameter		mm	450	630	1,000	1,500				
Table height at 0° position		mm	425	585	900	1,155				
Center height at 90° position		mm	325	450	700	1,055				
Center bore	Nose Diameter	mm	140H7	180H6	75H7	75H7				
	Thru Diameter	mm	140	180	-	-				
Table T-slot width		14H7		18H7	22H7	28H7				
Guide block width		18h7		18h7	-	-				
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	
		Alpha 12i	Alpha 12i	Alpha 12i	Alpha 12i	Alpha 22i	Alpha 30i	Alpha 30i	Alpha 30i	
Maximum motor speed		rpm	4,000	4,000	4,000	4,000	3,000	2,000	2,000	2,000
Speed reduction ratio			1/180	1/360	1/180	1/360	1/360	1/1,440	1/720	1/1,440
Maximum table speed		rpm	22.2	11.1	22.2	11.1	8.3	1.4	2.7	1.4
Inertia converted into motor shaft		x 10 ⁻³ kg·m ²	1.98	2.7	5.42	3.77	4.37	4.1	5.37	7.46
Clamp system**			Hydraulic @500psi	Hydraulic @500psi	Hydraulic @500psi	Hydraulic @500psi	Hydraulic @1,000psi	Hydraulic @1,000psi	Hydraulic @500psi	Hydraulic @500psi
Clamp torque		Nm (ft. lbs.)	980 (722)	980 (722)	4,410 (3,250)	2,352 (1,733)	9,800 (7,223)	19,600 (14,445)	12,000 (8,844)	12,500 x (2) (9,213) x (2)
Indexing accuracy		arc sec.	±7.5	-	±7.5	-	±7.5	-	±10	-
Tilting accuracy		arc sec.	-	±30	-	±30	-	±30	-	±22.5 (scale)
Net Weight		kg (lbs.)	780 (1,716)		1,700 (3,740)		4,600 (10,120)		12,000 (26,400)	
Allowable wheel torque - rotary		Nm (ft. lbs.)	1,666 (1,228)		3,284 (4,420)		13,230 (9,751)		21,560 (15,890)	
Allowable work inertia		kg·m ²	5.1		29.7		312.6		2,255	
Allowable work weight	0° tilt angle		kg (lbs)	200 (440)	600 (1,320)	2,500 (5,500)	2,500 (5,500)			
	0° ~ 90° tilt angle		kg (lbs)	150 (330)	300 (660)	1,500 (3,300)	1,500 (3,300)			
Allowable work moment		Nm (ft. lbs.)	294 (217)	980 (722)	7,840 (5,778)	7,840 (5,778)				
Allowable load when table clamped		N (lbf)	19,600 (4,390)	24,500 (5,488)	29,400 (6,587)	49,000 (10,976)				
		Nm (ft. lbs.)	980 (722)	4,410 (3,250)	9,800 (7,223)	12,000 (8,844)				
		Nm (ft. lbs.)	980 (722)	2,352 (1,733)	19,600 (14,445)	12,500 x (2) (9,213) x (2)				

* Other motors & RPM available • ** Booster optional • Specifications subject to change without notice

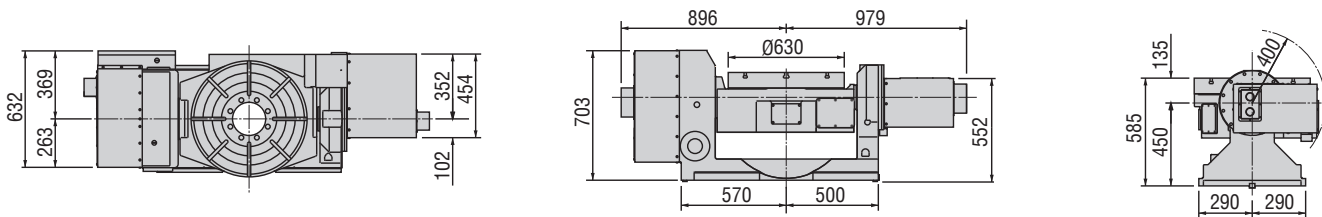
Dimensions

Drawings not to scale • Dimensions = mm

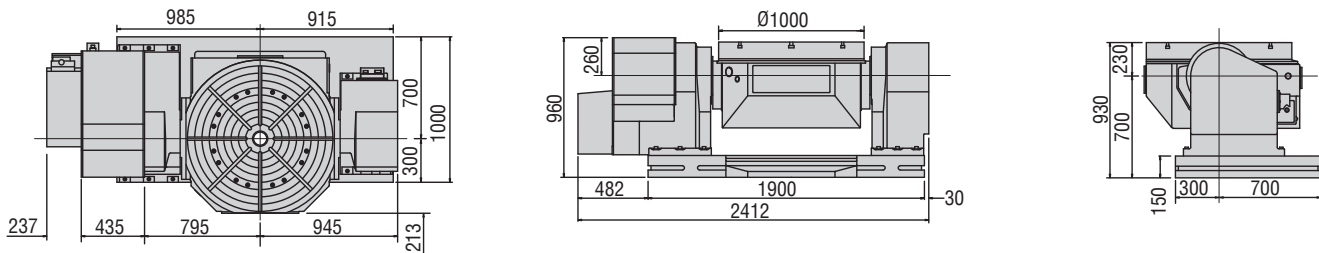
TTNC-451



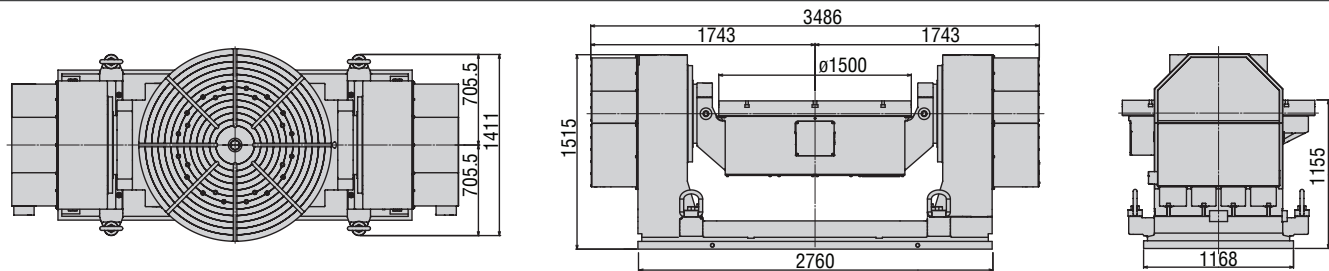
TTNC-631



TTNC-1001



TTNC-1500



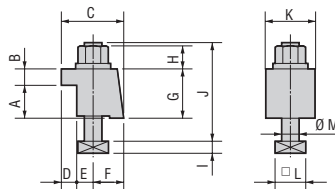
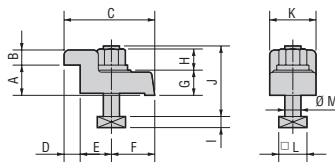
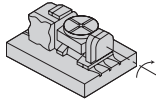
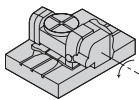
The dimensions above are for tables with a FANUC servo motor. Other motors available (dimensions may increase).

Layout a

Layout b

Type I

Type II



Dimensions = mm

Clamping Block and Bolt

	Type	Q'ty	Layout	T-Slot Width	A	B	C	D	E	F	G	H	I	J	K	L	M
TTNC-451	I	4	a b	18	40	20	109	18	42	50	25	21	11	70	46	28	16
TTNC-631	I	4	a b	18	40	20	110	18	42	50	25	21	11	70	46	28	16
TTNC-1001	II	8	-	24	50	20	74	20	18	36	70	29	16	130	70	40	22
TTNC-1500	II	10	-	28	60	28	95	29	16	50	95	22	17.5	146	100	41.3	24

Options & Accessories

TPC NC Controller	
Chucks	
Tailstock	
Support Spindle	
Face Plate	
Encoder / Scale	
Pull Stud Device	
Rotary Joint	
PVC Cables	

Note 1: In the case of layout b, contact us for details about mounting.

Note 2: When using a machine with a T-slot pitch other than the above, use suitable clamping blocks and bolts that are available on the market, or order custom-made ones (opt.)