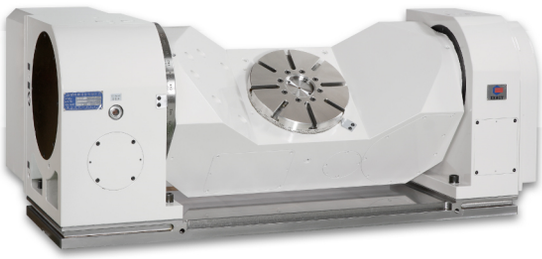
ERT

CNC Tilting Rotary Table



2 Axes motor driver with dual lead worm transmission
0.001 increment Continue type
Hydraulic clamping system (PHC booster available)
Wider tilting angle for better working.

Mode1			ERT-250		ERT-350		ERT-500	
Table Diameter		(mm)	ø250		ø350		ø500	
Table Center Hole Diameter		(mm)	$ø70^{H7}$		$ø100^{H7}$		$ø200^{H7}$	
Table Center Through Hole Diameter		(mm)	ø50		ø60		ø170	
Table Horizontal Position Height		(mm)	315		390		520	
Table T-Slot Width		(mm)	12^{H7}		14^{H7}		18^{H7}	
Standard guide block width		(mm)	14^{h7}		18^{h7}		18^{h7}	
Pressure of clamp system		(kg/cm^2)	35 by Hyd.		35 by Hyd.		35 by Hyd.	
Axis			Rotary	Tilting	Rotary	Tilting	Rotary	Tilting
Minimum input increment		(degree)	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°
Total speed (Motor 2000rpm)	Rotation Speed	(r.p.m.)	16.6	11.1	16.6	11.1	11.1	5.5
	Gear Ratio		1 / 120	1 / 180	1 / 120	1 / 180	1 / 180	1 / 360
Servo Motor (Optional)	FANUC		αiF8	αiF8	αiF8	αiF12	αiF12	αiF22
	MITSUBISHI		HF104T	HF104T	HF104T	HF204S	HF204S	HF354S
	SIEMENS		1FK7063	1FK7063	1FK7063	1FK7083	1FK7083	1FK7101
Rotation torque		(kgf-m)	82	102	200	200	240	240
Indexing accuracy (accumulative)		(sec)	30"	45"	20"	45"	15"	90"
Repetitive accuracy		(sec)	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"
Tilting angle of Tilting axis		(Horizontal = 0°)	-20°~+110°		-20°~+110°		-20°~+110°	
Clamping Torque	F	(kgf)	1000		1500		2300	
	F x L	(kgf-m)	82		200		350	
	F x L	(kgf-m)	102		200		710	
Load Capacity	0°	(kg)	120		150		500	
	0~90°	(kg)	70		100		300	
Movable load for tilting moment	W x L	(kgf-m)	5		15		51	
Weight	Net	(kg)	900		1200		2500	

* We reserve the right to make changes arising from constant product development without advance notice.
* The list of fitting servomotor, please refer to page 43.

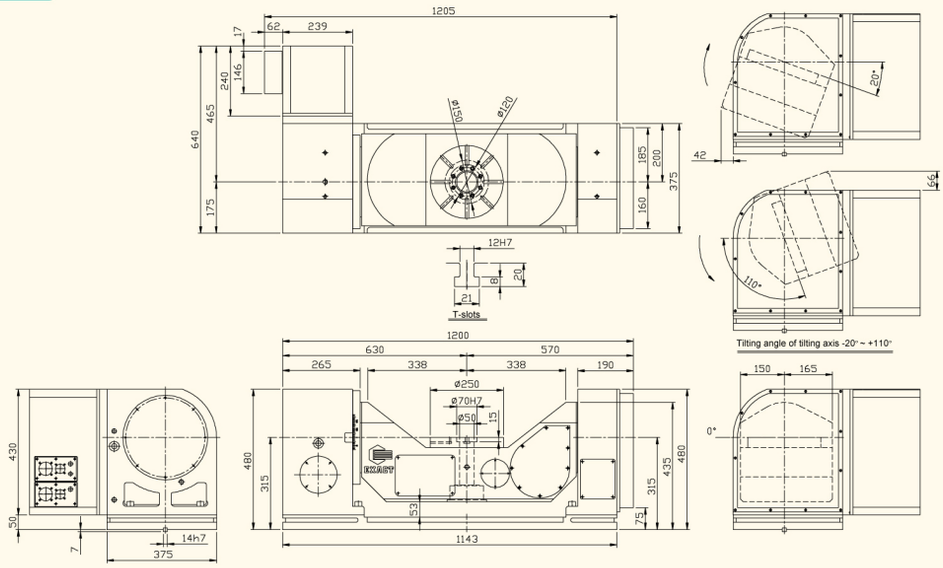
◎ Standard accessories

Block nuts	Hangers
◎	◎

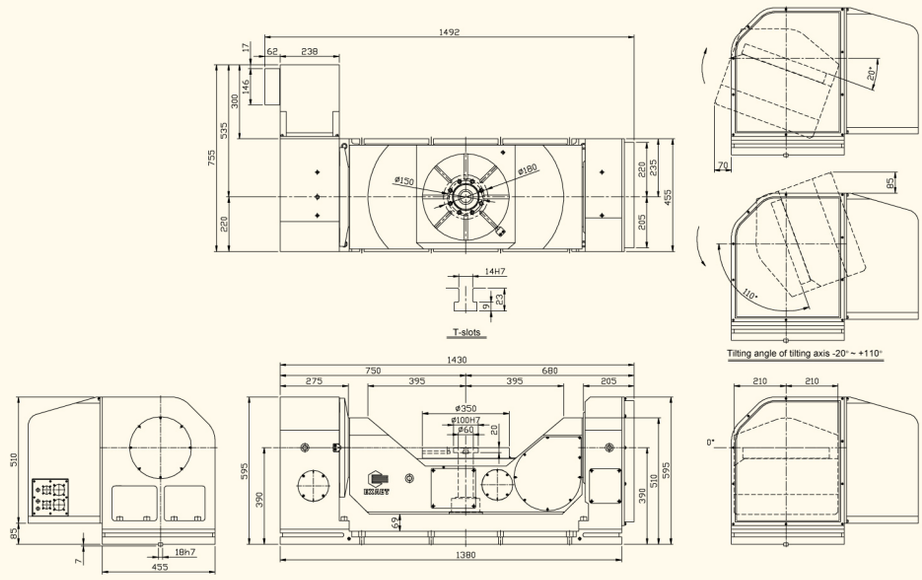
∗ Optional accessories

DNS controller	Tailstock		3-jaw chuck with sub plate	Encoder	PHC x 2
	Taper	Support			
∗ (p.42)	∗ (p.38)	∗ (p.40)	∗ (p.46)	∗ (p.46)	∗ (p.46)

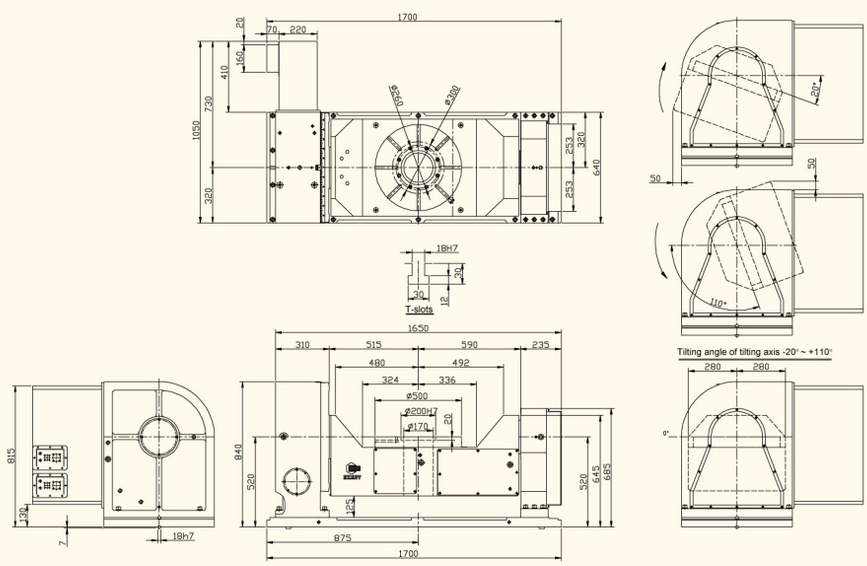
ERT-250



ERT-350

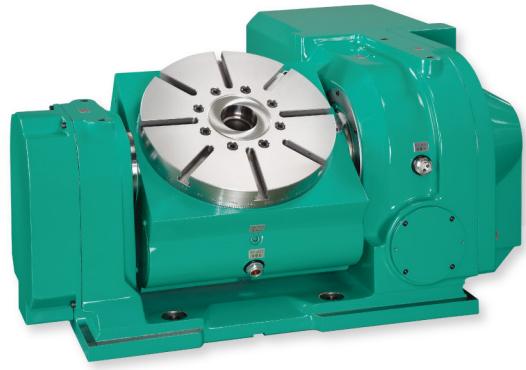


ERT-500



TRT

CNC Tilting Rotary Table



2 Axes motor driver with dual lead worm transmission
0.001 increment Continue type
Hydraulic clamping system (PHC booster available)
Wider tilting angle for better working.

Model			TRT-100		TRT-170		TRT-250		TRT-320		TRT-450	
Table Diameter		(mm)	ø115		ø170		ø250		ø320		ø450	
Table Center Hole Diameter		(mm)	ø55^{H7}		ø35^{H7}		ø50^{H7}		ø60^{H7}		ø60^{H7}	
Table Center Through Hole Diameter		(mm)	ø35		ø25		ø40		ø46		ø51	
Table Horizontal Position Height		(mm)	190		260		320		355		435	
Table Overall Height at 90° tilted		(mm)	255		315		382		448		598	
Table Center Height at 90° tilted		(mm)	135		190		230		255		335	
Table T-Slot Width		(mm)	x		12^{H7}		12^{H7}		14^{H7}		14^{H7}	
Standard guide block width		(mm)	14^{h7}		18^{h7}		18^{h7}		18^{h7}		18^{h7}	
Pressure of clamp system		(kg/cm^2)	5 by Air		35 by Hyd.		35 by Hyd.		35 by Hyd.		35 by Hyd.	
Axis			Rotary	Tilting	Rotary	Tilting	Rotary	Tilting	Rotary	Tilting	Rotary	Tilting
Minimum input increment		(degree)	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°
Total speed (Motor 2000rpm)	Rotation Speed	(r.p.m.)	33.3	16.6	5.5	5.5	5.5	5.5	5.5	5.5	11.1	5.5
	Gear Ratio		1 / 60	1 / 120	1 / 360	1 / 360	1 / 360	1 / 360	1 / 360	1 / 360	1 / 180	1 / 360
Servo Motor (Optional)	FANUC		αiF2	αiF2	αiF2	αiF2	αiF8	αiF8	αiF8	αiF8	αiF12	αiF12
	MITSUBISHI		HF-75T	HF-75T	HF-75T	HF-75T	HF-104T	HF104T	HF-104T	HF-104T	HF-204S	HF-204S
	SIEMENS		1FK7042	1FK7042	1FK7042	1FK7042	1FK7063	1FK7063	1FK7063	1FK7063	1FK7083	1FK7083
Rotation torque		(kgf-m)	8.5	8.5	16	16	47	47	78	78	170	170
Indexing accuracy (accumulative)		(sec)	40"	60"	20"	60"	15"	60"	15"	60"	15"	60"
Repetitive accuracy		(sec)	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"	± 2"
Tilting angle of Tilting axis	(Horizontal = 0°)		-17°～+107°		-110°～+110°		-110°～+110°		-110°～+110°		-110°～+110°	
Clamping Torque	F	(kgf)	350		500		900		1800		2500	
	F x L	(kgf-m)	15		17		50		85		180	
	F x L	(kgf-m)	15		17		50		100		180	
Load Capacity	0°	(kg)	40		50		100		150		250	
	0～90°	(kg)	25		35		50		100		150	
Movable load for tilting moment	W x L	(kgf-m)	3		8		16		25		30	
Weight	Net	(kg)	105		180		340		500		900	

＊ We reserve the right to make changes arising from constant product development without advance notice.
＊ The list of fitting servomotor, please refer to page 43.

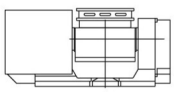
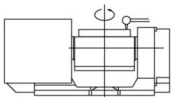
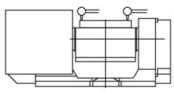
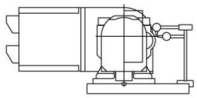
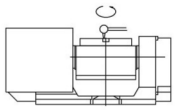
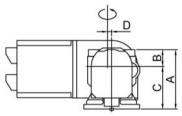
◎ Standard accessories

Block nuts	Hangers
◎	◎

＊ Optional accessories

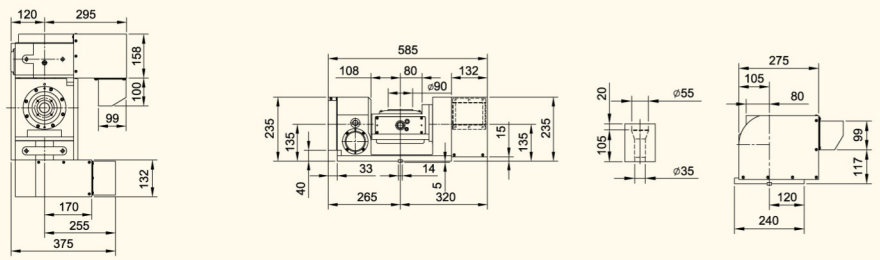
DNS controller	Tailstock		3-jaw chuck with sub plate	Encoder	PHC x 2
	Taper	Support			
＊ (p.38)	＊ (p.34)	＊ (p.36)	＊ (p.42)	＊ (p.42)	＊ (p.42)

Guaranteed inspection accuracy

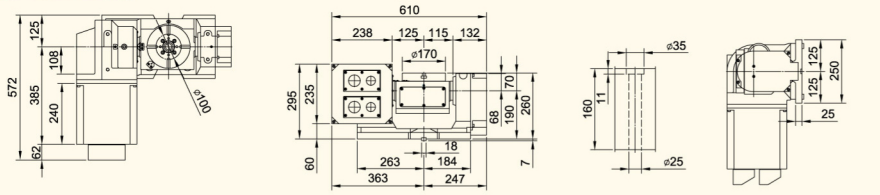
1	2	3	4	5	6
					

NO	Inspection items		TRT-100	TRT-170	TRT-250	TRT-320	TRT-450
1	Table flatness	Per overall length	0.01	0.01	0.01	0.01	0.01
2	Table run out		0.01	0.01	0.01	0.01	0.01
3	Parallelism of table top to frame bottom	Per overall length	0.02	0.02	0.02	0.02	0.02
4	Parallelism of table top to frame bottom	Per overall length	0.02	0.02	0.02	0.02	0.02
5	Concentricity of center hole		0.01	0.01	0.01	0.01	0.01
6	Parallelism of table top to frame bottom guide blocks	Per overall length	0.02	0.02	0.02	0.02	0.02

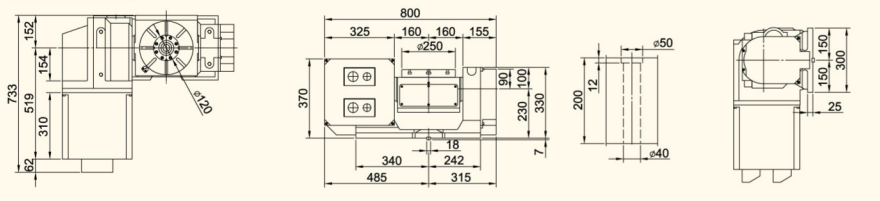
TRT-100



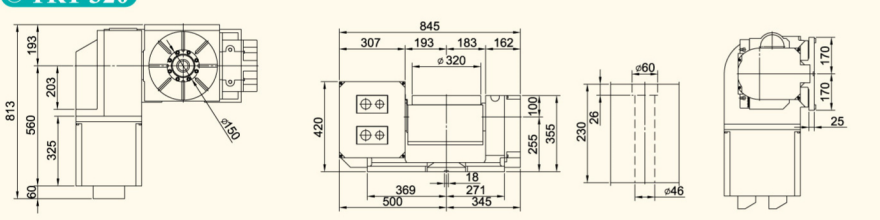
TRT-170



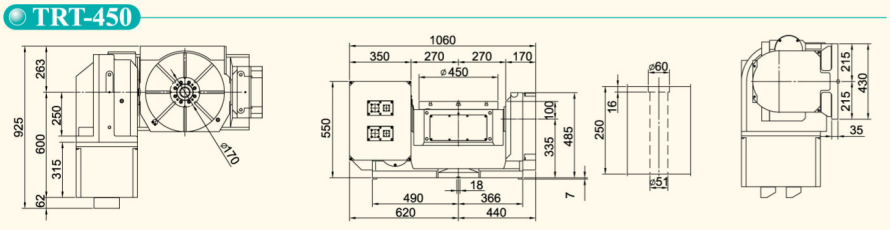
TRT-250



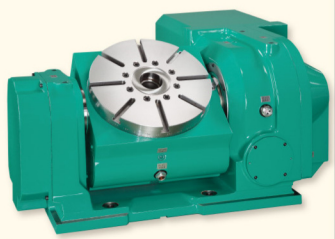
TRT-320



TRT-450



TRT-250



TRT-320