

DDM Trunnion
Tilting Rotary Table

DTFS - 170P

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Single support
Flat

Supplemental
Base for standard
3 axis M/C

Five axes
Low Gravity Design

DDM direct drive
(torque motor)

P

H

Table size

Pneumatic

Hydraulic brake



- High Speed – The average rotation speed of a normal rotary table is 22.2 RPM. Whereas DDM Rotary Table runs at speeds exceeding 100RPM. Hence this is suitable for high speed turning and cutting applications.
- High Precision – Direct drive design is without the normal worm gear transmission. Hence, there is no backlash and mechanical errors. This guarantees very high positional accuracy and repeatability.
- Superior Surface Finish - No Backlash, No Abrasion & Low Inertia – No gears or belts in direct drive system ensures superior surface finish.

SPECIFICATIONS

MODEL		Unit	DTFS-125P / DTFE-125P		DTFS-170P / DTFE-170P	
Worktable diameter		mm / inch	Ø160 / Ø6.29		Ø170 / Ø6.69	
Center bore diameter		mm / inch	Ø30H7 / Ø1.18H7		Ø40H7 / Ø1.57H7	
Height of table (horizontal)		mm / inch	210 / 8 240 / 9		280 / 11 310 / 12	
Height of center (vertical)		mm / inch	210 / 8		280 / 11	
Width of T-slot		mm / inch	12H7 / 0.47H7		12H7 / 0.47H7	
Width of guide block		mm / inch	18 / 0.71		18 / 0.71	
Clamping method / pressure		MPa / psi	pneumatic 0.6~0.7 / 87~101.5		pneumatic 0.6~0.7 / 87~101.5	
Max. table speed		min ⁻¹	R 200 T 50		R 250 T 100	
Clamping torque		N.m / ft. lbs.	100 / 73.76 400 / 295.02		230 / 169.64 400 / 295.02	
Allowable loading capacity	In Horizontal	kg / lb	20 / 44.10		30 / 66.14	
	In Tilting (0~90°)	kg / lb	20 / 44.10		30 / 66.14	
Allowable unbalancing work moment		N.m / ft. lbs.	6.4 / 4.72		30 / 14.74	
FxL When table clamped	F	N / lbs	9700 / 2180.6		12700 / 2855.07	
	FxL	N.m / ft. lbs.	100 / 73.76		230 / 169.64	
	FxL	N.m / ft. lbs.	400 / 295.02		400 / 295.02	
Allowable loading inertia		kg.m ²	0.05		0.12	
Resolution		deg.	0.001		0.001	
Indexing accuracy		sec	20 30		20 30	
Repeatability		sec	4 4		4 4	
Tilting angle range		deg.	+30 ~ -120		+30 ~ -120	
Net weight (motor incl.)		kg / lb	DTFS-125P: 105 / 231.49 DTFE-125P: 226 / 498.24		DTFS-170P: 215 / 474 DTFE-170P: 296 / 652.56 DTFE-171P: 336 / 740.75	
Cooling system			Air cooling		DTFE-171P: Oil cooling DTFE-170P / DTFS-170P: Air cooling	

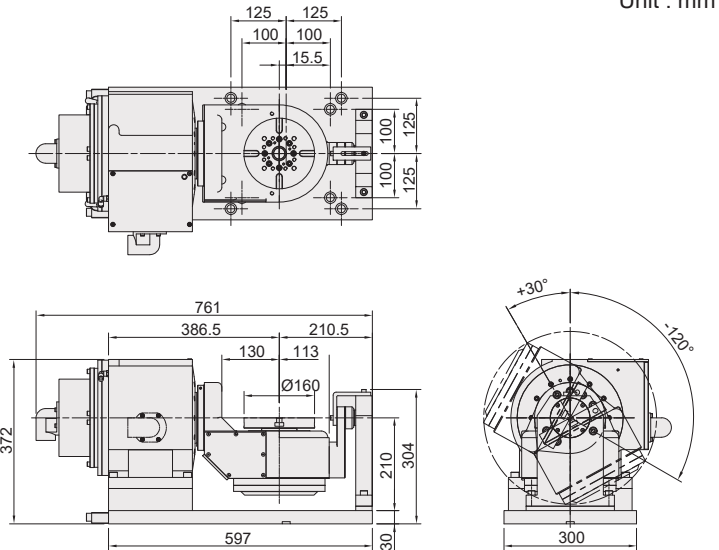
Remark* : 1. Oil cooling device shall be connected and shared from the basic 3 axis standard machine.
2. Air cooling device is not allowed for continuous cutting.
3. FxL When table clamped is a reference data, the users should consider proper safety factor or contact detron for details.

DIMENSIONAL DRAWINGS

DTFE-125P with base plate



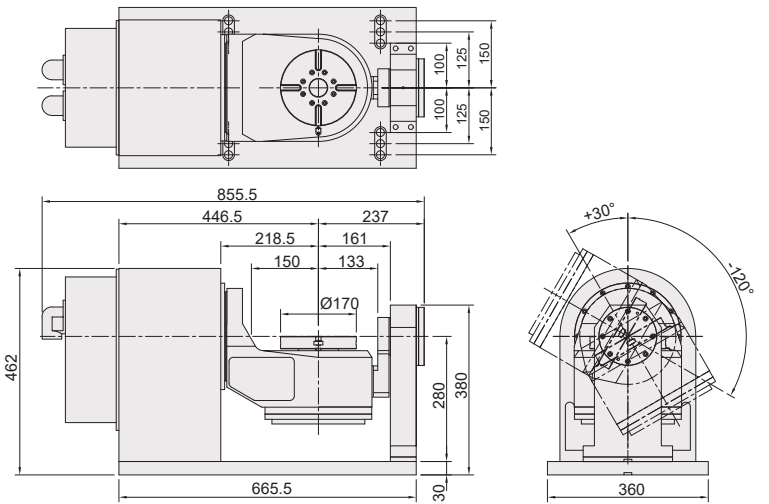
DTFS-125P with compact single support



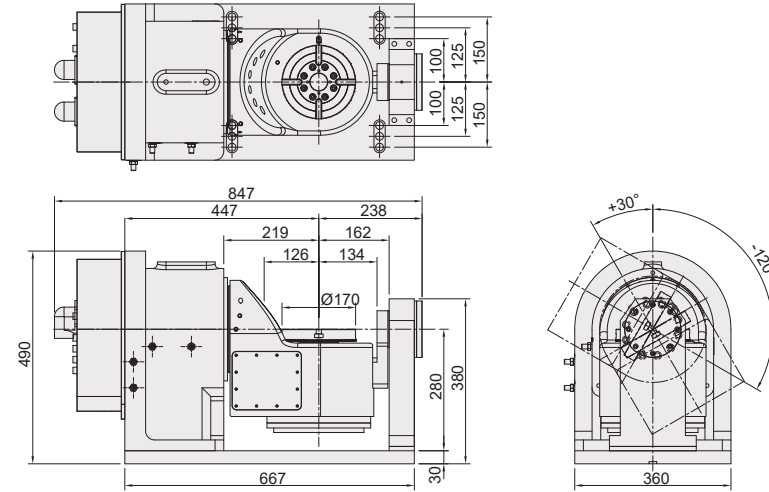
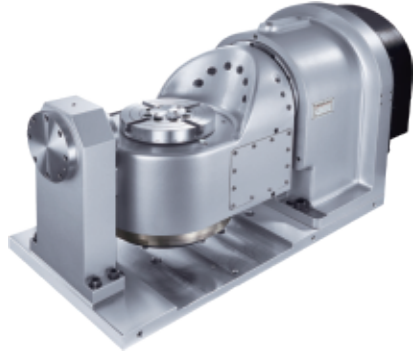
DTFE-170P with base plate



DTFS-170P with compact single support is recommended model for multiple faces positioning application



DTFE-171P



for VMC_DDM series