

GTFAE-L(S) series

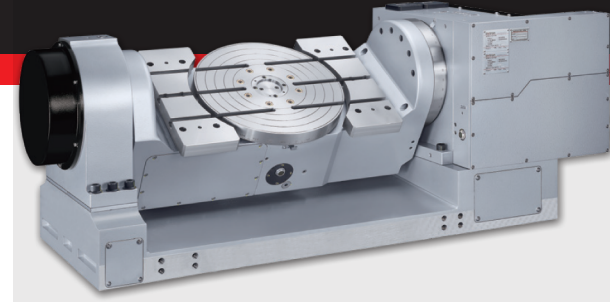
CNC Trunnion Tilting Rotary Table

GTFAE-410XBL(S)

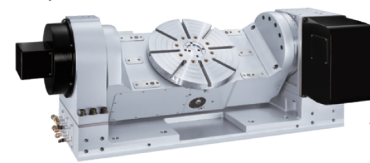
Flat supplemental base for standard 3 axis M/C
new optimization model
Five axis Trunnion type for lower gravity
Worm gear transmission

with sub-table enlarged swing scope
Tilting motor mounted at the back of table
X hydraulic clamp by air booster converter built-in
S superior pneumatic clamp
H hydraulic brake

Table size



- Worktable diameter, Ø255, Ø320, Ø410, Ø500.
- The hydraulic brake equipped with radial and axial bearings.(P.18)
- Full gear depth transmitted by dual lead worm drive, resulting in higher efficiency and lower backlash.(P.20)
- Enlarged swing to allow more working envelope.
- Sub- table available as "S" model.



▲ GTFAE-410HL(S) with tilting axial motor at front.

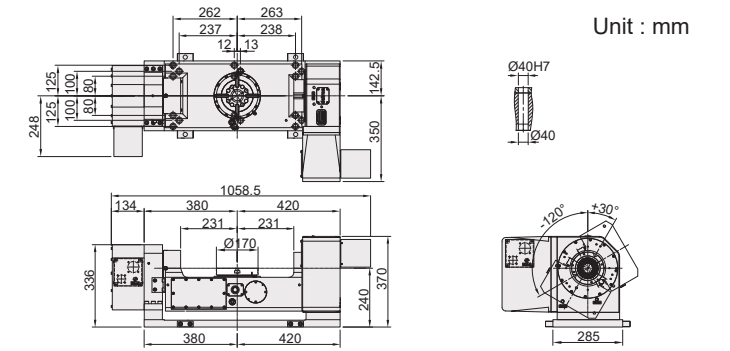
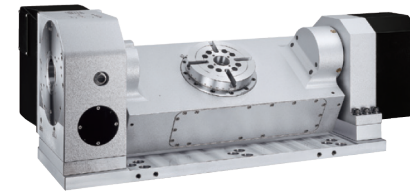
SPECIFICATIONS

MODEL	Unit	GTFAE-170SL	GTFAE-255SBL(S)	GTFAE-320XBL(S)	GTFAE-410XBL(S)/HL(S)	GTFAE-500XBL	
Worktable diameter	mm / inch	Ø170 / Ø6.69	Ø255 / Ø10.455	Ø320 / Ø12.60	Ø410 / Ø16.14	Ø500 / Ø19.69	
Center bore diameter	mm / inch	Ø40H7 / Ø1.57H7	Ø65H7 / Ø2.56H7	Ø50H7 / Ø1.97H7	Ø70H7 / Ø2.76H7	Ø70H7 / Ø2.76H7	
Height of table (horizontal)	mm / inch	240 / 9.45	360 / 14.17	365 / 14.37	411 / 16.18 370 / 14.57	460 / 18.11	
Height of center (vertical)	mm / inch	240 / 9.45	360 / 14.17	365 / 14.37	411 / 16.18 370 / 14.57	460 / 18.11	
Width of T-slot	mm / inch	12H7 / 0.47H7	12H7 / 0.47H7	12H7 / 0.47H7	14H7 / 0.55H7	14H7 / 0.55H7	
Clamping method /pressure	MPa / psi	P: 0.55~0.7 / 72.5~101.5	*P: 0.55~0.7 / 72.5~101.5	*P: 0.6~0.7 / 87~101.5	*P:0.6~0.7/87~101.5 *H:5/25	*P:0.6 ~ 0.7 / 87~101.5	
Servo motor spec		refer to page 69					
Transmission ratio		R: 1/90 T: 1/90	R: 1:90 T: 1:120	R: 1:100 T: 1:120	R: 1:120 T: 1:150 HL(S): 1:120	R: 1:120 T: 1:180	
Max. table speed	min ⁻¹	22.2 22.2	22.2 16.6	25 16.6	16.6 11.1	16.6 11.1	
Allowable loading capacity	In Horizontal	kg / lb	75 / 165	100 / 220	200 / 440	200 / 440	300 / 660
	In Tilting (0~90°)	kg / lb	50 / 110	75 / 165	100 / 220	150 / 330	250 / 550
Allowable unblancing work moment	WxL	Nm / ft. lbs.	40 / 29.5	53 / 39.06	100 / 73.7	200 / 147.40	300 / 221.0
Allowable load (when table clamped)	F	N / lbs	7000 / 1570.8	20000 / 4488.0	20000 / 4488.0	20000 / 4488.0	30000 / 6732.0
	FxL	Nm / ft. lbs.	300 / 221	400 / 295	750 / 553.17	1600 / 1180	2500 / 1843.75
	FxL	N.mNm / ft. lbs.	400 / 294.7	600 / 442.48	1500 / 1106.25	2000 / 1475	3000 / 2212.5
Allowable loading inertia	$\frac{W.D^2}{8}$	kg.m ²	0.28	0.55	2.6	4.3	9.6
Resolution	deg.	0.001	0.001	0.001	0.001	0.001	
Indexing accuracy	sec	20" 60"	20" 60"	20" 60"	15" 60"	15" 60"	
Repeatability	sec	6" 8"	6" 8"	6" 8"	6" 8"	6" 8"	
Tilting angle range	deg.	-120 ~ +30	-120 ~ +30	-120 ~ +30	-120 ~ +30	-120 ~ +30	
Net weight (servo motor excluded)	kg / lb	275 / 606.3	560 / 1235	750 / 1653	1020 / 2175 850 / 1860	1270 / 2800	
Allowable cutting torque	Nm / ft. lbs.	200 / 147.4	250 / 182.5	550 / 401.5	780 / 569.4	1700 / 1241	
Allowable Max. rotary joint quantity	Port	-	4	6	6	6	

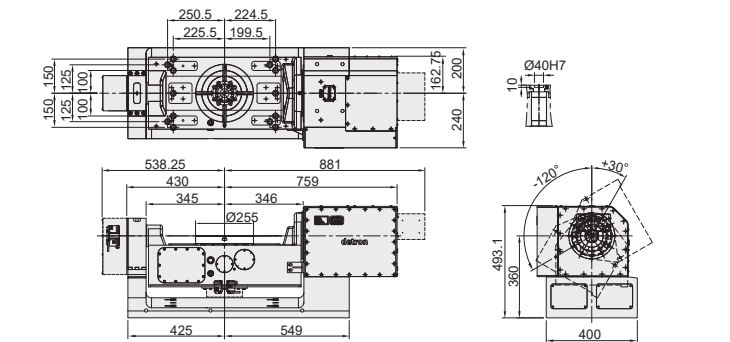
Note: P: Pneumatic H:Hydraulic R: Rotary Axis T: Tilt Axis

DIMENSIONAL DRAWINGS

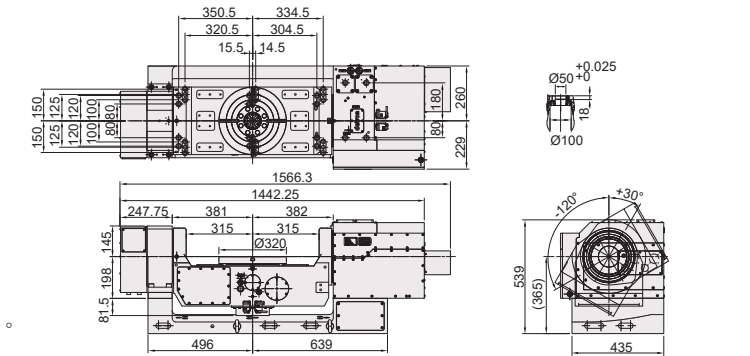
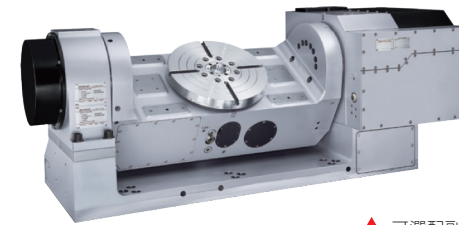
GTFAE-170SL



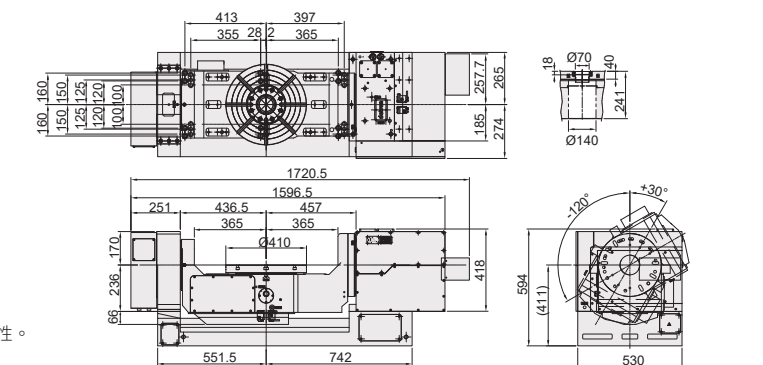
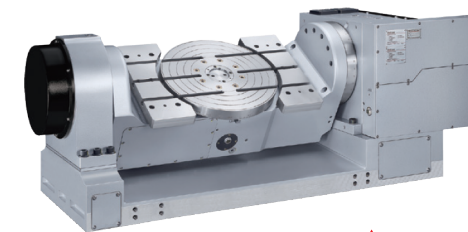
GTFAE-255SBL(S)



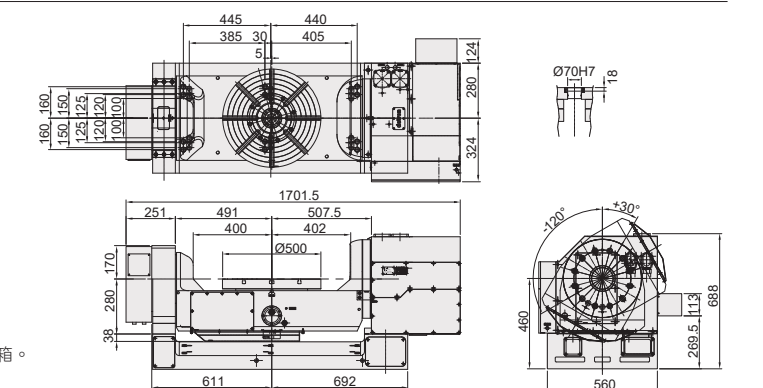
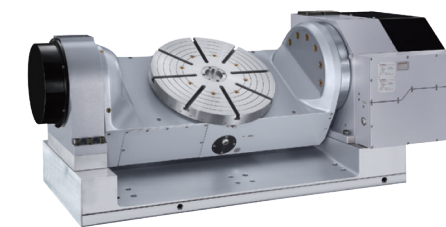
GTFAE-320XBL(S)



GTFAE-410XBL(S)



GTFAE-500XBL



- Note: 1. The length of servo guard may vary with servo motor type. (the metal sheet dimensions shown at above are based on Fanuc motor)
2. Allowable wheel torque at table speed of 1 min⁻¹.
3. According to application engineering, optical encoder is recommended for tilting axis.
4. Customized table Ø630mm and dual drive at tilting axis are available.