








Test Stand Comparison Chart

The following tables summarize the technical characteristics of Mark-10 test stands.



Motorized Force Test Stands

Model	Force Capacity	Maximum Travel ¹	Speed Range	Daylight ²
ESM303 / ESM303H 	300 lbF [1.5 kN]	18.0 [457 mm]	0.02 - 45 in/min [0.5 - 1,100 mm/min]	ESM303: 18.7 in [475 mm] ³ ESM303H: 21.2 in [538 mm] ³
ESM750 	750 lbF [3.4 kN]	32.0 in [813 mm]	0.001 - 60 in/min [0.02 - 1,525 mm/min]	40.1 in [1019 mm]
ESM750S 	750 lbF [3.4 kN]	14.2 in [360 mm]	0.001 - 60 in/min [0.02 - 1,525 mm/min]	19.5 in [494 mm]
ESM1500 	1,500 lbF [6.7 kN]	32.0 in [813 mm]	0.001 - 90 in/min [0.02 - 2,300 mm/min]	40.1 in [1019 mm]
ESM1500S 	1,500 lbF [6.7 kN]	14.2 in [360 mm]	0.001 - 90 in/min [0.02 - 2,300 mm/min]	19.5 in [494 mm]

Manual Force Test Stands

Model	Force Capacity	Maximum Travel ¹	Loading Method	Travel Rate	Daylight ²
ES05 	30 lbF [150 N]	1.5 in [38 mm]	Spring-loaded lever	---	8.0 in [203 mm]
ES10 / ES20 	100 lbF [500 N]	9.0 in [229 mm]	ES10: Lever ES20: Top-mounted hand wheel	ES10: 1.05 in [26.7 mm] / lever rev. ES20: 0.06 in [1.5 mm] / wheel rev.	9.0 in [229 mm]
ES30 	200 lbF [1,000 N]	13.0 in [330 mm]	Side-mounted hand wheel	0.05 in [1.3 mm] / wheel rev.	14.0 in [356 mm] ³
TSA750 / TSA750H 	750 lbF [3,750 N]	with travel stops: 2.75 in [70 mm] without travel stops: 6.00 in [152 mm]	Lever with rack & pinion, lever can be positioned in 30° increments	3.00 in [76.2 mm] / lever rev.	TSA750: 10.5 in [267 mm] ³ TSA750H: 14.5 in [368 mm] ³
TSB100 	100 lbF [500 N]	with travel stops: 2.75 in [70 mm] without travel stops: 6.00 in [152 mm]	Lever with rack & pinion, lever can be positioned in 30° increments	3.00 in [76.2 mm] / lever rev.	13.0 in [330 mm] ³
TSC1000 / TSC1000H 	1,000 lbF [5,000 N]	3.5 in [89 mm]	Inline hand wheel	0.10 in [2.5 mm] / wheel rev.	TSC1000: 10 in [254 mm] ³ TSC1000H: 13 in [330 mm] ³
TSF / TSFH 	1,000 lbF [5,000 N]	4.0 in [102 mm]	Side-mounted hand wheel	0.013 in [0.34 mm] / wheel rev.	TSF: 14.0 in [356 mm] ³ TSFH: 16.5 in [419 mm] ³

Torque Test Stands

Model	Torque Capacity lbFin [Nm]	Speed Range	Angle Indication	Programmable Angle Travel Limits	Daylight ² (w/R50 torque sensor) in [mm]
TST / TSTH					
	100 [11.3]	12° / wheel rev. (manually operated)	Dial, optional digital angle display (no data output)	N/A	TST: 15 [381] ³ TSTH: 16 [406] ³
TSTM-DC/ TSTMH-DC					
	100 [11.3]	0.01-15 RPM [0.05-90°/s]	Dial, integrated digital angle display with RS-232 output	Yes	TSTM-DC: 13 [330] ³ TSTMH-DC: 16 [406] ³

1. Maximum travel depends on the grips or fixtures used during testing. The dimensions indicate distances without the use of grips or fixtures.
2. The clearance between the bottom of a mounted force gauge or sensor and the loading surface of the stand. This distance is reduced if grips or fixtures are used. Column extensions are available with certain test stand models.
3. Column extensions available.

» **Questions?** Call Mark-10 toll-free at 888-MARK-TEN for application and product assistance.