WANCE®
Do Our Best for Your Test

Torsion Testing Machine | 500N.m~3000N.m

This series torsion testing machine is mainly used for performing torsion test on metal, nonmetal and compound materials complying with international standards. We offer various models to cover torsion test from 500Nm to 3000Nm.

Features:

1. For maximum torsion testing versatility and capability, WANCE offers a full range of torsion testing machines in capacities from 500 to 3000 Nm. These uniquely superior torsion testers provide loading and weighing capabilities in both directions of rotation. This feature makes it possible to conveniently determine not only the ultimate torque load of a specimen, but how that specimen behaves under conditions of continuous or intermittent torque loading in both directions. Essentially, each torsion tester comprises a variable speed drive loading system and a digital control and indicating system in a fixed unit.

Torsion angle measurement

2. The weighing head with its strain gage torque sensor is mounted on a moveable unit, which can position on the rails to accommodate specimens of varying lengths.
3. This series belong to bench top with floor based and are furnished with heavy duty slotted steel bed rails that are normally lies on the test bed, the standing support bed and the slotted steel rail are solid integral frame. These sliding rollers allow the moveable unit to compensate for any changes in specimen length during loading.

4. All torsion testers feature our patented bi-directional grips, which assure slip-free specimen clamping regardless of the twist direction. With these precision-machined universal grips, loads can be applied in both directions without changing grips.
5. The rugged, electromechanical loading system employs a gear reduction system coupled directly to a variable speed drive motor. This reversible loading system provides positive, infinitely variable testing speeds from 6° to 720°. As the load increases, more power is delivered to the twisting head to apply increasing torque to the specimen to maintain the preselected twisting rate.
6. Professional test software with standard PC and controller carries out closed loop control and torsion test data analysis and capturing, and also showing the material behavior throughout the test.

Parameters

Model	ETT502	ETT103	ETT203	ETT303
Max torque (Nm)	500	1000	2000	3000
Torque range (Nm)	5-500	10-1000	20-2000	30-3000
Calibration Accuracy	Class 1 / Class 0.5			
Torque accuracy	±1%(Class 1)/ ±0.5%(class 0.5)			
Torque resolution(Nm)	1/350000 of max torque			
Torsion angle (°)	0-10000			
Torsion angle accuracy	±1.0%			
Resolution of torsion angle between gauge length (°)	0.0045			
accuracy of torsion angle between gauge length	±1.0%			
Speed (°/min)	6 -720			6-500
Speed accuracy	±1.0% of set speed			
Distance between clamping grips (mm)	650			
Specimen diameter between gauge length (mm)	Φ6-Φ20		Φ8-Φ28	
Motor Power (Kw)	0.4	0.75	1	2
Power requirements	220±10%VAC /50Hz			
Dimension (mm)	1700×510×1150		1700×500×1200	1850×660×1200
Weight (kg)	500		750	1500