
WT Series Metal Wire Torsion Tester

Application

Model WT-3 is mainly used to test the plasticity of 1-3mm metal wires and ropes under torsion condition. Surface flaws of steel wires may be shown out during the testing process. It is most suitable for quality inspection of departments related to steel wire.

Main Functions:

This testing machine has 3 rotation speeds: 60, 90 and 12 revolutions per minute. The length range of specimen steel wire is 300-1000mm. The revolution is displayed by 4-digit LED. The Max. displayed revolution is 999.9. The revolution value is automatically held at the break of specimens.

Model WT-10

Application

Model WT-10 is mainly used to test the plasticity of 3-10mm steel wires under torsion condition. Surface flaws of steel wires may be shown out during the testing process. It's suitable for quality inspection of departments related to steel wire.

Main Functions:

This testing machine has 2 rotation speeds: 30 and 60 revolutions per minute. The length range of specimen steel wire is 500-3000mm. The axis force is through the 10:1 lever. The rotation motor is automatically started when the force is applied, and auto-stop at break of specimen. The revolution is displayed by 4-digit LED. The Max. displayed revolution is 999.9. The revolution value automatically holds at the break of specimens.



NJS Series Digital Display Torsion Tester

Applications:

NJS Series Digital Display Torsion Testing Machine is used to determine the torsional properties of various materials by imposing a torque. The torque transducer is attached to the moveable crosshead, which can be located at any position along the linear slide. It is suitable for applications in labs environment in scientific research dept., colleges and industrial enterprises to test the mechanical properties of materials under torsion conditions.



Features:

- Two test methods: Automatic test: Turn the hand wheel until the test rod breaks. The testing machine will automatically test the yield torque M1 and the maximum torque M2. Manual test: To choose the test angles and torques of any 9 points during the test period and record them.
- High rotational stiffness with minimal axial friction
- Adjustable crosshead for easy positioning anywhere along linear slide
- Test results can be printed or retrieved after test.

Standards:

This series of testing machines confirm to standards of ASTM A938, ISO 7800:2003 , GB/T239-1998, GB10128 and others equivalent.

Specifications:

Item	Specifications
Max. test torque	150 Nm/200Nm
Min. reading torque	0.05 Nm
Accurate torque measurement range	30-150/ 60-200 Nm
Max. torsion angle	9999.9°
Min. reading of torsion angle	0.1°
Relative error of torque indication	≤ ± 1.0%
Relative repeatability error of torque indication	≤1.0%
Diameter of specimen	10mm
Max. test space	260mm
Power supply	AC, 220V ±10%

NDW Series Computer Controlled Torsion Testing Machine



Applications:

NDW Series Computer Controlled Torsion Testing Machine provides loading and weighing capabilities in both directions of rotation, which makes it possible to conveniently determine not only the ultimate torque of a specimen, but also the specimen behaves under conditions of continuous or intermittent torque loading in both directions. Computer will dynamically display the torsion curve, loading speed, peak value, and so on.

It is mainly used for the torsion test of metal and non-metal materials, as well as the torsion test for parts and components. It is an essential instrument to measure torsion properties of materials for mechanics laboratories of aviation industry, construction industry, scientific research dept, universities and industrial enterprises etc.

Features

- Adopting PC-controlled Japanese AC servo system, it is loaded through the active clamping head driven by the AC servo motor and cycloidal pinwheel reduction motor.
- High-precision symmetrical torque transducer to measure test torque testing and high-precision LEC model photoelectric encoder to measure torsion angle;
- Double control modes: manual control and computer control;
- WINDOWS-based supervision software used to calculate mechanical indexes of materials. Automatic test data processing, dynamic display of test curves, storage and print out of test results. Operator can intervene the analysis process to improve the analysis accuracy.
- The computer can dynamically display the torsion curve, loading speed, peak value etc. .

Standards:

This series of testing machines confirm to standards of ASTM A938,ISO 7800:2003 , GB/T239-1998, GB10128 and others equivalent.

Specifications:

Model	NDW-200	NDW-500	NDW-1000	NDW-2000	NDW-3000
Capacity (N.m)	200	500	1000	2000	3000
Measuring range of torque (N.m)	4-200	10-500	20-1000	40-2000	60-3000
Distance between the grips (mm)	0-500		4--1000		4-1200
Relative error of torque indication	≤ 1.0% (from 20% of each full range)				
Relative repeatability error of torque	≤ 1.0% (from 20% of each full range)				



Control method	Close-loop control of torque, torsion angle and deformation
Curves	Torque/Angle/Deformation—Time curve Torque—Angle/Deformation curve
Resolution of torsion angle	0.1°
Torsion speed	0.1~1000°/min, stepless
Max. reading of torsion angle	9999.9°