NextGen GenTor Horizontal Torsion Tester

Standards: ASTM A938, ASTM E143, ISO 7800, GB 10128

- ULTIMATE USER-FRIENDLINESS
- LEADING DEPENDABILITY AND RELIABILITY
- STRICT COMPLIANCE WITH INDUSTRY STANDARDS
- STOCKED CONSUMABLES AND SPARES
- TRUSTED AFTER SALES TECHNICAL SUPPORT
- LIFETIME PRODUCT SUPPORT ADVANTAGE

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Description

Introducing the NextGen GenTor Torsion Tester, a state-of-the-art computerized machine designed specifically for the torsion testing of a wide range of materials including metals, non-metals, composite materials, and component parts. This testing machine boasts a horizontal type load frame with high stiffness, ensuring accurate and reliable test results.

Equipped with a high-precision torque sensor, the NextGen GenTor Torsion Tester is able to accurately measure the torque value of the material being tested. Additionally, it features a high-precision torsion angle meter, which accurately measures the torsion angle of the material.

With its various control modes, this torsion tester provides maximum flexibility in testing different types of materials. The machine's computerized real-time display of testing data and various testing curves provide users with a comprehensive and detailed view of the test results.

Whether you're testing metals, non-metals, composite materials, or component parts, the NextGen GenTor Torsion Tester is the perfect tool for achieving accurate and reliable torsion test results.

NextGen GenTor Horizontal Torsion Tester Working Principle

The NextGen GenTor Torsion Tester is a highly advanced testing machine that comprises a host machine, torsion angle measuring device, dedicated measuring system, and a computer. When conducting a test, the computer sends instructions to the control unit, which in turn drives the servo motor to operate. The moving grip rotates along with the reducer, causing the sample to undergo torque. The torque is then transmitted to the fixed grip, and the torque sensor detects this torque, sending a signal to the amplifying circuit of the control unit.

The amplified signal is converted from analog to digital and displayed in real-time on the computer screen. The torque angle is measured using an optical encoder, providing accurate and precise measurement of the torsion angle.

The NextGen GenTor Torsion Tester features computer-controlled English testing software that enables users to control various testing parameters, including torque control, torsion angle control, and deformation control. This software allows for testing speed and other control parameters to be set, while displaying real-time data, such as torque, yield torque, maximum torque, torque strength, angle, and torsion speed.

This highly sophisticated testing machine is perfect for a variety of testing applications, including research and quality control testing. Its advanced features provide reliable and precise results, making the NextGen GenTor Torsion Tester a valuable addition to any testing laboratory.

Test Capacities: 200N.m, 500N.m, 1,000N.m, 2,000N.m, 6,000N.m.

Horizontal Torsion Tester Technical Specifications

Specifications	NDW-6000				
Max. Torque Capacity (N.m)	200	500	1000	2000	6000

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Torque Measuring Range (N.m)	4-200	10-500	20-1000	40-2000	24-6000
Distance Between Grips (mm)	0-500		4-1000		Inquire
Min. Torque Reading (N.m)	0.01				
Relative Error of Torque	≤±1.0% (from 20% of each full range)				
Relative Repeatability Error of Torque	≤±1.0% (from 20% of each full range)				
Max. Reading of Torsion Angle	9999.9°				
Resolution of Torque Angle	0.1°				
Horizontal Opening (Without Grips) (mm)	675				
Maximum Test Speed (RPM)	1.5				
Torsion Speed	0.1-1000°/min Stepless				

Watch Video

Watch the NextGen GenTor Horizontal Torsion Tester product video.

WATCH ON YOUTUBE

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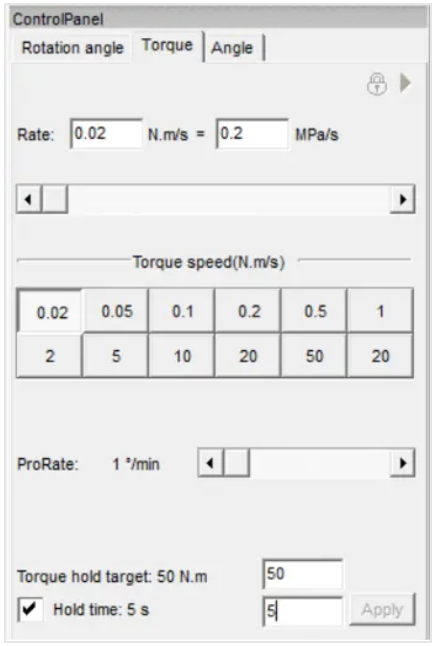
Horizontal Torsion Tester Testing Software

Close-loop control: it supports constant rotation angle, constant torque control, target hold and hold time.




ControlPanel
Rotation angle
Torque
Angle
Rate: 0.005 °/s = 0.01 %/s
AngleRate(°/s)
0.005
0.01
0.02
0.05
0.1
0.2
0.5
1
2
5
10
20
ProRate: 1 °/min
Torsion angle hold target: 90°
90
Hold time: 5 s
5
Apply