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TORSION TESTING MACHINE AZA1010

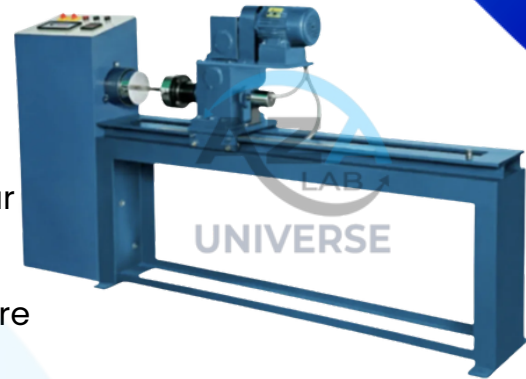
The AZA1010 Torsion Testing Machine is a precision-engineered laboratory system designed to evaluate the mechanical behavior of materials under torsional (twisting) loads.

It accurately determines key material properties such as torsional strength, shear modulus (modulus of rigidity), shear yield strength, and ductility in torsion. This makes it an essential testing solution for industries where components are subjected to rotational stresses, including automotive, aerospace, medical device manufacturing, and spring production.

With high-resolution measurement systems and stable loading control, the AZA1010 delivers reliable torque vs. angle of twist data for both research and quality control applications.

Key Features

- Heavy-duty, rigid frame for vibration-free operation
- High-accuracy electronic torque transducer
- High-resolution rotary encoder for angular measurement
- Digital display for real-time torque and angle readings
- Variable speed drive for controlled torsional loading
 - Self-centering grips/chucks for accurate specimen alignment
 - Overload protection and emergency stop system
 - Optional PC-based software for data acquisition and reporting





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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA1010
Machine Type	Torsion Testing Machine
Drive Type	Electromechanical (Motorized) / Manual
Torque Capacity	50 Nm – 2000 Nm (Customizable)
Torque Accuracy	±1% of Indicated Load
Angle Measurement	High-Resolution Rotary Encoder
Angle Resolution	0.1° or Better
Test Speed	Variable (0.1 – 10 RPM Typical)
Specimen Length Capacity	200 – 1000 mm (Approx.)
Specimen Diameter Range	3 – 25 mm (Typical)
Display	Digital (Torque & Angle)
Power Supply	230 V AC, 50/60 Hz
Safety Features	Overload Protection, Emergency Stop

Standard Compliance

- ASTM E143 – Shear Modulus Determination
- ASTM A938 – Torsion Testing of Wire
- ISO 7881 – Torsion Testing of Spring Steel Wire
- Other relevant IS / ASTM / ISO torsion testing standards