



## TORSION TESTING MACHINE-ELECTRONIC CAPACITY-0-50 KG

### TORSION TESTING MACHINE (ELECTRONIC VERSION)

#### Applications

In this instrument, the Torque and Angle of Twist are observed on Microprocessor based Digital Indicator unit.

#### Working Principle

A system of loading which causes section of a bar or shaft to rotate about its central longitudinal axis relatively to another such section and which thus produces twist or torsion in the bar, constitutes a Torsional load. The load may be composed of forces acting in any direction but the twisting or Torsional affect is provided by the couples formed by these forces in planes normal to the central axis. The Torsional shearing stresses in circular cross section vary from zero at the axis of the section to a maximum value at the extreme fibers. If no bending is present pure shear exists.

#### Construction Details

Torsion Testing machine Consists of two independent chucks. The twist is communicated through the test piece to the other jaw on which a weighted pendulum is attached. The resistance to deflection of pendulum causes a torque to be applied to the test piece and the angles of deflection of pendulum is the measure of torque. The machine is built for maximum twisting moment at about 50 kgm. It is equipped with jaws for accommodating test pieces of 10 mm, 15 mm and 20 mm size either square or circular with square shoulder.

#### Technical Specifications

- Capacity : 0 to 50 kgm
- Range : ONE
- Rod to be tested : 8 to 20 mm
- Load of Measurement : Torque and Twist will be read directly
- Other provisions : Automatic stop in case of failure of specimen



Asphalt Testing



Soil-Aggregate Testing



Cement-Concrete Testing



Pharmaceutical Testing



Tiles-Ceramic Testing



Petroleum & Lubricant Testing



Food Testing

#### Calibration Laboratory:

B-14, Zaveri Industrial Estate, Opp. Shyam Villa,  
Singarva-Kathwada Road,  
Kathwada, Ahmedabad-382 430.  
Phone : (079) 6604 0660 • Fax : (079) 6604 0600  
E-mail : [info@eieinstruments.com](mailto:info@eieinstruments.com)

#### Corporate Office:

1001-1002, Span Trade Centre,  
Opp. Kochrab Ashram, Paldi, Ahmedabad-380 006.  
Phone : (079) 6621 1234 • Fax : (079) 2658 4099  
Website : [www.eieinstruments.com](http://www.eieinstruments.com)

GST TIN No. : 24AABCE4018L1ZU  
I.T. PAN No. : AABCE 4018L  
IEC No. : 0813026598 Dt. 04/03/2014  
CIN No. : U29199GJ2004PTC045078