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Product Name :
Torsion And Deflection Testing Apparatus

Product Code :
LBNY-0005-17600019



Description :

Torsion and Deflection Testing Apparatus extruded base frame carries two solid vertical supports. Profiled grooves within the base frame, fasteners and quick release handles ensure quick and easy adjustment of the span between the vertical supports. Torsion and Deflection Testing Apparatus allows a variety of experiments to be undertaken to investigate test specimens under torsional loading and bending loading within their elastic limits. The students cover topics involving bending moment equation, torsional rigidity, modulus of rigidity, angle of twist, and create graphs and compare actual measured values with theoretical values using formulae and theory provided.

Experimental Capabilities:

Deflection of specimen as a function of loading force, material, Youngs Modulus of Elasticity (E), cross section, support span

Comparison of cantilever beams, simply supported beams

Determination of Youngs Modulus of Elasticity (E) in shear for the different material specimens

Comparison of bending stiffness of varying specimen sections for the same cross sectional area

Introducing Poissons Ratio

Torsion angle and specimen cross section

Modulus of rigidity introduction

Torsion angle and clamping length relationship

Torsion angle and torsion moment relationship.

Technical Specification :

Apparatus to test elastic deformation under bending and torsion

Compact, bench top, self contained unit
Torsion test specimens to be supplied in a variety of material
Apparatus to have adjustable beam span and torsion span
Deflections to be measured using dial gauge on movable stand
Specimens to be tested under bending and torsion
Torsion to be measured using movable protractor and pointer
Comprehensive technical manual for student and lecturer provided
To have ability to change the end clamping arrangement for bending specimens
Chucks to secure torsion specimens and to apply torsion via pulley and hanger
Bending specimens to be supplied in a variety of cross section and materials.



Laboratory Instrument India