

STRENGTH OF MATERIALS LABORATORY



Lab1: Introduction to Measurements

- To determine the length and diameter of members for use in other experiment
- To observe the errors in measurements



Lab2: Axial Load Tests

- To determine the modulus of elasticity, E , for the given materials
- To determine the deflection for linear elastic material



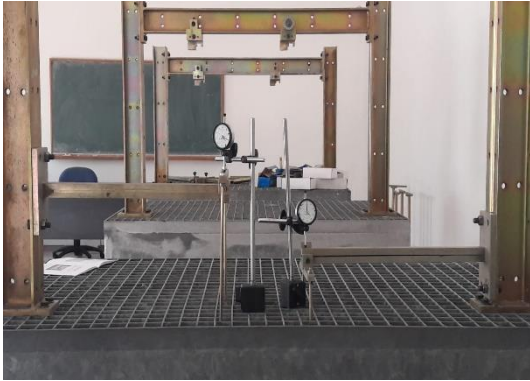
Lab3: Torsion Test

- To determine the material properties of a metal sample from torsion test
- To determine the deflection for linear elastic material



Lab4: Flexural (Bending) Deformation

- To observe the variation of bending strains under flexural loading



Lab5: Effect of Horizontal Shear on Deflection of Beams

- To verify deflection equation of beams made of linearly elastic materials
- To observe horizontal shear effect



Lab6: Deflection of Beams

- To observe deflection of beams
- To compare analytical beam deflection solutions with experimental findings