

Structure Lab

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About the Lab:

The primary activities include experimental studies on the model/prototype of structural elements and assemblies under various static and dynamic loading conditions. the laboratory represents a unique facility for large- and full-scale investigation of the load-deformation behavior of structures including their post-peak strength and deformability up to the failure.

List of Equipment:

1. Clerk's Maxwell Reciprocal Theorem Apparatus
2. Elastic Properties of Deflected Beam Apparatus
3. Curved Member Apparatus
4. Behaviors of Colum and Struts Apparatus
5. Two Hinged Arch Apparatus
6. Shear Center and Unsymmetrical Beam Bending Apparatus
7. Pin Joint Truss Apparatus
8. Strain Gauge Indicator with Digital Display

List of Experiments

1. To determine Flexural Rigidity (EI) of a given beam
2. To verify Maxwell's Reciprocal theorem.
3. To find horizontal thrust in a three-hinged arch and to draw influence line diagrams for

Horizontal Thrust end Bending moment.

4. To find horizontal thrust in a two hinged arch and to draw influence line diagrams for horizontal Thrust and bending moment.
5. To find Critical load in struts with different end conditions.
6. To find deflections in Beam having unsymmetrical bending.
7. To find the determination of elastic deflection of curved beams.
8. To analysis the redundant joint.