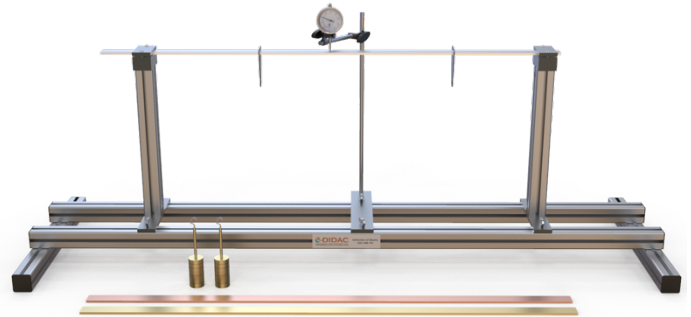


## Deflection of Beams Apparatus (EDC-SM-110)

### EXPERIMENTAL DATA:

- Study of the beams' deflection for different cross sections and lengths
- Experiments of both simply supported and cantilever beams.
- Determination of the Elasticity Modulus
- Determination of the Rigidity Modulus for steel, bronze and aluminum beams.



### DESCRIPTION:

This experimental setup is bench mounted which has an aluminium frame on which two support pillars with knife edge and cantilever supports which can be moved along the length of the base to create different test spans for the beam.

Test beam for different materials and cross-sections along-with two load hangers are supplied. Two analogue dial gauges are also provided for measuring beam deflections and slopes. The movable dial gauges' stand help students in accurate positioning of dial gauges along the beam length. A set of calibrated weights and hangers are supplied along with the necessary tools to adjust the equipment.

### TECHNICAL SPECIFICATIONS:

- Maximum distance between supports: 1000mm
- Test samples of steel, bronze and aluminium having 25mm\*3mm, 25mm\*6mm and 13mm\*6mm cross sections, and each with 500mm and 1000mm lengths.
- 2 x Set of Weights

### RELATED LAWS:

- Mechanical Engineering
- Deflection of beams
- Straight beams and Cantilever beams
- Bending Theory
- Stress

### SCOPE OF DELIVERY:

- 1 x EDC-SM-110
- 2 x Weight Set
- 2 x Load Hanger
- 1 x Dial Gauge and assembly
- 1 x Instructional Manual

### WEIGHT AND DIMENSIONS:

- L x W x H (mm): 1100 x 250 x 350
- Weight (approx): 12 kg

