

Combined Shearing Force and Bending Moment Apparatus

(EDC-MM-230)

EXPERIMENTAL DATA:

- Study of the Shear Force and Bending Moment at a 'cut' section in a beam.
- Assessment of experimental results with theoretical values and bending moment diagrams.
- Changing in bending moment by changing load, load position and load arrangement.



DESCRIPTION:

The apparatus used to analyze the effect of both shearing and bending moment in one unit. An aluminum bar us cut into two unequal lengths, creating a 'cut' section. At 'cut' section a deep groove ball bearing in one beam within a block with the other beam. The vertical movement is shear and rotation causes bending moment.

SPECIFICATIONS:

- A beam cut in at $1/3^{rd}$ point.
- Two force gauges:
 - Shear moment
 - Bending moment.
- Weights to apply.
- Scale available.
- Hooks to hang weights

TECHNICAL DATA:

- Beam lengths:
 - o 650mm.
 - o 350mm.
- Beam cross section area: 20mm X 40mm.
- Scale graduated: 25mm.
- Load hangers: 3 qty.
- Force gauge: 2 qty.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 1200 X 300 X 500 approx.
- Weight: 15 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-MM-230.
- 1 x Instructional Manual.

