

Unsymmetrical Bending Apparatus (EDC-SM-108)

EXPERIMENTAL DATA:

- Unsymmetrical bending (complex) on a beam with an L-profile.
- Symmetrical bending on a beam (uniaxial):
 - with I-profile.
 - with L-profile.
 - with U-profile.
- Combined bending and torsion loading by way of eccentric force application.



DESCRIPTION:

In unsymmetrical bending of a beam known as complex or biaxial bending, the main axes of the cross-section do not accord with the direction of loading. To prevent torsion, the line of application of the load must pass through the shear center. If it does not, the beam undergoes combined bending and torsion loading.

SPECIFICATIONS:

- Experimental unit for general and unsymmetrical bending of beams.
- 3 beams of shape I, L and U profiles.
- Clamping flange of beam can be clamped in the pillar free to interchange in any direction.
- Clamping flange with angle scale to designate the pointed position of the beam.
- Peculiarity of load application points adjustable.
- 2 dial gauges with bracket to record the horizontal and vertical buckle of the beam under load.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 600 X 350 X 400 approx.
- Weight: 28 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-SM-108.
- 1 x Instructional Manual.

TECHNICAL DATA:

- Aluminium beam:
 - deformed length: 450mm.
- Eccentricity of load application point: 0-25mm.
- Dial gauges:
 - 0-25mm, graduation: 0.01mm.
- Angle scale:
 - 0-360°, graduation: 1°.

