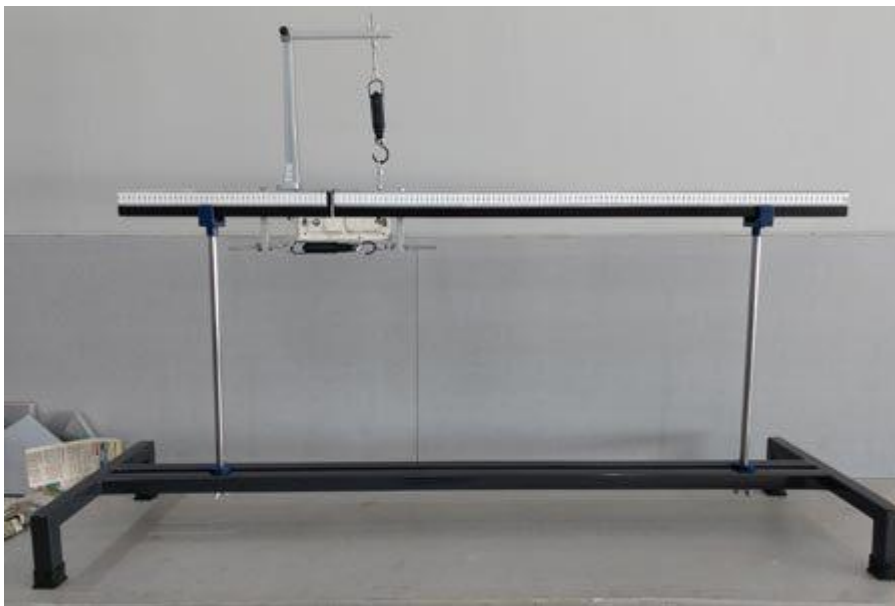


BENDING MOMENT & SHEAR FORCE APPARATUS



RESOTECH SFD26207

Introduction

Shear Forces occurs when two parallel forces act out of alignment with each other. For example, in a large boiler made from sections of sheet metal plate riveted together, there is an equal and opposite force exerted on the rivets, owing to the expansion and contraction of the plates. Bending Moments are rotational forces within the beam that cause bending. At any point within a beam, the Bending Moment is the sum of: each external force multiplied by the distance that is perpendicular to the direction of the force.

Experiment Manual

- To verify the Shear force a cross-section of the beam.
- To verify the bending moment in cross-section of beam with a flexure condition.

Accessory Requires

- Shear force apparatus
- Bending Moment Apparatus
- Hangers
- Weights

Specification

Dimensions	158 cm X 45cm X (h)60cm
Total Beam Length	160 cm with flexure
Width of Beam	5 cm
Distance of Length in Between	5 cm
Height of Beam	36 mm
No of Hanger for Weights	3
No of Spring Balance	2 (of 10kg)
Total Weight of Apparatus	13.1 kg
Two Spring Balances	10kgs
Body Material	S.S(stainless steel)
Surface Finish	Color Coated