



Email : sales@laboratoryinstrumentindia.com

Product Name :
Deflections of Beams

Product Code :
LBNY-0005-13900034



www.laboratoryinstrumentindia.com

Description :

Two steel beams are supplied, each having a different thickness, thus allowing the effect of beam thickness and length on deflection to be studied. Two movable vertical beam supports allow the fixing of knife-edges to their tops to create a simply supported arrangement for the study of Deflections of Beams. Each support can be moved anywhere within the working area of the Universal Frame and Stand and allows a variety of beam spans to be achieved. Apart from the large difference in second moments of area (nearly 1 to 4.5) it will be found that the stiffer beam is more accurate experimentally, while the more flexible beam exaggerates the deflected shape and is visually instructive.

Each clamp can be positioned anywhere along the working length of the beam, and can be quickly and easily removed and re-positioned. A set of calibrated test weights and load hangers creates the loads. Three load hangers supplied ensure a variety of loads can be applied to the Deflections of Beams. Each hanger is attached to the beam via beam clamps.

Technical Specification :

Experimental Capabilities:

Study the way the constant c is affected by the type and position of the load

The principle of superposition

To compare the measured and theoretical values

Study of the general formula for beam deflections in bending in the form $y = c \cdot WL^3 / EI$

Verification of the effect of changing the length and thickness of beams

Specifications:

Test beams in steel

Text book provided covering essential topics
Must be used with universal Frame and Stand
Three (3) hangers provided
Beam length 1200mm; cross section 25mm wide x 3mm and 5mm thick
Comprehensive instruction manual provided
Dial Gauge 012.7mm travel, 0.01mm resolution
Set of slotted and calibrated test weights provided.



Laboratory Instrument India