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**Product Name :**  
Deflection of Frame

**Product Code :**  
LBNY-0005-13900043



#### **Description :**

Horizontal reactions are monitored using the integral load cell within the track plate and its output fed into the Interface Deflection of Frame and sway is measured using the dial gauges supplied.  
A 'rectangular' Portal frame and an 'S' frame made from rectangular solid steel section are provided with a range of fixed or pinned ends and simple supports to enable each frame to be set up in the Universal Frame and Stand and loaded horizontally and vertically.  
Load hangers, calibrated weights, cords and pulleys are provided to apply vertical and/or horizontal loading to the frames. One end of the portal frame pivots on a knife edge, while the other end is free to move horizontally on a track plate against a load cell.

#### **Experimental Capabilities:**

Study the load, horizontal reactions, deflections, sway in portal frames  
Comparison of experimental results with theoretical values derived using Castigliano's theorem and numerical analysis by Simpson's rule.

#### **Technical Specification :**

Uses Castigliano's theorem with numerical analysis by Simpson's rule  
Study of load, horizontal reactions, sway  
Two test frames supplied as standard  
A variety of end conditions provided  
Load cells and dial gauges supplied  
Vertical and horizontal deflection measurement  
Support reactions, horizontal forces, and portal sway (deflection) must be captured on Interface Text book and

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accessories included  
Set of weights included  
Comprehensive instruction manual provided  
Must be used with universal Frame and Stand  
Must be used with Interface.



**Laboratory Instrument India**