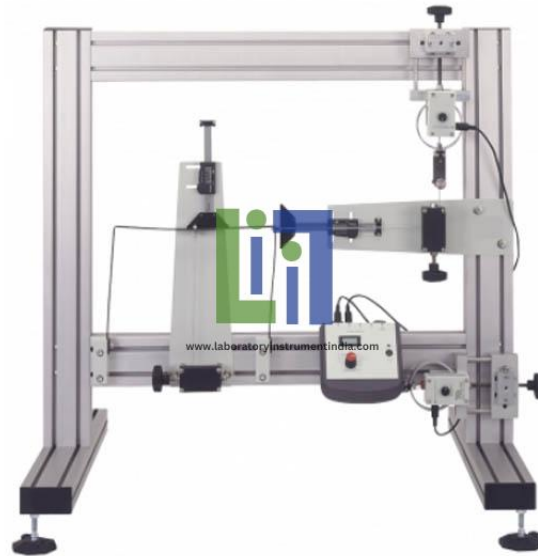




Email : sales@laboratoryinstrumentindia.com

**Product Name :**  
Plastic Bending of Portals

**Product Code :**  
LBNY-0005-13900045



#### **Description :**

A proportioning bar is held horizontally by loading chains that run to the Plastic Bending of Portals and to the screwjack loading mechanism (with integral load cell). Two portal frames (pitched and rectangular) are mounted within two ground supports, in either a pinned or fixed condition. Depending on the position of the loading mechanism on the proportioning bar depends on the extent of the load being applied either horizontally or vertically.

#### **Experimental Capabilities:**

Determines the increase in collapse load as the degree of redundancy increases  
Verifies that hinges occur at positions of greatest bending moment  
Studies the change in the collapse mechanism as the ratio of horizontal to vertical load is varied.

#### **Technical Specification :**

The apparatus consists of the test portals, two ground foundations, loading pulley, loading cords, proportioning beam, screw jack loading mechanism and deflection measuring instruments  
Studies the collapse mechanism of a portal frame when subjected to simultaneous horizontal and vertical loading; calculating and verifying position of greatest bending moment where plastic hinge is likely to form  
Screw jack mechanism with integral load cell with output to Interface  
Comprehensive technical manual for student and lecturer and text book provided  
The ground foundations provide for pinned or fixed supports.  
Two different shaped portal frames supplied, both typically made from 13x3mm black mild steel and with a span of 300mm  
Rectangular portal frames

---

Symmetrical gable (Pitched) portal frame  
Comprehensive instruction manual provided  
Must be used with universal Frame and Stand  
Must be used with Interface.



**Laboratory Instrument India**