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**Product Name:**Redundant Truss

Product Code: LBNY-0005-13900033



### **Description:**

Load is applied to the truss by a screw jack mechanism with integral load cell. An extra diagonal member with its length adjustable by a simple mechanism is provided to make the first bay of the Redundant Truss. Each Redundant Truss member incorporates a strain gauge bridge arrangement for direct measurement of strain. The 45° two bay truss consists of seven members with pinned joints cantilevered from the vertical member of the Universal Frame and Stand using an upper springing and supported by a roller bearing on a vertical track at the lower springing.

#### **Technical Specification:**

## **Experimental Capabilities:**

Study of deflection of a truss with and without redundancy

Study of strains, forces and deflections in a determinate and indeterminate framework

Comparison of experimental forces with theoretical values

View and record the effect of lack of fit of the redundant member into the truss

To measure the strain and deflection in the individual members of a truly pin jointed truss when a redundant member is added.

#### Specifications:

Vertical and horizontal members 400mm centres

Strain gauge technology used on each truss member

Deflection measured using digital deflection indicator with connecting lead

Comprehensive instruction manual provided.

To include an extra (redundant) member with a simple means of adjusting its length into the Redundant Truss

Loaded by an accurate screwjack mechanism with integral load cell
Must be used with universal Frame and Stand
Must be used with Interface
To be constructed of a 45° two bay cantilevered Redundant Truss with seven members and pinned joints.



# **Laboratory Instrument India**