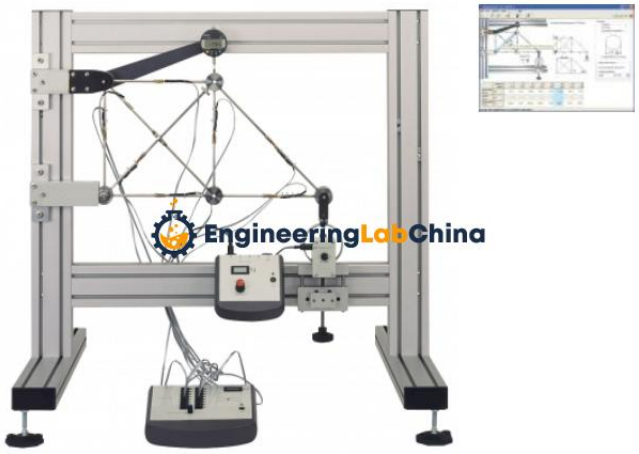
Product Name : Redundant Joint Truss Apparatus	**Product Code :** CHINAELABC2700005



Description :

Redundant Joint Truss Apparatus

Technical Specification :

An experimental apparatus to investigate the principles of redundancy and aspects of safety critical structures using determinate and indeterminate framed structures.
The experiment hardware fitted a Structures Test Frame.
Two supports hold the top and base of one side of a structure.
The top support allows pivoting, the base support allows pivoting and rolling.
Initially, one of the members is missing from the structure, making it determinate.
To make the structure indeterminate, students refit the missing member.
Students manually apply a load to one end of the determinate framework using a screw thread and electronic load cell.
Students use the strains to help them calculate the forces in the structure.
A digital deflection indicator measures displacement in the structure.
Students note applied load, strains and deflection in a determinate framework.
The load cell connects to a Digital Force Display, which shows the applied load.
Each member of the structure has strain gauges attached.
These each connects to a digital strain bridge, which shows the member strains.
They then repeat the experiment with the frame made indeterminate, and analyses and compare their results.
The Operation Manual provides details of the equipment including sample experiment results.
The Operation Manual describes how to use the equipment and gives experiment procedures.

Key features:
High-quality structures training module for students of mechanical, civil and structural engineering

Allows safe and practical experiments into determinate and indeterminate structures
Realistic and verifiable experiment results
Optional Structures Software package for extra, ‘virtual’ experiments, that simulate and confirm the results from your hardware and allow extended experiments
Optional unit with Structures Software package for automatic data acquisition and virtual experiments.

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