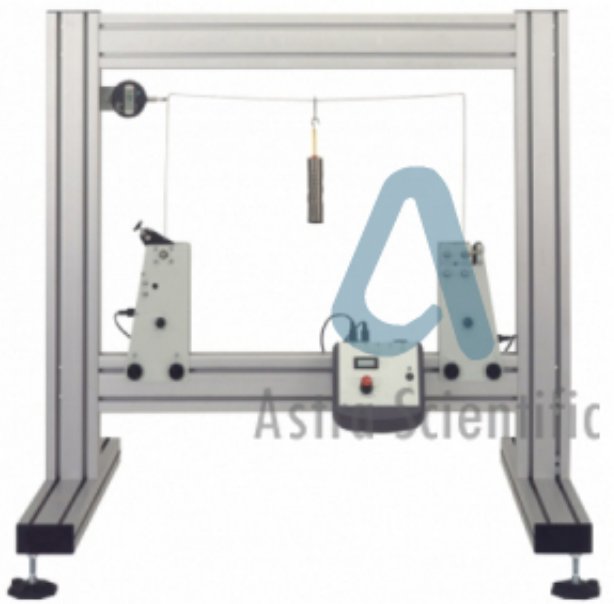
Phone: +91-8860605265
Email : info@astrascientific.com

Product Name : Deflection of Truss Apparatus with Data Acquisition	**Product Code :** ASTSTUCTURAL-0005



Description :

Deflection of Truss Apparatus with Data Acquisition

Technical Specification :

Description:
An experimental apparatus to allow students to investigate the reactions and deflections of a loaded rectangular portal.

The experiment hardware fitted a Structures Test Frame. The hardware includes two rectangular portal frames with the same dimensions. However, one of the frames has a constant second moment of area, while the other has one leg with a smaller second moment of area.

Load the top of the portal frame using masses on a hanger. Load cells on the supports connect to a Digital Force Display. These measure the moment at one end of the portal frame and the horizontal reaction at the other. A digital deflection indicator measures sway at the top of the portal frame.

Use the results of moments and reactions to plot bending moment

diagrams. They compare the bending moment diagrams, the direction of sway (and its causes) to theoretical calculations. They then repeat the experiment using the other portal frame.

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.

For extra ‘virtual’ experiments, supply the optional Structures Software, for use on a suitable computer. The virtual experiments simulate the tests you can perform with the hardware. They also extend the choice of tests beyond that available using only the hardware, for example: higher loads, uniform loads or different test specimens. This extends the student’s learning experience.

For automatic data acquisition of your experiment results, supply the optional Automatic Data Unit Supplied as standard with the Structures Software that displays and logs your experiment results and gives the extra virtual experiments.

Key features:

- High-quality structures Training module for students of mechanical, civil and structural engineering
- Allows safe and practical experiments into frame deflections and reactions
- 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
- One of many interchangeable experiment modules, flexible and cost effective structures Training system

Astra Scientific

www.astrascientific.com, **Email:** info@astrascientific.com

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265