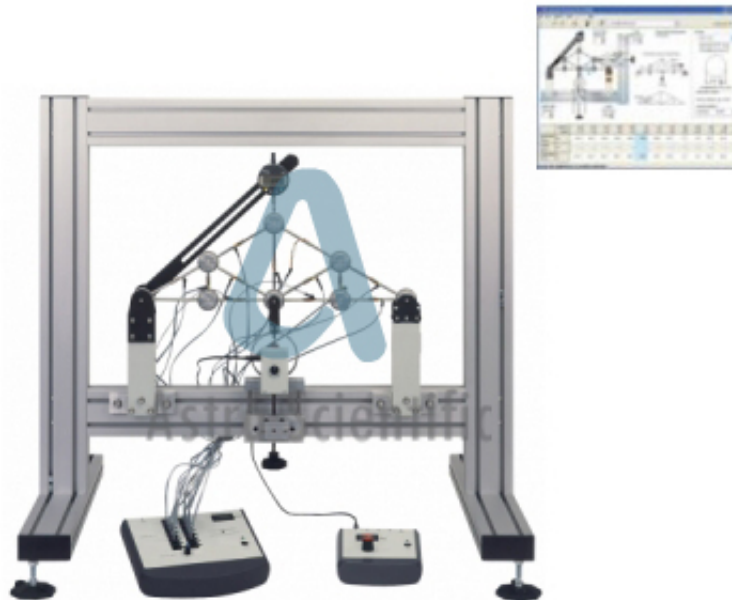


**Product Name :**  
Astra Scientific Pin Join Truss Apparatus Data Acquisition

**Product Code :**  
ASTSTRUCTURAL-0007



**Description :**

Astra Scientific Pin Join Truss Apparatus Data Acquisition

**Technical Specification :**

**Description:**

An experimental apparatus to create a wide selection of pin-jointed frameworks and then investigate the effects resulting from applying loading forces to them.

The experiment hardware fitted a Structures Test Frame. Students use stainless-steel members to build different pin-jointed frameworks. The members join by slotting the ends into bosses.

The equipment includes two framework supports: a pivoting support, and a pivoting and rolling support. Each member has a strain gauge attached that connects to a digital strain bridge. A load cell applies loads to the structure at various angles. When connected to the optional Digital Force Display, the load cell measures the applied load. To

apply loads simultaneously, extra load cells are available.

A digital deflection indicator measures the deflection and the digital strain bridge shows the strains in the members. From this, students can calculate the forces in the members.

supplies the members in a custom-made storage tray to avoid accidental damage. A second tray stores the joint bosses and other loose items.

Included is a lead to connect the load cell to a Digital Force Display. The Operation Manual 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, can supply the optional Automatic Data Acquisition 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 pin-jointed frameworks
- Realistic and verifiable experiments 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.



## Astra Scientific

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