

Product Name :
Astra Scientific Shear Force in a Beam Apparatus

Product Code :
ASTSTRUCTURAL-0010



Description :

Astra Scientific Shear Force in a Beam Apparatus

Technical Specification :

Description:

A simply supported beam apparatus to demonstrate and investigate the bending moments and forces within a structure.

The experiment hardware is a simply supported beam 'cut' by a pivot. The beam fixes to the Structures Test Frame. Students apply loads at set positions using hangers holding various masses. To stop the beam collapsing, a moment arm bridges the cut onto a load cell thus reacting (and measuring) the bending moment force. A Digital Force Display displays forces during experiments.

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 Acquisition Unit. Supplied as standard with the Structures Software, which 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 bending moments in a beam
- 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 experiment.



Astra Scientific

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

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