

FORCES in a TRUSS (Resolution)

HST17



Year 1
study

Features

- True pin jointed structure.
- Load can be applied at three joints
- No disassembly required.
- All truss members strain gauged.
- Customer specific members can be installed
- Dedicated e-book supplied

Description

A two bay, 45° cantilevered truss is suspended from the inside vertical edge of the HST1 Universal Frame and Stand (sold separately). At the far end of the truss a screwjack loading mechanism with integral load cell applies the truss loading. Each truss member is joined at its end by means of pins, which make up the true pin jointed assembly. The strain and hence force exerted in each member is measured using strain gauge technology applied to each truss member. The outputs from the member strain gauges and screw jack load cell are fed directly into the HDA200 Interface (sold separately).

Related Laws/Applications

- Statically Determinate.
- Resolution of Joints.
- Stress.
- Strain.
- Area.
- Modulus of Elasticity.

Learning capabilities

- Calculate member forces by resolution of joints
- Measure strains exerted on each truss member
- To view compressive and tensile forces/strains

Technical Specification

- Vertical and Horizontal Members: 400mm centres
- Acrylic Truss Members: 25(H) x 10(W) mm
- Loading Mechanism: 0...500N
- Half Bridge Strain Gauging

Essential Ancillaries

- HST1 (or HST100)
- HDA200

What's in the Box?

- 1 x Assembled Truss
- 1 x Loading Mechanism
- 2 x Bracket Assembly
- Hex wrench
- Accessories container
- Instruction manual
- E-book
- Packing list
- Test sheet

You might also like

- HST16
- HST19

Weights & Dimensions

- Weight: 4 kg
- Length: 1000mm
- Width: 470mm
- Height: 100mm

Essential Services

- 110/120V, 60Hz or 220/240V, 50Hz, single phase, live neutral and earth for HDA200

Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non condensing

Ordering information

To order this product, please call PA Hilton quoting the following code:
HST17

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS