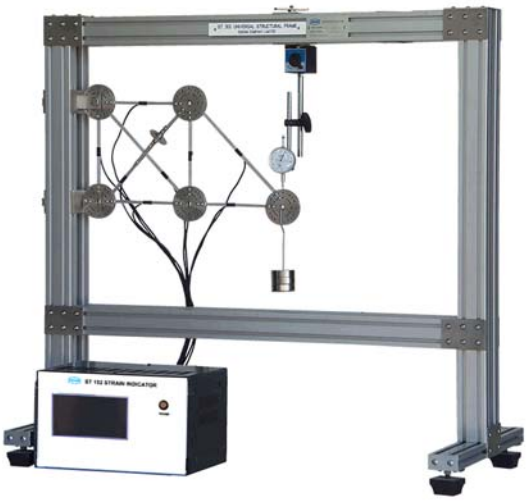
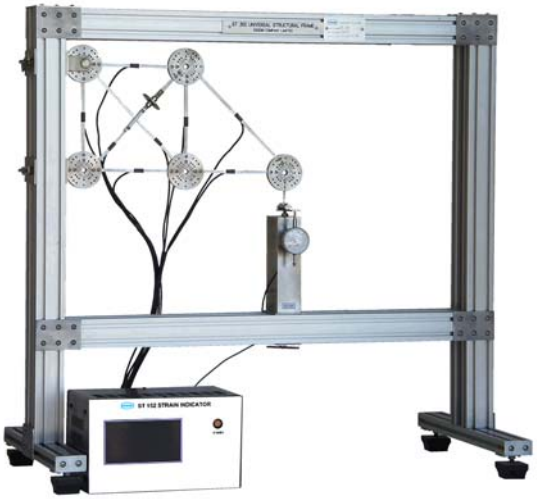
STRUCTURAL MODELS

Equipment for experiments on STRUCTURES consists of two main parts, accessories for specific experiment and a frame for attachment of the accessories. Many accessories common for various experiment.

ST 341 REDUNDANT TRUSS





Photograph includes optional equipment

GENERAL DESCRIPTION:

The equipment allows measurement of deflections and axial forces in pin-jointed truss members when a redundant member is added. It is to be used with ST300 Universal Structural Frame (separately supplied).

A wall mounted truss frame has a pinned upper joint and the lower joint a roller bearing on a support. There are 7 truss members and an extra member with an adjustable length. Load is applied by a load hanger and weights. Deflection is measured by a dial indicator. Each truss member has a strain gauge which is wired to form a full bridge with temperature compensation and zero adjustment in the strain indicator.

Instruction manual is also included.

EXPERIMENT CAPABILITIES:

- Study of strains, stresses, forces and deflections in a statically determinate and indeterminate structure
- Force analysis by Method of Joints
- Force analysis by the use of the strain energy method.

TECHNICAL DATA:

- Member approximate cross-section : 30 mm^2
- Members with strain gauge bridge : 8
- ST 131 Dial Indicator : 1
- ST 341-001 Force/Strain Indicator : 1
- Load hanger : 1
- Weights : 1 lot.
- Software for data display and analysis by computer (separately supplied).
- Power supply : 220 V, 1 Ph, 50Hz. or as required

OPTIONAL EQUIPMENT:

- ST341-055 Computer assist
  ST 125 Vertical Force Load Cell with dial indicator and ST150 Force Indicator with digital output instead of Load hanger with weights and ST131 Dial Indicator
- Other optional equipment, please contact manufacturer (essom@essom.com)

Net (unassembled) Shipping Dimensions WxLxH : 75 x 80 x 20 cm
Net Weight : Approx. 16 kg