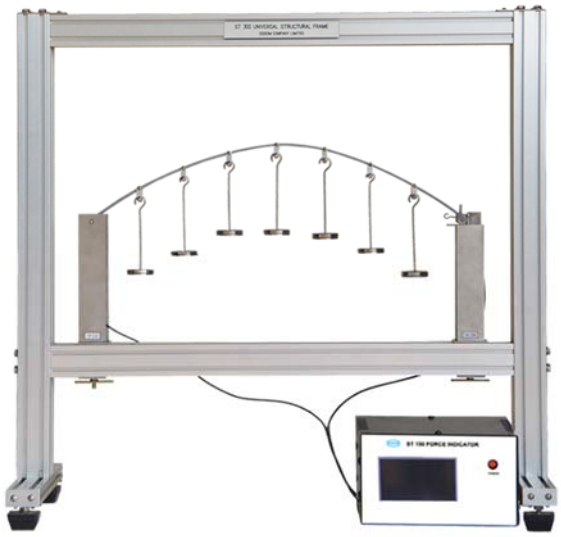
STRUCTURAL MODELS

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 332 TWO HINGED PARABOLIC ARCH, Fixed End



Photograph includes optional equipment

GENERAL DESCRIPTION:

This equipment is used for measurement of horizontal thrust and end fixing moments of the abutment for comparison with model analysis and simplified theory. It is to be used with ST300 Universal Structural Frame (separately supplied).

A parabolic arch has one end pivoted on a moment support and fitted with an arm for applying and measuring moments and rotations. The other end is pivoted in ball bearings on a horizontal force support. Load hangers and weights are attached to the arch. Load hangers are used for measurement of horizontal thrust and fixing moment.

Instruction manual is also included.

EXPERIMENT CAPABILITIES:

- Demonstration of the characteristics of a fixed arch
- Examination of the relationship between applied loads, horizontal thrust and fixing moment
- Comparison of behavior to simplified theory

TECHNICAL DATA:

- Arch
  - Mild steel : 19 x 4.5 (approx.) mm. section
    : 600 mm span, 100 mm rise
- Loading points : 7 equally spaced
- ST115 Moment Support : 1
- ST119 Horizontal Force Support : 1
- ST131 Dial Indicators : 2
- Load hangers : 7
- Weights : 1 lot
- Software for data display and analysis by computer (separately supplied).

OPTIONAL EQUIPMENT:

- ST332-055 Computer assist
  ST116 Moment Load Cell, ST120 Horizontal Force Load Cell and ST150 Force Indicator with digital output instead of ST115 Moment Support and ST119 Horizontal Force Support
- Other optional equipment, please contact manufacturer (essom@essom.com)

Net (unassembled) Shipping Dimensions WxLxH : 25 x 90 x 20 cm
Net Weight : Approx. 21 kg