

# Forces in a Howe Truss Apparatus

# (EDC-SM-120)

## **EXPERIMENTAL DATA:**

- Amount of the bar forces in a single plane truss: Howe type
- Compulsion of bar forces on the external force.
- Comparison of measuring results with mathematical and graphical methods:
  - Method of joints.
  - Ritter's method of sections.
  - Cremona diagram.



#### **DESCRIPTION:**

A Howe truss is a truss bridge consisting of chords, verticals, and diagonals whose vertical members are in tension and whose diagonal members are in compression. Apparatus consists of a frame of aluminum with howe truss structure. A digital display for measurement.

Optional Software is available for Data Acquisition and Control Function.

## **SPECIFICATIONS:**

- Assembled howe truss.
- Aluminium frame.
- 2 vertical and 2 horizontal supports.
- Digital LCD display for measurement.
- Manual load applied.
- Low friction knife edge bearing.

## **TECHNICAL DATA:**

- Angle between bars:
  - o 30, 45.
  - Node disks:
    - No. 8.
- 13 bars with 7 measuring points.
- Bars length:
  - o 115.5mm.
  - o 200mm.
  - o 231mm.
- 230V, 50Hz, 1 phase.



- L x W x H (mm): 1250 X 650 X 300 approx.
- Weight: 42 kg approx.

# **SCOPE OF DELIVERY:**

- 1 x EDC-SM-120.
- 1 x Instructional Manual.

