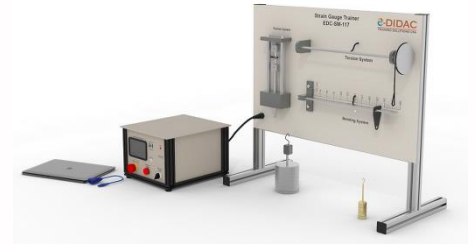


## Strain Gauge Trainer Apparatus (EDC-SM-117)

### EXPERIMENTAL DATA:

- Strains and stresses in a bending system.
- Strains and stresses in a torsion system.
- Strains and stresses in a tension system, Poisson's ratio and young's modulus.
- Comparison of different strain measurement systems and how they could measure force.



### DESCRIPTION:

The apparatus can be fits on a bench. It contains three types of strains, bending, torsion and tension. Student familiarizes with these strains effect on the specimen provided with the apparatus. LCD displays the value of strain of three type of systems.

Optional Software is available for Data Acquisition and Control Function.

### SPECIFICATIONS:

- Masses:
  - 10g – 500g.
  - 0.5kg – 10kg.
- Bending system:
  - Beam: 5 mm x 20 mm.
- Torsional System:
  - Bar dia.: 10mm.
- Tension system:
  - Specimen: 2mm X 10mm.

### DIMENSIONS AND WEIGHT:

- L x W x H (mm): 600 X 750 X 600 approx.
- Weight: 40 kg approx.

### SCOPE OF DELIVERY:

- 1 x EDC-SM-117.
- 1 x Instructional Manual.

### TECHNICAL DATA:

- Bending system: Four standard gauges fitted to a given datum on a steel beam, fixed as a cantilever. Nominal beam cross-section is 5 mm x 20 mm.
- Torsion system: Two sets of identical 45-degree shear/ torque strain gauge rosettes fitted to a torsion bar. Nominal bar diameter is 10 mm.
- Tension system: Two sets of identical 90-degree 'Tee' strain gauge rosettes fitted to a tensile test specimen. Steel specimen supplied as standard. Nominal tension specimen cross-section is 2 mm x 10 mm.

