

Fatigue Testing Machine Apparatus (EDC-SM-119)

EXPERIMENTAL DATA:

- Wohler diagram.
- Fatigue strength of bars under opposite bending stress.
- Effect of different fillet radii and surface qualities on the fatigue strength.



DESCRIPTION:

The trainer demonstrates the basic principles of fatigue strength testing and the creation of a Wohler diagram. The clean layout and simple process mean the investigational sequence can be observed in all details and phases. In the experiment, a cantilever-mounted and rotating cylindrical specimen is imperiled to a single force. The load on the specimen links to a cantilever bending beam. The specimen is endangered to a pure reverse bending stress and breaks after a certain number of load cycles because of material fatigue.

Optional Software is available for Data Acquisition and Control Function.

SPECIFICATIONS:

- Driven by an electric motor.
- Automatically shuts down when the specimen break.
- Loading Mechanism with LCD display.
- Steel cylindrical specimens, various fillet radii.
- LCD Display for Counter and RPM.
- Protective cover.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 900 X 450 X 700 approx.
- Weight: 35 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-SM-119.
- 1 x Instructional Manual.

TECHNICAL DATA:

- Electric motor:
 - speed: 2800 RPM.
 - power: 0.37kW.
- Load force:
 - 0...250N.
- Specimens:
 - material: steel.
 - 3 different fillet radii.
- 230V, 50Hz, 1 phase.

