



CREEP TESTING MACHINE HSM34



Year 1
study

Features

- Bench top unit
- Balanced loading arm
- 0 – 25mm dial gauge for specimen extension
- Specimen enclosure for temperature control and safety
- Plastic specimens supplied
- Hanger and weights supplied
- Additional specimen available
- Customer specific specimens can be fitted easily

Description

A sturdy bench top mounted unit for studying the affect of creep on different material test specimens. Necked test specimens are held vertically in position on special clamps, which do not induce bending during loading. A lever arm transmits the load from a Load hanger and weights into the specimen and the lever arm has a counter balance weight to ensure the lever arm self weight is calibrated out. Surrounding the test specimen is a transparent specimen guard. Its primary function is to allow the surrounding specimen temperature to be adjusted hot or cold. The temperature can be read using the thermometer supplied and the temperature controlled using a special thermal pack. The specimen cover also allows easy viewing of the specimen during creep. A dial gauge measures the extension of the specimen during testing. Specimens in polypropylene are supplied as standard. Specimens in nylon and PVC are also available as optional sets. A full technical Instruction manual is supplied, which details full unit operation, experimental technique, example results and relevant theory.

Related Laws/Applications

- Creep
- Failure
- Tensile testing
- Duration
- Temperature effect
- Elastic strain
- Primary, secondary, tertiary periods
- Material composition

Learning capabilities

- Creep fracture load
- Temperature affect on creep rate and failure
- Material variation on creep rate and failure
- Load variation on creep rate and failure

Technical Specification

- Loading arm: 4 : 1 loading ratio
- Polypropylene specimens (10 each)
- Specimen: 22mm gauge length, 4.8(W) x 1.6(t) mm nominal
- Load hanger: 1N
- Dial gauge, 0.01mm resolution, 25mm travel
- Thermometer
- Transparent specimen cover
- Hot and cold packs

Recommended Ancillaries

- HSM34N
- HSM34P
- HSM34Py

What's in the Box?

- 1 x HSM34
- 10 x Specimen
- 1 x Load hanger
- 1 x Hex wrench set
- 1 x Cold/Hot pack
- 1 x Miniature ice pack
- 1 x Thermometer
- 2 x 0.1N; 4 x 0.2N; 3 x 1N; 3 x 2N; 2 x 5N
- Instruction manual
- Packing list
- Test sheet

Weights & Dimensions

- Weight: 15 kg
- Length: 700mm
- Width: 360mm
- Height: 520mm

Essential Services

- Sturdy Bench top

Ordering information

To order this product, please call PA Hilton quoting the following code: HSM34

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS