



MODEL TO-331

Flexural Testing Machine



These machines are designed to test the flexural strength of concrete beams. Their design provides maximum rigidity throughout their working range as the downward movement of the piston applies load. A spacer is provided for testing different size of beams and load is indicated on a digital indicator. For the 150 x 150 x 700 beams, the support span is 600mm and the loading span is 200mm; for the 100 x 100 x 500 beams, the support span is 400mm and the loading span is 133mm.

One of the key considerations when using concrete in construction projects is how well the concrete is going to stand up to bending pressures and how often it needs to be supported. In concrete the most effective way to study the destructive testing is the Flexural Test. On specimen beams ideally of 150 x 150 x 750mm and/or 100 x 100 x 500mm, the maximum tensile stress reach at the bottom of the test beam is considered as the Flexural Strength/ Modulus of Rupture of the material.

Key features

- Lightweight, rugged high strength frame
- Two types of system available, one with a manual pump, the other with a motorized pump.
- Double action hydraulic pump used on manual system.
- Self-aligning four point loading roller assembly.
- Maximum capacity of either frame is 100 kN (22,000lbf).
- For testing beams of 100 x 100 x 500mm and 150 x 150 x 700mm.

Applicable standards

- BS 1881, ASTM C 78-02, BS EN 12390-5:2000

ORDERING INFORMATION

- **TO-33101-ASTM** Flexure Testing Frame 100kN machine no pump for use with CTMs using two-way valve
- **TO-33101-BS** Flexure Testing Frame 100kN machine no pump for use with CTMs using two-way valve
- **TO-331-ASTM** Flexure Testing Manual Machine ECO, for 10 x 10 x 50cm and 15 x 15 x 70cm beams
- **TO-331-BS** Flexure Testing Manual Machine ECO, for 10 x 10 x 50cm and 15 x 15 x 70cm beams
- **TO-332-ASTM-01** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 110V, 60Hz
- **TO-332-ASTM-02** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 220V, 60Hz
- **TO-332-ASTM-03** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 220V, 50Hz
- **TO-332-BS-01** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 110V, 60Hz
- **TO-332-BS-02** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 220V, 60Hz
- **TO-332-BS-03** Flexure Testing Machine, 100kN, for 10 x 10 x 50cm and 15 x 15 x 70cm beams DG EDI, 220V, 50Hz