

Product Name :
Flexure Testing Machine Digital

Product Code :
ASTConcrete-0002



Description :

Flexure Testing Machine Digital

Technical Specification :

Automatic range of 100 kN and 200 kN capacity flexure testing machines have been designed to meet the need for reliable and consistent testing of flexural test on standard concrete beams, transverse test on kerbs and flagstones, indirect tensile tests on concrete and interlocking pavers. All Test International machines feature the complete automatic test cycle with a closed loop digital readout. Once the specimen parameter have been introduced, it is sufficient to press the START button to complete the test.

The key characteristics of the flexural test machines are:

- Automatic test cycle with standard Rapid Approach
- Graphical - LCD Data Acquisition and Control System
- Menu Driven Software for easy operation
- Load vs time plot and instantaneous load rate displayed
- Accurate load rate control within ± 5 from 1 kN/sec to 20 kN /sec

- Class 1 starting from % 10 of the full range
- Ready Stress Calculation for the standards of EN 12390-5 , EN 12390-6, EN 1338 ,EN 1340, ASTM C78, C293, C496
- SI, Metric, Imperial Units
- Data storage up to 256 tests

Frame The versatile load frame is designed for minimum deflection at maximum load resulting in very high accuracy. The load frame is welded steel fabrication carrying the ram fitted to the upper crosshead. All frames have a single acting down-stroking ram with over travel switch protection to shut the machine down should maximum ram travel be reached. The return of the ram is done by dead weight to get maximum accuracy on the load measurement. The load cell is used for load measurements. All flexural frames have been designed to accept all the accessories for flexural and transverse tests. Flexural Frames TC4521 model is 100kN capacity and 4621 model is 200kN capacity. Both frames can be connected to any Test International compression machine as a second frame. 2

The main characteristics are:

- Two capacity High stability welded assembly
- 75 and 100 mm piston stroke with safety limit switch
- Piston return by dead weight
- Can accept all required accessories for mentioned standards

Power Pack The dual stage power pack which is controlled by BC 100 is designed to supply required oil to the frames. Very silent power pack can load a specimen between 1 kN/ sec to 20 kN/sec. On the dual stage pump high delivery low pressure pump is used for rapid approach and low delivery high pressure radial piston pump is used for test execution. On all power packs maximum pressure valve is used to avoid machine overloading.

The main characteristics are

- Dual stage pump
- 750 W power
- 25 litre oil capacity
- 60-100 mm/min fast approach speed

Safety Features: All Test International compression machines are fitted with:

- Max pressure valve to avoid machine overloading
- Ram travel switch to prevent excessive piston travel
- Front and rear gates with transparent durable flexi-glass



Astra Scientific

www.astrascientific.com, **Email:** info@astrascientific.com

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265