

Flexure Testing Machine Digital

Make: LabTek

Model: SUN-CT-002

Origin: India

Standards: EN 12390-5 , EN 12390-6, EN 1338 ,EN 1340, ASTM C78, C293, C496

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



Flexure Testing Machine Manual

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Capacity: 100 and 250 kN, 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. It consists of a two pillar load frame with lock nut. The lower platen has two rollers, the distance between which is adjustable. For 150 mm x 150 mm x 700 mm beam, the center distance between the rollers is 600 mm, while it is 400 mm for beams of size 100 mm x 100 mm x 500 mm. The upper platen has also a pair of rollers whose distance is adjustable. It is 200 mm center to center, for 150 mm x 150 mm x 700 mm size beam and 133 mm for 100 mm x 100 mm x 500 mm size beam. Total capacity of the machine is 100 kn. A 200mm dia pressure gauge of 0-100 kn x 0.5 kn least count to indicate load is fixed on the load frame. A hand operated pumping unit attached to the load frame is supplied. Rate of loading is maintained manually while pumping the hydraulic pump with the handle. The versatile load frame is designed for minimum deflection at maximum load resulting in very high accuracy. The load frame on 2 pillar lock nut type fabrication carrying the ram fitted to the lower base. It has 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. All flexural frames have been designed to accept all the accessories for flexural and transverse tests