

Product Name :
Servo Controlled Compression Testing Machine

Product Code :
CHINAELABC2680095



Description :

Flexure Testing Machine - Servo Controlled Compression Testing Machine with Digital readout unit along with Flexure Attachment for Testing of Cement Samples

Technical Specification :

The system is totally servo controlled with the facility of running one unit at a time either compression unit for testing 40mm cubes or flexure unit for testing specimen size 40 x 40x 160mm.

Principle of operation is based on Closed loop Principle.

The Close loop Principle is : –

A signal is generated on the ramp generator. Feed back signal is generated by the system. Both the Signals are processed at a speed of 10kHz in P.I.D. controller.

Resultant Signal is passed on to the Servo Valve keeping the system within + 2% of the Programmed value.

Loading Frame

Load frame is steel welded. It is designed to withstand a few million times of full cycles of loading without any sign of distortion or fatigue. These frames are light in weight. The base carries a fine finished hydraulic ram and the lower platen.

The top plate has a spherical seating to take care of any irregularity of the specimen surface or slight misplacement of the specimen from the central axis. Front cover is made of expanded sheet, which is provided as a protection to the operator while at the same time giving an unobstructive view of the specimen under test. An additional frame is provided by the side of the main unit for testing of samples in flexure as per EN 196 is fixed on the left hand side of the main loading unit.

Power Pack

Power pack is placed by the side of the loading unit and is connected to the main unit through quick-couplings. It is powered by a single phase motor to load the unit to its maximum capacity. It has provision for fast lift and also for the selection between ompression

unit or flexure unit.

Fixture for Testing Small Cubes

Fixture is made as per EN-196, for the testing of small cubes. It has a free moving spring loaded spherical seating. Bottom part of the fixture can accommodate cubes upto 50 mm.

Note:– Only one unit can be used at a time since all the controls are inter-related.

Main Unit

Capacity of the main unit (kN): 500

Max. Ram Travel (mm): 50

Day light clearance (mm): 350

Horizontal Clearance (mm): 300

Size of Platen (mm): 256

Flexure Unit

Capacity of the flexure unit (kN): 5

Maximum travel (mm): 50

Day light clearance (mm): 60



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