

Compressive Strength Tester-Digital

Make: LabTek

Model: SUN-CT-001

Origin: India

Standards: ASTM E447 | EN 772-1 | BS 6073 | UNE 83304 | BS 1610 |

NF P18-411 | UNI 6686 Part 1 and 2 | ASTM C39 | AASHTO T22, IS 516:1959

The digital compression testing machine has been designed to meet the need for a simple, economic and reliable means to test concrete for its compressive strength. The design expressive of simplicity, both of construction and operation, makes the machine easy to use and maintain. The unit is compact, making it useful for site and Laboratory applications. The digital machines are provided with a pace rate controller, to enable maintain a constant of loading.

Compression Testing Machines calibrated with an accuracy of $\pm 1\%$ as per the requirement of 1828(Grade A) These machines are available in 50 kN, 100 kN, 500 kN, 1000 kN, 2000 kN, 3000 kN, & 5000 kN Capacities.

Compression Testing Machines Classification :

Analogue models.

- Digital models.

Features of Compression Testing Machines are :

- Highly stable.
- Self-aligning platen assembly.
- Load Gauges are calibrated in Kn against certified Proving Rings, traceable to MSME / NCCBM.
- Suitable for testing cubes and cylinders of various sizes, Cubes from 50 mm.³ to 300 mm.³ Cylinders from 100 mm. to 300 mm.
- Logged data printing facility through a parallel port Interface available in digital base models.

Pace rate (display only) available in Digital models.

Digital Models:

2000 KN compression testing machine consists of a steel base and cross head welded along side with heavy-duty plates. The hydraulic loading jack is fixed on the base and lower platen rests entrally on the jack. The upper platen is attached to the head plate. The upper platen has got a spherical seating for a self-aligning action. For adjusting the vertical day light spacers are used as per the specimen height requirement. Micro safety switch has been incorporated within digital display unit assembly, which will switch off the motor when load is between 1800-1850 kn to avoid overloading of the loading frame.

Main Specifications:

Pumping Unit with choice of compact power pack attached closely to the loading unit or separate hydraulic pumping unit, attached to the loading unit by high pressure hydraulic flexible hose pipe. The pump facilitates rapid approach of the platens for daylight closure and also provides comprehensive control over the application of load. A control valve provides fine control over the loading rate for accurate pacing. Maximum load is held and retained for approx. 15 min, unless cancelled, using the panel mounted reset switch. Pace rate set for running the test can be maintained manually.

Optional Fittings

Digital Load indicator with RS 232 interface for connection to windows XP based computer system

Digital Load indicator with printer interface

Batteryback up for Digital Load indicator – in case of power failure

Additional Pressure Gauge as `stand by` load indicator for emergency use in case of power failure

Spare Oil seal

Flexural test attachment (to be ordered at the time of purchase of machine.) Can be accommodated later on, only if request received at the time of placement of order

Brick test attachment

Block testing attachment

Spacers to accommodate small size cubes and cylinders

Hydraulic Oil

Ram extracting tool



Model No.		SUN-CT-001A	SUN-CT-001B	SUN-CT-001C
Capacity	kN	1000	2000	3000
Electronic Display		(EO-D)	(EO-D)	(EO-D)
Ram Diameter	mm	165	234	234
Ram Travel	mm	50	50	50
Pressure Gauge Diameter	mm	Nil	Nil	Nil
Pressure Gauge	kN	Nil	Nil	Nil
Least Count	kN	0.1	0.1	0.1
Maximum Pressure	Kg./cm	480	480	720
Platen Diameter	mm	220	300	300
Horizontal Clearance	mm	260	320	350
Vertical Day Light	mm	310	310	310
Height of Load Frame	mm	770	890	990
Weight of Load Frame	Kg.	250	480	720
Lead Screw		No	No	No
Specimen Size (can be tested)				
Cube	mm	50, 70.6, 100, 150	100, 150, 200	100, 150, 200
Cylindrical	mm	100 x 200	100 x 200 150 x 300	100 x 200 150 x 300
Electrical Version				
Motor	H.P.	0.5 230 V. 1Ph 440 V. 3Ph 50 HZ	1.0 230 V. 1Ph 440 V. 3Ph 50 HZ	2.0 440 V. 3Ph 50 HZ
R.P.M		1440	1440	1440
Contactora	V	220	220	220
Height Of Pumping Unit	mm	810	810	810
Weight Of Pumping Unit	Kg.	90	90	100