

DIGITAL COMPRESSION TESTING MACHINE

Stanley Compression Testing Machines have been designed for extreme durability and simplicity of use by any operator at any level for making quality control testing possible .

Compression Testing Machines conform to IS: 14858(2000) and calibrated with an accuracy of $\pm 1\%$ as per the requirement of IS: 1828(Class1). The Stanley CTM are available in capacity options of 1000kN, 2000kN and 3000kN.

The Stanley CTM are available in the following configuration:

- (a). Digital Compression Testing Machine with Manual Pace Rate Control.
- (b). Digital Compression Testing Machine with Automatic Pace Rate Control.

ST 9000 Digital Compression Testing Machine With Manual Pace Rate Control:

ST 9000 CTM Series has been designed for simple and reliable test of concrete for its compressive strength. Machines are provided with digital pace rate indicator. The pace rate can be controlled manually by operator while test is in progress.

Features:

- Self aligning platen with fast accessory change capability.
- Piston, lower platens and upper platens are of hard chrome. Supplied with full set as per available specification of Indian/AASHTO/International Standards.
- Stanley CTM is conforming to IS: 14585 (2000).
- Overload safety protection.
- Safety features such as metal door with a Perspex window.
- Operator can predefine machine capacities. Specific capacity can be selected from the drop down menu.
- Load Indicator displays - Peak Load, Peak Stress and Unique Record No.
- Data logging through RS 232 to computer in real time
- Peak stress calculation based on sample type and shape.
- Easy to operate.
- 2% overload facility to calibrate the machine upto full capacity.
- Multifunction Keyboard.

System Description:

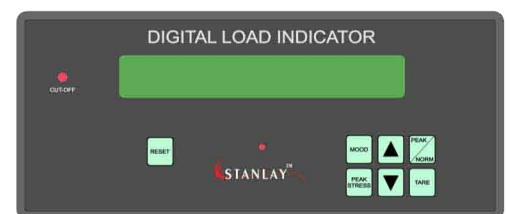
The loading frame has a fully welded construction with a top crosshead, base and solid side walls with the precision ground hydraulic piston fixed to the base. The machine's platens come with a self – aligning action and suitably sized spacers to accommodate a variety of specimen sizes.

The two speed pump allows fast approach of platens, for daylight closure and also allows automatic, precise control over the load application; a pace rate on the display gives operator feedback on the loading rate, peak load and stress.

The Calibration range of the machine is from 10% to 100% of the machine capacity , over which range the accuracy is $\pm 1\%$ of the applied load.

ST 9000 DPRC Digital Compression Testing Machine With Automatic Pace Rate Control:

ST 9000 DPRC Series Micro Controller based Compression Testing Machine is based on an intelligent pace rate controller. This facilitates automatic pace rate control, data logging, data printing , load hold etc. It has a full 3 term PID feedback control which uses a high torque Stepper Motor. It consists of a Loading Unit, an Electrically Operated Hydraulic Pump & an Intelligent Pace Rate Controller. The operation is user friendly with a menu driven interface.



Features:

- Automatic Pace Rate Control at a present value.
- Pace deviation bar graph.
- Automatic stress determination and display.
- Overload safety protection.
- Self aligning platen with fast accessory change capability.
- Operator can predefine machine capacities. Specific capacity can be selected from the drop down menu.
- Direct display of pace rate load & error on controller.
- Peak Load, Peak Stress, Unique Record No. is displayed.
- Conforming to IS: 14858 (2000)
- Menu Driven sample Details. Multifunction Keyboard.
- Data storage 1000 records.
- Data Download through RS 232. Stored records can be viewed & printed.
- 2% overload facility to calibrate the machine upto full capacity.



System Description:

The loading frame has a fully welded construction with a top crosshead, base and solid side walls with a precision ground hydraulic piston fixed to the base. The machine's platens come with a self – aligning action and suitably sized spacers to accommodate a variety of different sizes of specimen.

The **two speed pump** allows the fast approach of the platens, for daylight closure and also allows the automatic, precise control over the load application; a pace rate bar on the display gives operator feedback on the **loading rate**.

The controller incorporates a four line digital display and features the integral load pacing bar display, maximum load and stress result display and a RS 232 output. Results from 1000 completed tests can be stored in the memory and these results can be in English, Metric or SI units. The Calibration range of the machine is from 10% to 100% of the machine capacity , over which range the accuracy is $\pm 1\%$ of the applied load.



Specifications :

SERIES	ST 9000	ST 9000 DPRC
Capacity:	1000kN, 2000kN and 3000kN	1000kN, 2000kN and 3000kN
Dimension:	700mmX330mmX1100mm	700mmX330mmX1100mm
RAM Dia:	165mm, 230mm and 260mm	165mm, 230mm and 260mm
Sizes for Testing:	Cubes 70.6mm, 100mm and 150mm Cylinders 100mm dia.X200mm height, 150mm dia.X300mm height	Cubes 70.6mm, 100mm and 150mm Cylinders 100mm dia.X200mm height, 150mm dia.X300mm height
Stroke Length:	50mm	50mm
Least Count:	1kN	1kN
Max. Clearance between platens:	370mm	370mm
Data Storage:	Nil	1000 Records
Pace Rate control:	Manual	Automatic
Data Download (Real Time):	Via Rs 232	Via Rs 232
LCD Display:	2 line display	4 line display

