



### Compliance Standards : IS:14858 - 2000 and IS 516

Manufactured as per International design, Plate model for highest mechanical stability, accurate centering of load and excellent repeatability. Manual pace rate control, auto stop and manual release on failure of test specimen. Reading of Load in KN and N/mm<sup>2</sup> with auto calculation. with Pace Rate indication. Manual Pace rate Control will have certain limitations. CTM with Automatic Pace rate control is recommended for accurate Pace rate Setting.

### Introduction

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 digital machines are provided with a MANUAL pace rate controller, to enable maintain a constant rate of loading.

### Salient Features

- 2 line Alphanumeric display with backlite, displaying - Actual Load / Peak load, Rate of loading and Calculated load in N/mm<sup>2</sup> (as soon as sample fails)
- Four column high stiffness and high stability fully welded construction of the load frame.
- Direct reading of compressive strength in N/mm<sup>2</sup> -No calculation required.
- Peak hold facility.
- Can manually control pace rate from 1 KN/Sec to 20 KN/sec.
- Pace rate indication in KN/Sec.
- Bar Graph indication to control the pace rate
- Built in memory for last 10 readings
- Automatic internal calibration(without Proving ring)
- Safety cut out for overload and electrical short circuit.
- Safety door on the front side for operator safety.
- Compact Pumping unit with manually variable rate of loading.

Note: Specifications are subject to change.

Technical Specification	
Capacity	1200 kn
Platen size in mm	265 mm dia
Ram Dia in mm	165 mm
Ram Travel in mm	50 mm
Vertical daylight in mm	300 mm
Horizontal daylight in mm	300 mm
Weight approx in kg	-
Platen hardness	More than 550 Vickers hardness
Electric Motor	1 HP, Single Phase
Operation on	220 V AC Single Phase.
Least count	0.1 KN or better
Pace rate control	Manual control from 1 KN/Sec to 20 KN/sec
Pumping	Motorized
Pump Speed	Dual speed
Motor	Induction Motor
Reading	Digital
Accuracy	± 1%
Release valve operation	Required
Auto stop after failure of specimen	Available, machine stops after completion of test Auto Release of Pressure after specimen failure Not Available, Need to release pressure manually after the completion of test
Calculation of result	Automatic
Holding of Max. Load	Available
Pace Rate or Rate of Loading indication	Available
Operator skill to control Pace Rate	Required and very difficult to maintain
Bar Graph	Available
Multi Channel operation	3 channel operation possible, flexural and compression frame can be attached
Load indication and Control	Digital membrane key pad controller
Saving of records	Possible-10 reading
Pen drive slot	Optional, saves reading in excel format, Record date-time, Sr no and Peak load
Real time graph	Not Applicable
Printer interface (Direct connectivity to printer w/o computer)	Available at extra cost
Computer operation software and data Acquisition software	Available at extra cost
Displacement controlled operation	Not Available
Modulus of Elasticity Calculation	Not Available
Flexural attachment	Possible, all calculations will be made automatically
Splitting Tensile Test	Possible but manual calculation required
LAN Connectivity	Not Available
Auto internal Calibration without proving ring	Available
Piston over travel safety cut off	Available at extra cost
Over load safety cut off	Available
Shot circuit protection	Available

Note: Specifications are subject to change.



Order Code - MT012  
Compression Testing Machine - Digital -  
Manual Pace Control - (IS 14858) - 1200 KN

### **Scope of supply**

- High strength rigid structure (Loading Frame)
- Pumping unit (Oil source cabinet)
- Digital Load indicator
- High precision pressure transmitter
- Pair of compression platens
- High pressure hose pipe

### **Salient features of data manager PC software (Optional At Extra Cost.)**

- Two way communication i.e machine operates from computer and from the touch screen controller both (Stat, stop, save data and save graph)
- Results directly saved in excel file
- Graph also saved in excel file
- Capable to save customer name, other details of customer, ageing of cube moulds, identification mark of the cube mould, date and time of testing
- Capable to print direct report from the computer
- Capable to select different test parameters like pace rate, sample size and area from the computer (software)

### **Note :**

Use of 3 KVA three phase servo controlled stabilizer is essential to protect the machine against voltage fluctuations. Warranty voids in case of any damage due to power fluctuation.

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