

Compression Testing Machine

- Cement Testing
- AAC Block Testing
- Aggregate Testing
- Concrete Testing
- Paver Block Testing
- Brick Testing



EIE INSTRUMENTS PVT. LTD.

Compression Testing Machine

EIE Make Compression Testing Machine is available in four different variants

- 1 Digital compression testing machine with manual pace rate controller
- 2 Hand operated compression testing machine
- 3 Electrical operated compression machine
- 4 Fully automatic compression testing machine

The machines are available in following different capacities

1000 KN

2000 KN

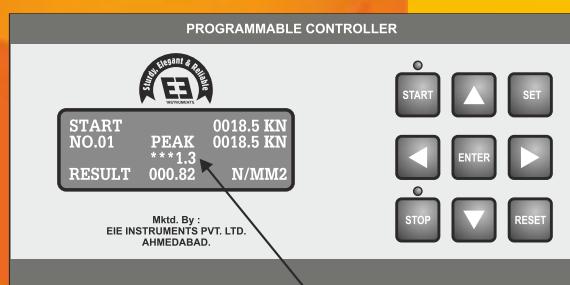
3000 KN

5000 KN

1 Digital compression testing machine with manual pace rate controller



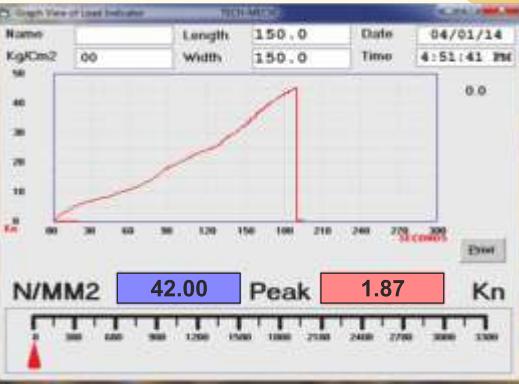
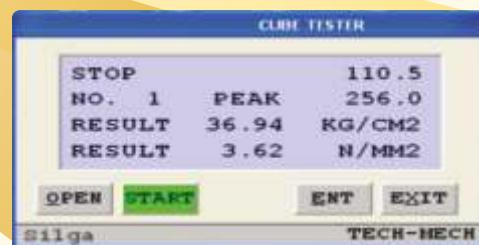
- Model available for 1000/2000/3000/5000 KN capacity
- The pace rate of the machine is manually controllable from 1 KN/sec to 9 KN/sec.
- The load indicator of the machine will show bar graph to control the pace rate of the machine.
- Direct reading of total applied load in KN
- Direct reading of compressive strength in N/mm² - no calculation required
- Peak hold facility
- Back light facility to observe the reading even in the dark
- Automatic internal calibration (without proving ring)
- Overload safety cut out
- Electrical over load trip facility
- Password protected calibration to prevent unauthorized manipulation
- Type of pumping: Electrical
- Least Count: 0.1 KN
- In built memory storage function to save last 10 readings



**Bar graph to control
the pace rate with digital display**



Two way communication to machine i.e. machine can be start, stop and controlled from the computer



◀ Auto generation of load/time graph.

Analytical software in excel formate.

Test Results of Compressive Strength of Cement Concrete Cubes					
Forwarded to :		Name of Client :			
NAME :		Name of Work :			
Report No :		Ref No and Date :			
Date :		Sample Sent by :			
Page :		Name of Agency :			
Date of Sample Received :		Agreement No :			
Condition of Sample on Receipt :		Structure's Name :			
Name of Test :		Type of Sample :			
Test Method Standard :		Compressive Strength of Cement Concrete Cubes			
No. of Sample(s) :		Specification of Sample :			
Grade of Concrete :					
Environmental Condition during test :					
Sr.no	Identity Mark	Size in cm.	Curing condition	Weight of the sample	Date of Testing
1 XYZ	15 X 15				9-2-2014 12:30
2 XYZ	15 X 15				9-2-2014 12:30
3 XYZ	15 X 15				9-2-2014 12:30
4 XYZ	15 X 15				9-2-2014 12:31
5 XYZ	15 X 15				9-2-2014 12:31
6 XYZ	15 X 15				9-2-2014 12:31
7 XYZ	15 X 15				9-2-2014 12:32
8 XYZ	15 X 15				9-2-2014 12:32
9 XYZ	15 X 15				9-2-2014 12:32
Comp. load in KN	Kg/Cm ²	N/mm ²	Ave N/mm ²	Remarks if Any	
100	4.44444444	4.44444444			
110	48.88888889	4.88888889			
108	48	4.71111111			
200	88.88888889	8.88888889			
205	91.11111111	9.11111111			
209	92.88888889	9.28888889	9.0962963		
300	133.33333333	13.33333333			
301	133.77777778	13.37777778			
302	134.22222222	13.42222222	13.37777778		



2 Hand operated compression testing machine

- Low cost model
- Useful for mobile concrete laboratory on wheel
- Stable, easy to use and maintain
- Mainly for the machine with low capacity (1000 KN)

3 Electrically operated compression testing machine



- Electrical pumping
- Clear 8" analogue readout
- Model available for 1000/2000/3000/5000 KN capacity
- Flexural attachment available
- Bricks attachment available
- Over load safety cutoff

Fully Automatic Compression Testing Machine



- Pace rate automatically controllable from 1 KN/sec to 10 KN/sec
- Automatic pace rate controlling with the accuracy of 2%
- Touch screen panel
- Large eye catching display
- Load v/s Time graph generating in indicator directly
- Direct print from the indicator (Optional)
- Automatic internal calibration (Without proving ring)
- Overload safety cut out
- Electrical over load trip facility
- Password protected calibration to prevent unauthorized manipulation
- Type of pumping: Electrical - Servo controlled
- Loading Range: 1000/2000/3000/5000 KN
- Least Count: 0.1 KN
- Software for the same available futures as above
- Flexural attachment available (Single Pumping Unit)
- Modulas of Elasticity attachment available

Frame

- Four column high stiffness welded frame tested for stability.
- Heavy duty spherical seat in lubricating oil bath, allowing initial free alignment at the initial contact with the specimen and automatic jamming up to the end of test.



- Series TM-042-AA fitted with 300 mm dia. platens which are suitable for testing cylinders up to dia. 160 x 320 mm and cubes up to 200 mm. Series TM-042-AB is fitted with 305 x 305 mm platens which are suitable for testing cylinders up to dia. 160 x 320 mm and cubes up to 300 mm
- For both surface hardness is 55 HRC, flatness tolerance 0.03 mm. Traceable certificate of surface hardness available on request.
- Series TM-042-AC is fitted with rectangular platens 310 x 510 mm that are suitable for testing cylinders up to dia. 160 x 320 mm, cubes up to 200 mm and blocks.
- Surface hardness 55 HRC, flatness tolerance 0.05 mm. Traceable certificate of surface hardness available on request.



Fully Automatic Compression Testing Machine

Safety Feature

- Max. pressure valve to avoid machine overloading
- Piston travel limit switch (Extra cost)
- Emergency stop button

Capacity (kn)	500	1000	2000	3000	4000
Platen dim (mm)	Dia 200	Dia 200	Dia 300	Dia 300	300 X 300
Ram Travel (mm)	50	50	50	50	50
Max Vertical Daylight (mm)	230	300	350	350	520
Horizontal Daylight (mm)	230	300	350	370	425
For specimen size:	7.06,10, 10 X 20	7.06,10 15, 10 X 20	7.06,10,15, 20, 10 X20 15 X 30 16 X 32	7.06,10,15, 20, 10 X20 15 X 30 16 X 32	7.06,10,15, 20, 10 X20 15 X 30 16 X 32 25 X 30
Weight Approx (Kg)	450	600	760	1150	2050

Note: Flexural attachment also available at extra cost. Pace rate load will be maintained from the same pumping unit.

Fully Automatic Compression Testing Machine



- Fully automatic test cycle. The complete test cycle is automatically performed by simply pressing the start button. Correct test execution according to selected pace rate, is continuously and automatically controlled.
- Graphical touch screen display.
- Controllable pace rate from 1 KN/Sec to 10 KN/Sec
- Inbuilt graph in the touch screen display.
- Facility to insert different shapes and area in the touch screen controller to see direct readings in N/MM² AND KG/CM².
- Auto stop and release after completion of each test.
- Accuracy Class 1 (EN) and Class A (ASTM) starting from 10% of full scale. On request from 1% with special calibration procedure.
- Double stage hydraulic pump with rapid approach and precise oil flow control. Allowing high through put of accurate tests.
- Soft platen-to-specimen contact and smooth load rate control from the very beginning of the ramp
- Optional internal graphic printer including Load-Time plot
- Allow remote verification of settings and performances. For easy debugging of unexpected malfunctions. Complete IP based controller.
- Recording facility of up to 50 test profiles for each channel allowing quick and easy test start

Mfg. by :



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