

Compression Testing Machine

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

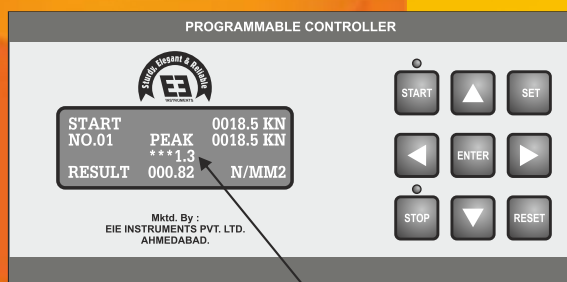
3000 KN

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/mm^2 - 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



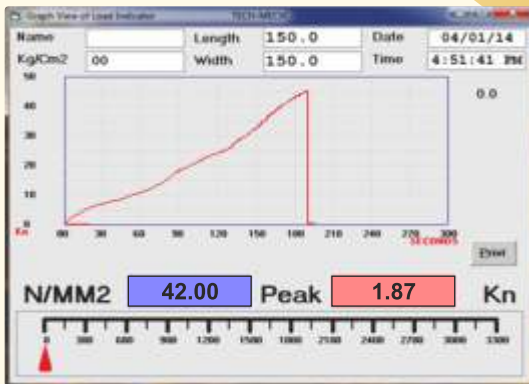
Bar graph to control the pace rate with digital display



**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 :					Compressive Strength of Cement Concrete Cubes				Type of Sample :			
Test Method Standard :					IS-516				No. of Sample(s) :			
Date of Testing :									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	Time of Testing	Age of testing in days	Comp. load in KN	Kg/Cm ² .	N/mm ² .	Ave N/mm2.	Remark s if Any
1	XVZ	15 X 15			9-2-2014	12:30	7	100	44.44444444	4.4444444		
2	XVZ	15 X 15			9-2-2014	12:30	7	110	48.88888889	4.8888889		
3	XVZ	15 X 15			9-2-2014	12:30	7	108	48	4.8	4.7111111	
4	XVZ	15 X 15			9-2-2014	12:31	21	200	88.88888889	8.8888889		
5	XVZ	15 X 15			9-2-2014	12:31	21	205	91.11111111	9.1111111		
6	XVZ	15 X 15			9-2-2014	12:31	21	209	92.88888889	9.2888889	9.0962963	
7	XVZ	15 X 15			9-2-2014	12:32	28	300	133.3333333	13.3333333		
8	XVZ	15 X 15			9-2-2014	12:32	28	301	133.7777778	13.3777778		
9	XVZ	15 X 15			9-2-2014	12:32	28	302	134.2222222	13.4222222	13.3777778	

- RS 232 interface
- Two way communication i.e start and stop from the computer only
- Auto generation and auto save of Excel file
- Auto generation and auto save of time v/s load graph
- Flexural attachment available
- Bricks attachment available

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)
- Modulus 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 :



**Tech-Mech Scientific
Instrument Corporation**

(An ISO 9001:2000 Certified Company)

43, Mahavir Estate, B/h. Anupam Cinema, Khokhra,
Ahmedabad-380 008. • Ph. : 2216 4334, 2216 5580, 2216 3705



Mktd. by :

EIE INSTRUMENTS PVT. LTD.

(An ISO 9001 : 2008 Certified Company)

1001-1002, Span Trade Centre, Opp. Kochrab Ashram,
Paldi, Ahmedabad-380 006. • Ph. : (079) 26211234, 9904301464
Fax : (079) 26584099 • Email : chintan@eieinstruments.com
Website : www.eieinstruments.com