

# Compression Testing Machine

TM-042

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



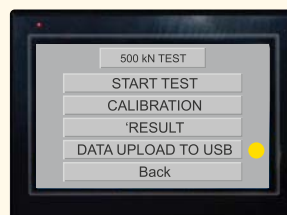
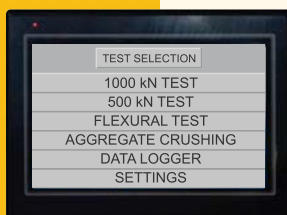
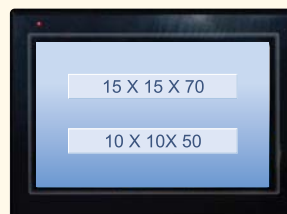
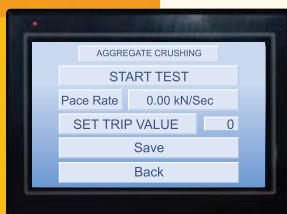
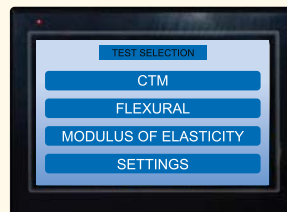
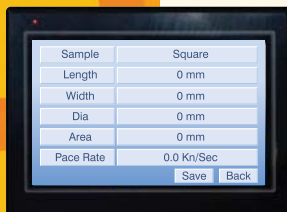
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# Fully Autoamtic Compression Testing Machine Ser

FULLY AUTOMATIC COMPRESSION TESTING MACHINE  
1000KN



- Controller : 7" touch screen controller
- Accuracy : 1% or better
- Controllable pace rate from 0.1 KN/Sec to 10 KN/Sec.
- Pace rate controlling accuracy : 1%
- Servo motor driven machine
- Automatic release valve operation
- Gives live online graph on the 7" touch screen
- User friendly large graphical display
- Displacement controlled machine also available (Optional)
- Saves 100 results in the 7" touch screen
- Inbuilt USB drive to save the data
- The test execution conforming to Standards can be easily proved.
- Working on 240V, 50-60Hz, single phase.
- Dual stage pump assuring fast piston approach and precise test execution
- Password protected calibration
- Auto re-calibration facility (Without proving ring)
- Gives results directly in  $n/mm^2$  and  $kg/cm^2$
- Test execution conforming to EN 12390-4, ASTM C39, AASHTO T22
- Auto stop and auto release after completion of each test.
- Soft platen-to-specimen contact and smooth load rate control from the very beginning of the ramp
- Servo motor driven machine
- Flexural Test Attachment available (optional) (works on the same panel as of CTM)
- CTM Attachment of lower capacity available (optional) (works on the same panel as of CTM)
- Splitting tensile attachment available (optional) (works on the same panel as of CTM)
- Stand mounted model for ease of operation
- Over load safety cut off
- Electrical over load trip facility

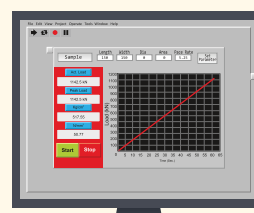
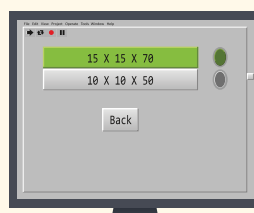
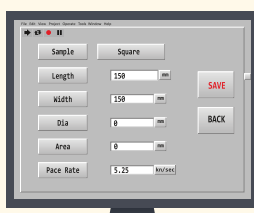
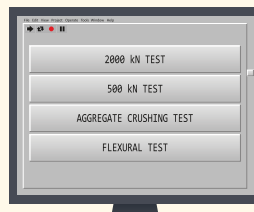
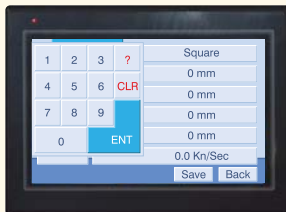
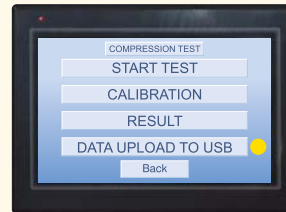


# Auto Controlled (TM-042F.A.)



## Salient features of data manager PC software (Optional)

- Two way communication i.e machine operates from computer and from the touch screen controller both (start, 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)
- Capable to select different type of tests, like flexural, CTM, aggregate crushing etc
- Emergency stop button

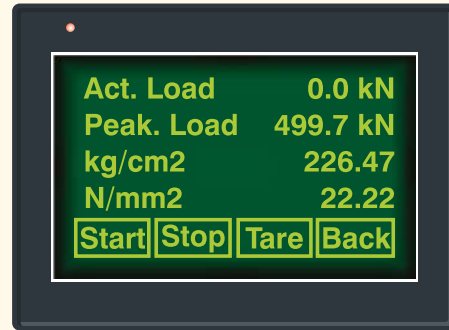
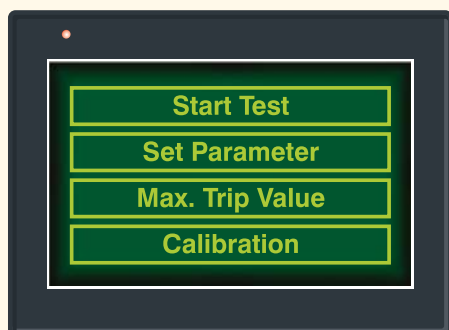


# Fully Autoamtic Compression Testing Machine

(TM-042A.C.)



- Controller : 4" touch screen controller
- Accuracy : 2% or better
- Controllable pace rate from 2 kN/sec to 10 kN/sec.
- Pace rate controlling accuracy : 10%
- Saves 50 results in the 4" touch screen
- Working on 240V, 50-60Hz, single phase.
- Dual stage pump assuring fast piston approach and precise test execution
- Password protected calibration
- Auto re-calibration facility (Without proving ring)
- Gives results directly in n/mm<sup>2</sup> and kg/cm<sup>2</sup>
- Auto stop after completion of each test.
- Soft platen-to-specimen contact and smooth load rate control from the very beginning of the ramp
- Flexural Test Attachment available (optional) (works on the same panel as of CTM)
- Splitting tensile attachment available (optional) (works on the same panel as of CTM)
- 7" touch screen can be upgraded from the 4" touch screen
- Stand mounted model for ease of operation
- Over load safety cut off
- Electrical over load trip facility



# Fully Automatic Compression Testing Machine

## Salient features of data manager PC software (Optional)

- 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).
- Capable to select different type of tests, like flexural, CTM, aggregate crushing etc.
- Emergency stop button load frame data same as of TM-042F.A.



## Frame

- Four column high stiffness welded frame tested for stability.
- Heavy duty spherical seat, allowing initial free alignment at the initial contact with the specimen and automatic jamming up to the end of test.
- Surface hardness of platen is 55 HRC, flatness tolerance 0.03 mm. Traceable certificate of surface hardness available on request.
- Piston travel limit switch (Extra cost)
- Safety door made of GI sheet with acrylic window.

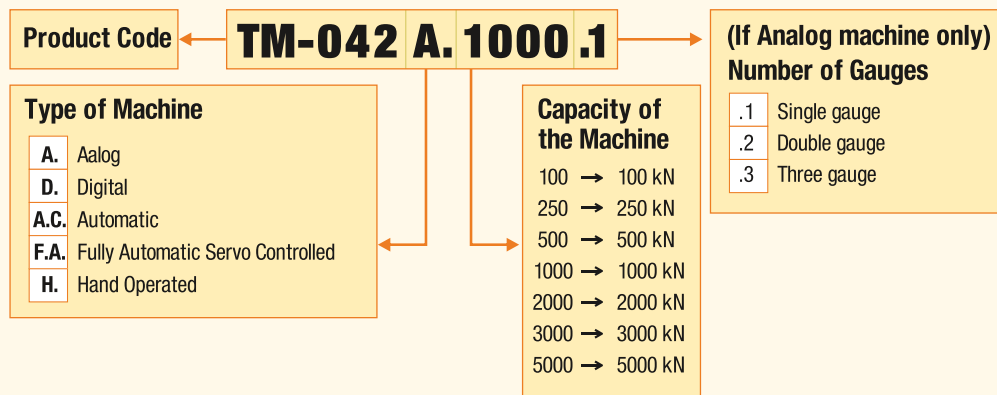
## Physical Data of load frames

Capacity in kN	100	250	500	1000	2000	3000	5000
Platen size in mm	130 dia	150 dia	160 dia	200 dia	300 dia	320 dia	320 X 320
Ram dia in mm	90	90	120	165	205	260	330
Ram travel in mm	50	50	50	50	50	50	50
Vertical daylight in mm	200	200	230	300	350	350	520
Horizontal daylight in mm	170	200	230	300	350	370	425
Weight approx in kg	350	350	450	600	760	1150	2050
Lease count	0.01kN	0.01kN	0.1 kN	0.1 kN	0.1 kN	0.1 kN	0.15 kN



# Fully Automatic Compression Testing Machine

	Comparison between all the above model	Digital (TM-042D)	Automatic (TM-042A.C.)	Servo controlled (TM-042F.A.)
1	Electric requirement	Three phase (single phase option also available)	Single Phase	Single Phase
2	Operation	Induction motor	Induction motor	Servo motor
3	Pace rate	Manual controlling	Automatic controlling	Automatic controlling
4	Pace rate controlling range	1 kN / sec to 9 kN/sec	2 kN / sec to 9 kN/sec	0.1 kN/sec to 10 kN/sec
5	Accuracy of the pace rate	N/A	10%	2%
6	Method to control pace rate	Manual	Microprocessor based	By servo motor by controlling the speed of the pump
7	Auto stop after completion of the test	Yes	Yes	Yes
8	Auto release after completion of the test	No	No	Yes
9	Display	4 line LED display	3.5" touch screen	7" touch screen
10	Saving of the reading	Last 10 readings	Last 20 readings	Last 100 readings
11	Online graph	No	No	Yes
12	Controller	Micro professor based, keypad	Touch screen	Touch screen
13	Software (computer connectivity)	Available at extra cost	Available at extra cost	Available at extra cost
14	USB post	Available at extra cost	Available at extra cost	Inbuilt to save 'n' no of readings.
15	Direct reading in N/mm <sup>2</sup>	Yes	Yes	Yes
16	Flexural attachment	Possible but manual calculation required	Possible but manual calculation required	Possible, all calculations will be made automatically
17	Splitting tensile attachment	Possible but manual calculation required	Possible but manual calculation required	Possible, all calculations will be made automatically
18	Displacement control	Not possible	Not possible	Possible at extra cost
19	Auto re-calibration	Possible	Possible	Possible



Mfg. by :



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