

# Computerised Tensile Testing Machine



These models are suitable for testing metals and iron, Plastics, Rubber, Ceramics, Fabrics , Composites, Cables and wires.

Load is measured through a strain gauge based Load Cell and elongation is through rotary encoder.

Depending upon the customers requirement a suitable type of grips are available. Extra Load cell can be offered suitable for low load samples.

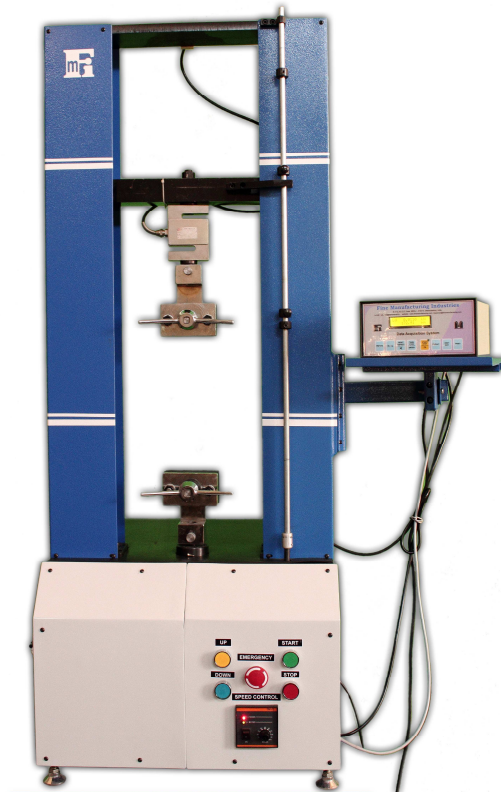
## Technical Specification of Tensile Testing Machine

Max. Capacity	2500N	5000N	10 kN	25kN	50 kN
Measuring range	0-2500N	0-5000N	0-10kN	0-25kN	0-50kN
ranges Least Counts	0.125 N	0.25N	0.5 N	1.25N	2.5N
Elongation Scale L.C.	0.01 mm	0.01mm	0.01 mm	0.01mm	0.01mm
Grip separation without Grip :					
Min	25 mm				25 mm
Max	750 mm				600 mm
variable speed drive stepless variation	5 to 300 mm/min				
H.P. (for standard speed)	1 Hp			2hp	
Supply	3 Phase, 415Volts, 50Hz AC				
Over travel Safety	Provided with each model				

### Software features :

- Menu driven form system with colour graphs to compare sample test results.
- Test details and reports are stored in database
- User programmable master test templates
- User can select test from master test Templates and can start similar test
- Load and Elongation is continuously displayed on screen
- Overload protection for machine by electronic control
- Tare Load and Reset Elongation facility available
- User selectable sample break detect condition
- Load rate and strain rate are also displayed while testing
- Unlimited Load rate and strain rate control steps \*
- With Load rate controller, user can hold the load on specimen for unlimited time \*
- With Load rate control, user can specify positive or negative Rate of Loading \*
- User selectable units for load and displacement (kg, kN,N, lbf, mm, cm, inch etc.) Results and graphs are automatically displayed accordingly.
- On line display of Load and Displacement (Stress, Extension, Strain) etc. while test is conducted
- Provision of auto zeroing of Elongation at preload set by user
- User Programmable Reports. User can select Header, Footer, Specimen information, Dimensions, Test information, Test results, Stastical analysis as per his need.
- Generated reports can be exported to PDF file and can be e-mailed
- If electronic extensometer is used then proof stress values from 0.1% to1%can be determined
- Software will give alert to user to remove extensometer when load crosses .2% of Gauge length selected then proof load value is calculated. (With extensometer)
- Separate graph of extensometer and encoder is displayed
- Provision of calculation of Load and Elongation at yield, Peak load and Load at break, Yield stress, Ultimate stress etc.
- Special software for tensile, compression, bend, TOR steel and other test software as per customer requirements.

# Digital Tensile Testing Machine



## Control Panel features :

- Full fledged sealed membrane alpha numeric keyboard for data entry  
16 x 2 Lines LCD Graphics display with backlit for displaying Load and Elongation of crosshead with bigger font size.
- Load indicated with resolution of 0.01% of machine capacity for entire range.
- Elongation is measured with resolution of 0.01 mm.
- Auto detection of overload and over travel and specimen break. On detection of any condition electrical motor is automatically turned off.
- Tare load and Reset Elongation facility to display Peak Load and Elongation at Peak, Load at break, Elongation at break
- RS232C interface for computer connectivity



## FINE MANUFACTURING INDUSTRIES

B-7/12, M.I.D.C. Area, Miraj- 416 410. (Maharashtra) India.

Phone : +91 233-2644237, 2644238 Fax : +91 233-2644913.

e-mail : [response@finemanufacturing.com](mailto:response@finemanufacturing.com) Web Sit : [www.finemanufacturing.com](http://www.finemanufacturing.com)