# TENSILE TESTING MACHINE COMPUTERIZED

# BTFT(C)-Series

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

Load is measured through as train 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 SPECIFICATIONS:**

| Max. Capacity | 2500N | 5000N | 10kN | 25kN | 50kN |
|---|---|---|---|---|---|
| Measuring range | 0-2500N | 0-5000N | 0-10kN | 0-25kN | 0-50kN |
| Ranges Least Counts | 0.125N | 0.25N | 0.5N | 1.25N | 2.5N |
| Elongation Scale L.C. | 0.01mm | 0.01mm | 0.01mm | 0.01mm | 0.01mm |
| Grip separation without Grip :Min Max | 25mm 750mm | | | 25mm 600mm | |
| Variable speed Drive step less variation | 5to300mm/min | | | | |
| H.P.(for standard speed) | 1Hp | | | 2hp | |
| Supply | 3Phase, 415Volts, 50HzAC | | | | |
| Over travel Safety | Provided with each model | | | | |

**SOFTWARE FEATURES:**

- Menu driven form system with color 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

- Over load 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,Ibf,mm,cm,inchetc.)

- Results and graphs are automatically displayed accordingly.

- Online 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 bee-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 tests software as per customer requirements.