

TENSILE TESTERS

Tensile testers conforming to the following standards i.e. IS BS ASTM, DIN or ISO are now available for :

Automotive

Textile

Food

Packaging

Aero Space & Defence

Wire & cable industries

For Materials like

Wood

Rubber

Plastic

Rexins

Teflon

Cardboard

Ceramics

Composite

Steel

Non Ferrous metals Latex etc.

With special fixture following tests can also be performed :

1. Compressions test
2. Cross breaking /bending test
3. Shearing test
4. Determination of gripping strength of adhesives
5. Determination of liners bonding strengths of adhesives
6. Determination of peeling strength of gummed tape etc.



| Maximum Capacity | Model - TKG | | | | Model - TKG | | Model - Tkg | |
|--|--|---------|---------|----------|--|----------|---|--------|
| | 200 N | 500 N | 1000 N | 2500 N | 5000N | 10kN | 25 kN | 50 kN |
| Measuring Range I | 0-50 N | 0-100 N | 0-200 N | 0-500 N | 5000 N | 10 kN | 0-5 kN | 0-10kN |
| II | 0-100 N | 0-250 N | 0-500 N | 0-1000 N | 0-1000 N | 0-2 kN | 0-10kN | 0-25kN |
| III | 0-200 N | 0-500 N | 0-1000N | 0-2500 N | 0-2500 N | 0-5 kN | 0-25kN | 0-50kN |
| Least Count Range I | 0.1 N | 0.2 N | 0.4 N | 1 N | 2 N | 0.004 kN | 0.01 kN | 0.02kN |
| II | 0.2 N | 0.5 N | 1 N | 2 N | 5 N | 0.01 kN | 0.02kN | 0.05kN |
| III | 0.4 N | 1 N | 2 N | 5 N | 10N | 0.02 kN | 0.05kN | 0.1 kN |
| Elongation Scale | 1 mm | | | | 1 mm | | 1 mm | |
| Least Count | | | | | | | | |
| Grip Separation | | | | | | | | |
| Minimum | | | | | | | | |
| Maximum | 25 mm | | | | 25 mm | | 25mm | |
| | 1000 mm | | | | 750 mm | | 750mm | |
| Traverse Speeds | | | | | | | | |
| Standard Speed | 10 Speeds 50, 100, 150, 200, 225, 250, 300, 400, 450 & 500 mm/min. | | | | 100 mm/min | | | |
| Optional Speeds | | | | | Additional Speed of 50 mm/m | | | |
| | | | | | Additional Speed of 500 mm/m | | | |
| | | | | | Alternate Speed of 1.3 mm/min. | | Alternet speed of 1.3mm /min in place of 25 mm | |
| | | | | | 10 Speeds of 50, 100, 150, 200, 225, 250, 300, 400, 450, & 500 | | 10 spd of 50,100,150,200, 225,250,300,400,450,500 | |
| | | | | | 10 to 100 mm/min. | | 2.5 to 25 mm / min | |
| Optional Variable speed drive stepless variation | 50 to 500 mm/min. | | | | 0.5 | | 0.5 | |
| H. P. (for standard speed) | 0.25/0.5 | | | | 0.5 | | 0.5 | |

Supply
Over travel safely
Load elongation recorder

3 Phase, 400/440 Volts, 50 C/S A. C.
Provided with each model
Provided with each model

- High Accuracy of +11% as per IS : 1828/BS-1610
- Simple Construction and controls for easy operation and maintenance
- Three measuring ranges for accurate, testing.
- Load Elongation Recorder included in standard supply.
- A number of straining t-peeds are available for proper selection
- Wide range of grips to suit variety of materials and shapes.

Provision of adequate safety devices.

All the machines are electrically operated and the electric motor, through belt and gear reduction, , rotates the main nut which causes up and down motion of lower gripping head. The downward motion applies tensile force on the specimen which is measured by the pendulum dynamometer and is indicated on the dial.

It is very important that while ordering the machine due care is taken in selecting proper capacity, traverse speeds, grip separation & grips. Following details should be furnished to ensure that testing of the materials is in conformity with the standards followed.

1)Size, Shape, materials of test specimens.

2)Minimum and Maximum breaking load for test speci mens (Not Strength)

3)The Standard (I.S./ B.S. etc) to be followed

4)Straining Rate required.

5)Please send representative samples.

Dumb Bell Specimen Cutter Accessories :
Hand Operated cutting press
Die overall Length 50 mm as per IS:34 part I & II, IS 5831
Die overall Length 75mm as per IS:3400 part , IS 434 part I & II, IS 5831

Die overall Length 115mm as per IS:3400 part I, IS:2414
Die overall Length 152mm as per IS:2076

| Extra Grips/Attachments | | | All Dimensions in mm | | |
|-------------------------|--|---|---|---------------------------------|-----------------------------|
| | | | Specifications for Models | | |
| Name | Type | Description | TKG 200 N TKG 500 N 100 N, 2500 N | TKG 5000 N TKG 10 kN | TKG 25 kN TKG 50 kN |
| TG 1 | Cam type self tightening PVC & Polythylene (non rigid materials) and adhesion test of rubber belting | For Dumb-bell specirrfen of rubber 35 wide x 6 thick | Max. Specimen sizes 35 wide x 9 thick | Max. Specimen | |
| TG 2 | Cam type grip | For testing fabristrip | Max. 100 wide x 6 thick | Max. 100 wide x 10 thick | Max. 100 wide 10 thick |
| TG 3 | Vice type grip | For testing fabric specimen | Max. 100 wide x 6 thick | Max. 100 wide x 10 thick | Max. 100 wide 10 thick |
| TG 4 | Vice type gripas | For Plywood, asbestos | Max. 50 wide x 25 thick | Max. 50 wide x 25 thick | |
| TG 5 | Wedge type grip | For rigid wires dia. & strips upto | 0.85 to 4.5 25 wide x 5 thick | 1.5 to 9.5 25 wide x 12 thick | 1.5 to 10 35 wide x12 thick |
| TG 6 | Vice type grip | For rigid wires below & for strip | 0.85 dia.5 dia 5 wide x 5 thick | 35 wide x 8 thick | x |
| TG 7 | Bollard type grip | For fine flexible wire upto | 20 SWG & finer | 20 SWG & fine | |
| TG 8 | Vice cum Wedge type grip& strips upto | For rigid carbon steel wires upto dia | x | 5 dia.10 dia. 25 wide x 5 thick | 35 wide x10 thick |
| TG9 | Bollard type grip | Nylon ropes | x | 0 10 to 16mm | 0 10 to 16mm |
| TG10 | Special shaped specimen | Moulded Plastic Specimenl | As per IS-867-1963l | As per IS-867 1963l | As per IS-867 1963 |
| TG 11 | Compression Cage | Compression Test fixture | with dial gauge 100 x 65 x200 ht | 150 x 80 x 200 high | 150 x 150 x 200 high |
| TG 12 | BendingCross fixture | breaking / bending test fixturerex Max. specimen size | 50 wide x 25 t 150 long | 25 wide x 150 to 300 long | 25 wide x 150 to 400 long |