UNIVERSAL TESTING MACHINE

Most useful for conducting tests for:
- Tension
- Compression
- Flexure
- Shear and other Mechanical Properties of a wide range of materials.

Product Code: UTM / UTM-P / UTM-V / UTM-P(V) / UTM-TS(V)

ATTACHMENTS
- Attachment for 90° Peel Test of Adhesives & Flexural Test on Laminates.
- Attachment for Compression Test of Packaging Materials, Bottles and Crush Strength of Medical Tablets.
- Attachment for Pull Strength of Connector & other Soldered Joints
- Spool Grip for Fibres, Filaments, Wires, etc.
- Tensile Grip
- Face Grip for Paper, Plastics, Rubber, etc.

Manufactured by: UBIQUE, Pune

Marketed by: SAURASHTRA SYSTOPACK PVT. LTD.

Serviced by: SAURASHTRA MARKETING CORPORATION
This equipment is extremely versatile for conducting a variety of tests, on different materials as per National and International Standards.

Among the many tests that can be conducted on the machine are:
- Actuating Force for Snap Action Switch
- Removal Force for Connector Pins in Plugs
- Tensile Strength of Crimp Terminals
- Tensile Strength of Rubber-fibre and Filaments
- Peel Strength of Adhesives
- Flexural Test for Laminates, PCB’s, Plastics, etc.
- Fruit Firmness Test
- Sealing Strength of Pouches and Bags
- Test for Springs, Magnets, etc.

Available in three models
1. With Fixed Testing Speed (Model UTM and UTM-P)
2. With Variable Testing Speed (Model UTM-V and UTM-P(V))
3. Fully Automatic Model with Integrated Computerised Touch Screen Panel (Model UTM-TS(V))

Salient Features
- Digital display of Length and Load.
- Tare set facility for load indicator to set off dead weights of clamps, springs, etc., and to read actual load directly.
- Length reset facility for length indicator at any position of moving platen to indicate actual deflection.
- Fully automatic test with single button test start.
- Easy to programme controller.

Test modes available:
- Test by preset length • Test by preset load
- Scrag by length • Scrag by load • Peak mode
- Electro-mechanical loading system.

The standard model is supplied with flat grip attachment for Tensile Test.

Additional Features of Micro Processor-based Equipment (Model UTM-P and Model UTM-P(V)):
- Printer Port to Print Load and Length/Deflection Graph of Test Data (80 column dot matrix Printer to be provided by user).
- RS232 Port for data transfer to PC/Data Transfer Unit with dedicated Software for Test Analysis (Optional at extra cost).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Technical Specifications</th>
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<tbody>
<tr>
<td>Loading Speed (to be specified with the order)</td>
<td>Model UTM / UTM-P: Any one specific speed between 12±3 mm/min to 100±3 mm/min</td>
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<tr>
<td></td>
<td>Model UTM-V / UTM-P(V): 1-100 mm/min or 4 Preset speeds (to be specified) or Higher Loading Speed**</td>
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<tr>
<td>Load Cell Capacity (KgF) To be specified with the order</td>
<td>20, 50, 100, 200, 500, 1000 (Loading Capacity will be approximately 90% of Load Cell Capacity.)</td>
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<td></td>
<td>This machine can be configured to operate with up to three Load Cells of different capacities (Optional at extra cost)</td>
</tr>
<tr>
<td>Load Indicator Resolution</td>
<td>0.1% of Loading Capacity</td>
</tr>
<tr>
<td>Load Indicator Accuracy</td>
<td>± 0.4% of Loading Capacity</td>
</tr>
<tr>
<td>Load Units (User Selectable)</td>
<td>KgF, Newton, Pound</td>
</tr>
<tr>
<td>Admit between Platens</td>
<td>Minimum 100 mm</td>
</tr>
<tr>
<td></td>
<td>Maximum 500 mm</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>3 Phase, 415 VAC, 1.5 HP with independent and effective neutral and earthing</td>
</tr>
<tr>
<td>Length Indicator Resolution</td>
<td>0.1 mm</td>
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<tr>
<td>Length Indicator Accuracy</td>
<td>± 0.2 mm</td>
</tr>
<tr>
<td>Dimensions of the Standard Machine with Control Panel (W x D x H) mm</td>
<td>1200 x 1100 x 1700 (Approx.)</td>
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<tr>
<td>Machine Weight of the Standard Machine</td>
<td>800 kgs (Approx.)</td>
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</table>

Standard Machine is supplied with one Load Cell and Attachment for Tensile Strength Test.

Optional at Extra Cost
Depending on requirements and the tests to be carried out, any of the attachment/s shown overleaf can be selected optionally and are supplied at extra cost.
- Additional Load Cells of different capacities.
- Higher admit than 500 mm, between the Platens, in multiples of 100 mm.
- RS 232 Port.
- ** Higher Loading Speed can also be provided up to 500 mm/min.
The “Touch Screen Range of Equipments” will enhance your testing practices and experience to a great level. Every feature will impact your operation in a big way.

Features that Enhance Applications

- **Easy to use Control Panel:**
  Provide a MMI (Man - Machine Interface) on a touch panel.

- **Graphic User Interface:**
  Helps you navigate through procedures and functions.

- **On-line Reporting:**
  Comparative reports in reference to previously conducted test can be generated on the machine itself to help immediate comparison and spot analysis.

- **Networking:**
  Easy network compatibility to help you remotely access, view and draw data over local network of your workplace.

- **Enhanced Storage:**
  Data can be stored for long duration and selective maintenance of data can be done for ease of reference in the future.

Advantages

- Flexibility to access different menu options with ease.
- Self-guided User Interface ensures maximum user-friendliness. All test parameters can be programmed referred, updated, edited and saved for future use.
- The on-line reporting facility allows to carry out comparative analysis of the different tests that have been conducted.
- Networking ability takes testing to the next level.
- Touch Screen range of equipments are able to communicate with each other through a centralized Lab Management Software.
- Enhanced storage facility allows building a vast data library of all tests carried out at various points.
Since we are continuously improving and upgrading the equipment, the design and specifications of all models featured here are subject to change without notice.