

# **UNIVERSAL TESTING MACHINE**



**Double Column Model** 

### Most useful for Conducting tests for:

- Tension
- Compression
- Flexure
- Shear and other

Mechanical Properties of a wide range of materials.



Single Column Model: UTM-500





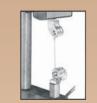
Attachment for 90° Peel Test of Adhesives & Flexural Test on Laminates.



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.

Marketed by:



Serviced by: SAURASHTRA MARKETING CORPORATION



Manufactured by: UBIQUE, Pune

# **UNIVERSAL TESTING MACHINE**

#### Introduction

- Ubique Universal Testing Machine (UTM) is available in 2 models
  - Microprocessor based Model
  - Integrated Touch Screen Control Panel Model.

#### Both Models are available in 2 variants:

A) Single Pillar and B) Double Pillar.

UTM is useful for testing various types of Materials and packaging like plastics, paper, wood and metals...

Various Compression and Tensile based tests can be performed in both - Dynamic & Constant Load or Length options.

#### Scope

The Ubique Universal Testing Machine is designed to accommodate all types of Tensile and Compression based Tests mentioned below as per the Various National and International Standards.

#### To name a few tests:

- Tensile
- Flexural
- Compression
- Top Load
- Torque
- Co-efficient of Friction
- Peel Strength
- Seal Strength
- Bending
- Stiffness
- Folding Endurance
- Bond Strength

#### Salient Features Micro-Processor based equipment

- Micro-Processor
- 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 using PC software.

#### Test modes available

- Test by preset length
- Test by preset load
- Scrag by length
- Scrag by load
- Peak mode

### **TECHNICAL SPECIFICATIONS**

Parameters	Single Column/Pillar	Double Column/Pillar
TYPE	Constant Rate of Travel	
Loading Mechanism	Electro - mechanical loading system using Lead Screw/s driven by suitably reduced Servo Motor and Drive.	
Loading Speed (to be	Minimum speed - 1 mm/min	
specified by the user)	Maximum of 500 mm/min	
Load Cell Quantity & Capacities (to be specified by the user)	<ul> <li>Machine can be configured to work with up to 4 different capacity load cells.</li> </ul>	
	Load Cell Capacities: 10, 20, 50, 100, 250, 500 & 1000 KGF	
Load Indicator Resolution	0.1% FS (Full Scale) of Load Cell capacity	
Load Indicator Accuracy	$\pm$ 0.4% FS of Load Cell capacity	
Admit Between Platens	• Minimum: 100 mm • Maximum: 1000 mm	
Specimen Sizes	<ul> <li>Max Length: 120 mm</li> <li>Max Width: 120 mm</li> </ul>	Max Length: 350 mm     Max Width: 350 mm
Length Indicator Resolutions	• 0.1 mm • 0.01 mm (On Request)	
Length Indicator Accuracy	± 0.2 mm	
Power Requirement	3 Phase, 415 VAC, 1.5 HP with independent potential-free neutral and earthing	
Customisation Available:		

- Customisation Available:
- 1. Special Application Fixtures
- Additional Load cells with auto range calibration.
   21 CFR Compliance for Pharmaceuticals Industry
- 3. 21 CFR Compliance for Pharmaceuticals industry



- User Inter face through PC Software provided with the machine. The real time test values can be viewed on the software and graphs are also plotted and scaled real time.
- Various type of tests can be programed and saved.

The data is stored in the database system of the software. The data can be reviewed later and a variety of reports and graphs can be generated.

The Standard Machine is supplied with flat grip attachment for Tensile Test

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.
- Pre-loaded PC with licensed software Machine User Interface.

## **Fully Automatic Model**

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.

- Online calibration facility is available on the machine.
- Scheduled maintenance alerts and calibration alerts are prompted to the user.
- Auto tare of values is performed to ensure no human intervention results.
- Hardware and software safety switches are implemented to ensure maximum safety in operation of the machine.

These are just a few features that explain the general functionality of this extremely versatile testing machine.

• Higher load capacities and customized can be provided on request.

#### **Advantages**

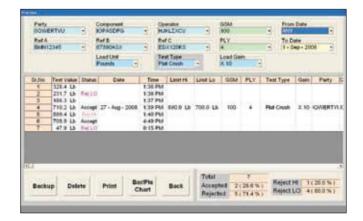
- Flexibility to access different menu options with ease.
- Self-guided User Interface ensures maximum userfriendliness.

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.







# THE WIDEST RANGE OF TESTING EQUIPMENTS FOR PAPER, PAPERBOARD AND PACKAGING



All digital models are also available with Integrated Computerised Touch Screen Control Panel

Since we are continuously improving and upgrading the equipment, the design and specifications of all models featured here are subject to change without notice.

Marketed by:



Serviced by:





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