SHRI ENGINEERING

Electro Mechanical Universal Testing Machines

Model : Unitek-97000α

Features :

- Precision AC servo motor & drive with ball lead screw gives an advanced drive system with 0.5 to 500 standard speed range.
- PLC & HMI based system to measure store load & displacement values.
- Provision for load cell interchangeability & thereby automatic selection of load full scale.
- Speed selection through data entry or variable speed through potentiometer.
- Facility for mounting different load cells & clamping devices to suit various tests & materials like thin wires, metal sheets, fiber glass, leather, spring, card boards etc.
- Safety interlock for overload & limit switch sensing to ensure protection during test.
- Universal applications in R & D, Education, Quality control and Production for tests like Tensile, Compression, Bending etc.

Touch Screen Control Panel :

PLC based panel incorporating following features :

- Front panel 7" Touch Screen
- Data entry of test parameters (like speeds, rupture %, pre-load, test data & specimen data) with touch screen
- Data storage ranges as: at input, at output; during power off
- Optional remote to ease specimen loading/unloading
- RS 232, USB & Ethernet ports for communication.
- The data will be stored in JPG format & accessible for external system with USB drive storage.

USB port for printer or USB drive interface for :

- Graph & result print-out
- Test certificate print-out
- Simple statistics print-out
- RS 232 interface for data transfer to desktop.
- Ethernet port for network printer access.
- Facility to export X, Y points in .csv format.
- Facility to export batch results in .csv format.

Technical Description :

'SE' Universal Testing Series UNITEK-97000 are PLC based electro-mechanical machines with servo drive designed for testing & studying mechanical behavior of various materials like metals, polymers etc.

These machines offer good built-in features so offer excellent stand alone performance for standard tests & great flexibility for complex analysis.

These machines confirm to IS, BS & ASTM standards.

Optional Accessories :

'SE' offers a wide range of optional accessories along with Unitek-97000 Machines to cover almost every material test requirements.

Load Cells :

'SE' offers Strain gauge type Universal load cell indifferent capacities in the following nominal ranges :
100N, 250N, 1kN, 2.5 kN, 5 kN load cell as per customers requirements.

Grip & Clamping Devices :

A wide range of grips are available from 'SE' such as :

- Wedge type grips
- Vice type grips
- Single threaded grips
- Compression plates
- Bending fixtures
- Shearing attachments

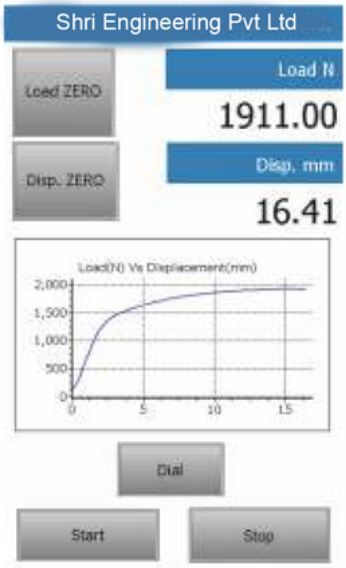
Extensometers :

Electronic extensometers are offered with extension on the touch screen to measure with resolution of 1 micron.
Model : EE2-Strain Gauge.

Electro Mechanical Universal Testing Machine

Model : Unitek 97000 α

Home Screen



Real time Graph
with load & displacement

Test Result Display

Test Report with Graph

Specifications :

MODEL	UNITEK 97001	UNITEK 97025	UNITEK 97050	UNITS
Load Range	0-1	0-2.5	0-5	kN
Load Resolution	1/20000 of Nominal load cell connected.	1/20000 of Nominal load cell connected.	1/20000 of Nominal load cell connected.	—
Load Measuring Accuracy	±1% from 2% to 100% of Nominal load of load cell used.	±1% from 2% to 100% of Nominal load of load cell used.	±1% from 2% to 100% of Nominal load of load cell used.	—
Max. Crosshead Stroke	900 (without grips & load cell)	900 (without grips & load cell)	900 (without grips & load cell)	mm
Crosshead displacement Measurement	0.01	0.01	0.01	mm
Crosshead Speed Range	0.5-350	0.5-350	0.5-350	mm/min
Power Supply	230 VAC, 50 Hz Single Phase	230 VAC, 50 Hz Single Phase	230 VAC, 50 Hz Single Phase	—

- F. S. = Connected load cell full scale.
- Due to constant R& D specifications & features are subject to change without notice.
- Colour scheme subject to confirm at the time of order.

Wholesale Trader and Supplier By :

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