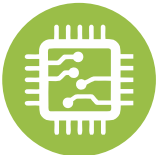


UNITEK 1600-TS



Electro Mechanical Universal Testing Machine



Micro Controller Based Panel,
Front Panel Touch Screen Display



Facility for mounting different
clamping devices



Provision for load cell interchangeability
(Automatic selection of load full scale)



Best in Class Analysis Software



* Accessories shown in the image are not a part of standard machine.



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Technical Description :

'FIE' Universal Testing Series Unitek-1600 are Micro Controller 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 to offer excellent stand alone performance for standard tests and great flexibility for complex analysis. These machines confirm to IS standard.

Built-in Computerized Touch Screen Control Panel Series : UNITEK 1600-TS

Micro Controller based panel incorporating state of art technology with following features -

- Front panel 10" touch screen industrial PC.
- Data entry of test parameters including pre-load, rupture %, Safe Load & Specimen data etc.
- Online graph of load Vs Displacement directly on screen.
- USB Printer port for printer interface with graph & result print out.
- Facility to export the result/ Data to EXCEL & CSV formats.
- Windows based software available for Online graph on PC, Data analysis, Statistics, Point tracing, superimposing graphs to compare with standard, zooming graph etc.

Features :

- Precision AC servo motor & drive with ball lead screw gives an advanced drive system with 0.5 to 500 standard speed range.
- Provision for load cell interchangeability & thereby automatic selection of load full scale & Units (kN or N).
- Speed selection through data entry .
- Facility for mounting different load cells & clamping devices to suit different tests & materials such as thin wires, metal sheets, fiber glass, leathers, springs, card boards etc.
- Safety interlock for overload & limit switch sensing to ensure protection during test.
- Universal applications in R& D, Education, Quality control & Production for test like, Tensile, Compression, Bending etc.
- FIE Electromechanical UTM comply with class 1 of IS 1828, Part 1.
- State of the Art software with unique features & user friendly interface.

Optional Accessories :

'FIE' offers a wide range of optional accessories along with Unitek 1600-TS Machines to cover almost every material test requirement.

Load Cells :

'FIE' offers Strain gauge type Universal load cells in different capacities in the following nominal ranges :

100 N	10 kN
250 N	25 kN
500 N	50 kN
1 kN	100 kN
2.5 kN	200 kN
5 kN	

Load cells of different capacity can be offered as per - customers' requirements.

Grip & Clamping Devices :

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

- Wedge type grips for flat & round specimens with different inserts. (Manual / Hydraulic)
- Vice type grips
- Single threaded grips.
- Compression plates.
- Bending fixtures.
- Shearing attachments.

Extensometers :

- Electronic extensometers are offered with interface card on the control panel to measure extension.
Model : EE2-Strain Gauge (With 1 micron resolution).
- Long travel extensometer, Model : LTE-800.

Specifications :

MODEL		UNITEK 1601 TS	UNITEK 1605 TS	UNITEK 1610 TS	UNITEK 1650 TS	UNITEK 16100 TS		UNITEK 16200 TS	UNITS
						250	500		
Load Range		0-1	0-5	0-10	0-50	0-100		0-200	kN
Load Resolution	0-100% of nominal load cell connected	1/50000 of F.S.	1/50000 of F.S.	1/50000 of F.S.	1/50000 of F.S.	1/50000 of F.S.		1/50000 of F.S.	—
Load Measuring Accuracy		±1% from 2% to 100% of load cell used.	±1% from 2% to 100% of load cell used.	±1% from 2% to 100% of load cell used.	±1% from 2% to 100% of load cell used.	±1% from 2% to 100% of load cell used.		±1% from 2% to 100% of load cell used.	—
Max. Crosshead Stroke		1000 (without grips & load cell)	1000 (without grips & load cell)	1000 (without grips & load cell)	1000 (without grips & load cell)	1000 (without grips & load cell)		800 (without grips & load cell)	mm
Clearance between columns		450	450	450	450	450		430	mm
Crosshead displacement Measurement		0.01	0.01	0.01	0.01	0.01		0.01	mm
Crosshead Speed Range		0.5-500	0.5-500	0.5-500	0.5-500	0.5-250	0.5-500	0.5-100	mm/min
Power Supply		230 VAC, 50 Hz Single Phase	230 VAC, 50 Hz Single Phase	230 VAC, 50 Hz Single Phase	230 VAC, 50 Hz Single Phase	440 VAC, 50 Hz Three Phase		440 VAC, 50 Hz Three Phase	—
Overall Dimensions		L W H	1250 700 2200	1250 700 2200	1250 700 2200	1300 700 2300		1300 800 2800	mm
Weight (approx)		600	600	600	900	900		900	kg.

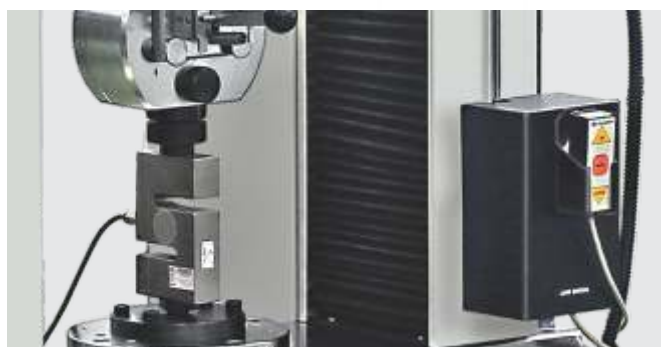
- F. S. = Connected load cell full scale.
- Due to constant R& D specifications & features are subject to change without notice.
- Colour scheme subject to confirm at the time of order.



10" Touch Screen industrial PC



LAN Port for seamless connectivity to the machine



Hand held Remote for ease of operation



USB Port for Data output & Printer connection



Optional Accessories :



Load Cell



Extensometer
EE 2



Wedge Grips for
Flat & Round Specimens



Thread Grip for
Thin Wires



3 Point Bend
Test Attachments



Screw Grip for
Peel Test



Screw Grip for
flat Specimens



Screw Grip for
Wires



Long Travel Extensometer
LTE - 800

Manufactured By :

Fuel Instruments & Engineers Pvt. Ltd.

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