

Universal Hydraulic Tensile

EN ISO 15630-1, EN ISO 6892-1, EN ISO 7500-1

DESCRIPTION:

Universal Hydraulic Tensile Test Machine (600 kN capacity) is designed to test the ferrous materials for structural values such as yield strength and tensile strength. Apart from tensile tests, Universal Test Machines can also be used for compression tests up to the capacity of the machine.



MAIN FEATURES:

- Can make test with displacement control.
- Real time display of test graph.
- 2 analog channels (one for load cell, one for displacement transducer)
- 10 data per second sample rate for each channel
- Multi-language support
- 2 different unit system selection; SI and metric
- Real-time clock and date
- RS-232 serial port connection with the device
- Free of charge PC software for the test control and advanced report generation

Load cell is used to measure stress. Strain measurement is done by the electronic displacement transducer built in the machine.

Tests can be done fully automatic by digital control unit or computer. Machine complete the test with the set pace rate and turns to start position automatically.

The distance between the grips can be set by motor driven hand set system.

The system is controlled by a hand up/down system. With open front hydraulic wedge grips user can load specimen easily.

Hydraulic Grips

Hydraulically operated grips, completely stop the possibility of sample sliding from the grips enabling for correct and definite strain measurements.

Hydraulic Power Pack and Digital Data Acquisition & Control System

Hydraulic Power Pack

Hydraulic Power Unit is designed to control the machine and processing of data from load-cell and displacement

transducers which are fitted to the machine. Controller unit has a simple and compact configuration.

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TECHNICAL SPECIFICATIONS:

Capacity		600 kN	1000 kN
Test Speed		2mm/min - 18mm/min	2mm/min - 18mm/min
Load Measurement Accuracy		± %1	± %1
Displacement Measurement Resolution		0,01 mm	0,01 mm
Columns Diameter	Lower	50 mm	60 mm
	Upper	70 mm	80 mm
Vertical Test Distance	Tension	Minimum 70 mm Maximum 300 mm	Minimum 70 mm Maximum 320 mm
	Compression	Maximum 110 mm	Maximum 110 mm
Distance Between Columns		460 mm	480 mm
Piston Stroke		150 mm	200 mm
Max Pressure	Grips	400 bar	400 bar
	Load	200 bar	320 bar
Weight		1950 kg	2150 kg
Height		2600 mm	2600 mm
Max. stroke		2750 mm	2800 mm

Dual Pumps

The dual pumps are formed by two groups:

1. Grip pump with dual stage pump
2. Piston pump to make tensile and compression tests

Our tensile testing machine consist of two independent pumps working in one oil tank system. One pump is controlled with digital readout unit with 3 phase controlled with and inverter to make test, other runs with a pedal to supply pressure to the grips. Grip pump has dual stage pump inside.

Digital Data Acquisition & Control System

The unit is designed to control the machine and processing of data from load-cells and displacement transducers, which are fitted to the machine.

All the operations of the unit is controlled from the front panel consisting of a LCD display and function keys.

ORDERING:

ST 0101
Hydraulic UTM Machine
600kN

ST 0102
Hydraulic UTM Machine
1000kN

ST 0103
Hydraulic UTM Machine
2000kN

ST 0104
Servo UTM Machine
600kN

ST 0105
Servo UTM Machine
1000kN

ST 0106
Servo UTM Machine
2000kN

ACCESSORIES:

Product Code	
ST 0107	Hydraulic Power Pack and Digital Data Acquisition & Control System
ST 0107-1	Hydraulic Power Pack
ST 0108	Digital Data Acquisition & Control System
ST 0109	Software
ST 0110	Jaw faces for flat samples
ST 0111	Jaw faces for round samples
ST 0112	Computer & Printer