



ELECTRO-HYDRAULIC SERVO CONTROL UNIVERSAL TESTING MACHINE (Multi Wire Strand) 1200kN

Standard: BS EN 10002-1, BS 5896, ISO 7500-1, ASTM A370, ASTM A1061/A

Tensile & Compression

This TT 6000 Series UTM used for the mechanics property test such as the tensile, bending, compression and etc to various metallic and non-metallic materials. The testers have been developed according to BS EN 10002-1, ISO 7500-1 & ASTM A370 "Metal Tensile Test Method" with the adoption of the electro-hydraulic servo control and electronic measurement. It can automatically process the test result for statistical purpose and print default or user-defined test report.

TT 6000 Series UTM use the micro-computer automatic data collection and processing, real time display of the test data and curves. It has the functions such as unlimited storage of test result in the computer, printing the test results and curves, processing the batch test result report, managing the database and so on. It also has the network interface. It can automatically seek the multiple technical parameters such as elastic module E upper yield strength ReH, lower yield strength REL, stipulated non-proportional elongation intensity Rr, tensile strength Rm, stipulated total elongation intensity Rt, yield point percentage elongation and etc.

TT 6000 Series UTM have the features such as the high precision, advantage performance, high reliability, convenient operation and etc.

OPERATION DISPLAY

Computer Screen Display unit with the following functions

- *Test force display
- *Break detection
- *Full auto test range switching function
- *Auto return function
- *Peak / Break value display function
- *Test conditions

SAFETY FEATURES

The system include with the followings safety features

- *Emergency stop switch
- *Overload limit
- *Ram-stroke limit
- *Hydraulic pump motor over-current & over heating protection
- *Leak / over current protection
- *Automatic stop control
- *Safety Guard

CONTROL & DATA PROCESSING SOFTWARE

- *User friendly & easily due to clear and brief operation – operation interface
- *Automatically save the test conditions & results
- *User define test curves including : Stress / Strain, Force / Elongation, Strength / Time to suit various requirement
- *Individual or combine display test curves on the same screen to compare with other several data at the same time
- *Compatible with Microsoft Excel by import or export function
- *Base of testing with digital sample break detection, auto ranging, auto calibration, quick tare & auto return facilities
- *Exceeds all International Standards for accuracy, ASTM, DIN, ISO, JIS, EN, GB...etc
- *Tension, Compression, Shear, Cycling & Creep Test facilities
- *User define Real Time Display Including Load, Stress, Elongation, Strain, Speed or Time
- *Advanced protection features with software setting or / & hardware switch upper & lower limit setting
- *Operation fully control by computer
- *USB communication system & ethernet
- *Grips & fixtures for tension, compression, flexural, shear & products testing available
- *Fully user define report including Report Sheet, Label, Chart & Bitmap or JPG
- *Report sheet consist of Load, Elongation, Yield, Break, Stress Modulus, Strain, Tear Strength, Peel Strength etc
- *Force display unit : kN,N,tons, & mN
- *Stress display unit : GPa,Mpa,Pa,psi,N/sq.mm,Kg/sq.mm & Tons/sq.inch
- *User define Yield Strength, Young Modulus, Offset Setting, Graph Offset, Export & Import test data, ...etc

Unique Feature :

- *Over size prestressed 4 column with twin screw
- *High toughness fragment safety guard with transparence sliding door
- *High precision load cell ram
- *Built-in shock absorbing system on base mounting
- *Console Control Unit

1200kN Specification

Technical Specifications :

| Model Number | TT 6000 X / 029 |
|-------------------------|-----------------|
| Load. Capacity | 1200 kN |
| Machine Class | Class 1 |
| Load. Accuracy | ±1% |
| Displacement Resolution | 0.001 mm |
| Max. Compression Space | 900 mm |
| Max. Tensile Space | 1000 mm |
| Piston Stroke | 200 mm |
| Max. Cross Head Speed | 240 mm/min |
| Test Speed | 100 mm/min |
| Wire Strand Size | Ø8 - Ø18 mm |
| Round Specimen Size | Ø14 - Ø45 mm |
| Flat Specimen Size | 40 mm |

| | |
|-------------------------------|-------------------------------------------|
| Max. Distance of Bending Test | 300 mm |
| Size of Compression Platen | Ø225 mm |
| Horizontal Clearance (max) | 505 mm |
| Dimension (Frame) | 1050 (L) x 800 (W) x 2800 (H) mm |
| Dimension (Control Console) | 1100 X 750 X 900 mm |
| Power | 380 - 415 V, 2.2 kw / 0.4 kw , 50 / 60 Hz |
| Weight (Control Console) | 300 kg |
| Weight (Frame) | 3500 kg |

Unit Standard Accessories :

| | | |
|------------------------|--------------------------------------------------------------------------------------------------|--------|
| TT 6000 X / 013 - P001 | Flat Specimen Jaw Set (0 - 40 mm Thick) | 1set |
| TT 6000 X / 013 - P002 | Round Specimen Jaw Set A (Ø14 - Ø32 mm) | 1set |
| TT 6000 X / 013 - P003 | Round Specimen Jaw Set B (Ø32 - Ø45 mm) | 1set |
| TT 6000 X / 029 - P001 | Wire Strand Jaw Set (Ø8 - Ø18 mm) | 1set |
| TT 6000 X / 013 - P004 | Compression Platen Set | 1set |
| TT 6000 X / 013 - P005 | Bending Test Device c/w Mandrel | 1set |
| TT 6000 X / 013 - P006 | Footing Stopper Bar c/w Wall Plug (2 Bar & 4 Plug) | 1unit |
| TT CP - 200 | Computer Printer | 1unit |
| TT SVP - 2.2 | Servo Pack | 1unit |
| TT YYU - 25/100 | Electronic Extensometer 100 mm c/w 25 mm Gauge Deformation | 1unit |
| TT YYU - 15/500 | Electronic Extensometer 500 mm Gauge Length with 15 mm Deformation | 1set |
| TT 6000 X TSL | 2 Steps Ladder | 1unit |
| TT SVP - 2.2 | Servopack Console Control Unit with Built-in Computer and Pre-Installed with TestMaster Software | 1 unit |



External Auto Grip



Front Grip

*1 Copy of Manual Instruction

Optional Accessories :

| | |
|------------------|---------------------------------------------------------------------------------------------|
| TT 6000 X / AGP1 | Aluminium Grip Piece for 12.7 mm Wire, Size : 1.5 mm (T) X 103° Angle X 16.8 X 180 mm (WxL) |
| TT 6000 X / AGP2 | Aluminium Grip Piece for 12.7 mm Wire, Size : 2.4 mm (T) X 103° Angle X 16.8 X 180 mm (WxL) |
| TT 6000 X / AGP3 | Aluminium Grip Piece for 15.6 mm Wire, Size : 1.5 mm (T) X 103° Angle X 22.4 X 180 mm (WxL) |

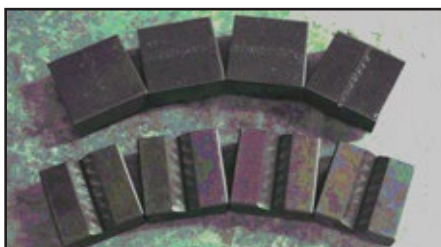
STANDARD ACCESSORIES



Compression Plated Set



Bending Jig



V-Shaped & Flat Jaws

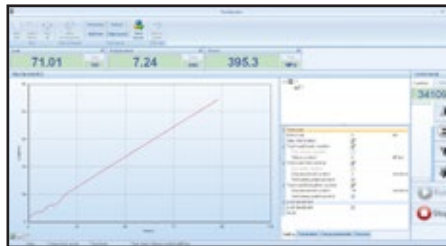


Shock Absorbing System



2 Steps Ladder

TEST REPORT SOFTWARE



Elastic Graph



Yield Graph



Strengthen Graph



TT CP - 200



TT YYU - 25/100



TT EST-500