TT 6KSX / 015

ELECTRO-HYDRAULIC SERVO CONTROL UNIVERSAL TESTING MACHINE 300kN

Standard: BS EN 10002-1, ISO 7500-1, ASTM A370

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.
– 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

300kN Specification

Technical Specifications :

Model Number	TT 6KSX X / 015
Load Capacity	300 kN
Machine Class	Class 1
Displacement Resolution	0.001 mm
Max. Compression Space	600 mm
Max. Tensile Space	700 mm
Piston Stroke	200 mm
Relative Error of Indicated Value	±1%
Effective Measurement Range	1% - 100 % F S (Full Range without binning)
Deformation Measurement Range	1% - 100 % F S
Relative Error of Deformation Indication	±1%
Relative Error of Displacement Indication	±1%
Relative Error of Stress Rate Control	±2%
Relative Error of Displacement Rate Control	±1%
Strain Rate Control Adjustment Range	0.00025/s / 0.0025/s
Relative Error of Strain Rate Control	±2%
Force, Deformation, & Displacement Retention Control	0.3% - 100% F S
Relative Error of Force, Deformation & Displacement Retention Control	≤1%
Girder Lifting Speed	320 mm / min
Effective Distance Between 2 Column	375 mm
Round Specimen Size	Ø10 - Ø32 mm
Flat Specimen Size	Max. 20 mm Thick
Size of Compression Platen	Ø150 mm
Dimension (Frame) (mm)	800 x 600 x 2100 mm (LxWxH)
Dimension (Control Console) (mm)	790 x 730 x 1600 mm (LxWxH)
Power	220~240 V, 1.5 kW, 1 Ph, 50/60 Hz, 9.6A
Weight (Control Console)	300 kg
Weight (Frame)	1850 kg

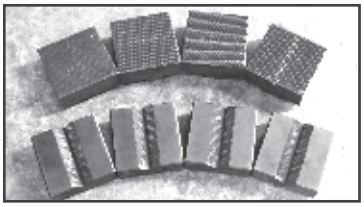
Unit Standard Accessories :

Model Number	Accessories Description	Qty
TT 6KSX X / 015 – P001	Flat Specimen Jaw Set (0~Ø20 mm Thick)	1set
TT 6KSX X / 015 – P002	Round Specimen Jaw Set A (Ø10~Ø20 mm)	1set
TT 6KSX X / 015 – P003	Round Specimen Jaw Set B (Ø20~Ø30 mm)	1set
TT 6KSX X / 015 – P004	Compression Platen Set (150 mm Dia.)	1set
TT 6KSX X / 014 – P006	Footing Stopper Bar c/w Wall Plug (2 Bars & 4 Plugs)	1set
TT CP – 200	Computer Printer	1unit
TT SVP – 2.2	**Servopack** Console Control Unit with Build-in Computer and Pre-Installed with TestMaster Software	1unit

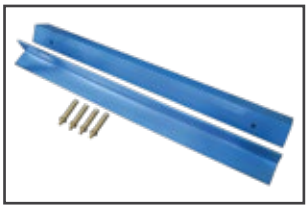
*1 Copy of Manual Instruction

Front Grip

Compression Plated Set



V-Shaped & Flat Jaws



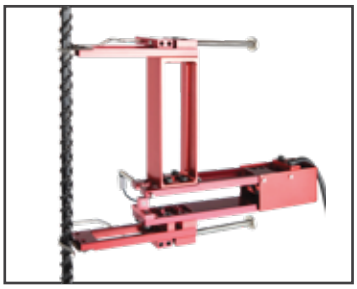
Stopper Bar

Computer Printer

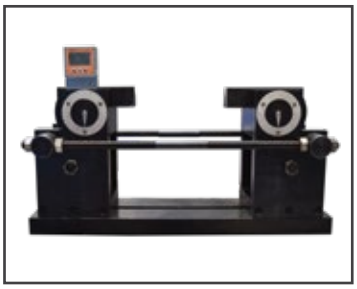
Optional Accessories :

Model Number	Accessories Description
TT AEX – 25/10	Axial Electronic Extensometer (GL25 / D10)
TT AEX – 50/25	Axial Electronic Extensometer (GL50 / D25)
TT AEX – 100/25	Axial Electronic Extensometer (GL100 / D25)
TT 6000 X / BRD	Bend & Re-bend Device
TT 6000 X / BRD – A1	Bending Holder & Mandrel Set

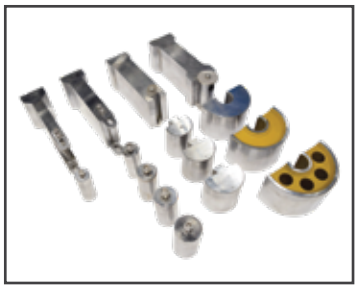
*1 Copy of Manual Instruction



Extensometer

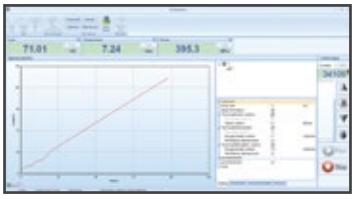


TT 6000 X / BRD

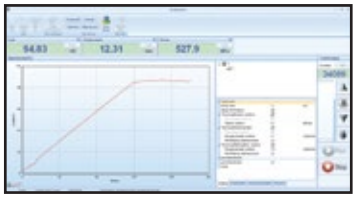


TT 6000 X / BRD – A1

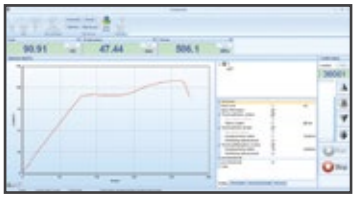
TEST REPORT SOFTWARE



Elastic Graph



Yield Graph



Strengthen Graph