



ELECTRO-HYDRAULIC SERVO CONTROL UNIVERSAL TESTING MACHINE 1200kN (HEAVY DUTY VERSION)

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

Tensile & Compression

This NL 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.

NL 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.

NL 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	NL 6000 X / 017
Max. Test Capacity	1200 kN
Machine Class	Class 1
Accuracy	±1%
Displacement Resolution	0.001 mm
Compression Space	600 mm
Tensile Space	700 mm
Piston Stroke	200 mm
Dia. of Round Specimen	14 - 40 mm
Thickness of Flat Specimen	Up to 40 mm
Max. Distance of Bending Test	300 mm
Dia. Size of Compression Plates	225 mm

Dimension (Frame)	1050 x 800 x 2500 mm
Dimension (Control Console)	1100 x 750 x 900 mm
Power	415 V, 3ph, 2.2 kw / 0.4 kw, 50/60 Hz
Weight (Control Console)	300 kg
Weight (Frame)	3200 kg

Unit Standard Accessories :

NL 6000 X / 017 - P001	Flat Specimen Jaw Set (4pcs)	1set
NL 6000 X / 017 - P002	Round Specimen Jaw Set A (4pcs)	1set
NL 6000 X / 017 - P003	Round Specimen Jaw Set B (4pcs)	1set
NL 6000 X / 017 - P004	Compression Platen Set (225 mm Dia)	1set
NL 6000 X / 017 - P005	Bending Test Device	1set
NL 6000 X / 017 - P006	Mounting Screw	4pcs
NL SAC	Console Control Unit with Built-in Industrial Computer and Pre-Installed with TestMaster Software	1 unit
NL 6000 X / TSL	2 Steps Ladder	1unit

*1 Copy of Manual Instruction

Optional Accessories :

Electronic Extensometer	NL EST - 100
Computer Printer	NL CP - 200



External Auto Grip



Front Grip

STANDARD ACCESSORIES



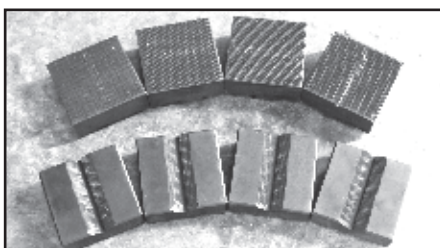
Compression Plated Set



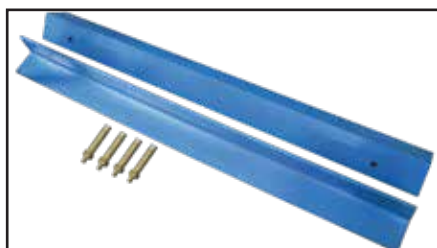
Bending Jig



2 Steps Ladder

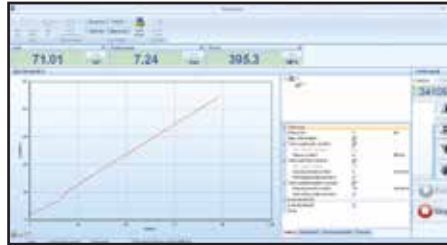


V-Shaped & Flat Jaws

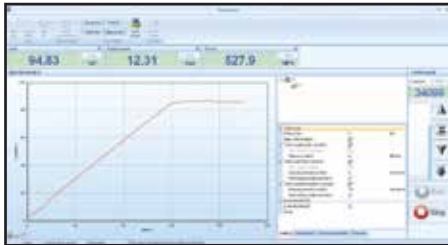


Stopper Bar

TEST REPORT SOFTWARE



Elastic Graph



Yield Graph



Strengthen Graph

OPTIONAL ACCESSORIES



NL EST-100



NL CP - 200