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### NextGen Electromechanical TestPilot Control Software

#### NG- EML Series Software

TestPilot is designed to enhance your ability to perform accurate and repeatable mechanical testing of materials, components and finished goods across a full spectrum of applications. It provides the simplicity and ease-of-operation needed for quick and efficient quality assurance and quality control testing, the flexibility to adapt readily to changing requirements, and the sophistication to address unique or complex demands. The software’s intuitive operator interface, powerful analysis and reporting, and growing host of test methods make it an excellent foundation for establishing and sustaining a truly global standardized testing methodology. TestPilot software is fully compatible with all NextGen electromechanical universal testing machine NG-ETM Series. This software features a large, growing host of pre-packaged test methods to help you quickly and efficiently meet the requirements of global test standards such as ASTM, ISO, DIN, EN, BS, and more. Selected by an operator at runtime, these methods are crafted to meet the specific test flow, analysis and reporting requirements of industry standards across a range of specimen and test types. Pre-packaged test methods are available in a wide selection of bundled sets, including: Polymers & Plastics, Metals, Construction Materials, Biomedical Products, paper Products, adhesives, foam, textiles and more.

#### Features

- Versatile, easy-to-use TestPilot software with a large and growing library of standards-compliant test methods (ASTM, ISO, DIN, EN, BS, and more)
- Modular design permits easy upgrading
- Multiple graphs on the same screen & report to observe multiple events at the same time: real time display curves, like displacement-load, stress-strain, displacement-time, load-times, and others.
- Powerful analysis function can calculate typical value and display on the curve, like Fm, ReL, ReH, Rp.
- Measurement unit: Users can select SI, or others, like N, kN, Kgf, lbf, Mpa, and so on, user can define the unit by themselves using formula.
- Customizable report format with full flexibility of adding & removing items in terms of layout, content, graphing to suite the exact test requirement, like company information, statistics, and etc. Test report can export to Excel or Word.



#### User Authorization Management

User authorization management is easily to define software access for different level of operators, like lab manager, operator and others.



User name	Pass	Governm	Units	Hardware	Calib	Verif	Linearizati	Direction Ju	Edit Standa	Rounding M	Manage Us	Report Preview
Administrator	AAAA	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Operator	AAAA	N	N	N	N	N	N	N	N	N	N	Y

## Calibration & Verification

This function is simple to calibrate and verify the load cell, extensometer and other accessories

%FS	Target	1st Run	Error	2nd Run	Error	3rd Run
10%	10000					
20%	20000					
50%	50000					
80%	80000					
100%	100000					

## Test Method Library

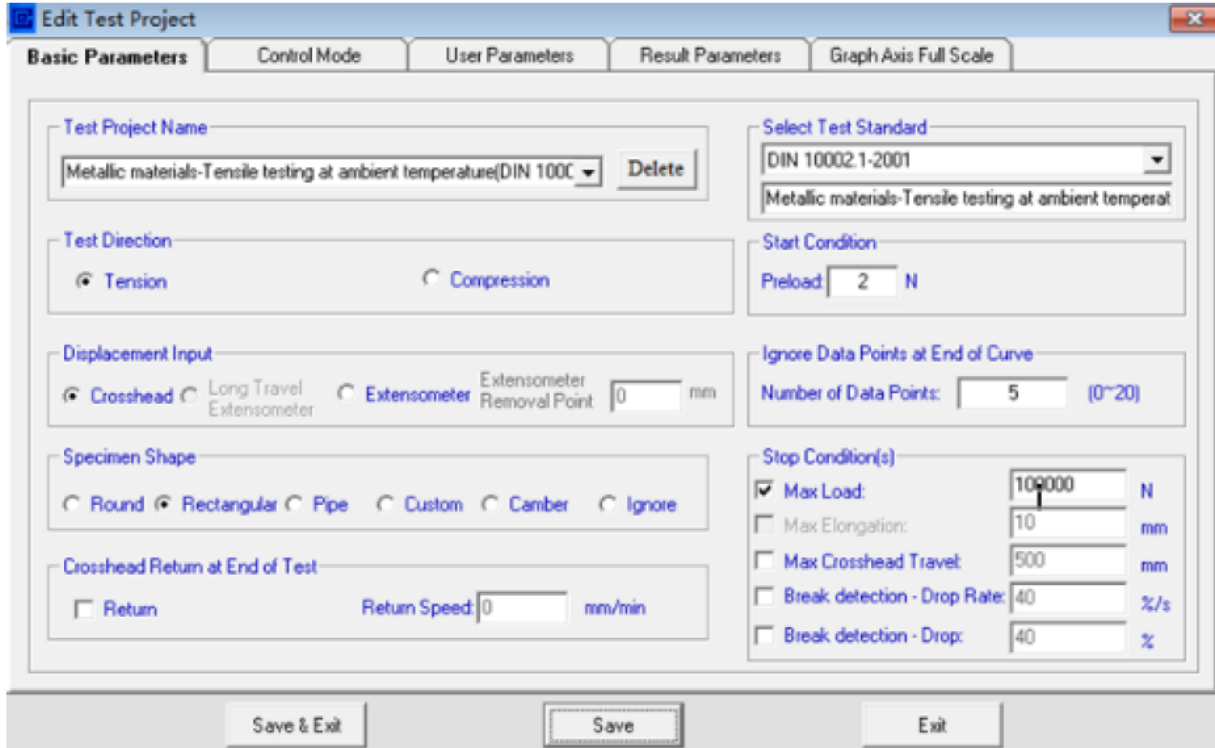
Pre-packaged test methods are available in a wide selection of bundled sets, including: Polymers & Plastics, Metals, Construction Materials, Biomedical Products, Paper Products, Adhesives, foam, textiles and more.

Standard name	Standard Description
ASTM D 790-2003	Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM E 290-1997a	Metallic materials-Bend test
ISO 7438-1995	Metallic materials-Bend test
ISO 7438-1995E	Metallic materials-Bend test
ASTM E 23-1998	Metallic materials-bending testing
DIN 10002 1-2001	Metallic materials-Tensile testing at ambient temperature
ISO 6892-1998	Metallic materials-Tensile testing at ambient temperature
ISO 604:2002(E)	Plastics-Determination of compressive properties
ISO 178-1993	Plastics-Determination of flexural properties
ISO 527-1-1996	Plastics-Determination of tensile properties
ISO 37:1994	Rubber, vulcanized or thermoplastic-Determination of tensile stress-strain properties
ASTM D 695-1996	Standard Test Method for Compressive Properties of Rigid Plastics
ASTM D 638-2003	Standard Test Method for Tensile Properties of Plastics
ASTM E 8M-2003	Standard Test Methods for Tension Testing of Metallic Materials



## Test Project

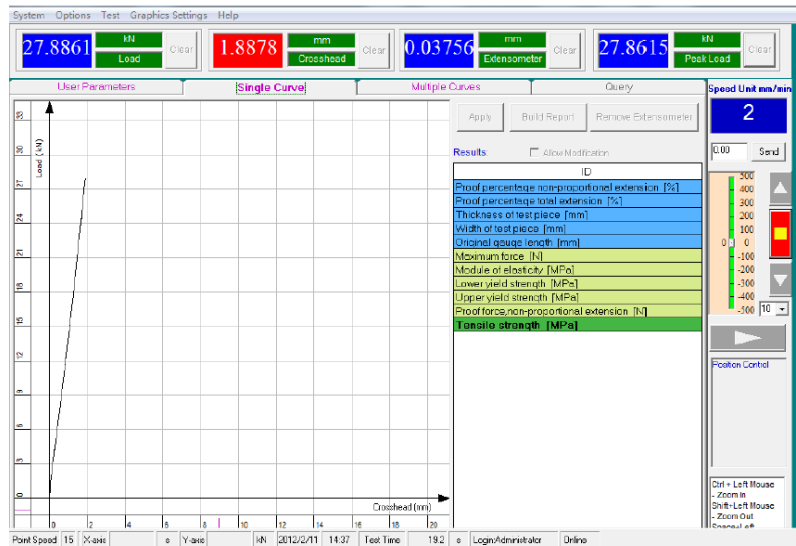
Very intuitive design to define a test procedure. Multi-panel enables easy setup of testing control (load, displacement and extension), testing specimen shape and test result parameter. Intuitive interface likes reading a testing standard.



## Running a test

Select one test application and click "Run".

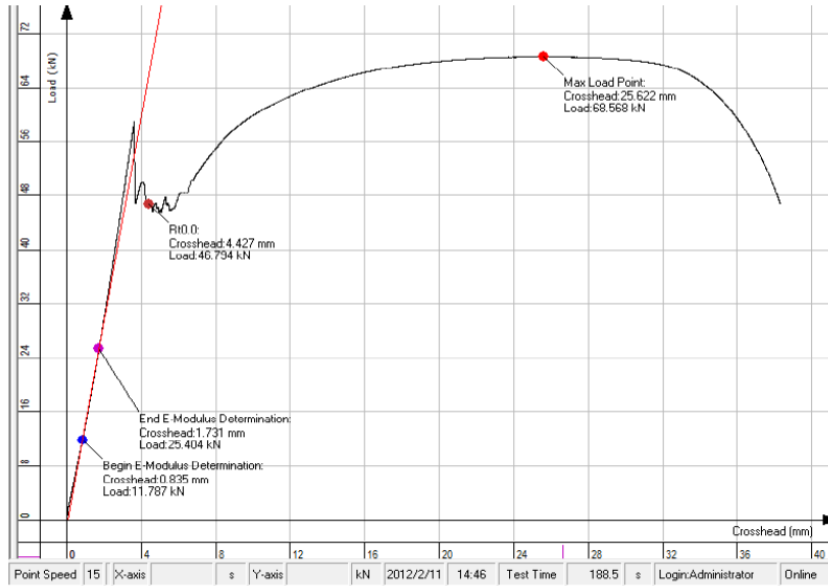
Real-time display of test data and graph: maximum 3 curves can be displayed in a single window.





### Test Curve Analysis

This software facilitates the flexible display, handling and sharing of test data to meet a full range of industry-standard analysis and reporting requirements. It features post-test analysis with easy-to-understand displays and highly flexible, interactive data plots. Features include movable markers, text, and construction lines, and the ability to define a region of interest and easily zoom in for closer inspection. The review screen also allows post-test data to be displayed across multiple graphs, simultaneously.



### Test Report

Test results can be output to standard, presentation-quality reports and plots, or a format customized to meet your particular data sharing needs. It is easy to export to Excel and Word.

Report Template

Select test project: Metallic materials-Tensile Testing (with ETD (S.D.855))

Save Save&Exit Cancel

Testing Lab: \_\_\_\_\_ Print Date: 2012/2/11

### Metallic materials-Tensile Testing Report

Standard(Standard): \_\_\_\_\_

Name	Diameter(d)	Le	Fm	Rm	E
ID	mm	mm	kN	MPa	MPa
No. 1	0000.00	0000.00	0000.00	0000.00	0000.00
No. 2	0000.00	0000.00	0000.00	0000.00	0000.00
No. 3	0000.00	0000.00	0000.00	0000.00	0000.00
No. 4	0000.00	0000.00	0000.00	0000.00	0000.00
No. 5	0000.00	0000.00	0000.00	0000.00	0000.00

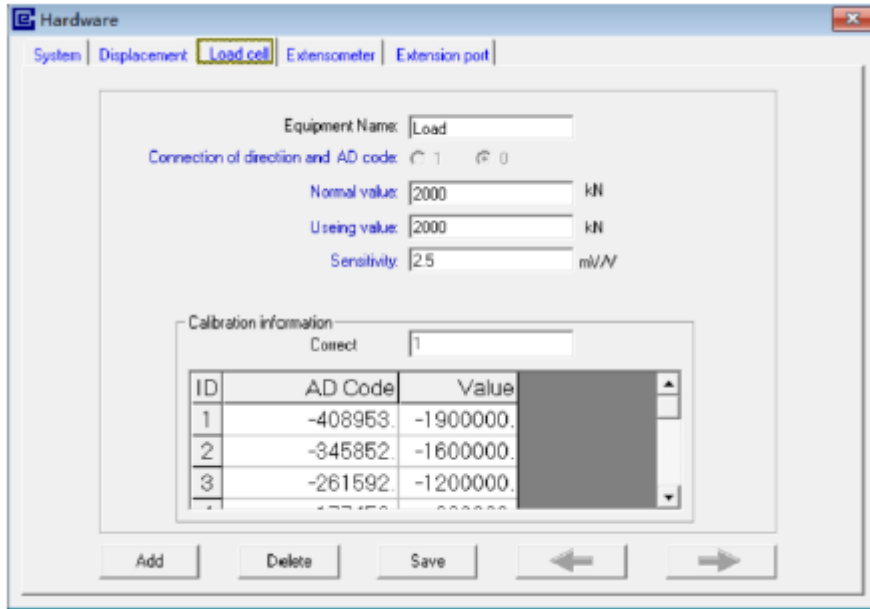
Statistics:

- Average  Maximum
- Minimum  Total
- Median
- Dispersion rate
- Average deviation
- Standard deviation
- Coefficient of variation
- Discrete coefficient
- Denominator pattern
- n
- n-1
- Mark denominator mode



### Hardware Parameter Configuration

It is convenient to add and modify hardware parameters and very useful when add some extended accessories, like micrometer.



### Measurement Unit Setup

The user can select SI and other measurements according to their personal test requirements.

