UTM-66-5TX

UTM-66-5TX, Universal Testing Machine

Uses:

This product is widely used in mechanical properties of metal, non-metallic materials, such as drawing, pressing and bending shear.It can be used in the mechanical properties of profiles and components.It is also widely applied in the field of testing of materials such as rope, belt, silk, rubber and plastics. Applicable to quality supervision, teaching research, aerospace, steel metallurgy, automobile, construction materials and other test fields.

Test Standard:

It meets the requirements of GB/T228.1-2010 metal materials temperature tensile test method, GB/t7314-2005 metal compression test method, which conforms to the data processing of GB, ISO, ASTM and DIN.Can meet the user's requirements and standards.

Describe:

● Host: this machine adopts double space door structure, upper space stretch, lower space compression, bending.The beams rise & fall without grade.The transmission part adopts the arc synchronous toothed belt, the screw side drive, the transmission is stable, the noise is low.The specially designed synchronous toothed belt deceleration system and the precision ball screw pair drive the moving beam movement of the testing machine to realize the no-gap transmission.

● Supported by: Standard configuration: wedge stretching fixture and compression fixture.

● Electrical measurement and control system:

1. Using ac servo system and servo motor, the performance is stable and reliable, with the protection device of overflow, overpressure, overspeed and overload.

2. It has the protection function of overload, overcurrent, overpressure, displacement upper and lower limit and emergency stop.

3. The internal controller ensures that the test machine can realize the control of beam displacement and other parameters, which can realize the equal velocity displacement.

4. At the end of the test, the initial position of the test can be returned manually or automatically.

5. To achieve the real physical zero, gain adjustment and test force measurement of automatic gear shifting, zero, calibration and inventory, and without any simulation adjustment link, highly integrated control circuit.

6. The electrical control line is based on the international standard, which conforms to the electric standard of the national testing machine and strong anti-interference ability, which guarantees the stability of the controller and the accuracy of the experimental data.

7. With network interface, data transmission, storage, printing record and network transmission can be carried out, which can be connected with Intranet or Internet network.

Specification:

Model	UTM-66-5TX
Max Force (kN)	50
Accuracy	1Level
Test force range	2%-100%
Test force indication relative error	<±1%
Test resolution	Max force 1/300000
Deformation range	2%-100%
Deformation indication relative error	<±1%
Deformation resolution	Maximum deformation 1/300000
Displacement indication relative error	<±1%
Displacement resolution (mm)	0.001
Speed range	0.01mm/min ~ 500mm/min, Stepless speed regulation
Tensile stroke (mm)	700
Compression space (mm)	700
Test the width (mm)	400
Choose fixture	Stretching, compression, bending, cutting, stripping, tearing, etc.
Main frame size (mm)	770X465X1730
Servo motor power (kW)	0.75
Weight (kg)	300

Software functions:

● Use windows working platform, set all parameter with dialog forms and operate easy;
● Using a single screen operation, do not need to change the screen;
● Have simplified Chinese, traditional Chinese and English three languages, switch conveniently;
● Plan test sheet mode freely;
● Test data can be directly appeared in the screen;
● Compare multiple curve data through translation or contrast ways;
● With many units of measurement, the metric system and british system can switch; 8.Have automatic calibration function;
● Have user-defined test method function
● Have test data arithmetic analysis function
● Have the function of automatic magnification, to achieve the most appropriate size of graphics.

Control parameters:

● Stress control speed range: 0.005 ~ 5%FS/s
● The stress control speed is precise: when the rate is < 0.05% FS/s, the rate is less than 2% of the set value, and the speed is greater than 0.05% FS/s, which is less than 0.5% of the set value.
● Strain control speed range: 0.005 ~ 5%FS/s
● The strain control rate is precise: when the rate is < 0.05% FS/s, the speed is less than 2% of the set value, and the speed is greater than 0.05% FS/s, which is less than 0.5% of the set value
● Displacement control rate range: 0.001 ~ 500mm/min
● Displacement control rate accuracy: within the set value of + + 0.2%
● Constant stress, constant strain and constant displacement control range: 0.5% ~ 100%FS
● Constant stress, constant strain and constant displacement control accuracy: when the set value is greater than 10% of the FS, the set value is less than 0.5% of the set value, and the set value is less than 1% of the set value when the set value is < 10%FS.
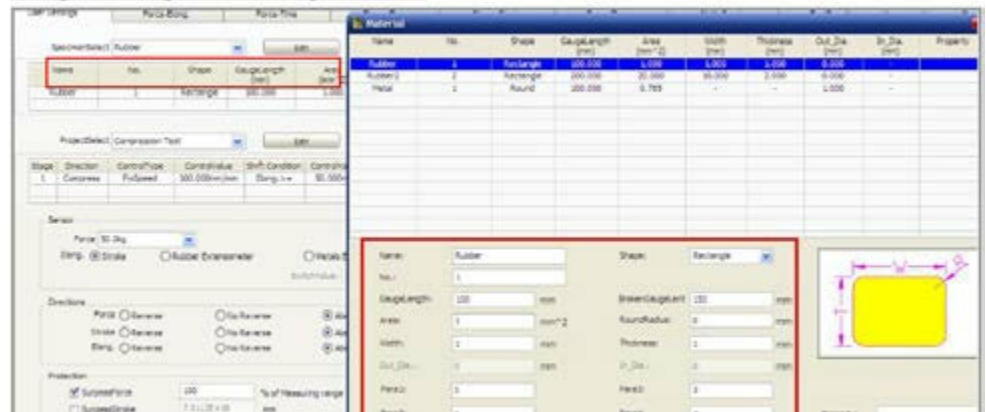
Software Introduction:

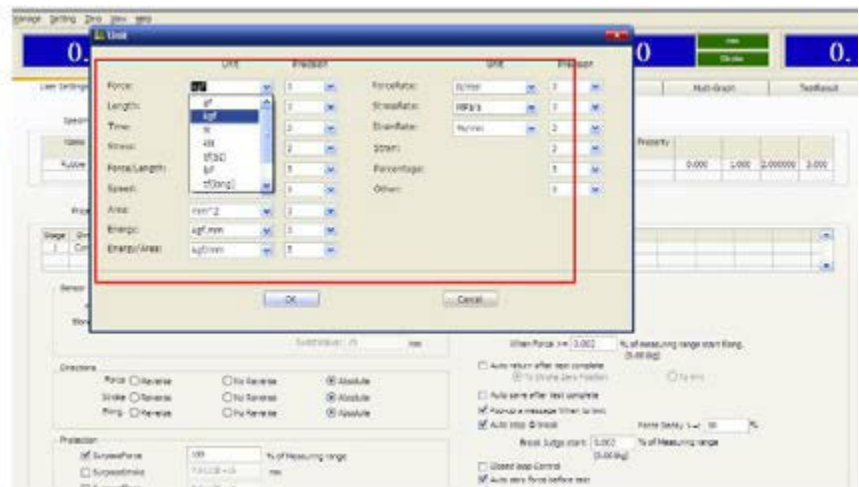### 1.Connect tensile tester with computer well,open software,Press Setting-Online-COM1......

2.Calibration,Press Setting-Calibration,input password,and enter calibration menu,Press

ReadFromChip,Press OK,the software will read from tensile tester chip
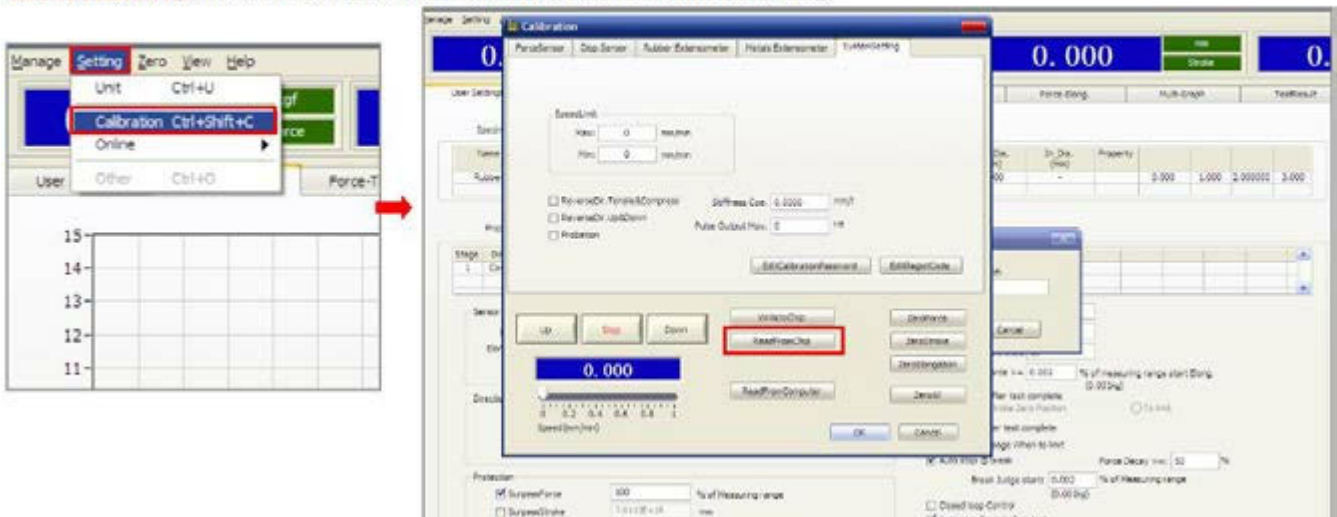
3.Input the Specimen shape,size......
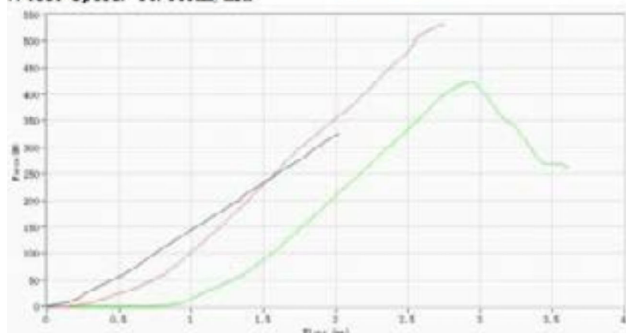

5.Set Unit

8.If you need to add test items of testing,or need to add formula,please choose Edit.Choose the test items you need,Press Insert-OK,save it.Or Press Edit to add formulas.

9.Test Reort Form(For Example)

1. Customer: 2. Test Date: 2013-3-8,10:18:10
3. Lot No.: 00000001   4. Material Name: Compression
5. Operator: 6. Material: Rubber
7. Test Speed: 50.000mm/min

No.	Force @ Peak (N)	Elong @ Peak (mm)
1	325.97	2.019
2	532.78	2.744
3	423.12	2.937
Maximum	532.70	2.94
Minimum	325.97	2.02
Mean	427.29	2.57