

SPG-1005B

Computer economic material testing machine



Equipment summary:

SPG-1005 Computer economic tensile strength tester is a new material testing machine that combined with the electronic technology and mechanical transmission, it has accurate load speed, range of force measurement, Has high accuracy and sensitivity for the load, displacement measurement and control, This machine is simple to operate, simple structure, it can be directly placed on the testing table for test, especially suitable for controlling quality in production line This series of machine is mainly applied to test the non-metallic and metallic materials which the load is less than 5KN

Main functions:

This machine can be test all the material in tensile, compression, bending, shear, peel, tear, two-point extended (need add extensometer) and others for control products quality. Such as textile, rubber, plastics, synthetic leather, tape, adhesive, plastic film, composite materials, electronics, metals and other materials.

Main feature:

1. the surface of appearance using electrostatic spray, simple and generous, multi-functions and economy.
2. digital force displayed by LCD , discernible tension or pressure, LCD display clearly
3. Three kinds of units: N,Kg,Lb, option or automatically exchange;
4. LCD with backlight can be used in low-light environments



PEACOCK INDUSTRIES SDN BHD

No.12&12A, Jalan Anggerik Mokara E31/E,
 Kota Kemuning Seksyen 31, 40460 Shah Alam,
 Selangor Darul Ehsan, MALAYSIA.
 Tel: 603-51247726, 51247727 Fax: 603-51224628
 email: sales@peacockspg.com (283115-T)

- 5. Single measurement, it can record the max force of tension and compression in both directions, automatic or manual cleared to zero.
- 6. The system would shut down if overload or over-trip
- 7. Structure of single-column is beautiful, sophisticated and economy.

Corresponding standard:

GB/T16491-1996 electronic universal testing machine

Applicable industry:

It is widely used in wire and cable, hardware, electronic and electrical equipment, packaging, printing, medical equipment, auto parts, textiles and leather, clothing, shoes, rubber and plastic products, colleges and universities; research laboratories; inspection arbitration, technical supervision departments and many other industries, it is the basic equipment for quality management and physical tested.

Technical parameters:

Model	SPG-1005B
Max load	100N, 200N, 500N, 1KN, 2KN, 5KN, option
Accurate grade	1grade /0.5 grade
Effective measuring range	Force from 0.2% to 100% (1grade) / from 0.4% to 100% (0.5 grade)
Measuring accuracy	the value $\pm 1\%$ / the value $\pm 0.5\%$
Tester resolution	Max load 1/200000, constant the resolution
Load sensor	Basic configuration sensor max load: one
Effective testing width	400mm (can be increased the width according to customers requirement)
Effective tensile stroke	400, 500, 600mm (can be increased the space according to customers requirement)
Testing speed	From 0.001 to 500mm/min
Accuracy of displacement measurement	Tolerance: $\pm 0.5\%$ / tolerance: $\pm 0.2\%$
Deformation of measured system (according to the requirements)	Min span: 10mm, Max range of deformation 800mm Extended deformation span: 25mm, 50mm, 100mm, range of deformation 5mm, 10mm, 25mm
Accuracy of measured deformation	Tolerance : $\pm 0.5\%$ (according to requirement of customer to choose the larger or small deformation)
safety	Electronic-limit protection
Testing platform moving device	Fast /slow (two speeds to control), can jog
Return Back	Manual or automatic operation, After the test, the moving iron return to initial position with the highest speed by manual or automatic operation



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Overload protection	Overload 10%, automatic protection
fixture	A set of tensile fixture
Machine size	550x420x1800mm(length*width*height)
Power system	AC Motor + Driver
Power supply	220V, 50HZ
Power	0.75KW (depending on different demand of force, using different motor)
Machine weight	about 120 Kg
Units	Kg, Lb, N, Ton (can be exchanged)

Software features:

1. The software description about Computer economic tensile testing machine

- A. Function of standard modular: provide users with the necessary applications to the test, covering GB, ASTM, DIN, JIS, BS ... and other testing standard specification.
- B. Tested product information: provide users with the data to set about the products, one time to input and re-use permanently . for improving the accuracy, the data can be corrected by the formula automatically.
- C. Dual-Report Editor: provide users with the reported format that users choose (testing program add EXCEL reported format, Extend the previous single pattern of statements)
- D. The data's unit of length and force can be exchanged, unit of force is T, Kg, N, KN, g, lb, unit of length is mm, cm, inch.
- E. auto-optimization of graphic scale, display the best measurement of graphics. It can test the moving exchange in graphics. It has the load - displacement, load - time, displacement - time, stress - strain load -2 points extending maps, and lots of graph compared.
- F. Test results can be output in EXCEL format.
- G. Testing result can be automatically preserved or manual preserved, after the test, it can automatically calculate the most strength, up and down yield strength, loop method, best method, non-proportional extended strength, tensile strength, compressive strength, tensile strength at any point, constant load extension, elastic modulus, rate of elongation, peel range of maximum force, minimum force, average force, total energy, bending modulus, x% load in break displacement, load X% in break displacement, and so on . the test data can be stored in any disk.
- H. Software has a capability that can output the before data.

2. The accessories about Computer Economic tensile testing machine

- A. warranted book within one-year and operating instructions.
- B. a group of fixture
- C. testing software for tensile machine.
- D. a set of brand computer, color printer

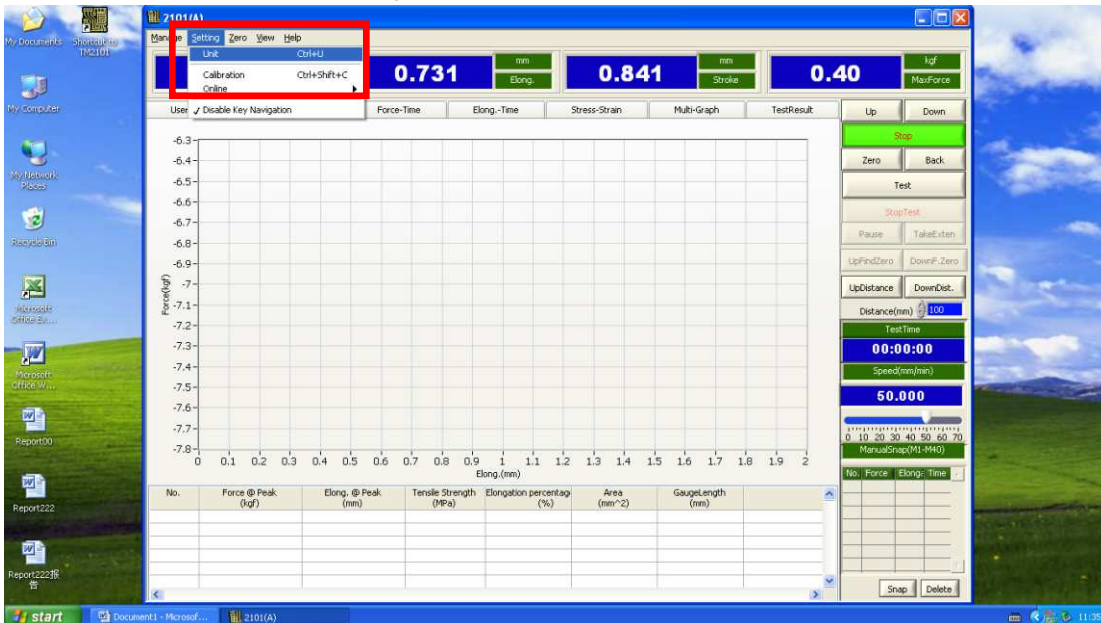
3. Items can be tested in the Computer tensile testing machine

Common items: (display data and calculation)

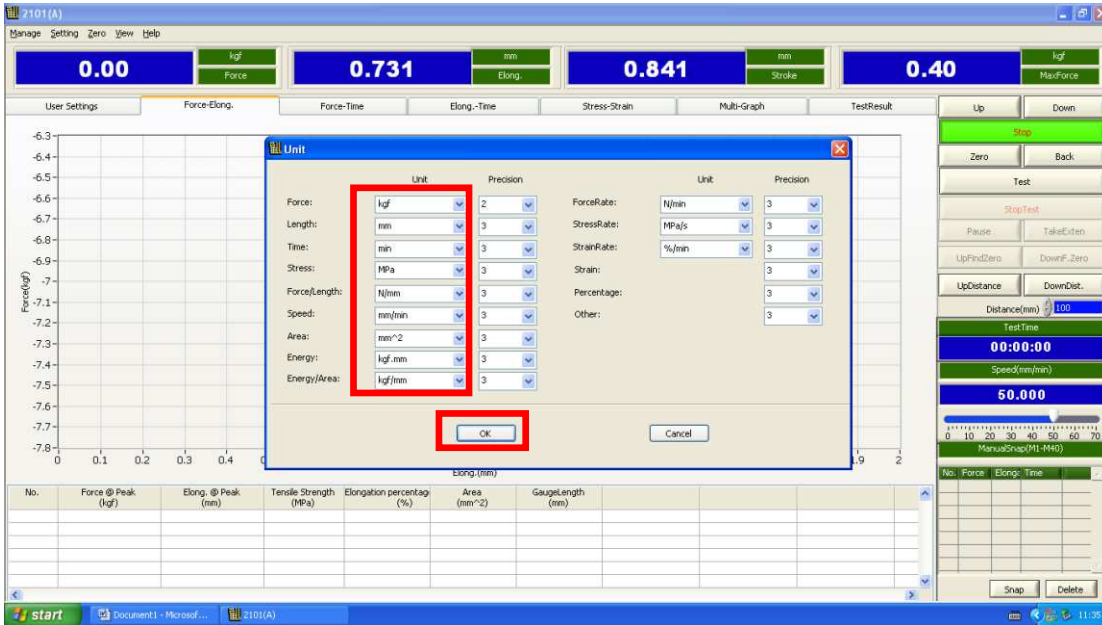
- tensile stress
- tensile strength
- fixed stress
- stress strength
- the value of force at any point
- pull-out strength
- tensile strength
- rate of elongation at break
- rate of stress at break
- tear strength
- rate of elongation at any point
- force of adhesion and the peak of force

4. Computer servo control material testing machine software operation interface

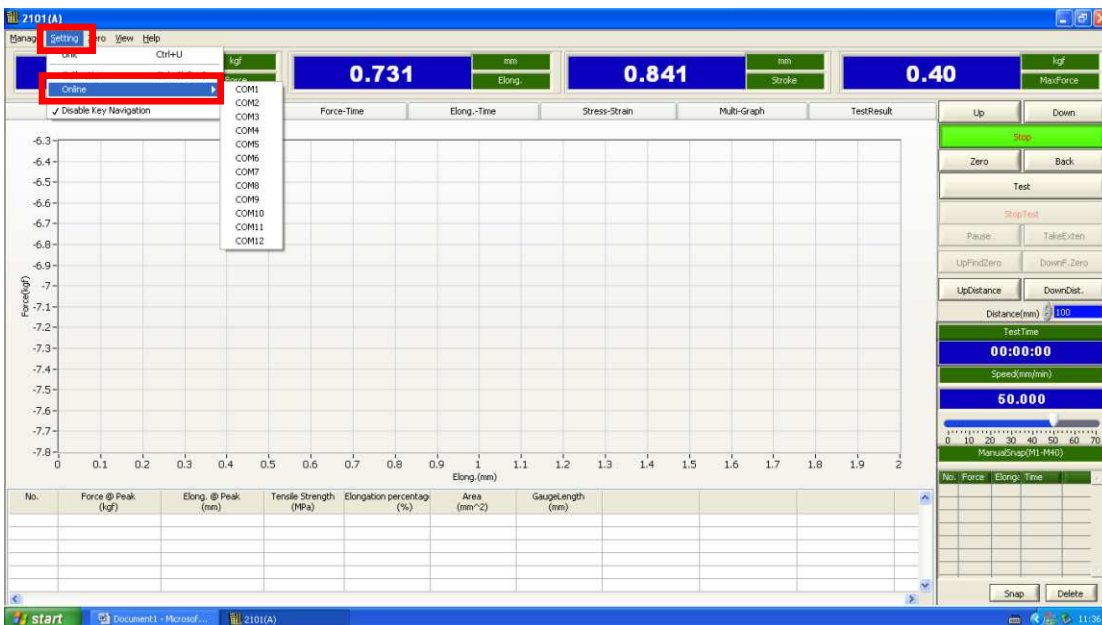
1. Choose you need units, setting ==> unit



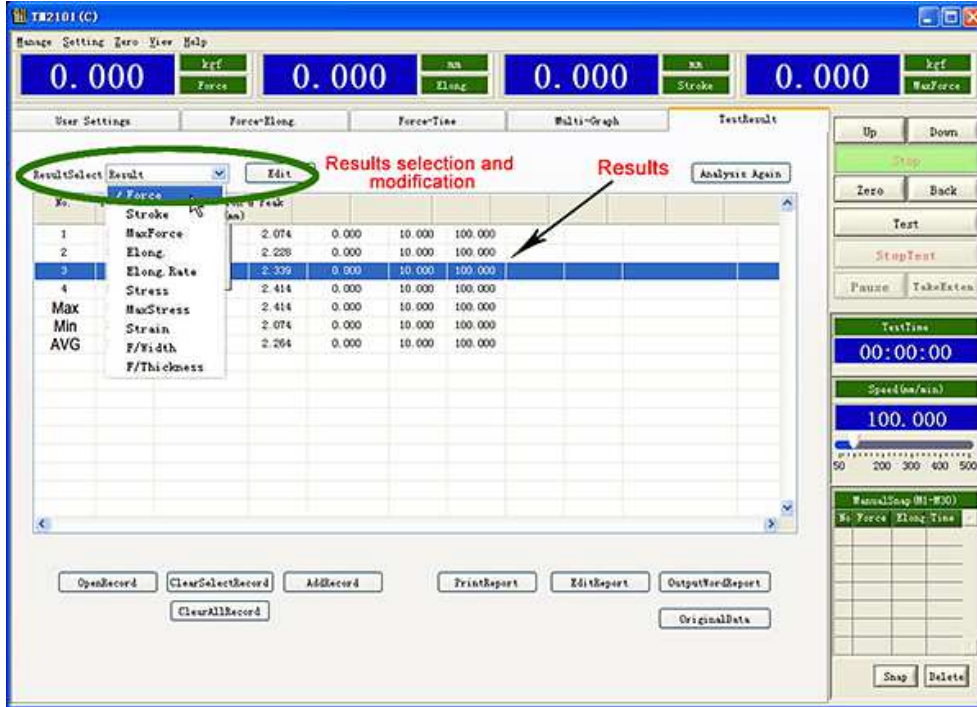
2. There are so many unit, just choose you need.



3. Connect computer and software online. Setting==>Online==>COM1 or COM2..., after it show success connected.



5. Test results



6. Computer servo control material testing machine test curve





C Shape Fixture

Large C-clamp

Large C-clamp



Plate Fixture

3 point bending device

Packaged with special fixtures



Rubber Tensile Fixture Jaw tension clamp

Universal tensile fixture



Locking Pincer clamp



90 Degree Peel fixture



Eccentric clamp



Extensometer



Metal Extensometer



Dumbbell Cutter



Seat belts fixture (braid)



Fixture(E shape)



Tensile fixture (20T,30T)



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Servo motor+Driver

Sensor O type

Sensor S type