

Universal Material Compression Tensile Strength Testing Machine For Test Spring Industry



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Application Industry:

1. Electronic products: mobile phones, computers, television, video recorders and so on
2. Textile fabric products: clothes, hats, shoes, ropes
3. Wire and cable: data cable, usb, springs
4. Leather products: handbags, wallets, leather shoes, leather chairs
5. Instrumentation, vehicles, plastic products, metal,
6. Food, chemical, building materials, medical, aerospace
7. Others...

Main Parameter

Item	Description
Max. Force	2000 kg (20KN)
Load cell	China brand load cell
Control system	PC with windows 7 system
Motor	variable frequency motor with reduction box, high-precision ball screw rod
Force reading	kgf, lbf, N, KN, T etc
Stoke	1200mm including fixture
Load cell Resolution	1/100,000
Load Precision	≤0.5%
Test speed	50~300mm/min (adjustable by PC)

Test width	≤400mm
Software	TM 2101
Curves display	Load- elongation, Elongation-time, Time-elongation, Stress-strain
Data display	Max. force, speed, sample information, strength(Kpa, Mpa, N/mm, N/mm ²) etc...
Safety features	E-Stop Over-load protection Upper and lower limit switches Load sensor with automatic retreat

Detection function:

1. Universal test
2. Tensile strength test
3. Bending strength test
4. shearing test
5. Tear fatigue test
6. 3 points bending test
7. Compressive test
8. Other functional testing ...

This **Compression Tensile Strength Testing Machine** can do various of test such as tensile test, compression test, bending test to get the result with elongation, Internal stress, strain and testing data. Tension tester can match different fixture, accessories, two point stretcher and load cell, It can be connected by computer to operate the machine.

Selling point:

1. TM 2101 intelligent automatic detection of the operating system, (can adapt to all current PC)
2. High-tech, low noise
3. Humanized industrial design, easy to place and transport
4. The world famous brand core precision components
5. Security protection system
6. Valid test trip length (modifiable)

Film/Plastic Film

- ASTM D882: **Tensile Test**
- ASTM F1306: **Puncture Test**
- ASTM D1938: **Trouser Tear Test**
- ASTM D2732: **Thermal Shrinkage Test**
- ASTM D1709, ISO 7765-1: **Free-Falling Dart Method**
- ASTM D1894: **Static and Kinetic Coefficients of Friction**
- ASTM D1424, ASTM D1922, ISO 1974: **Elmendorf Tearing Strength Test**

Theory

Place the sample between the upper and lower fixture, use a given speed to pull the upper fixture upward, and the upper load cell with sensor to check tensile strength and convert the strength into voltage sign and output to the display screen. And the strength value will be displayed automatically on the computer.

6. Software

The TM2101 measurement and control system is designed purposely for microcomputer controlled electronic universal testing machine, microcomputer controlled universal hydraulic testing machine and microcomputer controlled compress testing machine, used for tension, compress, bend, shear, tearing and peel test. With the personal computer and interface plate, it could collect, save, process and print test result. Further it can calculate multiple parameters, i.e. maximum force, yield strength, average peel force, maximum deformation, yielding point and elastic modulus; this system is

featured in curve process, multisensor support, image interface, flexible data process and powerful system function.

TEST SOFTWARE – TM 2101

Universal testing machine TM2101 control system data display:

1. Max. force, 2. speed, 3. sample information, 4. strength(Kpa, Mpa, N/mm, N/mm²) etc...

1. Load- elongation, 2. Elongation-time, 3. Time-elongation, 4. Stress-strain.

