

PW-UD23 Universal Material Testing Machine



Scope of application:

It is widely applicable to the tensile, compression, peeling, tearing, bending, and other performance tests of rubber, plastic, polymer materials, adhesives, adhesive tapes, metals, textiles, wires, containers and other products and semi-finished products.

Standards compliant:

ISO 7500-1, JIG475-88, ASTM E4, DIN5122, JIS B7721/B7733, EN10002-1, EN1002-2, BS1610, GB/T228, GB/T2792, ASTM D3330, GB/T15598-1995, HGT2-163, GT/T7753-1987, GT/T7754-1987, GB/T7124-86, GB/T7124-2008, etc.

Features:

1. Powerful test function, with different fixtures, it can carry out a variety of test requirements to meet the needs of users.
2. The software has more powerful functions. Various test results and test curves can be displayed and automatically marked in the interval. It can be upgraded at any time to realize positioning shift, fixed force, fixed time, repeated fatigue testing, etc.
3. The design of the machine is beautiful, generous, easy to operate, and the software has strong scalability and high accuracy.
4. Servo motor drive, high precision ball screw drive, low failure rate and simple maintenance.

Machine structure:

Choose 45# steel, sand blasting and electrostatic spraying treatment, the surface will not peel off; The dust cover adopts mold processing, extrusion molding process, and the surface is sandblasted with anodized silver, which is beautiful and durable;

Servo motor control system, coordinated with precision synchronizing wheel and precision ball screw drive;

The force measurement system is the latest high-speed, high-resolution, high-precision, continuous acquisition AD converter; it reaches $\pm 500,000$ subdivision codes, reaching the international advanced level.

Force measurement range: 0.5 - 100% FS

Measurement accuracy: 0.5 level

Resolution: 1/500,000

Equipped with precision tension and compression sensors to meet high stability and high precision force value collection;

Displacement measurement system, the unit adopts the latest high-speed, high-resolution, high-precision, continuous acquisition AD converter; reaches $\pm 500,000$ subdivision codes, reaching the international advanced level.

Deformation measurement range: 1 - 100% FS

Measurement accuracy: 0.5 level

Resolution: 1/500,000

The servo motor is matched with a high-line-count photoelectric encoder to output a displacement signal, which has the characteristics of fast transmission speed and high precision.

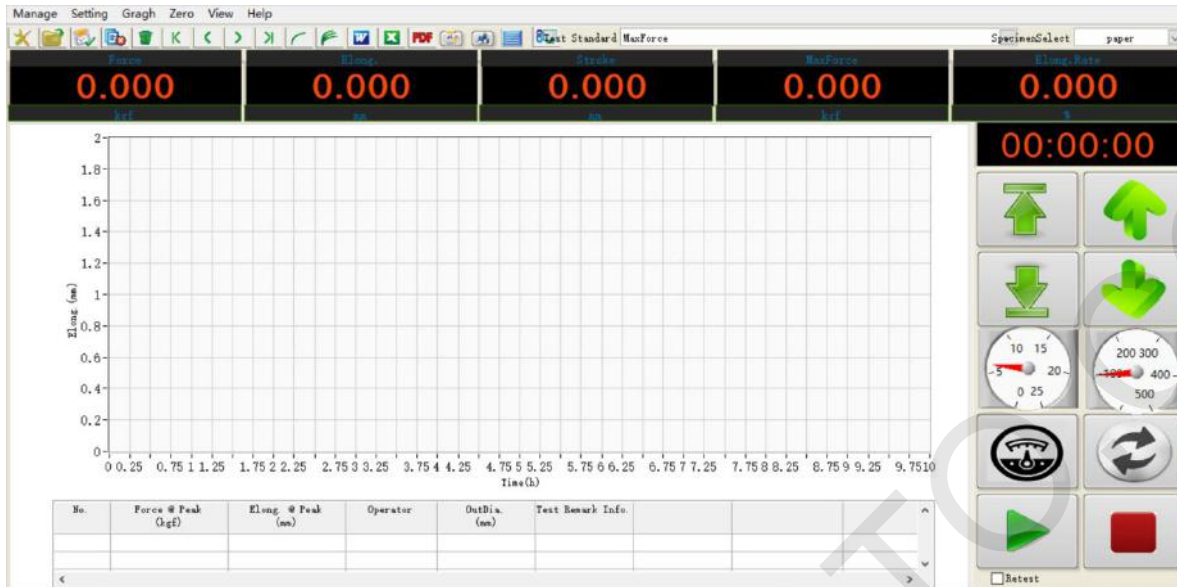
Measurement and control software:

The software satisfies the testing requirements of tensile, compression, bending, shearing, tearing, and peeling of various materials.

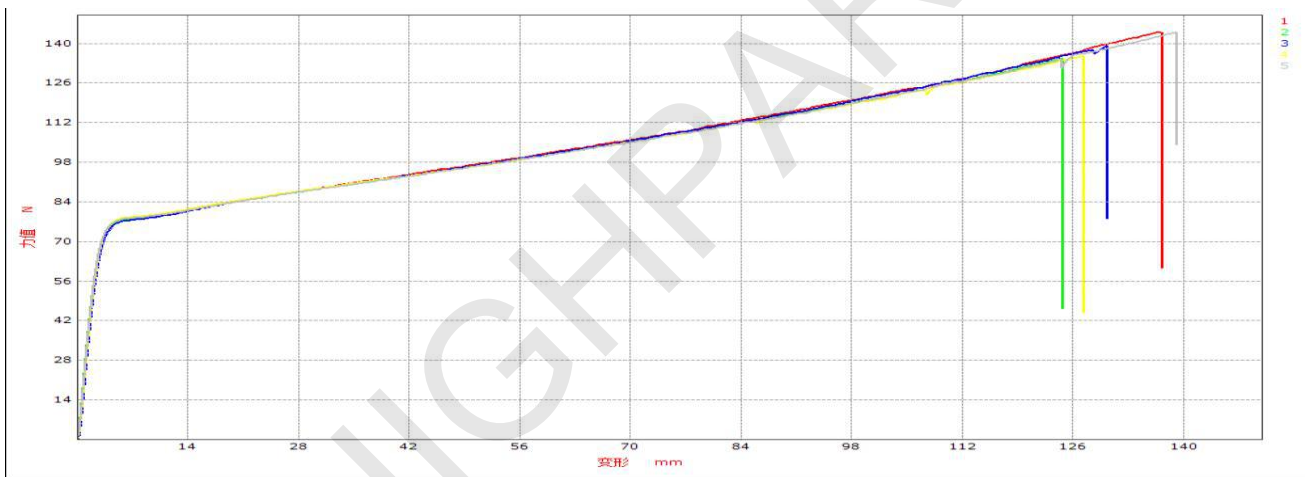
1. It can perform tensile, compression, bending, shear, tear, and peel tests;
2. It can calculate the maximum deformation, yield point, elastic modulus and other parameters such as maximum value, failure value, tensile strength, compressive strength, flexural strength, elongation, elongation, average peel force, elastic modulus, yield strength, etc.;
3. Automatic return: select the automatic return function, after the test is broken, it will automatically return to the initial position at high speed;
4. It can perform curve processing, multi-sensor support, graphical interface, flexible data processing, and support Windows operating system;
5. It is convenient to connect with office software such as office; the test results can be accessed at will, and the data curve can be re-analyzed;
6. Comparison of results: Multiple test characteristic curves can be superimposed, reproduced, enlarged, and presented in different colors for analysis and comparison of a set of samples;
7. Test report: The report can be printed directly or exported to PDF, Word, Excel and other formats;

8. Support multiple languages, switch arbitrarily, the display name of the database field of the test data is automatically translated following the selected text, so that the data can be easily browsed in the local text, which basically meets the use of the test machine in the world;
9. Support 3 types: SI international standard unit, kg-cm unit, Lb-Inch inch unit, 6 common unit systems: N-mm-MPa, kN-mm-MPa, gf-cm-kgf/cm², kgf -cm-kgf/cm², Lb-Inch-kpsi, kP-Inch-kpsi, the unit is easy to switch, can meet the use of different regional standards.
10. Test mode structure output:
Stretching: maximum force, tensile strength, yield strength, elongation after fracture, modulus of elasticity, etc.
Bending: maximum force, bending strength, deflection, modulus of elasticity, etc.
Compression: Maximum force, compression strength, yield strength, elastic modulus, etc.
Tear: maximum force, tear strength, etc.
Peeling: maximum peeling force, average peeling force, minimum peeling force, maximum peeling strength, average peeling strength, minimum peeling strength, etc.;
11. Support the original data viewing function, and provide original data files for material testing and analysis;
12. The use of a photoelectrically isolated communication interface completely solves the computer serial port or circuit board serial port damage caused by non-common ground, and realizes the hot swap of the computer and the testing machine circuit;
13. The software adopts authority level management: tester-level authority, test management authority, and test machine manufacturer authority, taking into account the convenience and safety of use.
14. One-button measurement, and can output analysis graphs and print test reports.

Software interface: (multiple test interfaces can be customized)



Test curve:



Item	PW-UD23
Capacity (MAX)	20KN (optional 10N~20KN range force sensor)
Control mode	full computer control mode, powerful software function
Power unit	N, kN, gf, kgf, lbf, kP, tf (SI), tf (long), etc.
Length unit	mm, cm, Inch, m, km, um, etc.
Power resolution	1/500,000;
Accuracy	±0.1%
Travel resolution	1/500,000mm
Accuracy	±0.1%
Effective stroke	700mm; (customizable)

Speed range	0.01~500mm/min; (customizable)
Test space	420mm left and right (customizable)
Shutdown mode	overload shutdown, emergency stop button, automatic shutdown of specimen damage, automatic shutdown of upper and lower limit settings
Machine power	Servo motor drive
Machine size	83*60*160cm (width×depth×height)
Net weight of machine	120KG
Power	400W
Power supply	220V 50~60HZ
Machine equipment	1 USB communication line, 1 software
Optional accessories	tensile fixture, compression fixture, etc.; (purchase different fixtures according to different test standards)

Grips Selection :

