

Universal material testing machine GHH



Product introduction

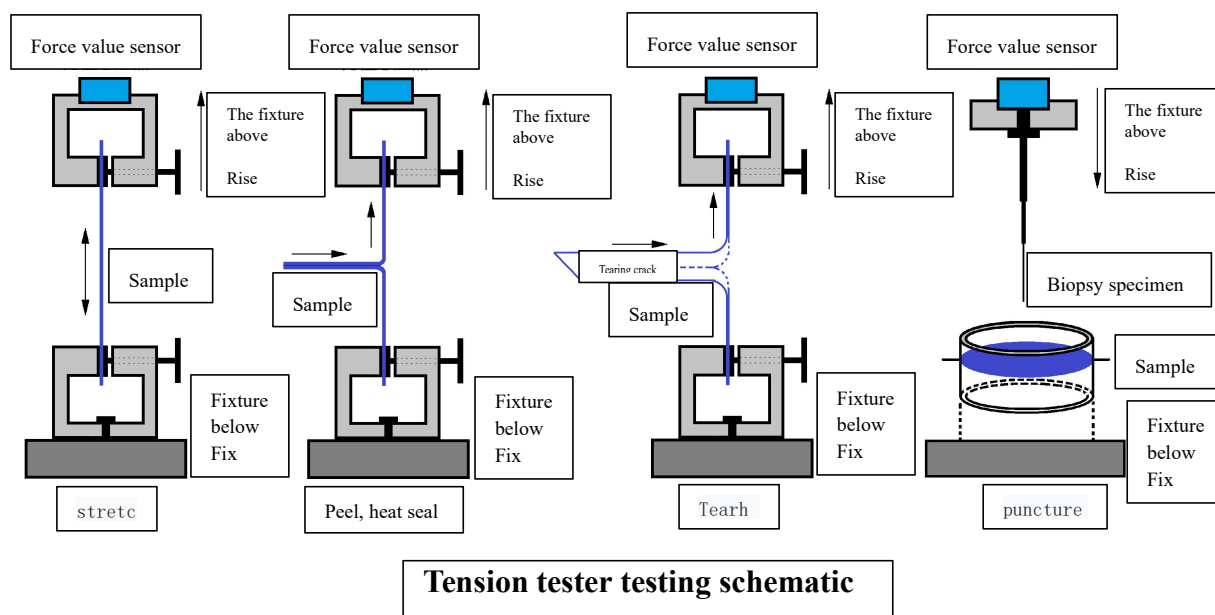
GHH universal material testing machine is the Guangzhou international r&d team based on GB, JIS, ASTM, DIN and other standards and market demand to upgrade the mechanical properties of new testing machine, suitable for all kinds of metal, non-metallic materials tensile, stripping, heat sealing, tearing, piercing, compression, bending and shear test, and then calculate the material parameters such as fracture strength, elastic modulus, It can also be used in the medical industry of syringe piston sliding, body tightness test verification.

GHH universal material testing machine has a flexible interface and control mode, can do stretching, peeling, and other tests, speed, thickness, clamping distance multi-parameter variable setting; The measuring accuracy can reach 0.5 level; The whole process is controlled by computer, open data structure; The core adopts imported parts, loaded with high-precision ball screw; Control measurement unit, can choose the built-in or external type, with perfect limit protection, overload protection, emergency stop and other safety protection functions.

GHH universal material testing machine is suitable for plastic sheet, pipe, profile, plastic film and rubber, wire and cable, steel, glass fiber and other materials of all kinds of physical and mechanical properties test for material development, is the physical property test, teaching research, quality control and other indispensable testing equipment.

Test principle

Will be clamped specimen in tensile machine fixture between two chuck, two clip do relative movement, through strength sensor and the machine is located in the moving clamp head built-in displacement sensor, collected test force value change and displacement in the process of change, to calculate the sample drawing (tensile strength, elongation at break and the elastic modulus of performance indicators, etc.



Standard

JIG 139, ASTM D828, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, JIS P8113

Technical parameters

Item	Technical parameters
Test range	0~3000 N (Multiple groups of sensors can be selected within 20000 N)
Test measurement	Within ± 0.5 %FS
Test speed	0~500 mm/min (continuously variable speed)
Speed precision	Indicates within $\pm 1\%$ of the value
Displacement measurement accuracy	Indicates within $\pm 0.5\%$ of the value
Effective test stroke	1000 mm
Effective test stroke	1100%
Effective test width	30 mm
Force value resolution	0.001 g

Resolution of displacement	0.001 mm
Size	L×W×H: 750 mm×500 mm×1800 mm
Weight	150 kg
Power	1000 W
The power supply	AC 220 V, 50 Hz

Features

◆ Flexibility and variety of control

Supports stretching, peeling, heat sealing, tearing, puncture, compression, bending, shear and other tests, speed, thickness, clamping distance variable parameters set, optional pneumatic fixture, suitable for a variety of fixtures.

◆ High measurement accuracy

The test measurement accuracy can reach 0.5 level, high sampling rate (100 times/second), wide speed range, can adapt to high and low speed test, make the test data more accurate.

◆ Imported core components, safe and reliable operation

- Using high-precision ball screw loading, the loading is stable, the testing machine has a long life, good long-term stability and energy saving;
- A plurality of load/deformation measurement subchannels are proposed, which support multiple sensor expansion measurement. A fully digital control system with imported AC servo system and motor can control the displacement zero flutters.
- It has improved safety protection functions such as limit protection, overload protection, emergency stop, etc.
- Double column table structure, good rigidity, control measurement unit can choose built-in type (simple appearance, save space) and external type (easy to upgrade, maintenance and separate from the microcomputer operation).

◆ **Intelligent operating system**



- According to the computer system design of the new version of GMP appendix, the test process parameters are flexibly set, and the function of audit tracing (test tracing, log tracing) is provided, which meets the requirements of data traceability and ensures the security and integrity of the test data. You can set different levels of system operation rights.
- Intelligent Statistical analysis, support multiple data standard deviation analysis. At the same time, the system can be expanded, such as access to laboratory LIMS system.
- Personalized test reports are set on demand to support multiple formats of data output.
- Independent test can be separated from the computer, data can be processed automatically, and a built-in micro-printer can print data in real time. The instrument is equipped with computer interface, can also be connected to the computer online detection.

◆ **Laboratory intelligent IoT platform**

It can be connected to the Internet of Things platform to realize digital network management:

- Remote login to the IoT platform can be performed by directly accessing the software interface of the instrument.
- All experimental data can be viewed anywhere by simply logging in to the platform;
- Unified management of experimental data of all instruments in the interface of things platform can be achieved.
- A complete laboratory management process can be realized;
- One-click application for after-sales service, and one-click application for relevant accessories; After-sales staff can provide remote after-sales service through the system. There is a complete after-sales record on the platform, which is convenient for after-sales staff to provide high-quality online service;
- Customers may download the required instrument materials, documents and operation videos on the platform by themselves.

Application Area

	<p>Plastic film</p>	<p>It is suitable for testing the properties of plastic film, composite material, soft packaging material and adhesive tape, such as stretching, peeling and heat sealing.</p>
	<p>Composite film bag</p>	<p>It is suitable for testing the properties of composite film, co-extruded film, composite bag, cooking bag, aluminum-plastic composite bag, such as stretching, peeling and heat sealing.</p>
	<p>Paper</p>	<p>Suitable for stretching, peeling and heat sealing of paper, kraft paper, facial tissue, toilet paper and other products.</p>
	<p>Medical patch</p>	<p>It is suitable for testing the properties of stretching, peeling, heat sealing and other products such as medical cold compress and paste.</p>
	<p>Pressure sensitive adhesive tape</p>	<p>It is suitable for testing the properties of cellophane tape, electrical insulation tape, medical zinc oxide adhesive paste, such as stretching, peeling and heat sealing.</p>

Factory configuration

The standard configuration	Main machine, stretching fixture, professional software, power cord, servo motor, double ball screw, professional control system, pneumatic fixture, international quality sensor
Optional	Pneumatic fixture, sample cutter, puncture fixture, other types of fixture
Remark	Computer and air source shall be provided by users themselves

Note: GBPI has always been committed to the innovation and improvement of product performance and function. For this reason, product technical specifications and appearance will be changed accordingly. The above situation will not be notified. GBPI reserves the right of modification and final interpretation.



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