



HZ-1009C High And Low Temperature Universal Testing Machine



Product profile

HZ-1009C

Company Profile

Dongguan Lixian

Instrument Scientific Co., Ltd., founded in 2000, is a collection of scientific research, design and development, production and manufacturing, sales and service in one of the middle and high-end instrument technology enterprises. After more than ten years, the company has occupied the absolute market in the domestic test machine industry and enjoys the national popularity. The manufacturing base is set up in Dongguan, the factory area of 6000 square meters, has been covered in Dongguan, Shanghai, Beijing, Jinjiang, Wuhan, Chongqing, Shenyang, Changsha and other major cities set up branches and after-sales service workstations; And in Malaysia, Indonesia, Saudi Arabia, India, Sri Lanka, Brazil, Poland and other countries have developed a number of agent foreign sales and after-sales service qualification dealers.



We always adhering to the concept of "continuous innovation", 2003 with east China university of science and technology jointly developed tensile test special software system, test machine industry brings a new round of technical innovation, led the pearl river delta area test machine industry rapid development, after our years of study, product software and hardware has made great progress, accuracy has reached advanced level at home and abroad, acquisition resolution can reach 1 / 500000.

Our main business products: material stretching / pressure test machine series (such as: hydraulic servo universal test machine, servo electronics universal pull test machine, etc.), environmental test series, optical series), shoe material test series, is a few famous manufacturers of testing instruments, at the same time, during the outbreak in 2020 we also produced mask machine, melt spray, masks, particle filter and other epidemic prevention materials, for the national epidemic prevention.

Up to now, the company has obtained CMC metering license and ISO9001:2015 quality management system certification, has a perfect and reliable product development process and rigorous quality monitoring system.

"Think high, down to earth"! Faced with new challenges and development opportunities in the future, we will make unremitting efforts to accelerate the comprehensive improvement of — —, actively surpass, innovate technology, better play the vanguard role of the international industry, and serve the global manufacturing industry!



HZ-1009C (100-300KN)

High And Low Temperature Universal Testing Machine

Equipment overview

Lixian's complete solutions for high-temperature are based on the proven load frame concept of the AllroundLine. The flexible and modular load frame design in conjunction with an array of high-temperature components enable the configuration of individual testing systems that are optimally matched to the testing requirements of our customers. Model HZ-1009C offers standard solutions in a temperature range of -70°C up to $+1,000^{\circ}\text{C}$ and customized testing solutions up to $+1,200^{\circ}\text{C}$.

A testing system for all quasi-static tests (tensile, compression and flexure tests)



Wide Temperature Range

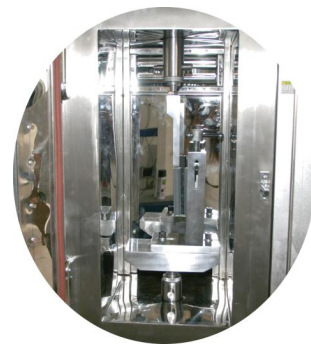
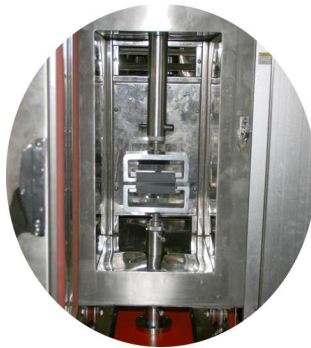
- -70°C to $+1,000^{\circ}\text{C}$ with high-temperature furnace and temperature chamber
- Precise measurement and standard-compliant specimen temperature control
- Wide selection of contact-type and non-contact extensometers for all applications in the entire temperature range
- Appropriate specimen grips for almost all materials (metals, plastics, composites, ...)
- Wide range of high-temperature accessories for customized system configurations

Main Features

The imported photoelectric encoder is used for displacement measurement, the controller adopts embedded monolithic microcomputer structure, built-in powerful measurement and control software, integrating measurement, control, calculation and storage functions. With the function of automatically calculating stress, elongation rate (extension), tensile strength and elastic modulus, automatic statistical results; automatically record the maximum point, fracture point, specified point force or elongation; use computer test process and test curve dynamic display, and data processing. After the test, data analysis and editing, and print report, product performance reaches the international advanced level.

Satisfying Criteria and Picture Details

Meet the standard GB / T 16491-2008 electronic universal test machine, Also comply with the ASTM D412, ASTM D638, GB/T 1040, GB/T 8808, GB/T 13022, GB/T 2790, GB/T 2791, GB/T 2792, GB/T 16825, GB/T 17200, GB/T 3923. 1. GB / T2611, GB / T 6344, GB / T 20310, GB / T 3690, GB / T 3690, GB / T 4944, GB / T 3686, GB / T 6344, G B / T 10654, etc.



剖面 A-A

项目号	零件号	说明	数量	备注
1		上板	HZ-1009-X-01	1
2		HZ-1009电子绝缘体	HZ-1009-X-02-00	2
3		中间升降板	与原有件力机相同	1
4		送料轴	与原有件力机相同	2
5		左送料	与原有件力机相同	1
6		右送料	与原有件力机相同	1
7		支块	与原有件力机相同	2
8		力机底板	与原有件力机相同	1
9		底座	HZ-1009-X-05	1
10		限位开关绝缘体	与原有件力机相同	1
11		限位开关安全	与原有件力机相同	1
12		大交形	与原有件力机相同	1
13		电源空壳	HZ-1009-X-04	1
14		后封板	HZ-1009-X-08	1
15		右封板	HZ-1009-X-06	1
16		前封板	HZ-1009-X-07	1
17		密封胶2-Skw		1 外购
18		后封板	HZ-1009-X-08	1
19		后封板门1	HZ-1009-X-09	1
20		后封板门2	HZ-1009-X-10	1
21		大交形下座基	与原有件力机相同	1
22		大交形上支腿	与原有件力机相同	1
23		电路板		1 外购

恒准仪器科技有限公司
HENGLIANG

.I	.II	.III	单位	审核	日期	恒准仪器科技(拆版)	
张	图	图	mm	图	图	HZZ-1009 力机 (拆版)	
设计	校对	审核	制图	日期	数量	1	出图 日期
本图由恒准 C.1	设计	校对	制图	日期	数量	1	出图 日期
技术要求: 棱角倒钝, 去毛边,				图号 HZ-1009-X-00			

恒准仪器科技(拆版) 恒准仪器科技(拆版) 恒准仪器科技(拆版)

Different Testing Method

Mainly suitable for metal and non-metallic materials, such as rubber, plastic, wire and cable, optical fiber and cable, safety belt, leather belt composite, plastic profile, waterproof coil, steel pipe, copper, profile, spring steel, bearing steel, stainless steel (and other high hardness steel), casting, steel plate, strip, nonferrous metal wire in tensile, compression, bending, shear, stripping, tear, two point extension (fixture spacing calibration) and other tests.



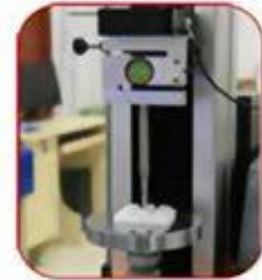
stretch



compress



peel



press back



three points of bending



metal extrusion meter



puncture



tear

Stretching test operation



Step 1: Prepare the sample



Step 2: Software setup



Step 3: Start the test

Application Industry

Extensive used in measurement and quality inspection, clothing and shoes; rubber and plastics; metallurgy and steel; machinery manufacturing; electronics and electrical appliances; automobile production; textile and chemical fiber; wire and cable; packaging materials and food; instruments; medical equipment; civil nuclear energy; civil aviation; universities; scientific research, arbitration and technical supervision department; building materials and ceramics; petrochemical; other industries.



chips



wire and cable



package



paint



phone



bottle



shoes



tape



plastic sheeting



bandage



metal



testing institute

Some clamp display, more test requirements, please contact business



Technical Parameter

Model	HZ-1009C (Model C represents this device with environment box)		
	10Ton	20Ton	30Ton
Volume	10Ton	20Ton	30Ton
Sensor	Basic configuration	A United States high-precision pull, pressure sensor	
	Extended configuration	The equipment can meet a machine with multiple sensors, to meet the large disparity test	
Accuracy class	Level 0.5 (national standard and high standard level)		
Effective force measurement range	0.4%~100% (refers to the valid force measurement range segment)		
Test machine resolution	Maximum load 1 / 200000, inside and outside is not divided, and the whole resolution is unchanged		
Valid test width	Standard width of 650mm (excluding ambient box)	Can be customized according to customer needs widened	
Effective stretch space	No fixture trip 1000mm	Can be customized according to customer demand to increase	
	The actual itinerary varies with the fixture		
Test speed range	0.1 ~ 500mm/min		
Displacement measurement accuracy	± within 0.2% of the indicating value		
Large deformation measurement system	Extended configuration	scale distance 10-100mm adjustable; deformation: standard 800mm, special customizable	
Small deformation measurement system	Extended configuration	Scale distance: 25mm, 50mm, 100mm deformation: 5mm, 10mm, 25mm	
Deformation measurement accuracy	Within 0.5% of ± value (large or small deformation can be selected according to customer requirements)		
Test table safety device	1. Electronic limit protection-stop when encountered	2. Emergency stop switch-press and stop	
Test table lifting device	The manual panel has three sets of actions: up, down, slow up, slow down, micro up, micro down can be moved		
The test table	Manual or automatic selection, automatic or manual return to test initial position at		

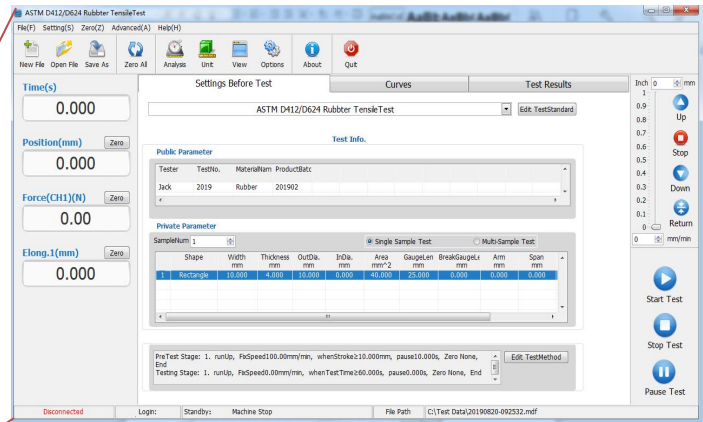
MATERIAL TEST MACHINE

returns function	maximum speed	
overload protection	After exceeding the equipment set maximum load of 10%, the machine is automatically shutdown for protection	
The fixture configuration	One set of tensile clamp (also optional)	
Host size	Length 1080 * width 540 * height 2200mm (excluding ambient box size)	
Dynamic system	Brand servo motor + servo drive + high precision ball silk rod	
Electric source	220V、 50HZ	
Power	0 . 4KW	0.75KW
Control method	Color touch screen control	
Temperature range	-40°C~150 °C (other temperature can be customized, for details)	
Heating rate	Average 3 C/min (means no heat source in the box)	
Internal box size	W350mm*H600mm*D300mm	
Carton size	W550mm*H1100mm*D1100mm	
Environmental box shelf	W600mm*H850mm*D2800mm	
Box material	SUS304 stainless steel material	
Heat insulating material	High-temperature and high-density amino acid ethyl ester foam insulation material	
Observation circle	Quantity: 1; function: easy to observe the test situation in the box	
Host weight	(About) 350 KG	



REALTEST

Universal Testing Software



Computer Software Test Items

General test items: (ordinary display value and calculated value)

- Tensile stress
- Tensile strength
- Tensile strength
- Pulling elongation rate
- Tensile stress
- Fixed stress elongation rate
- Fixed stress force value
- Tear strength
- Arbitrary point force value
- Any point elongation rate
- Poisson ratio

Other Test Items

1. The elastic coefficient is the elastic Young's modulus Definition: the ratio of the normal stress component to the normal strain. To determine the coefficient of material rigidity, the higher the value, the stronger the material is.

Scale limit: the load weight can be maintained directly proportional to the elongation within a certain range, and its maximum stress is the ratio limit.

Elastic limit: maximum stress for material tolerance without permanent deformation.

Elastic deformation: after the removal of the load weight, the deformation of the material is completely disappeared.

Permanent deformation: the material remains deformed after removing removal.

yield point: when the material stretches, the deformation increases and the stress remains unchanged, this point is the yield point. Yield points are divided into up and down yield points, and the above yield points are generally used as yield points. Quow (yield); the load weight exceeds the proportional limit and is no longer proportional to the elongation, the load will fall suddenly, but in a period of time, up and down, elongation changes greatly, this phenomenon is called yield.

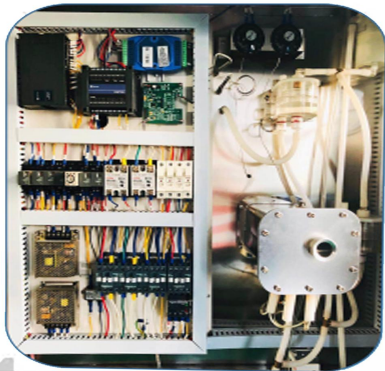
Yield strength; when the permanent elongation reaches a specified value divided by the original break area of the parallel part.

Spring K; the ratio of the same phase with deformation.

Effective elasticity and lag loss: on the yield strength test machine, when the sample is stretched to a certain specialty rate at a certain speed or to the specified load, the percentage of the recovery and the expansion is the effective elasticity, and the lag loss.

10 For more testing please contact us at www.luxvantech.com

Temperature Controller E-600



Special Features

Application

- Energy Conservation
- Temperature and Humidity Change Test

Functions

- Touch
- USB
- RS485 RS232C Ethernet
- language
- Free PCS/W



Convenient water supply

The water tank located in the front side, below the door. Drawer type structure provides convenient operation, can move freely and easily supply water.



Dry/wet bulb sensor

Using wet and dry bulb sensor to control the temperature and humidity, can get accurate test results.



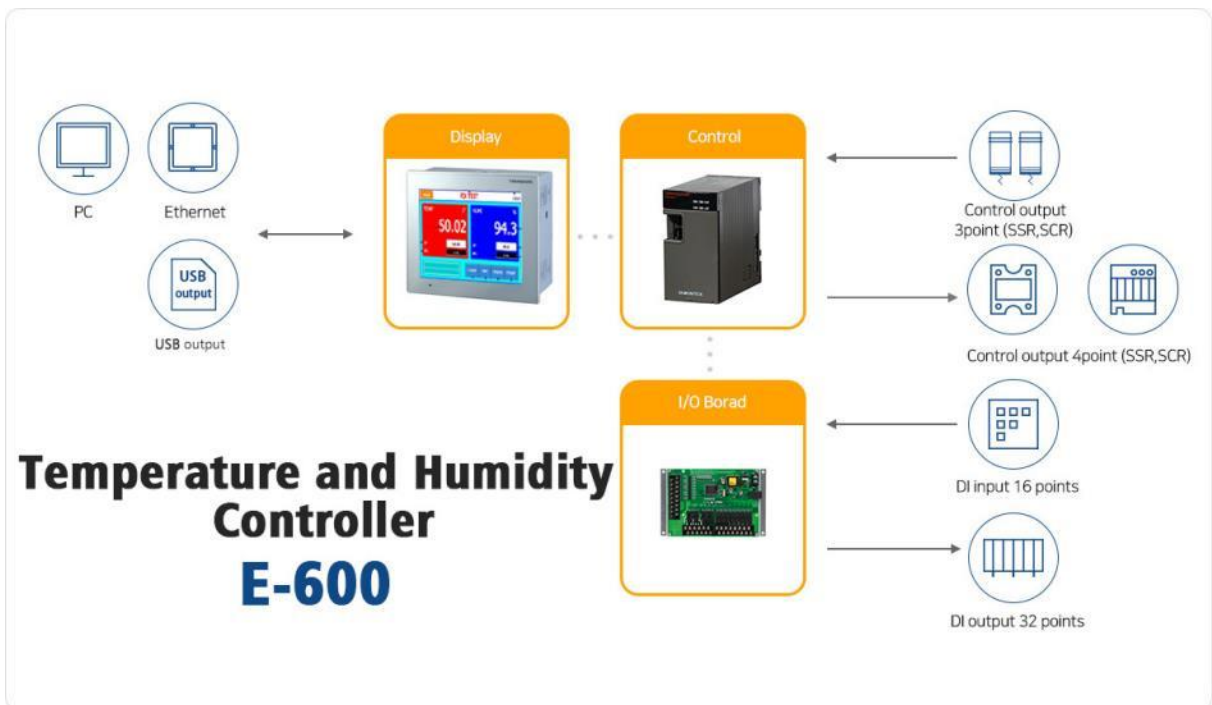
Cable port

On the side of the main body, a cable port for connecting the power of the sample and a connection for easy determination is mounted.



Low-noise

Used BLDC motor, noise is less than 59db, it is suitable for indoor use.



Configure List

Configuration list	
Material tester host machine	1 set
Environmental chamber	1 set
Environmental chamber shelf	1 set
HP computer	a set
HP Color Inkjet printer	1 set
User Manul	portion
Software backup disk	portion
Factory qualification certificate	portion
Warranty Card	portion
Standard tensile fixture	1 set
Hexagon spanner	1 set

Major Dispositions :

High precision sensor(1 Branch)

High accuracy, good repeatability, will not produce zero point drift, durable.Each test data was less biased.

AC servo motor(a set)

Import servo system is through mechanical or displacement speed, acceleration feedback control system, its function is to make the output mechanical displacement (or corner) accurately track input displacement (or Angle) than ordinary motor, low power consumption, large torque, accurate speed control, high and low running torque, with servo closed loop control, high precision braking.Generally used in automation, precision instruments, precision equipment.

Taiwan TBI high precision ball bearing + ball rod (two suit)

Non-trapezoidal screw, trapezoidal screw dry sound, easy to wear, large clearance, low accuracy.The cost of high-precision ball bearing + ball wire rod is several times that of ordinary trapezoidal wire rod, and its advantages, small clearance, high moving distance accuracy.

Technical Support

Lixian® provides documentation, including manuals and online help, that can answer many questions you may have. It is recommended that you view the documentation sent with the system you purchased to identify possible solutions to the problem.

If you cannot find answers in these resources, please contact Lixian® After Sales Service directly at 0769-22677455, or email to dg@hengzhun.com. The official force display Chinese website is www.hengzhunxc.com, and the official English website is www.lyxyantech.com. If you need to consult with a foreign trade business, you can call you directly on 0769-23388228 or sales1@hengzhunx.com.

Power supply requirements and wiring

Model HZ-1009C

technical requirement	specifications
(VA) peak voltage	380
(Vac) voltage	220、,100~120 customization
(Hz) frequency	50
m (ft) Wire length	1/2.44 (8)

Warning



Electrical hazard-To ensure safety and electromagnetic compatibility (EMC), the facility sockets must be three-wire ground sockets. The ground must be a low-impedance land surface in accordance with national and / or local regulations.

Warning



If your test system includes water or any other fluid, the GFCI (ground fault circuit interruption) protection must be used on all power supplies.

If your system includes any liquid (e. g. Water cooled grips, biological pulse bath, food testing device), you must use the GFCI to protect all power supplies to protect the operator from possible liquid leaks into the load frame electronics.

Commitment Service

Our company solemnly promises that, in addition to fully responding to all the requirements of the quotation documents for the accompanying service and after-sales service, we will also provide high-quality and perfect after-sales service in accordance with the following terms!

1、Promise for the project customers

1) Warranty period and after-sales service

After the equipment acceptance, guarantee for 12 months, we send someone to the end user for equipment installation, debugging, training and acceptance, 24 hour hotline response 365 days a year (including holidays); after the warranty period, cost maintenance (we guarantee to provide spare parts and maintenance services at preferential price).

2) Active after-sales return visit

Regular maintenance service and regular return visit, debugging and maintenance of the equipment of the project, to reduce the work effect due to improper use or damage of the equipment.

3) Technical service

1、The delivery place shall be designated by the user. After the equipment arrives, professional and technical personnel shall be sent to the user site in time to assist the user to complete the placement, installation and debugging in the shortest time.

2、Equipment acceptance shall be carried out at the user site, and the acceptance standards shall be in accordance with the relevant national verification standards.

3、Technical data: We shall provide the complete operation manual, maintenance manual and other related materials, and the operation manual and maintenance manual are in Chinese version.

2、Content and method of service during the warranty period

Our company will provide free quality assurance service for the project equipment, and provide free field warranty and maintenance service for the purchased equipment during the warranty period.

For any problems caused by equipment quality, our company will provide services to the project users in strict accordance with the above after-sales service commitment. During the warranty period, we will bear the replacement / repair costs of all defective equipment or spare parts.

3、Content and method of service after the warranty period

We have set up a special hotline: 0769-22677453. Our company provides technical consulting services of the system project, for some more important, telephone support cannot help users solve problems, will send technical experts in the field to the scene to solve, help users to fault diagnosis and related installation, configuration and adjustment of the system components. Our company will make full use of the sorting power to provide first-class service for the project users.

LIXIAN

C R E A T I V E

Add: No. 88 He ngxing Road, Xinhe, Wanjiang, Dongguan

Email: sales1@hengzhunx.com

WhatsApp: +86 137 1188 8650

TEL: +86 0769 23388228

Web: www.lyxyantech.com

EXCELLENT BUSINESS

EXCELLENT PRODUCT

EXCELLENT SERVICE