

# Universal Testing Machine Series

Testing Systems

东莞市力显仪器科技有限公司

DONGGUAN LIXIAN INSTRUMENT SCIENTIFIC CO.,LTD

Lyxian 

[www.lyxyantech.com](http://www.lyxyantech.com)



Dongguan Lixian Instrument Co., Ltd. was established in 2000, located in Dongguan City, Guangdong Province. The company mainly engaged in the design, production and sales of the reliability testing instruments such as mechanics, environment, rubber, footwear, packaging, luggage and so on. Mr. Xu Yongsen, the boss, is a highly skilled expert in this industry. And under his guide, the company won the honorary title of "High-tech Enterprises" in Guangdong Province in 2014. With the excellent product research and development and the diligent service after nearly 20 years of accumulation, we have become one of the pioneers in this profession and we have been always striving for high cost-effective testing equipments for each customer of Lixian.

**Lyxian** 

**Company Profile**





## Universal Material Testing Machine



With over **19 YEARS** of materials testing experience, **LYXYAN** company delivers impactful innovations to enable our users business to thrive. We are committed to delivering services which delight and usability improvements throughout the lifetime of the system.

**LYXYAN Universal Testing Machine** 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, it also can be tested the constant-velocity loading, constant-velocity displacement.



### Own Factory

Located In WanJiang district Dongguan city , Guangdong province for 19 years

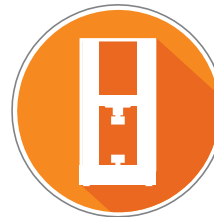


### 100+ Employees

Ahighly-educated, experienced, and diverse workforce



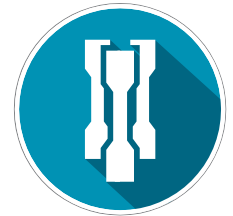
Representing **80 Countries**, speaking **40+ languages**



**10,000+** systems installed worldwide



**19+years** of engineering and manufacturing test systems since 2000, 10 years export experience



**Diverse product range** for nearly all global markets and industries

# 20 KN UNIVERSAL TEST MACHINE

MODEL:HZ-1003

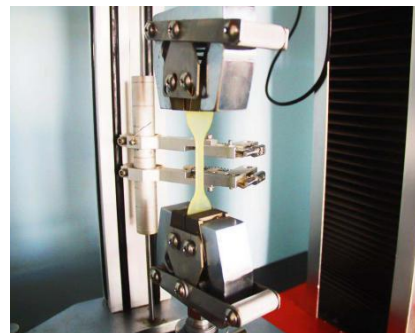


## Introduction for HZ-1003

This Series machine can be applied to test lots of materials in rubber tensile elongation, compression, tear, big size peel (can 90 degrees and 180 degrees) and other mid-force mechanical test (20KN), such as tires, belt, shoes, plastic, film, acrylic, FRP, ABS, EVA, PU, aluminum-plastic pipe, composite materials, waterproof materials, fibers, textiles, wire and cable, paper, gold foil, ribbons, thread, spring, wood, medicine packaging materials, tapes etc.

## Rubber, PVC,PE,Polymer,Plastic,Metal:

- (A) Tensile test: Main test tensile strength
- (B) 3point bending test: Test material bending resistance
- (C) Compression test: Test material compression resistance



Tensile Test



3 Point Bending Test



Compression Test

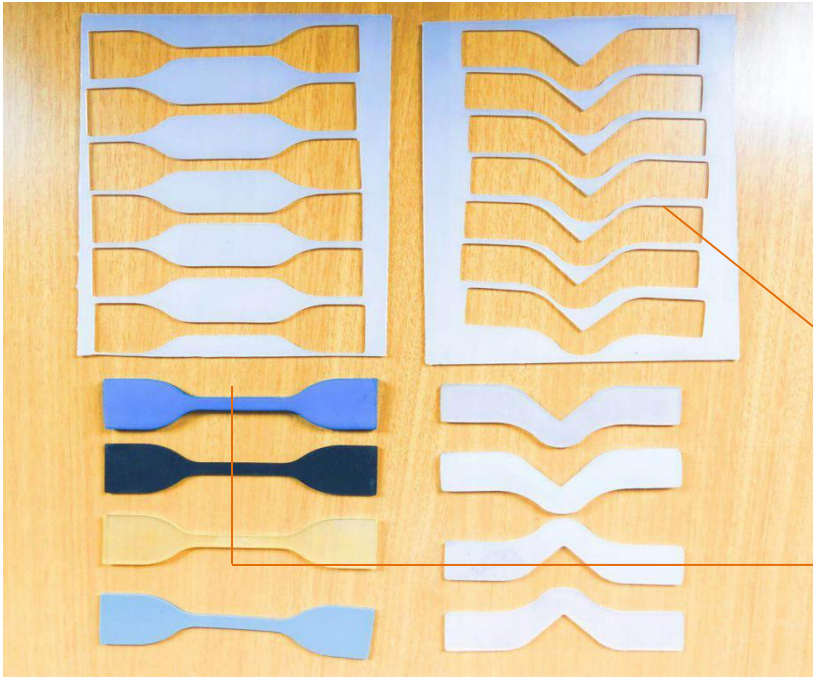
# SPECIFICATIONS

Lyxyan® Universal

Max load	10KN
Maximum Load	500N, 1KN,2KN,5KN,10KN,20KN optional
Extensometer	Comply with Extensometer (if need, please inform supplier before order)
Control Mode	Force from 0.2% to 100% / from 0.4% to 100%
Weight	350KG
Accurate Grade	1 grade / 0.5 grade
Effective Measuring Range	Force from 0.2% to 100% / from 0.4% to 100%
Load Sensor	Basic configuration sensor max load: one
Effective Test Width	420mm (can be increased the tensile space according to customers requirement )
Effective Tensile Stroke	800mm (can be increased the tensile space according to customers requirement )
Testing Speed	From 0.01 to 500mm/min, adjustable
Displacement Accuracy	Tolerance:±0.5% / tolerance: ±0.2%
Safety	Electronic-limit protection
Overload Protection	Overload 10%, automatic protection
Machine Dimension	80x55x220cm (L*W*H)
Motor	Taiwan “Delta” servo motor and drive
Power Supply	220V , 50HZ or according to the requirement

# STANDARD SAMPLE

Lyxian® Universal

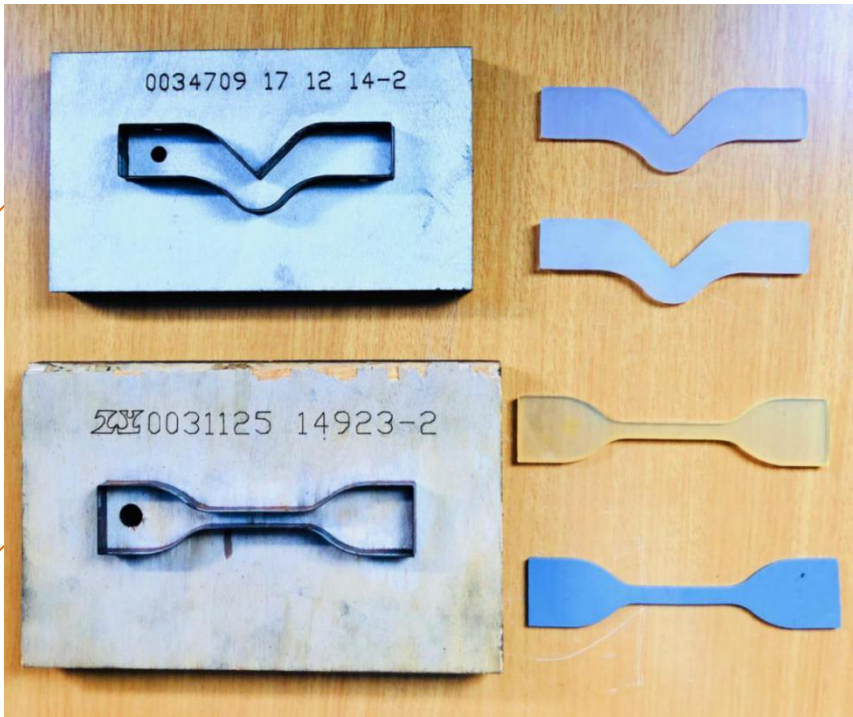


ASTM D 638 Right-Angle (90°) sample

ASTM D 412, ISO 37 Dumbbell sample

ASTM D 638 Right-Angle (90°) Cutter

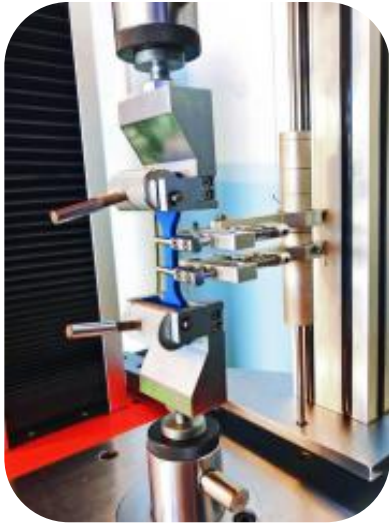
ASTM D 412 ISO 37 Dumbbell Cutter



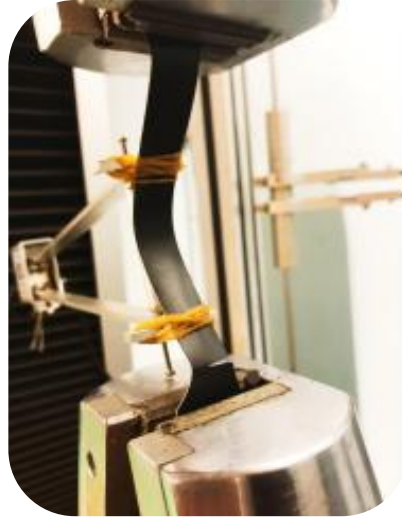


# PART OF NORMAL TEST TYPE

Lyxan® Universal



**Rubber Tensile Testing**  
With Rubber Extensometer



**Metal Tensile Testing**  
With Metal Extensometer



**3 Point Bending Testing**  
For Pills or other



**Tear Strength Testing**  
For Shoes or Leather



**90° Peel Testing**  
For Adhesive Tape



**180° Peel Testing**  
For Adhesive Tape



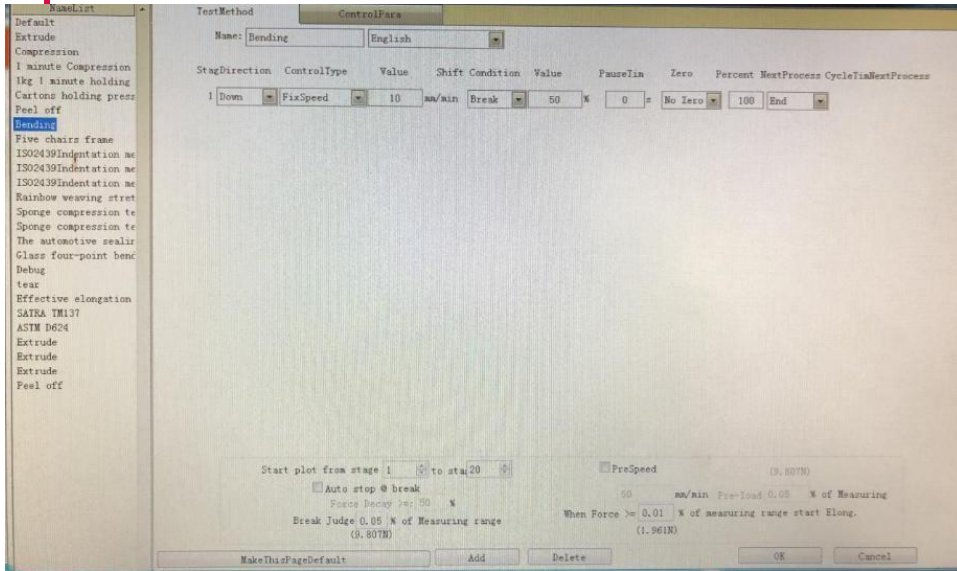
**Compression Testing**  
For Spring



**Film Puncture Testing**  
For Film

# TESTING SHOWING

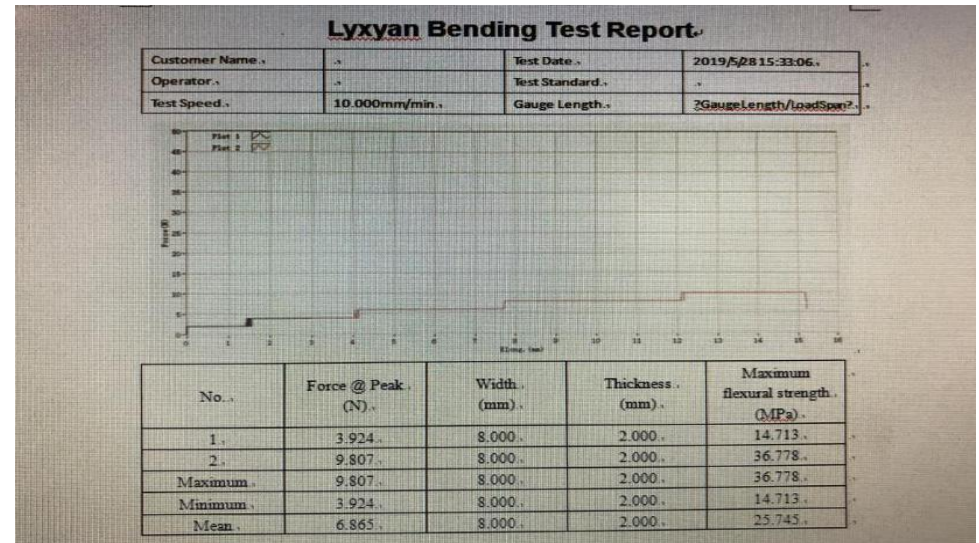
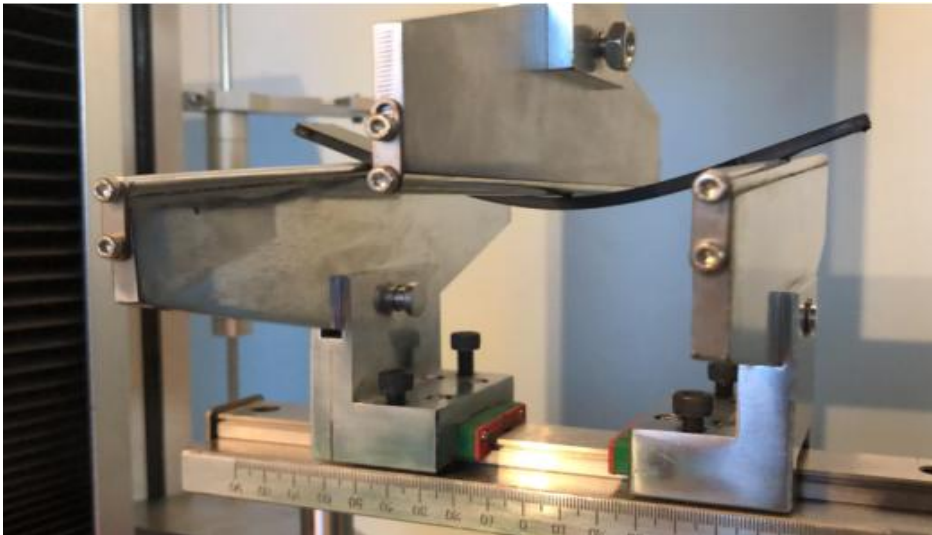
Testing Method, Testing Result



Test Method



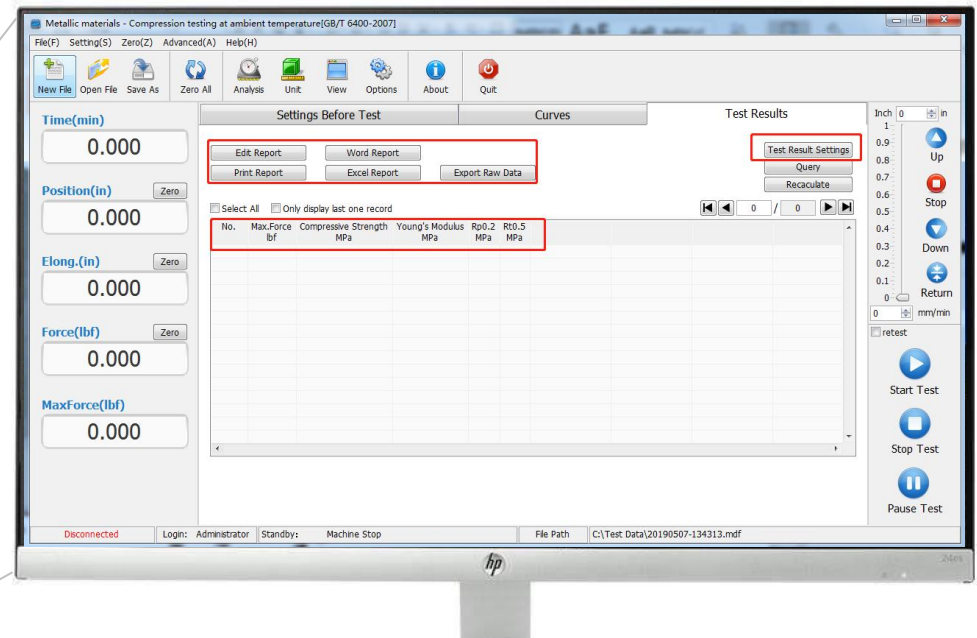
Test Curve





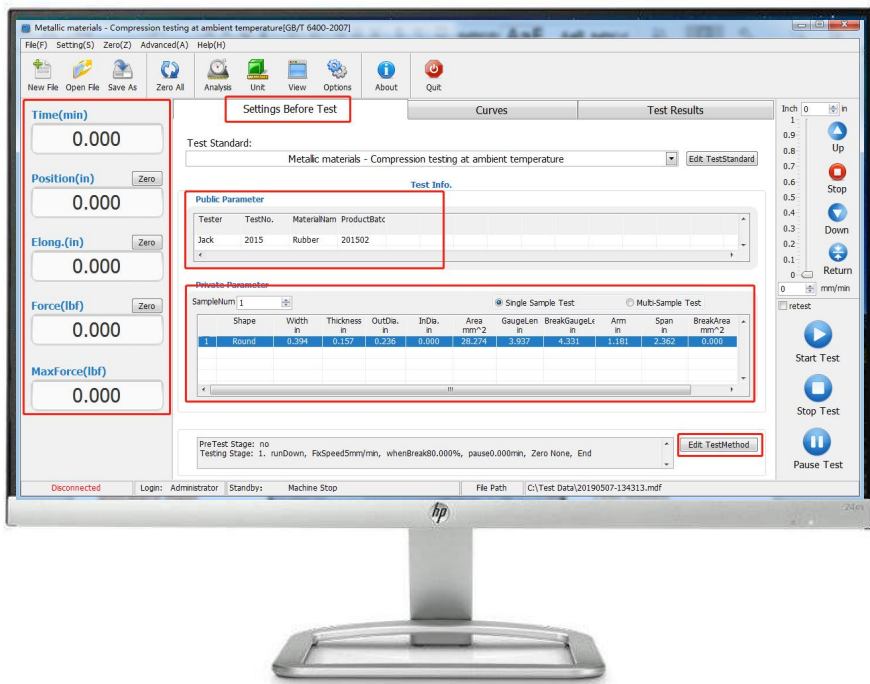
# REALTEST® SOFTWARE

Computer Test System



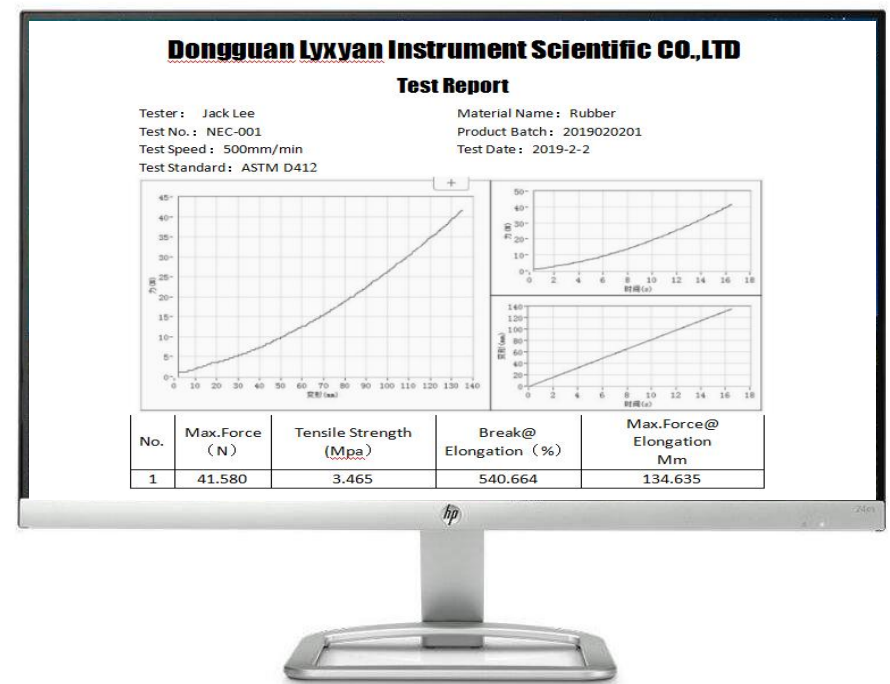
## Control System

- Support for tensile, compression, shear, bending and other tests;
- Support open editing test, editorial standards and editorial procedures,
- Support export import testing, standards and procedures;
- Support custom test parameters;
- Adopt an open statement in the form of EXCEL, to support user-defined report format;
- Print the query testing results flexibility, support for printing multiple samples, custom sorting print projects
- Procedure supports hierarchical management levels (administrator, tester) user management rights;



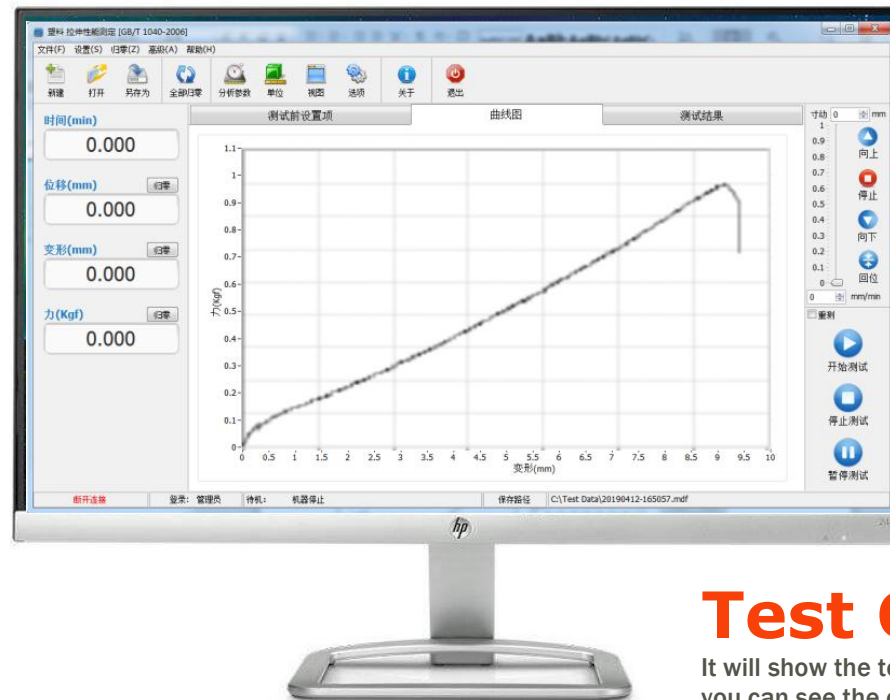
## Software Main Interface

A computer software interface, display test data, setup method, sample size



## Test Result

To show test information, including test person, test standard, test curve, test max load etc, can add your company



## Test Curve

It will show the test data synchronously, and you can see the curve change during the test



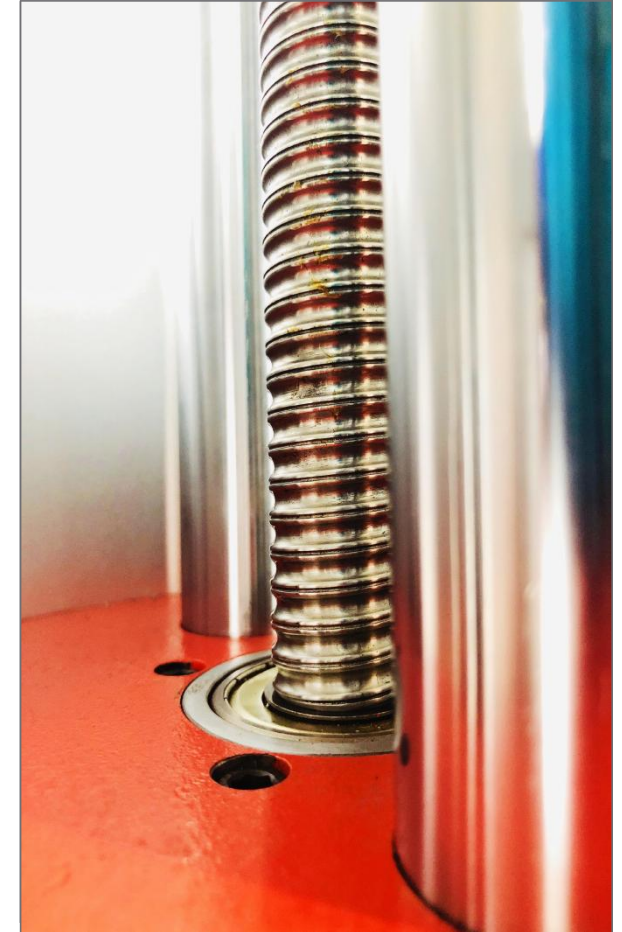
## Load Cell Construction

The highest quality mechanical and electrical components ensure the maximum level of performance, producing the most accurate results.



## Load-string Alignment

Precision concentricity ring and alignment pins for base adapter and load cell, self-aligning grips, optional specimen centering device.



## Machine Integrity

Preloaded ballscrews, precision guidance columns, symmetrical drive system, on-board diagnostics/real-time error checking, ISO 9001 accredited.



# | SUPPORT FOR THE LIFE OF YOUR EQUIPMENT

Lyxan® is the largest supplier of materials testing machines in the world. Our reliable testing systems can run 24 hours a day, 7 days a week, 365 days of the year. However, if something does go wrong, or you have a question, we offer a variety of resources to ensure you receive the assistance you need as soon as you need it.



## You Can Count on Us

- Represented in more than 80 countries, speaking 40 different languages
- Our on-site and laboratory calibration and verification processes are ISO 9001 accredited throughout China, North America, Brazil, Australia, China, Japan, Korea, Singapore, India, Thailand, and Taiwan



## Enhanced Technical Support a “Touch” Away

- Lyxan Connect provides easy remote screen sharing and service request submissions to reduce support times
- Lyxan Connect allows simple test method and file transfers to keep systems up to date
- Expert consultants provide tailored solutions and traditional hotline access
- Additional services like preventative maintenance, calibration, training, emergency repair, and service parts insure confidence that you can keep systems running and get date in a timely fashion



## Stay at the Forefront of Materials Science

- Training courses available on-site or in one of our Regional Training Centers
- Utilize our Applications Engineering Lab or Custom Solutions Group for the latest technological advances in materials testing
- Our state-of-the-art Calibration Laboratory offers a comprehensive range of accredited calibration and verification services complying with ASTM, ISO, and Nadcap standards for: force, speed, strain (extensometers), displacement, impact, temperature, torque, creep, strain gauge channel, alignment, and verification of all UTM instruments.



## Resources at Your Fingertips • [www.lyxyantech.com](http://www.lyxyantech.com)

- Our *Testing Solutions* section provides answers to your most current testing challenges
- Lyxyantech.com is a dedicated support website, providing web-based delivery of information specific to your system
- Access to our complete online Accessories catalog

# FACTORY WITH PRODUCE AND SERVICE

## 售前服务 Pre-Sales Service



## 方案研发过程 Scheme R&D



## 生产服务体系流程 Production&Customer Service



## clients

Part of our clients



## Honors

