Mikrosize®

Automatic Load Displacement Curve Tester

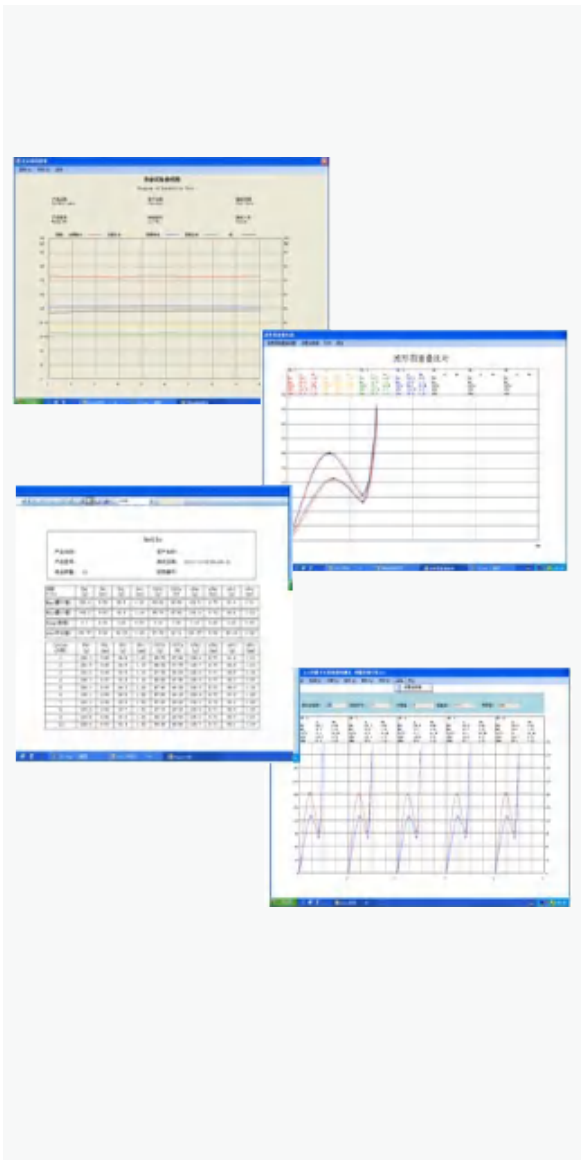# Mikrosize®

Product Features

• You can directly see the data of Peak Force, Return Force, Distance and Click rate on the software graph without any calculation.

• Measurement curve graphs are memorized by computer and can be enlarged or reduced at any time. Many curve graphs can be printed on a piece of A4 paper.

• You can input the upper and lower limits of specification values for measurement items, and the results can be automatically determined as OK or NO.

•You can input the maximum measuring displacement and load, and the computer automatically controls it.

• The load unit display N, Ib, g and kg can be switched freely.

• The computer can directly print and store load-displacement curves graphs and inspect reports. (A4 paper is enough with no need of grid paper.)

• The test data is stored in the hard disk (every data can be stored unlimitedly).

• The test conditions are all set on the computer screen (including test displacement, speed, times, air pressure, pause time, etc.)

• The report title of the inspection can be modified at any time.

• Inspection reports can be generated automatically without further input.

• Inspection reports can be converted into document report formats such as Excel.

Product Advantages

1. With independent intellectual property rights.
2. Curve graph reports and text reports is specified with Mikrosize title.
3. Automatically generate EXCEL and CPK.
4. The equipment has its own impedance test, which can detect the force and displacement of the conduction point while testing the force value and displacement value which makes measurement data more stable and accurate.
5. The load cell has double-layer protection for load cells to more effectively protect the load cells of vulnerable and valuable parts.
6. The analog-to-digital signal conversion uses a data capturing card. The load and displacement analog signals distinguishes and converts each other, with strong anti-interference.
7. Optimize the load collection mechanism, and the force collection accuracy and speed are greatly improved 10 times quicker than the ordinary version. The minimum accuracy is 0.01g.
8. The shortcut mode of cross tracking, that is, after double-clicking the tested curve graph, the enlarged graph will automatically pop up, and cross tracking can be performed.
9. Add the number of test groups for the measurement items "Determining the load based on the displacement" and "Finding the displacement based on the load" to 5 groups, and the report can also import 8 groups of data accordingly;
10. The curve coordinate can be set as the number of load displacement corresponding to the XY of each small grid and the total number of subdivided small grids.
11. "Resistance value of conduction point" and "Resistance value of disconnection point" can capture the resistance value at the moment of conduction and disconnection.
12. With the "waveform data" function.
13. With group testing function.

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Instrument Structure

This machine is driven by servo motor and can provide high-precision (load-displacement) measurement, as well as fully accurate button and switch curve tests. By using a computer analysis system, it can accurately measure the corresponding variation curve of the load and displacement of tested samples, and accurately control the load and displacement, testing speed, number of setting times, and pause time. It can also set groups based on the same test sample for easy comparison. During the testing, all curve graphs are automatically generated, eliminating the cumbersome operation of moving paper and pen in the old instrument. This machine uses servo motor and Windows control system, which is easy to operate and all data can be stored. It is a reliable high-performance testing instrument.

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Control System

The control system of this machine consists of an industrial computer, a highly integrated micro controller, and a servo system. This control system is accurate, efficient, and highly integrated. Communication between instruments and computers can be achieved through only one RS232 serial port cable, achieving precise detection. Operation is simple and convenient, and the micro ohm measurement module has been integrated into it, avoiding unnecessary expenses for purchasing a separate micro ohm testing machine.

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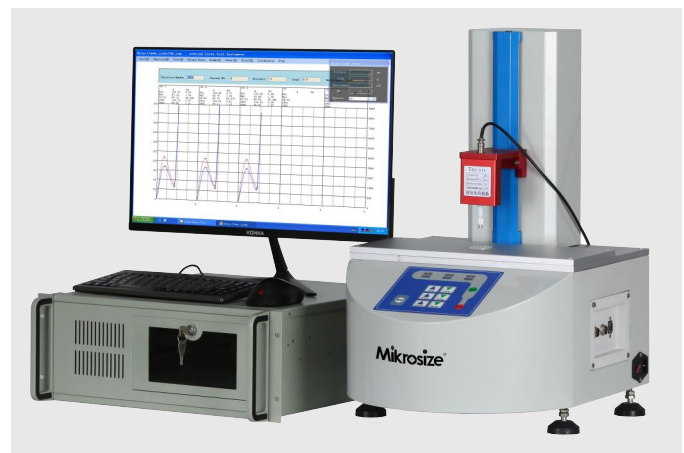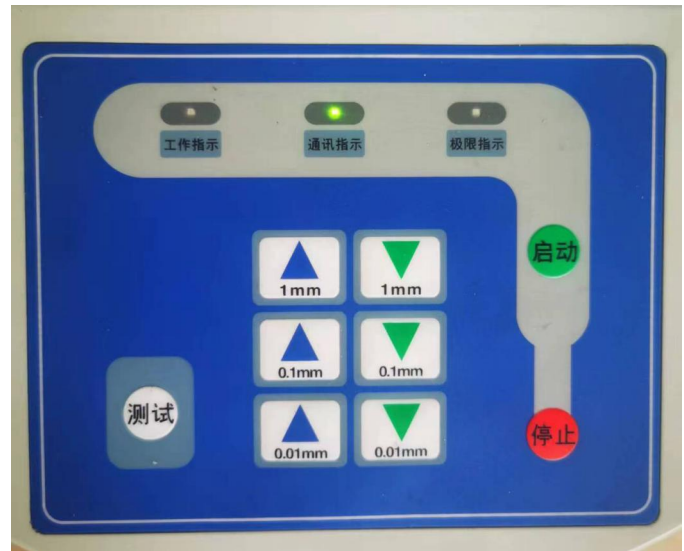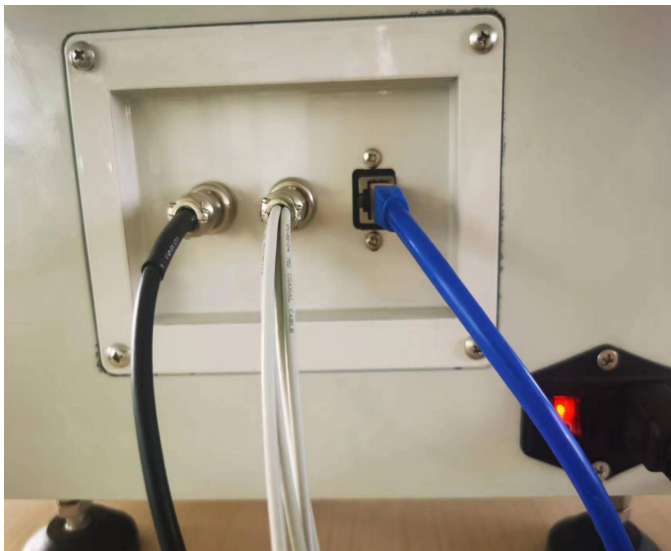
Testing Software Interface
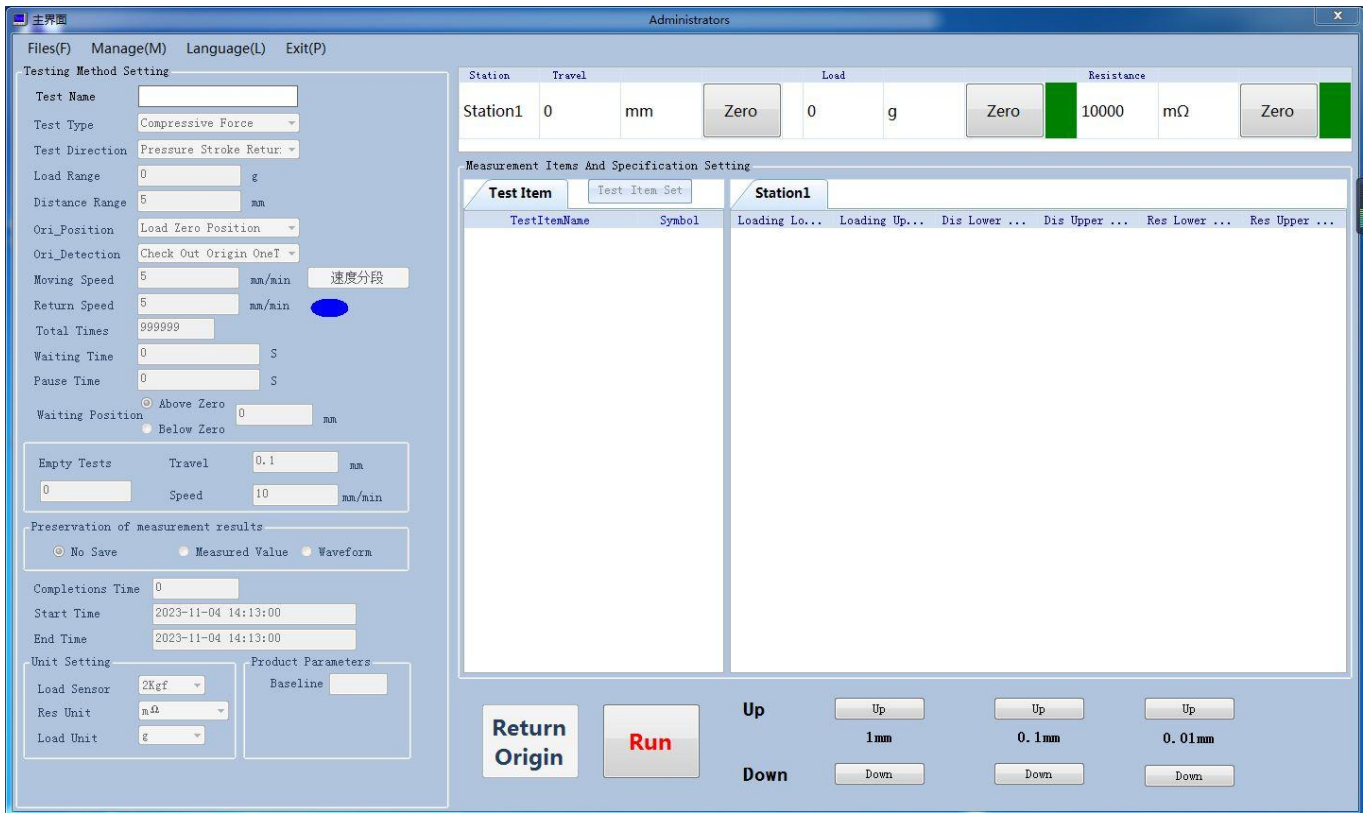
First Interface
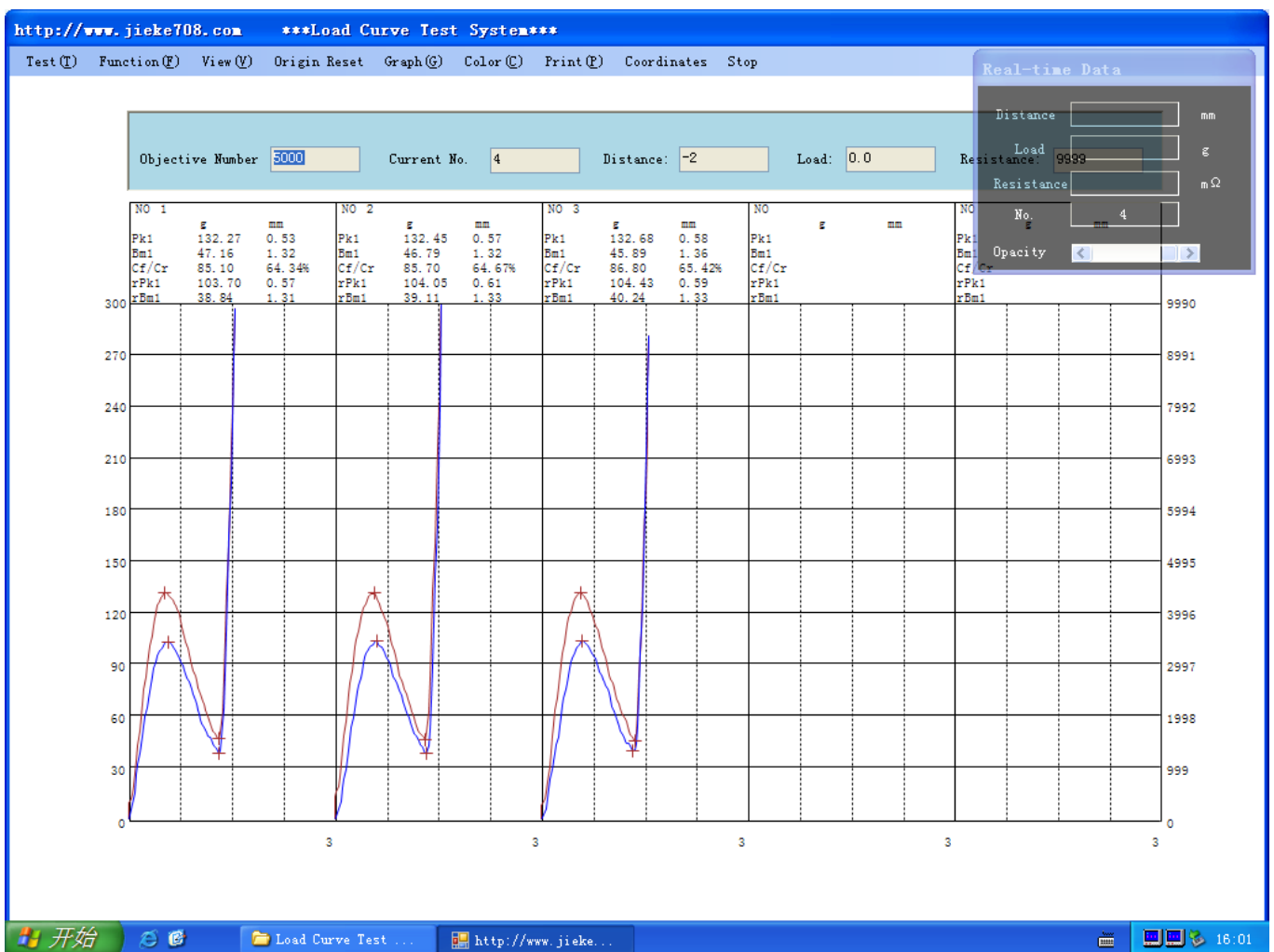
PDF Data Report
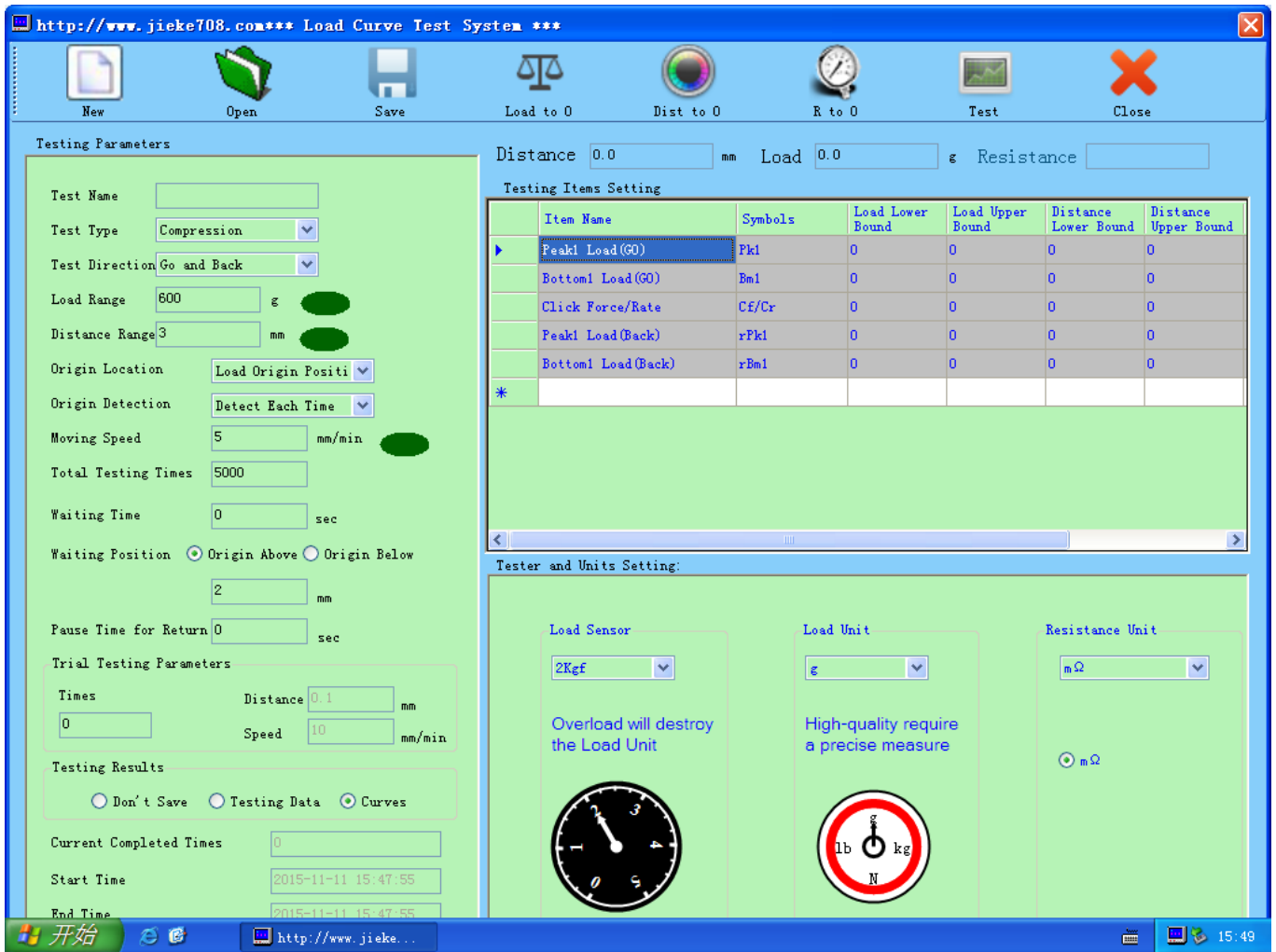
Can simultaneously test dynamic impedance (mΩ)
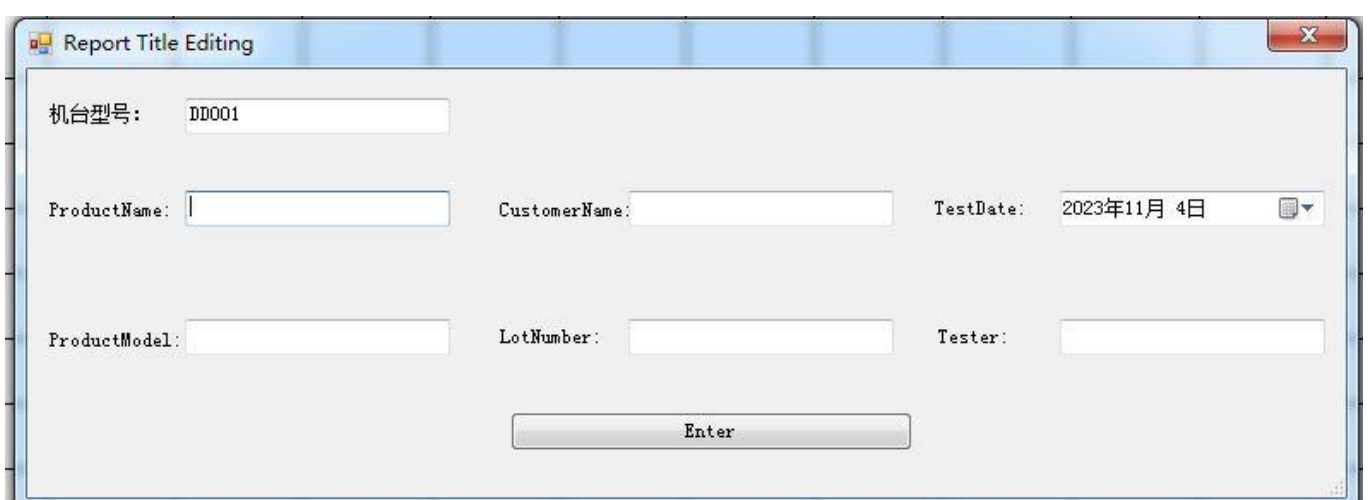
Report Group Editing

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Testing Software Interface

Test Interface

Data Storage

Data Storage

Test Interface

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Technical Specification

Product Model	1305R
Product Name	Automatic Load Displacement Curve Tester
Drive Serve Motor	Panasonic servo motor and drive system
Transmission	Ball screw
Max Test Load	50Kg
Max Test Displacement	100mm
Minimum Test Displacement	0.01mm
Test Speed Range	0~100mm/min
Machine Size	400*290*650mm （W*D*H）
Net Weight	22Kg
Power Supply	AC220V
Net Weight of Control System	20Kgf
Load Cell	5kg、2kg、1kg (accuracy of 0.1%FS)
Minimum Value of Load Cell	0.01g/0.1g
Maximum Value of Micro ohm Module	300mΩ
Probe Specifications	With diameters of 2, 4, 6, 8, and 10mm for each

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Metal Contact Springs
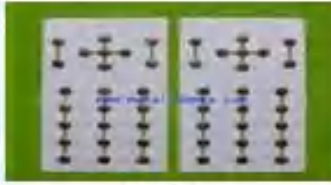
Metal Contact Springs

Phone Keypads

Phone Keypads

Remote Controls

Remote Controls

Computer Keyboards

Computer Keyboards

• Dimensional curve testing of load, and displacement of silicone buttons (keyboard), metal buttons, and touch switch buttons;

• During the conductive button testing process, it can also perform contact "OFF → ON" and "ON → OFF", dynamic resistance testing;

• Test the conductivity and resistance parameters of each key contact on the PS2 port keyboard and USB port keyboard of the entire machine;

1.Maximum load value (go), maximum load value (back), valley load value (go)

2.Click Force/Rate, Peak Load Value (back), Valley Load Value (back)

3.Peak point 2 load value (go), valley point 2 load value (go), peak point 2 load value (back)

4. Valley point 2 load value at(back), displacement 1 measured load value (go), displacement 2 measured load value(go)

5.Displacement 1 load value (back), Displacement 2 load value (back), Load 1 measurement value (go)

6.Load 2 measurement displacement value (go), Load 1 measurement displacement value (back), Load 2 measurement displacement value (back)

7.Known displacement to measure resistance, known load to measure resistance, conduction to measure displacement, conduction to measure load

• This machine is suitable for testing the (load-displacement) curve of various buttons and switches. It is set by using the WINDOWS screen, and the operation is simple and convenient. All data can be stored (test conditions, load curve graph, test results, inspection reports, etc.).

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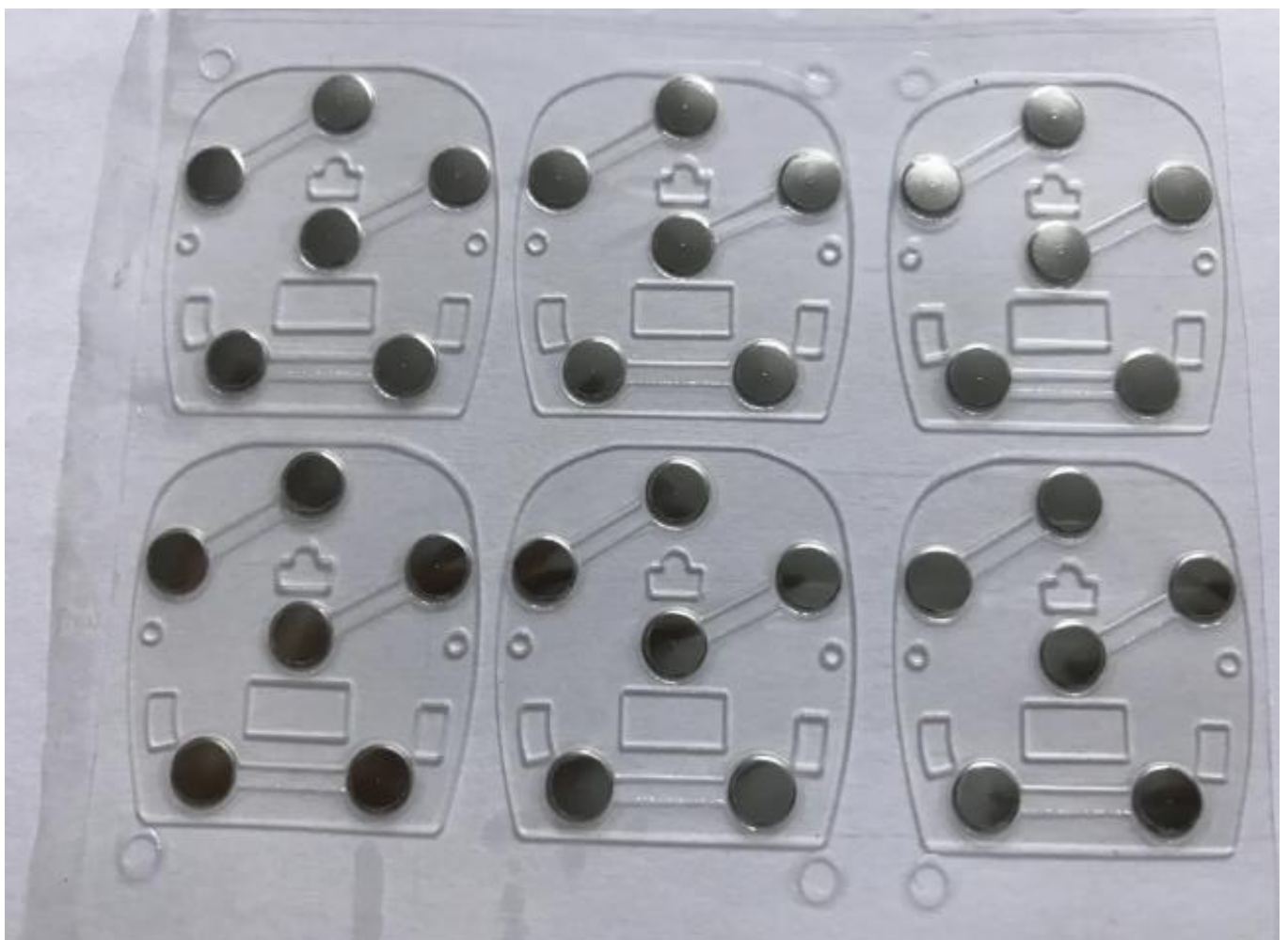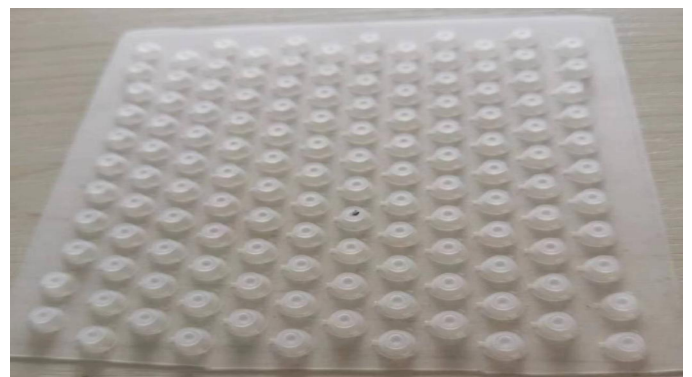
Standard Delivery

No	Name	Quantity
1	Mainframe	1
2	Computer	1
3	19 inch computer monitor	1
4	USB mouse, keyboard	1 for each
5	Panasonic Motor	1
6	Ball screw	1
7	Windows system plugging control operation software	1
9	Micro ohm test module and dedicated connection line	1
9	High-precision load cell （2KG)	1
10	Dedicated data communication cable	1
11	Probe(Φ2、Φ4、Φ6、Φ8、Φ10)	5
12	Toolbox	1
13	User manual	1
14	Packing list	1
15	Ex-factory certificate	1