

Computer type electronic Brinell hardness tester HBE-3000S

The computer-type electronic Brinell hardness tester HBE-3000S removes the original weight load, adopts a single-chip computer to control, the sensor collects the signal, and the step motor is charged and closed loop control system.

Ensure that the force value is more accurate and the indication value is more stable. Equipped with a mobile measurement platform and computer measurement system with good operability and humanity, high test speed and cost performance, can save test results, print, analyze, and issue test reports, widely used in the factory QC lab, Universities, research institutes, laboratories, etc.



Main functions and features:

- 1, equipped with precision sensors and computer control system, test results accurate and stable;
- 2, with 10 test force, can test a wider range;
- 3, equipped with high-performance stepper motor automatic loading and unloading, the noise generated during the test process is smaller;
- 4, the shell is cast once, the structure is stable and not deformed, and it can work in a relatively harsh environment;
- 5, The surface is treated with automotive baking paint, which has strong scratch resistance and is still bright as a new product for many years.
- 6, the machine can be used with Brookfield image measurement software, greatly improving work efficiency.

Main uses and scope of use:

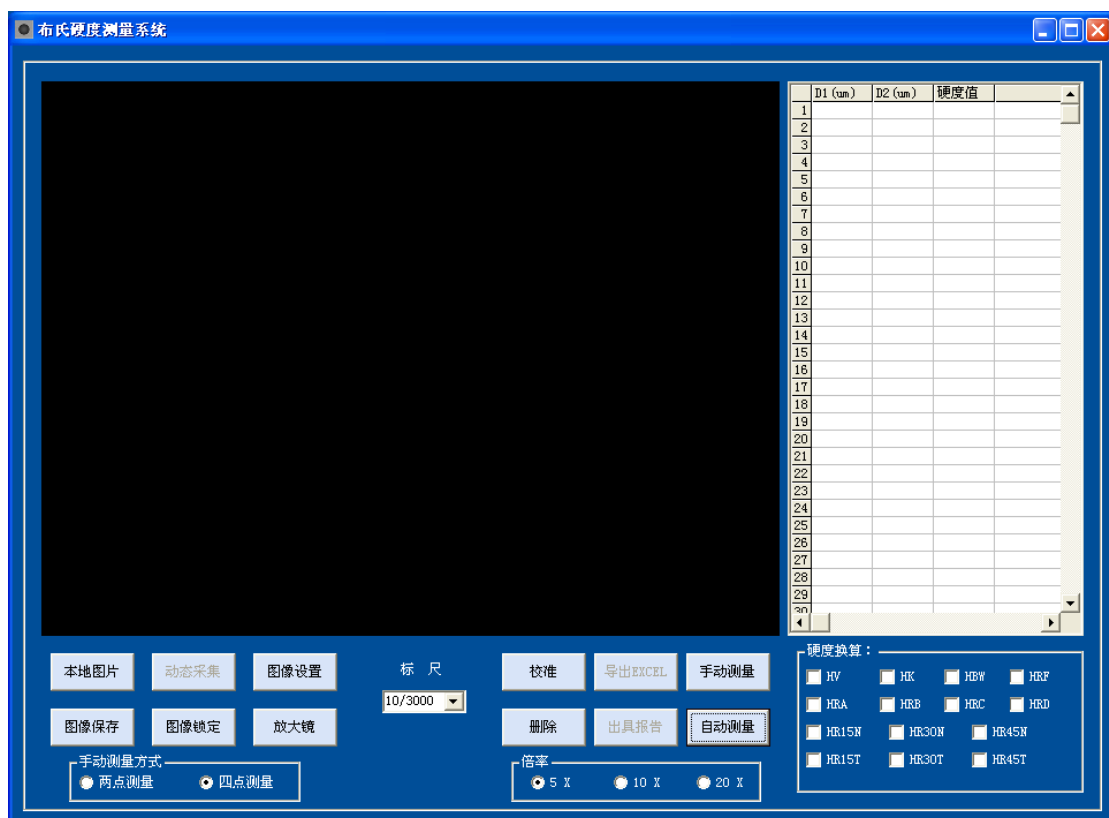
- 1, suitable for hardness tester with large grain metal materials, can reflect the comprehensive performance of the material;
- 2, cast iron, steel, non-ferrous metals, especially for softer metals, such as pure aluminum, lead, tin, etc.
- 3, can be used for hard plastic, bakelite and other non-metallic material hardness tester

Software introduction:

Brinell hardness tester is mainly used to determine the hardness of materials such as cast iron, steel, non-ferrous metals and soft alloys. The Brinell hardness test is the largest indentation test method in all hardness tests. It can reflect the comprehensive performance of materials, not Due to microscopic segregation of the sample tissue and non-uniform composition, it is a highly accurate hardness test method. It is widely used in industrial fields such as metallurgy, forging, unhardened steel and non-ferrous metals, laboratories, universities and research institutes.

Brinell hardness measurement and analysis system uses optical vision detection technology combined with image analysis processing technology to design a Brinell hardness measurement and analysis system. The system collects indentations through the optical system, and the software measures and analyzes the hardness, avoiding the influence of human factors and greatly improving the measurement efficiency and measurement accuracy.

The Open the software interface as follows:



Button function introduction:

Local picture: can open the local picture for measurement, resolution of 640 * 480 bmp format picture

Image save: The captured image can be saved with a resolution of 640*480 bmp format image

Dynamic acquisition: display images captured by the camera in real time

Graphic Lock: freezes the current captured image

Image settings: You can adjust the image's color and other properties, if you have two cameras, you can choose here, the first time you use the software please enter the image settings to adjust the camera resolution to 640*480

Magnifier: Digitally zoom in on the captured image

Ruler: Please select the test force and the diameter of the indenter used for the indentation before measuring.

Calibration: use the hardness block to calibrate the current magnification, the calibration password is 11111

Delete: Delete the selected row in the right table, and if there is no selection, delete the last row

Export EXCEL: Export all the data in the result table to excel

Issue report: issue a print report, fill in data automatically save

Manual measurement: Manually measure the indentation. After the click, the four sides of the card indentation are up and down and left and right, and the hardness value is automatically calculated. If the two points are measured, only the upper and lower points need to be measured.

Automatic Measurement: Automatic Measurement of Hardness Results

Hardness conversion: according to the United States astm-e140 standard conversion, for reference

Technical Parameters:

Product number	HBE-3000S
Brinell ruler	HBW2.5/62.5, HBW2.5/187.5, HBW5/125, HBW5/750, HBW10/100, HBW10/1500, HBW10/3000, HBW10/250, HBW10/500, HBW10/1000
Test force	62.5kgf(612.9N), 100kgf(980.7N), 125kgf(1226N), 187.5kgf(1839N), 250kgf(2452N), 500kgf(4903N), 750kgf(7355N), 1000kgf(8907N), 1500kgf(14710N), 3000kgf(29420N)
Maximum height of test piece	220mm
Minimum measurement unit	0.005mm
Burden time	0~60s
Hardness test range	8~650HBW
Total magnification	20X
Executive standard	GB/T231.2, JJG150
Indenter - outside wall distance	135mm
Indenter - Upper wall distance	55mm (Increased head-to-wall distance with custom head)
Hardness reading	Check table, computer display
power supply	AC220+5%,50~60Hz
Dimensions(mm)	520*210*745mm
Weight of host	90kg

Accessories:

Name	Quantity	Name	Quantity
Measuring microscope	1	Diameter 2.5, 5, 10mm Carbide Ball Indenter	1
Standard hardness block	3	Large, medium and V-type test benches	1
Power cable	1	Product certification, product instruction manual	1
Fuse	2	Brinell comparison table	1
Mobile measurement platform	1	Measurement system (software, camera, collection box, cable, etc.)	1