

Touch screen digital hardness tester HBRV-187.5DT

The igualitrol touch screen digital universal hardness tester has novel appearance, complete functions, convenient operation, clear and intuitive display and stable performance.

It can perform Brinell, Rockwell and Vickers hardness test, equips with 23-level measuring scales, which can meet a variety of hardness testing needs. It has the characteristics of high accuracy, simple operation, high sensitivity, convenient operation and stable value.

Equipped with a built-in printer, and optional RS232 cable can be connected to a computer via hyper terminal, or USB disk to export measurement reports.



The main purpose and scope of use of the instrument:

1. Determine the Brinell, Vickers and Rockwell hardness of ferrous metals, non-ferrous metals and cemented carbides;
2. Brinell hardness of castings, annealed steel, normalized steel, non-ferrous metals and soft alloys;
3. Rockwell hardness of heat-treated materials such as quenching and quenching and tempering;
4. Vickers hardness of nitriding layer, ceramics, thin plates, metal flakes, electroplating layers, and small parts;

Main features of the instrument:

1. The optical system designed by senior optical engineers not only has clear images, but also can be used as a simple microscope, with adjustable brightness, comfortable vision, and not easy to fatigue after long-term operation;
2. The LCD touch screen can directly display the hardness value, the conversion hardness, the test method, the test force, the brightness, the holding time, the number of measurements, the statistical data, and the test time are intuitive and clear;
3. The system comes with a calibration function, which can manually adjust the input error calibration instrument;
4. When testing the curved surface, it is automatically corrected according to the standard curved surface radius;
5. Adjustable range of optical system brightness: 0-100;
6. 100 sets of test data can be stored, and the test data can be viewed at any time, and the current data can also be deleted or all test data can be cleared;
7. The test force unit can be manually selected for mutual conversion, the conversion unit is: (Kgf, N)
8. Simultaneous display: maximum value, minimum value, average value, number of tests, test block name (test block number can be input);
9. The main interface can display 4 conversion scales at the same time, and can switch: National Standard (GB), American Standard (ASTM) and International (ISO) Standards. A total of 21 measurement scales can be converted: HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HK, HBW, HS, HBS, HV, Rm (tensile strength), MPa (pressure);
10. With diagonal length memory function, the diagonal length will be automatically memorized after shutdown, and it will be measured directly after startup, without the need for secondary reset.
11. The upper and lower limit measurement range can be set, displayed on the main measurement interface, and the unqualified value will automatically prompt an alarm;
12. The operating system supports English.
13. It has three test methods of Brinell, Rockwell and Vickers, with eight levels of test force, which can meet various hardness test requirements;
14. Equipped with a built-in printer, test data can also be output to U disk via USB for saving and analysis;
15. The cast aluminum shell has a stable and non-deformed structure once formed, and the pure white car paint has a high level of scratch resistance. It is still bright as new after years of use;

Technical Specifications:

| | |
|------------------------------|--|
| Model | HBRV-187.5DT |
| Brinell Scales | HB1/30、HB2.5/31.25、HB2.5/62.5、HB2.5/187.5、HB5/62.5、HB10/100 |
| Rockwell Scales | HRA、HRB、HRC、HRD、HRE、HRF、HRG、HRH、HRK、HRL、HRM、HEP、HRR、HRS、HRV |
| Vickers Scales | HV30、HV100 |
| Test force | Rockwell test force: 60、100、150Kgf (588、980、1471N) |
| | Brinell test force: 30、31.25、62.5、100、187.5Kgf (294.2、306.5、612.9、980.7、1839N) |
| | Vickers test force: 30、100Kgf (294.2、980.7N) |
| Magnification | Brinell: 37.5×, Vickers: 75× |
| Maximum height of specimen | Rockwell 170mm, Vickers and Brinell 145mm |
| Indenter-outer wall distance | 165mm |
| Hardness test range | Rockwell: 20-88HRA、20-100HRB、20-70HRC Brinell: 5-650HBW Vickers: 10-3000HV |
| Hardness reading | Automatic calculation |
| power supply | AC220±5%,50~60Hz |
| Dimensions (mm) | 550×200×720mm |
| Net weight | 85kg |

Standard configuration:

| name | Quantity | name | Quantity |
|------------------------------------|----------|----------------------------------|----------|
| Rockwell 1/16" steel ball indenter | 1 only | Rockwell diamond indenter | 1 only |
| Brinell 2.5mm indenter | 1 only | Brinell 5mm indenter | 1 only |
| Vickers diamond indenter | 1 only | Standard Rockwell hardness block | 3 pieces |
| Standard Brinell hardness block | 1piece | Standard Vickers hardness block | 1 piece |
| Medium and V type test bench | One each | Sliding test bench | 1 only |
| Power cable | 1 | Dust cover | 1 piece |