

# iBrin-3000CL

## Electronic Digital Brinell Hardness Tester



## Contact us

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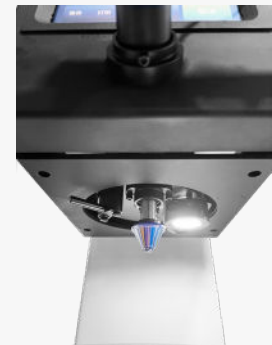
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## Features and Applications

### Product Features

- Touch screen control, the operation interface is simple and easy to understand, with good reliability, operability and intuitiveness.
- High-precision sensors are used to ensure the accuracy of the test.
- The equipment controls the stepper motor through a single-chip microcomputer, which realizes the function of automatic loading and unloading, and improves the efficiency and stability of the test.
- The shape and structure are reasonable, the appearance is beautiful, and it is easy to operate and observe.
- Wide measuring range: this machine is suitable for measuring the brinell hardness of annealed and normalized workpieces, cast parts, non-ferrous metals and soft parts or unquenched steel parts.
- Strict implementation standards to ensure the accuracy and reliability of test results.



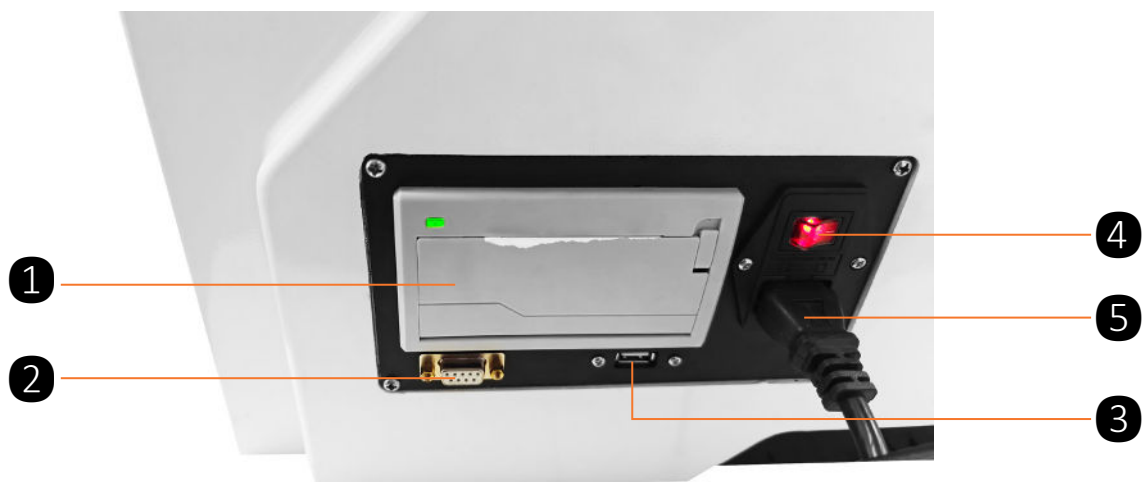
### Product Applications

- During machining, brinell hardness testers can be used to test the hardness of raw materials in order to select the appropriate machining process and tool.
- It can be used to test the hardness of mechanical parts (such as gears, bearings, bolts, etc.) to ensure that they meet the design requirements and use performance.
- It can be used to test the hardness of parts and components of power station boilers, steam turbines, generators and other equipment to ensure the safe operation of equipment.

## Product Details



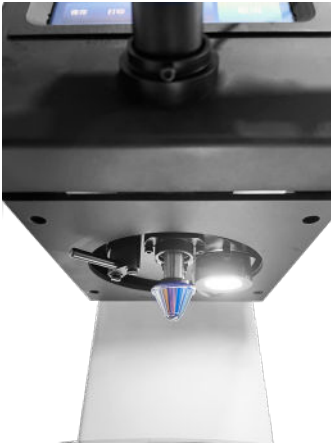
- 1. Display The Screen    2. Micrometer Eyepiece Socket    3. Micrometric Eyepieces**  
**4. Indenter    5. Test Bench    6. Lifting Screws    7. Handwheel**



- 1. Printer    2. Rs232 Interface    3. Usb Interface    4. Switch    5. Power Cable Interface**

## Product Details

### Detailed Display



- Equipped with a 2-station turret, including one indenter and one objective lens. The indenter and objective lens can be manually switched via the side crossbar.
- The objective lens is equipped with an illumination lamp, ensuring a clear and bright view of the indentation.



- 20X micrometric eyepiece, capable of accurately measuring the indentation size.

### Functions

The screenshot shows a blue-themed control interface with the following elements:

- 1:** A large green digital display showing the test result '0.0'.
- 2:** A box containing the test scale 'HBW' and 'HBW10/3000'.
- 3:** A box showing the test force '0.0kg'.
- 4:** A box with hardness conversion options: 'NG', 'HRD', and 'Rm'.
- 5:** A box with test data fields: 'No: 0/10', 'Max. 0', 'Min. 0', and 'Ave. 0'.
- 6:** A box for 'History Data' with a brightness adjustment control showing '100%'.

At the bottom of the interface are buttons for 'Save', 'Print', 'Clear', and 'Cancel'.

1. Test Results

2. Test Scale

3. Test Force (Real-time Display)

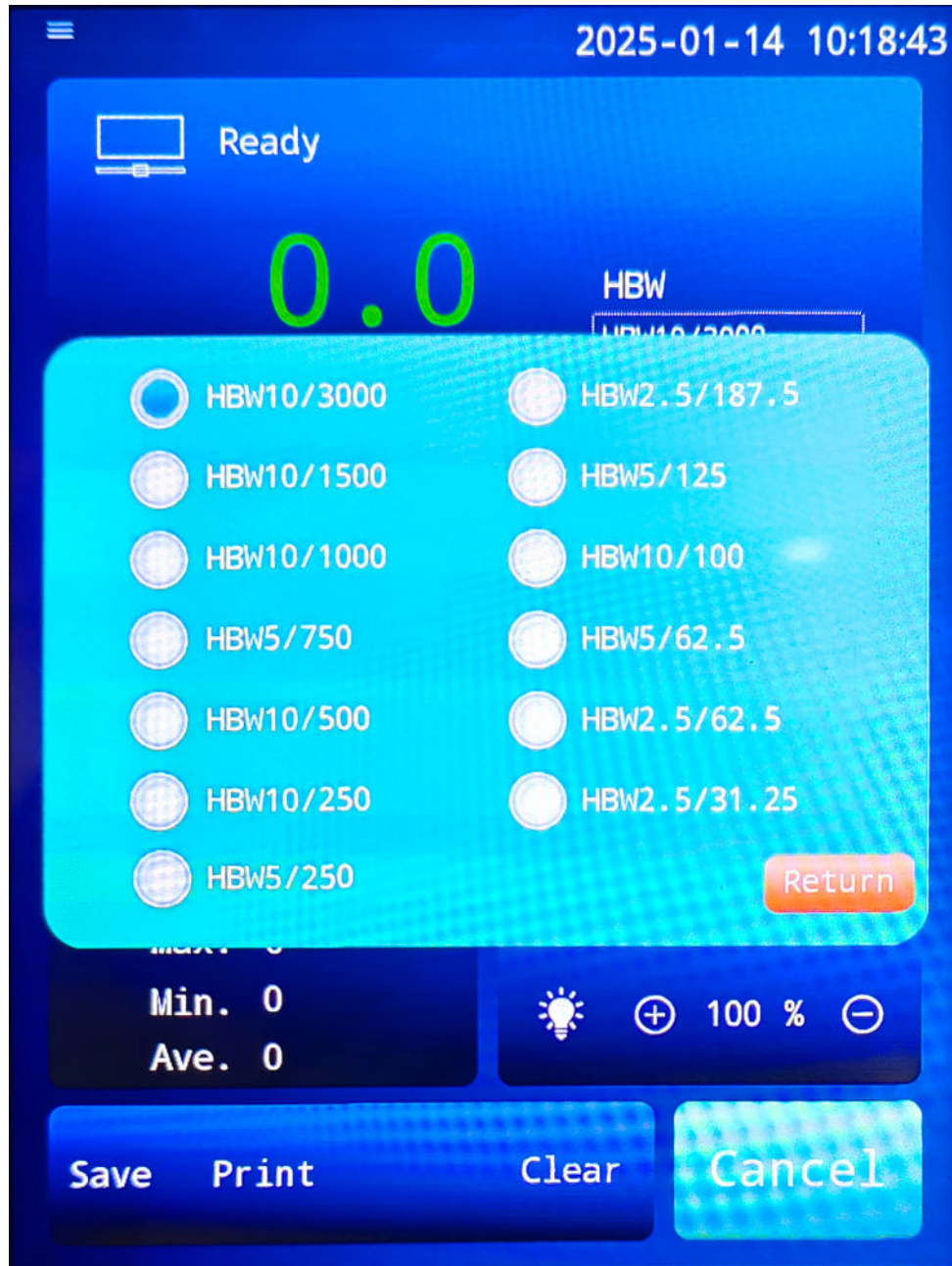
4. Hardness Value Conversion

5. Test Data

6. Brightness Adjustment

## Operation Interface

### Test Scale Selection



- There are 13 test scales available, with 3 different sizes of indenters loaded with different test forces.

HBW2.5/31.25、HBW2.5/62.5、HBW2.5/187.5、  
HBW5/62.5、HBW5/125、HBW5/250、HBW5/750、  
HBW10/100、HBW10/250、HBW10/500、HBW10/1000、HBW10/1500、HBW10/3000

## Operation Interface

### Hardness Value Conversion

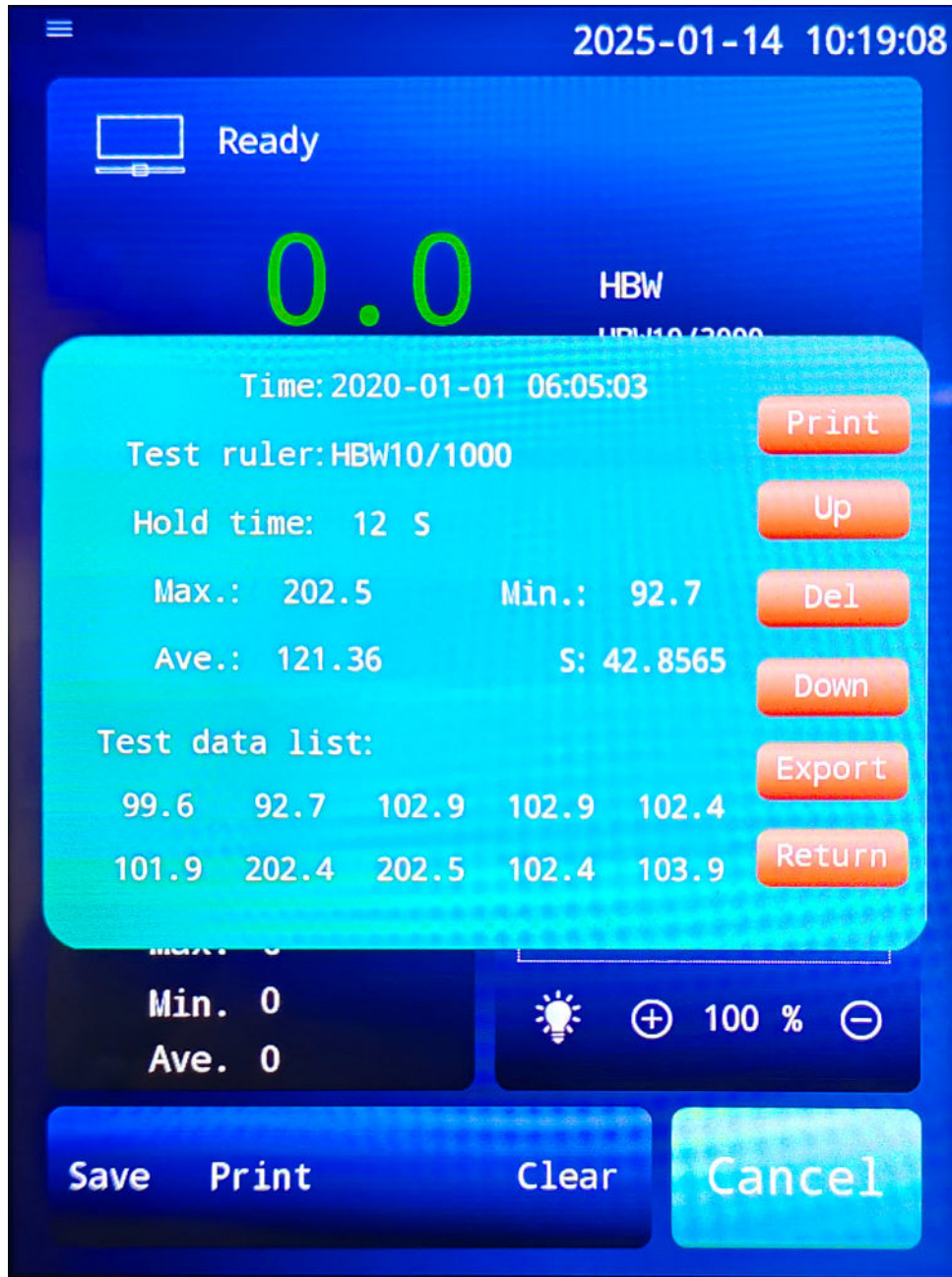


- It can convert with 19 commonly used hardness scales, including Rockwell hardness, Vickers hardness, Knoop hardness, superficial Rockwell hardness, etc.

HRA、HRB、HRC、HRD、HRE、HRF、HRG、HRH、HRK、HS、  
HV、HK、HBW、HR15N、HR30N、HR45N、HR15T、HR30T、HR45T

## Operation Interface

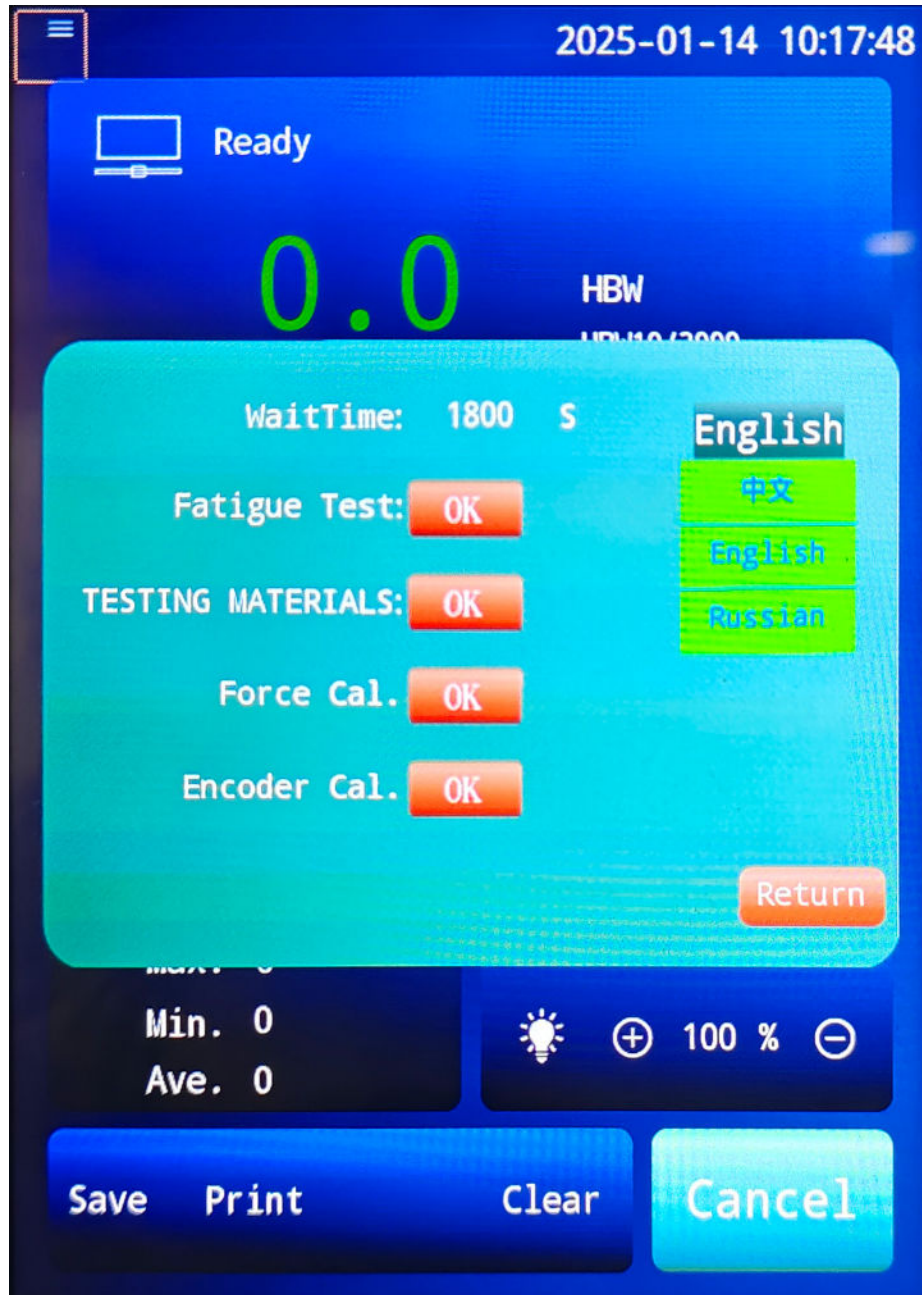
### Data Management



- Test data can be saved to historical data by clicking the save button. Users can perform functions such as data search, deletion, and print output on this interface.
- Printing can be done directly through the built-in printer of the equipment, or by connecting to a computer via the RS232 interface and using a printer for printing.

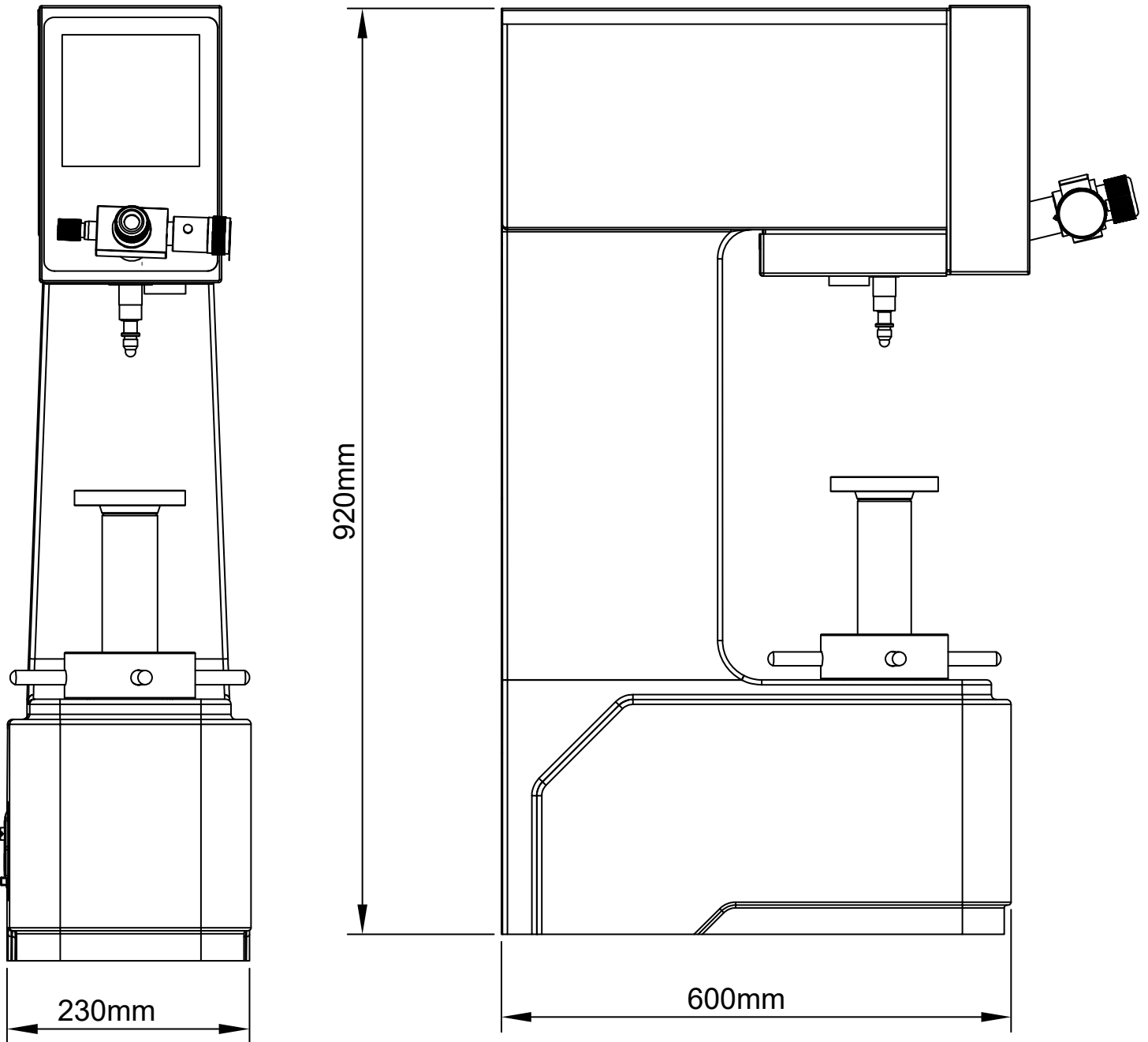
## Operation Interface

### Function Settings



- Calibrated before leaving the factory; users are not recommended to modify it by themselves.
- Test Material Selection: Select according to the sample material to be tested by the user.
- Language Selection: Supports display in 3 languages.

## Instrument Dimension





# Technical Specification

<b>Name</b>	Digital brinell hardness tester
<b>Model</b>	iBrin-3000CL
<b>Measurement Range</b>	8~650HBW
<b>Test Force</b>	62.5kgf、100kgf、125kgf、187.5kgf、250kgf、500kgf、750kgf、1000kgf、1500kgf、3000kgf 612.9N、980.7N、1226N、1839N、2452N、4903N、7355N、8907N、14710N、29420N
<b>Test Scales</b>	HBW2.5/31.25、HBW2.5/62.5、HBW2.5/187.5、HBW5/62.5、HBW5/125、HBW5/250、HBW5/750、HBW10/100、HBW10/250、HBW10/500、HBW10/1000、HBW10/1500、HBW10/3000
<b>Conversion Scales</b>	HRA、HRB、HRC、HRD、HRE、HRF、HRG、HRH、HRK、HS、HV、HK、HBW、HR15N、HR30N、HR45N、HR15T、HR30T、HR45T
<b>Indenter Specification</b>	Φ2.5mm、Φ5mm、Φ10mm
<b>Micrometric Eyepiece</b>	20X
<b>Objective Lens</b>	1X (2X optional)
<b>Maximum Allowable Height of Test Piece</b>	280mm
<b>Distance from Indenter Center to Machine Wall</b>	150mm
<b>Load Holding Time</b>	0~99s
<b>Power Supply</b>	AC220V,50HZ
<b>Overall Dimensions</b>	230*600*920mm
<b>Net Weight</b>	130kg

## Standard Delivery

Name	Qty	Photo
Brinell Hardness Tester	1	
Reading Microscope	1	
Φ150mm Platform	1	
Φ78mm Platform	1	
Φ78mm V-shaped Platform	1	
Φ10mm Brinell Indenter	1	
Φ5mm Brinell Indenter	1	
Φ2.5mm Brinell Indenter	1	

## Standard Delivery

Name	Qty	Photo
Hardness Block (150~250) HBW10/3000	1	
Hardness Block (80~110) HBW10/1000	1	
Power Cable	1	
Accessory Box	1	
Dust Cover	1	
User Manual	1	
Certificate Of Conformity	1	

## Optional Delivery

Name	Qty	Photo
Cemented Carbide Balls	1	
Various Workbenches	1	
Various Hardness Blocks	1	
Internal Accessories of This Machine	1	
Reading Microscopes	1	
Various Indenters	1	