

Mikrosize®

iBrin-3000CLD

Digital Display Brinell Hardness Tester



Video



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Features and Applications

Product Features

- Equipped with 11 test forces and 15 brinell hardness test scales for flexible selection.
- 3 types of indenters pre-installed simultaneously.
- 2 sets of objectives, both capable of measuring indentation diameter.
- Automatic switching of objectives and indenters based on selected scale.
- Pre-set dwell time and adjustable indentation measurement light intensity.
- Real-time display of loading time.
- Displays indentation size, hardness value, test count, etc.
- Converts between common hardness scales.
- Printable test results.

Product Application

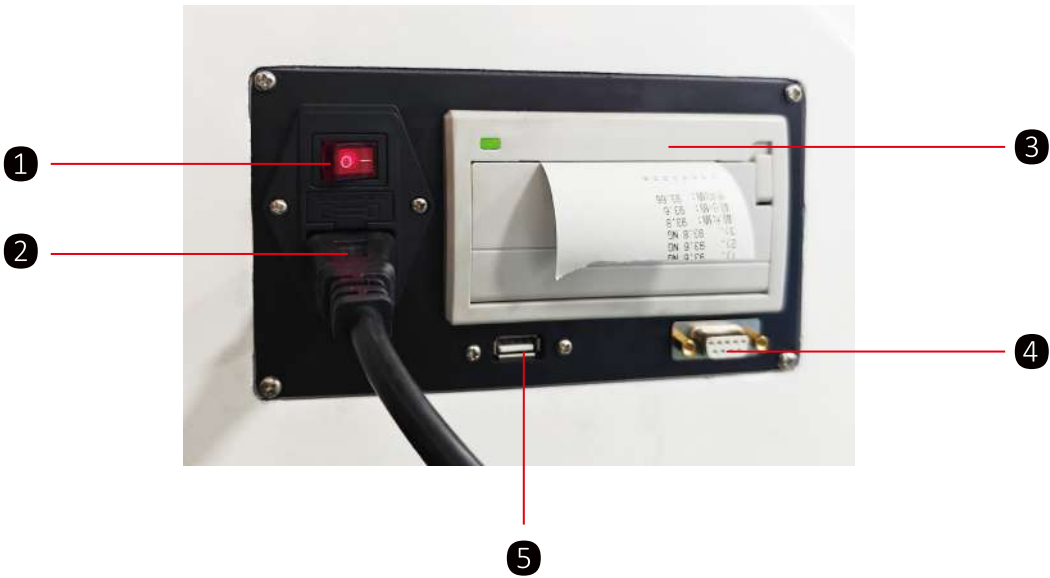
- Inspects raw material hardness during machining for optimal tool/process selection.
- Verifies hardness of mechanical components (gears, bearings, bolts) for compliance.
- Ensures safety-critical hardness of power plant equipment (boilers, turbines, generators).
- Evaluates forging quality and process effectiveness.



Product Details



1. Display Screen 2. Eyepiece Interface 3. Measuring Eyepiece
4. Automatic Turret (Holds 3 Indenters + 2 Objectives) 5. Test Anvil
6. Lifting Screw 7. Handwheel 8. Emergency Stop



1. Power Switch 2. Power Cable Port 3. Printer 4. RS232 Interface 5. USB Port

Product Details

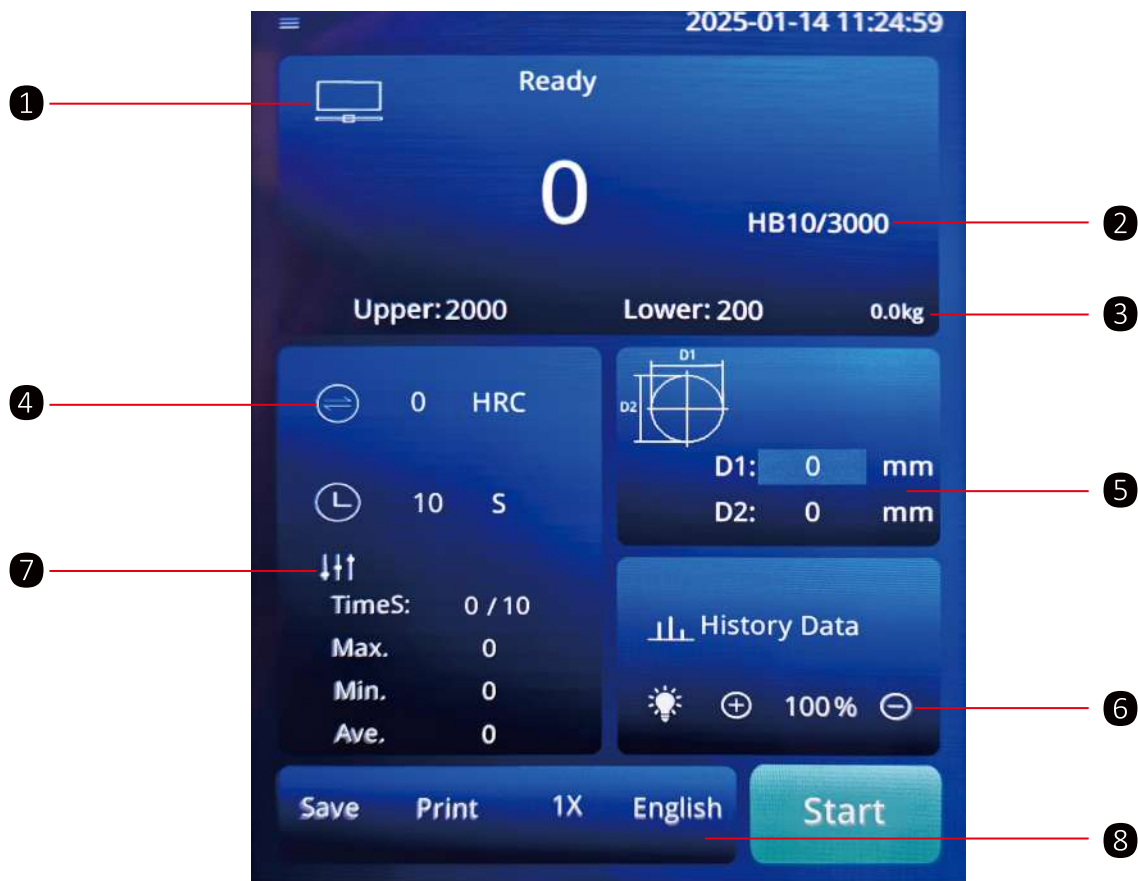


5-position automatic turret with 3 indenters ($\Phi 2.5\text{mm}$, $\Phi 5\text{mm}$, $\Phi 10\text{mm}$) and 2 objectives (1X, 2X). No manual change required; all components directly participate in measurement



20X measuring eyepiece + objectives enable 40X magnification for clear, accurate indentation observation and measurement.

Product Functions



1.Test Results 2.Test Scale 3.Real-time Test force Display
4.Scale Conversion 5.Indentation Size 6.Brightness Adjustment
7.Test Data 8.Language Switch: Supports Chinese/English

Operation Interface



Scale Selection

15 Test scales available across 3 indenter sizes and varying forces.

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



Hardness Conversion

Converts to 19 common hardness scales.

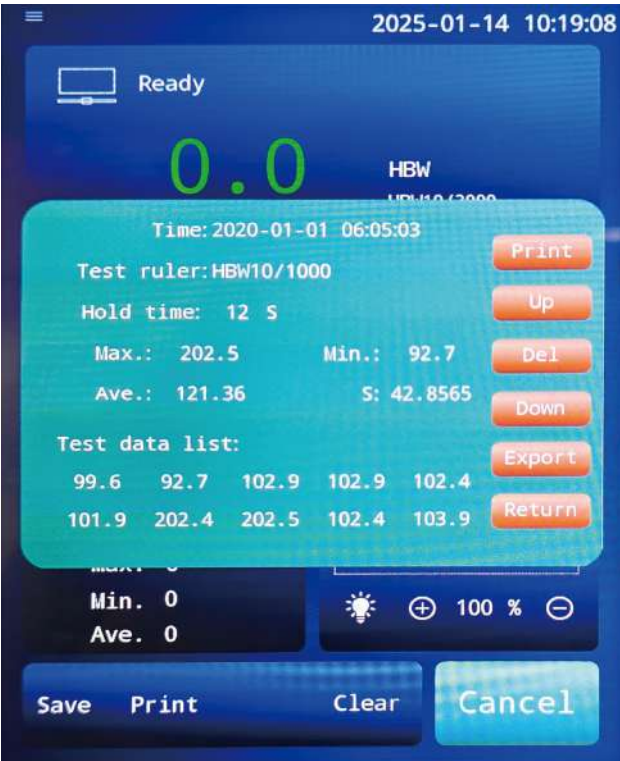
HRA、HRB、HRC、HRD、HRE、HRF、HRG、HRH、HRK、HS、HV、HK、HBW、HR15N、HR30N、HR45N、HR15T、HR30T、HR45T

Operation Interface



Automatic Turret

Turret rotates to selected indenter/objective position. All 3 indenters and 2 objectives remain mounted



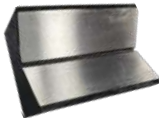
Automatic Turret

- Save tests to history for search/delete/print functions
- Print via built-in printer or external PC/printer via RS232

Technical Specification

Name	Digital Automatic Turret Brinell Hardness Tester
Model	iBrin-3000CLD
Test Range	8~650HBW
Test Force	31.25kgf、62.5kgf、100kgf、125kgf、187.5kgf、250kgf、500kgf、750kgf、1000kgf、1500kgf、3000kgf
	306.45N、612.9N、980.7N、1226N、1839N、2452N、4903N、7355N、9807N、14710N、29420N
Test Scales	HBW2.5/31.25、HBW2.5/62.5、HBW2.5/187.5、HBW5/31.25、HBW5/62.5、HBW5/125、HBW5/250、HBW5/750、HBW10/100、HBW10/125、HBW10/250、HBW10/500、HBW10/1000、HBW10/1500、HBW10/3000
Scale Conversion	HRA、HRB、HRC、HRD、HRE、HRF、HRG、HRH、HRK、HS、HV、HK、HBW、HR15N、HR30N、HR45N、HR15T、HR30T、HR45T
Loading Method	Automatic Loading, Dwell, Unloading
Main Test Force Loading Time (s)	2~8
Dwell Time (s)	0~99 Stepless Setting
Test Height (mm)	270
Test Throat (mm)	190
Indenter/Objective Change	Automatic Turret
Indentation Measurement	Digital Reading Microscope
Eyepiece	20X
Objective	1X, 2x
Display	8-inch Industrial Touchscreen
Indenter Specifications	Φ2.5mm、Φ5mm、Φ10mm Mounted on Same Turret
Data Output	Built-in Printer, RS232 Interface
Light Source	LED
Light Adjustment	Stepless Brightness Control
Optical Path Switching	Automatic
Dimensions mm (L*W*H)	1000X595X350
Net Weight (kg)	150
Power Supply	AC220, 50Hz

Standard Delivery

Name	Qty	Photo
Machine Mainframe	1	
1X、 2X Objectives	each1	
Measuring Eyepiece	1	
Φ230mm Φ230mm Test Stage	1	
Φ78mm Flat Test Stage	1	
60*90mm V-shape Test Anvil	1	
Φ10mm Brinell Indenter	1	
Φ5mm Brinell Indenter	1	
Φ2.5mm Brinell Indenter	1	
Test Block （150~250） HBW10/3000	1	
Hex Key	1	
Power Cable	1	
Fuse	2	
Accessory Case	1	
Anti-dust Cover	1	
User Manual	1	
Certificate of Conformity	1	



Optional Delivery

Optional Accessories

Carbide balls

Various test anvils

Hardness test blocks

Internal spare parts

Additional indenters