

MIDLAND METROLOGY LTD

# iBrin-3000E

## Electronic Touch Screen Brinell Hardness Tester



Video



# Product Features and Application

## Product Features

- Closed loop loading with high-precision load cell and single-chip microcomputer control ensure precise automatic loading and unloading, guaranteeing reliable test results.
- Variety of test force levels, ranging from 0.613 KN to 29.42 KN, meeting the hardness testing requirements for different materials.
- 2.5mm, 5mm, 10mm three carbide brinell ball indenters
- The test force dwelling time can be flexibly adjusted from 1 to 99 seconds, adapting to the characteristics of various materials and testing standards.
- The maximum test height is 280mm, and test throat is 150mm, providing ample operating space.
- Instrument function on touch screen is clearly divided, operating simple: data viewing, processing, and calibration can be easily completed.
- iBrin-3000E complies with standards such as GB/T231.2 - 2002 ensuring accuracy.

## Product Application

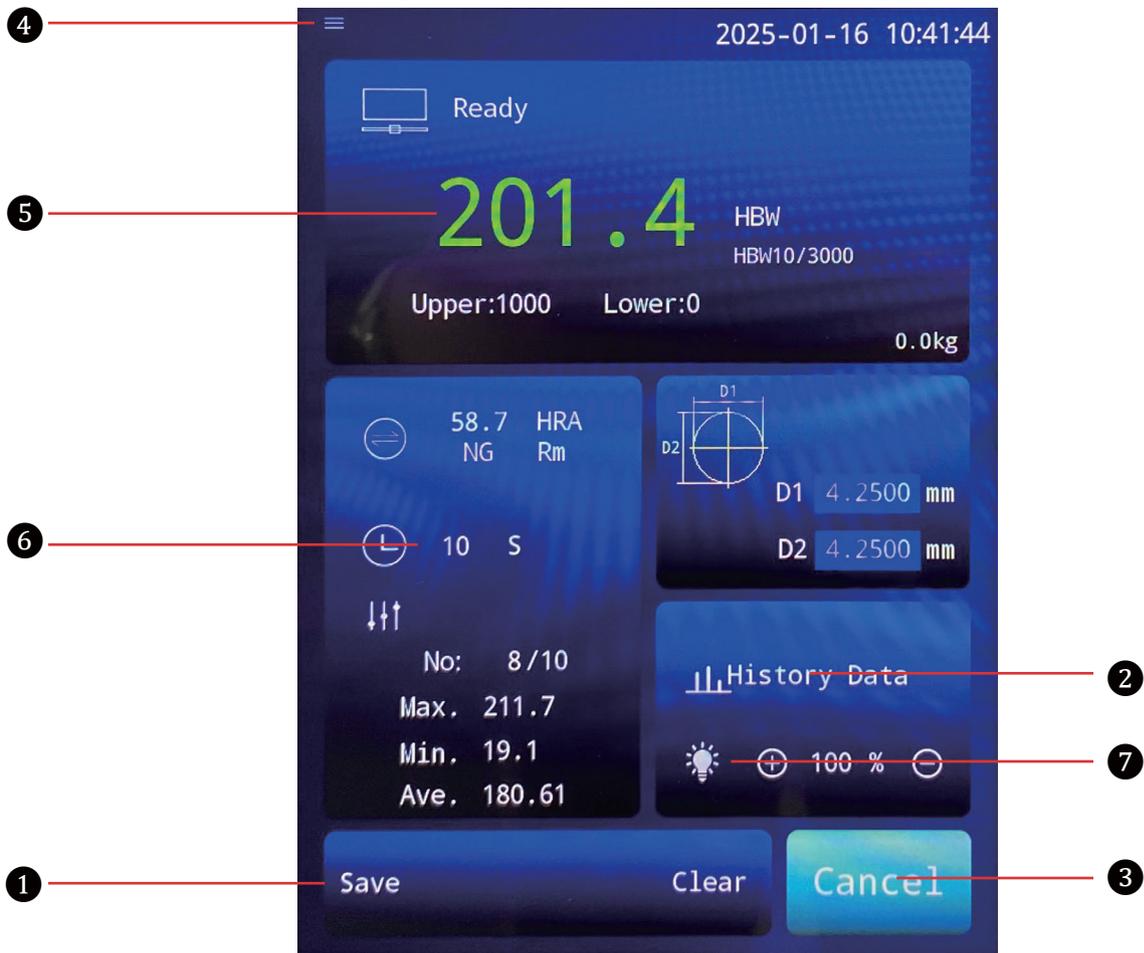
- iBrin-3000E brinell hardness tester is a bench-type machine, which is used to test the brinell hardness of annealed and normalized workpieces, cast parts, non-ferrous metals, various relatively soft components, or unquenched steel parts.
- It is suitable for use in metrology, metal metallurgy, chemical industry, machinery manufacturing, industry, as well as scientific research institutions of universities and colleges.
- Accurately detect the hardness of annealed and normalized parts to control the quality of metal processing.
- Effectively measure the hardness of cast parts to ensure stable performance of products.
- Reliably test the hardness of non-ferrous metals to support the R & D and innovation of materials.
- Precisely measure the hardness of soft components to ensure a good fit during assembly.
- Quickly identify the hardness of unquenched steel parts to improve production efficiency.



# Instrument Structure



# Touch Screen Function



1. Save: Save current test data and store it in the historical data.

History Data: View the previously saved historical data. You can scroll up and down to check, and also delete, print or export the historical data to a USB.

Cancel: Press "Cancel" during operation to stop the running process, and the indenter will return to initial state.

4. Function keys: Used for force value calibration, encoder calibration, and language switching.

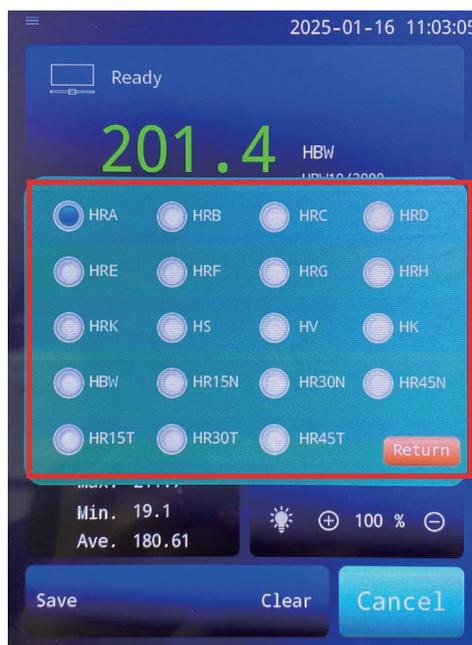
5. Hardness Test Result

6. Dwelling Time Setting

7. Illumination Adjusting



Brinell Hardness Scale Selection



Conversion Scale Selection



Measured Data Input

# BRM-2 Portable Brinell Reading Microscope



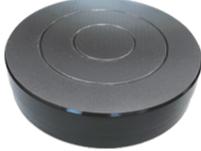
BRM-2 brinell reading microscope with light source is specially used for measuring the indentation size of Brinell hardness. Its own light source ensures that the indentation image and scale line are super clear in the environment with no light, makes indentation measurement is easy and accurate.

Model	BRM-2
Total Magnification	20X
Eyepiece Microscale Range	0 mm to 6 mm
Eyepiece Maximum field of View	9 mm
Effective Measuring Range	0 mm to 6 mm
The Minimum Reading of Microdrum	0.01mm
Measurement Accuracy	+ / - 0.01mm
Weight	500g
Dimensions	82X35X155mm

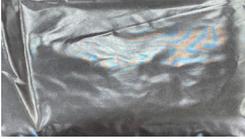
# Technical Specification

<b>Product Name</b>	Electronic Touch Screen Brinell Hardness Tester	
<b>Model</b>	iBrin-3000E	
<b>Data Display&amp;Output</b>	LCD touch screen	
<b>Test Force</b>	<b>Kg</b>	62.5kgf、 100kgf、 125kgf、 187.5kgf、 250kgf、 500kgf、 750kgf、 1000kgf、 1500kgf、 3000kgf
	<b>N</b>	612.9N, 980.7N, 1226N, 1839N,2452N, 4903N, 7355N, 9807N,14710N, 29420N
<b>Test Force Resolution</b>	0.1Kg	
<b>Brinell Scale</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>Test Force Accuracy</b>	62.5 ~ 250Kgf≤1%, 500 ~ 3000Kgf≤0.5%	
<b>Reading Microscope</b>	Resolution :0.01 mm (The minimum reading of microdrum)	
<b>Ball Diameter</b>	Φ2.5mm、 Φ5mm、 Φ10mm	
<b>Test Space</b>	Test Height: 280mm Test Throat:150mm	
<b>Executive Standard</b>	BSEN 6506, ISO 6506, ASTM E10, GB/T231	
<b>Loading Method</b>	Automatic (Loading/Dwell/Unloading)	
<b>Test Force Dwelling Time</b>	1-99 S (1 second /step)	
<b>Hardness Resolution</b>	0.1 HBW	
<b>Hardness Test Range</b>	8-650HBW	
<b>Power Supply</b>	220V /2A /50Hz	
<b>Dimensions(L*W*H)</b>	Machine: 520*250*950mm Package: 720*530*1150mm	
<b>Weight</b>	Net Weight: 164Kg Gross Weight:195kg	

# Standard Delivery

Item	Qty	
Machine Mainframe	1 set	
Φ150mm Test Anvil	1 pc	
Φ80mm Test Anvil	1 pc	
Φ80mm V-shape Test Anvil	1 pc	
Φ10mm Hard Alloy Ball Indenter	1 pc	
Φ5mm Hard Alloy Ball Indenter	1 pc	
Φ2.5mm Hard Alloy Ball Indenter	1 pc	
200±50HBW Brinell Hardness Block HB10/3000	1 pc	
100±25HBW Brinell Hardness Block HB10/1000	1 pc	

# Standard Delivery

Item	Qty	
BRM-2Reading Microscope	1 pc	
Power Cord	1 pc	
Accessory Case	1 pc	
Anti-dust Cover	1 pc	
Instruction Manual	1 copy	
Warranty Card	1 copy	
Product Certificate	1 copy	