

Mikrosize®

uBrin-3000M

Manual Digital Brinell Hardness Tester



Video



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Product Feature&Application

Product Features

uBrin-3000M-M/ uBrin-3000M-A:

- Closed-loop control system, high accuracy load cell, no need installs weights, easy installation and calibration.
- Automatically compensate for each test force
- Auto loading and unloading, large test force range: 62.5Kgf to 3000Kgf.
- Eyepiece with digital encoder, D1 and D2 values display on LCD directly. Measuring indentation automatically, no need to focus
- Hardness value display on screen, and with hardness conversion function
- Touch screen interface, menu structure interface, more information display
- Save more samples and test information
- Support to set a password for protection
- Auto calibration according to the standard block or length scale, loading automatic corrected, much more accuracy
- Auto test force calibration by standard dynamometer
- Large test space: 155*200mm (Depth * Height)
- Vickers and Rockwell hardness values can be converted, with 12 kinds of measurement scale
- With USB interface,all data can be saved in the U disk as EXCEL format, easy edit and process
- Modular design, easy maintenance
- Support upgrade to full automatic Brinell hardness tester

uBrin-3000M-V:

- Based on uBrin-3000M-M/A, uBrin-3000M-V is with dual optical path system, built-in camera,
- Eyepiece and camera both can be connected
- Indention measurement can be both done by eyepiece or computer automatically
- Industrial touch screen computer monitor
- Computerized control system for loading , single sample test, batch samples test, hardness scale conversion, alarm for unqualified test result etc.
- Integrated hardness tester, image process system, hardness measurement software system and industrial touch screen computer system in one, more scientific and concise structure, and more easier operation.
- Equipped with double touch screen. Double insurance of stable working performance. On front touch screen panel can do testing and measurement by machine independently; On side touch screen panel can do automatic measure or manual measure by software. Even one of the screen was damage machine still can running normally.
- On side panel touch screen can control machine turret. Press 'start' key on side touch screen, machine will automatic working and indentation will display on screen directly. Side touch screen panel can connect with internet through wifi, and can work together with keyboard and mouse.
- On test report can display indentation image, hardness curve, hardness value, conversion value, test force, dwell time, Max. - Min data, average data, etc.



**uBrin-3000M-M
Manual Turret**



**uBrin-3000M-A
Auto Turret**



**uBrin-3000M-V
Auto Turret**

Product Application

Suitable for cast iron, steel products, nonferrous metals and soft alloys etc. Also suitable for some nonmetal materials such as rigid plastics and Bakelite etc.

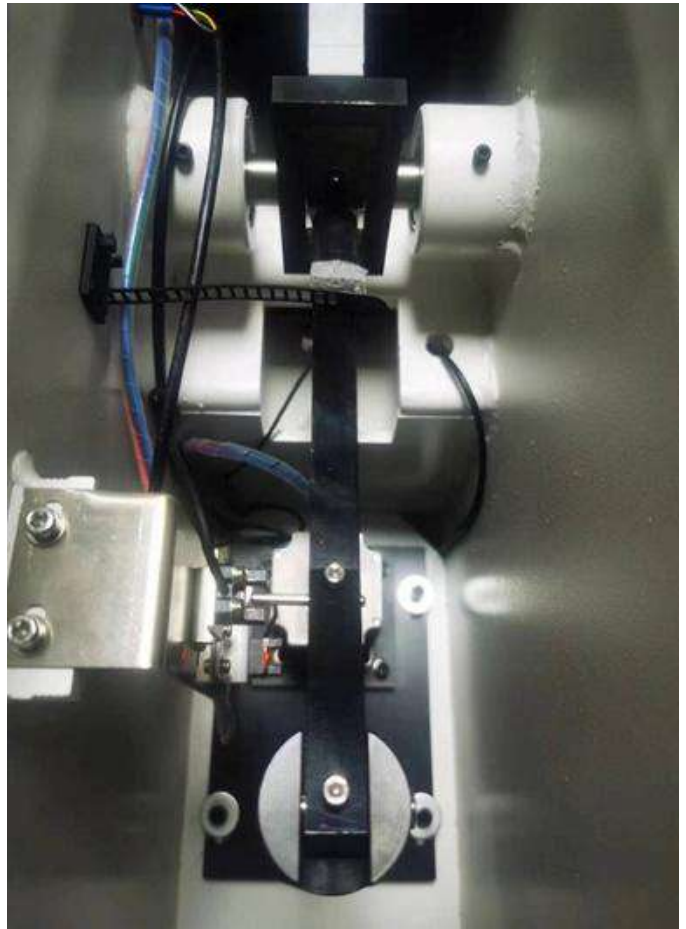
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User Friendly

High precision load cell with closed-loop control system, each test force automatically compensated.



Closed-loop Control System



Closed-loop Control System

Digital Eyepiece with Encoder

Eyepiece with digital encoder, just click the encoder button, indentation length will be input to machine automatically measuring D1 and D2 values, LCD directly displays D1 and D2 values and hardness value.



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Turret System

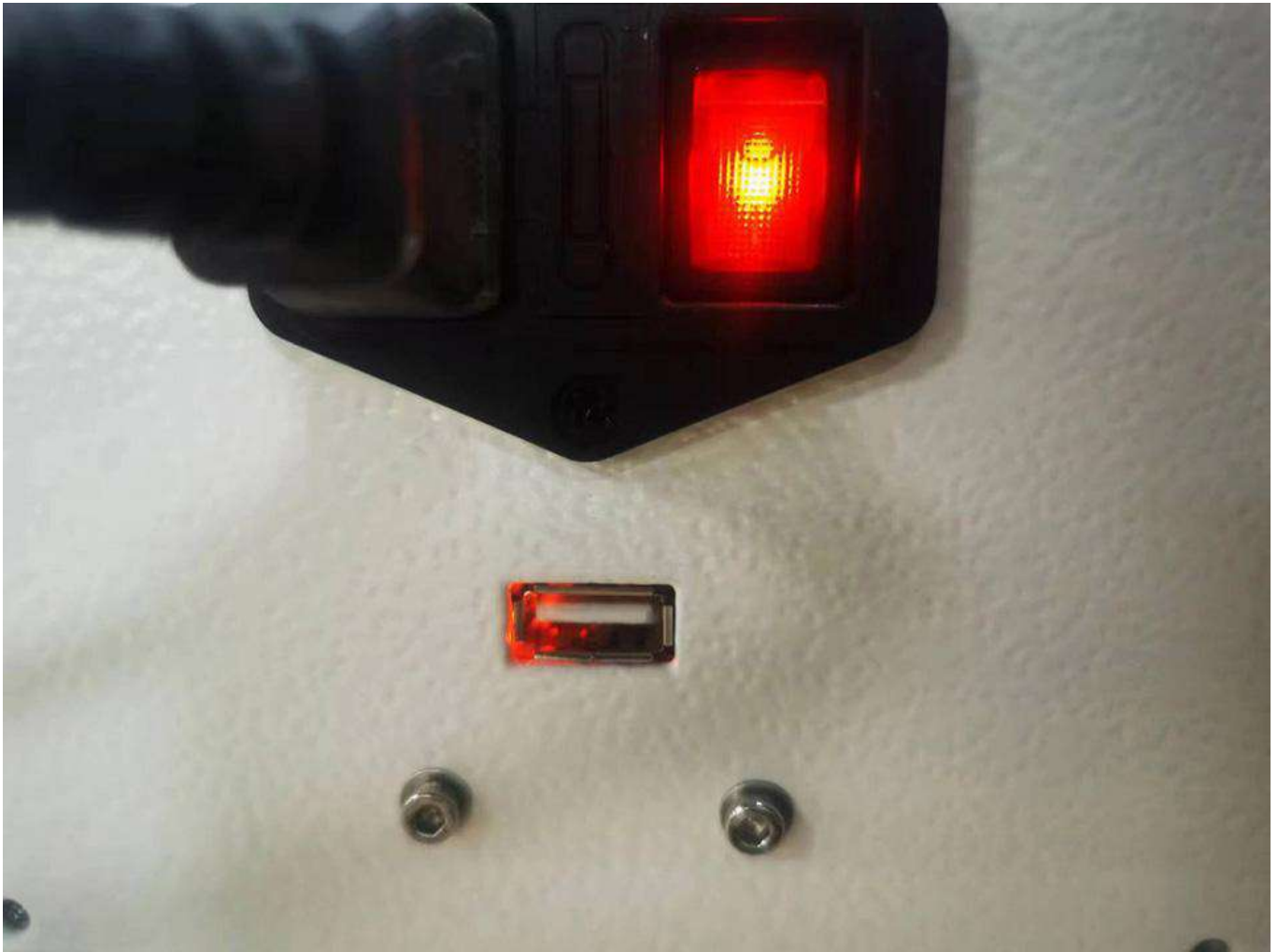


Real Photo at Factory



Data Output

With USB interface, test data can be saved to U-flash as EXCEL format, easy edit and process.



Operation Interface

Operator

Sample

Range To

Load(kg) Dwell Time(S)

Turret

Start

D1 D2

HEW

Conversion

Reset

Data

Setting

Measurement Scale

2.5/62.5

2.5/187.5

5/62.5

5/125

5/250

5/750

10/100

10/250

10/500

10/1000

10/1500

10/3000

Return

Conversion Scale

HRA

HRB

HRC

HRD

HRF

HV

HK

HBW

HR15N

HR30N

HR45N

HR15T

HR30T

HR45T

Return

Calibration

Magnification:

Loda(kg) :

Pulses : X Y

Scale

Hardness

Save

Calibration

Language

Return



Ordering Information



uBrin-3000M-M Manual -turret Digital Brinell Hardness Tester
uBrin-3000M-A Auto-turret Digital Brinell Hardness Tester

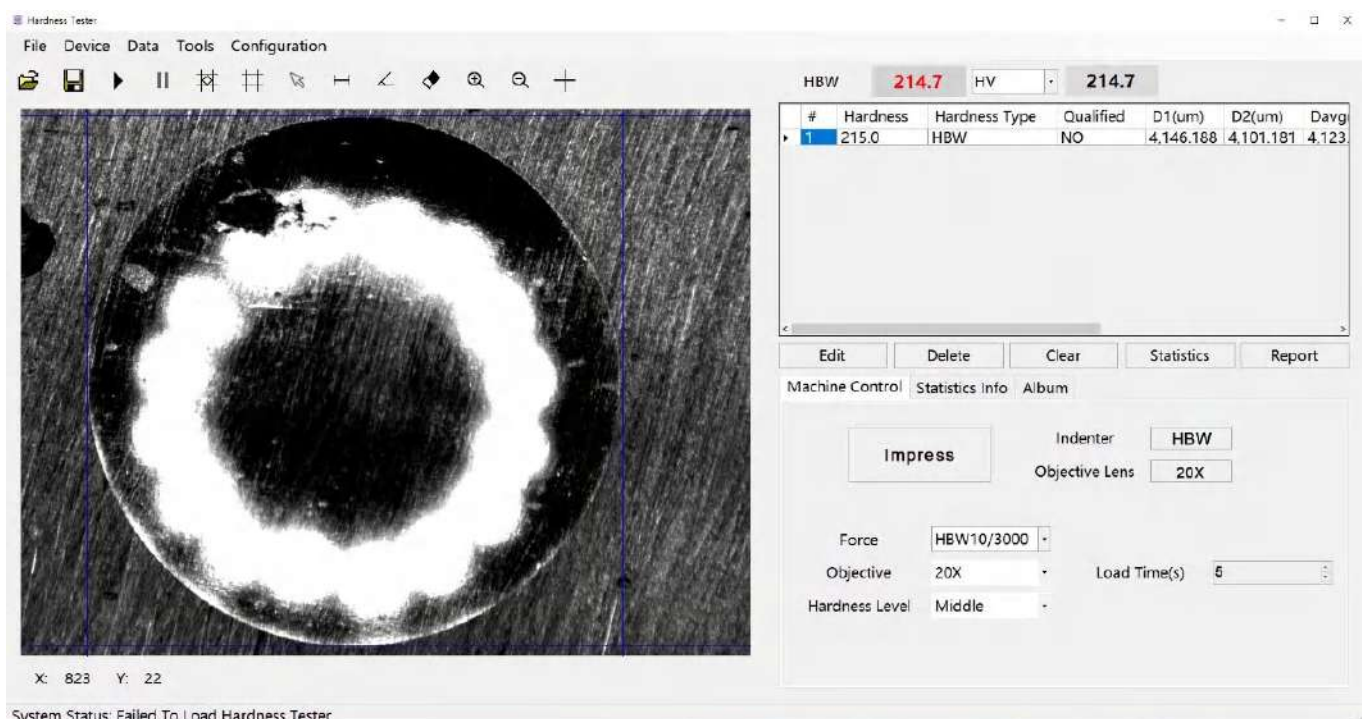


uBrin-3000M-V Auto-turret Vision Digital Brinell Hardness Tester

uBrin-3000M-V Brinell Software System

Product Introduction:

- Wide range of application: laboratory, or industrial workshop; Accurate test results can be obtained under the condition of standard surface roughness, suitable for various loads of Brinell hardness tester.
- 5 million pixel industrial grade digital camera, clear image;
- Direct communication with hardness tester, software control hardness tester turret, loading and other whole test process;
- The brightness, contrast and lighting system can be adjusted, and the parameter values can be saved and imported for different sample surfaces.
- Precise image analysis: integrated shape, brightness and edge calculation to improve the accuracy of measurement results.
- Indentation automatic measurement, real-time calculation of accurate hardness value and indentation diameter, good repeatability, high accuracy, wide applicability, while sup
- Powerful software functions: single piece measurement, batch measurement, hardness conversion table, data and image storage, database query, unqualified value alarm.
- According to GB/ASTM standards, automatic Brinell - Rockwell - Vickers and other hardness conversion;
- It can be calibrated according to standard hardness blocks or length scales.
- Automatically record measurement data and output WORD report according to user customization; Automatic recording of measurement data, all data saved in EXCEL format.





uBrin-3000M-V Brinell Software System

Technical Specification:

Model	uBrin-3000M-V
Brinell Scale	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
Meet Standard	BSEN 6506, ISO 6506, ASTM E10, GB/T231
Measuring Range	15.9-650HBW (effective hardness value recommended by ASTM E10)
Measurement Resolution	0.0001 mm
Resolution of Hardness Value	0.1 HBW
Digital Imaging	5 million industrial grade digital cameras
Measuring Method	Manual and automatic measurement (for standard samples)
Calibration Method	Standard Hardness block/length scale
Support Language	Chinese/English (More Languages Customized)

Standard Accessories:

Item	Instructions	Quantity
Camera	5 million pixels	1 set
Interface	Connect the durometer to the camera	1 set
U disk	Includes software and instruction manual	1 set

Technical Specification

Model	uBrin-3000M-M	uBrin-3000M-A	uBrin-3000M-V
Turret	Manual	Auto	Auto
Brinell Scale	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		
Test Force	62.5kgf(612.9N), 100kgf(980.7N), 125kgf(1226N), 187.5kgf(1839N), 250kgf(2452N), 500kgf(4903N), 750kgf(7355N), 1000kgf(9807N), 1500kgf(14710N), 3000kgf(29420N)		
Test Force Accuracy	0.1%		
Test Force Precision	62.5 ~ 250kgf ≤ 1% 500 ~ 3000kgf ≤ 0.5%		
Test Range	8-650HBW		
Camera(uBrin-3000M-V)	Industrial 5 Millions Pixels		
Eyepiece	20X (Optional: 10X, 15X, 30X)		
Indention Measuring	Manual	Manual	Manual/Auto
Data Output	LCD/USB	LCD/USB	LCD/USB/Computer
Calibration Method	Standard Block/Length Scale		
Computer(uBrin-3000M-V)	Industrial 15"-resistance screen Core i5 quad core/4G/64G/wifi win10		
Measuring Device Resolution	0.1um	0.1um	0.1um
Hardness Resolution	0.1HBW	0.1HBW	0.1HBW
Dwell Time	0 ~ 99S		
Data Storage	Results Saved in U disk as Excel Format		
Test Height	200mm(Customized Optional)		
Test Throat	155mm		
Executive Standard	BSEN 6506, ISO 6506, ASTM E10, GB/T231, JIS Z2243		
Machine Dimension	550×210×800mm		
Weight	110kg		
Power Supply	AC220+5%,50 ~ 60Hz		

Packing List

Item	Quantity
20X Measuring Eyepiece	1pc
Diameter 2.5mm Hard Alloy Ball Indenter	1pc
Diameter 5mm Hard Alloy Ball Indenter	1 pc
Diameter 10mm Hard Alloy Ball Indenter	1 pc
U-flash Disk/Touch Pen	1 pc
Power Cord	1 pc
Φ200mm Test Anvil	1 pc
Φ60mm Test Anvil	1 pc
Φ80mm V-shape Test Anvil	1 pc
Item	Quantity
Standard Hardness Block HBW10/3000	Each 1
Standard Hardness Block HBW10/1000	1pc
Standard Hardness Block HBW2.5/187.5	1pc
Anti-dust Cover	1pc
Spare Fuse (2A)	2pcs
Instruction Manual	1 copy
Product Certificate	1 copy
Warranty Card	1 copy
Accessories Case	1pc



HBW10/1000 Brinell Block



HBW10/3000 Brinell Block



HBW2.5/187.5 Brinell Block



Φ200mm Test Anvil



Φ60mm Test Anvil



Φ80mm V-shape Test Anvil



Φ2.5mm/5mm/10mmBrinell Ball Indentors