



DIGITAL BRINELL HARDNESS TESTER RoboBrinell-3000C

STANDARD

ISO 6506, ASTM E10, GB/T 231.2

Multi-function digital display Brinell hardness tester adopts quality components ensure equipment running more stable and accurate test result. Powerful data measurement control system accompanying with 5.6 inch LCD screen function is more comprehensive. Machine is simple and easy to operate.





FEATURE

- Equipped with Omron encoder digital display micrometer eyepiece and precise data calculating system, only gentle touch can directly show the hardness value.
- Equipped with sophisticated sensors and a microcomputer control system, dynamic force value fluctuation is less than 1/1000, test results are more accurate.
- The main components adopt brand such as American 3M, Allegro, Japan Omron and NKK, to ensure the equipment running stable.
- Equipped with high performance of servo motor which automatically load/unload.
- Input the indentation diameter, hardness value is displayed directly and can display conversion hardness value at the same time avoid the inconvenience of looking up table.
- The industrial LCD screen can display hardness value, hardness unit, conversion hardness, testing force, indenter type, required minimum thickness, load time, measurement times. Test process is intuitive and clear, built-in printer can print out measured times, hardness value, average, maximum and minimum values and range for the customer to archive.
- Can be equipped with data transmission software through RS232 interface data to computer to edit and save.
- The shell is one step casting molding with special foundry process, stable structure and no deformation, can work under relatively harsh environment. Pure white painting and have scratch resistance ability.
- Brinell hardness with huge test force, the indentation is large which adapts to test the big size grain metal reflecting the combination property.
- Used for cast iron, steel, ferrous metal especially for soft metal such as pure aluminum, lead, tin etc.



TECHNICAL SPECIFICATION

Parameter	Specification
Brinell scale	HBW2.5/62.5, HBW2.5/187.5, HBW5/125, 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 (8907N), 1500kgf (14710N), 3000kgf (29420N)
LCD Screen size	118x99mm
Minimum measuring unit	0.00125mm
Hardness data read	Digital LCD
Hardness range	8-650HBW
Total amplification times	20X
Load method	Automatic(load, dwell, unload)
Dwell time	1~99S each step is 1 second
Specimen maximum height allowed	220mm
Throat depth	120mm
Instrument size and weight	530×187×758mm (L×W×H) 135kg
Package size and weight	625x430x950mm(L×W×H) 149kg
Power supply	AC110V or AC220V + 5%, 50~60 Hz
Standard accessories	<p>1 piece: Hardness tester; 20X Omron digital measuring eyepiece ; Φ2.5, Φ5m, Φ10mm harden alloy indenter ; big, medium and “V” test table ; hand wrench; safety fuse; power cable ; accessory box; dust-proof cover ; manual instruction, certificate of quality ; warranty card; hardness conversion table.</p> <p>2 piece: Standard hardness block</p>



DATA TRANSFER SOFTWARE (OPTIONAL)

The screenshot shows the 'Hardness_Report' software interface. At the top, there is a 'Device Control' section with a 'Port' dropdown set to 'COM1'. Below this are buttons for 'Open', 'Close', 'Clear', 'Read Single', and 'Read All'. A callout box points to the 'Read Single' and 'Read All' buttons, stating: "Conversion scale for Rockwell, Superficial Rockwell, Brinell, Vickers, Knoop".

Below the device control is a 'Conversion' section with radio buttons for 'HBRV', 'Rockwell', 'Superficial Rockwell', and 'HV'. The 'HV' option is selected. A callout box points to this section, stating: "Conversion scale for Rockwell, Superficial Rockwell, Brinell, Vickers, Knoop".

Below the conversion section is a table with columns: 'NO.', 'Force', 'Dwell Time', 'D1', 'D2', 'Hardness', and 'Scale'. The 'Export Excel' button is highlighted with a red box. A callout box points to this button, stating: "Generate hardness report automatically into excel format".

A large yellow callout box at the bottom of the table area states: "Test result will display in this area".



SOFTWARE INTERFACE

- 1) This software including: CD-ROM 1 piece; Software Dongle 1 piece; Data line 1 piece
- 2) Data line connect with computer via RS232 interface
- 3) One time can show 13 pieces of data in report, and show dwell time, force, hardness value, hardness curve automatically.

REPORT FORMAT

ABC Co., Ltd.						
Hardness Test Report						
	Date	15-Aug-16		Time	2016.8.15	
Applicant	XYZ Electrical Technology Co., Ltd.					
Sample Name	Handwheel		Sample No.	16088258		
Material	steel		Description	SXL-1200 furnace use		
Machine ID	HJ16080126		Test Standard	EN-ISO-6507		
Operator	Tom		Auditor	Ben		
Test Result						
Test Item	Force	Dwell Time	D1	D2	Hardness	Scale
1	500	15	17.48	17.65	3003.4	HV
2	500	15	13.29	13.29	5244.13	HV
3	500	15	36.75	36.78	685.94	HV
4	500	15	28.4	36.78	1147.8	HV
5	500	15	37	37.03	676.71	HV
6	500	15	55.64	55.64	299.49	HV
7	500	15	63.18	63.14	232.39	HV
8	500	15	35.51	35.46	736.05	HV
9	500	15	18.21	18.18	2798.21	HV
10	500	15	28.4	36.78	1147.8	HV
11	500	15	63.18	63.14	232.39	HV
12	500	15	37	37.03	676.71	HV
13	500	15	36.75	36.78	685.94	HV

Hardness Value Curve

Test Item	Hardness (HV)
1	3003.4
2	5244.13
3	685.94
4	1147.8
5	676.71
6	299.49
7	232.39
8	736.05
9	2798.21
10	1147.8
11	232.39
12	676.71
13	685.94