



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

FULLY AUTOMATIC DIGITAL ROCKWELL HARDNESS TESTER



- **VALUE**
- **VERSATILITY**
- **PERFORMANCE**

BHRR-150AT

**DESCRIPTION:**

BHRR-150AT fully automatic Rockwell hardness tester adopted close loop load cell, with a good aesthetic aspect, complete functions, easy operation, intuitive display and good reliability, is a high-tech product combining the mechanic and electric features, which is suitable for the Rockwell hardness test.

APPLICATION:

Suitable for quenched steel, tempered steel, annealed steel, cold and hard casting, malleable cast iron, hard alloy steel, aluminum alloy, copper alloy, bearing steel etc. Also suitable for surface quenched steel, surface heat treating and chemical treating materials, sheet, zinc layers, chrome layers, tin layers etc.

FEATURES:

- Support for all the Rockwell scales and superficial Rockwell scales.
- Support for conversion scales of different kinds of hardness.
- With arc correction function.
- Touch screen display and operation, dynamically display the working state of the lifting screw and the indenter.
- With data storage function, automatic calculation of the maximum, minimum, average of the hardness value, the test results can be printed for output.
- Press one key, machine table automatic raise up and automatic do loading - dwell - unloading work, automatic get Rockwell value and show on screen.
- Software can save test data to computer.

TECHNICAL SPECIFICATION:

Model No.	BHRR-150AT
Initial Test Force	3kgf(29.4N), 10kgf(98N)
Total Test Force	60kgf(588.4N), 100kgf(980.7N), 150kgf(1471N), 15kgf(147.1N), 30kgf(249.2N), 45kgf(441.3N)
Indenter	Diamond Rockwell Indenter, ϕ 1.5875mm Ball Indenter
Loading Method	Automatic (Loading/Dwell/Unloading)
Table Raise Up	Motorized (automatic)
Hardness Reading	Touch Screen
Software	Save data to computer and generate test report
Test Scale	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HRL, HRM, HRP, HRR, HRS, HRV, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HR15X, HR30X, HR45X, HR15Y, HR30Y, HR45Y, HR15W, HR30W, HR45W
Conversion Scale	HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HBW
Data Output	Built-in Printer, RS232 port to PC
Resolution	0.1HR
Dwell Time	0-99s
Test Space	180mm x 150mm (Height x depth)
Power Supply	AC220V, 50Hz
Execute Standard	ISO 6508-2, ASTM E-18, JIS Z2245, GB/T 230.2-2018
Dimension & Weight	510*290*730mm, 95kg

**STANDARD ACCESSORIES:**

Item Name	Q'ty	Item Name	Q'ty
Instrument Main Body	1 set	Diamond Rockwell Indenter	1 pc
Φ1.5875mm Ball Indenter	1 pc	Middle Plane Test Table	1 pc
Large Plane Test Table	1 pc	V-Shaped Test Table	1 pc
Inner Hexagon Spanner	1 pc	Spanner	1 pc
Hardness Block	5 pcs	Fuse 2A	2 pcs
Software Key	1 pc	Software File USB Pen-Drive	1 pc
Power Cable + Data Cable	2 pcs	Anti-Dust Cover	1 pc

ROCKWELL HARDNESS TESTER SOFTWARE:

**REPORT:**

Example WORD and Excel reports are as shown below. The WORD and EXCEL report template files hr_report_en.doc and hr_report_en.xls are under the installation bin directory, and they can be customized to some extent, e.g, with LOGO and title etc.

Rockwell Hardness (HR) Test Results

Submitter						Date Submitted					
Part Name						Part #					
Qual. UL			48.0			Qual. LL			40.0		
Operator			Eric Smith			Seq #			20171120001		
Test Results											
#	Depth(m m)	Y(mm)	HR	Scale	Converted HV	#	Depth(m m)	Y(mm)	HR	Scale	Converted HV
1			44.9	HRC	444.8						
2			43.9	HRC	432.9						
3			44.1	HRC	435.2						
Case Hardness(HR)						Case Depth(mm)					
Hard. Curve											
Statistics											
Maximum			44.9			Minimum			43.9		
Average			44.3			Std. Dev.			0.5		
Cp			2.52			Cpk			2.33		
Operator			Test Date			Auditor			Audit date		
			2017.11.20								

* Due to continuous product development, Image & specification can be upgrade.