



北京凯普海泰科技有限公司  
Beijing Cap High Technology Co.,Ltd.

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## HBRV-187.5 Motorized Brinell Rockwell & Vickers Hardness Tester



### Product Details:

**Model Number** HBRV-187.5  
**Power** Electronic  
**Usage** Universal Hardness Tester

**Minimum Order Quantity:**

1 Set/Sets

**Packaging Details:**

Wooden Case. L x W x H (mm):  
655 x 375 x 960 Gross Weight: 105KG

**Delivery Time:**

within 2 weeks upon receipt the deposit

**Payment Terms:**

T/T, Western Union

**Supply Ability:**

150 Set/Sets per Month

Measure brinell rockwell and vickers hardness.

7 steps testing force

simple, easy and quickly operation, high accuracy.

1. Hardness is one of the important mechanic characteristics of the material while the hardness testing is the most quickly and economic testing method, as well as an important method to judge the quality of the metal material or its component parts. The mechanic characteristics of most metal materials such as the strength, tiredness, wriggling and wearing out can be tested out approximately through its hardness testing.

2. The Motorized Brinell Rockwell & Vickers Hardness Tester, a multi-functional hardness tester with Brinell, Rockwell & Vickers 3 kinds of testing methods and 7 steps testing force will meet the needs of many kinds of hardness measurement. The instrument is adopted automatic shifter to load, dwell and

unload testing force, therefore the operation for this instrument is simple, easy and quickly.

### Technical specifications

1. The Initial Test Force: 98.07N (10Kg); Tolerance:  $\pm 2.0\%$
2. The Tolerance of Total Test Force:  $\pm 1.0\%$
- 2.1 The Test Force of Brinell Hardness: 294.2N(30kg), 306.5N (31.25kg), 612.9N (62.5kg), 980.7N(100kg), 1893N(187.5kg)
- 2.2 The Test Force of Rockwell Hardness: 588.4N (60kg), 980.7N (100kg), 1471N(150kg)
- 2.3 The Test Force of Vickers Hardness: 294.2N (30Kg), 980.7N (100Kg)
3. The Indenter Specifications:
  - 3.1 The diamond Rockwell indenter
  - 3.2 The diamond Vickers indenter
  - 3.3 The  $\phi 1.5875$  mm,  $\phi 2.5$  mm,  $\phi 5$  mm Brinell ball indenter
4. The Power Source and the Voltage: AC220V $\pm 5\%$ , 50-60 HZ
5. Time-delayed control: 2-60 seconds, can be adjusted
6. The Distance from the Indenter Central Point to the Instrument Body: 165mm.
7. The Max. Height of the Specimen:
  - 7.1 The Max. Height of the Specimen for Rockwell Hardness: 170mm
  - 7.2 The Max. Height of the Specimen for Brinell & Vickers Hardness: 100mm
8. The Amplification of Objective: 37.5 $\times$ ; 75 $\times$
9. The Overall Dimension of Hardness Tester(Length $\times$ Width $\times$ Height): 520 $\times$ 215 $\times$ 700mm
10. The Total Weight of the Tester: 78kg

### Rockwell Hardness

#### 11. The Tolerance of Rockwell Hardness Display Value

Hardness Scale	Range of The Standard Testing Blocks	The Tolerance of Hardness Display Value
HRA	20~ $\leq$ 75HRA	$\pm 2$ HRA
	$>75$ ~ $\leq$ 88HRA	$\pm 1.5$ HRA
HRB	20~ $\leq$ 45HRB	$\pm 4$ HRB
	$>45$ ~ $\leq$ 80HRB	$\pm 3$ HRB
HRC	$>80$ ~ $\leq$ 100HRB	$\pm 2$ HRB
	20~ $\leq$ 70HRC	$\pm 1.5$ HRC

### Brinell Hardness

#### 12. The repetition and tolerance of displayed Value for Brinell hardness tester

Hardness Value of Standard Testing Blocks	Tolerance of Displayed Value (%)	Repetition of Displayed Value (%)
HBW $\leq$ 125	$\pm 3$	$\leq 3$
125<HBW $\leq$ 225	$\pm 2.5$	$\leq 2.5$
(HBW) $>225$	$\pm 2$	$\leq 2$

### Vickers Hardness

#### 13. The Tolerance and Repetition of Displayed Value for Vickers Hardness Tester

Tolerance of Displayed Value			Repetition of Displayed Value	
Hardness Scale	Displayed Value of Hardness Test Block	Tolerance of Displayed Value	Displayed Value of Hardness Test Block	Repetition of Displayed Value
HV30	$\leq 250$ HV	$\pm 3\%$	$\leq 225$ HV	6%
HV100	300~1000HV	$\pm 2\%$	$> 225$ HV	4%