

6. Specifications of Rockwell Hardness

Testing force (N)	Initial Testing Force	98.07 (10kg)			Tolerance $\pm 2.0\%$
	Total testing force	588.4 (60kg)			Tolerance $\pm 1.0\%$
		980.7 (100kg)			
		1471 (150kg)			
Indenter	Diamond Cone Indenter				
	$\Phi 1.5875\text{mm}$ Ball Indenter				
Scales	HRA	HRB	HRC	HRD	
Max height of samples	175mm				

7. The Tolerance of Rockwell Hardness Display Value

Hardness Scale	Hardness Range of The Standard Testing Blocks	The Max. Tolerance of Display Value	Repeatability ^a
HRA	(20 ~ ≤ 75) HRA	$\pm 2\text{HRA}$	$\leq 0.02 (100 - H)$ or
	($> 75 \sim \leq 88$) HRA	$\pm 1.5\text{HRA}$	0.8 Rockwell Unit ^b
HRB	(20 ~ ≤ 45) HRB	$\pm 4\text{HRB}$	$\leq 0.04 (130 - H)$ or 1.2 Rockwell Unit ^b
	($> 45 \sim \leq 80$) HRB	$\pm 3\text{HRB}$	
	($> 80 \sim \leq 100$) HRB	$\pm 2\text{HRB}$	
HRC	(20 ~ ≤ 70) HRC	$\pm 1.5\text{HRC}$	$\leq 0.02 (100 - H)$ or 0.8 Rockwell Unit ^b
a : H is average hardness value b : Confirm as higher value			

8. The Technical Specification of Brinell Hardness Tester

Testing force	294.2N (30kg)			Tolerance $\pm 1.0\%$
	306.5N (31.25kg)			
	612.9N (62.5kg)			
	980.7N (100kg)			
	1839N (187.5kg)			
Indenter	$\varphi 2.5\text{mm}$ 、 $\varphi 5\text{mm}$ Ball Indenter			
Scales	HBW1/30	HBW2.5/31.25	HBW2.5/62.5	
	HBW5/62.5	HBW10/100	HBW2.5/187.5	
Eyepiece magnification	15 \times			
Objective	2.5 \times (resolution 0.5 μm) 、 5 \times (resolution 0.25 μm)			
Max Height of Sample	For 2.5 \times : Max Height is 95mm			
	For 5 \times : Max height is 115mm			

9. The Tolerance and Repetition of Displayed Value for Brinell Hardness Tester

Hardness Block (HBW)	Tolerance (%)	Repeatability (%)
≤ 125	± 3	3
$125 < \text{HBW} \leq 225$	± 2.5	2.5
> 225	± 2	2

Vickers Hardness

10. Technical Specifications of Vickers Hardness

Test force	294.2N (30kg) 980.7N (100kg)	Tolerance $\pm 1.0\%$
Indenter	Diamond Vickers Indenter	
Scale	HV30	HV100
Eyepiece magnification	15 ^x	
Objective magnification	5 ^x (Resolution 0.25 μm)	
Max. Height of Specimen	115mm	

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

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

Accessories (Packing list)

1. Accessories Kit of Main Body

No.	Description of Goods	Quantity
1	Diamond Rockwell Indenter	1 PC
2	φ1.5875mm Steel ball indenter	1 PC
3	Large Test Table, Medium Test Table, V-shaped Test Table	3 PCS
4	0、 1、 2、 3、 4 weight	5 PCS
5	Standard Hardness Block HRC (High, Lower) , Standard Hardness Block HRB	3 PCS
6	Level Regulation Screw	4 PCS
7	Screw driver, Spanner	2 PCS
8	Power cable	1 PC
9	Instruction Manual	1 PC
10	Plastic Anti-dust Bag	1 PC

2. Accessories Kit of Microscope

No.	Description of Goods	Quantity
1	Eyepiece	1 PC
2	Seat of Microscope	1 PC
3	Outside Light	1 PC
4	Inside Light	1 PC
	3 in all	
5	2.5× objective	1 PC
6	5× objective	1 PC
7	Slipped Testing Table	1 PC
8	Diamond Vickers Indenter	1 PC
9	φ2.5mm、φ5mm Ball Indenter	2 PCS
10	Standard Vickers Hardness Block (HV30)	1 PC
11	Standard Brinell Hardness Block (HBW/2.5/187.5)	1 PC
12	Level	1 PC
13	Fuse 2A	2 PCS