

Product name: SINO HBRVU - 187.5 Brinell Rockwell & Vickers Optical Hardness Tester

This tester is used for determining the Brinell, Rockwell, and Vickers hardness of ferrous, nonferrous metals, hardmetals, carburized layers and chemical treating layers. It can be applied in the factories, scientific research institutes, laboratories and colleges.



Specifications

MODEL	HBRVU187.5
Type	Brinell, Rockwell & Vickers Optical
Preliminary test force (N)	98.07
Total test force for Rockwell hardness (N)	588.4, 980.7, 1471
Total test force for Brinell hardness (N)	306.5, 612.9, 1839
Total test force for Vickers hardness (N)	294.2, 980.7
Test range for Rockwell hardness	20~67 HRC / 30~100 HRB / 70~85 HRA
Test range for Brinell hardness	4~450 HB
Test range for Vickers hardness	14~1000 HV
Magnification of microscope x	37.5x, 75x
Min. calibrated value of micro-measuring drum wheel	0.004mm@37.5x, 0.002mm@75x
Max. height of specimens (mm)	160 for Rockwell, 100 for Vickers, Brinell
Max. depth of specimens (mm)	200
Power supply	AC220V, 50Hz
Dimension (DxWxH) (mm)	560 x 260 x 760
Net weight (kg)	90

Standard Package

MODEL	HBRVU187.5
Main machine	1
Accessory box of main apparatus	

Indenter	Conical angle 120 degree Diamond Rockwell indenter x 1 Pyramidal angle 136 degree Diamond Vickers x 1 Steel ball indenter 1.588mm x 1 2.5mmx1, 5mm x 1
Testing table	Large leveled / medium leveled / V shaped, 1 for each
Standard Rockwell hardness block	55~65 HRC x 1 25~35 HRC x 1 75~95 HRB x 1
Standard Brinell hardness block	200 +/- 50 HB 2.5/187.5/30 x 1
Standard Vickers hardness block	450 +/- 50 HV 30 x 1
Weights	5
Fuse	7A x 2
Lamp	6V 21 CP x 2
Power supply plug	1
Operation instructions	1
Attachment box of microscope	
Microscope	1
Micro-eyepiece	15x x 1
Objective	2.5x x 1, 5x x 1
Sliding test platform	Pyramidal platform x 1, V shaped platform x 1
Lamp shade	for external lighting x 1, for internal lighting x 1
Lamp	6V, 5W x 4

Type of Test	Primary Test Force (N)	Total Test Force (N)	Hardness Scale	Indenter	Measuring Installation	Examples of Measuring and Testing Materials
Rockwell hardness test	98.07	588.4	HRA	diamond cone indenter	optical measurement indicating mechanism	hard alloy carbon carburizing steel
		1471	HRC			quenched steel adjustable quality steel hard cast iron
		980.7	HRB	1.588mm steel ball indenter		mild steel aluminium alloy copper alloy forgeable cast iron

Brinell hardness test	306.5 / 612.9 / 1839	-	HB	2.5mm, 5mm steel ball indenter	microscope	non-ferrous metal cast iron soft alloy plastics
Vickers hardness test	294.2 / 980.7	-	HV 30	diamond angle conical indenter	microscope	the superficial hardness of metallic alloy carburized layer small type thin components