



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

VICKERS HARDNESS TESTER WITH TOUCH SCREEN CONTROL

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



BVH-ZT/T SERIES



- Automatic loading - dwell - unloading
- Precise manual analog eyepiece 10X
- Reserved CCD camera path, can work with camera and hardness software system
- High resolution optical system, indentation image very clear
- One time casting shell with car painting
- Touch screen with menu structure, easy operate
- LED light source, service time more longer

APPLICATION:

- Steel, nonferrous metals, tinsel, cemented carbide, sheet metal, metallographic structure.
- Carburization, nitriding and decarburization layer, surface hardening layer, galvanized coating, coating.
- Glass, chip and ceramic material.

FEATURES:

- The optical system designed by our senior optical engineer not only meet the definition of hardness testing requirements, but also can observe the micro structure of the material, image is very clear.
- According to different visual habits of the operators, the strength of the light source can be adjusted. To avoid the visual fatigue for long time operation.
- With Vickers hardness and Knoop hardness testing capabilities. By measuring the indentation diagonal length, the hardness value will show on the screen directly, no need to check hardness table.
- Large size touch screen can direct display hardness value, conversion hardness, testing method, testing force, dwell time, testing times and testing process;
- Reserved CCD camera optical path, support machine work with computer and hardness measuring software system.

**TECHNICAL SPECIFICATION:**

Model No.		BVH-5/10/30/50ZT	BVH-5/10/30/50T
Turret		Automatic	Manual
Hardness Scale & Test Force	BVH-5ZT BVH-5T	HV0.3, HV0.5, HV1, HV2, HV3, HV5	
		0.3kg(2.94N), 0.5kg(4.9N), 1kg(9.8N), 2kg(19.6N), 3kg(29.4N), 5kg (49N)	
	BVH-10ZT BVH-10T	HV0.3, HV0.5, HV1, HV3, HV5, HV10	
		0.3kg(2.94N), 0.5kg (4.9N), 1kg (9.8N), 3kg (29.4N), 5kg (49N), 10kg (98N)	
	BVH-30ZT BVH-30T	HV1, HV3, HV5, HV10, HV20, HV30	
		1kg(9.8N),3kg(29.4N),5kg(49N),10kg(98N),20kg(196N), 30kg(294N)	
	BVH-50ZT BVH-50T	HV1, HV5, HV10, HV20, HV30, HV50	
		1kg(9.8N), 5kg(49N), 10kg(98N), 20kg(196N), 30kg(294N), 50kg(490N)	
Hardness conversion scale		HRA, HRB, HRC, HRD, HK, HBS, H15N, H30N, H45N, H15T, H30T, H45T	
Loading speed		≤50µm/sec	
Min. Measuring Unit of eyepiece reading drum		0.5µm	
Indenter		Standard Rectangular pyramid diamond indenter (136°±0.5°)	
Hardness Value Range		5-3000HV, 8-4500HK	
Data Display		Touch screen	
Total Magnification		100X (For Observation), 200X (For Measurement)	
Loading Method		Automatically (Load, dwell and unload)	
Dwell Time		1-99s (each step is 1 second)	
Maximum Height		175mm	
Throat depth		135mm	
Light Source		LED Cold light source	
Power Supply		220V + 5%, 50/60 Hz (110V is available)	
X-Y Testing Table (optional purchase)		Dim.: 100×100 mm, Max. Travel Range: 25×25mm, Moving Resolution Ratio: 0.01mm	
Instrument size and Net weight		600*220*700mm; 55kg	
Executed Standard		GB/T4340, ASTM E384 & E92, EN-ISO 6507-2, JIS B-7734	



STANDARD ACCESSORIES:

Item Name	Q'TY	Item Name	Q'TY
10X analog eyepiece	1 pc	Power line	1 pc
10X and 20X objective lens	1 pc	Dust proof cover	1 pc
Vickers indenter	1 pc	Hardness Conversion Tables	1 pc
Level bubble	1 pc	Quality certificate	1 pc
Large / Medium / V-shape Testing Table	1 pc	Warranty Card	1 pc
horizontal adjusting screw	4 pcs	Standard block of hardness	2 pcs
Accessory case	1 pc	Manual Book	1 pc

OPTIONAL PURCHASE ACCESSORIES:

- Image analysis software
- Metallographic equipment
- Knoop Indenter
- hardness block
- 15X micrometer eyepiece

LED Cold light source (can be continuous use for 24 hours, no heat generate ensure stable working, servicing life can reach 100,000 hours); Lightness can be adjusted, avoid visual fatigue of operator.



Precision manual eyepiece (10X)

Resolution 0.5µm

X-Y precise work table manual micrometer head, also can change to digital micrometer head ([optional purchase](#))

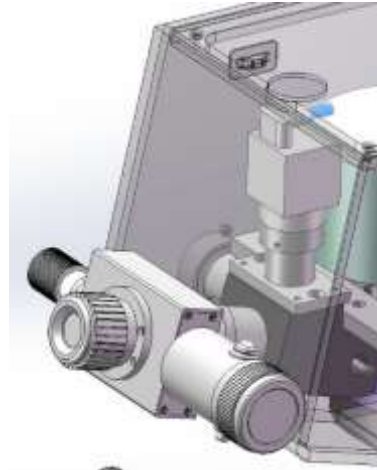




Main Interface



Dual Optical path design



Standard machine without printer & USB



Optional purchase (printer & RS232 / USB port)

Standard machine of BVH-5/10/30/50T & BVH-5/10/30/50ZT do not with printer and USB port, if need them can optional purchase

If purchase data transfer software, machine will add USB port, by software can transfer test data to computer).

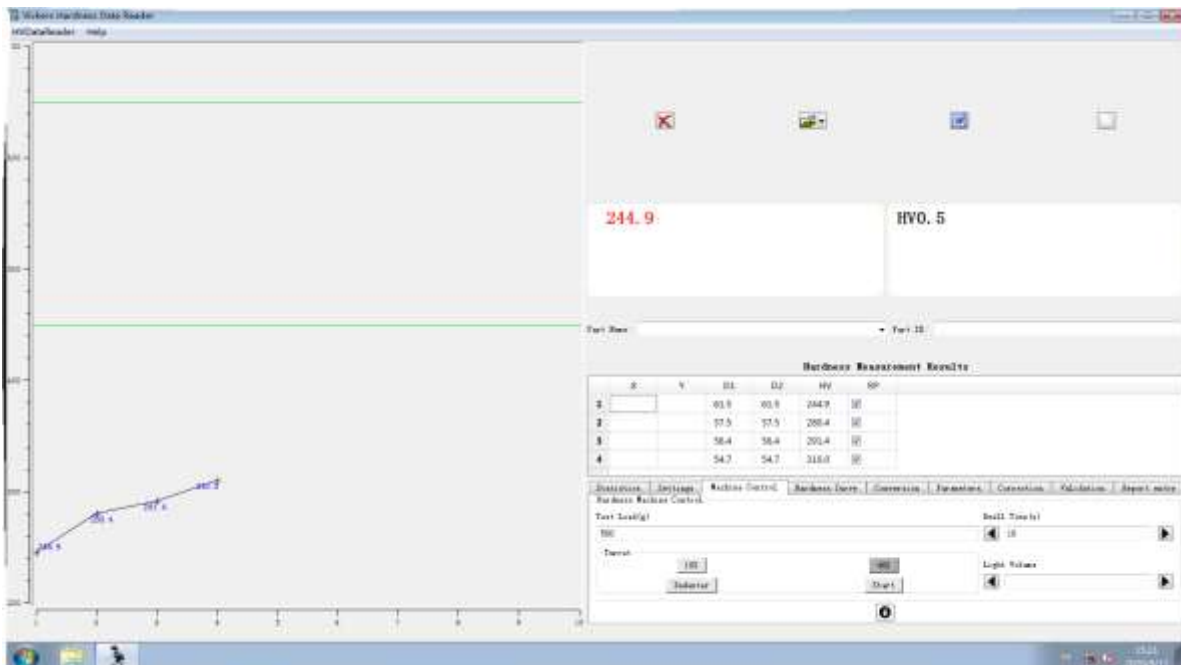


HVS-A Micro / Vickers Hardness Measurement Software (Optional Purchase 1)



Software support automatic measurement & manual measurement, can generate test report automatically in word / Excel format, including hardness value, test force, indentation image and hardness curve, etc.

Data Transfer Software (Optional Purchase 2)



Software can control the machine turret and generate test report including hardness value curve (Via RS232 port). Software install on the computer, connect with hardness tester through RS232 port. All the testing result can save to computer and generate test report in word format.