



MICRO VICKERS HARDNESS TESTER WITH SOFTWARE SYSTEM

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



BMVH-1000MTS/ATS

**DESCRIPTION: -**

High-quality imported components, ensure the new type Micro Hardness Testers working more stable. Protected by the state patent application of the lift & down system, after upgrading, the control system can provide more measuring data, and control more precise. This machine is integrated with optics, mechanics and electricity. It with unbeatable price / performance ratio, widely used in quality inspection and quality control field.

- With automatic HV measurement software system and 5 million pixel camera
- One time casting aluminum machine body with sturdy structure, modular design and stable working performance
- Load from 10 to 1000g, can extend to 2kgf
- Precise manual analog 10X eyepiece
- With hardness conversion function
- Touch screen; LED Cold light source
- Dual optical path, can work with hardness measurement software system (software for optional purchase); Eyepiece and camera path can work at same time
- Standard machine come with Precision screw rod lifting system (Worm gear rod lifting system for optional purchase)

APPLICATION: -

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

**MAIN FEATURES: -**

- Adopted one time casting aluminum machine body and car painting technology, structure more stable and appearance more decent.
- The independent research and development of lift & down system and positioning system, ensured the accuracy and repeatedly of the testing process.
- 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 will show on the screen directly, no need to check hardness table.
- Industrial digital touch screen can direct display hardness value, conversion hardness value, testing method, testing force, dwell time, easy for operator to save the data.
- Double optical path design. Both eyepiece and CCD camera path can work at same time. No need switch optical path. Camera can be install inside machine (camera for optional purchase).

**TECHNICAL SPECIFICATION: -**

Model No.	BMVH-1000MTS	BMVH-1000ATS
Turret	Manual Turret	Automatic Turret
Testing force	10g (0.098N), 25g (0.245N), 50g (0.49N), 100g (0.98N), 200g (1.96N), 300g (2.94N), 500g (4.9N), 1000g (9.8N) Test force error: $\pm 1.0\%$	
Hardness scale	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1	
Loading speed	$\leq 0.05\text{mm/sec}$	
Indenter	Standard Rectangular pyramid diamond indenter ($136^\circ \pm 0.5^\circ$)	
Min. measuring unit	0.25 μm	
Hardness value rang	5HV-3000HV	
Data Display	5.6" touch screen & Computer monitor software window	
Eyepiece	10X manual analog eyepiece	
Objective lens	10X (observe), 40X (Measurement)	
Total magnification	100X (For Observation), 400X (For Measurement)	
Loading method	Automatically (Load, dwell and unload the testing force)	
Duration time	1-60s (each step is 1 second)	
Software System	Professional HV / HK hardness measurement software, can work with win10 computer system very well. Support automatic measurement & manual measurement, can generate test report in word / Excel format.	
Camera	5 million pixel digital camera	
Maximum height	90mm	
Throat depth	95mm	
Instrument size and Net weight	405*290*480mm (LxWxH) 40kg	
Packing size and Gross weight	550x370x720mm (LxWxH) 56kg	
Light Source	LED cold light source	
Power Supply	220V + 5%, 50/60 Hz (110V is available)	
X-Y Testing Table	Dim.:100x100 mm, Max. Travel Range: 25x25mm, Moving Resolution Ratio: 0.01mm	
Executed Standard	GB/T4340, ASTM E384 & E92, EN-ISO 6507, JIS B-7734	

STANDARD ACCESSORY: -

Item Name	Qty	Item Name	Qty
Weights shaft	1 pc	Standard block of hardness	2 pcs
Weights	6 pcs	Spare fuse 2A	2 pcs
10X manual micrometer eyepiece	1 pc	Horizontal adjusting screw	4 pcs
10X objective lens	1 pc	Power line	1 pc
40X objective lens	1 pc	Dust proof cover	1 pc
Vickers diamond indenter	1 pc	Manual Book, QC certificate	1 pc
X-Y Testing Table	1 pc	Software system & camera	1 pc
Level bubble	1 pc	Screwdriver	2 pcs
Flat fixture	1 pc	Warranty Card	1 pc
Sheet specimen fixture	1 pc	Accessory box	1 pc



FEATURES: -

X-Y Testing table of Micro Vickers hardness tester

Dim.:100×100 mm, Max. Travel Range: 25×25mm,

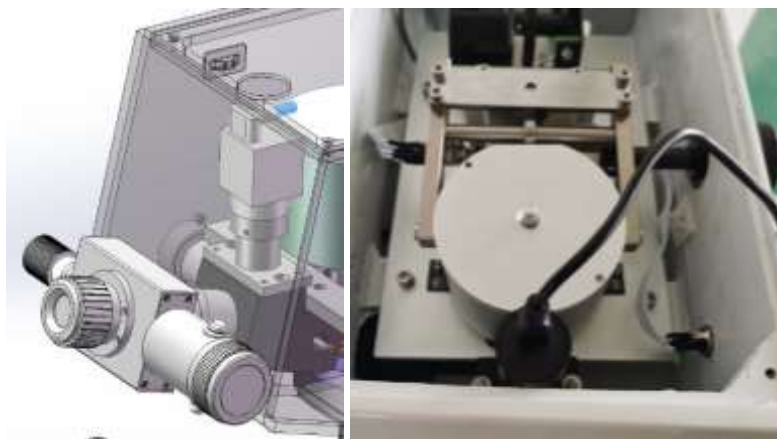
Moving Resolution Ratio: 0.01mm



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

Precision Manual measuring eyepiece (10X)

Resolution 0.5μm



Double optical path design. Both eyepiece and CCD camera path can work at same time. No need switch optical path.



5.6" touch screen with multiple functions.

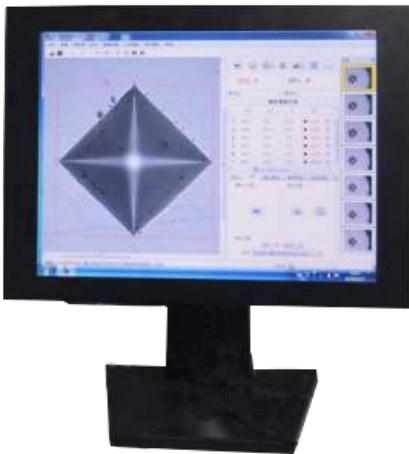
Support setting HV - HK test scale

With hardness conversion functions

Set limit can do automatic result judgement



SSSS



Advanced HV / HK Micro Hardness Indentation Measurement and Analysis system support automatic work mode and manual work mode. And can generate test report in word / Excel format directly, report data including indentation image, hardness value, test force, dwell time, hardness curve, indentation depth, etc.

It makes hardness test very easier!