

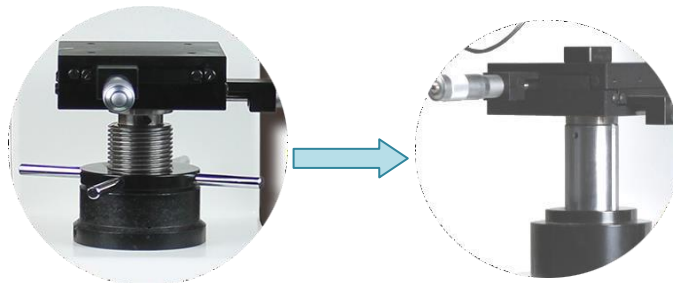


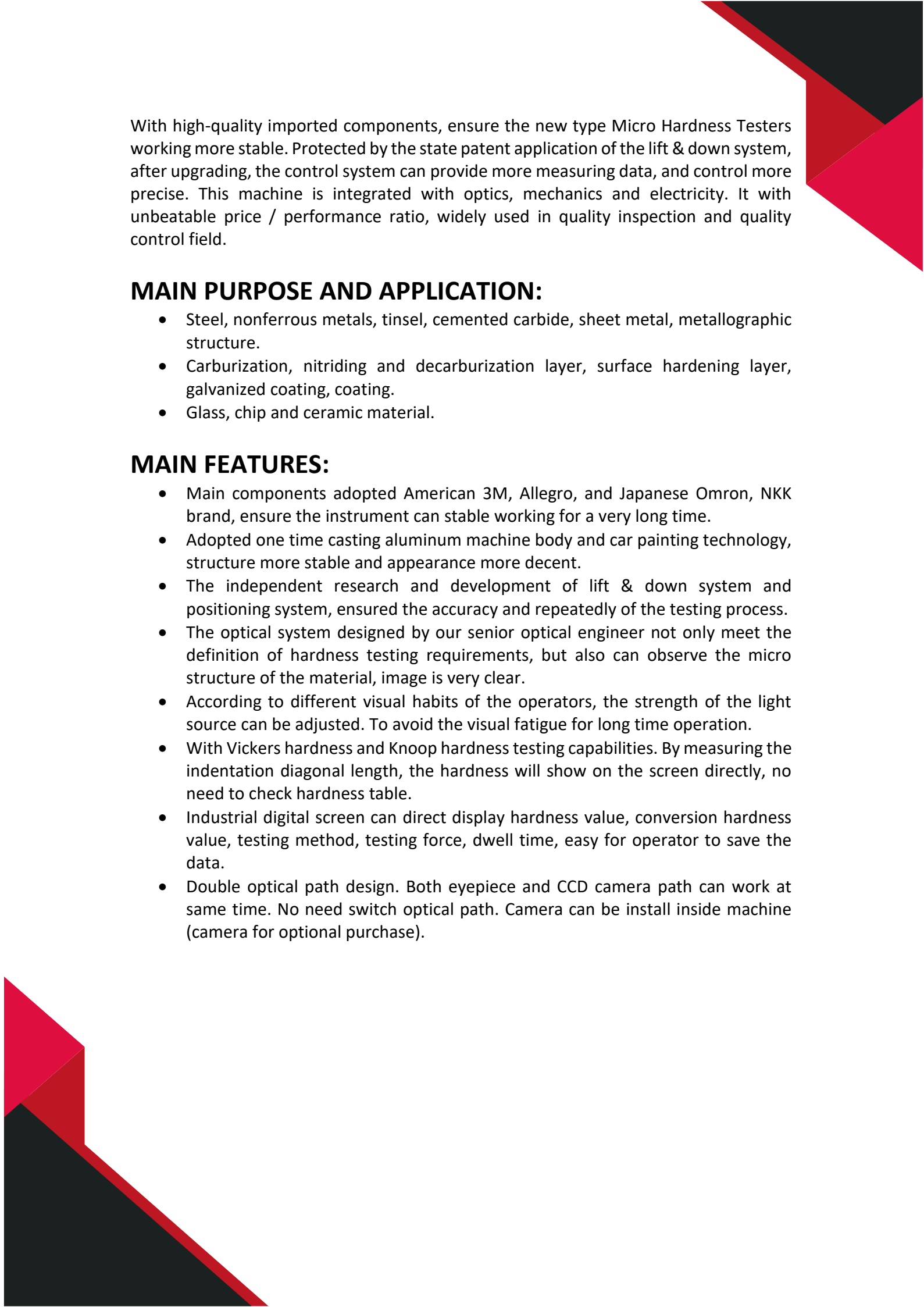
VERTEX

MICRO VICKERS HARDNESS TESTER HV1000-MT/HV1000-AT



- One time casting aluminum 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
- LED Cold light source
- Dual optical path, can work with hardness measurement software system (optional purchase)
- Standard machine come with Precision screw rod lifting system (Worm gear rod lifting system for optional purchase)





With 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.

MAIN PURPOSE AND 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.

MAIN FEATURES:

- Main components adopted American 3M, Allegro, and Japanese Omron, NKK brand, ensure the instrument can stable working for a very long time.
- 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 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).

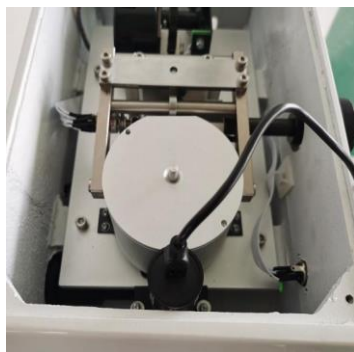
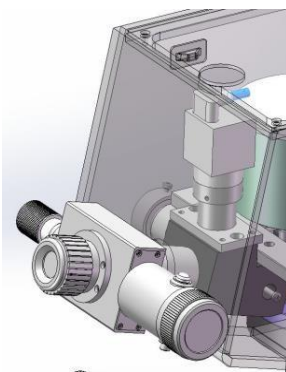


Main Interface



SETUP Interface

FEATURES:



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

Precision Manual measuring eyepiece (10X) Resolution 0.5 μ m




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.

X-Y Testing table of Micro Vickers hardness tester Dim.:100×100 mm, Max. Travel Range: 25×25mm, Moving Resolution Ratio: 0.01mm

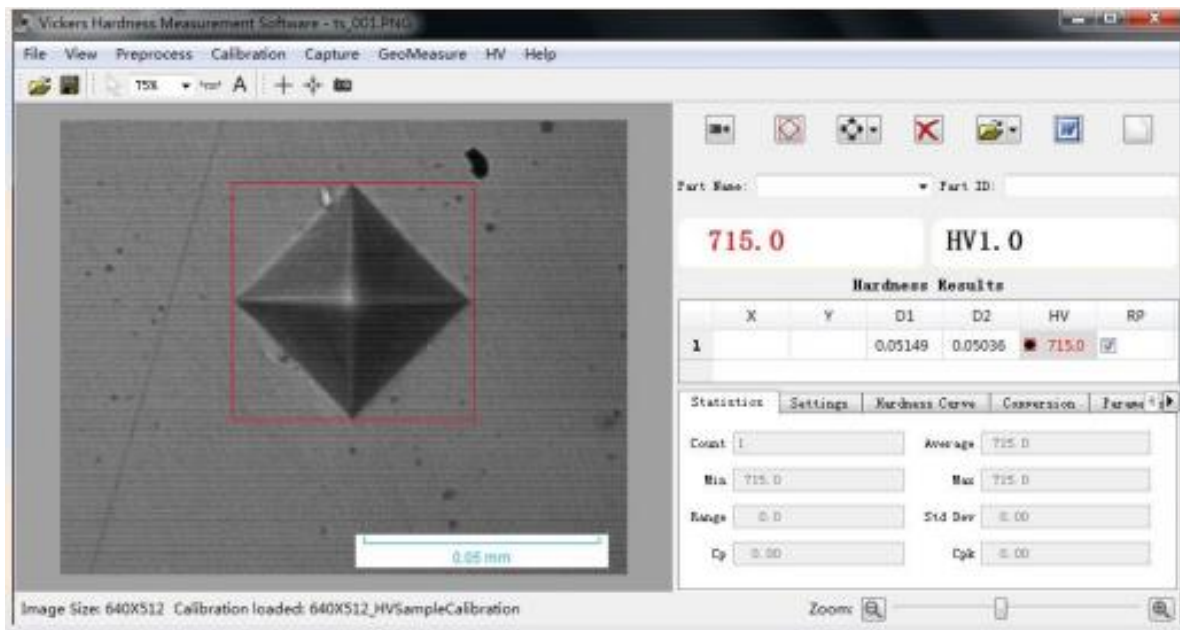


SPECIFICATION:

Model	HV1000-MT	HV1000-AT
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	
Indenter	Standard Rectangular pyramid diamond indenter ($136^{\circ} \pm 0.5^{\circ}$)	
Min. measuring unit	0.25 μ m	
Hardness value rang	5HV-3000HV	
Hardness Value of Reading	Digital LCD Screen	
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	1-99s (each step is 1 second)	
Maximum height	90mm	
Throat depth	95mm	
Instrument size and Net weight	405*290*480mm (L×W×H)	40kg
Packing size and Gross weight	550x370x830mm (L×W×H)	56kg
Light Source	LED cold light source	
Power Supply	220V + 5%, 50/60 Hz (110V is available)	

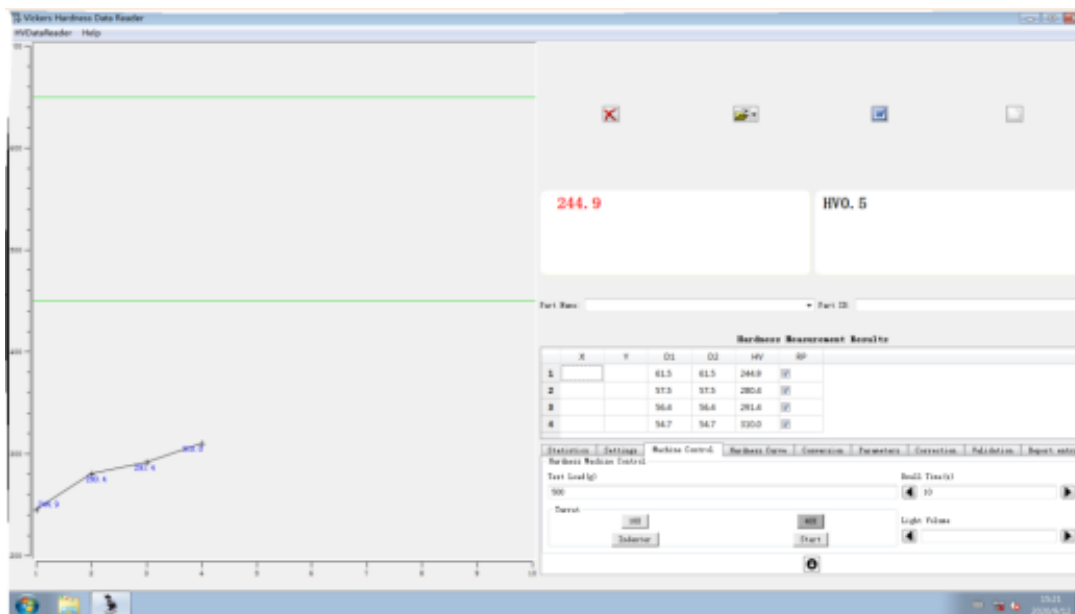
X-Y Testing Table	Dim.:100×100 mm, Max. Travel Range: 25×25mm, Moving Resolution Ratio: 0.01mm
Executed Standard	GB/T4340, ASTM E384 & E92, EN-ISO 6507, JIS B-7734
Standard Accessories	<p>1 piece: Weights shaft; 10X manual micrometer eyepiece; 10X and 40X objective lens; Vickers diamond indenter; X-Y Testing Table; Level bubble; Flat fixture; sheet specimen fixture; Power line; Dust proof cover; Manual Book; Certificate of quality; screwdriver, Warranty Card; Accessory box</p> <p>2 pieces: Standard block of hardness; Spare fuse</p> <p>4 pieces: horizontal adjusting screw</p> <p>Note: For avoid potential risks, Will remove '<u>Level bubble</u>' if ship by air, since liquid materials are forbidden by airlines</p> 
Optional Purchase Accessories	Image analysis software; Metallographic equipment; Knoop Indenter; hardness block; 15X micrometer eyepiece, Thin Specimen Test Table, Flat fixture, Filament Clamping Test Table

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. 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

