



## VIDEO MEASUREMENT MICRO VICKERS HARDNESS TESTER

This system is consisting of multi-function auto turret digital Micro hardness tester and video measuring device. The indentation can be clearly displayed on the 12-inch LCD screen. Operation process allow many people observe at the same time and can be measuring directly. High quality imported components ensure the instrument can stable working for a very long time; 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.



### **VHS-1000LCD**

#### **MAIN FUNCTIONS AND FEATURES: -**

- Equipped with Japanese Omron brand digital CCD eyepiece and Data computing systems which accuracy can reach to 0.01um; Just click one button the hardness value will display on screen directly.
- Main components adopted American 3M, Allegro, and Japanese Omron, NKK brand, ensure the instrument can stable working for a very long time.
- Protected by the state patent application of the lift & down system, the machine focus more easily and working more stable; Proprietary ball repositioning system ensure the repeat precision and repeatability of the whole test 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, and testing force can be extended to 2KG (HV2). Automatic measuring the indentation diagonal length, the hardness and conversion hardness will show on the screen directly, no need to check hardness table.
- Industrial digital screen can direct display hardness value, conversion hardness, testing method, testing force, dwell time, test number and testing process; The built-in printer can print testing times, hardness value, average value, Max. Value, Min. Value, Xmax-Xmin directly, easy for operator to save the data.
- Industrial digital screen can direct display hardness value, conversion hardness, testing method, testing force, dwell time, test number and testing process; The built-in printer can print testing times, hardness value, average value, Max. Value, Min. Value, Xmax-Xmin directly, easy for operator to save the data.
- One-time casting aluminium moulding shell ensure structure more stable; Adopted car painting technology, pure white colour looking more decent; High scratch resistance capability, used for years still brightness like new.
- Factory directly supply, we have products develop & design & produce ability, all the parts provide life-time replacement and maintenance.

**SPECIFICATION: -**

Technical Specifications	VHS-1000LCD
Hardness scale	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1, HV2
Hardness conversion scale	HRA, HRB, HRC, HRD, HK, HBS, H15N, H30N, H45N, H15T, H30T, H45T
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	±1.0%
Loading speed	≤50µm/sec
Indenter	Standard Rectangular pyramid diamond indenter (136°±0.5°)
Min. Measuring Unit	0.01µm
Hardness Value Range	1HV-4000HV
Monitor Screen	12" screen (see indentation image)
Hardness value of Reading	Digital LCD Screen (62x44mm)
Total Magnification	100X (For Observation), 400X (For Measurement) (Can be extended to 150X or 600X)
Loading Method	Automatically (Load, dwell and unload)
Dwell Time	1-99s (each step is 1 second)
Turret	Auto Turret
Objective lens center and indenter center	Coincidence accuracy error < 1µm (objective lens center position can be adjusted)
Maximum Height	85mm
Distance from Indenter Center to Fuselage	115mm
Instrument size and Net weight	490×185×515mm (L×W×H) and 43kg
Light Source	LED Cold light source (can be continuous use for 24 hours, no heat generates ensure stable working, servicing life can reach 100,000 hours)
Power Supply	220V + 5%, 50/60 Hz (110V is available)
Data Output	Built-in Printer; Built-in RS-232 interface (Transfer data to computer, easy for long time save)
X-Y Testing Table	Dim.:100×100 mm, Max. Travel Range: 25×25mm Moving Resolution Ratio: 0.01mm (Digital X-Y Testing Table with digital LCD Screen for Optional)

**STANDARD ACCESSORIES**

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| <ul style="list-style-type: none"> <li>• 10X Digital micrometer eyepiece: 1pc</li> <li>• 10X and 40X objective lens Vickers indenter: 1pc</li> <li>• X-Y testing table:1pc</li> <li>• Flat fixture: 1pc</li> <li>• Sheet specimen fixture:1pc</li> <li>• Small parts fixture:1pc</li> <li>• Gradiente Data transfer software: 1pc</li> <li>• Data line:1pc</li> <li>• Power cable:1pc</li> <li>• Dust-proof cover: 1pc</li> </ul> | <ul style="list-style-type: none"> <li>• Manual book: 1pc</li> <li>• Hardness Conversion Tables:1pc</li> <li>• Quality certificate :1pc</li> <li>• Warranty Card :1pc</li> <li>• Accessory case:1pc</li> <li>• Video measurement device (including a CCD micrometer eyepiece and a 12-inch LCD screen)</li> <li>• 2 Pieces: Standard Hardness Blocks</li> <li>• 4 Pieces: horizontal adjusting screw</li> </ul> |
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**OPTIONAL ACCESSORIES**

- Hardness measuring software
- Metallographic device
- Knoop Indenter
- Standard hardness block
- 15X micrometer eyepiece