



TOUCH SCREEN & DIGITAL MICRO VICKERS HARDNESS TESTER

High-end digital display touch screen micro hardness tester adopts 8 inches color industry LCD, high-end appearance, menu structure, one key operation, more imported components to ensure equipment running more stable, test result is more accurate, powerful data measurement control system provide comprehensive data for quality control, the machine design is advanced, comprehensive functions, is the ideal choice for high requirement client.



VHS-1000AT

MAIN FUNCTIONS AND FEATURES: -

- 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.
- 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.
- Humanized operation interface, can adjust angle according to customer's habit, meet the demand of different situations.
- Equipped with digital Omron 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.
- 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, make quality control more easily.
- Can store 300 groups of test data, all the testing data can be transferred to computer via RS232 port, then can edit and save the data on computer.
- One-time casting aluminum molding shell ensure structure more stable; Adopted car painting technology, pure white color 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 service.

SPECIFICATIONS: -

MODEL	VHS-1000AT
Hardness scale	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1 (HV2 Optional)
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: $\pm 1.0\%$
Loading speed	$\leq 50\mu\text{m}/\text{sec}$
Indenter	Standard Rectangular pyramid diamond indenter ($136^\circ \pm 0.5^\circ$)
LCD Screen size	8 inch
Min. measuring unit	0.01 μm
Hardness value range	1HV-4000HV
Hardness value of reading	Digital LCD Screen (118x99mm)
Total magnification	100X (For Observation), 400X (For Measurement) (Can be extended to 150X or 600X)
Loading Method	Automatically (Load, dwell and unload the testing force)
Duration Time	1-99s (each step is 1 second)
Turret	Auto Turret (High degree of automation, improve work efficiency) Coincidence
Objective lens center and indenter center	accuracy error < 1 μm (objective lens center position can be adjusted)
Specimen Allowing Maximum Height	85mm
Throat depth	115mm
Instrument size and Net weight	490x185x515mm (LxWxH) 43kg
Light Source	LED Cold light source (can be continuous use for 24 hours, no heat generate ensure stable working, servicing life can reach 100,000 hours)
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 (Digital X-Y Testing Table with digital LCD Screen for Optional)
Data Output	Built-in Printer; Built-in RS-232 interface (transfer data to computer, easy for long time save)

STANDARD ACCESSORIES

10X Omron digital micro eyepiece : 1 pc	10X and 40X objective lens : 1 pc	Vickers indenter : 1 pc
X-Y Testing Table : 1 pc	Flat fixture : 1 pc	Sheet specimen fixture : 1 pc
Small parts fixture : 1 pc	Gradienter; Data transfer software : 1 pc	Data line, Power Cable : 1 pc
Dust-proof cover : 1 pc	Manual Book; : 1 pc	Quality certificate : 1 pc
Accessory case : 1 pc	Standard block of hardness : 2 pc	Warranty Card : 1 pc
		Horizontal adjusting screw : 4 pc