

Digital display automatic turret type Microhardness Tester (HVS-1000Zpc Small Screen)

Digital automatic turret type micro hardness tester can meet the basic Vickers hardness test requirements. The upgraded digital micrometer eyepiece can directly read the measurement length, so that the measurement value can be obtained more quickly and accurately. The tower can automatically switch the eyepiece and indenter to avoid artificial errors and damage the instrument, and also greatly improve the efficiency.

The upgraded side-tilt lifting system has higher precision, and the lifting platform is more stable during testing. It is not necessary to focus again after the test is completed.



This machine is equipped with a micro hardness tester system: it can be used for continuous test of continuous indentation after continuous loading, and can carry out successive experiments for each load and each indentation. Using a digital camera with a convenient ccd camera, video cable, or USB interface, the measurement indentation can be directly observed on the monitor, and the accuracy can be measured with the mouse.

For setting test conditions, displaying results, etc. can be operated and displayed clearly and quickly. Through the measurement software, it can be easily operated by a computer. A single point measurement can be used to randomly measure multiple points and statistical measurement data, and the distance between two or more measurement points can be arbitrarily set as a depth measurement of the penetration layer. Measurements can be made along X or Y directions. , Statistical measurement data, according to the user input automatically determine the depth of hardened layer calculations. Statistics calculations, conversion, display curves, to determine whether the qualified. Can measure the length of the part of graphics preservation and printing.

Software features:

1. Universal USB controls, can be used with a USB camera, support more than 90% USB camera on the market, including chat camera, no capture card, notebook can also be used to save costs (also have a capture card version, the price is not the same , faster response, more stable, more powerful);

2. Carburized layer depth analysis, detailed report;
- 3, 10, 20, 40, 3 kinds of magnifications can be switched freely, and can be separated without affecting each other;
4. Replacement force without recalibration;
5. 14 kinds of E140 standard scale conversion;
6. Can achieve automatic measurement;
7. magnifier function, measurement easier;
8. The force value can be freely set, there is no limit of magnification, override software calibration, theoretically can measure all Vickers including small load;
9. Exclusive features: a hardness block to complete the calibration, eliminating the need for high-price multiplier, more convenient, easier and more accurate.

Main functions and features:

1. The optical system designed by senior optical engineers not only has clear images, but also can be used as a simple microscope. The brightness is adjustable, and it is visually comfortable. Long-time operation is not easy to fatigue.
2. The industrial display screen can directly display the hardness value, the conversion hardness, the test method, the test force, the retention time, the number of measurements, and the test process is intuitive and clear;
3. Cast aluminum shell molding, structural stability is not deformed, pure white car paint high grade, anti-scratch ability, use for many years is still bright as new;
4. Our company has its own R&D, production and processing capabilities. Our machines provide parts replacement and maintenance upgrade services for life.
5. HVS-1000Z model can be realistic: the length of the measurement directly confirms the hardness value.
6. HVS-1000Z models can be realized: observation - test - measurement of the position switch by the automatic turret to complete.
7. Side-sway lifting system greatly improves stability and accuracy, and does not require refocusing after the test is completed

The main purpose and scope of application:

1. Iron and steel, non-ferrous metals, metal foils, hard alloys, metal sheets, microstructures
2. Carburizing, Nitriding and Decarburization Layers, Surface Hardening Layers, Plating, Coatings
3. Glass, wafers, ceramic materials

Standard configuration:

1. Host (Micro Vickers indenter x1, 10x objective x1, 40x objective x1)	2. Test platform, weight, microscope accessory box;
3. Weights x6	4. Weight bar x1
5. Cross table x1	6. Sheet clamping table x1
7. Flat mouth clamping table x1	8. Filament holding table x1
9. Level meter x1	10. Screwdriver x2
11. Horizontal adjustment screws x4	12. External power cord x1

13.10× Digital Micrometer Eyepieces x1	14. Micro Vickers hardness block x2 (HV1, HV0.2 x1 for each)
15. Fuses (1 A) x2	16. Product certification x1
17. Product Instruction Manual x1	18. Dust cover x1

Technical Parameters:

Parameter name	Parameter data
Micro hardness scale	HV0.01,HV0.025,HV0.05,HV0.1,HV0.2,HV0.3,HV0.5,HV1
Display	Holding time (seconds), hardness value
Test force (gf)	10,25,50,100,200,300,500,1000
Loading control	Automatic (load/hold/uninstall)
Test force retention time (s)	5 to 60
Test force selection	External selector knob, test force is automatically displayed on the LCD screen
Objective magnification	10×, 40×
Optical channel	Dual light channels (eyepieces and CCD camera channels)
Optical system	1. Automatic digital encoder; 2. The total magnification (μm): 100 × (observation), 400 × (measurement); 3. Measuring range (μm): 200; 4. Resolution (μm): 0.01
Hardness measurement range	(5-3000) HV
XY test platform	Size (mm): 100×100 Travel range (mm): 25×25 Minimum reading (mm): 0.01
Maximum height of specimen (mm)	110
Maximum width of specimen (mm)	85(distance from the center line of the indenter to the wall)
Voltage	AC220V/50HZ
Weight (kg)	35
Dimensions	(540×200×530)mm