XHVT-1000Z/10Z/30Z/50Z

Intelligent Semi-Auto Vickers Hardness Tester
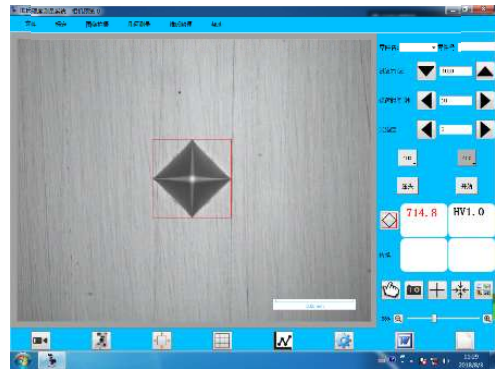
Product Features

- New generation of Micro/Macro Vickers hardness tester.
- Integrated design of hardness tester and panel computer, all the testing parameters can be selected on the panel computer.
- Touch screen makes operation quickly and conveniently and displays clearly and intuitively.
- With CCD image acquisition system, it can show dynamic indentation image, lock the image and automatically get vickers hardness value with high precision.
- The hardness tester with complete functions reaches the advanced level.
- With Windows operating system, it has all functions of computer and can be connected to the output devices such as external screen and printer.
- Automatic recognition and shifting between the objective and the indenter; Macro Vickers machine with 3 objectives.
- The lifting screw adopts worm and gear structure with smooth transmission.
- With digital X-Y test anvil, it makes positioning and measurement more precise.
- Auto test force loading, dwell and unloading.
- With function of hardness scale conversion.
- Automatically save the measuring data, generate the hardness-depth curve and save as WORD or EXCEL document.
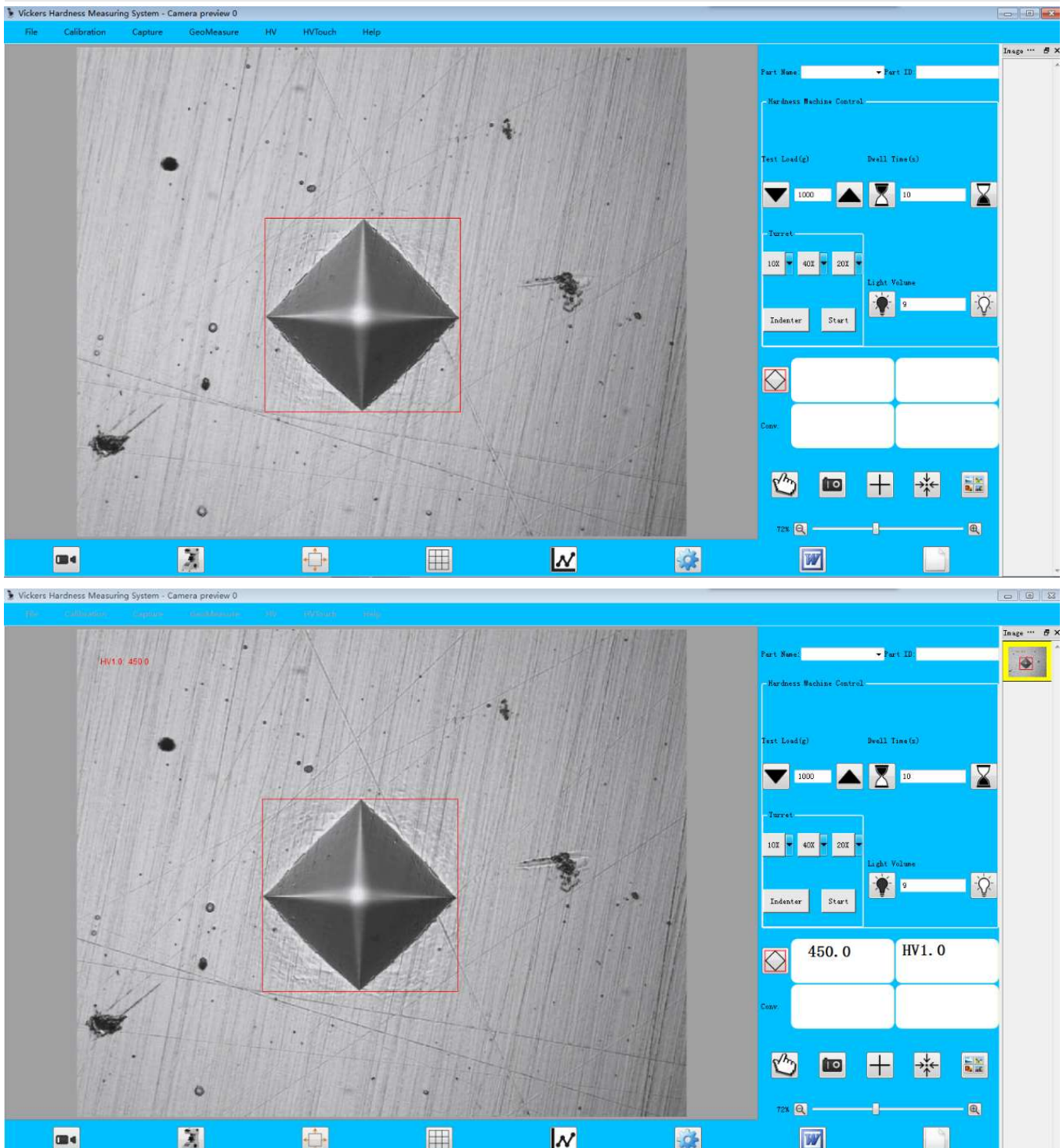
Product Application

Suitable for ferrous metal, non-ferrous metals, IC thin sections, coatings, ply-metals; glass, ceramics, agate, precious stones, thin plastic sections etc.; hardness testing such as that on the depth and the trapezium of the carbonized layers and quench hardened layers.
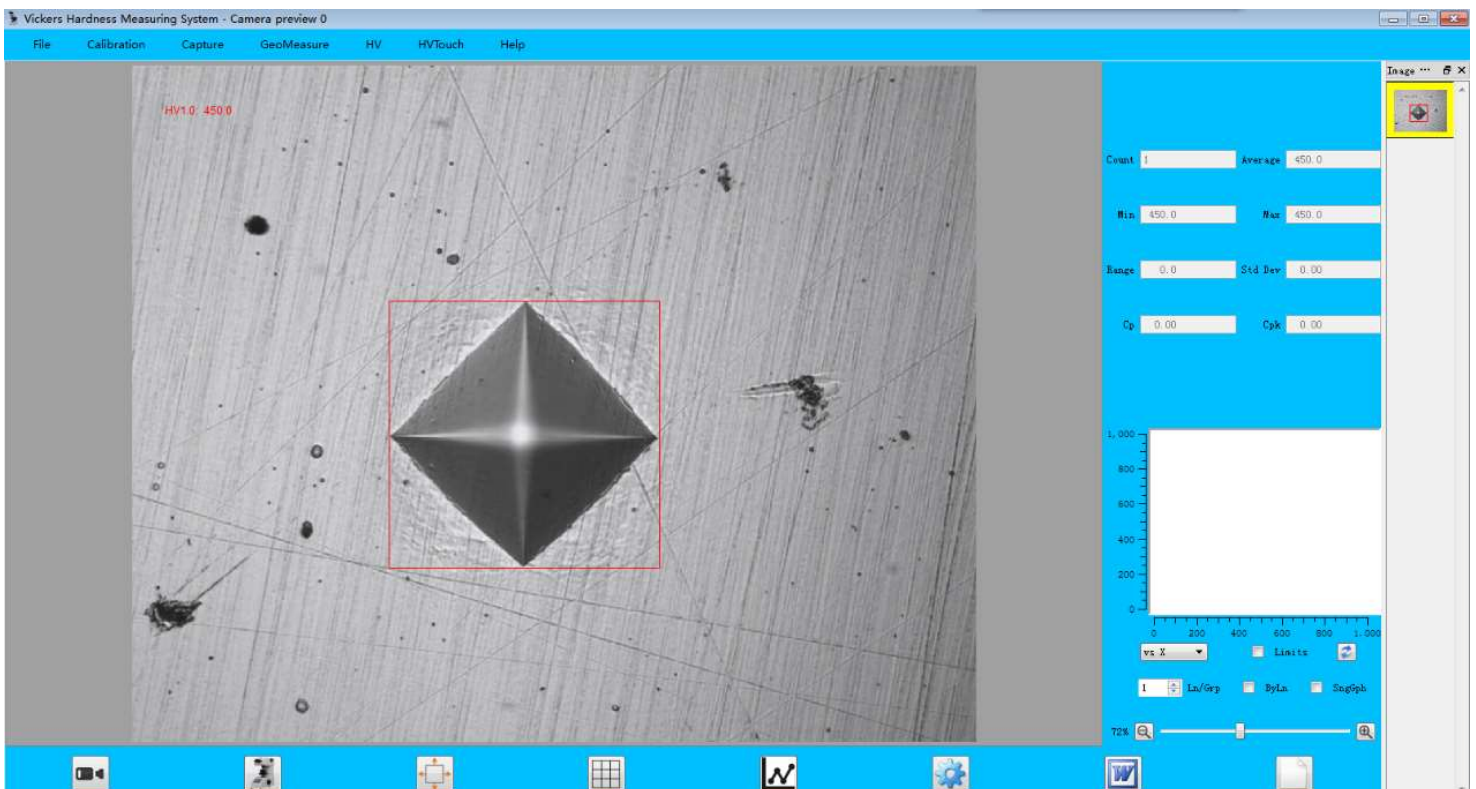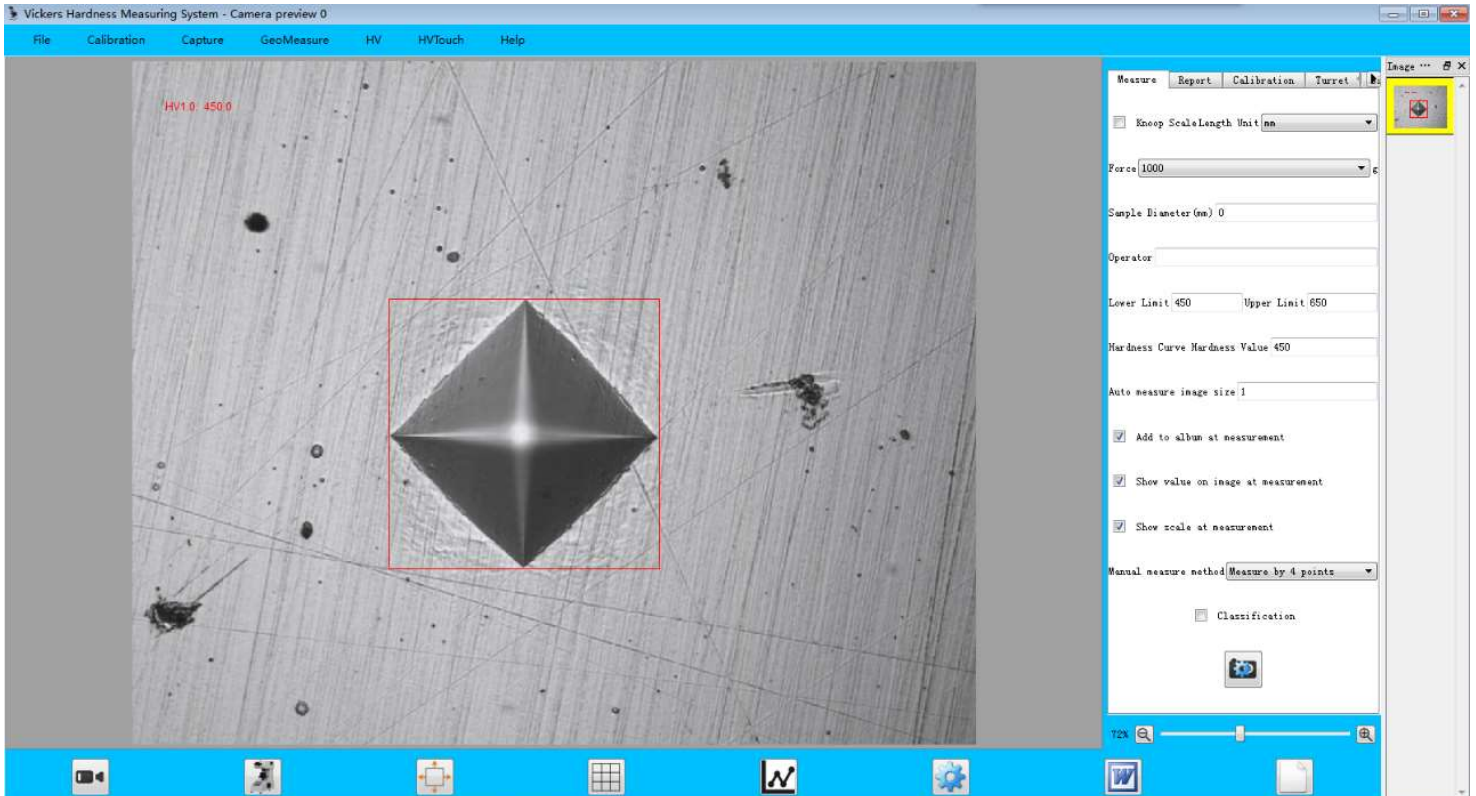
Touch Screen Interface

New generation hardness tester combining hardness testing machine with computer,all the testing parameters can be selected on the panel computer by just simple touch. Vickers software systeminstalled in computer .With Windows operating system, it has all functions of computer and can be connected to the output devices such as external screen and printer Automatically save the measuring data, generate the hardness-depth curve and save as WORD or EXCEL document.
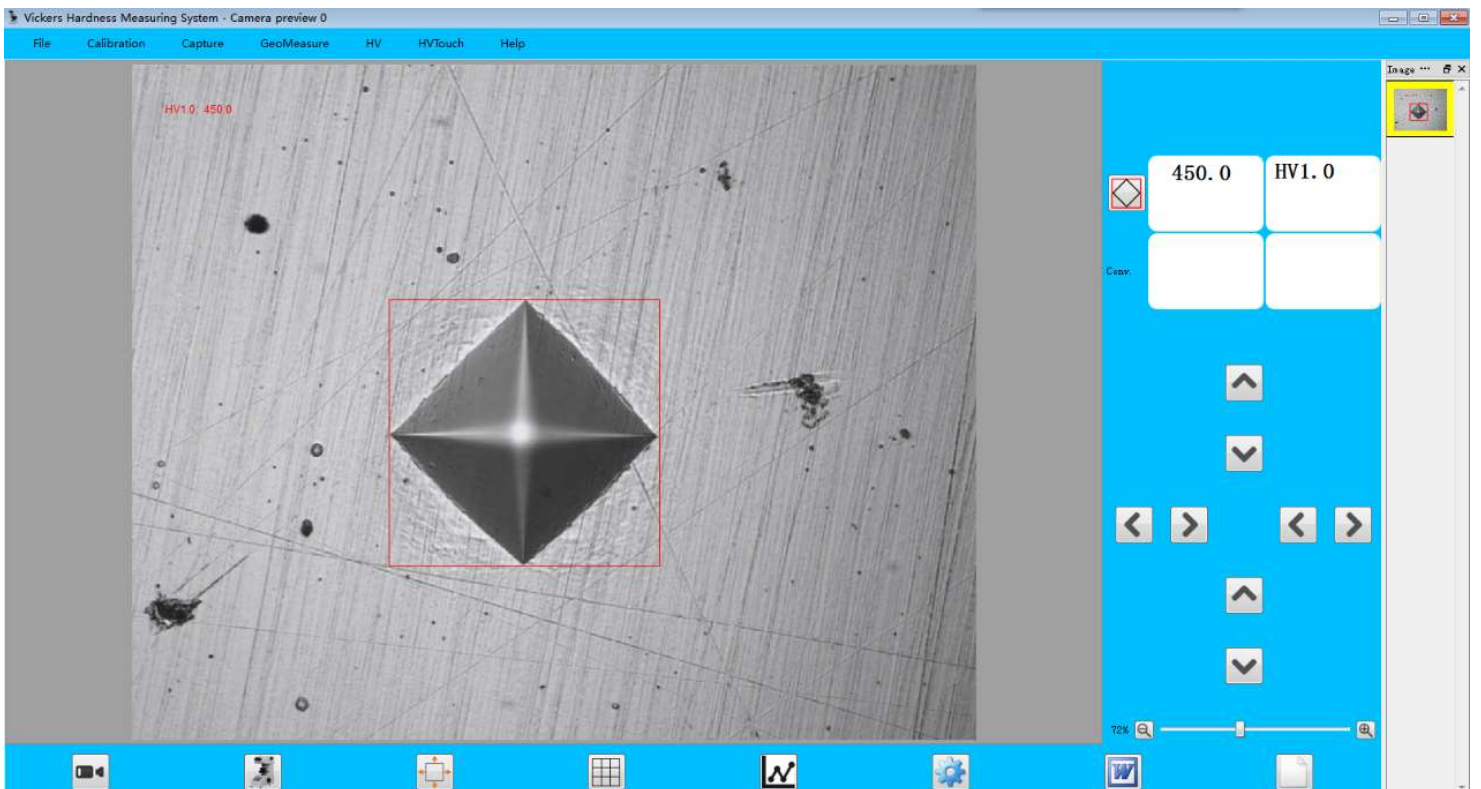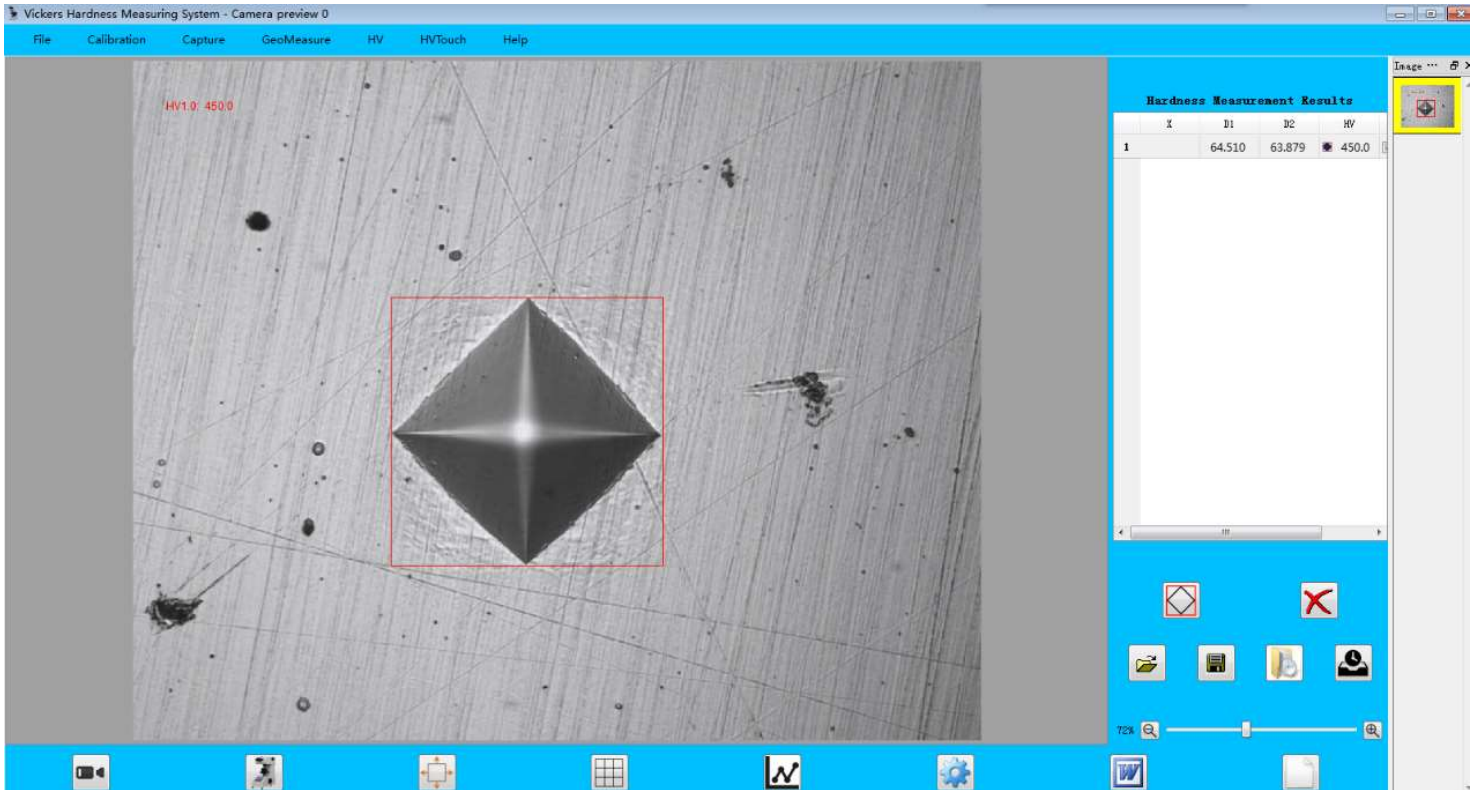
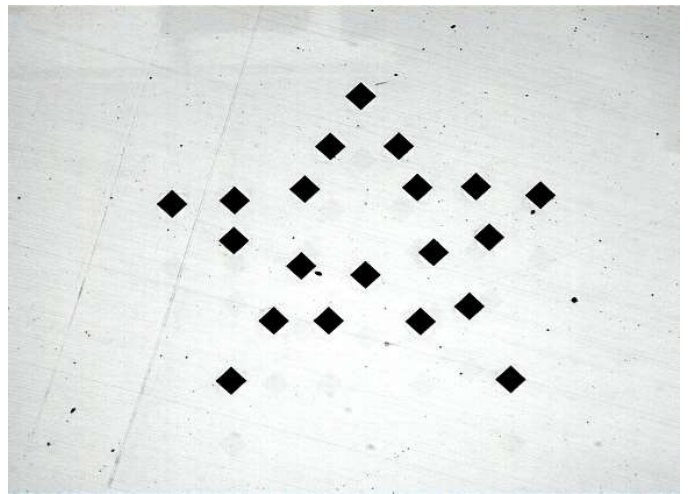# Touch Screen Interface

Touch Screen Interface

User Friendly

With high precision force sensor for close loop loading system, indention track for user to test , with precise Worm and Gear Structure wifor smooth transmission. Built-in CCD Image Capture System.

High Precision Force Sensor

Auto Measuring Software (Indention Track)

Worm and Gear Structure

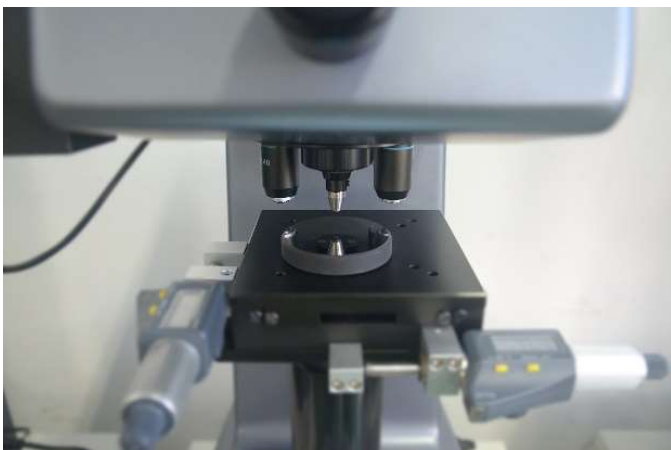
Built-in CCD Image Capture System

User Friendly

Objectives with different magnification for both observation and measuring. With USB/VGA/Network Interface for users' choices , Digital X-Y test Anvil makes positioning and measurement more precise; Auto X-Y Test Anvil is optional.

Objective/Indentor

USB/VGA/Network Interface

Digital X-Y Test Anvil

Auto X-Y Test Anvil (Optional)

XHVT-1000Z Intelligent Semi-auto Micro Vickers Hardness Tester

XHVT-10Z Intelligent Semi-auto Macro Vickers Hardness Tester
XHVT-30Z Intelligent Semi-auto Macro Vickers Hardness Tester
XHVT-50Z Intelligent Semi-auto Macro Vickers Hardness Tester

Technical Specification

Product Name	Intelligent Semi-Auto Vickers Hardness Tester			
Model	XHVT-1000Z	XHVT-10Z	XHVT-30Z	XHVT-50Z
Test Force	10gf, 25gf, 50gf, 100gf, 200gf, 300gf, 500gf, 1000gf	0.2kgf, 0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf	0.3kgf, 0.5kgf, 1kgf, 2kgf,2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf
Test Range	1HV~2967HV			
Test Mode	HV/HK			
Loading Method	Automatic (Loading/Dwell/Unloading)			
Turret	Automatic Shifting			
Micro Computer	CPU: Intel I5，Memory: 4G，SSD: 240G			
CCD Pixel	1.30 Million			
Conversion Scale	HV, HK, HRA, HRBW, HRC, HRD, HREW, HRFW, HRGW, HRKW, HR15N, HR30N, HR45N, HR15TW, HR30TW, HR45TW, HS, HBW			
Hardness Reading	Automatic Display on Touch Screen			
Data Output	WORD or EXCEL Report with Curve Chart			
Objective	10×, 40×	10×, 20×, 40×	10×, 20×, 40×	10×, 20×, 40×
Effective Field of View	10x: 680μm, 40×: 170μm	10×: 680μm, 20×: 340μm, 40×: 170μm	10×: 680μm, 20×: 340μm, 40×: 170μm	10×: 680μm, 20×: 340μm, 40×: 170μm
Min. Measuring Unit	10×: 0.1μm, 40×: 0.025μm	10×: 0.1μm, 20×: 0.05μm, 40×: 0.025μm	10×: 0.1μm, 20×: 0.05μm 40×: 0.025μm	10×: 0.1μm, 20×: 0.05μm, 40×: 0.025μm
Dwell Time	0~60s			
Illumination	Halogen Lamp			
Digital X-Y Test Anvil	Size: 120×120mm, Travel: 25×25mm, Resolution: 0.001mm			
Test Height	170mm			
Test Throat	130mm			
Power Supply	AC220V，50Hz			
Executive Standard	ISO 6507, ASTM E384, JIS Z2244, GB/T 4340.2			
Machine Dimension	560×335×675mm			
Net Weight	Net Weight: 48kg			