

# TMVT-1AT

INTELLIGENT FULLY AUTOMATIC  
MICRO VICKERS HARDNESS TESTER



## Features

This instrument is a new generation of automatic Micro Vickers hardness tester. It adopts the integrated design of hardness tester and panel computer; With Windows 7 operating system, it has all functions of computer. With CCD image acquisition system, it can show the indentation image directly on the touch screen and automatically get the Vickers hardness value. It takes over the old method of measuring the diagonal length by eyepiece, avoids the stimulation and visual fatigue of the light source of the eyepiece, and protects the eyesight of the operator. It is a major innovation of Micro Vickers hardness tester.

- All the testing parameters can be selected on the panel computer. With touching screen, it operates quickly and conveniently and displays clearly and intuitively.
- With CCD image acquisition system, it shows the image clearly and gets the hardness value just by touching the screen.
- Automatic recognition and shifting between the objective and the indenter.
- With the function of hardness scale conversion.
- The system has two languages: English and Chinese.
- With USB, VGA and LAN interfaces, the hardness measurement can be print out by USB interface.
- It can automatically save the measuring data, generate the hardness-depth curve and save as WORD or EXCEL document.
- With motorized X-Y test table, automatic focusing and automatic measuring, it realizes the fully automation of Micro Vickers hardness testing.

## Application Range

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.

### Accessories ( Packing list )

●Main unit	1	●10× Eyepiece	1
●Diamond Micro Vickers Indenter	1	●10×, 40× Objective	each 1
●External Touch Screen	1	●Weight Axis	1
●Weights	6	●Thin Specimen Test Table	1
●Motorized Cross Test Table	1	●Flat Clamping Test Table	1
●Horizontal Regulating Screw	4	●Filament Clamping Test Table	1
●Fuse 1A	2	●Level	1
●Power Cable	2	●Halogen Lamp 12V, 15~20W	1
●Hardness Block 400~500 HV0.2	1	●Screw Driver	2
●Anti-dust Cover	1	●Hardness Block 700~800 HV1	1
●Touch Screen Remote Control	1	●U disk	1
●Mouse	1	●Touch Pen	1
●Usage Instruction Manual	1		

### Technical Specification

Model	TMVT-1AT
Test Force	0.098N(10gf), 0.246N(25gf), 0.49N(50gf), 0.98N(100gf), 1.96N(200gf), 2.94N(300gf), 4.90N(500kgf), 9.80N(1000gf),
Test Range	1HV~2967HV
Test Mode	HV/HK
Loading Method	Automatic (Loading/Dwell/Unloading)
Shifting between Objective and Indenter	Automatic Shifting
Computer	CPU: Intel I5, Memory: 2G, SSD: 64G
Conversion Scale	1.30 Million
CCD Pixel	HV, HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS, HBW
Data Output	WORD or EXCEL Report with Curve Chart
Hardness Reading	Indentation Displaying and Automatic Measuring on Touch Screen
Objective	10× (Observe), 40× (Measure)
Resolution	0.025μm
Dwell Time	0~60s
Light Source	Halogen Lamp
X-Y Test Table	Size: 110×110mm; Travel: 50×50mm; Resolution: 0.002mm
Max. Height of Specimen	185mm
Throat	130mm
Power Supply	AC220V, 50Hz
Execute Standard	ISO 6507, ASTM E384, JIS Z2244, GB/T 4340.2
Dimension	560×335×675mm, Packing Dimension: 650×380×960mm
Weight	Net Weight: 52kg Gross Weight: 67kg