

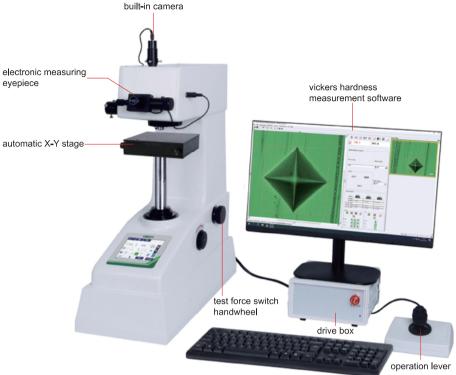
#### **AUTOMATIC VICKERS HARDNESS TESTER**









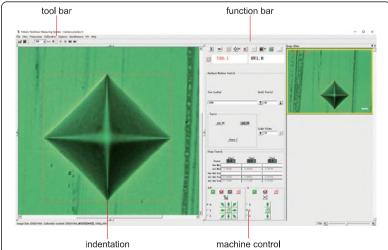






desk (optional)

- Suitable for vickers hardness determination of various metals and non-metal materials, effective depth and heat affected area measurement, especially suitable for measuring workpieces hardness gradient distribution curve and surface hardness after heat treatment, effective hardening layer depth
- Automatic switch between the indenter and objective lens
- Z-axis automatic focus, X, Y axis automatic movement, can be for multi-point continuous measurement
- Automatic moving table by built-in step motor, high positioning accuracy, good repeatability, fast moving speed, high efficiency
- Automatic moving table bidirectional movement, equipped with safety devices to avoid misoperation
- The software can control the hardness tester hardware operation, two-way communication with each other
- The image acquisition device has fast reaction speed, high automatic measurement accuracy and good repeatability
- The system can automatically generate Word or Excel test report, and the report template can be modified
- According to ISO 6507



#### **AUTOMATIC MEASUREMENT, CONTROL SYSTEM**

Hardness tester control	1.automatic turret, automatic loading, automatic measurement 2.automatic display of test force, load dwell time, illumination brightness		
Automatic control of X-Y stage	software system automatic control of X-Y stage movement		
Measurement mode	1.automatic mode: automatic loading, automatic measurement, automatic display of measurement results 2.manual measurement mode can be selected		
Automatic measurement	about 0.3sec of one indentation		
Measurement repeatability	±1% (700HV/5kgf)		
The smallest indentation that can be measured	about 394µin (automatic measurement)		
Data output format/ edit functions	1.inspection reports can be customized according to customer requirements 2.the depth of hardened layer is shown in table form 3.output various measurement data, hardness table, hardening layer depth, maximum value, average value, minimum value, image with hardness value		

## **AUTOMATIC X-Y STAGE**

Drive motor	step motor		
Drive control	movement control by software, speed is adjustable		
Dimension	4.33×4.33"		
Maximum travel distance	1.97×1.97"		
Minimum travel distance	39.4µin		
Movement speed	.04~.39in/sec, speed can be adjusted		
Displacement repetition accuracy	within 39.4µin		

## **SPECIFICATION**

Part No.	HDT-AVH05-U	HDT-AVH10-U	HDT-AVH30-U	HDT-AVH50-U	
Test force	0.3kgf, 0.5kgf, 1kgf, 2kgf, 3kgf, 5kgf	0.3kgf, 0.5kgf, 1kgf, 3kgf, 5kgf, 10kgf	1kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf	1kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf	
Vickers scales	HV0.3, HV0.5, HV1, HV2, HV3, HV5	HV0.3, HV0.5, HV1, HV3, HV5, HV10	HV1, HV3, HV5, HV10, HV20, HV30	HV1, HV5, HV10, HV20, HV30, HV50	
Converted scales	HRA, HRB, HRC, HRD, HRF, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T				
Range	5~3000HV				
Length measurement resolution	.394µin				
Objective/indenter switch	motor driven turret				
Stage lifting	manual/electric				
Focus mode	Z-axis autofocus				
Load control	automatic (load/dwell/unload)				
Load dwell time	1~60 second				
Objective	10X, 20X				
Eyepiece	10X				
Total magnification	100X (for measurement or observation), 200X (for measurement)				
Max. workpiece height	6.30"				
Max. testing width	5.12" (from the center of indenter to the wall of main body)				
Pixel	5M				
Communication interface	RS232				
Power supply	110V, 50/60HZ				
Dimension	24.80×11.81×31.50"				
Weight	165lb				

## STANDARD DELIVERY

Main unit	1 pc
10X, 20X objective	1 pc of each
Vickers indenter	1 pc
Hardness test block	2 pc
Automatic X-Y stage drive box	1 pc
Vickers hardness measurement system	1 pc
Computer	1 pc
Auti-dust cover	1 pc

# **OPTIONAL ACCESSORY**

Hardness test block	
Desk	HDT-DESK
OFFICE software	7313-OFFICE