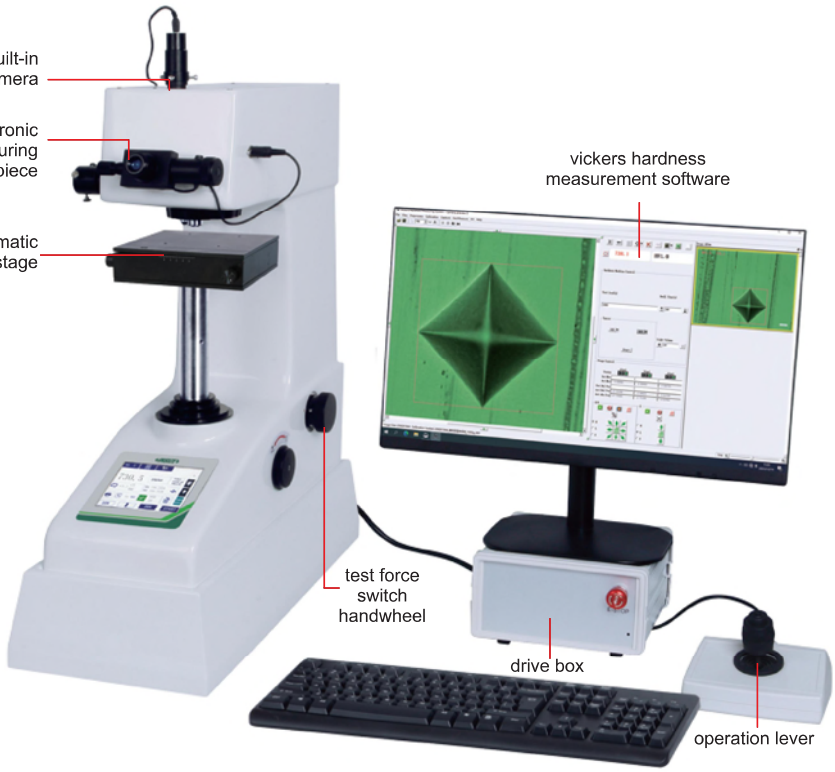
MOTOR DRIVEN TURRET

AUTOMATIC TEST

Z-AXIS AUTO FOCUS

INSPECTION CERTIFICATE

AUTOMATIC VICKERS HARDNESS TESTER

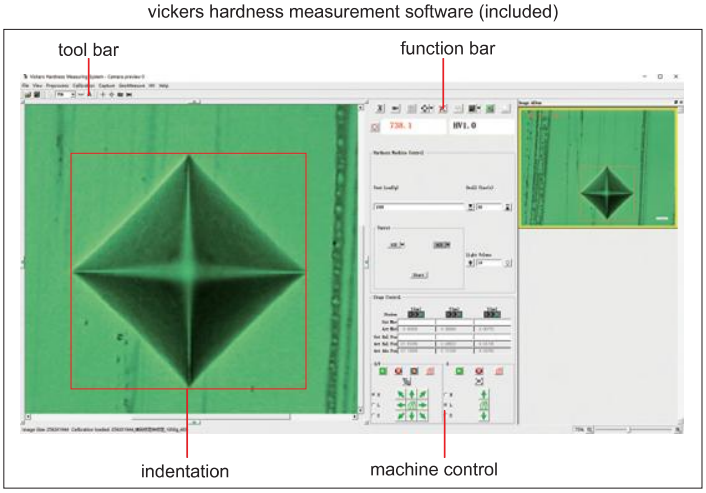


automatic X-Y stage

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

vickers hardness measurement software (included)



STANDARD DELIVERY

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

AUTOMATIC TEST 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 10μm (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	110x110mm
Max. travel distance	50x50mm
Min. travel distance	1μm
Movement speed	1~10mm/sec, speed can be adjusted
Displacement repetition accuracy	within 1μm

SPECIFICATION

Code	**HDT-AVH05**	**HDT-AVH10**	**HDT-AVH30**	**HDT-AVH50**
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	0.01μm			
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	160mm			
Max. testing width	130mm (from the center of indenter to the wall of main body)			
Pixel	5M			
Communication interface	RS232			
Power supply	220V, 50/60Hz			
Dimension	630x300x800mm			
Weight	75kg			

OPTIONAL ACCESSORY

Hardness test block	page 840~841
Desk	**HDT-DESK**
OFFICE software	**7313-OFFICE**