

## Vicker's Hardness Tester

Vicker's Hardness Tester is a testing instrument to measure the hardness value of all kinds of metals according to Vicker's hardness principle ASTM E92 and ISO 6507. They are widely used in metallurgy, forging, casting, hardness steel and nonferrous metals industries, as well as in the laboratories, universities, college and scientific research institutes.

### HVS-5/10/30/50 Digital Vickers Hardness Tester

- ※ Unique and precision design, can produce clearer indentation.
- ※ Wide measurement field, broader usage range. Can equipped with 10X and 20X lens or 20X and 40X lens and 2 pieces lens can be selected according to user's requirement.
- ※ Equipped with digital microscope; LCD screen can directly show measurement methods, test force, indentation length, hardness value, dwell time of test force and the number of measurement.
- ※ With optional linking with video measuring device and indentation automatically measuring device without changing optical path.
- ※ Adopting cold-circuit lamp, the life of light source can reach 100,000 hours.
- ※ Closed-loop control system. Microchip controls testing force to load, dwell and unload; the sensor feedback real load, the lost of testing force value can be automatically adjust during testing and warrant the testing force more accurate.



HVS-5/10/30/50

### HVM-5/10/30/50 Digital Vickers Hardness Tester with Motorized Turret

- ※ With large LCD display.
- ※ With motorized turret, the indenter and objectives can be shifted automatically.
- ※ Due to the excellent combination between the indenter and pressure sensor, the transitive error of test force is reduced.
- ※ With large size test table, X-Y test table(100×100mm,stroke 25×25mm) and other accessories will be supplied if required.
- ※ Measure the Vickers/Knoop hardness values(HV/HK) from HV0.3 to HV10 and HK0.3 to HK10. Select the test force directly.
- ※ With function of automatic exchanging hardness scales (HB, HRC, HRA, HRB, HRN, HRT).
- ※ The CCD image automatically measuring software may be equipped if the user optional required.
- ※ With built-in thermo-sensitive printer.
- ※ All information such as diagonal lines length of indentation, hardness values, data statistics and hardness exchange values, etc are displayed on the LCD screen.
- ※ With the thin film keyboard, various technical data can be inputted in. Press the START key, the whole test procedure can be carried out automatically.



HVM-5/10/30/50

# Specification



Model	HVS-5	HVM-5	HVS-10	HVM-10	HVS-30	HVM-30	HVS-50	HVM-50
Test load(N)	2.942/4.903/9.807/19.6 1/24.52/ 29.42/49.03		2.942/4.903/9.807/19.6 1/24.52/29.4 2/49.03/98.07		4.903/9.807/19.61/ 24.52/29.42/49.03 98.07/196.1/294.2		9.807/19.61/24.52 29.42/49.03/98.07 196.1/294.2/490.3	
Test load(Kgf)	0.3 / 0.5/1 /2 / 2.5 /3 / 5		0.3 /0.5 /1 /2/2.5/ 3 / 5 / 10		0.5/ 1 / 2 /2.5 3 / 5 /10 / 20 /30		1 / 2 / 2.5 / 3 5 / 10 / 20 /30 /50	
Carriage control	Automatic (loading/dwell-time/unloading)							
Load holding time	0~60 seconds							
Magnification of microscope	200X, 400X	100X, 400X	100X, 400X	100X, 400X	100X, 200X	100X, 200X	100X, 200X	100X, 200X
Microscope Min. measuring unit	0.0625um(400X) 0.125um(200X) 0.250um(100X)							
Testing range	1HV~2967HV							
Lens/indenter switch	HVS series with hand turret, HVM series with motorized turret							
Hardness scales	HVM whith function of convert HB,HRC,HRA,HRB,HRN,HRT,							
Dimension of XY table	100×100mm				No			
Stroke of XY table	25×25mm				No			
Max. height of specimen	170mm							
Max. depth of specimen	130mm							
Light source	Cold light source							
Power	1P~110V/220V, 50/60HZ							
Objective	10X, 20X and 40X can be selected according to user's requirement							
Main standard accessories	XY test table(HVS-5,HVS-10)				Large test table; "V" shape test table;			
	10X Digital Micro eyepiece ; Lever ; Adjustable screw; Vickers hardness block, RS232 Cable, Mini Printer							
Option accessories	HVS series can choose Motorized Turret(HVS-Z); HVS, HVM can add CCD Video system(HV-CCD), HVM series can add HK hardness test							
Dimension	535mm×225mm×630mm							
Weight	Gross weight:60KG; Net weight: 50KG							