

## HARDNESS TESTER

# SHVS-5000M Digital Vickers Hardness Tester



### Feature:

1. The optical system designed by senior optical engineer not only has clear image, but also can be used as a simple microscope. The brightness is adjustable, the vision is comfortable, and it is not easy to be tired after long-time operation;
2. 7-inch touch screen display test method, test force, indentation length, hardness value, time, and test results.
3. The system has its own calibration function, can be adjusted error calibration;
4. Optical system brightness adjustable range: 0-100;
5. store 100 groups data, and display the average value and test times;
6. The unit of test force can be manually selected and converted into (kgf, N)
8. Both objective lenses can be used to measure hardness directly,
10. The measuring scale can be converted into HK Knoop hardness;
11. Test data can be directly exported through USB

### Application:

Suitable for measuring steel, nonferrous metals, metal foil, cemented carbide, metal sheet, microstructure, carbonization; Carburizing, nitriding and decarburizing layer, surface hardening layer, electrodeposited layer, coating, heat treatment; Glass, wafer, ceramic material

**Standard:** ISO 6507, ASTM E384, JIS Z2244, GB/T 4340.2

### Technical Specification:

Model	SHVS-5005M	SHVS-5010M	SHVS-5030M	SHVS-5050M
testing force/ hardness scale	2.942N (0.3kg)/HV0.3 4.903N (0.5kg)/HV0.5 9.807N (1kg) /HV1.0 19.61N (2kg) /HV2.0 29.42N (3kg) /HV3. 49.03N (5kg) /HV5.0	2.942N (0.3kg) /HV0.3 4.903N (0.5kg) /HV0.5 9.807N (1kg) /HV1.0 29.42N (3kg) /HV3.0 49.03N (5kg) /HV5.0 98.07N (10kg) /HV10.0	9.807N (1kg) /HV1.0 29.42N (3kg) /HV3.0 49.03N (5kg) /HV5.0 98.07N (10kg) /HV10.0 196.1N (20kg) /HV20.0 294.2N (30kg) /HV30.0	9.807N (1kg) /HV1.0 49.03N (5kg) /HV5.0 98.07N (10kg) /HV10.0 196.1N (20kg) /HV20.0 294.2N (30kg) /HV30.0 490.3N (50kg) /HV50.0
objective	10x ,20x(option 40x)	10x, 20x(option 40x)	10x, 20x	10x, 20x
magnifying	100×/200×/400x	100×/200×/400x	100×/200×	100×/200×
resolution	0.125 μm, 0.0625μm	0.125μm , 0.0625μm	0.25μm , 0.125 μm	0.25μm , 0.125 μm
test table	100×100 cross table: range 25×25/0.01mm		big plane test table and V table	
conversion scale	HK, HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRK, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HS, HB			
max. height	165mm			
instrument throat	130mm			
eyepiece	10x digital eyepiece			
testing range	5hv-2967HV			
objective/indenter switch	automatic ( auto-turret) switch of objective and indenter			
printer	built in printer, RS232			
loading control	automatic ( loading / dwell / unloading )			
dwell time	5~60s			
power supply	AC220V/50HZ; AC110V/60HZ			
dimension(LWH)	machine size 585×200×630mm, packing 620x450x740mm			
weight	net weight: 42kg, gross weight: 50kg			

### Standard accessories:

No.	Name	Qty	No.	Name	Qty
1	instrument main body	1	13	objective	2
2	diamond vickers indenter	1	14	cross test table	1
3	10× digital measuring eyepiece	1	15	big plane test table	1
4	halogen lamp 12V, 15~20W	1	16	V-shaped test table	1
5	fuse 1A	2	17	SHVS-5005	hardness block 700~800 HV1
6	inner hexagon spanner 2.5mm	1	18		hardness block 400~500 HV5
7	horizontal regulating screw	4	19	SHVS-5010	hardness block 700~800 HV1
8	screw driver	1	20		hardness block 700~800 HV10
9	anti-dust cover	1	21	SHVS-5030	hardness block 700~800 HV30
10	power cable	1	22		hardness block 400~500 HV5
11	level	1	23	SHVS-5050	hardness block 700~800 HV30
12	manual	1	24		hardness block 400~500 HV5