

SHV-MZ Series Digital Vickers Hardness Tester
Features:

- Load range from 0.3kgf up to 50kgf
- Load cell, force feedback, closed-loop system
- Supplied with 5.6 inch high resolution full color touch screen
- Direct display of test mode, test force, indentation length, dwell time, test times, conversion scale and date & time
- Hardness scales conversion available
- Measuring confirmation button fixed on digital measuring eyepiece
- Test results storage in real time
- Built-in thermal printer for test results printout
- RS232 interface for PC connectivity
- Optional LCD video measuring device
- Optional HV1.0/2.0/3.0 Vickers measuring software


Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Specifications:

Model	SHV-500MZ/1000MZ/3000MZ/5000MZ
Test Load (kgf,N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N
Test Load (kgf,N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N
Test Load (kgf,N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N
Test Load (kgf,N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N, 490N
Test Range	1HV~2967HV
Loading Method	Automatic (loading/dwell/unloading)
Turret	Automatic turret with 3 positions including one indenter position & two objectives
Hardness Scales Conversion	Knoop, Brinell, Shore, Rockwell: A, B, C, D, G, K, 15N, 30N, 45N, 15T, 30T, 45T
Data Output	Built-in Thermal Printer; RS232 Interface
Objectives	20X(observation), 40X(measure)
Eyepiece	10X Digital Measuring Eyepiece
Total Magnification	200X, 400X
Resolution	0.125µm, 0.0625µm
Dwell Time	0-60 seconds
Illumination	Halogen Lamp
X-Y Stage	Size: 100×100mm; Travel: 25×25mm; Resolution: 0.01mm
Max. Height Capacity	170mm
Throat	130mm
Power Supply	AC220V/50Hz; AC110V/60Hz
Overall Dimension (L*W*H, mm)	Machine: 530 x 280 x 630; Packing Dimensions: 620 x 450 x 740
Weight	Net Weight: 35kg; Gross Weight: 47kg

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	SHV-500MZ Hardness Block 400~500 HV5	1 PC
	Hardness Block 700~800 HV1	1 PC
5.	SHV-1000MZ Hardness Block 700~800 HV10	1 PC
	Hardness Block 700~800 HV1	1 PC
6.	SHV-3000MZ Hardness Block 400~500 HV5	1 PC
	Hardness Block 700~800 HV30	1 PC
7.	SHV-5000MZ Hardness Block 400~500 HV5	1 PC
	Hardness Block 700~800 HV30	1 PC

No.	Name	Qty.
8.	10X Digital Measuring Eyepiece	1 PC
9.	Objectives: 20X; 40X	2 PCS
10.	Level Adjustable Feet	4 PCS
11.	Spirit Level / Level Gauge	1 PC
12.	Internal Hexagonal Wrench 2.5mm	1 PC
13.	Screw Driver	1 PC
14.	Halogen Lamp: 12V, 15~20W	1 PC
15.	Fuse 1A	2 PCS
16.	Anti-dust Cover	1 PC
17.	Power Cable	1 PC
18.	User Manual	1 PC

SHVS-500/500Z Digital Vickers Hardness Tester
Features:

- Load range from 0.3kgf up to 5kgf
- Load cell, force feedback, closed-loop system
- Direct display of the test mode, test force, indentation length, dwell time, test times
- Measuring confirmation button fixed on digital measuring eyepiece
- Test results storage in real time
- Integrated stylus printer for test results printout (Z Series)
- RS232 interface for connecting to PC (Z Series)
- Optional LCD video measuring device
- Optional HV1.0/2.0/3.0 Vickers measuring software

Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Applications:

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.


Specifications:

Model	SHVS-500	SHVS-500Z
Test Load (kgf/N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N	
Test Range	1HV~2967HV	
Loading Method	Automatic (loading/dwell/unloading)	
Turret	Manual	Automatic
Hardness Scales Conversion	Not Available	
Data Output		Built-in Stylus Printer; RS232
Objectives	20X(observation), 40X(measure)	
Eyepiece	10X Digital Measuring Eyepiece	
Total Magnification	200X, 400X	
Resolution	0.125 μ m, 0.0625 μ m	
Dwell Time	0-60 seconds	
Illumination	Halogen Lamp	
X-Y Stage	Size: 100 \times 100mm; Travel: 25 \times 25mm; Resolution: 0.01mm	
Max. Height Capacity	170mm	
Throat	130mm	
Power Supply	AC220V/50Hz; AC110V/60Hz	
Overall Dimension (L*W*H, mm)	Machine: 530 x 280 x 630; Packing Dimensions: 620 x 450 x 740	
Weight	Net Weight: 35kg; Gross Weight: 47kg	

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	Hardness Block 400~500 HV5	1 PC
5.	Hardness Block 700~800 HV1	1 PC
6.	10X Digital Measuring Eyepiece	1 PC
7.	Objectives: 20X; 40X	2 PCS
8.	Level Adjustable Feet	4 PCS

No.	Name	Qty.
9.	Spirit Level / Level Gauge	1 PC
10.	Internal Hexagonal Wrench 2.5mm	1 PC
11.	Screw Driver	1 PC
12.	Halogen Lamp: 12V, 15~20W	1 PC
13.	Fuse 1A	2 PCS
14.	Anti-dust Cover	1 PC
15.	Power Cable	1 PC
16.	User Manual	1 PC

SHVS-1000/1000Z Digital Vickers Hardness Tester
Features:

- Load range from 0.3kgf up to 10kgf
- Load cell, force feedback, closed-loop system
- Direct display of the test mode, test force, indentation length, dwell time, test times
- Measuring confirmation button fixed on digital measuring eyepiece
- Test results storage in real time
- Integrated stylus printer for test results printout (Z Series)
- RS232 interface for connecting to PC (Z Series)
- Optional LCD video measuring device
- Optional HV1.0/2.0/3.0 Vickers measuring software

Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Applications:

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.


Specification:

Model	SHVS-1000	SHVS-1000Z
Test Load (kgf/N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N	
Test Range	1HV~2967HV	
Loading Method	Automatic (loading/dwell/unloading)	
Turret	Manual	Automatic
Hardness Scale Conversion	Not Available	
Data Output	/	Built-in Stylus Printer; RS232
Objectives	10X(observation), 40X(measure)	
Eyepiece	10X Digital Measuring Eyepiece	
Total Magnification	100X, 400X	
Resolution	0.25µm, 0.0625µm	
Dwell Time	0-60 seconds	
Illumination	Halogen Lamp	
X-Y Stage	Size: 100×100mm; Travel: 25×25mm; Resolution: 0.01mm	
Max. Height Capacity	170mm	
Throat	130mm	
Power Supply	AC220V/50Hz; AC110V/60Hz	
Overall Dimension (L*W*H, mm)	Machine: 530 x 280 x 630; Packing Dimensions: 620 x 450 x 740	
Weight	Net Weight: 35kg; Gross Weight: 47kg	

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	Hardness Block 400~500 HV1	1 PC
5.	Hardness Block 700~800 HV10	1 PC
6.	10X Digital Measuring Eyepiece	1 PC
7.	Objectives: 10X; 40X	2 PCS
8.	Level Adjustable Feet	4 PCS

No.	Name	Qty.
9.	Spirit Level / Level Gauge	1 PC
10.	Internal Hexagonal Wrench 2.5mm	1 PC
11.	Screw Driver	1 PC
12.	Halogen Lamp: 12V, 15~20W	1 PC
13.	Fuse 1A	2 PCS
14.	Anti-dust Cover	1 PC
15.	Power Cable	1 PC
16.	User Manual	1 PC

SHVS-3000/3000Z Digital Vickers Hardness Tester
Features:

- Load range from 0.3kgf up to 30kgf
- Load cell, force feedback, closed-loop system
- Direct display of the test mode, test force, indentation length, dwell time, test times
- Measuring confirmation button fixed on digital measuring eyepiece
- Test results storage in real time
- Integrated stylus printer for test results printout (Z Series)
- RS232 interface for connecting to PC (Z Series)
- Optional LCD video measuring device
- Optional HV1.0/2.0/3.0 Vickers measuring software

Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Applications:

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.


Specification:

Model	SHVS-3000	SHVS-3000Z
Test Load (kgf/N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N	
Test Range	1HV~2967HV	
Loading Method	Automatic (loading/dwell/unloading)	
Turret	Manual	Automatic
Hardness Scales Conversion	Not Available	
Data Output	/	Built-in Stylus Printer; RS232
Objectives	10X(observation), 20X(measure)	
Eyepiece	10X Digital Measuring Eyepiece	
Total Magnification	100X, 200X	
Resolution	0.25µm, 0.125µm	
Dwell Time	0-60 seconds	
Illumination	Halogen Lamp	
X-Y Stage	Size: 100×100mm; Travel: 25×25mm; Resolution: 0.01mm	
Max. Height Capacity	170mm	
Throat	130mm	
Power Supply	AC220V/50Hz; AC110V/60Hz	
Overall Dimension (L*W*H, mm)	Machine: 530 x 280 x 630; Packing Dimensions: 620 x 450 x 740	
Weight	Net Weight: 35kg; Gross Weight: 47kg	

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	Large Flat Anvil	1 PC
5.	V Type Anvil	1 PC
6.	Hardness Block 400~500 HV5	1 PC
7.	Hardness Block 700~800 HV30	1 PC
8.	10X Digital Measuring Eyepiece	1 PC
9.	Level Adjustable Feet	4 PCS

No.	Name	Qty.
10.	Objectives: 10X; 20X	2 PCS
11.	Spirit Level / Level Gauge	1 PC
12.	Internal Hexagonal Wrench 2.5mm	1 PC
13.	Screw Driver	1 PC
14.	Halogen Lamp: 12V, 15~20W	1 PC
15.	Fuse 1A	2 PCS
16.	Anti-dust Cover	1 PC
17.	Power Cable	1 PC
18.	User Manual	1 PC

SHVS-5000/5000Z Digital Vickers Hardness Tester
Features:

- Load range from 0.3kgf up to 50kgf
- Load cell, force feedback, closed-loop system
- Direct display of the test mode, test force, indentation length, dwell time, test times
- Measuring confirmation button fixed on digital measuring eyepiece
- Test results storage in real time
- Integrated stylus printer for test results printout (Z Series)
- RS232 interface for connecting to PC (Z Series)
- Optional LCD video measuring device
- Optional HV1.0/2.0/3.0 Vickers measuring software

Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Applications:

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.


Specification:

Model	SHVS-5000	SHVS-5000Z
Test Load (kgf/N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N, 490N	
Test Range	1HV~2967HV	
Loading Method	Automatic (loading/dwell/unloading)	
Turret	Manual	Automatic
Hardness Scales Conversion	Not Available	
Data Output	/	Built-in Stylus Printer; RS232
Objectives	10X(observation), 20X(measure)	
Eyepiece	10X Digital Measuring Eyepiece	
Total Magnification	100X, 200X	
Resolution	0.25μm, 0.125μm	
Dwell Time	0-60 seconds	
Illumination	Halogen Lamp	
X-Y Stage	Size: 100×100mm; Travel: 25×25mm; Resolution: 0.01mm	
Max. Height Capacity	170mm	
Throat	130mm	
Power Supply	AC220V/50Hz; AC110V/60Hz	
Overall Dimension (L*W*H, mm)	Machine: 530 x 280 x 630; Packing Dimensions: 620 x 450 x 740	
Weight	Net Weight: 35kg; Gross Weight: 47kg	

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	Large Flat Anvil	1 PC
5.	V Type Anvil	1 PC
6.	Hardness Block 400~500 HV5	1 PC
7.	Hardness Block 700~800 HV30	1 PC
8.	10X Digital Measuring Eyepiece	1 PC
9.	Objectives: 10X; 20X	2 PCS

No.	Name	Qty.
10.	Level Adjustable Feet	4 PCS
11.	Spirit Level / Level Gauge	1 PC
12.	Internal Hexagonal Wrench 2.5mm	1 PC
13.	Screw Driver	1 PC
14.	Halogen Lamp: 12V, 15~20W	1 PC
15.	Fuse 1A	2 PCS
16.	Anti-dust Cover	1 PC
17.	Power Cable	1 PC
18.	User Manual	1 PC

SHVT-Z Series Digital Vickers Hardness Tester

Features:

- Load range from 0.2kgf to 50kgf
- Automatic test cycle (loading, dwell, unloading)
- Supplied with 8 inch high resolution full color touch screen
- 4-position automatic turret including 1 indenter & 3 objectives (automatic recognition)
- Digital test table with micrometers
- Embedded Win. 7 OS
- Embedded automatic Vickers measuring software
- Hardness scales conversion available
- Hardness-Depth Graph
- Test results storage for Word/Excel export
- Optional motorized X-Y stage

Standard Compliance: ISO 6507; ASTM E92; JIS Z2244; GB/T 4340.2

Applications:

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.



Specifications:

Model	SHVT-500Z/1000Z/3000Z/5000Z
Test Load (kgf,N)	0.2kgf, 0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf 1.96N, 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N
Test Load (kgf,N)	0.2kgf, 0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf 1.96N, 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N
Test Load (kgf,N)	0.3kgf, 0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf 2.94N, 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N
Test Load (kgf,N)	0.5kgf, 1kgf, 2kgf, 2.5kgf, 3kgf, 5kgf, 10kgf, 20kgf, 30kgf, 50kgf 4.90N, 9.80N, 19.6N, 24.5N, 29.4N, 49N, 98N, 196N, 294N, 490N
Loading Method	Automatic (loading/dwell/unloading)
Turret	Automatic turret with 4 positions including one indenter position & three objective positions
Computer Panel	CPU: Intel I3; Memory Capacity: 2G; Solid State Disk: 32G
Camera	Integrated CCD with 1.3M Pixels
Hardness Scales Conversion	Knoop, Brinell, Shore, Rockwell: A, B, C, D, G, K, 15N, 30N, 45N, 15T, 30T, 45T
Hardness Reading	Indentation can be shown on the touch screen and be read automatically.
Data Output	Word/Excel Report With hardness-Depth Graph
Objectives	10X, 20X, 40X
Total Magnification	100X, 200X, 400X
Resolution	0.25 μ m, 0.125 μ m, 0.0625 μ m
Dwell Time	0-60 seconds
Illumination	Halogen Lamp
X-Y Stage	Size: 100 \times 100mm; Travel: 25 \times 25mm; Resolution: 0.01mm
Max. Height Capacity	185mm
Throat	130mm
Power Supply	AC220V/50Hz; AC110V/60Hz
Overall Dimension (L*W*H, mm)	Machine: 560 x 335 x 675; Packing Dimensions: 650 x 380 x 960
Weight	Net Weight: 48kg; Gross Weight: 62kg

Standard Accessories:

No.	Name	Qty.
1.	Machine	1 Set
2.	Vickers Indenter (Diamond)	1 PC
3.	X-Y Stage	1 PC
4.	Hardness Block 400~500 HV5	1 PC
5.	Hardness Block 700~800 HV1	1 PC
6.	Objectives: 10X; 20X; 40X	3 PCS
7.	Level Adjustable Feet	4 PCS
8.	Spirit Level / Level Gauge	1 PC

No.	Name	Qty.
9.	Internal Hexagonal Wrench 2.5mm	1 PC
10.	Screw Driver	1 PC
11.	Halogen Lamp: 12V, 15~20W	1 PC
12.	Fuse 1A	2 PCS
13.	Anti-dust Cover	1 PC
14.	Power Cable	1 PC
15.	User Manual	1 PC
16.	Product Qualification Certificate	1 PC