

Vickers Hardness Tester

Model: HV-5/10/30/50



1, General introduction

All Vickers ranges use a 136° pyramidal diamond indenter that forms a square indent.

1, HV series Vickers Hardness Tester made with a unique and precision design in the field of mechanics, optics and light source is able to produce a clearer indentation and hence a more precise measurement.

2, Equipped with a 10* eyepiece for measurement;

3, Adopt cold light source, the using life of light source can reach 100000 hours

4, With LCD screen, customer can select HV/HK or change the hardness value by the option menu, The testing result (via the internal data processing) is shown on screen.

5, "Z" type has an automatically turning turret to change the object lens and indenter;

6, With a special thread interface, the tester can be linked with CCD video measuring system or LCD screen measuring system;

2, References

ASTM E384 "Standard Test Method for Microindentation Hardness of Materials"

ISO 6507 "Metallic materials -- Vickers hardness test"

3, Main technical specification

Model		HV-5/HV-5Z	HV-10/HV-10Z	HV-30/HV-30Z	HV-50/HV-50Z
Test force	N	2.942, 4.903, 9.807, 19.61, 24.52, 29.42, 49.03	2.942, 4.903, 9.807, 29.42, 49.03, 98.07	9.807, 29.42, 49.03, 98.07, 196.1, 294.2	9.807, 49.03, 98.07, 196.1, 294.2, 490.3
	Kg	0.3, 0.5, 1, 2, 3, 5	0.3, 0.5, 1, 3, 5, 10	1, 3, 5, 10, 20, 30	1, 5, 10, 20, 30, 50
Force loading mode		Automatic loading, holding and unloading			
Holding time		0-60S			
Amplification of microscope		100*, 200*	200*,100*	100*	
Min. measuring resolution rate		0.125 μ m(200*), 0.250 μ m(100*),			
Testing field		8HV _{0.3} ~2900HV ₁₀			
Lens/indenter switch mode		HV series : Manually HV-Z series: Motorized			
Dimension of XY table		100*100mm		***	
Moving range of XY table		25*25mm		***	
Max. height of test sample		160mm			
Max.width of test sample		135mm			
Light source		Cold light source			
Objectives		10*, 20*, 40* according customer requirement			
Power		AC 220V, 50/60HZ			
Dimensions		520*190*650mm			
Net Weight		40Kg			
Standard Accessories		XY-stage test table, thin specimen test table, fine wire test table, Fork-shaped test table		Large test table, V shape test table	
		10* digital micro lens, adjustable screw, vickers hardness block, manual etc.			

Digital Vickers Hardness Tester

Model: HVS-5/10/30/50



1, General introduction

All Vickers ranges use a 136° pyramidal diamond indenter that forms a square indent, 1, HVS series Digital Vickers Hardness Tester made with a unique and precision design in the field of mechanics, optics and light source is able to produce a clearer indentation and hence a more precise measurement.

2, Equipped with a 10* eyepiece for measurement;

3, Equipped with a digital microscope, LCD screen to display testing method, test force, indentation length, hardness value, dwell time of test force as well as the number of measuring times.

4, Adopt cold light source, the using life of light source can reach 100000 hours

5, With 4.8 inch Large LCD screen, customer can select HV/HK or change the hardness value by the option menu, The testing result (via the internal data processing) is shown on screen.

6, "Z" type has an automatically turning turret to change the object lens and indenter;

7, With a special thread interface, the tester can be linked with CCD video measuring system or LCD screen measuring system;

2, References

ASTM E384 "Standard Test Method for Microindentation Hardness of Materials"

ISO 6507 "Metallic materials -- Vickers hardness test"

3, Main technical specification

Model		HVS-5/HVS-5Z	HVS-10/HVS-10Z	HVS-30/HVS-30Z	HVS-50/HVS-50Z
Test force	N	2.942, 4.903, 9.807, 19.61, 24.52, 29.42, 49.03	2.942, 4.903, 9.807, 29.42, 49.03, 98.07	9.807, 29.42, 49.03, 98.07, 196.1, 294.2	9.807, 49.03, 98.07, 196.1, 294.2, 490.3
	Kg	0.3, 0.5, 1, 2, 3, 5	0.3, 0.5, 1, 3, 5, 10	1, 3, 5, 10, 20, 30	1, 5, 10, 20, 30, 50
Force loading mode	Automatic loading, holding and unloading				
Holding time	0-60S				
Amplification of microscope	100*, 200*	200*, 100*	100*		
Min. measuring resolution rate	0.125 μm(200*), 0.250 μm(100*),				
Testing field	8HV _{0.3} ~2900HV ₁₀				
Output	Built-in micro printer, RS232 interface				
Lens/indenter switch mode	HV series :Manually HV-Z series: Motorized				
Dimension of XY table	100*100mm			***	
Moving range of XY table	25*25mm			***	
Max. height of test sample	160mm				
Max.width of test sample	135mm				
Light source	Cold light source				
Power	AC 220V, 50/60HZ				
Objectives	10*, 20*, 40* according customer requirement				
Dimensions	520*190*650mm				
Net Weight	40Kg				
Standard Accessories	XY-stage test table, thin specimen test table, fine wire test table, Fork-shaped test table			Large test table, medium test table V shape test table	
	10* digital micro lens, adjustable screw, vickers hardness block, manual etc.				