ULTRASONIC HARDNESS TESTERS



SMALL TEST INDENTATION

ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL

ATTENTION: NEED TO CONFIRM IF THE WORKPIECES ARE SUITABLE BEFORE PURCHASE



9646-300



bluetooth printer (included in 9646-301)

- Small size, light weight, portable, convenient for on-line measurement and can be used to measure large workpieces
- Support 360° measurement, fast test speed, the fastest results in 1 second
- Standard Vickers indentation, small test indentation and low damage to the workpiece
- 100 measurement data sets and 10 calibration data sets can be stored
- Large display, directly shows the current measured value, maximum value, minimum value, average value and unit conversion value
- For unspecified conversion tables and unknown materials, multi-point calibration on any hardness scale you can choose to eliminate of systematic errors due to conversion tables
- According to DIN 50159, ASTM A1038 standards

Applications:

- Hardness measurement of flange edges and gearoot stampings, gears and gear grooves with hardened die sheet surfaces, taper sections
- 2. Hardness measurement of shafts and thin-walled pipes and vessels
- 3. Hardness measurement of thin plated layers, wheels, turbine rotors and welded parts
- Measurement of the depth of a certain hole diameter deep holes, curvature of the larger dents and convex marks, irregular planes
- Covering the majority of hardness measurement of industrial production of ferrous metals, non-ferrous metals and their alloys

SPECIFICATION

Code	9646-300	9646-301		
Data printout	without printer	with bluetooth printer		
Main test parameter	HV			
Convertible parameters	HRA, HRB, HRC, HBW, HS, MPa			
Measurement range	50-1599HV, 20-68HRC, 85-650HB, 41-100HRB 61-85.6HRA, 34.2-97.3HS, 255-2180MPa			
Resolution	1HV, 0.1HRA, 0.1HRB, 0.1HRC, 1HB, 0.1HS, 1MPa			
Accuracy	±4%HV, ±4%HB, ±1.5HR			
Calibration method	normal material: one-point calibration special materials: multi-point calibration			
Operating temperature	-10°C~40°C			
Power supply	built-in rechargeable lithium battery (for 10 hours working)			
Dimension of main unit	190×82×30mm			
Dimension of probe	150ר22mm			
Weight	540g			

STANDARD DELIVERY

Code	9646-300	9646-301	
Main unit	1 pc	1 pc	
19.6N manual probe	1 pc	1 pc	
Bluetooth printer	_	1 pc	
charger	1 pc	1 pc	
USB cable	1 pc	1 pc	
Randomized standard hardness block	1 pc	1 pc	

OPTIONAL ACCESSORY

9.8N manual probe	9646-300-10	
29.4N manual probe	9646-300-30	
49N manual probe	9646-300-50	
98N manual probe	9646-300-98	
Hardness test block HRC20~30	HDT-B-HRCU1	
Hardness test block HRC35~55	HDT-B-HRCU2	
Hardness test block HRC60~70	HDT-B-HRCU3	
Hardness test block 200~300HV5	HDT-B-HV5U1	
Hardness test block 400~500HV5	HDT-B-HV5U2	
Hardness test block 700~750HV5	HDT-B-HV5U3	
Hardness test block 90~200HBW10/1000	HDT-B-HB10U1	
Hardness test block 200~300HBW10/3000	HDT-B-HB10U2	
Hardness test block 400~500HBW10/3000	HDT-B-HB10U3	

SPECIFICATION OF PROBE

Probe Types	9.8N (optional)	19.6N (included)	29.4N (optional)	49N (optional)	98N (optional)**
Diameter	22mm	22mm	22mm	22mm	22mm
Length	150mm	150mm	150mm	150mm	150mm
Maximum roughness of measuring surface	Ra<3.2µm	Ra<5µm	Ra<5µm	Ra<10µm	Ra<15µm
Minimum workpiece weight	0.3kg*	0.3kg*	0.3kg*	0.3kg*	0.3kg*
Minimum thickness of workpiece	2mm	2mm	2mm	2mm	2mm
Application	mold shells, fixtures, thin-walled parts, bearings, tooth sides and pipe interiors			measurement of grooves, gear flanks and gear roots	workpieces with low roughness requirements

^{*}If the weight or thickness of workpieces is less than required, the workpieces should be fixed or coupled on solid support

^{**}For larger measuring force, it is recommended to use it with the stand (optional)