

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

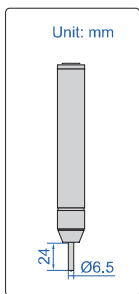
SMALL TEST INDENTATION

ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL

## ULTRASONIC HARDNESS TESTERS

INSPECTION CERTIFICATE

POPULAR MODEL



long probe (optional)



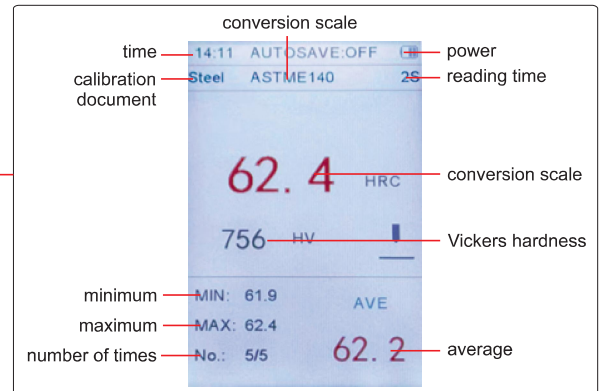
bluetooth printer (included in 9646-301)



9646-300

19.6N probe (included)

diamond Vickers indenter



stand (optional), suitable for measuring small workpieces, fast and stable

- 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:

1. Hardness measurement of flange edges and gear root stampings, gears and gear grooves with surface hardening of lamina, taper sections
2. Hardness measurement of shafts and thin-walled pipes and container
3. Hardness measurement of thin plating, wheels, turbine rotors and welded parts
4. Measurement of the depth of a certain diameter deep holes, dents of the larger curvature and convex marks, irregular planes
5. 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 material: multi-point calibration	
Operation temperature	-10°C~40°C	
Power supply	built-in rechargeable lithium battery (for 10 hours working)	
Dimension of main unit (L×W×H)	190×82×30mm	
Dimension of probe	150×Ø22mm	
Net 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
Ultrasonic hardness test 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
9.8N manual long probe	9646-300-10L
19.6N manual long probe	9646-300-20L
29.4N manual long probe	9646-300-30L
49N manual long probe	9646-300-50L
98N manual long probe	9646-300-98L
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 200~300HV2	HDT-B-HV2U8
Hardness test block 400~500HV2	HDT-B-HV2U9
Hardness test block 700~750HV2	HDT-B-HV2U10
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
Stand	9646-300-STAND

## SPECIFICATION OF PROBE

Probe type	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 requirement

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

\*\* For large test force, it is recommended to use the probe with a stand

Note: when replacing optional probes, a multi-point calibration with more than three calibration blocks must be performed before use