

ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL

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

WIRELESS TRANSMISSION IS OPTIONAL

SMALL TEST INDENTATION

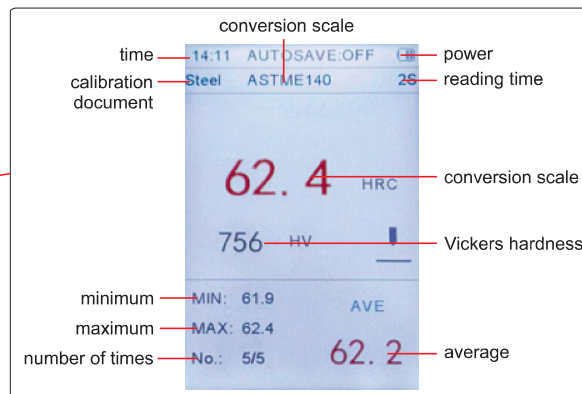
ULTRASONIC HARDNESS TESTERS



POPULAR MODEL



9646-300



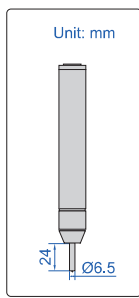
- Small size, light weight, portable, convenient for on-line measurement and can be used to measure large workpieces
- Support 360° measurement, fast test speed, the fastest results in 1 second
- Standard Vickers indentation, small test indentation and low damage to the workpiece
- 100 measurement data 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	9646-310	9646-311
Test force of probe	19.6N (2kgf)		49N (5kgf)	
Data printout	without printer	with bluetooth printer	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			



long probe
(optional)



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

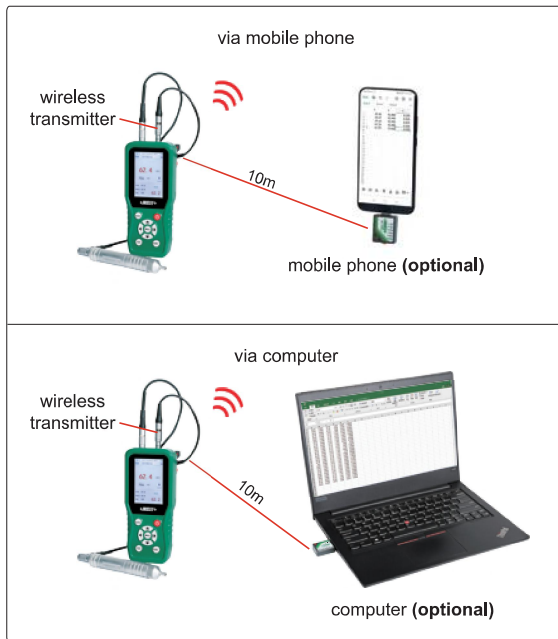


wireless transmitter (optional)



bluetooth printer
(included in 9646-301 and 9646-311)

can send data to Excel, TXT and other documents
by connecting to mobile phone or computer via
optional 7315 series wireless transmission systems



STANDARD DELIVERY

Code	9646-300	9646-301	9646-310	9646-311
Main unit	1 pc	1 pc	1 pc	1 pc
19.6N manual probe	1 pc	1 pc	—	—
49N manual probe	—	—	1 pc	1 pc
Bluetooth printer	—	1 pc	—	1 pc
Charger	1 pc	1 pc	1 pc	1 pc
USB cable	1 pc	1 pc	1 pc	1 pc
Ultrasonic hardness tset block	1 pc	1 pc	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
Wireless transmitter (receiver is needed)	7315-9646
Receiver	7315-2/3/6/7/8/9

SPECIFICATION OF PROBE

Probe type	9.8N	19.6N	29.4N	49N	98N**
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