

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

SMALL TEST INDENTATION

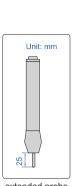
## **ULTRASONIC HARDNESS TESTERS**

INSPECTION





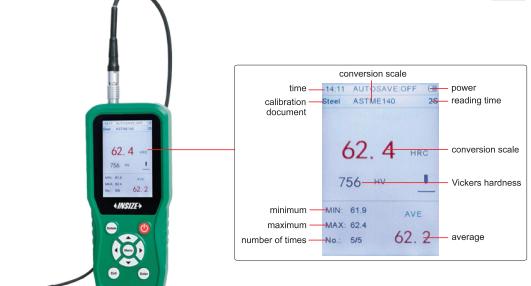
# ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL



extended probe (optional)



bluetooth printer (included in 9646-301)



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

9646-300

19.6N probe (included)

- 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 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
- Hardness measurement of thin plating, wheels, turbine rotors and welded parts
- Measurement of the depth of a certain diameter deep holes, dents of the larger curvature 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 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	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	
Ultrasonic hardness test block	1 pc	1 pc	

#### **OPTIONAL ACCESSORY**

OF HOMAL 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 extended probe	9646-300-10L	
19.6N manual extended probe	9646-300-20L	
29.4N manual extended probe	9646-300-30L	
49N manual extended probe	9646-300-50L	
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

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

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