



## PORTABLE LEEB HARDNESS TESTER **CODE ISH-SPHA**



- Based on Leeb (HL), converted to Vickers (HV), Brinell (HB), Rockwell (HRC and HRB), Shore (HS) and tensile strength (MPa)
- Connected with printer via bluetooth
  Connected with computer via USB port
- Up to 800 test results can be saved
- Tolerance testing
- Touch screen operation, large display with backlight Language: English, Chinese, Italian, German, French and Portuguese
- Automatic power off
- According to ASTM A 956





software CD (included)



hardness test block D (included)



small support ring (included)



printer (included)

### **SPECIFICATION**

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Min. reading	1HL, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
Accuracy	±6HL (when HL=800)
Display	Leeb (HL), converted hardness, material, impact direction, test times, average value, deviation, time
Output	bluetooth and USB
Power supply	built-in rechargeable battery
Dimension	135×83×24mm
Weight	350g

#### STANDARD DELIVERY

Main unit	1 pc		
Impact device D	1 pc		
Printer	1 pc		
Hardness test block D	1 pc		
Small support ring	1 pc		
Cleaning brush	1 pc		
AC/DC adapter	1 pc		
Software disc and USB cable	1 pc		
Pen for touch screen	1 pc		

#### **OPTIONAL ACCESSORY**

Impact device DC	ISH-SPHA-DC			
Impact device C	ISH-SPHA-C			
Impact device D+15	ISH-SPHA-D15			
Impact device DL	ISH-SPHA-DL			
Impact device G	ISH-SPHA-G			
Hardness test block D*	HDT-B-HLD3			
Hardness test block G*	HDT-B-HLG2			
Couplant	ISH-COUPLANT			
Support rings	refer to details			

\* Hardness test block G (HDT-B-HLG2) is for impact device G (ISH-SPHA-G). Hardness test block D (HDT-B-HLD3) is for all others impact devices.

# D+15 depth<15mm Ød>4.5mm width>12mm DL D+15 (optional) (optional) (included) (optional) (optional) (optional)

APPLICABLE WORKPIECE									
Impact device		DC	С	D	D+15	DL	G		
Application		inner wall of small space	small or thin workpiece, coating layer	general use	deep groove	narrow slot or small hole	casting or forging workpiece		
Maximum roughness of workpiece (Ra)		1.6µm	0.4µm	1.6µm	1.6µm	1.6µm	7µm		
Minimum weight of workpiece	direct measurement	5kg	1.5kg	5kg	5kg	5kg	15kg		
	on solid support	2kg	0.5kg	2kg	2kg	2kg	5kg		
	coupled on plate	0.1kg	0.02kg	0.1kg	0.1kg	0.1kg	0.5kg		
Minimum thickness of workpiece		5mm	1mm	5mm	5mm	5mm	10mm		