





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
- Low and high limits with judgement
- Touch screen operation, large display with backlight
- Language: English, Chinese, Italian, German, French and Portuguese
- Automatic power offAccording to ASTM A 956





software CD (included)





SPECIFICATION

| OI LOII IOATION | |
|-----------------|---|
| 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 |



small support ring (included)



(included)

STANDARD DELIVERY

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

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* | ISH-BHLD | | | |
| Hardness test block G* | ISH-BHLG | | | |
| Couplant | ISH-COUPLANT | | | |
| Support rings | see details | | | |

^{*} Hardness test block G (ISH-BHLG) is for impact device G (ISH-SPHA-G). Hardness test block D (ISH-BHLD) is for all others impact devices.

DL 層 D+15 Ød>4.5mm Ød>100mm DC D+15 DL (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 5mr | | 5mm | 1mm | 5mm | 5mm | 5mm | 10mm |