

# PORTABLE HARDNESS TESTER

## HARTIP 3000

**H**ARTIP 3000 is an advanced hand-held digital metal hardness tester with characters of high accuracy, wide measuring range and easy operation. It is suitable for testing the hardness of all metals especially on site for large structure or assembled components, which is widely used in the industry of power, petrochemistry, air space, vehicle, machine and so on.

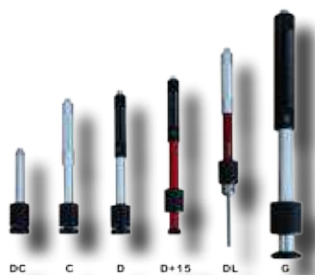
### Specifications



| SADT HARTIP 3000           |   |                            |  |
|----------------------------|---|----------------------------|--|
| <b>Principle</b>           | Leeb hardness measurement   | <b>Indicator</b>           | Low battery                              |
| <b>Accuracy</b>            | $\pm 0.5\%$ @ HL=800 / $\pm 4\text{HL}$                           | <b>Communication</b>       | RS232/USB to PC for transferring data    |
| <b>Display</b>             | Large graphic LCD with EL backlight                               | <b>Print</b>               | RS232/USB to micro printer               |
| <b>Hardness scale</b>      | HL/HRC/HRB/HB/HV/HS   | <b>Power supply</b>        | 1.5V AA battery x 4                      |
| <b>Measuring range</b>     | HL200-960/ HRC19-70/ HRB13-109/ HB20-655/ HV80-1027/ HS31.9-102.8 | <b>Working environment</b> | -10~+45°C                                |
| <b>Impact device</b>       | D (Standard)<br>DC/D+15/C/G/EL (Optional)                         | <b>Dimension (mm)</b>      | 195x84x38                                |
| <b>Materials</b>           | 9 common metal materials  | <b>Net weight (g)</b>      | 550                                      |
| <b>Memory</b>              | 960 data in 8 blocks, can be saved and re-readable                | <b>Standards</b>           | Conforming to ASTM A956, GB/T 17394-1998 |
| <b>Statistics function</b> | Average / Max. / Min. / value                                     |                            |  |

### KEY FEATURES

- ✦ Wide measuring range: Rockwell B&C, Brinell, Vickers, Shore and HL
- ✦ Automatic conversion to Brinell, Rockwell, Vicker and Shore
- ✦ Test in any directions
- ✦ Impact devices: D, DC, DL, C, D+15, E, G
- ✦ All impact devices interchangeable
- ✦ Menu operation
- ✦ Large LCD display with backlight
- ✦ RS 232/USB interface to PC and micro-printer
- ✦ Automatic mean, max., min. value display
- ✦ Data management software



### Optional Accessories

| Special Support Rings             | Size(mm)                            | Description  |
|-----------------------------------|-------------------------------------|--|
| Z10-15<br>Z14.5-30<br>Z25-50      | 20x20x7.5<br>20x20x6.5<br>20x20x6.5 | Cylindrical<br>R10-15mm<br>R14.5-30mm<br>R25-50mm          |
| HZ11-13<br>HZ12.5-17<br>HZ16.5-30 | 20x18x5<br>20x20x5<br>20x20x5       | Hollow-cylindrical<br>R11-13mm<br>R12.5-17mm<br>R16.5-30mm |
| K10-15<br>K14.5-30                | Ø20x7.7<br>Ø20x6.7                  | Spherical<br>R10-13mm<br>R14.5-30mm                        |
| HK11-13<br>HK12.5-17<br>HK16.5-30 | Ø17x5<br>Ø18x5<br>Ø20x5             | Hollow-spherical<br>R11-13mm<br>R12.5-17mm<br>R16.5-30mm   |
| UN                                | Ø52x20x16                           | Universal  |

| Optional Probes |  |
|-----------------|--|
| <b>D</b>        | Universal standard unit. For the majority of hardness testing assignments.   |
| <b>DC</b>       | Extremely short impact device. Use in very confined spaces.  |
| <b>DL</b>       | Needle front section diameter 2.78mm, length 50mm. Measurements in extremely confined spaces.                                  |
| <b>C</b>        | Reduced impact energy. Test in surface hardened or impact sensitive components.  |
| <b>D+15</b>     | Particularly slim front section and with measuring coil moved back. Hardness measurements in grooves and on recessed surfaces. |
| <b>E</b>        | Synthetic diamond test tip. For measurements in the extremely high hardness range.   |
| <b>G</b>        | Enlarged test tip, increased impact energy. For measurements in the Brinell range only. Use in solid components.               |

### Portable Hardness Tester

#### Standard package

|                               |   |
|-------------------------------|---|
| HARTIP 3000 main unit         | 1 |
| Impact device type D          | 1 |
| Small support ring            | 1 |
| Test block D with certificate | 1 |
| AA Battery                    | 4 |
| Cleaning brush                | 1 |
| Operation manual              | 1 |
| Carrying case                 | 1 |

#### Optional accessories

Mirco-printer MP60

Impact device D  
Impact device DC  
Impact device D+15  
Impact device G  
Impact device C  
Impact device E  
Impact device DL

Impact body D/DC  
Impact body D+15  
Impact body G  
Impact body C  
Impact body E  
Impact body DL

Test block G / D with certificate

Special support rings

Leather case

Interface cable (to PC or printer)

Data management software

