MESSTECHNIK SaluTron®

# Digital hardness meter

*with inbuilt printer*

- *for all metallic materials*
- *large measuring memory*
- *with PC-interface*
- *inbuilt battery-charger*
- *for all measuring directions*


# Hardy *Test* D700®

The **Hardy***Test* **D700®** measures the hardness of a large number of materials in six hardness units. Seven types of impact devices enable the hardness measurement of special test piece forms in different hardness grades. It is equipped with an integrated printer and the opportunity to PC transfer.

# precise and practical

## Features

- **Wide measuring range**
- Available hardness scales: HRB, HRC, HV, HB, HS, HL
- **Large memory capacity**
- Upper and lower limit can be preset. It will alarm automatically when the measured value exceeds the limit.
- **Test at any angle**, even upside down
- **User calibration function**
- 7 types of impact devices for specific applications available; **automatic identification** after connection
- **Integrated printer**
- Large display: all functions and parameters are displayed + backlight
- **PC-transfer** with USB cable and software
- **Built-in charging circuitry**
- Battery capacity display - **150 hours operating time** (without backlight and printing)
- **Auto-Power-Off** to save energy

## Application

- Measurements on **steel, cast steel, cold work tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminium alloys, brass, bronze and wrought copper alloys**
- **Defect analysis** of pressure vessels, steam generators, etc.
- **Material identification** of metal warehouses

## Standard delivery

- Main unit
- Impact device D
- Cleaning brush
- Small support ring
- Charger cable
- Paper for printing
- Manual
- Service-case
- USB-cable and software

**Optional**

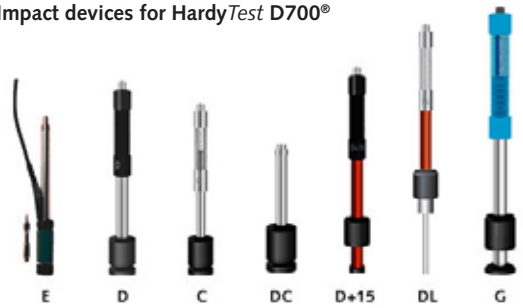
- Set of supporting rings
- Other impact devices

| Technical Specifications | |
|---|---|
| Hardness units | HL (Leeb), HB (Brinell), HRB (Rockwell B), HRC (Rockwell C), HV (Vickers), HS (Shore D) |
| Measuring range | 170 - 960 HLD |
| Measuring direction | 360° |
| Standard impact device | D |
| Memory size | Max. 500 groups (relative to the times of impacts 1-32) |
| Statistics | Records the number of measurements, date, average value, impact device, material and hardness unit for each measured value. |
| Setting of limits | Acoustic signal by overstepping preset min. and max. limits |
| Minimum weight of sample | > 5kg solid material;<br>2-5kg on stable surface;<br>< 2kg with coupling paste on stable surface |
| Memory function | Manually or automatically |
| Data transfer | USB-cable and software |
| Languages | English and German |
| Display | 128 × 64 Dot-Matrix-LCD |
| Backlight | Adjustable brightness |
| Battery capacity | 150 hours (without backlight and printing) |
| Power supply | Battery-pack (6V NI-MH) with integrated charging circuit and charging cable |
| Battery charging cable | 9V / 500mA |
| Print paper (length x width) | 57.5 (± 0,5 mm) x 30 mm |
| Storage temperature | -30°C to +60°C |
| Relative humidity | ≤ 90% |
| Working temperature | -10°C to +50°C |
| Weight | 340 g (with batteries) |
| Size | 212 x 80 x 32 mm |

Technical details are subject to change.

Certified EN ISO 9001

**Impact devices for Hardy***Test* **D700®**




**Impact device D:** Universal device for most hardness requirements

**Impact device DC:** Ultra-short version; manually loaded on the front; same characteristics as type D; for testing in boreholes, built-in parts, hollow cylindrical parts, etc.; max. 940 HV

**Impact device DL:** With extremely long and fine front piece only for steel and cast steel; for testing in narrow or hard to reach areas; max. 950 HV

**Impact device D+15:** The front part is narrow and the coil is located behind it; same characteristics as type D; only for steel; for hardness testing in slots, grooves, recessed areas, gear flanks, grooves, cavities, tooth flanks, etc.; max. 940 HV

**Impact device C:** Reduced impact energy of about ¼ of type D; for tempered or surface treated steel, small or sensitive-to-shock parts (minimal imprint is left); max. 1000 HV

**Impact device G:** With large test-tip diameter; impact energy 9 times larger than type D; on steel, gray or nodular cast iron; for large cast parts and forgings or parts with high surface roughness; max. 650 HB (only in Brinell)

**Impact device E:** With a synthetic diamond test tip of approx. 5000 HV; for very hard materials (above 50 HRC / 650 HV) such as carbide, barrels, etc.; max. 1200 HV

| Standard Impact Device D | HRB | HRC | HB | HV | HS |
|---|---|---|---|---|---|
| Steel, Cast Steel | 38-100 | 20-69 | 127-651 | 83-976 | 32-100 |
| Cold Work Steel | - | 20-67 | - | 80-898 | - |
| Stainless Steel | 47-102 | - | 85-655 | 85-802 | - |
| Gray Cast Iron | - | - | 93-334 | - | - |
| Nodular Cast Iron | - | - | 131-387 | - | - |
| Aluminum Alloys | 24-85 | - | 19-164 | - | - |
| Brass | 14-95 | - | 40-173 | - | - |
| Bronze | - | - | 60-290 | - | - |
| Copper | - | - | 45-315 | - | - |

MESSTECHNIK SaluTron® GmbH
*Production and distribution of measuring instruments*

**Salutron Messtechnik GmbH**
D-32107 Bad Salzuflen
Max-Planck-Straße 62

Phone: 0049 (0) 52 22 - 95 97 60
Fax: 0049 (0) 52 22 - 5 04 99
Email: info@salutron.de
Web: www.salutron.de