

Hardness Tester PCE-2000N







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Hardness tester for metallic materials / Different impactors available / 7 different hardness scales / Save the data on USB stick

The PCE-Instruments PCE-2000N hardness meter uses the Leeb rebound method. This is a dynamic hardness test method in which a standardized test specimen, usually a hard metal ball, is hit with defined impact energy on a test surface. The impact of the hard metal ball on the test surface results in a plastic deformation of the surface at the point of impact. From this deformation results in an energy loss, which is proportional to the workpiece hardness and can be determined by the ratio of rebound to impact velocity of the specimen.

This technology enables a compact design, which makes it particularly suitable for the hardness tester. In contrast to static test methods with heavy hardness testing machines, a mobile hardness tester can be used very flexibly in the incoming or outgoing inspection, in production and generally in all areas where hardness has an influence on quality parameters. The hardness tester from PCE Instruments can be used to measure six different hardness scales (HL, HV, HRA, HRC, HB, HV, HS) as well as ten different materials.

As standard, the hardness meter is supplied with a striker D, but optional additional impactors (DC, DL, C, D + 15, E, G) can be connected for more specific applications. In addition, the data can be saved directly on a USB stick, which further extends the flexibility of this mobile hardness tester. With a highly readable OLED display, a long standby time, a handy housing and a symbol-based menu navigation, the handling of the mobile hardness tester is extremely user-friendly.

- Measures all common hardness parameters
- External impact device on 1.5 m / 4.9 ft cable
- large measuring range
- High precision
- Storage data measurements on USB stick
- Various other impactors as accessories
- Measurement in different angles possible
- Color display

Specifications

Measuring ranges 170 ... 960 HLD

17.9 ... 69.5 HRC 19 ... 683 HB 80 ... 1042 HV 30.6 ... 102.6 HS 59.1 ... 88 HRA 13.5. .. 101.7 HRB

More information

Manual

More product info



Similar products



Impact device included D

(optional impact devices) (DC, D + 15, C, G, DL)

Cable length impact

About 1.5 m / 4.9 ft

device

Accuracy ± 0.5% (@ 800 HLD)

Repeatability 0.8% (@ 800 HLD)

Hardness scales

HV (Vickers) HB (Brinell) HS (Shore)

HL (Leeb)

HRA (Rockwell A) HRB (Rockwell B) HRC (Rockwell C)

Measurable materials

Cast steel
Alloy steel
Stainless steel
Gray glacé
Ductile iron

Steel

Cast aluminum alloy Cu-zinc (brass) Copper-tin alloy,

Copper

Display resolution 1

128 x 64 pixel OLED

Data storage 600 averages in 6 data groups

Data output USB stick

Power supply 3 x AAA batteries

Auto Power-Off if not in use, the device shuts off automatically after 12

minutes

Operating conditions 10 ... 50°C / 50 ... 122°F, 20 ... 90% rh

Storage conditions -30 ... 60°C / -22 ... 140°F

Dimensions 160 x 80 x 40 mm / 6.3 x 3.1 x 1.6 in (H x W x D)

Weight Measuring device with batteries: approx. 300 g / < 1 lb

Impact device : approx. 75 g / < 1 lb

Material

Steel / cold rolled steel HRA 59.1 ... 85.8

> HRC 20 ... 68.5 HRB 38.4 ... 99.6 HB 127 ... 651 HSD 32.2 ... 99.5 HV 83 ... 976

Alloyed tool steel

HRC 20.4 ... 67.1

HV 80 ... 898

Stainless steel

HRB 46.5 ... 101.7

HB 85 ... 655 HV 85 ... 802

Cast iron

HB 93 ... 334

Ductile iron

HB 131 ... 387

Cast aluminum

HRB 23.8 ... 84.6

HB 19 ... 164

Brass

HRB 13.5 ... 95.3

HB 40 ... 173

Bronze

HB 60 ... 290

Copper

HB 45 ... 315