



Hardness Tester PCE-2000N



Hardness Tester PCE-2000N

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

Subject to change

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
------------------	---

Impact device included D

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

Cable length impact device	About 1.5 m / 4.9 ft
Accuracy	± 0.5% (@ 800 HLD)
Repeatability	0.8% (@ 800 HLD)

Hardness scales	HL (Leeb) HV (Vickers) HB (Brinell) HS (Shore) HRA (Rockwell A) HRB (Rockwell B) HRC (Rockwell C)
-----------------	---

Measurable materials	Steel Cast steel Alloy steel Stainless steel Gray glacé Ductile iron Cast aluminum alloy Cu-zinc (brass) Copper-tin alloy, Copper
----------------------	--

Display resolution	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

Subject to change



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

Subject to change