



Leeb Hardness Meter PCE-2000N



PCE-2000N

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

General Features PCE-2000N

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
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
Alloyed tool steel	HV 83 ... 976
	HRC 20.4 ... 67.1
Stainless steel	HV 80 ... 898
	HRB 46.5 ... 101.7
	HB 85 ... 655
Cast iron	HV 85 ... 802
	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