

HARDNESS TESTING

HARDNESS TESTER PCE-2000N

Leeb hardness tester for metals

The PCE-2000N hardness tester from PCE-Instruments uses the Leeb rebound method. This is a dynamic hardness test method in which a standardized test specimen, usually a hard metal ball, hits a test surface at a defined impact energy. The impact of the hard metal ball on the test surface results in a plastic deformation of the surface at the point of impact. This

deformation results in an energy loss which is proportional to the hardness of the workpiece and which can be determined by means of the ratio of rebound to impact velocity of the specimen.

ISO cal option

- ▶ various other impactors as accessories
- ▶ measurement in different angles possible
- ▶ readings are saved to USB pen drive
- ▶ external impact device with 1.5 m cable
- ▶ wide measurement range
- ▶ 6 different hardness scales



APPLICATION



TECHNICAL SPECIFICATIONS

Measurement 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	Display resolution Data memory Data output Power supply Auto Power Off Operating conditions Storage conditions Dimensions Weight	128 x 64 pixel OLED 600 averages in 6 data groups USB pen drive 3 x AAA batteries after 12 min of inactivity +10 ... +50 °C, 20 ... 90 % RH -30 ... +60 °C 160 x 80 x 40 mm (H x W x D) Meter with batteries: approx. 300 g / <1 lb Impact device: approx. 75 g / <1 lb
Impact device included (optional impact devices) Cable length impact device Accuracy Repeatability	D (DC, D+15, C, G, DL) approx. 1.5 m ±0.5 % (@800 HLD) 0.8 % (@800 HLD)	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
Hardness scales	HL (Leeb) HV (Vickers) HB (Brinell) HS (Shore) HRA (Rockwell A) HRB (Rockwell B) HRC (Rockwell C)	Alloyed tool steel	HRC 20.4 ... 67.1 HV 80 ... 898
Measurable materials	Steel Cast steel Alloy steel Stainless steel Grey cast iron Spheroidal graphite iron Cast aluminium alloy Cu-zinc (brass) Copper-tin alloy Copper	Stainless steel Grey cast iron Spheroidal graphite iron Cast aluminium Brass Bronze Copper	HRB 46.5 ... 101.7 HB 85 ... 655 HV 85 ... 802 HB 93 ... 334 HB 131 ... 387 HRB 23.8 ... 84.6 HB 19 ... 164 HRB 13.5 ... 95.3 HB 40 ... 173 HB 60 ... 290 HB 45 ... 315

Optional accessories:

Impact device D	Order code	PCE-2000N Probe D
Impact device DC	Order code	PCE-2000N Probe DC
Impact device D+15	Order code	PCE-2000N Probe D+15
Impact device C	Order code	PCE-2000N Probe C
Impact device G	Order code	PCE-2000N Probe G
Impact device DL	Order code	PCE-2000N Probe DL



Subject to change without notice