HARDNESS TESTER

PCE-500N

- **Determines all common hardness scales**
- **High accuracy/repeatability**
- **LCD display**
- **Current measured value**
- **Measurement possible in various positions**
- **Measurement on many materials**
- **USB-C interface for charging/PC software**
- **Rechargeable lithium-ion battery**
- **Charging via micro-USB C cable**
- **Portable, lightweight design**

A hardness tester is used to reliably determine the hardness of materials, for example in quality control or during material testing in the laboratory. The hardness tester is compact and suitable for small and medium-sized metal parts. The hardness tester can test materials such as aluminum, aluminum-copper alloys, brass, bronze, copper, low-alloy copper, forged copper alloys, stainless steel, steel, forged steel, cast iron, cast steel, grey cast iron, ductile cast iron and alloyed tool steel. The measurement is carried out with a type D impact device that touches the surface. The hardness values are automatically transferred to the connected software, where they are recorded and evaluated. Settings on the device are made exclusively via the software. The recorded measurement data can be exported directly from the software as an XLS or PDF file. In addition, an upper and lower limit can be set in the software, which highlights the result in color if it is exceeded. The device also has an automatic shut-off function after 220 seconds. Common hardness scales such as HRC, HRB, HRA, HB, HV, HS, HL and MPa are supported. The hardness tester is mainly used by testing laboratories, manufacturing companies and workshops to check smaller metal parts and document the measurement results via software.

Specification

Hardness	
Measurement range up to	170 ... 960 HL
Resolution	1 HL
Accuracy	±0.3% @ 800 HL
Hardness	
Measurement range up to	1 ... 74 HRC
Resolution	0,1 HRC
Accuracy	±0.3%
Hardness	
Measurement range with	140 HRB
Resolution	0,1 HRB
Accuracy	±0.3%
Hardness	
Measurement range up to	7 ... 88,5 HRA
Resolution	0,1 HRA
Accuracy	±0.3%
Hardness	
Measurement range up to	18 ... 1027 HB
Resolution	1 HB
Accuracy	±0.3%
Hardness	
Measurement range up to	42 ... 1220 HV
Resolution	1 HV
Accuracy	±0.3%
Hardness	
Measurement range up to	3,9 ... 112 HS
Resolution	1 HS
Accuracy	±0.3%
Hardness	
Measurement range up to	89 ... 3300 MPa
Resolution	1 MPa
Accuracy	±0.3%

General technical data	
Measuring functions	Average value
Measuring principle	Rebound method
Display type	LCD with backlight
Display size	1,1 Inch
Storage medium	About software
Interface	USB-C
Automatic power-off	220 s
Impact device	D-type
Hardness scales	HRC, HRB, HRA, HB, HV, HS, HL, MPa
Repeatability	±2 HL
Additional description	Settings such as changing the unit can only be adjusted via the software
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	5V DC / 0.5 A
(Rechargeable) battery	1 x 3,7 V internal , Lithium-ion battery
Operating conditions	-20 ... 45 °C , 20 ... 80 % RH
Storage conditions	-20 ... 60 °C , 10 ... 90 % RH
Dimensions (L x W x H)	88 x 30 x 18 mm
Weight	56 g