UCI DUROMETER PCE-3500 INCL. 50N PROBE-ICA

PCE-3500-ICA



- **Measurement in line with UCI procedure**
- **Tests HRC, HRB, HV, HB, MPa**
- **Measurement direction 360°**
- **Large colour LC display**
- **Memory function via SD card**
- **Different probes can be attached**
- **Characteristic curve of material pre-calibrated**
- **Evaluation via software possible**
- **incl. ISO-Calibration Certificate**

The UCI hardness tester PCE-3500 has been designed for the non-destructive hardness measurement of metallic components. The UCI hardness tester works on the basis of the Ultrasonic Contact Impedance test procedure. This UCI procedure works as follows: a Vickers diamond at the probe is stimulated with its self-resonance. By pushing the probe, the vibration frequency is reduced depending on the hardness of the surface and on the e module of the material and of the contact surface. The hardness of the surface can be determined on the basis of the frequency shift, taking the characteristic curve of the material into consideration.

The UCI hardness tester works non-destructively. There is a microscopically slight pressure against the surface, however, this is normally not visible.

Specification

Hardness	
Measuring range	230 ... 940 HV
Resolution	1 HV
Accuracy	±3% HV
Hardness	
Measuring range	20 ... 70 HRC
Resolution	0,1 HRC
Accuracy	±1.5 HRC
Hardness	
Measuring range	90 ... 650 HB
Resolution	1 HB
Accuracy	±3 % HB

General technical data	
Measuring functions	MIN, MAX, Average value
Measuring functions (additional information)	Single measurement, number of measurements, averaging, standard deviation, coefficient of variation, bar chart, smart mode (filters outliers)
Measuring principle	Ultrasonic contact impedance method
Display type	LCD graphic display with backlight
Display size	2,8 Inch
Storage medium	SD card
Storage capacity	2 GB
Interface	SD card, Mini-USB
Standard(s)	ASTM A1038
Measuring surface minimum	1 mm
Measuring surface additional information	Minimum material thickness: 1 mm (UCI probe only)
Materials	Steel, Cast iron, Stainless steel, Aluminium, Bronze
Camera resolution	320 x 240 640 x 480
Operating time	10 h
Automatic power-off from...to	1 ... 30 min.
Measuring angle	360 °
Impact device	D-type
Hardness scales	HRC, HB, HV, HRB, MPa
Tensile strength	370 ... 1740 MPa
Menu language	English, Russian, English (GB), French, Portuguese, Polish, Ukrainian
Protection class (device)	IP54
Power supply	Primary: 100 ... 240V AC | 50/60 Hz Secondary: 5V DC / 2 A
Connector type	Device-europlug
(Rechargeable) battery	3 x 1,2 V AA - rechargeable battery , Nickel-metal hydride battery
Capacity	2600 mAh
Operating conditions	-20 ... 40 °C , 30 ... 80 % RH
Storage conditions	-20 ... 40 °C , 30 ... 80 % RH
Dimensions (L x W x H)	168 x 85 x 40 mm
Weight	223 g