



PCE-A / S

Hardness Tester Shore A (Rubber)

- models with and without drag indicator
- readings in units of hardness
- complete 360° clock
- ergonomic handle design
- complies with all norms
- for single or serial measurements (for serial measurements, the optional test stand is necessary)
- delivered with calibration (incl. factory certificate)
- includes storage box



TECHNICAL SPECIFICATIONS

Measurement range	10 ... 90
Accuracy	±0.5
Scale division	1
Pressure force	12.5 N
Indenter	35°
Norm	DIN 53505
Clock diameter	57 mm
Total length	123 mm
Clock range	0 ... 100
Drag indicator	depending on model
Weight	158 g

INCLUDES

Hardness tester (one of the models) Shore-A, box, calibration certificate, instruction manual

ITEM NO.	ITEM
K-PCE-A	hardness tester
K-PCE-A-S	hardness tester with drag indicator

OPTIONAL ACCESSORIES

K-PS-A	testing samples
K-CAL-PCE-DX	recalibration
K-CAL-DAKKS-PCE-A/D	DaKKs certificate

PCE-D / S

Hardn. Tester Shore D (Hard Rubber)

- models with and without drag indicator
- large display
- readings in units of hardness
- complete 360°clock
- high accuracy
- ergonomic handle design
- complies with all norms
- for single or serial measurements
- delivered with calibration (incl. factory certificate)
- includes storage box



TECHNICAL SPECIFICATIONS

Measurement range	30 ... 90
Accuracy	±0.5
Scale division	1
Pressure force	50.0 N
Indenter	30°
Norm	DIN 53505
Clock diameter	57 mm
Total length	123 mm
Clock range	0 ... 100
Drag indicator	depending on model
Weight	158 g

INCLUDES

Hardness tester (one of the models) Shore-D, box, calibration certificate, instruction manual

ITEM NO.	ITEM
K-PCE-D	hardness tester
K-PCE-D-S	hardness tester with drag indicator

OPTIONAL ACCESSORIES

K-PS-A	testing samples
K-CAL-PCE-DX	recalibration
K-CAL-DAKKS-PCE-A/D	DaKKs certificate

PCE-O / O

Hardn. Tester Shore O (Soft Rubber)

- models with and without drag indicator
- large display
- readings in units of hardness
- complete 360°clock
- high accuracy
- complies with all norms
- for single or serial measurements
- delivered with calibration (incl. factory certificate)
- includes storage box
- ergonomic handle design



TECHNICAL SPECIFICATIONS

Measurement range	10 ... 90
Accuracy	±0.5
Scale division	1
Pressure force	12.5 N
Indenter	3/32"
Norm	ASTM D 2240
Clock diameter	57 mm
Total length	123 mm
Clock range	0 ... 100
Drag indicator	depending on model
Weight	158 g

INCLUDES

Hardness tester (one of the models) Shore-O, box, calibration certificate, instruction manual

ITEM NO.	ITEM
K-PCE-O	hardness tester
K-PCE-O-S	hardness tester with drag indicator

OPTIONAL ACCESSORIES

K-CAL-PCE-DX	recalibration certificate
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PCE-OO

PCE-DD-Serie

PCE-HT-225A

PCE-HT 225E

Timber Grader MTG 920

Durometer Shore OO (Foam Rub.)

- complies with ASTM
- for moss, cellular rubber and human skin
- large display / complete 360°clock
- accuracy: 0.5 units of hardness
- ergonomic handle design



Durometer for Shore A, D

- digital display / easy to read
- range of application Shore A

Shore D

soft rubber,  
caoutchouk,  
elastomers

hard rubber,  
thermoplastics



Concr. Test Hammer (Schmidt Meth.)

- conversion table on rear side
- value correction help in instructions
- allows conclusions on: strength of the cement stone, composition and density of the concrete, age and storage conditions, type and duration of load



Digital Test Hammer (Schmidt Meth.)

- when the testing parameters are entered, the device automatically calculates all values
- real-time date and time function
- Schmidt measurement method
- Automatic Power Off



Hardness Tester for Classifying Timber for Load-Bearing Applications



- complies with EN 14081-4:2009 norm
- includes software for transfer and analysis
- transfers data via Bluetooth
- to measure coniferous and deciduous timber







TECHNICAL SPECIFICATIONS		TECHNICAL SPECIFICATIONS		TECHNICAL SPECIFICATIONS		TECHNICAL SPECIFICATIONS		TECHNICAL SPECIFICATIONS		TECHNICAL SPECIFICATIONS	
Measurement range	10 ... 90	Model	PCE-DD-A	PCE-DD-D	Measur. range	100 ... 600 kg/cm²; (~9.81 ... 58.9 N/mm²)	Measur. range	10 ... 60 MPa	Measurement range	coniferous: up to C45	
Scale division	1	Measurement range	0 ... 100	0 ... 100			Impact energy	2207 J ±0.3 J		dense: up to D70	
Accuracy	±0.5 units of hardness	Scale division	0.5	0.5	Accuracy	18 kg/cm² (~±1.8 N/cm²)	Hardness scale	to convert the values without dimensions in MPa in the instruc. (with angle indication)	Display	LCD	
Pressure force	400 g	Accuracy	±1	±1	Impact energy	2207 J			Software	incl. in delivery only for Windows	
Indenter	3/32"	Unit	Shore A	Shore D	Display	0 ... 100 (scale without dimensions)				USB, Bluetooth	
Norm	ASTM D 2240	Penetration depth	0 ... 2.5 mm	0 ... 2.5 mm	Meas. principle	Schmidt	Minimum thickness	70 cm			
Clock diameter	57 mm	Function	Hold	Hold	Hardness scale	to convert the values without dimensions into kg/cm² (chart on case with angle indication)	Interface	USB 2.0	Interface	can be extended to up to 30	
Total length	121 mm	Pressure force	1 kg	5 kg			Display	16 bit True Color, resol. 176 x 220 adjustable backlight	Types of wood	<2 seconds	
Clock range	0 ... 100	Indenter	35° truncated cone	30° tip	Correction table	in the instructions	Memory	200 sets of data, 99 values per set	Meas. time	EN 14081-4:2009	
Materials	moss, cellular rubber, skin	Min. mat. thickness	>6 mm		Minimum thickness	70 cm	Power supply	4 x AA batteries	Norm		
Drag indicator	depending on model	Power supply	1.5 V battery (SR44)		Case	resilient metallic case	Dimensions	Ø 54 x 280 mm	<b>INCLUDES</b>		
Weight	184 g	Dimensions	80 x 60 x 25 mm		Dimens. / weight	Ø 66 x 280 mm / 1 kg	Weight	approx.1 kg	Timber grader, USB cable, Bluetooth communication tool, software, calibration kit, installation instructions, CE license for spruce, instruction manual		
<b>INCLUDES</b>		Weight	240 g		<b>INCLUDES</b>		<b>INCLUDES</b>		<b>ITEM NO.</b>		
Hardness tester (one of the models) Shore-O, box, calibration certificate, instruction manual		<b>INCLUDES</b>			Concrete test hammer, emery stick for preparing the surface, wooden case, instruction manual		Concrete test hammer, USB cable, software, carrying case, instruction manual		<b>ITEM</b>		
<b>ITEM NO.</b>	<b>ITEM</b>	<b>ITEM NO.</b>	<b>ITEM</b>		<b>ITEM NO.</b>	<b>ITEM</b>	<b>ITEM NO.</b>	<b>ITEM</b>	K-Timber Grader MTG hardness meter		
K-PCE-OO	hardness tester	K-PCE-DD-A	hardness tester Shore A		K-PCE-HT-225A	concrete test hammer	K-PCE-HT 225E	digital concrete test hammer			
<b>OPTIONAL ACCESSORIES</b>		K-PCE-DD-D	hardness tester Shore D		<b>OPTIONAL ACCESSORIES</b>		<b>OPTIONAL ACCESSORIES</b>				
K-CAL-PCE-DX	recalibration				K-CAL-HT-2	ISO calibration certificate	K-CAL-HT-2	ISO calibration certificate			



PCE-1000

Hardness Tester for Metal Materials

- pocket size
- measures all common hardness parameters
- integrated impact device / no cables
- can measure in any position
- Automatic Power Off
- rechargeable battery and charger included
- wide range of optional adaptors available



TECHNICAL SPECIFICATIONS

Unit	HRC	HRB	HB	HV	HSD
Steel / cast iron	20 ... 68	60 ... 100	80 ... 647	80 ... 940	32 ... 99
Tool steel	20 ... 67	---	---	80 ... 898	---
Stainless steel	20 ... 62	46 ... 101	85 ... 655	85 ... 802	---
Grey cast iron	---	---	93 ... 334	---	---
Nodular cast iron	---	---	131 ... 387	---	---
Cast aluminium	---	---	30 ... 159	---	---
Brass	---	14 ... 95	40 ... 173	---	---
Bronze	---	---	60 ... 290	---	---
Copper	---	---	45 ... 315	---	---
Hardness scales	HL, HRC, HRB, HB, HV, HSD				
Accuracy	±6 HL at HL = 800 (0.8 %)				
Weight of part	min. 5 kg without base, 2 ... 5 kg with base, 50 g ... 2 kg with base with gel				
Radius	Rmin (convex / concave) = 30 mm (with accessories 10 mm)				
Impact device	Type D (integrated)				
Max. hardness	940 HV				
Min. thickness	3 mm with coupling gel				
Hardness depth	0.8 mm				
Interface	---				
Memory	---				
Power supply	9 V block battery				
Temperature	max. +120 °C				
Dimensions	100 x 60 x 33 mm				
Weight	150 g				

**INCLUDES**  
Hardness tester, spring pin, calibration block, case, charger, rechargeable battery, brush, instruction manual

ITEM NO.	ITEM
K-PCE-1000	hardness tester

**OPTIONAL ACCESSORIES**

K-CAL-PCE-1000	ISO calibration certificate
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**Materials (adjustable)**  
STEEL (steel)  
WT. STEEL (tool steel)  
STAIN. STEEL (stainless st.)  
GC. IRON (grey cast iron)  
NC. IRON (nodular cast iron)  
C. ALUMIN (cast aluminium)  
BRASS (brass)  
BRONZE (bronze)  
COPPER (copper)

PCE-2500

Hardness Tester with Memory, USB

- measures all common hardness parameters
- can measure in any position
- memory (1250 points), PC cable, USB
- LC display shows all functions and parameters
- Lithium Ion rechargeable battery



TECHNICAL SPECIFICATIONS

Measur. range	like PCE-1000
Materials	like PCE-1000
Max. hardness	940 HV
Accuracy	±0.5 % (at HL = 800)
Impact device	D type
Radius of part	Rmin = 30 mm
(convex/ concave)	(with accessories 10 mm)
Minimum weight	2 kg with base,
of piece	50 g ... 2 kg with base with gel
Minimum thickness	3 mm with coupling gel
Hardness depth	0.8 mm
Memory / interface	1250 values / USB
Power supply	Lithium-Ion rechargeable battery
Temp. of part	+120 °C
Dimens. / weight	158 x 41 x 26 mm / 120 g

**INCLUDES**  
Hardness tester, USB charging cable, calibration block, instruction manual

ITEM NO.	ITEM
K-PCE-2500	hardness tester

**OPTIONAL ACCESSORIES**

K-CAL-PCE-2500	ISO calibration certificate
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PCE-2800

Hardness Tester with Printer, Memory

- Direct indication of tensile strength
- can measure in any position
- memory (100 sets of data), software, data cable, USB



TECHNICAL SPECIFICATIONS

Measur. range	see PCE-1000
Materials	see PCE-1000
Max. hardness	940 HV
Reproducibility	±6 HLD
Impact device	D-type
Tensile strength	374 ... 2652 N/mm² (dep. on mat.)
Radius work piece	Rmin= 30 mm with access. 10 mm
Min. weight	2 kg with base,
(work piece)	50 g on base with coupling gel
Min. thickness	3 mm (with coupling gel)
Hardness depth	0.8 mm
Memory / interface	100 sets of data / USB
Power supply	6 V Ni-Mh rechargeable battery
Operating conditions	-10 ... +50 °C
Dimensions / weight	212 x 80 x 32 mm / 650 g

**INCLUDES**  
Hardn. tester, rechargeable battery, charger, data cable, software, calibration block, printing paper, manual

ITEM NO.	ITEM
K-PCE-2800	hardness tester

**OPTIONAL ACCESSORIES**

K-CAL-PCE-2800	ISO calibration certificate
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PCE-2000

Hardness Tester for Metallic Materials with Memory and Internal Software

- measures all common hardness parameters
- external impact device with 1.5 m cable
- can measure in any position
- RS-232 interface for data transfer
- internal memory (100 groups)
- software and data cable included in delivery



TECHNICAL SPECIFICATIONS

Unit	HRC	HRB	HB	HV	HSD
Steel / cold-rolled st.	20 ... 68	60 ... 100	80 ... 647	80 ... 976	32 ... 99
Alloyed tool steel	20 ... 67	---	---	80 ... 898	---
Stainless steel	20 ... 62	46 ... 101	85 ... 655	85 ... 802	---
Grey cast iron	---	---	93 ... 334	---	---
Nodular cast iron	---	---	131 ... 387	---	---
Cast aluminium	---	---	30 ... 159	---	---
Brass	---	14 ... 95	40 ... 173	---	---
Bronze	---	---	60 ... 290	---	---
Copper	---	---	45 ... 315	---	---
Hardness scales	HL, HRC, HRB, HB, HV, HSD				
Accuracy	±1 % (at HL = 800)				
Reproducibility	±6 (at HL)				
Impact device	D-type (external)				
Max. hardness	976 HV				
Radius	Rmin (convex / concave) = 30 mm				
Weight work piece	2 kg (on stable surface / 0.05 kg with coupling gel)				
Min. thickness	3 mm with coupling gel				
Min. hardness depth	0.8 mm				
Memory / interface	100 groups / RS-232				
Power supply	2 x 1.5 V AA batteries				
Dimensions	150 x 74 x 32 mm				
Weight	245 g				

**INCLUDES**  
Hardness tester, sensor cable 1.5 m, software, RS-232 cable, brush, calibration block, carrying case, manual

ITEM NO.	ITEM
K-PCE-2000	hardness tester

**OPTIONAL ACCESSORIES**

K-RS232-USB	RS-232 to USB adaptor
K-CAL-PCE-2000	calibration certificate



PCE-3500

Portable Ultrasonic Hardness Tester with SD Card Memory

- measurement using Ultrasonic Contact Impedance (UCI) method
- hardness measured in HV, HRC, HRB, HB, MPa
- graphical colour LCD with backlight
- supports SD cards
- USB cable and software for PC included
- adapted sensor is displayed
- splash proof case



**UCI (Ultrasonic Contact Impedance)**  
A spring makes the bar in the probe vibrate lengthwise. This means that the diamond cone on the lower end of the probe is pressed against the surface of the work piece at 10 or 50 Newtons, depending on the probe you choose. The bar vibrates at natural resonant frequency, however, when the diamond penetrates the material being tested, the natural resonant frequency of the probe will decrease. The change in resonance also depends on the modulus of elasticity of the material which means that the device must be recalibrated when there is a change in material. The displacement of the frequency is a proportional result of the root of the impact surface in mm. The device measures the change in frequency and takes the test load and calibration values into account to calculate the hardness.

TECHNICAL SPECIFICATIONS

Measurement range	HV	HRC	HB
	230 ... 940	20 ... 70	90 ... 650
Accuracy	±3 %	±1.5 %	±3 %
Traction resistance	370...1740 MPa		
Hardness scale	HRC, HRB, HB, HV, MPa		
Probe	ultrasonic probe (UCI) only for steel (precalibr.), incl. in delivery; impact probe (Leeb) for steel, stainless steel, cast steel, alum., bronze (optionally available)		
Impact body	136° Vickers diamond		
Probe load	50 N (own load)		
Meas. direction	all directions 360°		
Functions	automatic probe recognition, calibration data are stored, single measurement; MIN / MAX / MEAN values; number of measurements; deviation from mean value; variation coefficient, standard deviation, mean square deviation, homogeneity of the material; histogram; Smart Mode with filter (filters outliers)		

Memory	SD card
Interface	USB
Display	graphical colour LCD, with backlight
Power supply	6 V dc or 3 x AA batteries
Battery life	approx. 10 h
Operating cond.	-20 ... +40 °C; 30 ... 80 % RH
Dimensions	160 x 75 x 30 mm
Weight	0.3 kg (without probe)
Protection class	IP 54
<b>INCLUDES</b>	
Ultrasonic hardness tester, UCI 50 N probe, SD card (2 GB), USB cable, software for PC, instruction manual	
<b>ITEM NO.</b>	<b>ITEM</b>
K-PCE-3500	ultrasonic hardness tester
<b>OPTIONAL ACCESSORIES</b>	
K-UCI-3500	UCI 10 N probe
K-Leeb-3500	Leeb probe
K-CAL-UCI	1500 calibration certificate

**Probe UCI 10 N**  
for non-destructive hardness measurements in nitrided steel, stamping tools, tins, presses and thin-wall pieces.



**Probe UCI 50 N**  
for non-destructive measurement of hardness in, for example, cam shafts, turbines, grooves, tooth flanks, turbine blades and weld seams.



PCE-5000

Ultrasonic Hardness Tester (UCI) f. Serial Measurements (Optional Test Stand)

- non-destructive measurement method
- tests HV, HB, HRC, HRB, HRA, MPa
- memory capacity for up to 1000 sets of measurement data
- can measure in small places
- large LC display
- for metallic materials
- simple calibration
- RS-232 interface



Hardn. test stand optionally avail.

TECHNICAL SPECIFICATIONS

	Measurement range	Accuracy
Rockwell	20.3 ... 68.0 HRC	±1.5 HR
	41.0 ... 100.0 HRB	
	61.0 ... 85.6 HRA	
Brinell	76 ... 618 HB	±3 %
Vickers	80 ... 1599 HV	±3 %
Tensile strength	255 ... 2180 N/mm²	
Meas. principle	Ultrasonic Contact Impedance	
Meas. direction	360°	
Meas. time	2 s	
Units	HRC, HV, HB, HRA, HRB, MPa	
Mat. thickness	min. 2 mm	
Probe	standard probe test force 20 N	
Cable length	1.5 m	
Statistics	single value, MIN / MAX, MEAN	
Display	graphical LCD with backlight	
Memory	up to 2000 sets of measurement data up to 20 calibration data	
Power supply	4.2 V battery, 4800 mAh (rechargeable)	
Operating hours	approx. 10 hours (without backlight)	
Operating cond.	-10 ... +40 °C / ≤85 % RH	
Dimensions	162 x 81 x 31 mm (display device)	
Weight	incl. probe approx. 755 g	

INCLUDES

Ultrasonic hardness tester, probe 20 N (standard), cable, 4.2 V block of rechargeable batteries, USB cable, USB adaptor, screwdriver, protective silicone cap for the probe, RS-232 interface cable, stable case, manual

ITEM NO.	ITEM
K-PCE-5000	Hardness tester

OPTIONAL ACCESSORIES

K-CAL-UCI	ISO calibration certificate
K-PCE-MSS10	probe 10 N
K-PCE-MSS50	probe 50 N
K-PCE-MSS98	probe 98 N
K-PCE-SRF	flat support ring
K-PCE-SRZG	cylindrical support ring (small)
K-PCE-SRZG	cylindrical support ring (large)
K-PCE-CB28	calibration block 28 ... 35 HRC
K-PCE-CB38	calibration block 38 ... 43 HRC
K-PCE-CB48	calibration block 48 ... 53 HRC
K-PCE-CB58	calibration block 58 ... 63 HRC
K-PCE-CB300	calibration block 300 ... 500 HV
K-PCE-HSS	hardness test stand

MF300F+

Ferrite Meter for Weld Seams Control

- non-destructive measurement of ferrite content in duplex steel and austenitic steel
- measurement in FN (ferrite number) or %
- memory for 52 values (RS-232 / USB optional)
- user calibration by means of 5 included transfer standards, factory NIST calibration



TECHNICAL SPECIFICATIONS

Meas. range	0 ... 115 FN / 0 ... 80.5 F%	
Unit	FN / F%	
Resolution	0.1 FN / 0.1 F%	
	Standard	Air-Cooled
Accuracy	(+10 ... +30 °C)	(+30 ... +300 °C)
FN 0 ... 10	±0.5 FN	±1 FN
FN 10 ... 30	±5 % MW	±10 % MW
FN 30 ... 100	±10 % MW	±20 % MW
Zero reset	Automatic if needed	
Functions	MEAN, MAX	
Memory	52 measurements	
Probe	Ø 15 mm x 120 mm, Ø m. spot 10 mm	
Oper. cond.	0 ... +40 °C; cooled: 0... +300 °C (opt.)	

INCLUDES

Ferrite meter, probe, 5 x transfer standards, carrying case, instruction manual

ITEM NO.	ITEM
K-MF300F+	ferrite meter

OPTIONAL ACCESSORIES

K-MF300HT+	meter + air-cooled probe
K-MF300F-S	USB / RS-232 cable + software