Portable hardness tester alphaDUR

Portables Härteprüfgerät nach dem UCI-Verfahren

- mobile hardness testing of miscellaneous materials
- applicable for a wide variety of uses
- measurements can be automated
- huge data storage capacity
- comprehensive range of accessories available
- comes with a set of predefined material calibrations (individual calibrations can be done and saved)
- high measuring accuracy
- large backlit LCD display
- intuitive, menu-driven user interface
- Vickers hardness, can be converted to Rockwell (HRC, HRB), Brinell (HB) or tensile strength (DIN 50150)

Technische Daten

Measuring procedure	Modified Vickers hardness to the UCI procedure according to VDI/VDE guidelines 2616, Page1. Measurement of the impressionis executed under test load.
Indentor	Diamond, Vickers 136° pyramid.
Testmaterials	Preferably metals, for which alphaDUR can be calibrated. Examinations of ceramic(s), glass and plastic are possible, if comparative measurements are accomplished for calibration.
Test load	From 10 N to 100 N, dependent on probe in use.
Display	Large diagram display, brightness and contrast adjustable. Simultaneous announcement of HV, HRC and HB.
Datastorage	916 measured values with variable organization into groups. Storage with date, time and evaluation good/badly. Optionally: Storage of 30.000 measured values.
Statistics	Mean value, minimum, maximum, Standard deviation. Measurements can be deleted at any time.
Interfaced	RS232C, RS485, Parallel
Power supply	Main-/Charging unit: 100 - 240 V AC / 15 V DC Accumulator 9,6 V / 1700 mAh
Operating times	Duty cycle (operation period): approx. 5 h Charging time: approx. 2,5 h
Lanuages	English, German, French
Temperatures	0 - 50°C operating range; Storage -20°C to +70°C
Dimensions	Main unit: 85 / 225 / 198 mm Probe: Ø 19,5 mm, length 175 mm
Weights	Complete instrument: 2200 g, Probe only: 190 g

Standard delivery

- Main unit with Accumulator
- Probe (10N, 20N, 30N, 49N or 98N) incl. connection cable and certificate
- Power supply
- Manual
- Case

Accessories

- Probe shoes for flat and curved surfaces
- High precision stand
- PC software alphaSOFT
- Carrier bag
- Handle for the probes
- Portable mini printer
- Storage for up to 30.000 readings
- Special probe SL for measuring at locations difficult to access
- Option: SPS connectable

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Tragbares Härteprüfgerät alphaDUR

Portables Härteprüfgerät nach dem UCI-Verfahren

The handy and mobile hardness tester alphaDUR provides precise and reliable hardness testing of all materials that would normally be tested according to traditional hardness testing procedures such as Vickers or Rockwell.
The alphaDUR is easy to use by means of the menu driven operation and the large backlit graphic display. The electronic evaluation of the measurement immediately provides the hardness
value in HV, HB or HRC. The quality of the testing is guaranteed by 500 measurements per second. Therefore the alphaDUR is ideal not only for the mobile use but also for the hardness testing in production and
vendor inspection. The alphaDUR can be adjusted to a wide range of materials without problems and can store up to 20 calibrations, complete with material identification. Measured data can be permanently stored with date, time, material and evaluation GOOD/BAD. For further evaluations, a variety of statistical functions are available.
The test load can be adjusted to the range of application. It is not necessary to change the calibration. The small probes allows you to test in areas, which are difficult to reach or lie on curved surfaces,
in every possible direktion without the need of a correction factor.
The documentation can be done be means of the ports of the alphaDUR to which a printer or a PC can be directly connected.

Measuring ranges		
Vickers	HV	10 - ca. 3000
Rockwell C *	HRC	20,3 - 68,0
Rockwell B *	HRB	41,0 - 99,5
Brinell *	HB	(76) - 447
Tensile strength *	N/mm²	255 - 2180

* Re-evaluation of scales according to DIN 50150 (1976)

Reproducibility		
Vickers	HV	±1% of full scale output
Rockwell C *	HRC	±0,5 points
Rockwell B *	HRB	±1,2 points
Brinell *	HB	±1% of full scale output
Tensile strength *	N/mm²	±1% of full scale output

* Re-evaluation of scales according to DIN 50150 (1976)

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