Portable Hardness Tester - NOVOTEST

Combined Hardness Tester NOVOTEST T-UD3 combines two methods of measuring hardness by an indirect method: Ultrasonic Contact Impedance (ASTM A1038) and Leeb (ASTM A956). This makes the device the most versatile portable device in the world. T-U3 only Ultrasonic Contact Impedance and T-D3 only Leeb Impedance.



The Combined Hardness Tester NOVOTEST T-UD3 allows user to measure the hardness of any metals, parts of any shape and thickness, measure the hardness of the surface hardened layers and evaluate the tensile strength.





BUILT-IN CAMERA

The device has a built-in camera, which allows the user to store a measurement archive of images of the tested objects with binding of hardness to a specific place on the product.

Advantages:

- Small indenter imprint (suits for mirror surfaces of shafts necks, blades, gear teeth, etc.)
- Measuring surface hardened layers hardness
- Wide range of hardness testing
- Various measurement modes
- 88 combinations of materials and hardness scales (calibrations)
- Calibration of any scale in any range
- Convenience and ease of measurement
- Optimized number of buttons

- Large full-color graphic display with bright backlight
- Built-in photo camera for thorough reports
- Automatic probe types recognition
- Connected probe types indication
- The calibrations are stored in UCI probe memory
- Extended operating temperature range (frost, down to -40° C)
- Internal memory and communication with a PC
- New intuitive menu with tips on the buttons
- Optional wireless mini printer
- Waterproofed housing
- Rubber bumper protected housing
- Internal clock
- Hardness value measuring for any mass products with more than 1 mm thickness (small parts, thinwalled structures, pipes, tanks, steel sheets, articles of complex shape, hardness testing of metal coatings, etc.)
- Different operating modes:
 - Graph the graph building mode
 - Histogram the histogram building mode
 - Statistics provides statistics for the current set of measurements
 - Smart filters the incorrect measurements
 - Signal displays the probe signal (only for the Leeb probe)

Specifications

UCI probe types

Leeb probe types

Measuring range

Measuring accuracy

- 1kgf (10N) 2.2 lbf
- 5kgf (50N) 11lbf
- 10kgf (98N) 22lbf
- D
- DC
- DL
- C
- D+15
- E
- G
- HRC:20~70
- HB:90~650
- HV:230~940
- Tensile strength, MPa: 370~1740
- User calibrations for any range
- (for example: HV100-1600)
- HRC: 2HRC
- HB: 10HB
- HV: 15HV

Standards	 ASTM A1038 ASTM A956 ASTM A370 ISO 16859 ASTM E140 ISO 18265 DIN 50159 GB/T 34205
Indenter	UCI probe – Diamond indenter Leeb probe – Hardened ball
Measuring direction	Any direction 360°
Data storage	Limited only by the memory card up to 32Gb
Communication	Upload data to PC and export as a spreadsheet (USB cable and software included)
Hardness scales	 UCI probe – HRC, HB, HV, MPa Leeb probe – HRC, HRB, HB, HV, HL, MPa Additional custom scales for calibration
Materials	 Ultrasonic (UCI) probe – pre-calibrated for steel Dynamic (Leeb) pre-calibrated for steel, alloy steel, cast in Additional custom materials for calibration
Data display	 Load applied/contact (UCI) Angle (Leeb) Single test result Max, Min, Average of tests Number of tests, Deviation Var. coeff. Histogram, Signal and Smart Modes (Filter of incorrect measurements).
Language	 English German French Polish Russian *additional languages available by request
Indication	Color LCD display (320×240)
Operating environment	 Temperature: -20°C~40°C Humidity: 30%~80%R.H.
Power supply	DC 4,5V (3 pcs batteries AA)
Instrument dimensions	160x75x30mm
Net weight	Approx. 0.3kg (without probe)
Gross weight (package)	2kg
Package dimensions, cm	33*27*10
Battery life	Approx. 10 hours.

Standard Package depending on T-UD3, T-U3 or T-D3

- Hardness tester •
- UCI probe (10N, 50N or 98N for choice)
- Leeb probe (D type) •
- 3pcs AA batteries •
- Test Block (OPTIONAL) •
- Charger ٠
- USB cable •
- Operating manual
- Software for PC (Need Download or Web Link)
- Case •





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