

Combined **Hardness Tester NOVOTEST T-UD3**



Unique and unmatched Portable Hardness Tester! High-precision, multi-functional, convenient, reliable and at affordable price!



The advantages of Hardness Tester NOVOTEST T-UD3:

- √ hardness measurement of any mass products √ convenience and ease of measurement. with a thickness of 1 mm − inaccessible to the dy- ✓ large full color graphic display namic (Leeb) hardness testers (small parts, thinwalled structures, pipes, tanks, steel sheets, arti- ✓ automatic recognition of probe cles of complex shape, hardness control of metal ✓ indication of the type of connected probe coatings, etc.)
- √ small imprint after measuring (mirror surfaces of shafts necks, blades, gear teeth, etc.)
- measuring the hardness of the surface hardened layer
- √ wide range of hardness

UCI probe

- √ various measurement modes
- calibration of any scale in any range

- with bright back-lighting

- √ calibrations stored in memory of probe
- √ extended temperature range (frost, down) to - 40°C)
- √ internal memory and communication with PC
- √ new, intuitive menu with tips on the buttons
- ✓ optional wireless mini printer
- √ water resistant case
- √ rubber bumper protected case

The device works with both ultrasonic contact impedance (UCI) and dynamic (Leeb) probes. User get the benefits of two methods of measurement – it is the maximum that can be obtained from a portable hardness tester.



Can be equipped with three types of UCI probes:

| Load | Advantage or Benefit | Typical Applications |
|-------------------|---|--|
| 98N (22.0 lbf) | Leaves relatively large dent. Suitable for low finished surfaces. Surface finish equivalent to 30 grind or better. | Small forged products, cast materials, heat-treated materials, etc. Turbine blades, inside tubes with Ø> 90mm. |
| 50N (11.2 lbf) | Considered to be the Universal type for most general applications. 50N of downward hand pressure is required to activate the probe. Surface finish equivalent to 80 grind or better. | |
| 10N (2.2 lbf) | Load is easy to apply; provides control to test on a sharp radius. Only 10N of downward hand pressure is required to activate the probe. Surface finish equivalent to 150 grind or better. | Ion-nitrided stamping dies and molds, forms, presses, thin-walled parts Bearings, tooth flanks Turbine blades, inside tubes with Ø> 90 mm. |

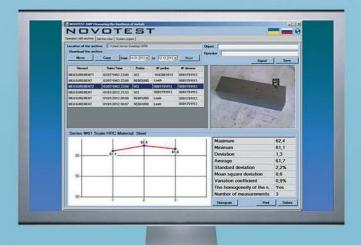
Portable hardness tester T-UD3 has different operating modes:



Sealed housing with rubber protective strips - Hardness testers is ideal for use in workshop and field conditions with high humidity, dust, etc. Hardness tester has frost-resistant display that allows user to use the device at any season and in any climatic zone of the Earth.

Combined Hardness Tester NOVOTEST T-UD3 specifications:

| UCI probe types | 1 kgf (10N) 2.2 lbf, 5 kgf (50N) 11 lbf, 10 kgf (98N) 22 lbf |
|-----------------------|--|
| Leeb probe types | D, DC, DL, C, D+15, E, G |
| Measuring range | HV:230~940; HRC:20~70; HB:90~650. Tensile strength, MPa 370~1740 (User calibrations for any scales and ranges, for example 10 - 1770 HV) |
| Measuring accuracy | HV:±3%HV; HRC:±1.5%HRC; HB:±3%HB |
| Indenter | Diamond Indenter (UCI), Hardened ball (Leeb) |
| Measuring direction | Any direction 360° |
| Data storage | Limited only by the memory card |
| Communication | Upload data to PC and export as a spreadsheet (USB cable and software included) Bluetooth, SD-card |
| Hardness scale | HRC, HB, HV, HRB, HS, HL, MPa |
| Materials | Ultrasonic (UCI) probe - pre-calibrated for steel. Dynamic (Leeb) pre-calibrated for steel, alloy steel, cast iron, stainless steel, aluminum, bronze, brass, copper. 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 Mode (Filter of incorrect measurements). |
| Indication | Color display (320x240) (Wireless connection via NOVOTEST Lab App to Android Smartphone/Tablet with touch screen any diagonal size) |
| Operating environment | Temperature: -20°C ~50°C; Humidity: 30%~80%R.H. |
| Power supply | DC 4,5V (3 pc batteries AA) |
| Instrument dimensions | 160x75x30 mm |
| Net weight | Approx. 0.3kg (Without probe) |
| Battery life | Approx. 10 hours. |



The device has PC software (novotest.info) with comfortable and intuitive interface

Standard set of Hardness Tester NOVOTEST T-UD3

- √ Electronic unit
- √ 3 pcs batteries AA
- Operating manual

- √ UCI probe
- √ Charger
- √ Software for PC

- √ Leeb probe
- √ USB cable
- √ Case

Available options for orderingof Hardness Tester NOVOTEST T-UD3

- √ UCI probe
- √ Leeb probe
- Different colors of rubber bumper protected case
- √ Wireless printer
- √ Portable grinding machine
- √ Set of measures of hardness
- ✓ Can be equipped with three types of UCI probes: 10N (2.2 lbf), 50N (11.2 lbf), 98N (22 lbf)
- √ Batteries
- √ Charger
- √ USB-cable
- √ Case



Application of Hardness Tester NOVOTEST T-UD3













