

## UCI Hardness Tester NOVOTEST T-U3 NEW

**Unique and unmatched Portable Hardness Tester!**

**High-precision, multi-functional, convenient, reliable and at affordable price!**

- ✓ 88 combinations of materials and hardness scales (calibrations)
- ✓ Photographing of tested object
- ✓ UCI probe
- ✓ Big color display
- ✓ Modes: statistic, graph, histogram
- ✓ Smart mode
- ✓ Internal memory in probe
- ✓ Wireless printer



### Description of UCI Hardness Tester NOVOTEST T-U3:



Built-in camera allows to take a picture of tested object and mark tested area with corresponding hardness value.

User get the most reliable and intuitive method of logging of measurements.



**Hardness tester has technical specifications that not inferior to the most eminent and expensive hardness tester of the world, with a much more extensive functionality!**

The ultrasonic contact impedance (UCI) probe is used for measuring the hardness of small items, objects with a thin wall, complex form, and to measure the hardness of surface hardened layers.







**Can be equipped with two types of UCI probes:**

Load	Advantage or Benefit	Typical Applications
<b>50N (11.2lbf)</b>	<p>Considered to be the Universal type for most general applications.</p> <p>50N of downward hand pressure is required to activate the probe.</p> <p>Surface finish equivalent to 80 grind or better.</p>	<p>Induction or carburized machined parts, e.g.. camshafts, turbines, weld inspection, HAZ.</p> <p>Measurement in grooves, gear tooth flanks and roots</p> <p>Turbine blades, inside tubes with <math>\phi &gt; 90\text{mm}</math>.</p>
<b>10N (2.2lbf)</b>	<p>Load is easy to apply; provides control to test on a sharp radius.</p> <p>Only 10N of downward hand pressure is required to activate the probe.</p> <p>Surface finish equivalent to 150 grind or better.</p>	<p>Ion-nitrided stamping dies and molds, forms, presses, thin-walled parts</p> <p>Bearings, tooth flanks</p> <p>Turbine blades, inside tubes with <math>\phi &gt; 90\text{ mm}</math>.</p>



Has different operating modes:



-  Graph - the mode of building of graph;
-  Histogram - the mode of building of histogram;
-  Statistics - the mode of statistic;
-  Smart - the mode of filtering of incorrect.



**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.



### UCI Hardness Tester NOVOTEST T-U3 specifications:

UCI probe types	1kgf (10N) 2.2 lbf, 5kgf (50N) 11lbf, 10kgf (98N)
Measuring Range	HV:230~940; HRC:20~70; HB:90~650. Tensile strength, MPa 370~1740
Measuring Accuracy	HV:±3%HV; HRC:±1.5%HRC; HB:±3%HB
Indenter	Diamond Indenter (UCI)
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 )
Hardness Scale	HRC, HB, HV, HRB, HS, HL, MPa
Materials	<ul style="list-style-type: none"> <li>- Ultrasonic (UCI) probe - pre-calibrated for steel.</li> <li>- Additional custom materials for calibration.</li> </ul>
Data display	Load applied/contact (UCI), 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 LCD display (320x240)
Operating Environment	Temperature:-20°C~40°C; Humidity: 30%~80%R.H.
Power Supply	DC 4,5V (3 pc batteries AA)
Instrument Dimensions	160x75x30mm
Net Weight	Approx. 0.3kg (Without probe)
Battery life	Approx. 10 hours.



The device has PC software with a comfortable and intuitive interface

The screenshot shows the NOVOTEST AWP software interface. At the top, it says "NOVOTEST AWP Measuring the hardness of metals". Below this is a table of measurement records:

Record	Date/Time	Probe	N° probe	N° device
MEASUREMENT1	03/07/1963 23:00	UCI	1043861013	0081791113
MEASUREMENT	03/07/1963 23:00	REBOUND	Leeb	0081791113
MEASUREMENT2	03/07/1963 23:00	UCI	0081791113	0081791113
MEASUREMENT	01/01/2012 21:53	UCI	0081791113	0081791113
MEASUREMENT	01/01/2012 00:08	REBOUND	Leeb	0081791113
MEASUREMENT	01/01/2012 00:07	REBOUND	Leeb	0081791113

Below the table is a graph titled "Series №01 Scale:HRC Material: Steel". The graph shows three data points connected by a red line:

Point	Value
1	61.1
2	62.4
3	61.6

To the right of the graph is a statistics panel:

Maximum	62,4
Minimum	61,1
Deviation	1,3
Average	61,7
Standard deviation	2,2%
Mean square deviation	0,6
Variation coefficient	0,9%
The homogeneity of the s...	Yes
Number of measurements	3

At the bottom right of the statistics panel are buttons for "Histogram", "Print", and "Delete".





## The advantages of UCI Hardness Tester NOVOTEST T-U3:

- ✓ hardness measurement of any mass products with a thickness of 1 mm - inaccessible to the dynamic (Leeb) hardness testers (small parts, thin-walled structures, pipes, tanks, steel sheets, articles of complex shape, hardness control of metal 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
- ✓ new, intuitive menu with tips on the buttons
- ✓ calibration of any scale in any range
- ✓ convenience and ease of measurement
- ✓ water resistant case and rubber protected bumper
- ✓ large full color graphic display with bright back-lighting
- ✓ calibrations stored in memory of probe
- ✓ extended temperature range (frost, down to - 40°C)
- ✓ internal memory and communication with PC
- ✓ various measurement modes
- ✓ optional wireless mini printer
- ✓ optimized number of buttons





## Standard set of UCI Hardness Tester NOVOTEST T-U3

- Electronic block
- UCI probe
- 3 batteries AA
- Charger
- USB cable
- Operating manual
- Software for PC
- Case



## Available options for ordering of UCI Hardness Tester NOVOTEST T-U3

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



# NOVOTEST



## Application of UCI Hardness Tester NOVOTEST T-U3

