

# Ultrasonic Thickness Gauge

## NOVOTEST UT-1M



### ◀Description of Ultrasonic Thickness Gauge NOVOTEST UT-1M▶

Ultrasonic Thickness Gauge NOVOTEST UT-1M operates on the principle of measuring the propagation time of ultrasound in the product. The pulse generator produces a high frequency electrical pulses that excite the piezoelectric transducer (Probe). At the same transducer converts electrical signals into the elastic (mechanical) vibrations - sound waves. These waves propagate from the surface to reflect the input (bottom) of the surface and re-taken and converted into an electrical signal by means of UT-probe. The instrument calculates the thickness.

Ultrasonic method is appropriate for measuring the thickness:

- ☐ products made of various metals, alloys and other materials;
- ☐ thickness of glass, plastic, composite and other products from non-metallic materials;
- ☐ the walls of the tanks, pipes, casing parts, sheets, overhead, transportation, and other structures, including the corroded surfaces, pitted, with scum, etc.;
- ☐ thickness of the products during their production and operation;
- ☐ metal thickness for diagnostic and expert work with one-side access to the object of control.

## ◀ Advantages of Ultrasonic Thickness Gauge NOVOTEST UT-1M ▶

- ☐ Ease of operation and ease of setup;
- ☐ Saved data can be transmit to PC;
- ☐ Material selection and automatic setting of ultrasound velocity;
- ☐ Large graphic display of high contrast and backlight;
- ☐ Mode “ECHO-ECHO” (Through-Coating) allows to measure through paint (*new*);
- ☐ Mapping the presence of acoustic coupling on the graphic display
- ☐ Display of measured thickness in mm and inches;
- ☐ Convenient menu in the device;
- ☐ Wide choice of UT probes with preset settings in the device;
- ☐ Modes of statistical processing of measurements;
- ☐ Ability to restore factory calibrations;
- ☐ Ability to adjust all parameters of the acoustic path;
- ☐ Ability of further adjusting the user gain directly from the measurement mode;
- ☐ Wide range of testing;
- ☐ Mode of audible and visual alarm when break the preset ranges;
- ☐ Minimum number of controls.



## ◀ Specifications of Ultrasonic Thickness Gauge NOVOTEST UT-1M ▶

Range of measured thicknesses (depending on the probe's type), mm	0,8 ... 500 or more
Setting range of ultrasound velocity, m/s	1000-17000
Resolution, mm	0,01
Response time, with no more than, s	1
Basic measurement accuracy, mm	$\pm(0,01T+0,05)$
Modes, mm	Normal, Statistic, ECHO, ECHO-ECHO (Through-Coating)
Operating temperature range, ° C	From -20 to + 40
Power supply	2 pcs AA batteries
Time of continuous work hours, not less, h	10
Weight of electronic unit with battery, no more, kg	0,2
Interface language and menu	English, Spanish, Russian

## ◀ Available options of Ultrasonic Thickness Gauge NOVOTEST UT-1M ▶

- ☐ Couplant
- ☐ UT probes
- ☐ "ECHO-ECHO" (Through-Coating) probes
- ☐ Calibration blocks



## ◀ Standard set of Ultrasonic Thickness Gauge NOVOTEST UT-1M ▶

- ☐ Electronic unit Ultrasonic Thickness Gauge NOVOTEST UT-1M
- ☐ UT probe – 1 pc. (depends on the desired range of controlled thickness)
- ☐ 2 AA batteries
- ☐ Charger of batteries
- ☐ USB Cable for PC
- ☐ Calibration certificate
- ☐ Operating manual
- ☐ Case



◀ **Other pictures of Ultrasonic Thickness Gauge  
NOVOTEST UT-1M** ▶

