



**NOVOTEST**

## **Ultrasonic Thickness Gauge NOVOTEST UT-1M**



### **Description of Ultrasonic Thickness Gauge NOVOTEST UT-1M**

**Ultrasonic Thickness Gauge NOVOTEST UT-1M is designed for rapid non-destructive testing of 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.

### **Ultrasonic method for measuring the thickness**

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.

### **The advantages of Ultrasonic Thickness Gauge NOVOTEST UT-1M**

- Wide range of measured thicknesses
- Convenience and ease of measurement
- Minimum number of controls
- Select the type of sensor used with one button
- Preset velocity of ultrasound
- Graphical display with backlight
- Compensation of probe delay



- Control of the battery
- Ease of operation and ease of setup
- Mapping the presence of acoustic coupling on the graphic display
- Fixation of the last measurement result in the removal of the transducer surface

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

The range of measured thicknesses (depending on sensor type), mm	0.8 ... 300
Probe 10MHz – P112-10-6 / 2	(range 0.8-30mm)
Probe 5MHz – P112-5-10 / 2	(range 1-75mm)
Probe 2,5MHz – P112-2,5-12 / 2	(range 2-300mm)
Setting range of the ultrasonic velocity, m / s	1000-9999
Discrete readings on the digital indicator, mm	0.1
Response time, with no more than, s	2
The basic error of measurement, mm	$\pm (0,001 T \pm 0.1)$
Overall dimensions, mm	120x60x25
Operating temperature range, ° C	-5 to +40
Power	2 AA batteries
Time of continuous work hours, not less	10
Weight of electronic unit with battery, no more, kg	0.2

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

- Couplant
- UT-probes
- Calibration blocks

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

- Electronic unit with gauge transducers (number and type of agreement with the buyer, depending on the desired range of controlled thickness)
- 2 batteries with charger
- Operation manual
- Cables
- Case

