

# **[ A1209 ] RF PATENT N0.2231753 RF PATENT N0.2082160**

# UNIVERSAL ULTRASONIC THICKNESS GAUGE

New performance for reliable measurements!

Large contrast display, integrated auxiliary features and various modes of measuring, possibility to work with all double- crystal transducers at the range from 2,5 to 10 MHz and embedded memory – everything to guarantee comfort work at any object to test.

The patented algorithm of automatic adaptation to the surface curvature and roughness (dynamical threshold) makes it possible to conduct measuring at corroded surfaces with small radius of curvature as well as at flat smooth surfaces without any extra setup or adjustments, which makes the work easier and faster.

The delivery kit contains the double-crystal transducer D1771 4.0A0D12CL, which has great wearing capacity and provides steady measuring at most objects.

Optionally the devices can be completed with a hightemperature transducer for operating at the temperature range from -20 to 200 °C.



## **FEATURES**

- Light shockproof body
- · Large informative contrast TFT display
- Built-in Lilon accumulator
- Automatic adaptation to transducers
- Discreteness of thickness measuring 0,01 or 0,1 mm
- Various operation modes
- Calibration at the tested object
- Indication of residual thickness of the tested object in per cent
- Nonvolatile memory for 50 000 measurements
- USB connection to PC for data transmission

#### **EXTRA FUNCTIONS**

- Sound indication of echo-signal reception
- · Vibro indication
- · Signal level indication
- Battery level indication
- · Automatic switch off

### **OPERATION MODES**



## NORM mode

For quick thickness measuring with the possibility to set the range of automatical flaw alarm response and to detect the metal thickness derating.

Sound and vibro indications when violating the limits of permissible results together with graphic presentation of the depth gauge scale provide comfort work.

There is a possibility to measure thickness with indication of residual thickness of the testing object in per cent of value preset by defining the upper limit indicating 100% and the lower limit indicating spoilage standard.



#### MEMORY mode

For quick thickness measuring with the possibility to save the result to the nonvolatile memory.

While saving the readings can be organized in groups which make further viewing and analysis more convenient.

# **SPECIFICATION**

Thickness measurement range(for steel) with transducer D1771 4.0A0D12CL	from 0,7 to 300,0 mm
Discreteness of thickness measuring for thickness range:	
from 0,7 to 99,99 mm	0,01; 0,1 mm
from 100,0 to 300,0 mm	0,1 mm
Basic error of measurements with discreteness:	
0,01 mm	±(0,05X+0,01) mm
0,1 mm	±(0,01X+0,1) mm
Permissible surface roughness	Rz 160
Minimum curvature radius	10 mm
Ultrasound velocity range	from 1000 to 9999 m/s
Display type	TFT
Power	built-in LiPol accumulator
Operating time without re-charging	10h
Opeating temperature	from -20 to +50 °C
Size of the electronic unit	157 x 70 x 23 mm
Weight of the electronic unit	250 g

#### **DELIVERY KIT**

- A1209 –ultrasonic thickness gauge
- Transducer D1771 4.0A0D12CL
- Double LEMO 00 LEMO 00 cable 1,2 m
- 220 B USB adapter
- USB A Micro B cable
- Bag



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