

The main feature of this thickness gauge is its possibility to operate both with single crystal and double-crystal transducers. The patented algorithm of automatic adaptation to the surface curvature and roughness allows measurements on different surfaces and thicknesses without special adjustments of the device. The A-Scan feature allows ruling out false results considerably increasing the inspection reliability.

The A-Scan feature allows ruling out false results considerably increasing the inspection reliability, to conduct express-searches of foreign inclusions and laminations and to get true results of measuring through polymeric, varnish and paint and other types of insulated coating.

The thickness gauge A1210 has a whole range of features to provide comfort and effective work:

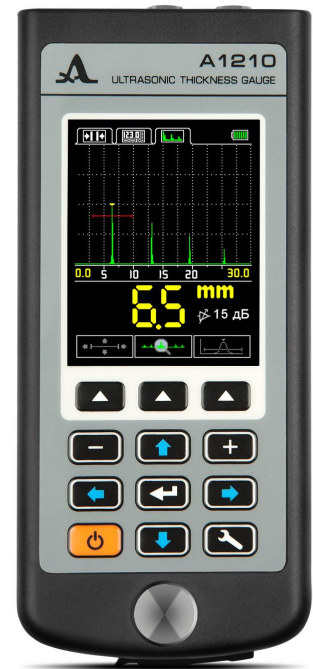
- double-crystal and single-crystal transducers
- patented system of automatic adaptation to the surface curvature and roughness
- patented auto correlated algorithm of measuring for pinpoint accuracy of results eliminating the influence of the single-crystal transducers' blind zone at small thickness.

The large TFT display ensures the full visual control of the inspection process with the help of color indications.

The magnetic holder helps to fix the thickness gauge safely to surfaces for comfort work at hard-to reach places and at metal heights.

Advantages

- 1) Colour high-contrast TFT display
- 2) A-Scan mode with an option to save images to the memory
- 3) Metal thickness measuring through insulated coating at the A-Scan mode
- 4) Nonvolatile memory for 50 000 measurements including 4 000 A-Scan images
- 5) USB connection to PC
- 6) Automatic logging of the maximum and minimum values at multiple measurements or while scanning the object
- 7) Automatic measuring of the ultrasonic wave velocity at a sample with known thickness
- 8) Setting the range of measurements
- 9) Indication of the range limits violation – with color, sound and vibro
- 10) Indication of residual thickness of the tested object in per cent
- 11) USB connection to PC for data transmission.

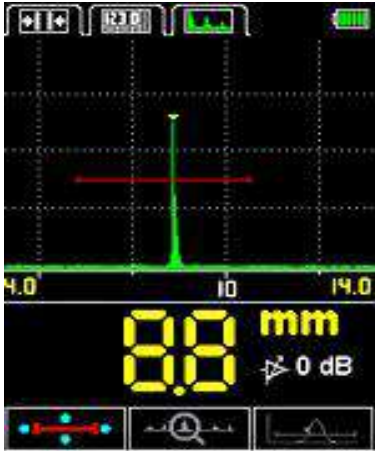


Extra Features

- 1) Discreteness of thickness measuring 0,01 or 0,1 mm
- 2) Choice between mm and inches
- 3) Vibro indication
- 4) Signal level indication
- 5) Battery level indication.

Operating Modes

A-SCAN mode



For measurements with displaying signals as A-Scan. **This mode makes it possible to rule out inaccuracy of measurements caused by duplicated readings.** There are four possible ways to conduct measuring:

- first overshoot of the strobe,
- maximum point at the strobe, between two signals and
- auto correlation function (ACF) in strobe.

The “between two signals” mode allows to measure the thickness of metal through polymeric and varnish and paint coatings without skinning.

NORM mode

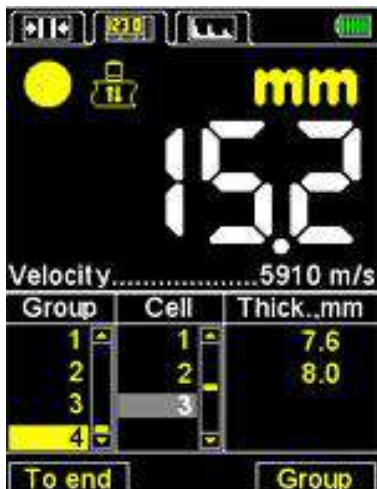
For quick thickness measuring with the possibility to set the range of automatic flaw alarm response and to detect the metal thickness derating.

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 controlled object in per cent of value preset by defining the upper limit indicating 100% and the lower limit indicating spoilage standart.



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

Parameter	Value
Thickness measurement range (for steel):	
with transducer S3567 2.5A0D10CL	from 0.7 to 300.0 mm
with transducer D1771 4.0A0D12CL	from 0.7 to 300.0 mm
Discreteness of thickness measuring:	
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	$\pm(0.05X+0.01)$ mm
with discreteness 0.1 mm	$\pm(0.01X+0.1)$ mm
Permissible surface roughness	Rz 160
Minimum curvature radius	10 mm
Ultrasound velocity range	from 1000 to 9999 m/c
Display type	TFT
При толщинах от 100.0 мм	0.1
Power	built-in LiPol accumulator
Operation time without re-charging	9h
Operating temperature	from -20 to +50 °C
Size of the electronic unit	157 x 70 x 23 mm
Weight of the electronic unit	250 g

Standart Delivery Kit

- A1210 –ultrasonic thickness gauge with A-Scan
- Transducer S3567 2.5A0D10CL
- Transducer D1771 4.0A0D12CL
- Single LEMO 00 – LEMO 00 cable 1.2 m
- Double LEMO 00 – LEMO 00 cable 1.2 m
- 220 B – USB adapter
- USB A - Micro B cable
- Bag