

Ultrasonic Wall
Thickness gauge

DELTA



- Fast and accurate thickness measurement
- 5 preset sound velocities
- Stores 10 readings
- Strong and reliable construction

DELTA – Digital Ultrasonic Thickness gauge

Application

The DELTA is hand held microprocessor controlled thickness gauge specifically designed for measuring the thickness of metallic- and non-metallic materials e.g. aluminium, titanium, plastics, ceramics glass and any other good ultrasonic wave-conducto as long as it has parallel top and bottom surfaces.

With uses in many areas of industry the DELTA can perform precise measurements of various types of raw materials, component parts, and assembled machinery. It can also be used to monitro all types of pipes and pressure vessels for loss of

thickness due to corrosion/erosion.

The DELTA is extremely easy to use, after a simple calibration to a known thickness or sound velocity, the gauge will give accurate reading in millimeters. Sound velocities for 5 different materials can be preset and 10 thickness reading can be stored in the memory.

Description

The principle of ultrasonic wave in the thickness measurement is similar to that of optical wave. The ultrasonic wave pulses transmitted by the probe reach the object to be measured and propagate in the object and

when they reach the interfaces, they are reflected back. The thickness of the object is determined by precisely measuring the time the ultrasonic wave travels in the object. To increase accuracy the DELTA is equipped with automatic gain control and V-path error correction.

Supply schedule:

The DELTA comes complete with plastic case, probe, coupling agent and instruction manual.

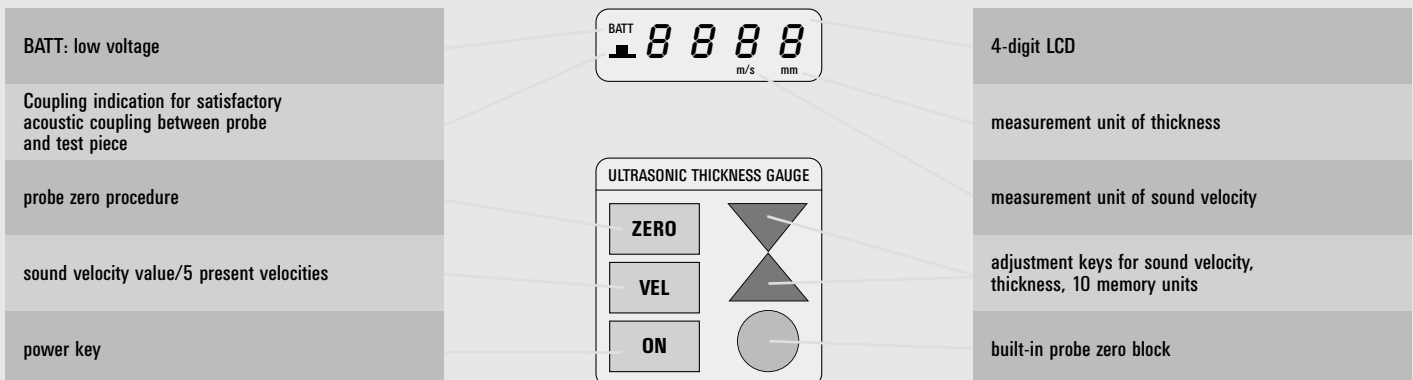
The actual sound velocities depend on the exact material compound, temperature and treatment and can thus differ from a.m. values

Technical specification

Display type:	4-digit LCD
Resolution:	0,1 mm
Measuring range:	1,0 bis 225,0 mm (in steel with standard probe, other maximum values dependant on material)
Lower limit steel pipes:	minimum dia. 20 mm x 3 mm
Tolerance:	± 0,1 mm
Sound velocity range:	1000–9999 m/s
Operating temperature:	–5°C to +45°C
Frequency:	5 MHz
Update rate:	4 Hz
Power supply:	1,5 V AA alkaline cells (2pcs)
Battery life:	250 hours with one battery set
Dimensions:	126 mm x 68 mm x 23 mm

Typical sound velocities

Material	m/s
Aluminium (alloy)	6380
Epoxy resin	2600–2840
Glass (window glass)	5790
Rubber (hard)	2200–2540
Cast iron (lamellar)	3800–4700
Copper	4700–5000
Brass	4400–4700
Plexiglass	2730
Polyethylene (PE hard)	2530
Steel (ferritic)	5940
Zinc	4190



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