



Compact device
+
Easy handling
+
9 predefined
speeds of sound

DC-2000C

Portable Wall Thickness Measurement Gauge

Ultrasonic thickness gauges are used to measure the thickness of materials from one side by means of ultrasound. An ultrasound transducer generates a high-frequency ultrasound pulse which is sent through the material to be measured. At the backside of the material the pulse is reflected and travels back to the transducer. As the material and its sound velocity is known the travel time of the pulse is used to calculate the material thickness. Wall thickness gauges are often used to determine the amount of corrosion on ships or at pipeline tubes.

The DC-2000C is an universal gauge for metallic and non-metallic materials, e. g. steel, aluminium, cast iron, glass, ceramic, plastics. The gauge is characterized by high accuracy and with an easy-to-use menu structure. The sound velocities of nine different materials are stored in the gauge. The gauge allows also the storage of four user-defined sound velocities, resulting from numerical input or built-in sound velocity measurement.

The measurement process is simple: after selecting the material or the sound velocity the probe will be placed on the measuring spot which was prepared beforehand with a small amount of couplant. A symbol in the display signals a successful pairing and the wall thickness is shown.

Different probes for different applications are available including a special high-temperature probe which allows measurements up to 350 °C.

Advantages at a glance

- + Pocket size, easy to operate
- + Auto Probe Zero Calibration
- + Auto Probe Identify
- + Measuring range: 0.65 – 400 mm (depending on probe type)
- + Suitable for various materials such as steel, stainless steel, aluminium, glass, polystyrene etc.
- + Gain adjustable: Auto, High, Medium, Low
- + Standard 5.0 MHz probe included, optional probes: 2.0 MHz, 7.5 MHz, 10 MHz, 5.0 MHz high temperature
- + Nine pre-defined sound velocities for different materials
- + Four user-defined sound velocities
- + Display resolution 0.1mm/0.01mm or 0.01/0.001 inch

DC-2000C

Technical data	DC-2000C
Measurement range	0.65 mm – 400.00 mm (depending on probe type)
Units of measurement	mm / inch
Resolution	0.1 mm / 0.01 mm 0.01 inch / 0.001 inch
Accuracy	0.65 mm – 10 mm: ± 0.04 mm 10 mm – 100 mm: $\pm (0.04 \text{ mm} + 0.1 \% \text{ of reading})$ 100 mm – 400 mm: $\pm 0.3 \% \text{ of reading}$
Zero calibration	Auto
Velocity range	1000 m/s – 9999 m/s 9 pre-defined sound velocities for different materials 4 user-defined sound velocities manual input of sound velocity
Measurement rate	4 per sec.
Display	128 x 64 LCD with backlight
Battery	2 x AAA batteries
Operating temperature	-20 °C to +50 °C
Measuring temperature	-20 °C to +350 °C (depending on probe type)
Dimensions (L x W x H)	116 mm x 64 mm x 27 mm
Weight	220 g, incl. batteries
Pre-defined sound velocities	Aluminium, Titanium, Steel, Stainless Steel, Glass, Copper, Cast Iron, Brass, Polystyrene
Available probes	5 MHz (0.8 – 300 mm, in the standard delivery) 2 MHz (2.0 – 400 mm) 7.5 MHz (0.65 – 50 mm) 10 MHz (0.65 – 20 mm) 5 MHz High temperature (2.0 – 200 mm)

Scope of Delivery

- Main Unit
- Standard 5 MHz probe D5008
- Built-in steel block 4 mm
- Couplant 75 ml
- Calibration Certificate
- Instruction Manual
- Carrying Case

