Ultrasonic Thickness Meter PCE-TG 50

PCE-TG 50 Ultrasonic Thickness Meter

Portable handheld thickness gauge with a measuring range of 1.2 ... 200.0 mm / 0.05 ... 7.87 inches (steel) and adjustable ultrasound speed / velocity

PCE-TG 50 is a compact ultrasonic thickness meter or gauge used to measure the thickness of metal, glass, plastic and other homogeneous materials. This portable handheld material thickness gauge operates with an external ultrasonic contact transducer sensor probe and requires the use of coupling gel or paste. The probe directs ultrasonic waves through the coupling gel into the material to be tested. Since different materials conduct ultrasound at different speeds or velocities, the PCE-TG 50 material thickness gauge allows for ultrasound velocity adjustments to accommodate a wide variety of material testing applications.

With the PCE-TG 50 ultrasonic material thickness gauge, you can determine the thickness of metal, glass, plastic and other homogeneous materials in seconds. Operation of the ultrasonic material thickness gauge is easily carried out via the seven-button interface. Using the integrated calibration block, the measuring device can be calibrated onsite or in the field with minimal effort. Measured values can be transferred to a PC using the optional software and connection cable (sold separately - see accessories for details). The software also offers the possibility to export the data into Microsoft Excel.

- Measurement range: 1.2 ... 200.0 mm / 0.05 ... 7.87 in (steel)
- Accuracy: ± 0.5% of rdg. ± 0.1 mm / ± 0.00393701 in
- Resolution: 0.1 mm / 0.001 in
- Ultrasound velocity (adjustable): 800 ... 9950 m/s / 2624.67 ... 32644.36 ft/s
- Adjustable ultrasound velocity (for thickness measurements of different materials)
- Requires use of contact gel or paste
- Features an integrated steel calibration block and user-friendly DIY calibration procedure
- Optional software and connection cable (sold separately) for data transfer to a PC - see accessories for details

Specifications

Measurement range	1.2 ... 200 mm / 0.05 ... 7.87 in (steel)
Accuracy	± 0.5% of rdg. ± 0.1 mm / ± 0.00393701 in
Transducer	5 MHz frequency, 8 mm / 0.32 inch diameter; Probe support surface: 10.2 mm / 0.4 in diameter; Head: 15.4 mm diameter / 0.61 in
Resolution	0.1 mm / 0.001 in
Ultrasound velocity	800 ... 9950 m/s / 2624.67 ... 32644.36 ft/s (adjustable)
Display	4-digit LCD
Operating conditions	-10 ... 50°C / 14 ... 122°F; Relative humidity: < 80% RH
Calibration block	5.0 mm / 0.2 in steel (integrated)
Measuring units	mm or in (adjustable)
Material temperature	0 ... 50°C / 32 ... 122°F (permanent); 50 ... 85°C / 122 ... 185°F (for 5 minutes, then 30 minutes cooling below 50° C / 122°F)
Data interface	RS-232 port
Power supply	3 x 1.5V AAA batteries (approx. 250 hours of battery life)
Dimensions	Approx. 142 x 77 x 40 mm / 5.6 x 3.1 x 1.6 inches (handset)
Weight	Approx. 265 g / < 1 lb (handset with batteries and probe)

Subject to change