# **Touchstone 1** Ultrasonic Thickness Gauge



The **Touchstone 1** is a high performance, low cost, simple to use handheld thickness gauge, often known as an ultrasonic thickness gage in the USA, or an ultrasonic wall thickness gauge. It is suitable for use in a variety of applications in NDT (non-destructive testing) and is capable of measuring most engineering materials including plastic, glass, copper, cast iron and aluminium as well as a wide range of steels. The Touchstone 1 is simple to calibrate and operate and produces accurate and reproducible results.

The **Touchstone 1** ultrasonic thickness gage is widely used in ultrasonic thickness testing in quality control during manufacturing and as an inspection tool to measure remaining wall thickness of materials subject to erosion and corrosion.

#### • Accreditations

- o American Bureau of Shipping Classification Society Manufacturing Process Approval
- o ISO 9001:2000 Certificate Number GB13487
- NCAGE Number U0B22
- o CE Mark BS EN 15317:2007
- o IIMS Corporate Membership Number C508
- o Nautical Institute Membership Number CA00059
- o NFPA Membership Number 2800960





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## • The complete Touchstone 1 kit includes:

- Touchstone 1 thickness gauge
- o Embedded stainless stainless 5mm calibration block
- Ultrasonic sensor
- o 125ml bottle of couplant
- o Full operating instructions
- o 2 x 9v PP3 batteries
- o Foam-lined black polymer carry case

## • Touchstone 1 applications:

- Shipping
- o Offshore
- Storage Tanks
- o Pipelines
- o Bridges
- o Road Tankers
- Lighting Columns

### • Touchstone 1 Features

- Robust and waterproof to IP66
- Resolution of 0.1mm / 4 thou

## • Touchstone 1 Technical Specifications

- o Battery Life: 40 hours nominal with a PP3 alkaline battery
- o Carry Case Dimensions: 220 x 200 x 80mm
- Operational Weight: 326g
- Shipping weight: 750g
- Simple calibration and operation
- $\circ$  back light auto shut off after 3 minutes in robust casing waterproof to IP66









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- Sensor: 5 MHz ultrasonic thickness
- Unit Dimensions: 132 x 82 x 33mm
- Temperature Range: -10°C to +50°C
- Power Supply: 1 x 9v PP3 battery
- Robust and waterproof to IP66
- Resolution of 0.1mm / 4 thou
- Thickness range: 1.0 to 199.9mm
- Resolution: 0.1mm
- Accuracy: ±0.1mm
- Velocity Adjustment: 0 to 999metres/sec
- Display: 12.5mm high LCD screen

#### Operating the Touchstone 1 Ultrasonic Thickness Gauge

- Calibrate the sensor using the inbuilt calibration block.
- Identify substance to be measured.
- Use the Sound Velocity Table to ascertain the relevant speed of sound for the substance.
- Use the up and down velocity arrows to set the required speed.
- Place couplant on the substance being tested and press the sensor down. The thickness will be displayed.





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