

## Portagauge® III

### Technical Specification

**TYPE:** Portable Ultrasonic Thickness Gauge

**FUNCTION:** for measuring thickness and corrosion of fire cylinders, ship hulls, bulk heads, pressure vessels, chemical equipment, boilers, oil storage tanks, and industrial pipe work amongst others

**PART NUMBER:** 2099382, **NSN:** 5520-99-382-6449

#### INTRODUCING THE FEATURES:

- Simple set-up and ease of operation with digital processing
- Long term reliability and battery life, light weight, compact and reliable
- Accurate measurement in steps of 0.1mm from 1.5mm-99.9mm
- Suited for a wide range of industrial applications



In over 20 years of designing and manufacturing, Coltraco have supplied robust general-purpose thickness gauges to complement our range of equipment utilizing Ultrasonic Technology across the spectrums of solids, liquids and air. In 2012, Coltraco partnered with a well-respected UK OEM of thickness gauges to design our latest model **Portagauge® III**.

This is designed with ease of use, simplicity and longevity of life as key characteristics. It is reliable and accurate and based on a technology with a long history of success in the field, combined with the most up to date designs and aesthetics. **Portagauge® III** is a handheld, simple digital ultrasonic thickness gauge for a wide range of applications across the array of our market sectors.



#### APPLICATIONS:

- Fire Systems
- Marine operation & maintenance
- Onboard vessels, rigs, platforms
- Pressure vessels and storage tanks
- Ship hulls/decks
- Bulkheads/flanges
- Rails/wheels
- Casting/Steeplejacks/Boilers
- Pipes/Tubings
- General Maintenance

#### RECOMMENDED FOR:

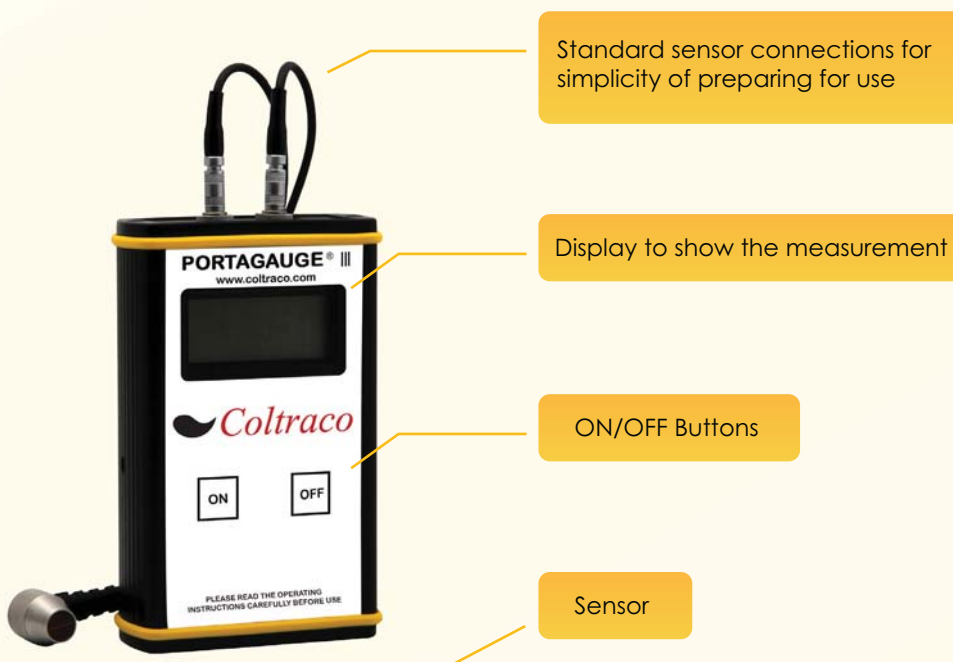
- Steel/ Stainless Steel
- Cast Iron
- Aluminium
- Copper
- Brass
- Zinc
- Quartz
- Glass/PVC
- Polyethylene
- Grey Cast Iron

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## Technical & Operation

**HOW IT WORKS:** digital ultrasonic thickness gauges use two transducers that both function as ultrasonic transmitters and receivers

1. The transmitting sensor emits an ultrasonic pulse into the material being measured eg. Cast iron
2. The pulse returns as an echo to the receiving sensor.
3. The elapsed time between the two sensors shows how thick the material is. The longer the time the thicker the material and by working out the speed of the signal the gauge works out the thickness.
- 4.



### HOW TO USE THE PORTAGAUGE®:

1. Ensure that the surface being tested is clean free of debris.
2. Place a small amount of gel on the surface to be tested.
3. Turn ON the Unit and connect the sensor. Numbers will stabilise at 0.
4. Place the sensor on the surface and hold.
5. Observe the digital reading, which will indicate in millimetres the thickness of the surface being tested

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## After Sales Support

**In The Box:** Portagauge® comes in a ready-to-go-package complete with all items required to carry out thickness measurement: carrying case, sensor set, cables and accessories, instruction manual.



*Different types of sensor are available for different applications*

### Support & Customer Service

- 1 year warranty
- Support for the life-time of the equipment via telephone/email
- Guaranteed against defects in materials & workmanship
- See terms and conditions for details
- For your Technical Queries or Sales Enquiries and Quotations please email [sales@coltraco.co.uk](mailto:sales@coltraco.co.uk) or call +44 207 629 8475

### TECHNICAL SPECIFICATIONS TABLE

Thickness Measuring Range	1.5 mm – 99.9 mm
Accuracy	+/- 0.1 mm
Sound Velocity	500 – 9000 m/s
Lower Limit Steel Pipes	1.5 x 2.0 mm, 20 x 3.0 mm determined by the transducer
Resolution	0.1 mm
Power Supply - Battery	PP3 Alk (replaceable) – Average 25,000 plus measurements per battery low charge indication
Operating Conditions	0-4C / 10-90% RH
Dimensions	140 x 80 x 30mm
Weight	300 grams

