



# Ultrasonic Thickness Gauge

## Multigaugage 5500

The Multigaugage 5500 has been designed for hands free use when climbing on staging, ladders, scaffolding or when accessing by rope. Whether it's onboard a ship, on large storage tanks, climbing on top of a road tanker or inspecting underneath a bridge, the 5500 will make the job much easier. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes. All probes have Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge at the same time as transmitting recognition data - the result is a perfectly matched probe and gauge for enhanced performance. Additionally, the Automatic Measurement Verification System (AMVS) ensures only true measurements are displayed, even on the most heavily corroded metals.

### Features

- Ignores coatings up to **6 mm thick** using **Multiple Echo**.  
Coating Plus+ ignores coatings up to 20 mm.
- Automatic Measurement Verification System (AMVS).
- Mounts onto waist belt or chest harness for hands free use.
- No zeroing required.
- Single crystal soft faced probe protected by a membrane.
- Easy calibration with menu driven buttons.
- Intelligent Probe Recognition (IPR).
- Echo strength indicator.
- 3 year warranty.
- Free calibration for the life of the gauge.



### Typical Applications

- |                 |                    |
|-----------------|--------------------|
| Shipping        | Pipelines          |
| Bridges         | Road Tankers       |
| Pilings         | Offshore Platforms |
| Storage Tanks   | Lighting Columns   |
| Industry        | Phone Masts        |
| Quality Control | Lock Gates         |
| Leisure Craft   | Barges             |

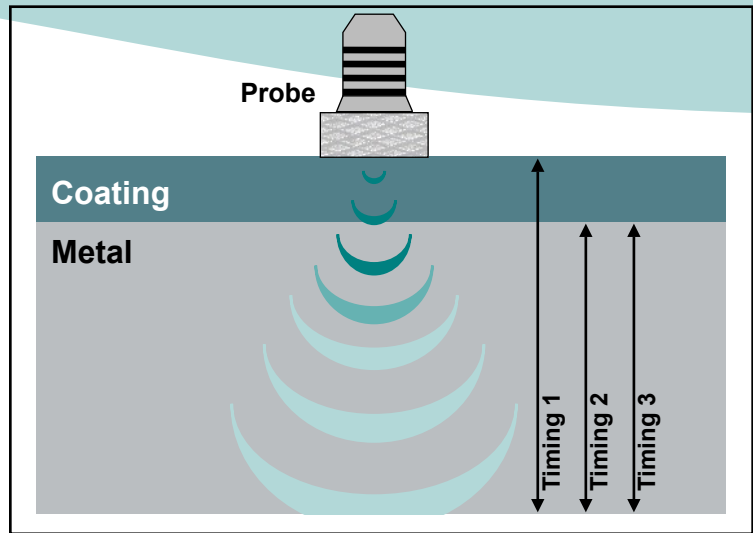
# About Multiple Echo

All Ultrasonic Thickness Gauges should be calibrated to the velocity of sound of the material being measured. Coatings have a different velocity of sound than metal and it is important they are not included in the measurement. Multiple Echo ensures all coatings, up to 6mm thick, are completely eliminated from the measurement.

## How it works:

A transmitted ultrasound pulse travels through both the coating and the metal and reflects from the back wall. The returned echo then reverberates within the metal, with only a small portion of the echo travelling back through the coating each time. The timing between the small echoes gives us the timing of the echoes within the metal, which relate to the metal thickness. The returned echoes need not be consecutive as the gauge will interpret them automatically and calculate the thickness. A minimum of three echoes are checked each time.

This is referred to as the **Automatic Measurement Verification System (AMVS)**.



# Specification

<b>Sound Velocity Range</b>	From 1000 m/s to 8000 m/s (0.0394 in/μs to 0.3150 in/μs)		
<b>Single Crystal Soft Faced Probe Options</b>	2.25 MHz	3.5 MHz	5 MHz
<b>Probe Measurement Range</b>	3 - 250 mm (0.120" to 10")	2 - 150 mm (0.080" to 6")	1 - 50 mm (0.040" to 2")
<b>Probe Sizes</b>	13 mm (0.5") & 19 mm (0.75")	13 mm (0.5")	6 mm (0.25") & 13 mm (0.5")
<b>Resolution</b>	0.1 mm (0.005") or 0.05 mm (0.002")		
<b>Accuracy</b>	± 0.1 mm (0.005") or ± 0.05 mm (0.002")		
<b>Coatings Range</b>	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*		
<b>Display</b>	Red 4 character 7 segment LED		
<b>Batteries</b>	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD		
<b>Battery Life</b>	Up to 50 hours continuous use using alkaline batteries		
<b>Gauge Dimensions</b>	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")		
<b>Gauge Weight</b>	320 g (11.3 ounces) including batteries		
<b>Environmental</b>	Case rated to IP65. RoHS and WEEE compliant		
<b>Operating Temperature</b>	-10°C to +50°C (14°F to 122°F)		
<b>Storage Temperature</b>	-10°C to +60°C (14°F to 140°F)		

\* Figures relate to most coating types

The Tritex Multigauge 5500 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.



## Kit Contents:

Multigauge 5500 gauge, probe, probe lead, spare membranes, membrane oil, belt clip, ultrasonic gel, 15mm test block, membrane key, batteries, manual, calibration certificate, carry case. Optional leather case.

**3 YEAR WARRANTY**

# Contact

**TX Marine Messsysteme GmbH**  
 Sandkamp 18  
 25368 Kiebitzreihe  
 Germany  
 t: +49 (0) 4121 491 6890  
 f: +49 (0) 4121 463 4874  
 e: office@txmarine.com  
 w: www.txmarine.com

