

# Ultrasonic Thickness Gauge

## Shipping

Tritex ultrasonic thickness gauges are ideally suited for the shipping and marine industry. The rugged designs not only look good but are also durable. All probes have **IPR (Intelligent Probe Recognition)**, 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. That's not all; the **AMVS (Automatic Measurement Verification System)** ensures only true measurements are displayed, even on the most heavily corroded metals. Housed in purpose designed cases and incorporating **Triple Echo** and **Coating Plus+** to completely ignore coatings, Tritex Multigauges are the choice for the future...

## A choice of two...

### Multigauge 5500

The **Multigauge 5500** is supplied with a belt clip for hands free use when climbing on staging, ladders, scaffolding or when accessing by rope during ship's surveys. The easy to use keypad allows operator interface whilst the bright LED display can be used in all light conditions, whether inside holds, cargo tanks or out on deck.



### Multigauge 5600

The **Multigauge 5600** is a simple, robust ultrasonic thickness gauge designed for most common thickness gauging applications aboard ships or in the dockyard. The graphical LCD display gives detailed information such as echo strength, probe type and measurement units. The moulded soft rubber surround feels comfortable, looks good and provides extra protection against knocks and scrapes.

## Vessel Types

Tankers	Fishing Boats
Bulkers	Barges
F.P.S.O	Product Tankers
Aframax	General Cargo
Panamax	VLCC
Shuttle Tankers	ULCC

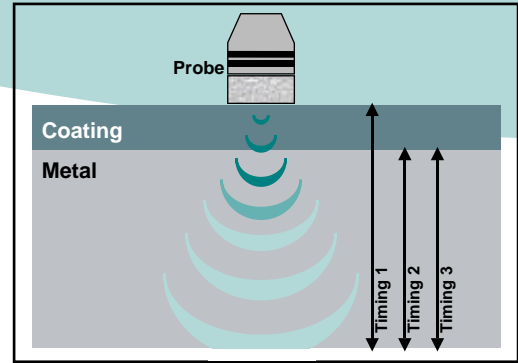
simple . accurate . robust

# About Triple 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. Triple Echo ensures all coatings 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).



## Typical Applications

Pipelines - Cargo & Ballast	Bulkheads	Hull Bottom	Boiler Tubes
Special Surveys	Frames	Hull Sides	Hatch Covers
Cap Surveys	Main Deck	Stringers	Fire Lines

## 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>Display</b>	Multigaugage 5500 - Red 4 character 7 segment LED Multigaugage 5600 - Multi character LCD with white back light		
<b>Batteries</b>	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD		
<b>Battery Life</b>	20 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>	Multigaugage 5500 - 320 g (11.3 ounces) including batteries Multigaugage 5600 - 330 g (11.6 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)		

Tritex Multigauges are manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

## Contact

Tritex NDT Ltd  
Unit 10  
Mellstock Business Park  
Higher Bockhampton  
Dorchester, Dorset  
United Kingdom  
DT2 8QJ

t: +44 (0) 1305 257160  
f: +44 (0) 1305 259573  
e: sales@tritexndt.com  
w: www.tritexndt.com

simple . accurate . robust

