



# Ultrasonic Thickness Gauge

## Multigauge 5700 Datalogger

The Multigauge 5700 is a simple, robust ultrasonic thickness gauge designed for most common thickness gauging applications with the added benefit of being able to store measurements within the gauge. The easy to use keypad allows operator interface whilst the bright LCD display can be used in all light conditions. 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. The gauge can store measurements in either a grid or string format which can then later be used in other proprietary programs.









Easy Menu System



- Ignores coatings up to 6 mm thick using Multiple
   Echo. Coating Plus+ ignores coatings up to 20 mm.
- Automatic Measurement Verification System (AMVS).
- Large colour LCD display giving user information.
- · No zeroing required.
- Wireless data transmission.
- 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.

simple . accurate . robust

### **Typical Applications**

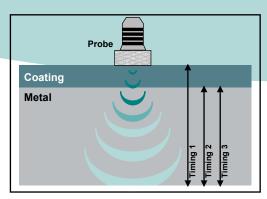
Shipping Pipelines
Bridges Road Tankers
Pilings Offshore Platforms
Storage Tanks Lighting Columns
Industry Phone Masts
Quality Control Lock Gates
Leisure Craft Barges

### 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 though 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

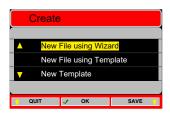


small echoes gives us the timing of the echoes within the metal, which relate to the metal thickness. The returned echoes need not be consecutive as the gauge will interpret them automatically and calculate the thickness. A minimum of three echoes are checked each time. This is referred to as the **Automatic Measurement Verification System (AMVS)**.

## Datalogging

Measurements can be logged using a grid or string format. The gauge will store up to 895 files, each containing 100 records. Each record can store either a string of 250 or grid of  $16 \times 16$  measurements. The simple, easy to use menu guides the user through intuitive setup procedures.

The gauge uses wireless technology to transmit the measurements to the PC where dedicated Communicator software allows the analysis of the results or easy production of templates.



### Specification

The Tritex Multigauge 5700 has been manufactured to comply with British Standard BS EN 15317:2007, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

Sound Velocity Range	From 1000 m/s to 8000 m/s (0.0394 in/µs to 0.3150 in/µs)		
Single Crystal Soft Faced Probe Options	2.25 MHz	3.5 MHz	5 MHz
Probe Measurement Range	3 - 250 mm (0.120" to 10")	2 - 150 mm (0.080" to 6")	1 - 50 mm (0.040" to 2")
Probe Sizes	13 mm (0.5") & 19 mm (0.75")	13 mm (0.5")	6 mm (0.25") & 13 mm (0.5")
Resolution	0.1 mm (0.005") or 0.05 mm (0.002")		
Accuracy	± 0.1 mm (0.005") or ± 0.05 mm (0.002")		
Display	Colour LCD		
Storage capacity	32 Mb		
Data Transmission	Wireless RF		
Coatings Range	Up to 6mm (Standard Mode)*; up to 20mm (Coating Plus+)*		
Batteries	3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD		
Battery Life	Up to 50 hours continuous use using alkaline batteries		
Gauge Dimensions	147 mm x 90 mm x 28 mm (5.75" X 3.5" X 1")		
Gauge Weight	325 g (11.5 ounces) including batteries		
Environmental	Case rated to IP65. RoHS and WEEE compliant		
Operating Temperature	-10°C to +50°C (14°F to 122°F)		
Storage Temperature	-10°C to +60°C (14°F to 140°F)		
	_		* Figures relate to most coating type





#### Kit Contents:

Multigauge 5700 gauge, probe, probe lead, spare membranes, membrane oil, ultrasonic gel, 15mm test block, membrane key, batteries, transceiver, Communicator software, manual, calibration certificate, carry case.

Optional leather case.

#### **3 YEAR WARRANTY**

### Contact

#### **UK Office:**

#### 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

#### **USA Office:**

#### Tritex NDT LLC

1533 Stuyvesant Avenue, Union, New Jersey, 07083, United States

t: +1 908 688 6706 f: +1 908 688 9040

e: sales.us@tritexndt.com

w: www.tritexndt.com

