

Underwater Ultrasonic Thickness Gauge

 tritex
ndt

“We have a lot of experience using underwater thickness gauges, but my team insist on using only the Tritex gauges now. The Multigauge 3000 gives stable measurements and locks onto readings instantaneously”

SeaTech Commercial Diving Services Ltd - United Kingdom

Typical Applications

Shipping
Bridges
Pipelines
Dockyards
Offshore Platforms
Wind Turbines
Pilings
Dock Gates

Multigauge 3000 Diver

The Multigauge 3000 Underwater Gauge is a simple, robust ultrasonic thickness gauge designed for most common underwater thickness gauging applications. The gauge is pressure tested to 500m and has the option to transfer measurements to a surface display unit with the simple addition of a replacement end cap. It has been designed and built to survive extremely harsh conditions that exist in the offshore and underwater industries worldwide. The gauge uses multiple echo, which means measurements can be easily taken without the need to remove coatings, and the large bright LED display ensures the display can be seen by the diver, even in poor visibility.

The gauge is equipped with **Intelligent Probe Recognition (IPR)**, which automatically adjusts settings in the gauge for enhanced performance and **Automatic Measurement Verification System (AMVS)** to ensure only true measurements are displayed, even on the most heavily corroded metals.

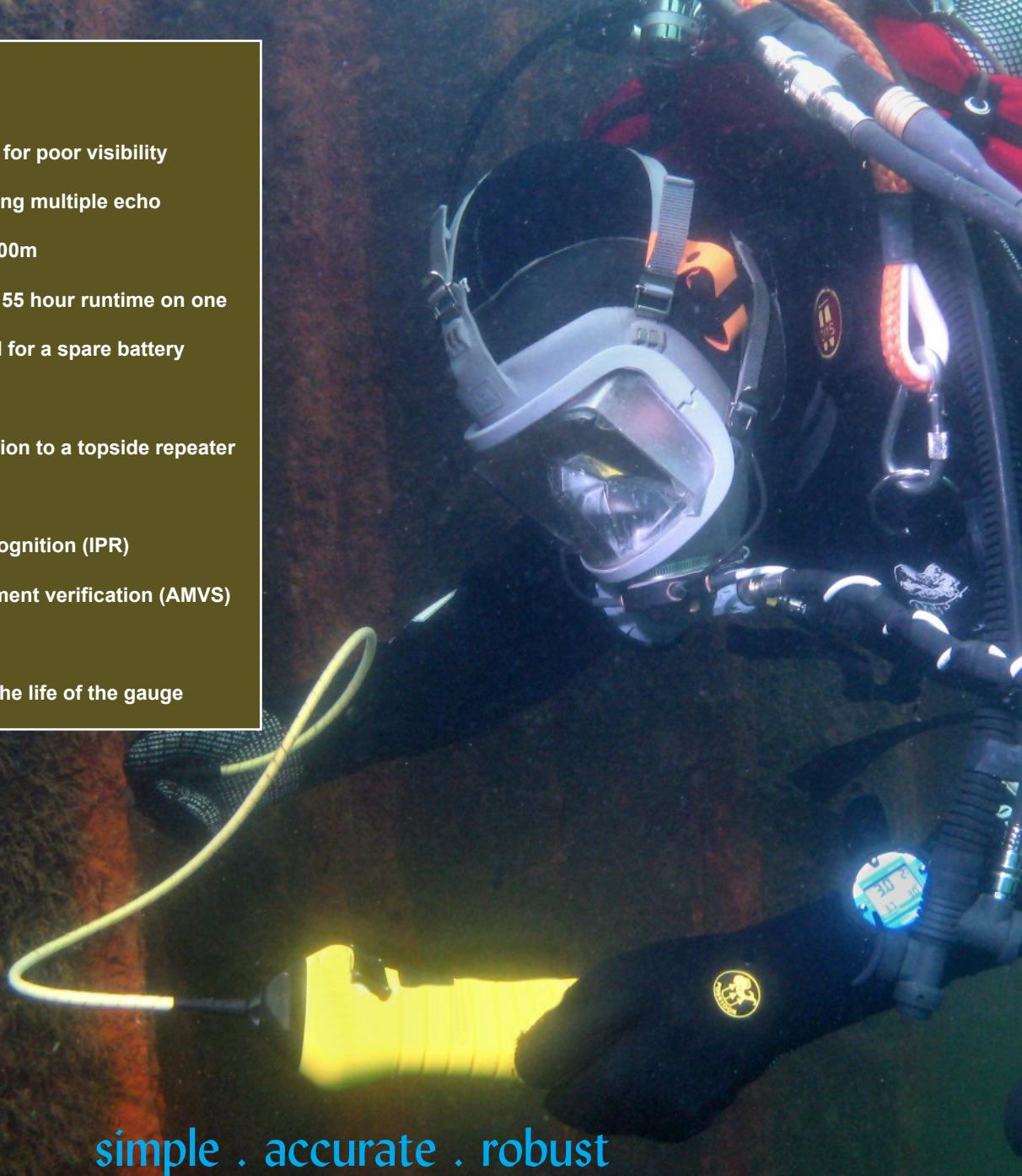


Robust Probe & Cable



Features

- Large 10mm display for poor visibility
- Ignores coatings using multiple echo
- Pressure tested to 500m
- Integral battery with 55 hour runtime on one fast charge. No need for a spare battery
- Easy to use
- No fuss upgrade option to a topside repeater
- Rugged and robust
- Intelligent probe recognition (IPR)
- Automatic measurement verification (AMVS)
- No zeroing required
- Free calibration for the life of the gauge



simple . accurate . robust

Surface Display Unit

The Surface Display Unit is used with the Multigauge 3000 Underwater Thickness Gauge to verify the measurements that the diver is getting, by either a class surveyor or supervisor. Also, readings can be clearly taken on the surface if the diver is operating in zero visibility. The Surface Display Unit has bi-directional communication with the Multigauge 3000 Underwater Thickness Gauge – This means that settings can be adjusted in the Multigauge 3000 without having to break the 'O' ring seals. Settings, such as calibration for different metal types, can be adjusted from the surface whilst the diver is underwater using the Multigauge 3000 Underwater Thickness Gauge.



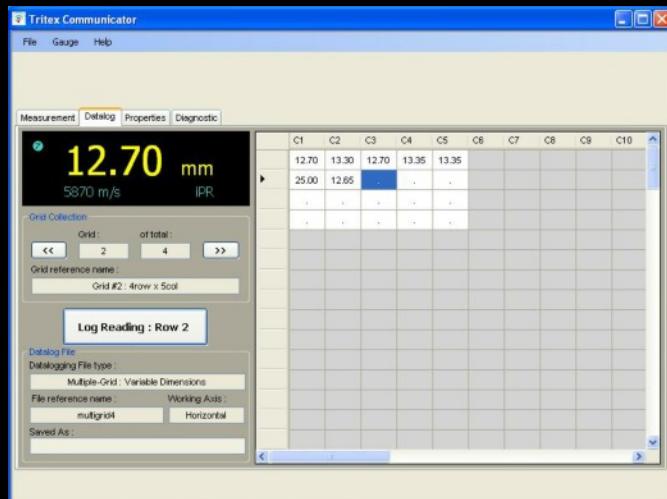
"The gauge gives quick and accurate readings, requires far less surface preparation than other makes we have used and locks on much faster. It can speed up the survey process by a factor of at least two."

Communicator Software

Tritex Communicator software displays live measurement results from the Multigauge 3000 onto either a laptop or PC. Templates can be preset based on a grid or string of measurements. This gives maximum versatility for a wide range of applications including measurements on pipelines, pilings or ship hulls.

As well as storing measurement data, Communicator software also has the option to store the time, date and an identifying label for each measurement. In addition, various settings within the gauge can be changed from the software to optimise performance.

The stored data is saved in a standard TXT format allowing importation into standard analysing programs.



Features

- Displays real time measurements from the Multigauge 3000 Ultrasonic Thickness Gauge
- Easy to install and very user friendly
- Datalogging with grid or string templates, or a combination of both
- Bi-directional to allow settings in the gauge to be changed when the Multigauge 3000 is being used underwater
- Accepts RS232 or RS422 input
- Time, date and a label can be added to each measurement value
- Common output interface (.txt)
- Easy to use wizards for template programming

Specifications

Multigauge 3000 Gauge

* Figures relate to most coating types

Sound Velocity Range	<i>From 1000 m/s to 8000 m/s (0.0394 in/μs to 0.3150 in/μs)</i>		
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")	13 mm (0.5")
Resolution	<i>0.1 mm (0.005") or 0.05 mm (0.002")</i>		
Accuracy	<i>± 0.1 mm (0.005") or ± 0.05 mm (0.002")</i>		
Coatings Range	<i>Up to 6 mm (Standard Mode)*; up to 20 mm (Coating Plus+)*</i>		
Display	<i>10mm Red 4 character 7 segment LED</i>		
Pressure Tested	<i>500 metres</i>		
Batteries	<i>1 x Rechargeable 7.2V 2.3Ah NiMH battery pack</i>		
Battery Life	<i>55 Hours continuous use</i>		
Gauge Dimensions	<i>235 mm x 80 mm (9.25" x 3.15")</i>		
Gauge Weight	<i>1110 g (38.85 ounces) fully assembled</i>		
Environmental	<i>RoHS and WEEE compliant</i>		
Operating Temperature	<i>-10°C to +50°C (14°F to 122°F)</i>		
Storage Temperature	<i>-10°C to +60°C (14°F to 140°F)</i>		

The Tritex Multigauge 3000 has been manufactured to comply with British Standard BS EN 15317:2013, which covers the characterisation and verification of ultrasonic thickness measuring equipment.

Surface Display Unit

Display:	<i>Multi character LCD with white backlight</i>
Batteries:	<i>3 x disposable AA alkaline batteries or rechargeable NiMH / NiCD</i>
Battery Life:	<i>Up to 50 Hours continuous use using alkaline batteries</i>
Gauge Dimensions:	<i>147 mm x 90 mm x 28 mm (5.75" X 3.5" x 1")</i>
Gauge Weight:	<i>330 g (11.6 ounces)</i>
Environmental:	<i>Case rated to IP65. RoHS and WEEE compliant</i>
Operating Temp:	<i>-10°C to +50°C (14°F to 122°F)</i>
Storage Temp:	<i>-10°C to +60°C (14°F to 140°F)</i>

Kit Contents

Multigauge 3000, probe, spare membranes, membrane oil, 15mm test block, membrane key, spare 'O' rings, Molykote grease, nose cone release bar, battery charger with appropriate power lead, manual, calibration certificate, carry case.

3 YEAR WARRANTY



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