



Cygnus Heavy Duty

MULTIPLE ECHO ULTRASONIC DIGITAL THICKNESS GAUGE

Measures metal thickness to determine wastage or corrosion accurately, quickly and without removing protective coatings

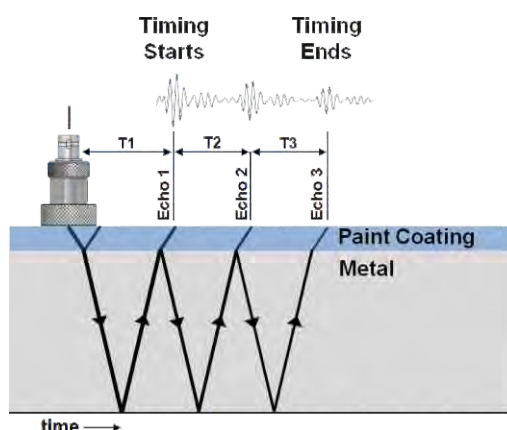


Features

- Heavy duty sealed unit - highly water and dust resistant
- Rugged construction - shock proof
- Stable calibration - linear accuracy - no zero adjustment
- Self verification of the measurements to ensure accuracy
- Various probe options
- Displays sound velocity settings
- Echo strength indicator to aid measurement
- Bright LED display with polarised filter
- Gauge senses probe type and automatically adjusts settings for optimum performance
- Low battery warning
- Metric / Imperial switchable
- Deep-Coat mode for coatings up to 20 mm (3/4") thick.

Benefits of Cygnus Multiple Echo

- Measures remaining metal thickness on corroded and coated structures
- All measurements are error checked using 3 return echoes to give repeatable, reliable results
- Accepted by all major classification societies
- Greatly reduces inspection time and costs
- Echo strength indicator to aid measurement.



With multiple echo, readings are taken by measuring the time delay between any three consecutive backwall echos. The time of T1 (coating thickness) is ignored. The times of T2 and T3 are equal to the time that it takes to travel through the metal. Only by looking at three echos can the measurements be automatically verified (where $T2 = T3$).





Applications

Maintenance and safety checks of metal thickness for:

- Metal thickness monitoring on cranes, marine structures and conveying systems
- Corrosion checks on ships' shell plates, bulkheads and structure
- Metal thickness safety checks on steam and pressurised water systems, transportable gas containers and compressed air systems
- Systematic wall thickness and corrosion monitoring of storage tanks and process vessels
- Quality assurance metal thickness checks
- Maintenance and safety checks on bridges and street lighting columns
- Pipeline wall thickness monitoring.

Kit Contents

Instrument, heavy duty remote 2.25 MHz x 13 mm (1/2") diameter probe, battery pack, spare membranes and 'O' rings, steel test block, calibration trim tool, operational manual and carry case.



Specifications

Materials	Sound velocities between 2000 m/s and 7000 m/s (0.059 and 0.31 in/microsec) - covers virtually all common engineering materials
Measurement Range in Steel	3 mm - 250 mm (0.110" - 9.995") with 2.25 MHz probe 2 mm - 150 mm (0.065" - 6.000") with 3.5 MHz probe 1 mm - 50 mm (0.045" - 4.000") with 5.0 MHz probe
Accuracy	0.1 mm (0.005") when calibrated in accordance with Cygnus Instruments Calibration Procedures
Resolution	0.1 mm or 0.05 mm (selectable) (0.005" or 0.002")
Probes	Single crystal soft-faced compression remote or fixed head probe 6 mm (1/4") - 5 MHz 13 mm (1/2") - 2.25, 3.5 or 5 MHz 19 mm (3/4") - 2.25 MHz (Lower frequency probes offer better penetration on heavy corrosion/coatings)
Power	3 x AA alkaline batteries
Display	Large clear LED display with polarised filter
Size	240 mm x 75 mm (8 3/8" x 3")
Weight	886 gms (20 oz) - with remote probe 827 gms (29.2 oz) - with fixed head probe
Operating Temp.	0°C to +35°C (32°F to 95°F)
Compliance	CE, British Standard BS EN 15317:2013 (Specification for the characterisation and verification of ultrasonic thickness measuring equipment)
Environmental	RoHS, WEEE compliant
Warranty	3 years on gauge, 6 months on probe

*Specifications are subject to change for product improvement

Cygnus Thickness Gauges



Intrinsically Safe



Hands Free



Data Logger



General Purpose



Underwater



DIVE
(Underwater A-Scan)



Mini ROV Mountable



ROV Mountable



Russell Fraser Sales Pty Ltd

Unit 7/38 Waratah St
Kirrawee NSW 2232

Ph: (02) 9545 4433
Fax: (02) 9545 4218

Email: rfs@rfsales.com.au
Web: www.rfsales.com.au

ABN: 79 074 258 549



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