



Cygnus 4 General Purpose

MULTIPLE ECHO ULTRASONIC DIGITAL THICKNESS GAUGE

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



Features

- Light, rugged, small and shock-proof within IP65 & IP67 sealed aluminum enclosure
- Gauge senses probe type and automatically adjusts settings for optimum performance
- Valid thickness measurements and minimum thickness function
- LCD graphic display with automatic white backlight
- Cygnus Echo-Strength bars assist thickness measurements
- Simple gauge and menu operation with 3 tactile keys
- Protective silicone sleeve offers maximum protection and versatility
- Secure, twist-to-lock probe connection (BNC)
- Deep-Coat mode for coatings up to 20 mm (3/4") thick
- Rugged probe cable designed for superior flexibility.

The new Cygnus 4 is the most versatile through coating thickness gauge available and perfect for all lighting conditions.

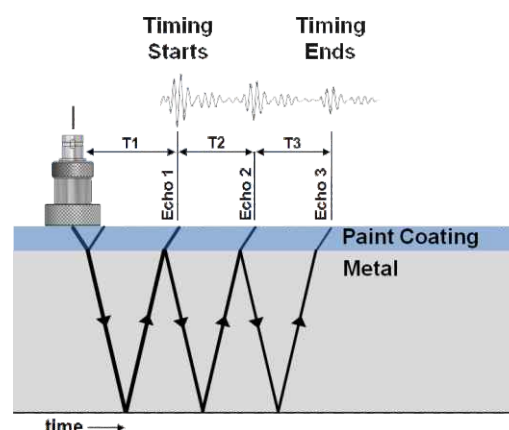
Lighter and simpler to use, yet accurate and very durable!

Ideal for use on flat surfaces or pipes. Our multiple echo single crystal probe technology means you can measure through thick coatings and only the remaining metal thickness is displayed.



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 $T2 = T3$).



RINA

— Type Approved —



Applications

Maintenance and safety checks of metal thickness for:

- Ships
- Storage tanks
- Pipelines
- Bridges
- Street lighting columns
- LPG vessels
- Road transport tankers
- Offshore platforms
- Piers, jetties and pilings
- Processing vessels
- Cranes.

...plus many more.

Kit Contents

Instrument, 2.25MHz x 13 mm (1/2") diameter probe, spare membranes, steel test block, membrane couplant, ultrasonic couplant, accessory pouch, protective silicone sleeve with neck strap, operation manual, carry case, blue high flex probe cable and optional belt/harness clip.



Specifications

| | |
|-----------------------------------|---|
| Materials | Sound velocities between 2000 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 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 | 2 x 'AA' alkaline batteries or rechargeable NiMH / NiCD |
| Battery Life | Up to 30 hours' continuous operation with alkaline batteries |
| Display | Large liquid crystal display with white backlight - automatically turns off in bright light conditions |
| Size | 85 mm x 115 mm x 25 mm (4 3/4" x 3 3/8" x 1") |
| Weight | 275 g (9.7 oz) (inc. batteries) |
| Operating Temp. | -10°C to +50°C (14°F to 122°F) |
| Environmental Protection | IP65 & IP67 |
| Compliance | CE, British Standard BS EN 15317:2007 (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



Heavy Duty



Underwater



DIVE
(Underwater A-Scan)



Mini ROV Mountable



ROV Mountable

For more products, please visit www.cygnus-instruments.com



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