CYGNUS
INSTRUMENTS

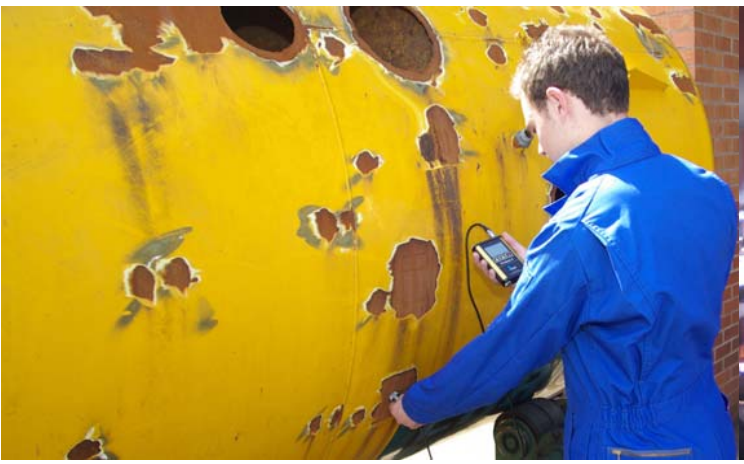
Solenvis
experts in energy metering

With IP65 & IP67 rated protection

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.



Primary 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 thick
- Rugged probe cable designed for superior flexibility

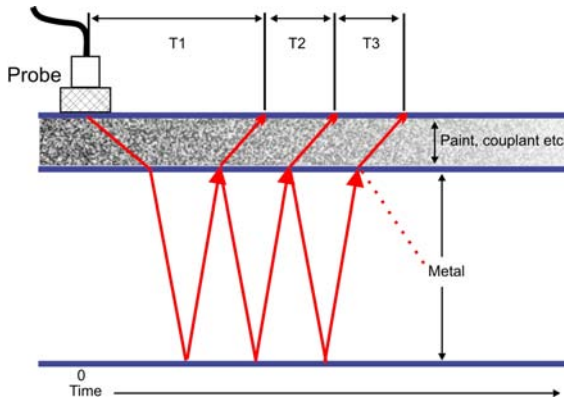
The new Cygnus 4 is the most versatile through coating thickness gauge available and perfect for all lighting conditions.

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 echoes can the measurements be automatically verified (where T2 = T3).

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, 2.25 MHz x 13 mm diameter probe, spare membranes, 15 mm 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.

Optional belt/harness clip

Specification

Materials	Sound velocities between 2000 m/s and 7000 m/s – covers virtually all common engineering materials
Measurement Range in steel	3 mm – 250 mm with 2.25 MHz probe 2 mm – 150 mm with 3.5 MHz probe 1 mm – 50 mm with 5 MHz probe
Accuracy	±0.1 mm or ±0.05 mm (selectable)
Resolution	0.1 mm or 0.05 mm (selectable)
Probes	Single crystal soft-faced compression. 6 mm – 5 MHz 13 mm – 2.25, 3.5 or 5 MHz 19 mm – 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
Weight	275 g (inc batteries)
Operating Temp	-10°C to +50°C
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

Specifications are subject to change for product improvement

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LLOYD'S REGISTER QUALITY ASSURANCE ISO9001
CYG S.033 ISS6