Cygnus 4 General Purpose
Multiple-Echo Ultrasonic Thickness Gauge

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

"Simplicity through technology"

CYGNUS
INSTRUMENTS

NEW CYGNUS 4 GENERAL PURPOSE MULTIPLE-ECHO THICKNESS GAUGE

The NEW Cygnus 4 ultrasonic thickness gauge is a small, tough and accurate through coating digital thickness gauge.

Designed for the harshest of environments with a simple to use keypad, intuitive menus and a colour LCD display which can be viewed in all lighting conditions.

The twin shot injection moulded enclosure has a soft but durable TPE outer skin which is comfortable to hold and protects against bumps while the hard internal shell offers maximum strength and environmental protection certified to the demanding US MIL STD 810G standard.

Perfect for use on flat plate, curved 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.

KEY FEATURES

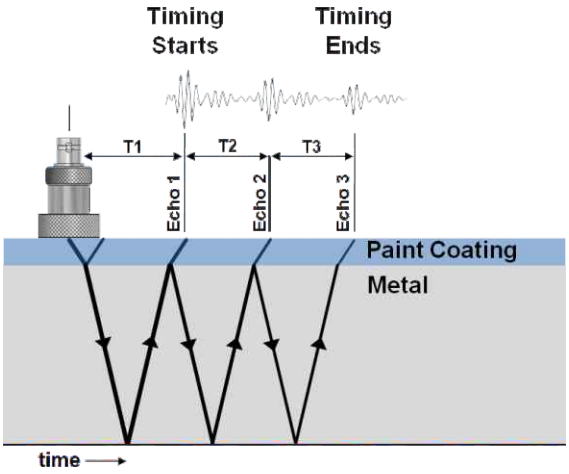
- Multiple-Echo for reliable, accurate through coating measurements as specified by Classification Societies
- Large bright colour LCD screen with back light
- Deep-coat mode, measure through coatings up to 20 mm thick
- Wrist mountable
- Min/max measurement limit functions with visual and vibrate alert
- Intuitive easy to use menu
- Extremely rugged enclosure – shock and impact to US MIL STD 810G
- Environmental sealing to IP67 – US MIL STD 810G

KEY FEATURES (CONT.)

- Cygnus echo strength bars to assist quick measurements
- Buttons integral with the TPE moulding and designed for minimum 100,000 depressions.

MULTIPLE-ECHO MEASURING MODE

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



Cygnus Multiple-Echo Diagram

With Multiple-Echo, readings are taken by measuring the time delay between any three consecutive back-wall 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).

All Cygnus thickness gauges are supplied with a 3 YEAR Cygnus Gauge Warranty as standard

SPECIFICATION

Materials	Sound velocities between 2000 m/s - 9000 m/s - covers virtually all common engineering materials
Accuracy	±0.1 mm or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure
Resolution	0.1 mm or 0.05 mm
Probes	Single crystal probes: 6 mm - 5 MHz (S5A) 13 mm - 2.25 MHz (S2C (standard)), 3.5 MHz (S3C) or 5 MHz (S5C) 19 mm - 2.25 MHz (S2D)
Measurement Range in Steel	Single crystal probes: 3 mm - 250 mm with 2.25 MHz probe (S2C/D) 2 mm - 150 mm with 3.5 MHz probe (S3C) 1 mm - 50 mm with 5 MHz probe (S5C/A)
Connector	1 x Lemo 1
Power	3 x AA batteries
Battery Life	10 hours minimum
Display	2.4" quarter VGA LCD
Size	132 mm x 82 mm x 34 mm
Weight	300 grams (inc. batteries)
Operating Temp.	-10°C to 50°C
Environmental Rating	IP67 MIL STD 810G Method 501.6 (high temp +55°C) MIL STD 810G Method 502.6 (low temp -20°C) MIL STD 810G Method 507.6 (humidity 95%) MIL STD 810G Method 512.6 (immersion - 1 metre for 30 mins)
Shock and Impact	MIL STD 810G Method 514.7 (vibration - 1 hour each axis) MIL STD 810G Method 516.7 (shock 20g - 11ms half sine shock pulse, 40g 11ms in each axis) MIL STD 810G Method 516.7 (26 drops - transit drop 1.22 m)
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 and 6 months on probe

**Specifications are subject to change*

CYGNUS PROBES AND CABLES

Cygnus Stainless Steel INOX Probes (Single Crystal Probes)

The INOX probes have an updated ergonomic design with easy to read frequency, identification and serial number. All frequencies of INOX probes have a black face and a colour coding system to identify probe frequencies and a replaceable wear membrane for long life.

Cygnus Cables

Using standard industry connectors the probe lead uses a custom made over moulded cable that offers superior flexibility and resistance to oils and ultraviolet light. The cable will not stiffen after exposure to ultraviolet light.

STANDARD KIT CONTENTS

Cygnus 4 ultrasonic thickness gauge; padded carry case; operating manual; adjustable neck strap and loops; wrist strap; accessory pouch; spare membranes; surface and membrane couplant; test block; 3 x AA batteries; mini USB - USB cable and instruction manual; optional Krusell® belt clip.

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CYGNUS INSTRUMENTS

LLOYD'S REGISTER QUALITY ASSURANCE ISO9001 · UKAS MANAGEMENT SYSTEMS 001

reddot award 2015 honourable mention

WARRANTY 3 YEARS CYGNUS GAUGE WARRANTY

Manufactured in the UK

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