

### RELIABLE ULTRASONIC MEASUREMENT





**CYGNUS 6\*Pro** 

The Cygnus 6+ PRO thickness gauge boasts a full range of useful features for professional users, including A-scan, B-scan and comprehensive data logging. Used with Cygnus High Temperature probe, the Cygnus 6+ PRO can measure remaining wall thickness of high-temperature, in-service assets without shutdown or isolation.

IDEAL FOR



...plant maintenance, civil engineering, ship inspections, oil and gas facilities. High-temperature, in-service thickness surveys across refining, oil and gas, energy and process sectors.





# CYGNUS 6+ **PRO KEY FEATURES**





PRODUCT

ADVANCED **DUAL LCD DATA LOGGING** DISPLAY -WITH RADIAL FRONT & FND\_AUTO START/ VERIFICATION POINTS MOUNTED

 Multiple-Echo mode for accurate, through-coat measurements as specified by Classification Societies

- Echo-Echo and Single-Echo modes for heavily corroded metals with a thin or no coating
- Temperature Compensation feature for measurement on hot materials
- Deep Coat function ignores coatings up to 20mm thick
- Manual and automatic gain control
- Min/max measurement limit functions with visual and vibrate alert
- Uses single and twin crystal probes
- Freeze function
- One and two point calibration
- Bluetooth<sup>™</sup> for data transfer
- Large front LCD display and an end-mounted LCD display with grayscale setting for bright sunlight
- Safe operation in explosive atmospheres: Class 1, Division 2, Group D locations only, as defined in NFPA 70, Article 500
- Water and dust tight IP67 housing
- Shock and impact proof to US MIL STD 810G



ROLLING

STOP

LIVE A-SCAN

**B-SCAN** WITH FOR FURTHER

# **COMPREHENSIVE DATA** LOGGING

- Linear, 2D grid and template
- 16 grid patterns available
- Add radial points to any
- Eight user-defined text
- Auto-log feature

- and manage data

### Three Versatile Measuring Modes

Multiple-Echo mode uses three error checked back wall echoes to provide the most reliable and accurate remaining thickness measurements, with no need to remove coatings (up to 20mm/0.8 in thick).

Single-Echo mode is ideal for measuring uncoated metals with heavy front and/or back-wall corrosion. Also effective on a range of cast metals, plastics and composites.

Echo-Echo mode works best for measuring heavily corroded metals through thin coatings of up to 1mm/0.04in thick, ideal for measuring painted metals with heavy back wall corrosion.

### **Cvanus High Temp Probe T5B-MAUH** (Twin Crystal)

For use on hot surfaces up to 300°C. Measures remaining wall thickness from 1.5mm to 250mm - depending on temperature and material. No cooling period required - reducing inspection time and facilitating more effective measurement.

Option to use a standard cable or a more robust, braided cable.



Standard Cable

Braided Cable

# Measurement Stability Indicator (MSI™)

Exclusive to Cygnus, MSI<sup>™</sup> ensures stable and therefore reliable measurements are displayed in Echo-Echo and Single-Echo modes

## **Cyglink Computer Software**

CygLink is a Windows® based application used to transfer and manage data logger records, A-scans, B-scans, templates, measurement comments and material velocity tables. The program can generate PDF reports and export to Excel. It also displays A-scans and B-scans, allowing for after-the-event analysis of logged measurements.



# Visit www.cygnus-instruments.com to explore our full product range

# Call our team today on +44 (0) 1305 265 533 for expert product advice

### CYGNUS 6+ PRO SPECIFICATION

Feature	Description
reature	
Measuring Modes	Multiple-Echo using 3 echoes to ignore coatings up to 20mm thick. Echo-Echo using 2 echoes to ignore coatings up to 1mm thick. Single-Echo using 1 echo
Materials	Velocities from 1,000 - 9,000 m/s (0.0390 - 0.3543 in/us)
Accuracy	±0.05 mm (±0.002") - in Multiple-Echo measurement mode, when calibrated and measuring the same material as calibrated on. ±0.1 mm (±0.004") or 0.1% of thickness measurement whichever is the greatest - in Single-Echo & Echo-Echo measurement modes, when calibrated and measuring the same material as calibrated on.
Resolution	Multiple-Echo mode - 0.1 mm (0.005") or 0.05 mm (0.002") Single-Echo and Echo-Echo modes - 0.1 mm (0.005") or 0.01 mm (0.001")
Probe Options	Single Crystal probes, Twin Crystal probes and High Temp probe
Measurement Range in Steel	0.8 – 250mm (0.031 in. – 10 in.) depending on selected probe and configuration, material and temperature
Connector	2 x Lemo 00
Power	3 x AA / R6 batteries
Battery Life	10 hours continuous measurement
Electronics	Dual channel pulser
Display	2.4" QVGA LCD and end-mounted rotatable LCD 25.58 mm (W) x 6.38 mm (H)
Size	84mm x 130mm x 35mm (W x H x D) (3.3" x 5.1" x 1.4")
Weight	300g (10.5 oz.) (inc. batteries)
Operating Temp.	-10°C to 50°C (14°F - 122°F)
Data Logging	5000 measurements and A-scans per record. Max number records: 100 (soft limit)
Computer Software	CygLink allows remote logging and viewing of A-scan graphs Survey and report generation to PDF file Graphic analysis of data and statistical calculations
Environmental Rating	IP67 Safe operation in Explosive Atmospheres: Class I, Division 2, Group D Locations only, as defined in the National Fire Protection Association Code (NFPA 70), Article 500. Tested using MIL-STD-810G, Method 511.5, Procedure I MIL STD 810G Method 501.6 (high temp +55°C (131°F)) MIL STD 810G Method 502.6 (low temp -20°C (-4°F)) 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) MIL STD 810G Method 516.7 (shock 20g) MIL STD 810G Method 516.7 (transit drop 1.22 m)
Standards	Designed for EN 15317
Compliance	CE, UKCA, RoHS
Warranty	3 years on gauge and 6 months on probes



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