CYGNUS
INSTRUMENTS

RELIABLE ULTRASONIC MEASUREMENT

CYGNUS 1 Ex

INTRINSICALLY SAFE
ULTRASONIC THICKNESS GAUGE

MADE IN BRITAIN

The Cygnus 1 Ex Ultrasonic Thickness Gauge is a rugged, handheld, intrinsically safe instrument designed for taking reliable thickness measurements in Zone 0 Explosive Atmospheres. It features a large colour LCD display and 3 measuring modes for through-coat measurements and various materials - including heavily corroded metals. Although designed for ease of use, the gauge boasts advanced datalogging and manual measurement mode.

IDEAL FOR USE IN

- FUEL DEPOTS
- ROAD & VESSEL TANKERS
- MINES
- CHEMICAL PLANTS
- OIL AND GAS

...refineries, pipelines and hazardous storage tanks.

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CYGNUS 1 Ex KEY FEATURES

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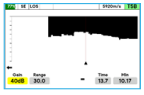
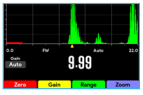
- **Certified Intrinsically Safe to ATEX, IECEx, UKEX for Zone 0 and NRTL for Class 1, Division 1**
- 3 measuring modes for levels of corrosion, various materials and through-coat measurements
- Manual Measurement Mode allows gates and gain to be configured to suit your application
- Live A-Scans aid visual measurement verification
- Live B-scans give a quick, cross-sectional representation
- 4 function keys for easy controls and dynamic views
- Deep Coat function ignores thick coatings
- User Access feature protects records with correct user access levels
- Measurement setup can be saved and restored for a quick start
- Measurement Freeze function and Ref/Min/Max thickness limits
- A solid-state electronic instrument with a rugged IP67 rated enclosure
- Available as SC, TC, PLUS and PRO variants with options of upgradeable features

LARGE 3.5" OUTDOOR READABLE DISPLAY

CYGLINK SOFTWARE



B-SCAN WITH AUTO START/ PAUSE/CONTINUE



LIVE A-SCAN FOR FURTHER VERIFICATION

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

CERTIFIED INTRINSICALLY SAFE TO:

ATEX, IECEx and UKEX
I M1 Ex ia Ma (Tamb = 0°C to +50°C)
II 1G Ex ia IIC T4 Ga (Tamb = 0°C to +50°C)

Certificate Numbers;
ATEX: ExVeritas 21ATEX0860X
UKEX: ExVeritas 21UKEX0861X
IECEx: IECEx EXV 21.0035X

NRTL
I.S. Class I Zone 0 AEx ia IIC Ga T4
I.S. Class I Division 1 Groups ABCD T4
(Tamb = 0°C to +50°C)

NRTL / MET US Certification, Listing Number E115506

Three Selectable 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 many cast metals, plastics and composites.

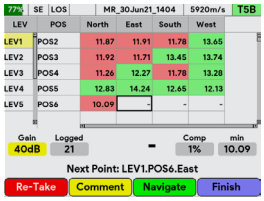
Echo-Echo mode works best for measuring heavily corroded metals through thin coatings of up to 1mm/0.04in thick, ideal for measuring painted metals with heavy back wall corrosion.

Exclusive to Cygnus, Measurement Stability Indicator (MSI™) ensures stable and therefore reliable measurements are displayed in Echo-Echo and Single-Echo modes.

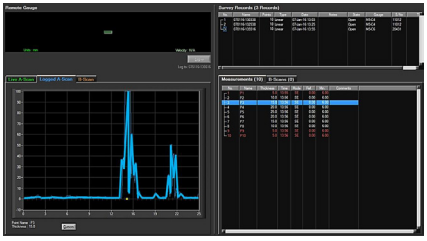
SELECTABLE OPTIONS

Comprehensive Data Logging

- Datalogging: Basic (Linear lists) or Advanced (2D/3D Grids, Templates)



- Allows a maximum of 10,000 measurement points per record
- 16 grid patterns available
- Add radial points to any measurement (linear/grid) to further investigate immediately an area of interest or heavy corrosion
- 8 User-defined text comments to attach to any measurement point
- Auto-log feature
- Saves measurements and A-scans as records on internal memory



Cyglink Computer Software

CygLink is a Windows® based application for computer use to display continuous A-Scan output and measurement data. CygLink has the facility to log both data formats into a Survey file for report presentation, which can be emailed, exported as a PDF, or printed.

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

CYGNUS 1 Ex SPECIFICATION

Feature	Description
Measuring Mode	Single Echo with Twin Crystal Probes Echo-Echo with Twin Crystal Probes Multiple Echo with Singly Crystal Probes
Materials	Sound velocity from 1000 m/s to 9000 m/s [0.0390 in/us to 0.3543 in/us]
Accuracy	±0.1 mm (±0.004") or 0.1% of thickness measurement whichever is the greatest
Resolution	0.1mm, 0.05mm or 0.01mm depending on probe type
Probe Options	Single crystal and twin crystal probes
Measurement Range in Steel	0.8mm to 250mm (0.031 in. – 10 in.) depending on selected probe and configuration, material and temperature
Connector	Single Dual Coaxial Connector
Power Supply	Rechargeable, removable Lithium-Ion battery pack
Power Rating	2W
Probe Sockets	Single Dual Coaxial Connector
Battery Life	6-8 hours continuous measurement
Display	3.5" VGA, sunlight readable colour display
Size	270mm tall, 135mm wide, 80mm deep
Weight	1 kg with battery
Operating Temp.	-0°C to +50°C (32°F to 122°F)
Storage Temp.	-10°C to +65°C (50°F to 149°F)
Data Logging	10,000 measurements and A-scans per record
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. Bluetooth connection to transfer data to a Windows® computer with CygLink
Certification	**ATEX, IECEx and UKEX** I M1 Ex ia Ma (Tamb = 0°C to +50°C) II 1G Ex ia IIC T4 Ga (Tamb = 0°C to +50°C) Certificate Numbers; ATEX: ExVeritas 21ATEX0860X UKEX: ExVeritas 21UKEX0861X IECEx: IECEx EXV 21.0035X **NRTL** I.S. Class I Zone 0 AEx ia IIC Ga T4 I.S. Class I Division 1 Groups ABCD T4 (Tamb = 0°C to +50°C) NRTL / MET US Certification, Listing Number E115506
Environmental Protection	IP67 Pollution degree 3
Standards	Designed for BS EN 15317:2000
Warranty	3 years on gauge and 6 months on probe

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All information provided is subject to change without prior notice.

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