



# **CYGNUS ROV UTM**

**ULTRASONIC THICKNESS GAUGE** 



Specifically designed for underwater remotely operated vehicles, Cygnus offers a dedicated ROV mountable thickness gauge (depth rated to 3,000m) with live A-scan and piezo-composite probe. This gauge is versatile and designed to measure metal thickness in the harshest subsea operating conditions - without the need to remove coatings.









...Class surveys on offshore installations or units, subsea inspection, repair and maintenance (IRM) of infrastructure, underwater equipment





#### **BENEFITS OF MULTIPLE-ECHO**

- corroded and coated structures
- Accepted by all major classification
- Greatly reduces inspection time and costs

# **CYGNUS ROV UTM KEY FEATURES**



- A-scan to assist with measurement verification visually
- Multiple-Echo and Echo-Echo modes for accurate measurements through coatings (up to 1mm) as specified by Classification Societies
- Single-Echo mode for heavily corroded metals with no
- Use the Auto SE/EE/ME measuring mode for best results or set manually
- · Supplied with CygLink software to display and process measurements on a computer at the surface
- High-performance SD2C probe fitted with a Hard Rexolite Delay line
- Easy calibration and measurement settings via CygLink software at the surface
- P50 Probe Handler cleverly-designed to self-align with pipes from 50mm diameters to flat surfaces
- Manual or automatic gain control



**DEPTH RATED TO** 3KM/9.843FT



CYGLINK SOFTWARE



FOR FASY

**CLEVER PROBE** LIVE A **HANDLER SCAN FOR** FURTHER ALIGNMENT VERIFICATION

# **OPTIONS AND ACCESSORIES**

## **Probe Handling Solutions**

The 'P50' Probe Handler is designed to align the ultrasonic probe on to straight pipes, from 50mm in diameter up to flat surfaces.

The spring-loaded probe and v-shaped block allow the probe to be positioned correctly on a straight pipe and move to accommodate different pipe diameters.

A gimbal allows the probe to move to align on to the straight pipe surface when used with a ROV manipulator arm.

The probe handler can be fitted with a choice of manipulator handles; T Bar or Fishtail.



T-Bar Handle





## **Cyglink Computer Software**

CygLink is a Windows® based application for topside 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.





#### **CYGNUS ROV UTM SPECIFICATION**

Feature	Description
Materials	Sound velocities between 2000 m/s and 9000 m/s (0.0780 in/us to 0.3543 in/us)
Measuring Modes	Multiple-Echo using 3 echoes to ignore coatings up to 1mm(0.039") thick. Echo-Echo using 2 echoes to ignore coatings up to 1mm(0.039") thick. Single-Echo using 1 echo
Accuracy	$\pm$ 0.1 mm ( $\pm$ 0.004") or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure
Measurement Range in Steel	Multiple Echo: 4 - 20mm (0.157" to 0.78") Echo Echo: 4 - 30mm (0.157" to 1.18") Single Echo: 4 - 50mm (0.157" to 1.96")
Measurement Resolution	0.1 mm (0.005")
Probe Zero	Automatic and manual selectable
Power	12 - 24 V supply input @ 60mA (average) @ 200mA (maximum)
Size	105mm x 110mm x 35mm (4.1 in x 4.3 in x 1.4 in) (W x H x D)
Weight in Air	Gauge body 3.7kg max (8.2 lb.)
Operating Temp.	-10°C to 50°C (14°F to 122°F)
Environmental Rating	IP68 rated to 3000m (9,843 ft)
Communication	RS-232
Computer Software	CygLink allows remote data logging and viewing of A-scan graphs Survey and report generation to PDF file Graphic analysis of data Designed for Windows 10 and above
Environmental	CE, UKCA, RoHS
Warranty	3 years on gauge and 6 months on probe



ISSI 11/21 All information provided is subject to change without prior notice.

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