

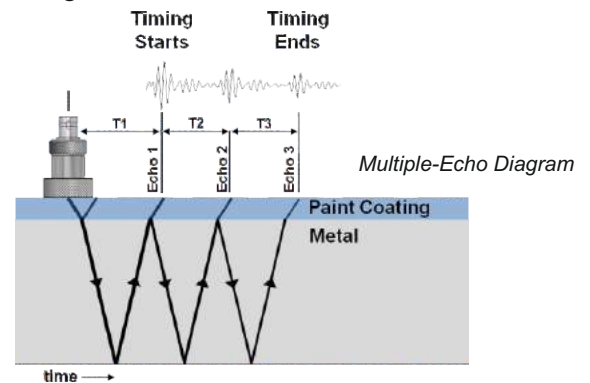


KEY FEATURES

- Designed specifically to mount onto small observation ROV's.
- Supplied with CygLink software to display and log thickness measurements from the ROV on a computer at the surface which can be saved to a file and printed out.
- The Cygnus Topside Repeater (TSR) is available as an option and has the facility to display the thickness measurements remotely and overlay them on to a video signal. This allows the measurements to be superimposed on the ROV camera's monitor screen.
- Easy calibration at the surface via CygLink software or TSR unit.
- Optional dedicated probe holder to allow measurements on curved or flat surfaces.
- Only one twisted pair is required to transfer the data to the surface.

BENEFITS OF 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 $T2 = T3$).

CYGLINK SOFTWARE

CygLink is a Windows® application for PCs that allows remote viewing and data logging for the Cygnus Mini ROV gauge. CygLink displays the thickness measurements in real-time and these can then be logged.

Each recorded measurement can have pre-set comments and/or a manually typed note added.

The data logged measurements can be recorded in a Linear List. Each survey can have separate groups of measurements within it and a "Reference" and "Minimum" thickness set.

Reports can be created either as a .pdf or the data exported to a .csv file.



RINA

—Type Approved—

OPTIONS

Topside Repeater (TSR) - Optional

The TSR is a small display unit that can be used to display the thickness measurements sent from the Cygnus Mini ROV gauge to the surface.

*Kit includes data and video cables.



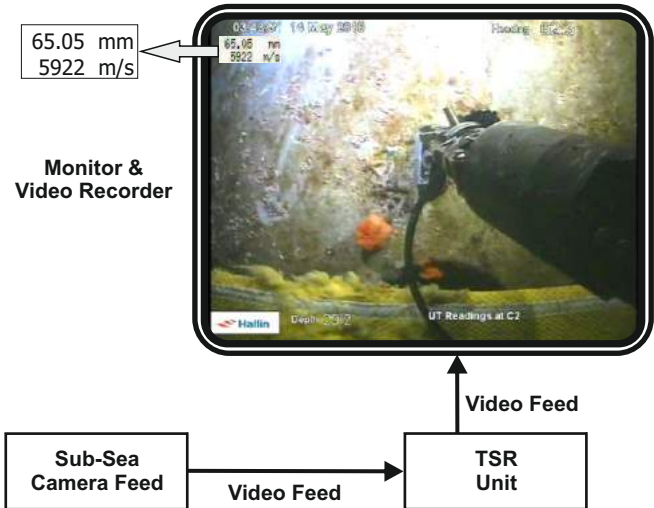
TSR Video Overlay Facility

The TSR can also superimpose the thickness measurements on to a composite PAL or NTSC video signal to display it on a monitor screen and/or the video recording of the survey. This provides a thickness measurement that can be linked to a position or place in the video recording.

Probe Handling Solutions

Complementing the Cygnus Mini ROV Mountable thickness gauge, the Cygnus G1 is designed for use on observation, inspection and light workclass ROVs whilst the S1 probe handler is developed for use on inspection and medium sized ROVs carrying out ship hull inspections.

Details of this system and others can be found in separate brochures available on request or downloaded from our website.



KIT CONTENTS

Cygnus Mini ROV Mountable ultrasonic thickness gauge; probe cable with marinised remote probe 0.95 m (3 ft); sealed 4-way connector with fly lead including 9 way connector; RS-422 to RS-232 converter; test cable; CygLink data logging software; membrane couplant for the UT probe; spare membranes for the UT probe; membrane locking ring key; spare O-rings for ROV; 15 mm (0.5 inch) test block; operation manual; carry case; silicone grease.

*Optional Topside Repeater with video overlay facility kit.

SPECIFICATION

Gauge	Cygnus Mini ROV Mountable
Materials	Sound velocities between 1000 and 9995 m/s
Measurement Range in Steel	3 - 250 mm (0.110 - 9.995 inch) with 2.25 MHz probe 2 - 150 mm (0.065 - 6.000 inch) with 3.5 MHz probe 1 - 50 mm (0.045 - 4.000 inch) with 5 MHz probe
Accuracy	±0.1 mm (±0.004 inch) or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance in accordance with Cygnus Instruments calibration procedure
Resolution	0.05 (0.002 inch)
Probes	Single crystal soft-faced compression: • 13 mm (0.5 inch) - 2.25, 3.5 or 5 MHz (lower frequency probes offer better penetration on heavy corrosion / coatings)
Power	7.0 - 30 V dc @ 150 mA (max)
Display	PC or laptop with VGA (not included)
Size	160 x 62 mm (6.299 x 2.441 inch)
Weight	550 g (19.4 oz)
Operating Temp.	-10°C to 50°C (14°F to 122°F)
Approvals	RINA Type approved
Testing	Tested to 500 m (1,500 ft) depth
Communication	RS-422, Simple Single Pair, 2400 Baud (RS-232 9600 Baud output available as special order)
Standards	Designed for EN 15317
Environmental	RoHS, WEEE compliant
Warranty	3 years on gauge and 6 months on probes

