

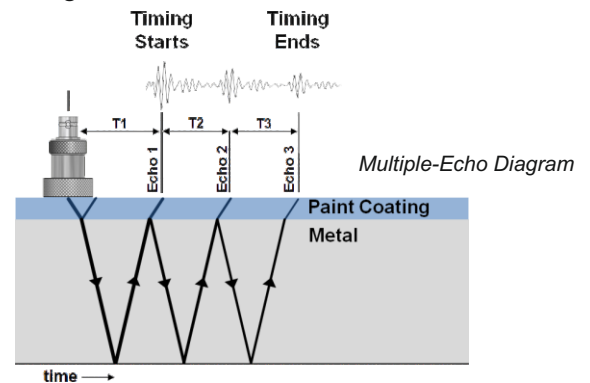


KEY FEATURES

- The ROV 2K MK5 UTG kit has been depth rated to 2,000 m (6,562 ft).
- 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.
- Selectable Deep Coat mode for measuring through coatings up to 20 mm (0.8 inch) thick.
- 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 ROV gauge sends thickness measurement data to the surface via an RS-422 serial link. Cygnus can supply the RS-422 umbilical cable up to 1,200 m (4,000 ft) in length. For longer distances, using a fibre optic multiplexer, the ROV gauge can output data in RS-232 mode.
- Fitted with a safety pressure relief valve and securing eye.
- Easy calibration at the surface via CygLink software or TSR unit.
- Removable end plate for full serviceability with access to the option switches, fuse and status LED.
- Wet mateable 'MC' style underwater connectors.
- RS-422 - RS-232 selectable.

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 echos 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 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.



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 ROV gauge to the surface.

Kit includes data and video cables.



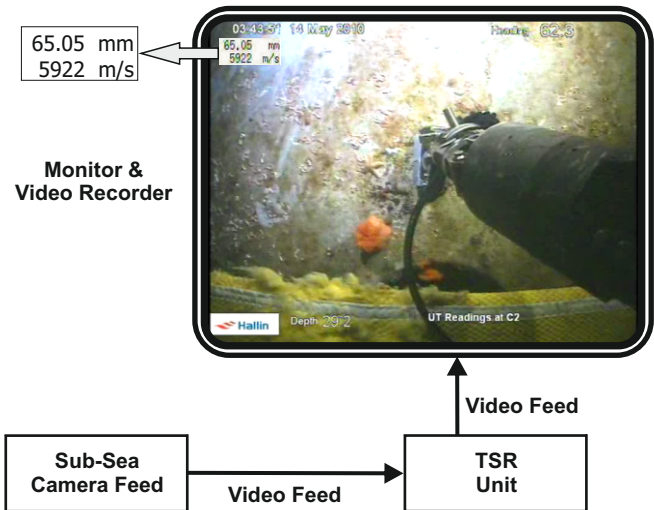
TSR Video Overlay Facility

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 ROV Mountable thickness gauge, the Cygnus W1 Work Class ROV Probe Handler has been developed to offer an engineered probe-handling solution for Work Class ROV thickness gauging operations.

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



KIT CONTENTS

Cygnus ROV Mountable ultrasonic thickness gauge; power and data cable ;'K3' RS-422 to RS-232 converter; RS-232 to USB converter; CygLink data logging software; membrane couplant for the UT probe; spare membranes for the UT probe; membrane locking ring key; probe cable with marinised connector remote probe 5 m (16 ft); spare O-rings for ROV; 15 mm (0.5 inch) test block; spare 1A fuses; 3 mm (0.100 inch) allen key; silicone grease.

**Optional Topside Repeater with video overlay facility kit.*

SPECIFICATION

Gauge	Cygnus 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)
Size	88.90 x 205 mm (3.50 x 8.07 inch) (inc. fittings)
Weight	0.975 kg (2.150 lbs)
Operating Temp.	-10°C to 50°C (14°F to 122°F)
Testing	3 km (9.842 ft) depth
Communication	RS-422, Simple Single Pair or RS-232 TXD 2400 or 9600 Baud (selectable via DIP switches)
Standards	Designed for EN 15317
Environmental	RoHS, WEEE compliant
Warranty	3 years on gauge and 6 months on probes

