

Cygnus mini roV mountable Ultrasonic thickness gauge



The Cygnus Mini ROV Mountable thickness gauge has been specially designed to be mounted onto small observation ROVs with or without a manipulator facility. Built in conjunction with VideoRay, this subsea thickness gauge will allow the operator to carry out an ultrasonic thickness measurement in areas that have previously been unfeasible using larger ROVs or divers. And no need to remove coatings!

Key features

- Multiple-Echo mode for accurate, through-coat measurements as specified by Classification Societies
- Supplied with CygLink software to display and process measurements on a computer at the surface
- Easy calibration at the surface via CygLink software or Topside Repeater (TSR) unit
- Optional Topside Repeater (TSR) unit allowing readings to be displayed remotely and superimposed onto ROV's camera screen
- Optional purpose-built ROV probe handlers for optimal alignment

Specifications

Product	Cygnus mini roV mountable ultrasonic thickness gauge
Country of origin	UK
Manufacturer	Cygnus Instruments Ltd

Options and accessories

Engineered 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 ROVs performing UTM surveys on ship hulls.

Topside repeater remote display unit

The Cygnus Topside Repeater is a remote display unit connected to the gauge with an umbilical cable. It displays the thickness measurements at the surface in real-time during the survey.

Topside repeater with video overlay

The Topside Repeater can also overlay the real-time thickness measurements on to a composite video signal, displaying it on the survey monitor screen. It will also then be recorded (if there is a video of the survey), showing exact locations and the thickness measurement for future reference

Cymlink computer software

CygLink is a Windows® application that allows remote viewing, control and data logging of the Mini ROV gauge. The software can generate survey reports in PDF or export to a CSV file. Designed for Windows® 7 and above.

Specifications

Feature	Description
Materials	Velocities between 1000 m/s and 9995 m/s (0.0400 and 0.3998 in/microsec)
Measurement range in steel	1 mm - 250mm (0.040" - 10.000") depending on selected probe and configuration, material and temperature
Accuracy	±0.1mm (±0.004") or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure
Resolution	0.1 mm or 0.05 mm (selectable) (0.005" or 0.002")
Probe options	Single crystal probes
Power	7.5 - 30 V DC @ 150 mA (max)
Display	PC or laptop with VGA (not included)
Size	160mm x 62mm (6.3 x 2.4 in.)
Weight in air	550g (19.4 oz)
Operating Temp	-10°C to +50°C (14°F to 122°F)
Approvals	RINA Type approved
Testing	Tested to 500m (1,640ft) depth
Communication	RS-422, Simplex Single Pair or 2400 Baud (RS-232 9600 Baud output available as special order)
Standards	Designed for EN 15317
Compliance	CE, UKCA, RoHS
Warranty	3 years on gauge and 6 months on probe