

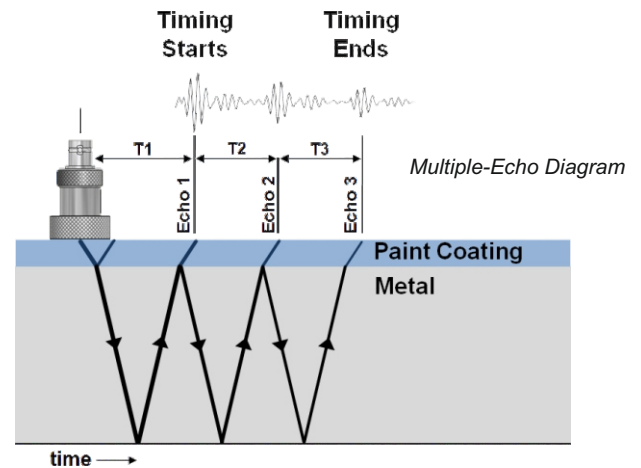


### KEY FEATURES

- Heavy duty sealed unit - highly water and dust resistant
- Rugged construction - shock proof
- Stable calibration - linear accuracy - no zero adjustment
- Self verification of the measurements to ensure accuracy
- Various probe options
- Displays sound velocity settings
- Echo strength indicator to aid measurement
- Bright LED display with polarised filter
- Gauge senses probe type and automatically adjusts settings for optimum performance
- Low battery warning
- Metric / imperial switchable

### 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 echoes. 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  $T2 = T3$ ).

### APPLICATIONS

Maintenance and safety checks of metal thickness for:

- Metal thickness monitoring on cranes, marine structures and conveying systems
- Corrosion checks on ships' shell plates, bulkheads and structure
- Metal thickness safety checks on steam and pressurised water systems, transportable gas containers and compressed air systems
- Systematic wall thickness and corrosion monitoring of storage tanks and process vessels
- Quality assurance metal thickness checks
- Maintenance and safety checks on bridges and street lighting columns
- Pipeline wall thickness monitoring.

# Cygnus Instruments

## Cygnus Heavy Duty Ultrasonic Thickness Gauge



### KIT CONTENTS

Cygnus Heavy Duty ultrasonic thickness gauge; heavy duty remote 2.25 MHz x 13 mm (0.5 inch) diameter probe; battery pack; spare membranes and O-rings; steel test block; calibration trim tool; operational manual and carry case.

### SPECIFICATION

Gauge	Cygnus Heavy Duty
Materials	Sound velocities from 2,000 - 7,000 m/s (0.059 - 0.31 in/us) - covers virtually all common engineering materials
Accuracy	±0.1 mm (±0.004 inch) or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure
Resolution	0.1 mm (0.005 inch) or 0.05 mm (0.002 inch)
Probe Diameters and Frequencies	6 mm (0.25 inch) - 5 MHz 13 mm (0.5 inch) - 2.25, 3.5 or 5 MHz 19 mm (0.75 inch) - 2.25 MHz (lower frequency probes offer better penetration on heavy corrosion / coatings)
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
Power	3 x AA alkaline batteries
Display	Large clear LED display with polarised filter
Size	240 x 75 mm (9.45 x 3 inch)
Weight	886 g (20 oz) with remote probe 827 g (29.2 oz) with fixed head probe
Operating Temp.	0°C to 35°C (32°F to 95°F)
Standards	Designed for EN 15317
Environmental	RoHS, WEEE compliant
Warranty	3 years on gauge and 6 months on probes

