INVERT ROBOTICS

TECHNICAL SPECIFICATIONS

Ultrasonic Testing

Ultrasonic Testing capability for Suction based and Hybrid crawlers

Make the most of our robot with the Ultrasonic Thickness Tester (UTT) Payload. This high-end tool can be mounted in front of the robot and will take you less than five minutes to install or remove. It has never been so easy to achieve an accurate thickness measurement.

The probe and encoder can be raised between measurements to minimize wear and tear of the transducer. The water (or water/gel mix) is routed to the probe head to link the ultrasonic transmission. These cables will be combined with our UTT umbilical cable.

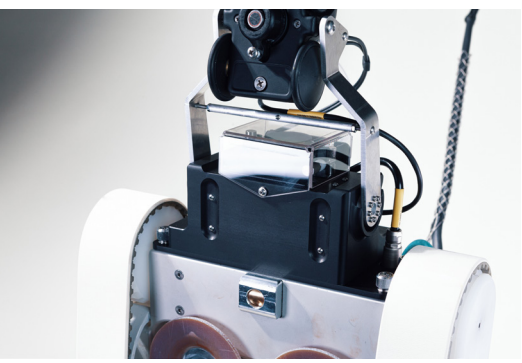
Equipment and procedure standards are our top priority. That's why we use a high-end Olympus D790-SM as a standard transducer. Its dual element pitch-catch probe creates a V-shaped sound path. One element acts as sender and the second as receiver in the test material. This improves near surface resolution and is ideal for remaining wall thickness measurements. Even on curved or rough surfaces. The probe is perpendicular to the surface due to the attitude of the encoder buggy.

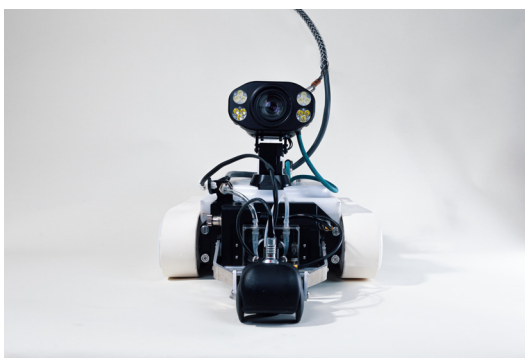
The Olympus probe is, not without reason, one of the most utilized probes in the industry. Many qualified personnel will be able to perform wall thickness measurements with it. We rely on the adequate UT knowledge/ experience skills of both you and our personnel. Additional training may be required to operate the payload on the robot.

Prefer another probe? Please let us know your personal business needs. We can always discuss the integration of any probe of your choice.

The UTT Payload, Olympus 38DL Plus, and UTT umbilical are packed in light-weight (< 20 kg /45 lbs) Pelican cases. That's how it readily can be transported as air freight to minimise costs and increase speed.

Request a demo or contact your local Invert Robotics sales representative for additional information. With seven offices around the globe, Invert Robotics can quickly respond to your inspection needs.





TECHNICAL SPECIFICATIONS *UTT1.1 version*

Ultrasonic Testing

Ultrasonic Testing capability for Suction based and Hybrid crawlers

Payload Information

Vessel diameter	Ø3m (Ø118inch) or greater
Max/Min service temperature	0 to +50 deg C +32 to +122 deg F
IP rating	IP54
UT Probe	Olympus D790-SM
B Scan Encoder	Olympus B Scan buggy
Couplant	Water
Couplant flowrate	Variable with pressure
Pressure rating couplant tank	45 psi

Ultrasonic Probe Info

Brand / Model	Olympus D790-SM with 38DL Plus
Frequency (MHz)	5 MHz
Connector	10-32 Microdot
Connector Location	Straight
Range in steel	1 to 508mm 0.04 to 20inch
Temperature Range	0 to +50 deg C +32 to +122 deg F
Tip diameter	11mm 0.434inch

Robot Measurements

Mass (robot)	8.0kg (12.8lbs)
Mass (robot & payload)	10.3kg (22.7lbs)
Dimensions (without payload)	325W x 400L x 300H mm 12.8W x 15.7L x 11.8H inch
Dimensions (with payload)	325W x 640L x 300H mm 12.8W x 25.2L x 11.8H inch
Main construction materials	Aluminium, UHMWPE, Rubber
UTT Umbilical length	Standard 30m (100ft)

www.invertrobotics.com
info@invertrobotics.com