CASE

INVERT ROBOTICS

Combined NDT inspection: ultrasonic measurements and visual inspection of a carbon steel tank

High corrosion levels and a crowded interior provided the challenges for the inspection of this vessel. A custom-built ramp and a versatile robot enabled Invert Robotics to successfully inspect all areas of the slurry tank.

At this zeolite production plant, located in the chemical cluster of Delfzijl in the Netherlands, Invert Robotics was tasked with the inspection of a more than thirty-year-old slurry tank. Both visual inspection and UT wall-thickness measurements were requested by the customer.

The heavily corroded surface together with the inner layout - including an agitator and baffles running up to the roof - made inspection of this vessel challenging.

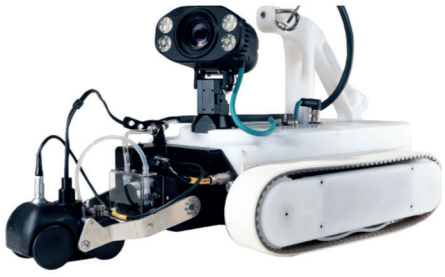
Custom solution

A custom ramp was built to ensure the robot could reach even the most difficult to reach areas of the slurry tank. In just under a week, the customised solutions for a successful inspection were in place.

The crawler robot's state-of-the-art camera with 30x optical zoom function and an Olympus 38-DL UT-probe placed in front of the robot as a buggy, ensured the slurry-tank was fully inspected as required. A full status report provided the client with the insights they were looking for regarding the condition of their slurry tank.

The result: a very satisfied customer who is now looking forward to having more inspections carried out using our robot crawler.

Interested to learn how we can help you with your unique situation, using our unique robot? Contact our nearest sales representative!



Technical Information

Vessel type	Carbon steel tank
Vessel size	Ø3 m
Vessel material	Fiberglass reinforced polyester
Robotic platform	V1800
NDT Method	Ultrasonic & Visual inspection