



Collaborative project with major Dutch oil company results in first automated UT measurements in aluminium tank

Invert Robotics' unique suction-based crawler inspection platform was used to take ultrasonic wall thickness measurements without the need for confined space entry.

A major Dutch oil company approached Invert Robotics after a demonstration organised by Sprint Robotics. They asked us to add an Olympus DL38 ultrasonic thickness probe on our suction-based crawler platform. The objective was to take spot UT measurements on each wind direction, with an interval of 10 cm between the measurements inside the tank. Traditionally, this job would have been performed manually with scaffolding inside the tank, involving working at height and confined space entry risk.

Our rapid response team was challenged to create an adaptor to mount the UT probe on the crawler platform. Within one month, the first prototype was finished and first tests performed. After further significant testing and one design iteration, the final prototype was finished and mounted on the crawler. No less than 223 datapoints were successfully captured.

With no scaffolding being required for this job, the oil company saved time and money while boosting safety: there was no working at heights or confined space entry.

Interested to learn how we can help you using our unique robotic crawler? Contact our nearest sales representative!



Technical Information

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| Vessel type | Storage tank |
| Vessel size | ø9 x 11 m |
| Vessel material | Aluminium |
| Robotic platform | V1800 |
| NDT method | UT spot measurements & visual testing |