



## Robotic internal UT B-scans in a resin tank with heating coil

**A complex inspection job: an insulated 600 m<sup>3</sup> resin tank was equipped with a large heating coil on the floor, making scaffolding impractical. But a thin residue of resin on the walls meant our robotic crawler was challenged in ensuring sufficient adhesive power.**

With its unique combination of sliding cup suction technology and supporting magnets, Invert Robotics' Hybrid Robot, the H2200 model, is very well equipped for specifically such challenging environments. The adhesion is doubly redundant and allows easy freedom of movement throughout the vessel.

A major international inspections company, contract holder for the regulatory inspections on this site, therefore called in the services of Invert for this not so everyday inspection.

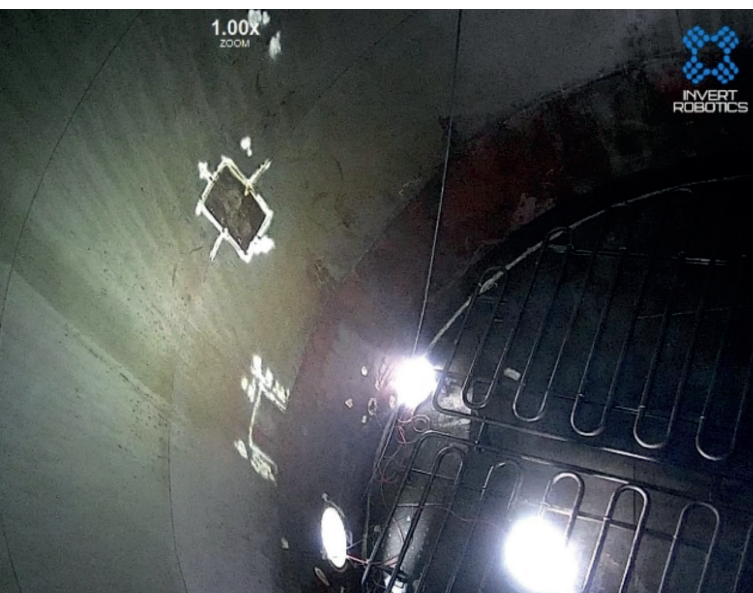
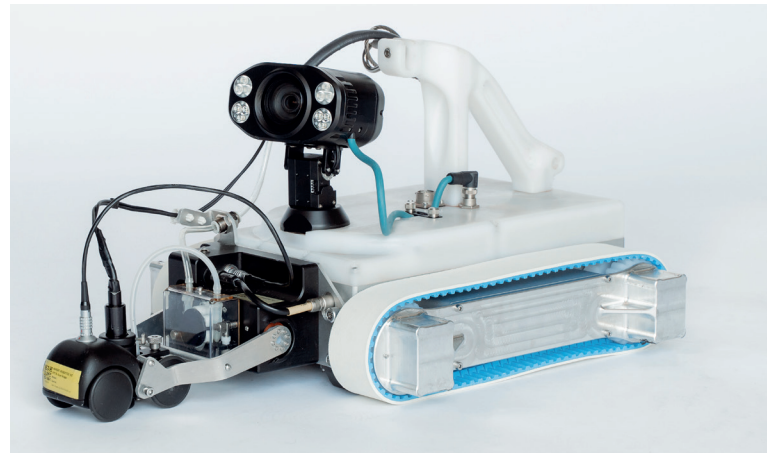
### Getting it all done in one go

The challenge was to get all the required elements for this regulatory inspection in one robotic session. For this, a detailed close-up visual inspection of all the structural roofing parts, as well as a general visual inspection of the rest of the vessel, needed to be carried out. In addition, wall

thickness measurements were needed at a minimum of 2 per panel, with a total of 120 points throughout the vessel.

The encoded buggy mounting of the UT probe - with a pressurized couplant feed - ensured that the Olympus system could get many accurate UT readings, despite the less-than-perfect condition of the walls.

All-in-all, in less than half a day, all the necessary data for the re-certification were collected without any human entry.



### Technical Information

Vessel type	Carbon steel storage tank
Vessel size	Ø7 m, H15 m
Vessel material	Carbon steel
Robotic platform	H2200
NDT method	Full HD @ 30fps