



Repair or replace? Visual inspection of a fifty-year-old spray-dryer

Utilising its high-definition camera system, Invert Robotics conducted a visual inspection of a stainless-steel spray dryer within a day, delivering a highly detailed inventory of the vessels' condition for the customer.

This major Dutch silica producer requested visual inspection to help determine what to do with their spray dryer, commissioned in the 1970s.

50 years of wear and tear in this challenging production environment made the customer's 'moon landscape' description of the vessel's inner surface highly accurate. In fact, the vessel's highly irregular surface made it almost impossible to use our crawlers.

Ingenious use of HD camera

Instead, we took advantage of the capabilities of the high-definition camera used on our crawlers and mounted it on a very stable Remote Camera System, or RCS, mounting (see picture). Combining this

vertical control with the pan-and-tilt bracket and the 30x optical zoom of the camera, allowed us to inspect and map the entire vessel with a resolution of 0.015 mm.

What's more. The inspection was completed within just one day. The full report included photos and videos for the customer's internal reporting and presentation requirements.

The satisfied customer commented: 'Invert Robotics has made a good impression and we look forward to future cooperation for our inspections.'



Technical Information

Vessel type	Spray dryer
Vessel size	10x6 m
Vessel material	Stainless steel
NDT method	Full HD @ 30fps