



## CASE STUDY

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## HIGHLY CURVED SURFACE INSPECTION USING VIDEO TRACKING SOFTWARE



### 1. INTRODUCTION

Sonomatic inspection services were contracted to carry out an inspection on highly curved surfaces with challenging access, the client required highly accurate 3D position of the corrosion. Sonomatic has proprietary video tracking software which is highly accurate and has been used for many years, however, it requires a strict setup procedure.



### 2. PROCESS

This inspection required Sonomatic to enact a setup which tracked the collection probe at an oblique angle and had to correct for the 3D curvature of the object being inspected. To achieve this the integrity team was tasked with developing custom algorithms to account for:

- The oblique angle.
- The 3D curvature of the surface.
- Allow for double curvature, i.e. bends.



### 3. OUTCOME

The methodology was trialed, demonstrated, and rolled out successfully on this project. This methodology has since been utilized on other projects with similar challenging requirements.

