



PROJECT OVERVIEW

Corrosion Under Insulation (CUI) remains one of the most persistent and costly challenges in asset integrity management.

A UK petrochemical plant adopted CorrosionRADAR's advanced sensor technology to address this issue, achieving significant reductions in inspection costs and improvements in asset reliability.

While this deployment was carried out by our technology partner, it serves as a compelling example of the solution's effectiveness, one that we have since assessed, adopted and successfully introduced to our own client base.



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CASE STUDY

Project	CUI Monitoring System
Location	UK Petrochemical Plant

THE CHALLENGE

The petrochemical plant's primary objective was to reduce the high costs and operational risks associated with traditional CUI inspections. Historically, inspecting heat exchangers required the removal and replacement of insulation and cladding; an expensive, time-consuming process that exposed assets to environmental conditions, increasing the risk of CUI.

These limitations made it difficult to perform frequent inspections or respond proactively to emerging issues. The petrochemical plant needed a smarter, more efficient way to monitor CUI risk without compromising safety or operational continuity.

THE SOLUTION

CorrosionRADAR's corrosion and moisture sensors were installed on a critical heat exchanger under the insulation using an innovative helical wrapping method. This approach ensured optimal sensor coverage and enabled the detection of localised corrosion; something traditional inspection methods often miss. Data was collected via USB, offering a simple and effective way to monitor asset condition over time.

The system successfully identified moisture ingress, revealing weaknesses in the insulation and cladding. With regular data analysis, the petrochemical plant was able to make informed, data-driven decisions about inspection and maintenance schedules, resulting in significant cost savings and improved asset performance.

Altrad's Role and Expertise

Following a thorough technical assessment of CorrosionRADAR's capabilities, we have fully adopted this technology into our corrosion monitoring portfolio.

Our field engineers are fully trained and certified in the deployment of CorrosionRADAR systems, ensuring we deliver the same level of performance and reliability demonstrated in this case study.



CR corrosion
RADAR

CASE STUDY

We have introduced this solution to one of our own clients and are actively supporting its integration into their asset integrity programme.

Our extensive experience in corrosion monitoring, combined with our hands-on knowledge of this technology, positions us as a trusted partner for clients seeking to reduce CUI risk and inspection costs.

THE BENEFITS

- Insulation QA/QC
- Enabling digitalisation and Industry 4.0
- Up to 65% reduction in maintenance costs
- Data-driven decision making
- Remote monitoring of CUI risk
- Extended asset life
- Enhanced safety and operational efficiency

CUSTOMER TESTIMONIAL

"We have had a highly positive experience with CorrosionRADAR's technology. Following the success of this deployment, we are now actively exploring opportunities to scale up the technology across our operations. We are confident that with the help of CorrosionRADAR and our team's expertise, we can continue to improve the safety, efficiency, and sustainability of our processes."

- Integrity Team Lead

SPEAK TO OUR EXPERTS

Email AIS.CorrosionRadar@altrad.com to discuss your upcoming project requirements with our experts.



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