

CUI Monitoring of a De-Ethaniser Column with Sweating Service

Customer



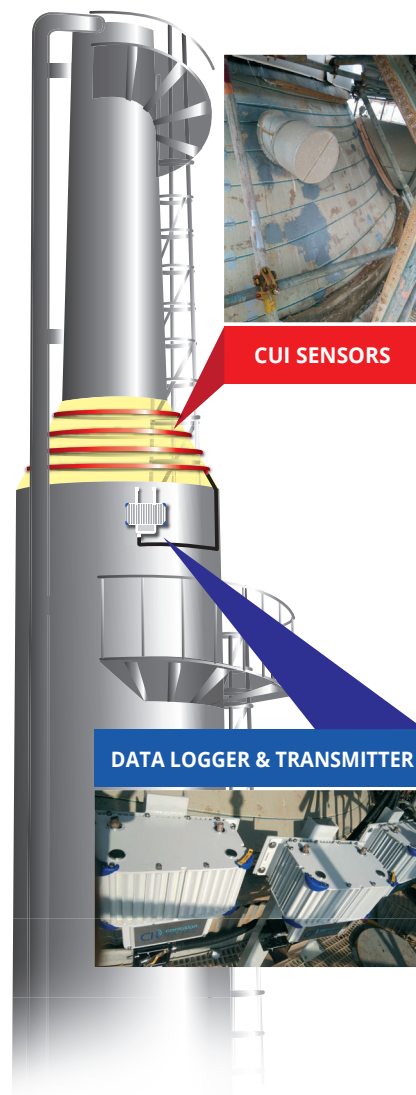
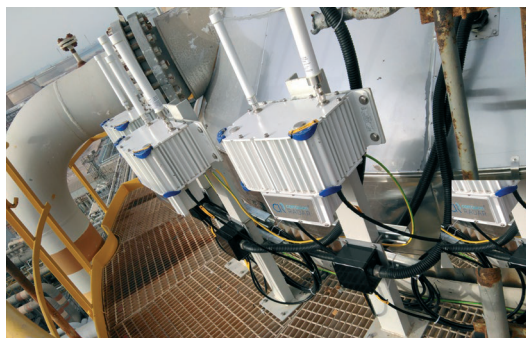
Key benefits of CorrosionRADAR: LR CUI Monitoring System

- Reduction in maintenance costs - up to 65%
- Data-driven inspection decisions
- Monitor CUI risk remotely
- Increase inspection frequency
- Improvement in safety
- Scaffolding scope reduction

Summary

The customer, a major energy producer based in Abu Dhabi, has a De-Ethaniser column.

Maintaining the asset was difficult and expensive, always requiring scaffolding. Three CorrosionRADAR systems were installed on the De-Ethaniser column for CUI (Corrosion Under Insulation) inspections, covering critical areas that had a history of CUI. The CUI risk analytics dashboard, **CR Clarity**, enabled the inspection engineer to make data-driven inspection decisions on locations and frequency.



Challenge

The site has a De-Ethaniser column with a history of CUI. This is common in gas processing plants due to sweating service under cold-duty insulation with vapour-seal.

It was extremely difficult and expensive to inspect due to its inaccessible location (over 30 meters high) and required scaffolding. The inspection engineer asked CorrosionRADAR to install its corrosion and moisture monitoring systems to enable them to reduce the cost of scaffolding for inspections.

Implementation

CorrosionRADAR successfully installed three CorrosionRADAR: LR systems in a helical configuration, covering critical areas of the column with sweating service and vapour-sealed insulation.

The asset on which the systems were installed had a particular section with a history of CUI issues due to its surface temperature being below the dew point and having a complex geometrical shape.

Results

After the installation of the CorrosionRADAR: LR system, the site inspection engineer may not require scaffolding unless monitoring suggests there is a likelihood of CUI.

Their decisions on asset management are now informed and cost-effective, offering improved safety to personnel.

About us

CorrosionRADAR is recognised internationally as a leading provider of CUI Risk Monitoring Technology. Our innovative patented sensors allow the inspector to:

Accurately predict and detect CUI in their industrial equipment.

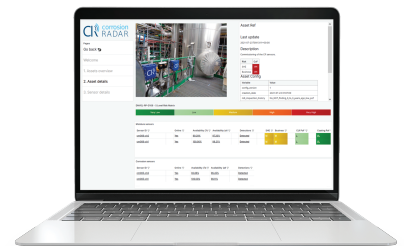
By adopting CUI monitoring, companies can achieve significant cost savings of up to 65%.

State-of-the-art sensors and software provide real-time data on the corrosion process, the lifespan of critical assets, enabling proactive maintenance and extending.

Facts:

- CorrosionRADAR's corrosion and moisture sensors can be fitted in complex field situations
- They operate between -310 F to 572 F (-190°C to +300°C)
- CorrosionRADAR: LR can transmit data wirelessly through BLE / LoRa and meets with ATEX / IECEx / UL requirements

CR Clarity Dashboard



Sensor Types



Corrosion



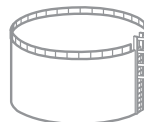
Moisture



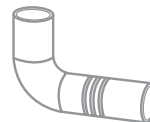
Column



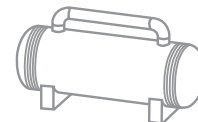
Dryer



Storage Tank



Pipeline



Heat Exchanger



CorrosionRADAR: LR CUI Risk Monitoring System on a column asset

For other case studies, please visit our website.

Deployed by



Contact us:

CorrosionRADAR Ltd, Future Business Centre, King's Hedges Road, Cambridge CB4 2HY, United Kingdom.

Tel: +44 1223 608861 | Email: info@corrosionradar.com

www.corrosionradar.com

