

Corrosion monitoring under insulation



Description

Corrosion under insulation (CUI) is a critical issue in refinery, petrochemical, power and offshore industries, causing significant financial losses and severe environmental hazards. CorrSen monitoring system is an autonomous solution for real-time non-destructive CUI monitoring. The system consists of flexible sensors, small loggers and a user-friendly interface.

The corrosion sensors, attached directly to a pipe under insulation and exposed to the same climatic conditions as the monitored pipe, allow the detection of any corrosivity increase before the pipe itself is damaged. The notification system allows the necessary measures to be timely taken increasing production efficiency, sustainability, environmental friendliness and safety.

Features

- ✓ Non-destructive continuous CUI monitoring
- ✓ Loggers placed outside the insulation system
- ✓ Wireless data transmission eliminating the need for operator presence and increasing the safety
- ✓ High sensitivity allowing early CUI detection and extensive damage prevention
- ✓ Residual life-time estimation
- ✓ Simple notification system providing the timely information on potential risks
- ✓ Detailed corrosion rate record for expert analysis
- ✓ Customized solutions and full customer support

Application fields

- ❖ Oil and gas
- ❖ Chemical industry
- ❖ Pharmaceutical industry
- ❖ Food processing
- ❖ Power generation
- ❖ Geothermal applications
- ❖ District heating
- ❖ Offshore facilities

Publication

[https://doi.org/10.1002/
maco.202314162](https://doi.org/10.1002/maco.202314162)

Developed by

Gema Ltd., Czech Republic

In partnership with

University of Chemistry and Technology Prague

Contact

www.corrsen.com

info@corrsen.com

