

Optimize profitability and reduce CUI related costs



CirruSense is an IIoT platform to help optimize maintenance plans and reduce your expenses related to CUI. By localizing all water intrusions with high accuracy, CirruSense allows you to focus rehabilitation only on areas of piping that has been exposed to water.

Conventional CUI monitoring is a costly approach

The conventional approaches to CUI monitoring are wasteful processes. Cladding and insulation are periodically removed to inspect and, if necessary, repair the piping. Typically, more than 90% of the inspected areas are unaffected by wetting and therefore not prone to CUI.

With inspection intervals ranging from a few to several years, corrosion gets a lot of time to form. Should your plant suffer a catastrophic incident due to CUI, production will likely be disrupted which, in turn, could cause grave financial losses.

Localized CUI detection helps reduce expenses

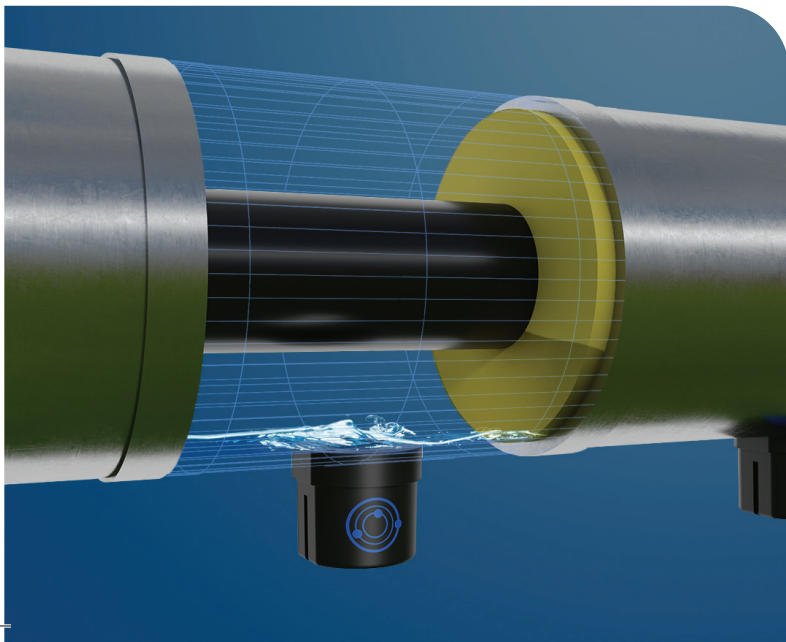
By knowing where piping has not been exposed to water, vast sections of piping can be excluded from maintenance plans.

Precise detection of water intrusions allows lighter repairs to be carried out where possible. Enabling lighter, more frequent maintenance will improve the general condition of your piping at the same time as drastically reducing costs.

Get the insights you need to boost profitability

By using smart IIoT sensors from Trisense to fuel CirruSense's algorithms, you receive insights that make it is easy to prioritize maintenance efforts and reduce costs.

- Continuous monitoring of actual wetting conditions
- Measurements enriched with weather data
- User friendly dashboards
- Actionable insights



Why CUI monitoring?

With conventional CUI monitoring, contributing factors such as piping age, coating and wall thickness as well as process temperature are analyzed to inform maintenance plans. What is not included in this analysis is the most impactful factor: actual wetting levels.

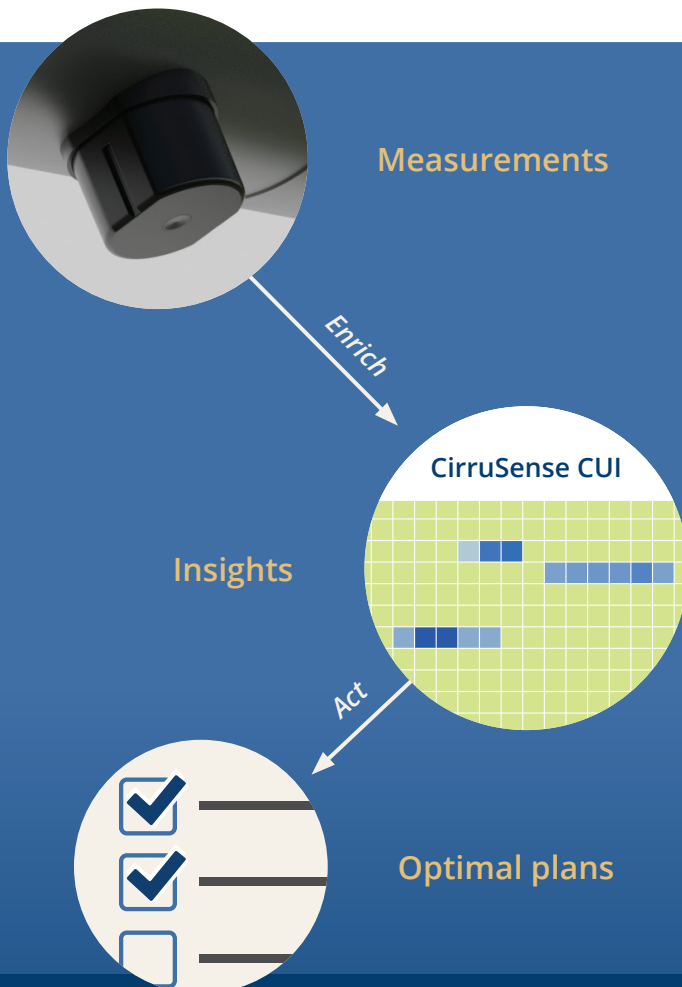
Data driven maintenance plans

Using CirruSense, you will know both the duration and extent of wetting on your different assets. You will also understand where wetting is caused by rain, and where water is able to desiccate during hot periods. Alerts about new water intrusions are delivered as soon as an anomaly is detected.

With this knowledge, you can confidently optimize maintenance planning based on the real state rather than assumptions.

Four-fold value creation

- Mitigate risk of incidents with IIoT CUI prediction
- Reduce cost by optimizing maintenance resources
- Save climate impact by avoiding waste from unnecessary replacements
- Optimize energy usage by replacing wet insulation



Our CUI sensors are mounted through the cladding of insulated piping to detect water at or in the vicinity of the sensor. Using cellular technology, the measurements are transferred to the CirruSense platform where it gets structured, enriched and presented in our web-based dashboard to provide an instant overview of your entire plant, with the ability to drill down into the details. The whole CirruSense solution is acquirable as a subscription service.

Fusion 310 Sensor

- Temperature, RH, surface wetting
- Cellular connectivity without gateways
- Quick sensor installation with NFC
- 15+ years of battery life
- Ex II 2G Ex ia IIC T4 Gb -40°C ≤ Ta ≤ +80°C