

Become more energy efficient with IIoT CUI monitoring



Wet insulation is inefficient insulation. With continuous monitoring, **CirruSense** by Trisense ensures optimal energy efficiency by informing your maintenance plans where energy is wasted due to compromised cladding and wet insulation.

Unquantifiable heat loss is currently the norm

The processing medium is often maintained at a desired temperature by insulating and cladding the piping. Ensuring that as little heat as possible can escape the medium reduces the energy needed to maintain this temperature.

If water makes its way through the cladding, it will get absorbed by the insulation and drastically reduce its insulation capabilities and drastically increase the energy required to maintain the same medium temperature levels.

Waste less energy by continuously replacing wet insulation

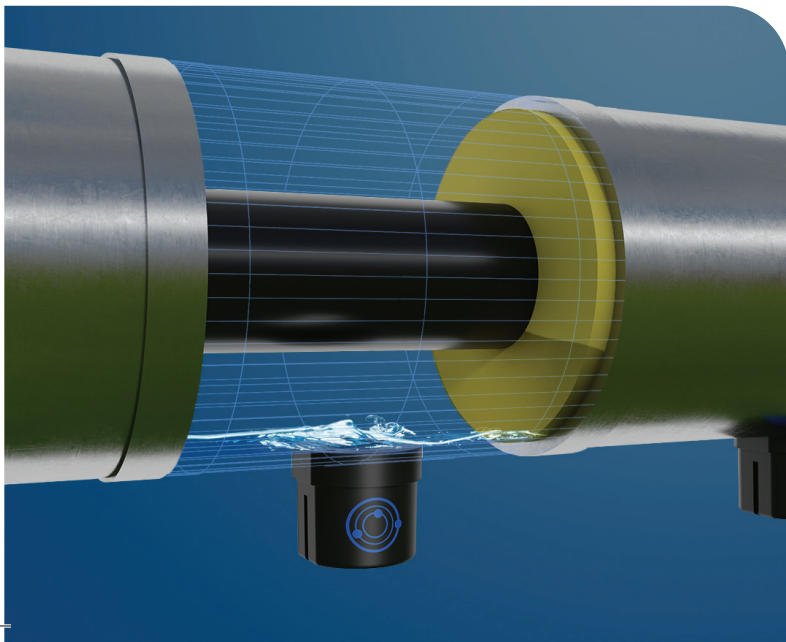
Using IIoT sensor technology by Trisense allows you to localize and replace wet insulation and broken cladding with a great level of information and accuracy.

CirruSense provides a comprehensive, data enriched overview of water intrusions to inform your maintenance plans for optimized energy efficiency.

Know which areas are affected with precise insights

By using smart IIoT sensors from Trisense to fuel CirruSense's algorithms, energy optimization is made easy through detailed insights.

- 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.

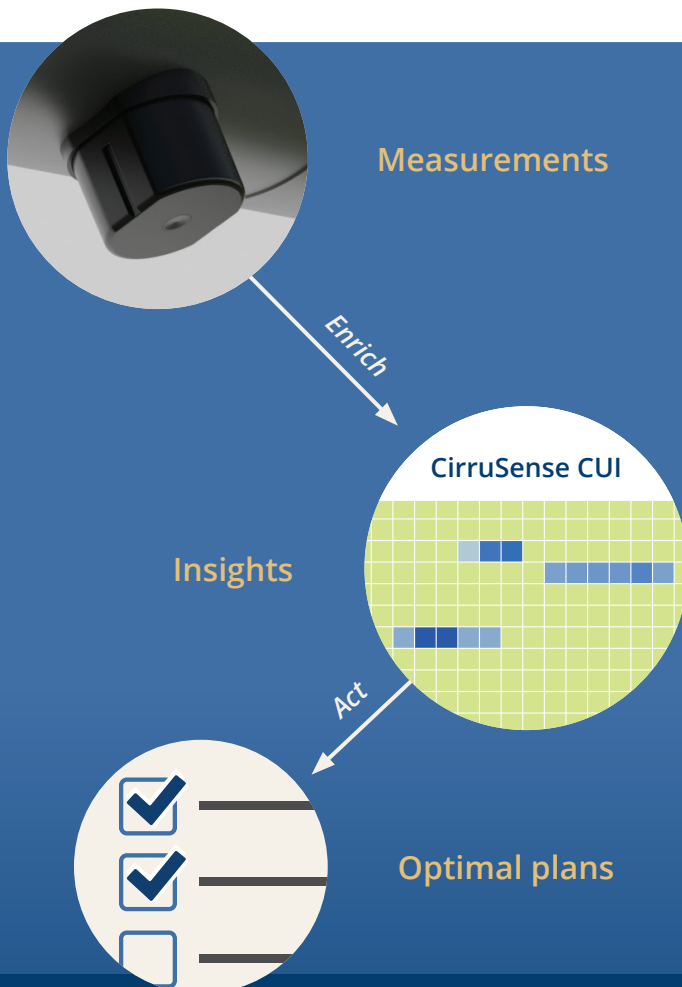
Data driven maintenance plans

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