Solutions for remote level measurement

Micropilot FWR30 – The wireless cloud-connected level sensor

Sensor on silos: Level sensor Micropilot FWR30 (battery-powered)

Fribin has more than 50 years of experience in the meat sector and is a benchmark in Spain. The company is present in more than 21 countries. The commitment to animal welfare and control over the natural and social environment has been part of their DNA since the founding more than 50 years ago. Today Fribin has more than 800 employees and a turnover of more than €270 million.

Fribin's privileged location in Huesca, one of the most productive livestock areas and close to key logistics points, allows them to have an exhaustive control over the animals throughout their life cycle, until the final product is delivered to the customer.

Fribin guarantees high-quality pork and beef, ensuring that the needs of their local and international customers are fully satisfied, while promoting healthy, natural, and balanced diet.

www.fribin.com

The application

The client needed to visualize the measurement of the level of chlorine, ferric chloride and sludge at its water treatment plant (WTP), which is a few kilometers away from the Fribin production plant in Binéfar.

Level control is currently carried out visually which can generate problems like the lack of product (chlorine and ferric chloride) for the WTP or the overflow of the sludge silo due to a lack of provision for its collection by an external company. The customer's requirement was to add the minimum amount of infrastructure during the installation of the level measuring device and to access the data from the plant in Binéfar. Considering these requirements, the solution of an autonomous (battery-operated) sensor, that makes the measured data available via clould, was decisive for the customer's choice.

Challenges for the application

The level measurements are carried out at the WTP, which is a few kilometers away from the main production plant. One of the requirements that Fribin raised was that they did not want to develop infrastructure (cabinet, power supply, radio, etc.) to send the measured data to the production plant. For this reason, a totally autonomous system was chosen:

Similar to a tablet or mobile phone, the measurement data recorded by the battery-powered level sensor Micropilot FWR30 is transmitted to a cloud via common mobile radio standards.

The solution

Micropilot FWR30 and SupplyCare Hosting

The level sensor Micropilot FWR30 (80 GHz radar) is an intelligent level measuring device with high-end technology. Together with the digital cloud service SupplyCare Hosting SCH30, the battery-powered wireless level sensor ensures reliable remote level monitoring.
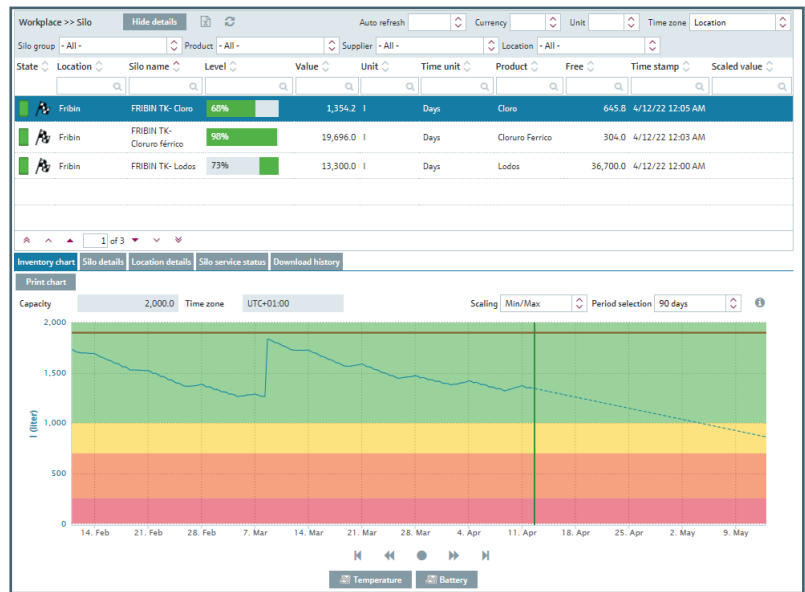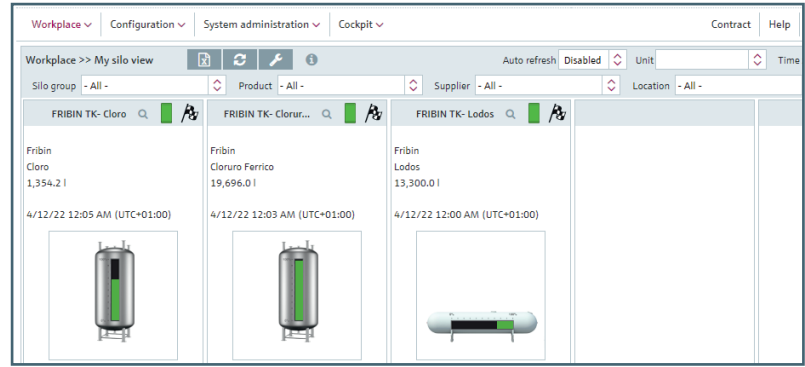
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People for Process Automation

The secure and certified solution provides access to information on assets and inventory status from anywhere and at any time.

- Level measurement and monitoring of the inventory in any application with liquids or solids up to 15 meters high.
- As it is a wireless device, it does not need any infrastructure in the form of power supply or wiring; the only important requirement is that there is mobile phone coverage.
- In addition to the level measurement, the equipment offers localization via GPS position. This parameter can be of great help when there is geographical disparity of different levels.

Advantages

- Access to information from anywhere and at any time via tablet or PC.
- Simplified solution without accessories. The measured data is sent directly to the cloud and is visible on the SupplyCare Hosting platform. Historical records can be viewed and alarms or user permissions can be configured easily. The inventory level forecast can also help indicate when a replenishment is needed and avoid unnecessary shutdowns or travels to the field.
- The installation of the level sensor Micropilot FWR30 requires no electrical wiring.
- Secure data transmission combined with a flexible digital service portfolio.

Digital service: Inventory management software SupplyCare Hosting SCH30

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