Liquid Fertiliser Tank Monitoring



Chemical Supplier Connects Remote Farms to Better Manage Demand Forecasting

The Need

A major Australian chemical supplier based in Western Australia supplies liquid fertiliser to a network of more than 1,500 farms throughout the state via their Energy and Fertilisers division.

A typical supply process, the fertiliser supplier provided goods to their customers only when an order was placed. However, with such a large customer base this process made it difficult to balance supply and demand and maintain fair lead times.

Additionally, with customers spanning the state, it was a challenge to coordinate delivery of goods efficiently and cost-effectively.

To improve their supply chain and customer service processes, the fertiliser supplier sought an alternative resupply method.

The Solution

In response to their challenges, the fertiliser supplier implemented a fleet of 250 Captis Multi devices across part of their customer base storing 20 or 50 kilolitre fertiliser tanks on their farms. Connected to a hydrostatic pressure sensor, the Captis Multi devices were configured to monitor the liquid fertiliser level of the storage tanks, alerting the supplier when the level was low and prompting a resupply.

The Captis Multi was chosen due to the devices IP68 rating which can withstand harsh elements and extreme temperatures, essential for agricultural applications. Moreover, the NB-IoT cellular technology allows for reliable and comprehensive coverage, which is crucial for many of the remote locations of the customer farms.

By means of the new resupply process using tank level data provided by the Captis Multi, a more automated resupply solution was afforded to the fertiliser supplier and their customers. The data also allowed for more accurate demand forecasting resulting in improved supply and a reduction in lead times. The fertiliser supplier has now also deployed the Captis solution across other areas of their business to assist with supply and demand planning.



RELIABLE COVERAGE
ON VERY REMOTE FARMS



REDUCED LEAD TIMES





Solution & Application



Captis Multi

250 Captis devices were installed across remote farms onto existing fertilizer tanks



Regular Data Logging

The cost-effective device was chosen thanks to its ability to provide regular data updates alerting supplier when the fertilizer level was low



The NB-IoT cellular technology enabled data to be transmitted from even the most remote farms



Rugged Hardware

The IP68 rated enclosure can withstand extreme temperatures and weather events





Multi Sensor Interface

Chosen for its multi sensor interface that can connect to existing infrastructure and hydrostatic pressure sensor



Data Logging with Captis Cloud

Data logged in a central hub with predefined rules and alarms to ensure real-time data and accuracy

