

Elecsys Case Study -

FERTILIZER TANK MONITORING

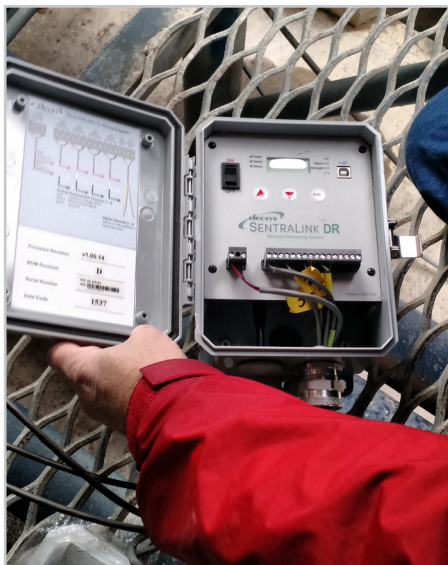
Elecsys remote monitoring provides proactive detection of low fertilizer tank levels.

BACKGROUND

Ag Service, Inc. has been serving farm communities in south central Kansas since 1975. Headquartered in Hillsboro, Kansas, Vice President Adam Kleiber and his staff are dedicated to providing for the timely sales and resupply of fertilizer products to a customer base spread out over a wide territory.

PROBLEM

Ag Service, Inc.'s primary operational concern is the ability to accurately monitor fertilizer tank levels at their manufacturing plant and at multiple resale locations throughout the region. Since the timing of fertilizer applications has such a significant effect on soil nutrient replenishment, plant uptake, and yields, it is mission critical that Ag Service, Inc. has full insight into tank levels throughout the entire manufacturing process. Previously, tank levels had been obtained by visually inspecting each tank, estimating its percent-empty or full, and then manually recording that data. This process was laborious and time consuming, and due to the potential for human error, it was only as accurate as the person estimating it. Ag Service, Inc. sought a solution to increase efficiency, inhibit theft, and reduce costs and waste, all while continuing to build customer loyalty by providing on-time delivery of fertilizer products.



APPLICATION
Fertilizer Tank
Monitoring

ORGANIZATION
Ag Service, Inc.

INDUSTRY
Commercial Agriculture

PRODUCT
SentraLink DR



“The SentraLink DR provides Ag Service, Inc. with the ability to track our fertilizer inventory and monitor fertilizer tank levels to a degree which we had not been able to do before. In making the decision to remotely monitor our products, it was equally as important for us to be able to view that information, in real time, from any location.”

- Adam Kleiber
Vice President
Ag Service, Inc.

SOLUTION

Elecsys Corporation has been in business for over twenty years providing remote monitoring solutions in the agricultural, oil, gas, water, and energy markets. Elecsys offers full-spectrum solutions from the design and manufacture of custom M2M products, as well as a proprietary assortment of remote monitors, and a web-interface with an abundance of data retrieval and reporting features.

Ag Service, Inc. connected with Elecsys after speaking with Kansas State University's Advanced Manufacturing Institute. The need for an automated remote monitoring solution was discussed and it was decided that the optimal product would be the Elecsys SentraLink DR. The SentraLink DR is a highly configurable and advanced sensor/transducer monitor with a high-speed and accurate scan rate of up to four times per second on each of its four channels. The unit has 8 GB of internal storage for data logging, and can be securely accessed 24/7 from any web-enabled device via the Elecsys remote monitoring

web interface. This kind of utility meant Ag Service, Inc. would no longer have to manually monitor, estimate, and report on the fertilizer tank levels at multiple locations throughout south central Kansas.

RESULTS

The SentraLink DR provides constant insight of fertilizer tank levels from any web-enabled device to Ag Service, Inc.'s employees, which cuts down on travel and provides instantaneous notifications when levels drop outside of the customized thresholds. This allows Ag Service, Inc. to respond rapidly so the timing of their customer's fertilization application is never interrupted. The Ag Service, Inc. outcome proved that the SentraLink DR is a proactive detection product capable of monitoring a variety of tank levels, pressure levels, and power settings in real time using bandwidth-friendly report-by-exception technology.