

Radar Offers Superior Solution for Taller Tanks



Cemstone has been providing concrete mixing and delivery services to the North Midwest region of the U.S. since 1927. Cemstone has driven the concrete industry to new heights by maintaining its legacy of unmatched quality and their commitment to providing cutting-edge science and technology, along with committed staff, has enabled them to consistently enhance their products and services.



Applications:
Fuel Inventory
Management

Market:
Diesel Fuel

Cemstone Concrete Materials used float sensors to check the level of fuel in their tanks. Many of their tanks are tall—some of them are over 15-feet tall and hold 12,000 gallons of fuel. Although tall tanks can benefit from float sensor monitors, they are not always the most reliable option and are prone to failure overtime. When the technology failed, service representatives were hard to contact, and problems were not solved. The company needed a cost-effective monitoring system that would provide more accurate and consistent readings.

“We previously used a monitoring service, but we have noticed that radar is a better option for more reliable and accurate readings.” said Kyle, Materials Manager

It was important to Cemstone Concrete Materials to reduce labor and overhead cost and have the capability to remotely monitor their tanks, eliminating the need to physically travel to the remote tanks to adjust floats, trouble shoot problems, and record readings.

Solution

In 2023, Cemstone installed the TankScan TSR1000 tank monitoring system on 17 diesel fuel tanks in throughout Minnesota. The remote monitoring system leverages existing wireless cellular infrastructure and a cloud software application to eliminate large startup and setup costs associated with typical SCADA systems. The install requires screwing the monitor into a 2" port on the top of tank and plugging in the battery. The cloud application is setup remotely and offers unlimited users, historical trending, and email/text notifications.

The tank levels are viewed from field operator's cell phone or from a PC at a remote office. The system is cost effective due to its use of existing infrastructures through internet connectivity, internet browser, email, text message and cloud compute. The user is provided with accurate readings to devices he already owns, understands and supports.



Results

Cemstone has seen numerous benefits from remote level monitoring including:

- Reduced labor and overhead associated with trips to the tank locations
- Enhanced operational dependability of their plant with remote viewing of tank levels
- Automated notifications boost confidence and lower environmental risk
- Increased safety as a result of not having to climb the tanks and adjust floats

"I chose TankScan because they are local. I was a super easy install process. We had a couple video calls with the service team to work through some technical issues which was great.", said Kyle.

