

Increasing customer loyalty with remote monitoring from ProcessMonitor

Problem case

FKM Buster, Altöl- und Reststoffentsorgung GmbH in Mannheim, Germany, is a recycling company of waste oil and waste emulsion, which they collect from thousands of customers in the region. After refining in their own refinery, FKM resells the high grade oil. FKM Buster was facing a challenge to increase the loyalty of their customer base. Customers were generally not very loyal and quickly changed their recycling company.

To improve customer loyalty, FKM Buster was interested in the added value of a system that would measure the waste oil level at the customer and report the measured data regularly into a web database. Herewith FKM could unburden their customers with automatic pick-up, when tanks were 80% full instead of at a certain time frame. Simultaneously and additionally, FKM Buster would optimize their truck logistics, saving cost, and keep record of customers' loyalty. FKM greatly preferred a complete package with highly reliable level monitoring (proven technology), data communication via GPRS and installation of the system components included.

ProcessMonitor solution

The price attractive package of the ProcessMonitor M844 was chosen with the Guidense TDR100 guided wave radar, for their reliable level measurement and data communication. With the data logging functionality and the internal/integrated power supply (24V DC @ 150mA) for connecting level instruments, installation is easy and quick: The M844 is connected to a mains power supply and the Guidense level sensors are connected to the M844 with the 24V DC sensor supply and analog sensor input signals. The advantages of the 12 Bit A/D conversion for highest accuracy, data logging down to 4Hz, free adjustable data communication, and the attractive rugged field IP67 housing convinced FKM further. Fluidwell was fully responsible for the setup on site, FKM Buster only had to provide the power.

Results

- ✓ FKM Buster can now daily check tank levels remotely at their storage facility in Mainz, optimizing their logistics and losing the hassle in scheduling pick-up of waste oil: Saving hundreds of euros per month per truck since the waiting times of the local truck drivers are almost eliminated;
- ✓ Alignment of measured values and weighing results, together with improved logistics, increases efficiency in their refinery considerably;
- ✓ Increased loyalty from customers, now that pick-ups are automated and misuse of the storage facility for other recycling companies is made visible;
- ✓ All this at very low installation costs and with little efforts.

After installation, truck drivers also wanted local displays on their tank, to optimize their truck routes according to the actual volume of the tank. Downtime for waiting would be further reduced, just by providing the actual volume via a display. A Fluidwell F070 level indicator was looped in with an external 24V DC power supply. Due to its backlight option, level readings can also be done when it is still or already dark.

FKM is very satisfied and willing to invest more. There are plenty of customers left for great potential!

More advantages

The M844 operates at a temperature range of -30°C to +75°C with a quad-band modem for worldwide GSM/GPRS coverage, plug and play configuration and flexible mounting possibilities (wall/panel/pipe). Galvanically isolated analog inputs eliminate the risk of electrical interference with existing (field) instruments. It monitors (inventory) levels of raw bulk materials (liquids or solids) but also weight, pH, (belt) scales, CO₂, pressure, temperature, etc. Save staff time, travelling and costs to remote sites!

Oil waste container



M844 and a KFA2 level sensor



3 Fluidwell F070 level indicators



M844 Data Acquisition and Communication Module

