Major Dairy Cooperative Prevents Shutdown and Maintains Compliance with Rosemount™ Magnetic Flowmeters

RESULTS
- Major dairy cooperative realized a cost savings of $71,300
- Operation was able to continue without shutdown
- Worker safety was improved due to work being done above ground

APPLICATION
Flow measurement of effluent from manufacturing process to water treatment facility. Measurement is reportable to the local FDA.

CUSTOMER
Major dairy cooperative

CHALLENGE
The installed magmeter system was no longer functioning and therefore could not be used to account for the amount of effluent being discharged from the plant to the treatment area. Because the flow sensor was installed below ground in a vault, the cost to remove the sensor to verify the integrity of the sensor was prohibitive.

The magmeter system was unable to produce an accurate output due to the failure of the transmitter electronics. Since the meter was produced by a competitive manufacturer, the customer had to manually verify the resistance readings to diagnose the health of the sensor. Once the sensor was verified to be good, the major dairy cooperative contacted their Rosemount sales representative to see if there was a way to get the system working without having to remove the flow sensor and wiring.

The failure of this meter put the entire plant at risk of a shutdown as they were already under heavy scrutiny from the FDA due to a production contamination issue. Not only was production at risk, but the customer was risking a daily fine for not being able to report the total effluent discharge to the FDA.
SOLUTION

The Rosemount sales representative and the major dairy cooperative’s service technician visited the site to oversee the installation and commissioning of the universal transmitter. The transmitter auto generated a calibration number for the installed sensor by utilizing the Universal Auto Trim software function. Because the service technician was unfamiliar with the Universal Trim commissioning process, they were unsure how to proceed when they encountered an unfamiliar error message. They contacted Rosemount flow technical support for assistance who were able to describe the cause of the problem and offered a quick fix to complete the commissioning process.

The plant was able to continue operation without a shutdown, optimizing plant availability, by avoiding the removal of the flow sensor. Worker safety was never compromised as all work was performed above ground. The major dairy cooperative now has a magmeter system with integral meter health diagnostic capabilities that they would not have been able to get from their original supplier. The ability to use the Rosemount 8712 Universal Transmitter with the competitive flow sensor enabled them to realize a cost savings of $71,300.

RESOURCES

Emerson™ Process Management Food & Beverage Industry
http://www2.emersonprocess.com/en-US/plantweb/customerproven/Pages/FoodBeverage.aspx

Rosemount Magnetic Flowmeters