



BREWER SIMPLIFIES TAX METER VERIFICATION WITH ADVANCED FLOW METER DIAGNOSTICS

Application

Brewery taxation meter verification

Customer

Brewer

Challenge

The U.S. Department of Treasury Alcohol and Tobacco Tax and Trade Bureau (TTB) requires that breweries measure and report the amount of alcohol produced for human consumption for tax purposes. The TTB requirements, defined in 27 CFR Part 25, Subpart E require that, "The brewer shall accurately and reliably measure the quantity of beer transferred from the brewery cellars for bottling and for racking." Further, "If a measuring device such as a meter or gauge glass is used to measure beer, the brewer shall periodically test the measuring device and adjust or repair it, if necessary. The brewer shall keep records of tests available for inspection by appropriate TTB officers."

This brewery had 12 magnetic flow meters that fell under this requirement and needed periodic verification. To meet the requirement, the brewery contracted with an outside organization to verify the flow meters twice per year. The brewery was charged \$1600 per meter, per verification, resulting in \$38,400 for outside services each year. Through careful coordination and scheduling, the brewery was able to reduce the net verification downtime to the equivalent of one day of lost production per year. This resulted in \$470,000 in lost revenue.

Results

- Tax meter verification reduced from four hours to under 10 minutes
- Reduced cost for outside verification services by \$38,400 per year
- Recovered lost production, increasing revenue by \$470,000 per year

Advanced in situ diagnostics enable verification without removing the flow meter from the line.

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Solution

The brewery replaced the 12 flow meters with Rosemount™ Magnetic Flow meters, which included the advanced meter verification diagnostic. This diagnostic verifies the sensor and transmitter in situ, without additional hardware, and with virtually no interruption to the process.

AMS® Suite asset management software gathers the verification data and the Audit Trail feature produces a report which meets the TTB documentation requirements.

Meter verification is now easily done by brewery maintenance staff. Verification was reduced from four hours to under 10 minutes per meter. A contractor was no longer needed to verify the flow meters, saving \$38,400 per year previously spent on outside services. Because the meter verification could now be done in situ, the brewery was able to eliminate the downtime previously required for meter verification. This allowed them to recover the lost day of production, and increase revenue by \$470,000.



The Rosemount Magnetic Flow Meter includes advanced meter verification diagnostics.

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