

Upstream oil & gas products Ultrasonic level measurement

Automating chemical control and inventory management in the oil and gas industry

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Introduction

Chemical use is prominent in the value chain of the oil and gas industry and many times is one of the highest lease operating expenses (LOE) production companies have, especially as an asset matures. Chemical Control and Inventory Management of these injection systems has been lacking the technology advancements that many of the other areas of the industry have realized with the 'Shale Boom'.

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With having the output from an LST100 Ultrasonic Level Sensor input into an ABB Totalflow Control Unit (XFC or XRC), customers can monitor tank level, use rates, percent full and number of gallons in the tank, as well as able to detect refill events. The ability to monitor the level in the tank allows you to not only have an accurate inventory of what you have in the field for each tank, but gives you the information needed to set alarms, detect pump issues, monitor for leaks or theft.

Imagine confidently reducing your total chemical inventory by 10%. Think of the service savings potential when only dispatching for chemical tank refills when truly needed.

Operational data

Current Level
Chemical Consumption Rate

Alarming data

Pump is running, no change in level (pump possibly plugged)
Pump not running, change in level (possible leak or theft)
Level Low Refill Alarm (JIT Inventory Management)

Inventory data

Current tank volume
Refill date/time & volume

Installation

Installation is easy with the first tank typically being installed within 30 minutes. For higher quantity installations, setups can be facilitated using copy and paste after the first tank. Always use proper PPE.

Cost & return on investment

At possibly 1/10th the cost of a single tank refill, the LST100 can keep your investment monitored and is well worth the price.

Simple justifications

- Preventing chemical loss or spillage of 200 gallons of foamer or corrosion inhibitor could represent savings ranging from as little as \$1,600 if all you did was spill some foamer to multiple thousands for the loss of corrosion inhibitor
- Tens of thousands in lost production from well shut down as a result in lack of chemicals.
- Ensuring adequate chemical volume and usage to avoid the cost of a well restart

Contact us

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