

ABB MEASUREMENT & ANALYTICS | APPLICATION DESCRIPTION

Tank level measurement

XSeries and Xcore applications



The proper handling of liquids, oil or water, at any well site is an essential requirement.

Measurement made easy

01 Totalflow applications can be used with etiher a Totalflow XSeries device, or a Totalflow XCORE device.

Automation objective

The proper handling of liquids, oil or water, at any well site is an essential requirement. Liquid storage tanks are usually installed at a central location and emptied on a routine schedule.

Good tank management can be achieved by the use of a tank level device. An accurate tank level device provides for the safety of personnel, helps in protecting the environment, reduces operating costs, alerts about theft and gives up-to-date knowledge of liquid production.

Automation solution

The Totalflow LevelMaster level sensor provides level measurement in tanks of 2 to 25 feet in height.

Transfer accuracies of +/- 0.1 inch can be made and an option of +/- 0.05 inch accuracy is available. Dual floats measure both the oil and water in a production tank and an integral temperature sensor measures the fluid temperature.

Production reports, alarms, tank measurement trends and inventory management can be viewed remotely with Totalflow WINCCU software or SCADAvantage™. If oil transfer accounting is required, the LevelMaster Oil Transfer Application can be used to provide an Electronic Run Ticket.

Recommended equipment

Qty 1 - XSeries FCU/RTU or XCORE RTU with solar panel

Qty 1 - LevelMaster level sensor

Qty 1 - PCCU Laptop communication software

Options – Radio for remote communications; WinCCU remote host software

Solution benefits

Personnel safety

Eliminate climbing on tanks; avoid entering unsafe H2S environments.

Cost reduction

Fewer site trips to monitor liquid production; awareness of theft; more efficient scheduling of truck runs; no two-man gauging at H2S wells; never needs calibration.

Environmental protection

Prevention of tank overruns; instant notification of tank leakage; emergency shutdown.

Alarm notification

High/low level and temperature; unauthorized movement; emergency shutdown.

Improved inventory control

+/- 0.1 inch level accuracy; Oil Transfer algorithm; Electronic Run Ticket; automated control of pump and valves.

Easy installation

Mount XSeries/Xcore; install LevelMaster; connect solar panel; connect wiring to valves.

Simple start-up

Enter initialization requirements with PCCU software or WinCCU software.

Low power electronics

Helps extend battery life, reduces maintenance expense, and allows for more run time.

Extendable

Any XSeries/XCORE product can also provide flow measurement, alarming, data logging, level measurement, remote communications, and plunger optimization, and nomination control while performing valve control.

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