AW-LAKE COMPANY

APPLICATION SPOTLIGHT

Onshore Oil Recovery - Chemical Injection

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APPLICATION:
This customer provides services and equipment for onshore oil recovery at well sites across North America. Depending on the site location, management of well integrity is done by injecting a variety of different chemicals deep into the well, such as: scale inhibitors, corrosion inhibitors, biocides, demulsifiers and foam inhibitors.

PRODUCT SUPPLIED:
- JVS Positive Displacement Flow Meters
- RT-30EX Flow Transmitters

CHALLENGE:
This customer was searching for a way to reduce costs of these expensive chemicals. It has been found that steady-state chemical dosing is much more effective than the old method of timer-based dosing, which allows for significant chemical waste when over-dosing occurs. This adds additional expenses for unnecessary chemicals, as well as additional costs at the processing end when the chemicals need to be removed. By switching to a steady-state dosing system using flow meters, chemicals are continuously injected into the oil well providing a more consistent oil product, but also more precise measurement and reporting of chemical use.

SOLUTION:
Positive Displacement flow meters were specified because of their low flow rates, high pressure ratings and wide turn-down. These meters are also ideal here because they are viscosity-independent (they are accurate, even when fluid viscosity changes). The AW Gear Meters JVS series PD meter has been used in both onshore and offshore oil fields for decades.

The flow transmitter chosen for this application was the EX-rated RT-30EX, with CSA/cUS Class I, Div 1 certification for use in hazardous areas. This transmitter is protected against environmental conditions and can be easily integrated with a multitude of SCADA, DAQ, DCS or PLC systems.