

Blow-out Preventor — Oil Well Snubbing



CUSTOMER

Oilfield Services & Equipment Provider
Edmonton, AB Canada

APPLICATION

The customer is involved in snubbing operations at well sites across North America. They are using flow meters as part of a pressure control device by using hydraulic flow to measure the amount of valve actuation when shutting in a well.

CHALLENGE

Because of the bi-directional nature of the hydraulic flow in the actuator lines, a meter was required that would read in either direction and provide counts similar to an encoder that could be used to indicate position. In addition, many of the wells are in a sour service (high H₂S levels) so materials of construction must be able to stand up to the corrosive properties.

SOLUTION

Positive Displacement flow meters were specified because of their symmetrical geometry. These meters can be used in bi-directional flow and are available in 316SS, suitable for the sour gas environment.

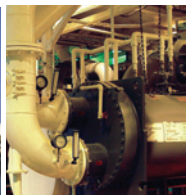
A custom version of our popular DH-BB sensor was used to provide both pulse counts and direction indication. Our engineers worked closely with the customer to provide a low power draw device that provided an output signal usable by the customer's proprietary DAQ system. AW was also able to do custom packaging of the electronics to provide complete encapsulation from the elements and increased immunity to external vibration.



AW products supplied:

- *JVS Positive Displacement Flow Meters*
- *Custom DH-BB Sensors*

“In our on-well-site test and demonstration with over 50 industry experts, our system was a huge success and the integration of the flow meters is a big part of the reason. Thank you for working with us on the electronics so we could provide a completely solar operated unit.”



continued:
Blow-out Preventor – Oil Well Snubbing



CUSTOMER

Oilfield Services & Equipment Provider
Edmonton, AB Canada

The AW Gear Meters JVS series PD meter has been time proven in the oil field both off and on shore and is being used in hundreds of locations around the world. Our electronics are protected against the environmental conditions and can be easily integrated with a multitude of DAQ, DCS, or PLC systems.

RESULTS

By measuring the amount of movement in the actuator via hydraulics, the pressure control system is able to greatly increase safety at the well head while dangerous operations are taking place. Ensuring that a safety valve is completely closed is a vital operation.



JVS series spur gear PD flow meter

