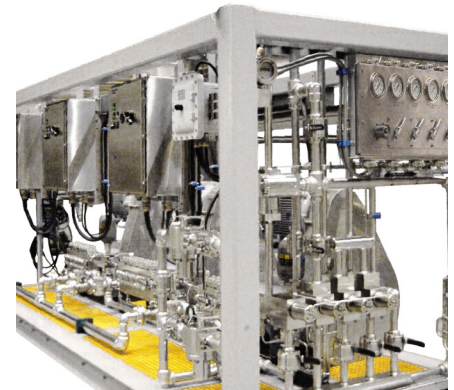




**APPLICATION SPOTLIGHT**  
Subsea Hydraulics - Topsides



## Subsea Hydraulics - Topsides



### APPLICATION:

This customer is building topside hydraulic control skids for subsea valve actuation. A special eco-friendly hydraulic fluid (water/glycol) is used to actuate valves and blow-out preventers that are located subsea. In order to ensure there is flow when these valves need to actuate, the fluid is monitored with flow meters located near the pumps.

### PRODUCT SUPPLIED:

- JVHS-30KG Positive Displacement Flow Meters
- VTGA ATEX-approved transmitters

### CHALLENGE:

Because of the distance that the fluid must travel through the umbilical, it is pumped at pressures up to 15,000 psi. In this case, the skid would be located in the North Sea and needed the appropriate area certifications to be used in the European area in hazardous locations.

### SOLUTION:

Positive displacement flow meters were specified because of the high turndown ratio, high accuracy, and pressures ranging up to 15,000 psi. These meters are viscosity-independent, so the changing environmental conditions do not have a strong effect on accuracy.

Because of our partnership with our worldwide network of flow metering companies, we are able to draw on products that meet the electrical and mechanical needs of any location around the world. In this case, pairing our JVHS-30KG flow meter with our sister company's VTGA ATEX-approved transmitter, we were able to meet all the requirements of the job.

Subsea valve actuation is critical for safety systems throughout the manifold and tree. Monitoring the flow to the valve can provide valuable feedback to prevent problems and indicate where maintenance is needed before a fault can occur during an emergency.