

# Major Offshore Producer Reduces Maintenance Costs and Increases Separation Efficiency

## RESULTS

- Reduced installation and capital costs
- Reduced operation and maintenance costs
- Lowered health, safety, and environmental risks
- Reduced downtime



## APPLICATION

2 and 3-Phase Offshore Production Separators

## CUSTOMER

Independent North American oil and gas producer

## CHALLENGE

This independent offshore oil and gas producer was experiencing inefficient separation from their production and test separators. Paraffin coating from untreated production fluids built up on the mechanical float switch used for level control.

Float technology has historically been used on this separator application and was prone to coating and erroneous readings. Since the float was in a sealed cage, replacement could only be done if the separator was taken out of service. The company needed to improve the efficiency and accuracy of their level measurements and simplify maintenance.

The previous float installation was bulky, and resulted in higher capital and installation costs. Fixing the float resulted in high maintenance costs due to routine cleaning. Moreover, the separator had to be taken out of service, which increased system downtime and placed personnel in hazardous environments while the separator was being cleaned.

## SOLUTION

The Rosemount 2120 Vibrating Fork was installed. The fork component has no moving parts and was more tolerant to paraffin buildup in this application, thereby eliminating the problem of false switching, lost uptime, and increased maintenance costs. The device's electrical output also allowed it to be tied into the automated process level control system, improving overall separator efficiency.

The 2120 comes with a simple way to test the device to ensure it is working properly. A magnetic test point is located on the side of the housing, allowing the user to perform a functional test of the device. The company could easily check that the device was working, which helped ensure adequate separation without taking the separator out of service.

*The Rosemount 2120 reduced maintenance and installation costs as well as improving overall separation efficiency.*



*The Rosemount 2120 Vibrating Fork*

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By utilizing the Rosemount 2120 Vibrating Fork, this company was able to save on installation and capital costs over the more costly and larger float switch technology. Furthermore, this company was able to reduce operations and maintenance costs by reducing the effects of paraffin buildup on the sensor and the need for routine cleaning. This company also lowered health, safety, and environmental risks associated with the cleaning and lifting of stuck float level measurements.

### RESOURCES

#### Emerson Oil and Gas Industry

[http://www.emersonprocess.com/rosemount/industry/oil\\_gas/index.html](http://www.emersonprocess.com/rosemount/industry/oil_gas/index.html)

#### Rosemount 2120 Vibrating Fork Level Switch

<http://www.emersonprocess.com/rosemount/products/level/m2120.html>

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