

Offshore Oil Producer Minimized Risk of Reduced Production and Well Availability with Non-intrusive Temperature Measurement

RESULTS

- Minimized risk of reduced production and well availability
- Decreased operations and maintenance costs
- Reduced safety risks



APPLICATION

Flowline Temperature Monitoring

CUSTOMER

Oil producer in Thailand

CHALLENGE

This offshore producer experienced difficulties with paraffin buildup inside their flowlines. Paraffin buildup restricted the internal diameter of the flowlines, resulting in reduced oil flow.

A primary cause of this customer's challenge was that there was no surface temperature measurement. Without this information, the oil producer was unable to detect when the conditions for paraffin buildup were present. Also, the customer required that no pipe penetrations or welded connections be part of this installation, which risk failing under high vibration conditions.

The absence of a flowline temperature measurement increased the risk of reduced production and well availability due to paraffin buildup. The customer experienced increased operations and maintenance costs when removing the paraffin obstructions with manual intervention and chemical injection. Lastly, offshore personnel had to enter hazardous areas, exposing them to increased safety risks during paraffin removal.

SOLUTION

The offshore oil producer reduced the possibility of paraffin buildup by installing customized Rosemount Application and Industry Solution (AIS) Sensors, which incorporated a non-intrusive pipe clamp sensor design. The non-intrusive design eliminates insertion into the process, and is quickly installed on the external piping.

The Rosemount 644 Temperature Transmitter, used in conjunction with the Pipe Clamp RTD Sensor design, enabled the customer to quickly install temperature measurements in areas where paraffin buildup was common. The temperature measurements helped the customer to be proactive, and reduce paraffin buildup within the production flowlines.

The Rosemount 644 Temperature Transmitter with Pipe Clamp RTD Sensor design allowed this customer to detect paraffin buildup, saving operations and maintenance costs.



The Rosemount 644 Temperature Transmitter used in conjunction with the Pipe Clamp RTD Sensor design

ROSEMOUNT[®]

For more information:
www.rosemount.com


EMERSON[™]
Process Management

The technology and ease of implementation with the Rosemount 644 Temperature Transmitter and Pipe Clamp RTD Sensor design enabled this customer to minimize the risk of reduced production and well availability due to paraffin obstructions. Decreased operations and maintenance costs were a result of proactive temperature monitoring and the early detection of conditions that result in paraffin buildup. Finally, the producer lowered their safety risks by reducing personnel exposure to hazardous areas.

RESOURCES

Rosemount 644 Head and Rail Mount Temperature Transmitters

<http://www.emersonprocess.com/rosemount/products/temperature/m644.html>

The Emerson logo is a trade mark and service mark of Emerson Electric Co. Rosemount and the Rosemount logotype are registered trademarks of Rosemount Inc. All other marks are the property of their respective owners.

Standard Terms and Conditions of Sale can be found at www.rosemount.com/terms_of_sale

Emerson Process Management

Rosemount Division
8200 Market Boulevard
Chanhassen, MN 55317 USA
T (U.S.) 1-800-999-9307
T (International) (952) 906-8888
F (952) 949-7001

www.rosemount.com

Emerson Process Management

Blegistrasse 23
P.O. Box 1046
CH 6341 Baar
Switzerland
Tel +41 (0) 41 768 6111
Fax +41 (0) 41 768 6300

Emerson FZE

P.O. Box 17033
Jebel Ali Free Zone
Dubai UAE
Tel +971 4 811 8100
Fax +971 4 886 5465

Emerson Process Management

Emerson Process Management Asia Pacific
Private Limited
1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
Enquiries@AP.EmersonProcess.com

ROSEMOUNT[®]

For more information:
www.rosemount.com


EMERSON[™]
Process Management