Reducer™ Vortex Minimizes Cost and Project Risk While Measuring Lower Flow Rates

RESULTS

- Eliminated downtime caused by frozen or plugged impulse lines
- Reduced installation costs by \$800 per flow point, or \$6,300 overall
- Reduced maintenance costs
- Improved measurement reliability

APPLICATION

Various installations where impulse line plugging is a concern

CUSTOMER

A large North American Refinery

CHALLENGE

This refinery had been experiencing maintenance issues with plugging and freezing of impulse lines in their plant. Plugging and freezing of impulse lines leads to loss of flow measurements, inaccurate measurements, and loss of process performance and process control.

SOLUTION

The company decided to apply vortex flowmeters where they had traditionally installed traditional DP orifice plates. While the original justification for this project was to eliminate the plugged/frozen impulse line problem, additional savings were realized by the Rosemount Reducer Vortex Flowmeter offering.

During the sizing of the meters for this application, it was noted that the line size needed to be reduced to get an accurate measurement from the vortex meters. Normally this would require welding reducers to the line and putting in a section of reduced-bore piping. With the installation of the Rosemount 8800 Reducer Vortex Flowmeter, the plugged/frozen lines in this plant were eliminated. By incorporating the line size reduction into the flange of the Rosemount 8800 Reducer Vortex Flowmeter, an additional \$6300+ in savings were realized by eliminating the additional installation costs normally associated with putting in a smaller line size meter.



The refinery realized \$6,300 in installation savings for this project alone.



Historic installation, common practice installation, and "Best Practice" installation with the Rosemount 8800 Reducer Vortex.





For more information: www.rosemount.com

In addition, this refinery was able to reduce operations and maintenance costs by reducing downtime and maintenance calls. The all-welded, non-clog design of the Rosemount 8800 Vortex Flowmeters were directly responsible for this benefit.

Lastly, this refinery was also able to better optimize their process because of the increased reliability of the flow measurement provided by the Rosemount 8800 Reducer Vortex Flowmeter.

RESOURCES

Emerson Process Management Petroleum Refining Industry

http://www2.emersonprocess.com/en-US/industries/refining/Pages/index.aspx

Rosemount 8800 Reducer Vortex Flowmeter

http://www2.emersonprocess.com/en-US/brands/rosemount/Flow/Vortex-Flowmeters/ 8800-Reducer/Pages/index.aspx The all-welded, nonclog design reduced maintenance costs and improved measurement reliability, resulting in better process optimization and availability.

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