



REDUCER VORTEX SAVES \$1121 ON STEAM FLOW MEASUREMENT INSTALLATION

Customer

Facility in North America

Application

Steam flow measurement in a 4" line

Challenge

This particular chemical plant had a traditional DP orifice system installed and was experiencing issues with impulse lines freezing due to insufficient heat tracing. This resulted in inaccuracy and loss of measurement. The customer had adopted vortex technology as "Best Practice" to address impulse line issues. In this 4" steam flow application, vortex sizing showed that a 3" meter would be ideal for the measurement range. This would require a costly field reduction in the piping.

Solution

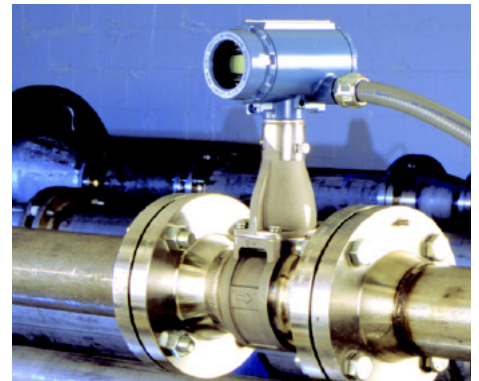
To reduce the cost of the installation, the Rosemount™ 8800 Reducer Vortex was suggested. This meter allowed the customer to install a 3" vortex meter that had 4" flanges attached allowing them to save \$1121 on the installation when compared to installing a standard 3" vortex meter.

Material Savings = \$551

- \$46: Traditional site practice, one reducer, one expander required
- \$700: Traditional site practice, two 3", two additional 4" flanges required
- \$200: Traditional site practice, ten feet of 3" pipe required at \$20 per foot
- -\$385: Paid \$385 more for Reducer™ Vortex versus a traditional 3" flanged meter

Results

- Installation savings of \$1121
- Reduced maintenance costs
- Improved measurement reliability



Reducer Vortex technology resulted in more than \$1100 in installation savings for this measurement.

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Engineering Savings = \$100

- \$100: Reduced engineering time by two hours at \$50 per hour

Procurement Savings = \$110

- \$110: Three less items to purchase and inspect than the traditional site practice

Installation Labor Savings = \$360

- \$360: Reduced demolition, fabrication, and installation time by eight hours at \$45 per hour

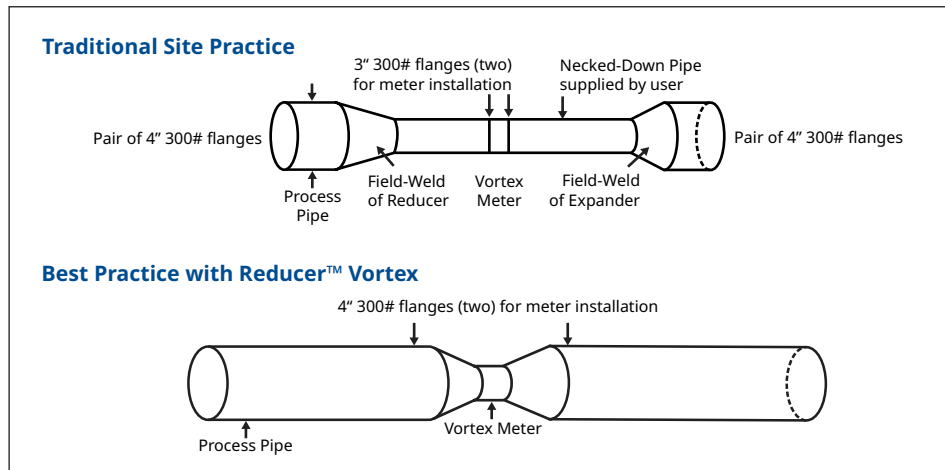
Total Savings = \$1121

In addition to eliminating the troublesome impulse lines, this chemical plant was able to reduce maintenance costs while improving measurement reliability with Rosemount 8800 Reducer Vortex technology.

By eliminating the impulse lines, this chemical facility was able to reduce maintenance costs and increase measurement reliability.



The 8800 Reducer Vortex Flow Meter



Changing installation practices

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