

# ROSEMOUNT 8800 QUAD VORTEX FLOW METER

Eliminate unexpected process shutdowns and installation complexity with redundant flow measurement you can quickly bolt in, wire up and go

#### **Our Solution**

No matter the application, plant safety is paramount and relies on the dependability of your instrumentation. Rosemount™ 8800 Quad Vortex Flow Meters with safety certification offer the ultimate redundant flow measurement. With four independent sensors and transmitters, our proprietary solution provides the utmost reliability to guard against spurious trips using a 2003 voting method.

The 8800 Quad Vortex Flow Meter offers world-class reliability with a gasket free, non-clog meter body that eliminates potential leak points, maximizing process availability without the need to shutdown for maintenance. Our unique design features isolated sensors that eliminate the need to break process in the uncommon case of sensor replacement.

## **Application**



#### Chemical

- Steam Measurement: Increased reliability and safety for mass and energy balance, benchmark efficiencies, and improvements
- Steam Cracking Furnace: Increase furnace efficiency with accurate and reliable measurement of steam and ethane.
- Reformer: Increase uptime and prevent damaging/cracking of tubes and lost production by accurately maintaining proper steam flow to avoid damage/crack tubing and safety risks



#### Power

 Feedwater Flow: Increased reliability and safety for combined cycle power plants



#### Refining

- Light Gas Oil Hydrotreating Units (GOHT): Utilizing feed strippers to remove dissolved O2 from storage feed tanks
- Delayed Coker Heater: Wide turndown range offers the flexibility for Spalling process of decoking of furnace tube walls



#### Offshore Oil & Gas

• Critical Steam Measurement: Ideal in high corrosive atmospheres where safety is crucial



# Rosemount 8800 Quad Vortex delivers:

Application flexibility

- qas
- liquid
- steam
- Safety Instrumented Systems

The power to withstand a wide range of operating conditions such as:

- process flow
- particulates
- dirty fluids
- process pressures
- process temperatures

A complete solution that comes with quadruple sensors and transmitters to meet your safety integrity level requirements.



# **ROSEMOUNT 8800 QUAD VORTEX FLOW METER**

#### **Benefits**



• Reduced installation costs: eliminating the need of additional flow meters and any related straight run with a simple all-in-one, drop in redundant flow solution



• Decreased operating expenses: no impulse lines to maintain



• Eliminated leak points: an all-welded, non-clog design for increased reliability



• Verified secondary confinement integrity: with the CriticalProcess valve (CPA option) to provide an extra level of safety assurance.

### 8800 Quad Vortex Flow Meter Specifications:

Available Line Sizes: 2-in to 12-in (50 to 300mm)

Flow Meter Accuracy:  $\pm$  0.65% of volumetric rate and liquids,  $\pm$  1.00% of volumetric rate for gas and steam

**Safety Certification:** SIL 2/3 capable per IEC 61508

Turndown: 15:1

4-20 mA with HART® 5 or 7,

Outputs: 4-20 mA with HART® 5 or 7 and Scalable Pulse Output

FOUNDATION Fieldbus ITK6

Wetted Materials: Stainless Steel, Nickel Alloy, High Temp Carbon Steel, Low Temp Carbon Steel,

and Duplex

ANSI Class 150 to 1500, DIN PN 10 to PN 160, JIS 10K to 40K,

Flange Options: Flanges are available in a variety of facings, consult factory for additional flange

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ratings

Operating Temperature: -330 °F to 800 °F (-200 °C to 427 °C)

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For more information, visit **Emerson.com/Vortex** 

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