



NANTONG SHEN HUA OPTIMIZES STEAM USAGE WITH THE ROSEMOUNT 8800 MULTIVARIABLE (MTA) WITH CRITICALPROCESS (CPA) VORTEX FLOW METER

Customer

Shen Hua Chemical Industrial Co., Ltd

Application

Saturated Steam measure for custody transfer from power plant (210 °C Temp Saturated)

Challenge

NanTong Shen Hua was experiencing erratic signal readings with a competitor Vortex product, evoking a need for an accurate and reliable measurement of their saturated steam usage to monitor utility costs. This measurement allows them to double check the steam billing and ensures that Shen Hua is not being overcharged for steam. Without a reliable steam measurement, Shen Hua doesn't have insight into their increasing utility cost.

In addition, because of the unstable meter performance, the customer had to replace and maintain the sensors more frequently. With the wetted sensor design, the flow meter and sensor had to be removed from the line to be replaced. The frequent unplanned process shutdowns were causing production loss and disruptions in workforce planning. It also created increased hazardous conditions for maintenance and operating staff.

Results

- Minimized the risk of being overcharged for utility cost
- Improved safety conditions for instrument technicians
- Eliminated the need for unscheduled shutdowns



Installed Rosemount 8800 Vortex Flow Meter

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Solution

The Rosemount 8800 Vortex's unique non-clog, no leak point design significantly improves the reliability and life of the flow meter. Emerson also provided the customer with the Rosemount™ 8800 MultiVariable™ Vortex with CriticalProcess™ options. The Rosemount 8800 CriticalProcess valve enables Shen Hua to replace the sensor online without shutting down the production and, more efficiently, on customer's schedule. The CriticalProcess option greatly enhances the safety level by providing a safety valve for the technician to verify if there is pressure in secondary containment, thus reducing personnel exposure to process fluid. The sensor can be replaced safely without process shut-down. Overall, the MultiVariable Vortex with CriticalProcess valve minimizes the risk of Shen Hua being overcharged for saturated steam, saving utility costs, and increasing the safety level of online sensor replacement while providing a more repeatable measurement. Additionally, the Rosemount 8800 unique non-wetted sensor design offers a more reliable performance for Shen Hua and significantly reduces the need to frequently replace the sensor.

MultiVariable™ Vortex with CriticalProcess™ option minimizes the risk of Shen Hua being overcharged for saturated steam, saving utility costs, and increasing the safety level of online sensor maintenance while providing a more repeatable measurement.



Rosemount 8800 Vortex Flow Meter with CPA option

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