

Municipal Water Treatment Facility Increases Water Quality with Universal Transmitter Technology

RESULTS

- Improved water quality
- Avoided facility shutdown
- Reduced operations and maintenance costs



APPLICATION

Raw feed water measurement to water plant

CUSTOMER

Municipal water treatment facility in the United States

CHALLENGE

This municipal water treatment facility (over 40 million gallons per day capacity) had problems controlling the volume of treating chemicals to the raw water feeding the facility.

The previously installed magnetic flowmeter caused erratic flow measurement when it exceeded 50% of its flow range and resulted in incorrect volumes of feed chemical into the raw feed water supply.

This reduced water quality caused facility operations personnel to operate the valves in manual and pay close attention to the chemical feeds. The customer considered removing the entire 30-in. (76.2 cm) magmeter sensor, which would involve shutting down the facility. This would have incurred significant repair costs, which include labor and a crane to remove the 20-ft. x 15-ft. (6.1 m x 4.5m) cover to a concrete vault and the 1800 lb. (847 kg.) sensor.

SOLUTION

The sensor was found to be in working condition through a resistance check. The previously installed transmitter was then replaced with the Rosemount 8712 with Universal Transmitter Technology. The plant operator manually stabilized the flow rate, which provided a baseline for the Universal Auto Trim feature included with Rosemount Universal Transmitter Technology. After a baseline measurement was found, the 8712 provided a stable and accurate measurement over the entire flow range of the sensor.

Stable and accurate measurement from the 8712 with Universal Auto Trim capability enabled the facility to automatically operate chemical feed volumes and improve water quality.



The Rosemount 8712 with Universal Transmitter Technology.

ROSEMOUNT

For more information:
www.rosemount.com


EMERSON
 Process Management

Stable and accurate measurements from the 8712 enabled the facility to automatically operate chemical feed volumes, resulting in improved water quality. Automatic operation also decreased the time spent by operations personnel running the chemical feed in manual. Finally, the facility avoided a plant shutdown by only replacing the previously installed transmitter with the 8712 and not the entire sensor assembly. The Universal Auto Trim capability provided this customer with a best implementation practice that enabled the achievement of these business results.

RESOURCES

Emerson Process Management Water/Wastewater Industry

<http://www2.emersonprocess.com/en-US/divisions/power-water/Pages/powerwater.aspx>

Rosemount E-Series Magnetic Flowmeter Transmitters

<http://www2.emersonprocess.com/en-US/brands/rosemount/Flow/Magnetic-Flowmeters/E-Series-Transmitters/Pages/index.aspx>

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which can be found at www.rosemount.com/terms_of_sale. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

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. PlantWeb is a registered trademark of one of the Emerson Process Management group of companies. All other marks are the property of their respective owners.

Emerson Process Management

Rosemount Inc.

8200 Market Boulevard
Chanhassen, MN 55317 USA
www.rosemount.com
Tel (USA) +1 800 522 6277
Tel (International) +1 (303) 527 5200
Fax +1 (303) 530 8459

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 Asia

Pacific Private Limited

1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
Enquiries@AP.EmersonProcess.com

Emerson Process Management Latin America

Multipark Office Center

Multipark Office Center
Turrubares Building, 3rd & 4th floor
Guachipelin de Escazu, Costa Rica
T+(506) 2505-6962
international.mmicam@emersonprocess.com

ROSEMOUNT[®]

For more information:
www.rosemount.com



EMERSON[™]
Process Management