# Automation team slashes pH maintenance costs using Rosemount Analytical sensor solutions

# **RESULTS**

- Reduced product rework and scrapped batches with proper calibration procedures
- Reduced the number of daily equipment checks
- Extended calibration intervals
- \$113,325 savings per year in maintenance costs\*

  \*1511 man hours using average burden rate of \$75.00 per hour



## **APPLICATION**

Pharmaceutical pH monitoring batch fermentation

# **CUSTOMER**

Major multinational pharmaceutical company

#### **CHALLENGE**

The customer determined that pH maintenance accounts for 46% of all the field work. Customer wanted to increase pH reliability and eliminate rework/scrap due to poor pH measurements. They also wanted to streamline maintenance practices.

## **SOLUTION**

Emerson Process Mangement determined that pH measurements could be improved by using HART™ digital field communication protocol in the transmitters that communicated with AMS™ Suite, Intelligent Device Manager. The improved maintenance strategy included glass impedance and reference impedance measurements to determine sensor health as well as Automatic buffer recognition to improve pH Calibrations. Built-in temperature compensation improved pH sensor accuracy and further tightened calibration procedures.

Emerson's recommendations allowed the customer to eliminate pH trims. AMS $^{\text{TM}}$  Suite allowed them to extend the interval of performing calibration checks by having critical sensor information available at the operation station via a HART $^{\text{TM}}$  digital signal. Tighter pH measurements allowed for better batch control, significantly cutting product rework and scrap.



EMERSON.
Process Management