

# Dependable Conductivity Measurements in Wort / Water Interface

## RESULTS

- Faster beer change over
- Reduce lost beer with tighter measurements
- Reduce off spec product
- Increase Brewery Profits



## APPLICATION

Beer – Push Water Interface

## CHALLENGE

After Wort is boiled in the brew kettle, the green beer is “pushed” by water to the whirlpool to prepare for fermentation. Conductivity is a good technology to determine the phase interface between the beer and the push water.

Conductivity measurement plays an important role in this process. Different brands of beer will have different conductivity values. The rinse water will also have a unique conductivity value based on the water source and treatment. Finally, CIP solutions will also have different conductivity values. The conductivity sensor needs to differentiate between all these different fluids as well as to be able to withstand the CIP cycles.

## SOLUTION

The PUR-SENSE™ Model 410 Four-Electrode Conductivity Sensor from Rosemount Analytical can accurately differentiate between different beer brands, CIP solutions, and rinse water. The sensor is made with FDA Compliant materials and wetted surfaces have a better than 16 µinch Ra finish (not including the active electrode surface). The sensor has an integral RTD that contacts the process liquid through a stainless steel face, enabling fast response to temperature changes. The Model 410 also has a compact design. The sensor does not penetrate deep into the fill lines so the sensor will not impede the flow in smaller dimensional fill lines. Flexible process installation is available through a variety of different mounting configurations: Varivent Type N, G 1-1/4, 1-1/2” and 2-inch Triclamp process connections available.

The Model 1056 Intelligent Analyzer works with the Model 410. The 1056 has improved signal conditioning to allow a wider conductivity range with one sensor. The 1056 allows up to two sensors inputs, reducing cost and minimizing panel space. The 1056 has an optional Profibus digital communications output that can integrate with either a DCS or PLC. Another digital option is HART Protocol that can optimize the sensor’s performance when used with AMS.

## INSTRUMENTATION

### 1056 Dual Input Intelligent Analyzer

- Up to Two sensor inputs
- Optional digital protocols available
- Easy to use menu structure
- Easy to read display



### PUR-Sense™ Model 410 Four-Electrode Conductivity Sensor

- Highly accurate conductivity sensor
- Better than 16 micro inch Ra surface finish
- Highly accurate internal RTD
- Documented Lot traceability on wetted components



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right now.*

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### Emerson Process Management

#### Liquid Division

2400 Barranca Parkway  
Irvine, CA 92606 USA  
Tel: (949) 757-8500  
Fax: (949) 474-7250

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