Liquid Analysis: pH, Conductivity and ORP Theory

Course 2200 CEUs: .7

Overview

This 1-day course provides a solid theoretical background in pH, conductivity, and ORP measurements. Students will:

- understand how each measurement is made
- recognize installation/application problems
- learn configuration/calibrate procedures
- how to implement a maintenance program
- troubleshooting problems using diagnostics

Topics

- What is pH/Conductivity/ORP
- How pH/Conductivity/ORP Measurements are Made
- Physical Process Properties and How They Effect On-Line Measurements
- Proper Calibration Techniques
- Cleaning and Maintenance of a Sensor
- Choosing Correct Sensor for any Process
- How to Decipher Diagnostics Readouts
- pH/Conductivity Sensor Overview
- pH/Conductivity/ORP Analyzer Overview

Available on Request or at Customer Site

Rosemount Analytical 56, 1056 and 1057 Four-Wire Liquid Analyzers

Course 2204 CEUs: .2

Overview

This 2-hour class covers features, benefits, and operation of the Rosemount Analytical Model 56, 1056, or 1057. Each analyzer family can measure pH, ORP, contacting conductivity, toroidal conductivity, chlorine, dissolved oxygen, and ozone. The Model 56 can also measure turbidity in drinking water and flow from a pulse sensor, and display any 4-20mA signal input Each instrument has its own available features, and menu tree which will be covered in great detail.

Topics

- Installation and Application Problems
- Configuration of Outputs / Alarms (If Applicable)
- Programming of Automated Cleaning Systems (DO, pH)
- Use Diagnostic Features (If Applicable)
- Sensor Calibration
- Troubleshooting

Available on Request or at Customer Site

Liquid Analysis: Chlorine, Dissolved Oxygen and Ozone Amperometric Measurement Theory

Course 2201 CEUs: .7

Overview

This 1-day course provides insight into the complicated amperometric measurements of chlorine, dissolved oxygen and ozone. Students will learn the concepts of how amperometric sensors work and how to calibrate each type of measurement. Students will:

- differentiate the various species of chlorine
- implement a proper maintenance program
- use diagnostics to troubleshoot problems

Topics

- Amperometric Measurement Theory
- Chlorine/Dissolved Oxygen/Ozone
- Calibration Procedures for Each Measurement
- Maintenance & Troubleshooting Tips

Available on Request or at Customer Site

Liquid Analysis: Measurement Theory (Customer Specific)

Course 2205 CEUs: .7

Overview

This 7-hour class is fully customized to cover the specific measurements that the customer requests. A certified trainer will cover up to 4 subjects in one day. The 4 subjects may be measurement or product related. The list of measurements that can be bundled into a tailored made training course are pH, ORP, contacting conductivity, toroidal conductivity, turbidity, chlorine, dissolved oxygen, and ozone. Each measurement theory has its own duration which can be modified to fit the customers' time frame needs. Select an analyzer (course 2204) or transmitter (course 2202) to accompany the measurement theories for a well-rounded class.

Topics

- Installation and Application Problems
- Configuration of Outputs / Alarms (If applicable)
- Use Diagnostic Features (If Applicable)
- Sensor Calibration & Maintenance
- Troubleshooting

Available on Request or at Customer Site

Rosemount Analytical 1066 and 5081 Two-Wire Liquid Transmitters

Course 2202 CEUs: .2

Overview

This 2-hour class covers features, benefits and operation of any Rosemount Analytical Model 5081 or Model Xmt two wire transmitters. Each transmitter family can measure pH, ORP, contacting conductivity, toroidal conductivity, chlorine, dissolved oxygen and ozone. Both transmitters have advanced diagnostic capabilities and can communicate via HART or Foundation Fieldbus communication protocols.

Topics

- Installation and Application Problems
- Configuration of Outputs (HART Only)
- Use Diagnostic Features (If Applicable)
- Sensor Calibration
- Troubleshooting

Available on Request or at Customer Site

Rosemount Analytical 1056 Dual Input Analyzer

Course e2061 NEW

Overview

Introduction to the 1056 Dual Input Analyzer, including overview of functions, mechanical and electronic installation, adding sensor boards and wiring sensors, and using the interface. Basic installation, configuration and calibration training in the 1056 Analyzer.
$125 per student - unlimited access
3 months. Duration: 1 hour

Rosemount Analytical pH Measurement Theory - Level 1

Course e2602 NEW

Overview

Entry level training in pH Theory, including explanation of pH measurement, industries utilizing measurement, types of pH measurement, science of determining pH, and examination of a pH detector and sensor.
$125 per student - unlimited access for
3 months. Duration: 1 hour