LEARNINGPATH

Typical Technician's Training Path

- Process Measurement Products I (Pressure & Temperature) 2326
- Process Measurement Products II (DP Flow) 2327
- Process Measurement Products III (Level) 2333
- AMS Device Manager 7020
- Fieldbus Measurement Instruments 2370

Typical Engineer's Training Path

- Process Measurement Products I (Pressure & Temperature) 2326
- Process Measurement Products II (DP Flow) 2327
- Process Measurement Products III (Level) 2333
- Introduction to Process Control 9000
- AMS Device Manager 7020
- Fieldbus Measurement Instruments 2370

To enroll in Rosemount courses or for more information, please call:
800-338-8158 or 641-754-3771

Process Measurement Products I (Pressure and Temperature)

Course 2326 CEUs: 2.8

This course is intended for technicians, engineers and other plant personnel who need to know installation, calibration, maintenance and troubleshooting of measurement instrumentation.

Overview

This 4-day course explains how pressure and temperature transmitters function and how they are installed and calibrated. It emphasizes installation, proper set-up and calibration of Analog and HART Pressure and Temperature Transmitters. The course uses lectures and labs to teach the students. Those who complete this class will be able to:

- correctly perform installation and setup procedures
- properly configure transmitters
- properly calibrate transmitters
- perform basic troubleshooting

Prerequisites

Some experience in instrument calibration, maintenance, installation and operation would be helpful.

Topics

- Basic 4-20 mA Loop Setup
- Pressure Sensors
- Temperature Sensors (TC, RTD)
- Analog Transmitters (1151)
- HART Communication
- Field Communicator
- Pressure Transmitters
- Temperature Transmitters
- Using AMS Device Manager to Configure and Calibrate Transmitters
- Installation
- Configuration
- Calibration
- Troubleshooting

Process Measurement Products II (DP Flow)

Course 2327 CEUs: 1.4

This course is intended for technicians, engineers and other plant personnel who need to know installation, calibration, verification, maintenance and troubleshooting of DP flow measurement instrumentation.

Overview

This 2-day course explains how DP flow instruments function and how they are installed and calibrated. It emphasizes installation, proper setup and calibration/verification of DP flow instruments. The course uses lectures and labs to teach the students. Those who complete this class will be able to:

- correctly install configure, calibrate multivariable DP Flow Transmitters
- perform DP Flow troubleshooting

Prerequisites

Some experience in instrument calibration/verification, maintenance, installation and operation would be helpful.

Topics

- Basic DP Flow Fundamentals
- DP Flow Sizing Calculations
- Multivariable Flow Transmitters
- AMS Device Manager with Engineering Assistant Snap-ON (3095)
- Engineering Assistant for 3051SMV
- Field Communicator
- Test Equipment Selection
- Installation
- Configuration
- Calibration / Verification
- Troubleshooting DP Flow Installations

For Rosemount training information please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.

Emerson's tireless pursuit of innovation drives the Rosemount portfolio of superior quality measurement and analytical technologies to provide customers with insight across all touch points needed to operate efficiently safely, and with peace of mind.

ROSEMOUNT™

Process Measurement Products III (Level)

Course 2333 CEUs: 2.1

This course is intended for technicians, engineers and other plant personnel who need to know installation, calibration, maintenance and troubleshooting of level measurement instrumentation.

Overview

This 3-day course explains how level instruments function and how they are installed calibrated/verified. It emphasizes installation, proper setup and calibration/verification of level instruments. The course uses lectures and labs to teach the students. Those who complete this class will be able to:

- correctly install DP Level Transmitters
- correctly install Guided Wave Radar Transmitters
- correctly install Non-contacting Radar Transmitters
- properly calibrate/verify Level Instruments
- perform basic troubleshooting

Prerequisites

Experience in instrument calibration, maintenance, installation and operation would be helpful.

Topics

- DP Level Fundamentals
- Electronic Remote Sensors
- Radar Applications
- Radar Instruments
- Radar PC Software
- Field Communicator
- Test Equipment Selection
- Installation
- Configuration
- Calibration / Verification
- Troubleshooting

Fieldbus Measurement Instruments

Course 2370 CEUs: 2.1

This course is for individuals responsible for installing, configuring, calibrating, and troubleshooting FOUNDATION™ fieldbus measurement devices.

Overview

This 3-day class covers the integration of FOUNDATION™ fieldbus compliant measurement devices using the Field Communicator, Emerson USB Fieldbus Modem, AMS Device Manager and other hosts. Upon completion of this course students will be able to: install, configure, calibrate, and troubleshoot Rosemount Fieldbus devices which include the 3051 and 3051S Pressure transmitters, 644, 3144P and 848 Temperature transmitters, 5600, 5400 and 5300 Radar Level Transmitters, and 752 Indicator.

Prerequisites

Experience in instrument calibration, maintenance, installation and operation would be helpful.

Topics

- FOUNDATION™ fieldbus Overview
- Fieldbus: Wiring/Segment Design/Function Blocks
- Field Communicator Operation
- AMS Device Manager Operation
- Theory of Operation, Installation, Configuration, Maintenance, Calibration and Troubleshooting on the following:
  - 3051 Pressure Transmitter
  - 3051S Pressure Transmitter
  - 3144P, and 644 Temperature Transmitters
  - 848 Temperature Transmitter
  - 5600/5400/5300 Radar Level Transmitter
  - 752 Fieldbus Indicator

Instrument Fundamentals Overview

Course 2320 CEUs: 2.1

This course is intended for engineers and other persons responsible for the selection and installation of instruments for measurement types of Pressure, Temperature, Level, and Flow.

Overview This 3-day course explains the measurement technology for Pressure, Temperature, Flow and Level instruments. It will also emphasis proper installation of these instruments.

Prerequisites

Students should have experience with process instrumentation and measurements.

Topics

- 4-20 mA Electrical Loops
- Pressure Sensors
- Pressure Instruments
- Temperature Sensors
- Temperature Instruments
- Analog Transmitters
- Smart Transmitters
- HART Communication Protocol
- Field Communicator
- DP Flow
- Flow Technology Overview
- DP Level
- Electronic Remote Sensors
- Guided Wave Radar Level Instruments
- Non-Contacting Radar Level Instruments
- Self-Organizing Wireless Networks

Measurement Instrument Fundamentals

Course 2322 NEW CEUs: 1.4

This course is intended for engineers and other persons responsible for the selection and installation of instruments for measurement types of Pressure, Temperature, Level, and Flow.

Overview This 2-day course explains the measurement technology for Pressure, Temperature, Flow and Level instruments. It will also emphasis proper installation of these instruments.

Prerequisites

Students should have experience with process instrumentation and measurements.

Topics

- 4-20 mA Electrical loops
- Pressure Sensors
- Pressure Instruments
- Temperature Sensors
- Temperature Instruments
- Analog Transmitters
- HART Transmitters
- HART Communication Protocol
- Field Communicator
- DP Flow
- Guided Wave Radar Level Instruments
- Non-Contacting Radar Level Instruments

Pressure, Transmitter & Multi - Variable Flow Transmitters

Course 2329 CEUs: 1.4

This course uses lectures and labs to maximize the hands on experiences and teach the student how to install, configure, calibrate, troubleshooting, and maintenance of the Rosemount 3051 Pressure Transmitter, 3144P Temperature Transmitter, and the 3051S MultiVariable™ (MV) Flow Transmitter. This course is a combination of courses: 2305, 2321, and 2308MV.

Overview

This 2-day course uses lectures and labs to maximize the hands on experiences and teach the student how to install, configure, calibrate, troubleshoot, and maintain the Rosemount 3051, 3144P, and 3051SMV Transmitters.

Prerequisites

Students should have experience with process instrumentation and measurements.

Topics

- Field Communicator Operation
- 3051 Pressure Transmitter Installation, Configuration, Calibration and Troubleshooting
- 3144P Temperature Transmitter Installation, Configuration, Calibration and Troubleshooting
- 3051SMV Multivariable DP Flow Transmitter Installation, Configuration, Calibration and Troubleshooting

Note: Students must attend both days.

Reference course, 2305, 2321 and 2308MV for further details.

Rosemount 3051 Pressure Transmitter

Course 2305 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 3051 Pressure Transmitter.

Overview

This 1-day course uses lectures and labs to teach the student how to install, configure, calibrate and maintain the Rosemount 3051.

The student will also learn the operation of the Field Communicator. Students will:

- explain the differences between HART and Analog transmitters
- identify 3051 parts and functionality
- explain the principles of operation of the 3051
- configure, calibrate and test 3051 HART pressure transmitters using the Field Communicator or AMS Device Manager
- properly install/troubleshoot the 3051 transmitter

Prerequisites

Knowledge of basic pressure fundamentals and pressure instrumentation.

Topics

- 3051 Overview and Principles of Operation
- Test Equipment Selection
- Bench Testing the 3051 HART Transmitter
- Field Communicator Operation
- AMS Device Manager Operation
- Digital Trims/Calibration
- Installation and Start-up
- Troubleshooting and Maintenance

Note: This product is also included courses 2326 and 2329.

Rosemount 3051 Fieldbus Pressure Transmitter

Course 2307 CEUs: .7

This course is designed for those individualsresponsible for the installation, configuration, calibration and maintenance of the Rosemount 3051 Fieldbus Pressure Transmitter.

Overview

This 1-day course uses lectures and labs to maximize the hands on experiences and teach the student how to install, configure, calibrate and maintain the Rosemount 3051 Fieldbus Pressure Transmitter.

The student will also learn the operation of the Field Communicator. Students who complete this course will be able to:

- identify 3051 parts and functionality
- explain the principles of operation of the 3051
- design and build a Fieldbus segment
- configure, test, and calibrate the 3051 Fieldbus Pressure Transmitters using the Field Communicator or AMS Device Manager
- properly install and troubleshoot the 3051 Fieldbus Transmitter

Prerequisites

Knowledge of basic pressure fundamentals and pressure instrumentation.

Topics

- 3051 Overview and Principles of Operation
- FOUNDATION™ Fieldbus Overview
- Fieldbus Wiring/Segment Design/Function Blocks
- Test Equipment Selection
- Bench Testing 3051 Fieldbus Transmitter
- Field Communicator Operation
- AMS Device Manager Operation
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance

Note: Product is also part of course 2370.

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Rosemount 3051S Pressure Transmitter

Course 2308 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration, troubleshooting, and maintenance of the Rosemount 3051S Pressure Transmitter.

Overview
This 1-day course uses lectures and labs to maximize the hands on experiences and teach the student how to install, configure, calibrate, troubleshoot, and maintain the Rosemount 3051S Pressure Transmitter. The student will also learn the operation of the Field Communicator or AMS Device Manager. Students who complete this course will be able to:

- identify 3051S parts and functionality
- explain the principles of operation of the 3051S
- configure and test the 3051S HART Pressure Transmitters using the Field Communicator or AMS Device Manager
- properly install, configure, calibrate, and troubleshoot the 3051S HART transmitter

Prerequisites
Knowledge of basic pressure fundamentals and pressure instrumentation.

Topics

- 3051S Overview/Principles of Operation
- 3051S Installation and Options
- Test Equipment Selection
- Configure and Bench Testing the 3051S HART Transmitter
- Configure and Test the 3051S Advanced Features:
  - Alarm & Saturation Levels, Alarm Direction, Write Protection
  - Process Alerts, Scaled Variable
  - Digital Trims/Calibration
  - Troubleshooting and Maintenance

3051S MultiVariable™ Mass Flow Transmitter

Course 2310 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 3051S Multi Variable (MV) Transmitter.

Overview
This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, calibrate and maintain the Rosemount Model 3051SMV HART Mass Flow Transmitter. Students who complete this course will:

- identify transmitter parts and explain their functionality
- explain the principles of operation of the transmitter
- configure and test using the Field Communicator, AMS Device Manager, and the 3051SMV Engineering Assistant software
- configure the compensated flow parameters using the 3051SMV Engineering Assistant Software
- properly install & troubleshoot the 3051SMV transmitter

Prerequisites
Knowledge of basic Pressure, and DP Flow fundamentals and instrumentation.

Topics

- DP Flow Fundamentals
- Overview and Principles of Operation
- Test Equipment Selection
- Temperature Sensor Wiring
- Bench Testing the Smart Transmitters
- 3051SMV Engineering Assistant Software
- Operation of the Field Communicator and AMS Device Manager
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance

Note: This product is also included in course 2327 and 2329.

Rosemount 3095MV Multi-Variable Transmitters

Course 2343 CEUs: .7

This course is designed for those individuals responsible for the installation and maintenance of the Rosemount 3095 Multi Variable (MV) Transmitter.

Overview This 1-day course uses lecture and labs to teach the student how to install, configure, calibrate and maintain the Rosemount Model 3095MV Smart Transmitters. The student will also learn the operation of the Field Communicator. Students who complete this course will:

- identify transmitter parts and explain their functionality
- explain the principles of operation of the transmitter
- configure and test using the Field Communicator and the 3095MV Engineering Assistant (EA) Snap-On software
- configure the compensated flow parameters using AMS Device Manager with the 3095MV Engineering Assistant (EA) Snap-On Software
- properly install/troubleshoot transmitters

Prerequisites
Knowledge of basic pressure and temperature fundamentals/instrumentation.

Topics

- DP Flow Fundamentals
- Overview and Principles of Operation
- Test Equipment Selection
- Temperature Sensor Wiring
- Bench Testing the Smart Transmitters
- AMS Device Manager with the 3095MV EA Snap-On Software
- Operation of the Field Communicator and AMS Device Manager
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance
- Configure/Wire/Setup the HART Tri-Loop

Note: This product is also included in course 2327.

Rosemount 3144P Temperature Transmitters

Course 2321 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 3144P HART Temperature Transmitters.

Overview

This 1-day course uses lecture and labs to teach the student how to install, configure, calibrate and maintain the Rosemount 3144P HART Temperature Transmitters. The student will also learn the operation of the Field Communicator. Students who complete this course will:

- identify 3144P parts and explain their functionality
- explain the principles of operation of the 3144P
- configure, calibrate and test 3144P HART Temperature Transmitters using the Field Communicator or AMS Device Manager
- properly install and troubleshoot the 3144P Temperature Transmitters

Prerequisites

Knowledge of basic temperature fundamentals and temperature instrumentation.

Topics

- 3144P Overview and Principles of Operation
- Test Equipment Selection
- Sensor Selection and Wiring
- Bench Testing the 3144P HART Transmitters
- Smart Transmitters
- Field Communicator Operation
- AMS Device Manager Operation
- Digital Trims/Calibration
- 3144P Dual Sensor Setup
- Configuration
- Installation and Start-Up
- Troubleshooting and Maintenance

Note: This product is also included in courses 2326 and 2329.

Rosemount 3144P Fieldbus Temperature Transmitters

Course 2324 CEUs: .7

This course is designed for those individuals responsible for the installation and maintenance of the Rosemount Model 3144P Fieldbus Temperature Transmitters.

Overview

This 1-day course uses lecture and labs to maximize the hands on experiences and teach the student how to install, configure, calibrate, troubleshoot, and maintain the Rosemount Model 3144P Fieldbus Temperature Transmitters.

The student will also learn the operation of the Field Communicator. Students who complete this course will be able to:

- identify 3144P parts and explain their functionality
- explain principles of operation of the 3144P
- design and build a Fieldbus segment
- configure, calibrate, and test 3144P Fieldbus Temperature transmitters using the Field Communicator
- properly install and troubleshoot the 3144P Fieldbus Transmitters

Prerequisites

Knowledge of basic temperature fundamentals and temperature instrumentation.

Topics

- 3144P Overview and Principles of Operation
- FOUNDATION™ fieldbus Overview
- Fieldbus Wiring
- Fieldbus Segment Design
- Fieldbus Function Blocks
- Test Equipment Selection
- Sensor Selection and Wiring
- Bench Testing 3144P Fieldbus Transmitters
- Field Communicator Operation
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance

Note: This product is also part of 2370 course.

Rosemount 848 Fieldbus Temperature Transmitters

Course 2328 CEUs: .7

This course is designed for those individuals responsible for the installation and maintenance of the Rosemount Model 848 Fieldbus Temperature Transmitters

Overview

This 1-day course uses lectures and labs to maximize the hands on experiences and teach the student how to install, configure, troubleshoot, and maintain the Rosemount Model 848T Fieldbus Temperature Transmitters.

The student will also learn the operation of the Field Communicator. Students who complete this course will be able to:

- explain the principles of operation of the 848T
- configure, calibrate, and test the 848T Fieldbus temperature transmitter using the Field Communicator
- design and build a Fieldbus segment
- properly install and troubleshoot the 848T Fieldbus Transmitter

Prerequisites

Knowledge of basic temperature fundamentals and temperature instrumentation.

Topics

- 848T Overview and Principles of Operation
- FOUNDATION™ fieldbus Overview
- Fieldbus Wiring
- Fieldbus Segment Design
- Fieldbus Function Blocks (including the MAI, and ISEL Blocks)
- Test Equipment Selection
- Sensor Selection and Wiring
- Bench Testing the 848T Fieldbus Transmitters
- Field Communicator Operation
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance

Note: This product is also included in the 3-day 2370 Fieldbus Course.

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Rosemount 3051S Electronic Remote Sensors Systems

Course 2309 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration, troubleshooting and maintenance of the Rosemount 3051S Electronic Remote Sensors (ERS) System.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, calibrate, maintain, and troubleshoot the Rosemount 3051S ERS System. Students who complete this course will:

- identify transmitter parts and explain their functionality
- identify 3051S ERS Hi & Lo sensors
- explain the principles of operation of the ERS System
- configure and test the ERS system using AMS Device Manager and the Field Communicator
- perform zero trims and calibrate the ERS Sensors
- properly install & troubleshoot the 3051S ERS System

Prerequisites

Knowledge of basic Pressure, and DP Level fundamentals and instrumentation.

Topics

- DP Level Technology
- ERS Technology
- ERS Overview and Principles of Operation
- ERS / DP Level Installation
- ERS Wiring
- ERS Configuration with AMS Device Manager and the Field Communicator
- ERS Module Assignments
- ERS Scaled Variable
- Bench Testing the ERS System
- ERS Zero Trims and Calibration
- Troubleshooting and Maintenance

Note: This product is also included in course 2333.

Rosemount 3300 Guided Wave Radar Level Transmitter

Course 2332 CEUs: .7

This course is for those individuals responsible for the installation, configuration, verification and maintenance of the Rosemount 3300 Series Guided Wave Radar (GWR) Level Interface Transmitters.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, calibrate, troubleshoot and maintain the Rosemount 3300 GWR Level & Interface Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 3300 GWR
- identify 3300 parts and explain their functionality
- understand the available probe options and when each should be used
- properly install the 3300 GWR
- configure and test the 3300 GWR
- properly troubleshoot the 3300 GWR transmitter using RCT software

Prerequisites

Knowledge of basic level and interface fundamentals and instrumentation.

Topics

- 3300 Overview/Principles of Operation
- Installation of the 3300 GWR
- Configuration of the 3300 GWR
- Bench Testing the 3300 GWR
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Configuration Tools (RCT) Software Operation
- Calibration, Verification and Adjustments
- Troubleshooting and Maintenance
- Troubleshooting and Reading Tank Graphs Using RCT Software

Note: 3300 GWR is also included in the 3-day Level course #2333

Rosemount 5300 High Performance Guided Wave Radar HART Level Transmitter

Course 2337 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 5300 High Performance Guided Wave Radar (GWR) Series HART Radar Level Transmitter.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, troubleshoot and maintain the Rosemount 5300 High Performance GWR Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 5300 GWR
- identify 5300 GWR parts and explain their functionality
- understand the available probe options and when each should be used
- Properly install and wire the 5300 GWR
- configure and test the 5300 GWR
- understand how to setup the 5300 GWR to work in different applications
- properly troubleshoot the 5300 GWR Transmitter and Installation using Radar Master software

Prerequisites

Knowledge of basic level fundamentals and instrumentation.

Topics

- 5300 Overview and Principles of Operation
- Installation of the 5300 GWR
- Wiring the 5300 GWR
- Configuration of the 5300 GWR
- Bench Testing the 5300 GWR
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Master Software Operation
- Troubleshooting and Maintenance
- Tank & Application Troubleshooting and Echo Handling Using Radar Master Software

Note: 5300 GWR Hart Level transmitter is also included in the 3-day Level course 2333.

Rosemount 5600 Series HART Radar Level Transmitter

Course 2334 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 5600 Series HART Radar Level Transmitter.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, troubleshoot and maintain the Rosemount 5600 Series HART Radar Level Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 5600 Radar
- identify 5600 Radar parts and explain their functionality
- properly install and wire the 5600 Radar
- configure and test the 5600 Radar
- understand how to setup the 5600 Radar to work in different applications
- properly troubleshoot the 5600 Radar Transmitter using Radar Master software

Prerequisites

Knowledge of basic level fundamentals and instrumentation.

Topics

- 5600 Overview and Principles of Operation
- Installation of the 5600 Radar
- Wiring the 5600 Radar
- Configuration of the 5600 Radar
- Bench Testing the 5600 Radar
- 2210 LOI / Display Operation
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Master Software Operation
- Troubleshooting and Maintenance
- Tank and Application Troubleshooting and Echo Handling using Radar Master Software

Note: This product is also included in the 3-day Level course 2333.

Rosemount 5400 Series HART Radar Level Transmitter

Course 2336 CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 5400 HART Radar Level Transmitter.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, troubleshoot and maintain the Rosemount 5400 Radar Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 5400 Radar
- identify 5400 Radar parts and explain their functionality
- properly install and wire the 5400 Radar
- configure and test the 5400 Radar
- understand how to setup the 5400 Radar to work in different applications
- properly troubleshoot the 5400 Radar Transmitter and the installation using Radar Master software

Prerequisites

Knowledge of basic level fundamentals and instrumentation.

Topics

- 5400 Overview and Principles of Operation
- Installation of the 5400 Radar
- Wiring the 5400 Radar
- Configuration of the 5400 Radar
- Bench Testing the 5400 Radar
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Master Software Operation
- Troubleshooting and Maintenance
- Tank and Application Troubleshooting and Echo Handling using Radar Master Software

Note: This product is also included in the 3 day Level course 2333.

Wireless Self Organizing Network

Course 2375 CEUs: 1.4

This course is intended for technicians, engineers and other plant personnel who need to know how to design, install, setup, configure, maintain and troubleshoot Wireless Self Organizing Networks and their components.

Overview

This 2-day course explains how Self Organizing Wireless Networks function and how they are installed, setup, configured and integrated. It emphasizes planning, proper installation and startup, configuration, maintenance, and integration. The course uses lectures and labs to maximize the hands on experience and teach the students. Students who complete this course will:

- correctly install and setup the 1420 & 1410 Wireless Gateway
- properly install and configure Wireless Transmitters
- properly integrate Host interfaces to the Wireless Gateway

Prerequisites

Some experience in Wireless Networks and Host integration would be helpful.

Topics

- How Self Organizing Networks Function
- Self Organizing Networks Best Practices
- Network Components
- 1420 & 1410 Installation and Setup
- Network Parameters
- Wireless Transmitters Installation, Configuration, Maintenance and Calibration
- THUM Installation, Wiring and Configuration
- Integrating and Operating AMS Device Manager with the 1420 Wireless Gateway
- Operation of AMS Wireless SNAP-ON
- Modbus Serial Integration
- Modbus TCP Integration
- OPC Integration

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Wireless Self Organizing Network

Course 2376 NEW CEUs: .7

This course is intended for technicians, engineers and other plant personnel who need to know how to install, setup, configure, maintain and troubleshoot Wireless Self Organizing Networks and their components.

Overview
This 1-day course explains how Self Organizing Wireless Networks function and how they are installed, setup, and configured. It emphasizes planning, proper installation and startup, configuration and maintenance. The course uses lectures and labs to maximize the hands on experience and teach the students.

Students who complete this course will:
- correctly install and setup the 1420 & 1410 Wireless Gateway
- properly install and configure Wireless Transmitters

Prerequisites
Some experience in Wireless Networks and Host integration would be helpful. Completion of the Wireless classes on Plantweb University would be beneficial.

Topics
- How Self Organizing Networks Function
- Self Organizing Networks Best Practices
- Network Components
- 1420 & 1410 Installation and Setup
- Network Parameters
- Wireless Transmitters Installation, Configuration, Maintenance and Calibration
- THUM Installation, Wiring, Configuration
- Integrating and Operating AMS Device Manager with the 1420 & 1410 Wireless Gateway and Wireless Devices

AMS Device Manager

Course 7020 CEUs: 2.1

Overview Completing 3-days of AMS Device Manager hands-on instructor assisted training modules and exercises, provides the quickest route to your productive use of this predictive maintenance application. The training exercises focus on skills required by engineers and technicians, and are based on real-world tasks that most users will encounter on the job.

7020-1 Configuring and Using AMS Device Manager
- Viewing and Modifying Devices
- Creating a Plant Database Hierarchy and Adding Devices
- Field Communicator - AMS Device Manager
- AMS Device Manager Browser Functions
- Audit Trail
- Calibrating Device - Calibration Assistant
- Configuring and Monitoring System Alerts

7020-2 System Administration
- AMS Device Manager System Overview
- Installing an AMS Device Manager Server Plus Standalone
- Starting AMS Device Manager for the First Time
- Network Communication Interface Setup
- AMS Device Manager Database Management
- Installing a Distributed System
- Installing Device Types from Media

7020-3 SNAP-ON™ Applications
- AMS ValveLink® SNAP-ON Application-Basics
- MV Engineering Assistant SNAP-ON Application - Basics
- Rosemount Engineering Assistant™ 3051SMV SNAP-ON
- AMS Wireless SNAP-ON Application
- QuickCheck™ SNAP-ON Application
- Using AMS Device Manager OPC Server and the Matrikon OPC Explorer
- AMS Device Manager Web Services
- AlertTrack SNAP-ON Application

This instructor assisted course is operated in a hands-on, self-paced environment, which allows the student to work at their individual pace. Training can also be delivered at your plant with the help of our certified instructors. AMS Device Manager modules may be purchased for self-study for $200 each or $510 for all three paper/bound modules.

To Order
To Order Training modules ONLY visit:www2.emersonprocess.com/en-US/brands/fisher/Contacts/Pages/contacts.aspx

AMS Device Manager with Rosemount HART Instruments

Course 7021 CEUs: 2.1

Learn the installation, calibration, maintenance, and troubleshooting of measurement instrumentation using AMS Device Manager. The hand's on focus is on skills required by engineers, technicians, or others that are new to the plant or instrument environment.

Overview
This 3-day course teaches maintenance and calibration of measurement devices using AMS Device Manager software to communicate and track information. The student will learn how pressure and temperature transmitters function, are installed, and calibrated using AMS Device Manager. The course uses hands-on training, labs, and lecture to teach the student how to:
- configure and use AMS Device Manager
- correctly perform transmitter installation and setup procedures
- properly configure HART transmitters
- properly calibrate transmitters
- perform basic troubleshooting-transmitters

Topics
- Configuring and Using AMS Device Manager
- Viewing and Modifying Devices
- Creating a Plant Database Hierarchy and Adding Devices
- AMS Device Manager Browser Functions
- Audit Trail
- HART Communication
- HART Transmitters (3051C, 3144P)
- Test Equipment Selection
- Transmitter Installation
- Transmitter Configuration
- Transmitter Calibration
- AMS Calibration Assistant
- Intelligent Calibrators
- Transmitter Troubleshooting

Interactive Plant Environment Rosemount Pressure Transmitters

Course 2808 NEW CEUs: 1.4

Overview

This 2-day course combines lectures with bench-top labs and uses the interactive plant for scenario based training.

Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount Pressure transmitters.

Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Identify Transmitter Parts and Functionality
- Explain the Principles of Operation of Pressure Transmitters
- Configure, Calibrate and Test Pressure Transmitters using the Field Communicator
- Properly Install and Troubleshoot Pressure Transmitters

Students shall ensure proper PPE and safety measures while working on the plant.

Interactive Plant Environment Rosemount Temperature Transmitters

Course 2821 NEW CEUs: .7

Overview

This 1-day course combines lectures with bench-top labs and uses the interactive plant for scenario based training. Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount Temperature transmitters.

Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Identify Transmitter Parts and Functionality
- Explain the Principles of Operation of Temperature Transmitters
- Configure, Calibrate and Test Temperature Transmitters using the Field Communicator
- Properly Install and Troubleshoot Temperature Transmitters.

Students shall ensure proper PPE and safety measures while working on the plant.

Interactive Plant Environment Pressure and Temperature Transmitters

Course 2898 NEW CEUs: 2.1

Overview This 3-day course combines lectures with bench-top labs and uses the interactive plant for scenario based training. Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount Pressure and Temperature transmitters. Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Explain the Difference between HART & Analog Transmitters
- Identify Transmitter Parts andf Functionality
- Explain the Principles of Operation of Pressure and Temperature Transmitters
- Configure, Calibrate and Test Pressure and Temperature Transmitters using the Field Communicator
- Properly Install and Troubleshoot Pressure and Temperature Transmitters.

Students shall ensure proper PPE and safety measures while working on the plant.

Interactive Plant Environment Rosemount Pressure, Temperature, MultiVariable™ Flow Transmitters

Course 2829 NEW CEUs: 2.8

Overview This 4-day course combines lectures with bench-top labs and uses the interactive plant for scenario based training. Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount Pressure, Temperature, and Multi-Variable Flow transmitters. Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Identify Transmitter Parts and Functionality
- Explain the Principles of Operation of the Transmitters
- Configure, Calibrate and Test Transmitters using the Field Communicator, AMS Device Manager, and Engineering Assistant Software
- Configure the Compensated flow Parameters
- Properly Install and Troubleshoot Pressure, Temperatures and Multi-Variable Flow Transmitters

Students shall ensure proper PPE and safety measures while working on the plant.

Interactive Plant Environment Rosemount MultiVariable™ Flow Transmitters

Course 2812 NEW CEUs: 1.1

Overview This 1-1/2 day course combines lectures with bench-top labs and uses the interactive plant for scenario based training. Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 3051SMV Multi-Variable Flow transmitters. Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Identify Transmitter Parts and Functionality
- Explain the Principles of Operation of the Transmitters
- Configure, Calibrate and Test Transmitters using the Field Communicator, AMS Device Manager, and Engineering Assistant Software
- Configure the Compensated Flow Parameters
- Properly Install and Troubleshoot Pressure, Temperatures and Multi-Variable Flow Transmitters

Students shall ensure proper PPE and safety measures while working on the plant.

For Rosemount training information please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.

Interactive Plant Environment Rosemount Process Level Transmitters

Course 2896 NEW CEUs: 1.4

Overview

This 2-day course combines lectures with bench-top labs and uses the interactive plant for scenario based training. Target students are individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 5300 & 5400 Radar Level transmitters. Students shall apply classroom knowledge directly to the interactive plant scenario labs. Be ready to learn in a "real world" plant environment.

Topics

- Identify Transmitter Parts and Functionality
- Explain the Principles of Operation the Transmitters
- Configure, Calibrate/Verify andTtest Radar Level Transmitters using the Field Communicator, Radar Master Software
- Understand How to Setup the Radars in Different Applications
- Properly Install and Troubleshoot the 5300 & 5400 Transmitters and their Applications

Students shall ensure proper PPE and safety measures while working on the plant.

Rosemount 3095MV and 3051SMV MultiVariable™ Transmitters

Course 2393 NEW CEUs: .7

This course is designed for those individuals responsible for the installation and maintenance of the Rosemount 3095MV or 3051SMV Transmitter.

Overview

This 1-day course uses lecture and labs to teach the student how to install and maintain the Rosemount 3095MV & 3051SMV Smart Transmitters. The student will also learn the operation and interface capabilities of the Field Communicator. Students who complete this course will:

- identify transmitter parts and explain their functionality
- explain the principles of operation of the transmitter
- configure and test using the Field Communicator
- configure the compensated flow parameters using AMS Device Manager with the 3095MV & 3051SMV
- properly install/troubleshoot transmitters

Prerequisites

Knowledge of basic pressure, temperature, and DP Flow fundamentals /instrumentation.

Topics

- DP Flow Fundamentals
- Overview and Principles of Operation
- Test Equipment Selection
- Bench Testing the Smart Transmitters
- Operation of the Field Communicator and AMS Device Manager
- Digital Trims/Calibration
- Installation and Start-Up
- Troubleshooting and Maintenance
- Configure/Wire/Setup the HART Tri-Loop

Rosemount 3300 and 5300 Guided Wave Radar Transmitters

Course 2395 NEW CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 3300 and 5300 High Performance Guided Wave Radar (GWR) Series HART Radar Level Transmitters.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, troubleshoot and maintain the Rosemount 3300 & 5300 Series HART Radar Level Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 3300/5300 GWR
- identify 3300/5300 GWR parts and explain their functionality
- understand available probe options and when each should be used
- properly install and wire the 3300/5300 GWR
- configure and test the 3300/5300 GWR
- understand how to setup the 3300/5300 GWR to work in different applications
- properly troubleshoot the 3300 & 5300 GWR and the Installation using Radar Master software

Prerequisites

Knowledge of basic level fundamentals and instrumentation.

Topics

- 3300/5300 Overview and Principles of Operation
- Installation of the 3300/5300 GWR
- Wiring the 3300/5300 GWR
- Configuration of the 3300/5300 GWR
- Bench Testing the 3300/5300 GWR
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Master Software Operation
- Troubleshooting and Maintenance
- Tank and Application Troubleshooting and Echo Handling using Radar Master Software

Rosemount 5300 and 5400 Radar Level Contacting and Non-Contacting Radar Transmitters

Course 2396 NEW CEUs: .7

This course is designed for those individuals responsible for the installation, configuration, calibration and maintenance of the Rosemount 5400 & 5300 Series HART Radar Level Transmitters.

Overview

This 1-day course uses lecture and labs to maximize the hands on experience and teach the student how to install, configure, troubleshoot and maintain the Rosemount 5400 & 5300 Series HART Radar Level Transmitters. Students who complete this course will be able to:

- explain the principles of operation of the 5300/5400 radar
- identify 5300/5400 parts and explain their functionality
- properly install and wire the 5300/5400 Radar
- configure and test the 5300/5400 Radar
- properly troubleshoot the 5300/5400 Radar transmitter and installation using Radar Master software

Prerequisites

Knowledge of basic level and interface fundamentals and instrumentation.

Topics

- 5300/5400 Overview and Principles of Operation
- Installation of the 5300/5400 Radar
- Configuration of the 5300/5400 Radar
- Bench Testing the 5300/5400 Radar
- Field Communicator Operation
- AMS Device Manager Operation
- Radar Master Software Operation
- Calibration, Verification and Adjustments
- Troubleshooting and Maintenance
- Tank & Application/Probe Troubleshooting and Echo Handling Using Radar Master Software

Rosemount 3051 Pressure and 3144 Temperature Transmitters

Course 2398 NEW CEUs: .7

This course is designed for those individuals responsible for the installation and maintenance of the Rosemount 3051 Pressure, and 3144P Temperature Transmitters.

Overview

This 1-day course uses lectures and labs to teach the student how to install and maintain the Rosemount 3051C Smart Pressure, and 3144P Smart Temperature Transmitter. The student will also learn the operation and interface capabilities of the Field Communicator. Students will:

- explain the differences between Smart & Analog transmitters
- identify 3051C and 3144P parts and functionality
- explain the principles of operation of the 3051C and 3144P Transmitters
- configure and test the 3051C Pressure and 3144P Temperature Transmitters using the Field Communicator
- properly install/ troubleshoot the 3051 Pressure and 3144P Temperature transmitters

Prerequisites

Knowledge of basic pressure and temperature fundamentals and instrumentation.

Topics

- Smart and Analog Transmitters
- 3051C & 3144P Overview and Principles of Operation
- Test Equipment Selection
- Sensor Selection and Wiring
- Bench Testing the 3051C & 3144P Smart Transmitter
- Field Communicator Operation
- Digital Trims/Calibration
- Installation and Start-up
- Troubleshooting and Maintenance

8700 Series Magnetic Flowmeter

Course 2340 CEUs: .7

This course is intended for anyone that is involved with properly installing, wiring, configuring and troubleshooting a Rosemount 8700 Series Magnetic flowmeter. Typical job functions include: maintenance technicians, instrument technicians and instrumentation engineers.

Overview

This 1-day course consists of a blend of lectures and hands-on exercises that cover how to install, configure, and maintain the Rosemount 8700 Series Magnetic Flowmeter Systems composed of the Model 8712 and 8732 transmitters and the 8705 Flanged and 8711 Wafer Sensors. The students will learn the operation and capabilities of Local Operator Interface (LOI), 475 Field Communicator, and/or AMS Device Manager and how to use these tools to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites

Knowledge of basic flow fundamentals and instrumentation.

Topics

- Explain the Difference and Capabilities of the Rosemount 8700 Series Magnetic Flowmeters
- Identify Transmitter and Sensor Parts and Explain Functionality
- Explain Faraday's Law and the Principles of Operation of Magnetic Flowmeter System
- Configure and Test Transmitters Using the LOI, Field Communicator, or AMS Device Manager
- Properly Install/Troubleshoot the Rosemount Magnetic Flowmeter System

For Rosemount training information please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.

8700 Series Magnetic Flowmeter with AMS Device Manager

Course 2340A CEUs: .7

This course is intended for anyone that is involved with properly installing, wiring, configuring and troubleshooting a Rosemount 8700 Series Magnetic flowmeter. Typical job functions include: maintenance technicians, instrument technicians, and instrumentation engineers.

Overview

This 1-day course consists of a blend of lectures and hands-on exercises that cover how to install, configure, and maintain the Rosemount 8700 Series Magnetic Flowmeter Systems composed of the Model 8712 and 8732 transmitters and the 8705 Flanged and 8711 Wafer Sensors. The students will learn the operation and capabilities of AMS Device Manager and how to use this tool to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites

None required. However, basic understanding of the fundamentals of flow measurement, electricity, analog and frequency signal processing are assumed.

Topics

- Explain the Difference and Capabilities of the Rosemount 8700 Series Magnetic Flowmeters
- Identify Transmitter and Sensor Parts and Explain Functionality
- Explain Faraday's Law and the Principles of Operation of Magnetic Flowmeter system
- Configure and Test Transmitters Using AMS Device Manager
- Properly Install/Troubleshoot the Rosemount Magnetic Flowmeter System

Vortex Online Instrument and Electrical (I&E) Technician Training

Course c6000 NEW

This curriculum group containc6001, c6002, c6003 and c6004. This entire curriculum may be purchased at a discounted price, or each section of the curriculum may be purchased individually. The content for this curriculum group includes theory, product offering and model selection, and vortex sizing; installation best practices for piping, mounting, remote electronics and wiring; device configuration for the 475 HART Field Communicator and the AMS Device Manager and using the configuration tools; electronics, sensor and process troubleshooting and vibration, mass balancing and filter troubleshooting. unlimited access for 3 months. Duration: 3 HR

8800 Series HART Vortex Flowmeter

Course 2341 CEUs: .7

This course is intended for anyone that is involved with properly installing, wiring, configuring and troubleshooting a Rosemount 8800 Series Vortex Flowmeter. Typical job functions include; maintenance technicians, instrument technicians, and instrument engineers.

Overview This 1-day course consists of a blend of lectures and hands-on exercises that cover how to install, configure, and maintain the Rosemount 8800 Series Smart Vortex flowmeter systems. The students will learn the operation and capabilities of the Local Operator Interface and HC475 Field Communicator and how to use these tools to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites None required. However, basic understanding of the fundamentals of flow measurement, electricity, analog & frequency signal processing are assumed.

Topics

- Explain the Differences and Capabilities of the Rosemount 8800 Series Vortex Flowmeters
- Explain the von Karman Effect and the Principles of Operation of Vortex Flowmeters.
- Identify Vortex Parts and Explain Functionality
- Configure and Test Transmitters using Field Communicator or AMS Device Manager
- Properly Install and Troubleshoot the Rosemount 8800 Series Vortex Flowmeter System

Vortex Theory and Specification

Course c6001 NEW

This curriculum is part of the Vortex Online Instrument and Electrical (I&E) Technician Training. It may be purchased individually or with the c6000 curriculum. This course group covers the theory of operation, provides an overview of the vortex meter product offering and model selection, and discusses vortex sizing. $95 per student - unlimited access for 3 months. Duration: .5 hour

Vortex Installation Best Practices

Course c6002 NEW

This curriculum is part of the Vortex Online Instrument and Electrical (I&E) Technician Training. It may be purchased individually or with the c6000 curriculum. This course group covers piping requirements, mounting, remote electronics and wiring. unlimited access for 3 months. Duration: .5HR

8800 Series Vortex Flowmeter with AMS Device Manager

Course 2341A CEUs: .7

This course is intended for anyone that is involved with properly installing, wiring, configuring and troubleshooting a Rosemount 8800 Series Vortex Flowmeter. Typical job functions include; maintenance technicians, instrument technicians, and instrument engineers.

Overview

This 1-day course consists of a blend of lectures and hands-on exercises that cover how to install, configure, and maintain the Rosemount 8800 Series Vortex flowmeter systems. The students will learn how to use AMS Device Manager to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites

None required. However, basic understanding of the fundamentals of flow measurement, electricity, analog & frequency signal processing are assumed.

Topics

- Explain the Differences and Capabilities of the Rosemount 8800 Series Vortex Flowmeters
- Explain the von Karman Effect and Principles of Operation of Vortex Flowmeters
- Identify Vortex Parts and Explain Functionality
- Configure and Test Transmitters using the AMS Device Manager
- Properly Install and Troubleshoot the Rosemount 8800 Series Vortex Flowmeter System

Vortex Device Configuration and Using Configuration Tools

Course c6003 NEW

This curriculum is part of the Vortex Online Instrument and Electrical (I&E) Technician Training. It may be purchased individually or with the c6000 curriculum. This course group covers the key parameters for a basic vortex configuration, how to use AMS and the Field Communicator to configure an 8800D vortex meter, and advanced configuration for special units of measure, base volume units - density ratio, pulse output, totalizer, display variables and saturated steam using the MTA option. unlimited access for 3 months. Duration: 1 HR

Vortex Troubleshooting

Course c6004 NEW

This curriculum is part of the Vortex Online Instrument and Electrical (I&E) Technician Training. It may be purchased individually or with the c6000 curriculum. This course group covers troubleshooting scenarios; electronics, sensor and process troubleshooting; and vibration, mass balancing and filtering troubleshooting. unlimited access for 3 months. Duration: 1HR

8700 Series Smart Magnetic Flowmeter Short Course

Course 2339SM CEUs: .4

This course is intended as a refresher course for anyone that is involved with properly configuring and troubleshooting a Rosemount 8700 Series Smart Magnetic Flowmeter. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers. This class is also intended to be taught as two, ½ day repeat sessions to accommodate customers who need to train their entire department but must also maintain the operation of their plant by scheduling their employees between an AM/PM sessions.

Overview

This 1/2-day field class is a condensed version of the 2340 course briefly reviewing the theory of operation, meter components and installation. The focus of the class is to provide a hands-on experience configuring and troubleshooting of the 8700 Magnetic metering system composed of the Model 8712 and 8732 Transmitters and the 8705 Flanged and 8711 Wafer Sensors. The students will learn the operation and capabilities of the Local Operator interface & HC475 and how to use these tools to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites Some prior experience working with Rosemount Magnetic Flowmeters meters is recommended. However students with no past experience can also benefit. For all attendees, it is assumed they have a basic understanding of the fundamentals of flow measurement, electricity, analog & frequency signal processing.

Topics

- Magnetic Flowmeter System
- Smart vs. Analog Transmitters
- Flow Tube Selection
- Configuring Using LOI and AMS Device Manager
- Local Operator Interface Functions
- Positive Zero Return
- Auxiliary Functions and Special Units
- Signal Conditioning
- System Troubleshooting and Maintenance
- Bench Testing/Digital Trims
- Process Noise and Grounding Diagnostics
- Meter Verification Diagnostics

8800 Series Smart Vortex Flowmeter Short Course

Course 2339SV CEUs: .4

This class is intended as a refresher course for anyone that is involved with properly configuring and troubleshooting a Rosemount 8800 Series Smart Vortex Flowmeter. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers. This class is also intended to be taught as two, ½ day repeat sessions to accommodate customers who need to train their entire department but must also maintain the operation of their plant by scheduling their employees between an AM/PM sessions.

Overview

This 1/2-day field class is a condensed version of the 2341 course briefly reviewing the theory of operation, meter components and installation. The focus of the class is to provide a hands-on experience configuring and troubleshooting of the 8800 Vortex metering system. The students will learn the operation and capabilities of the Local Operator interface & HC475 and how to use these tools to perform configuration. Common issues encountered and troubleshooting techniques will also be covered.

Prerequisites

Some prior experience working with Micro Rosemount Vortex Flowmeters meters is recommended. However students with no past experience can also benefit if their learning objectives are to get a basic introduction to operation, installation, configuration and troubleshooting. For all attendees, it is assumed they have a basic understanding of the fundamentals of flow measurement, electricity, analog & frequency signal processing.

Topics

- Explain the Differences and Capabilities of the Rosemount 8800 Series Vortex Flowmeters
- Explain the von Karman Effect and Principles of Operation of Vortex Flowmeters
- Identify Vortex Parts and Explain Functionality
- Configure and Test Transmitters using the AMS Device Manager
- Properly Install and Troubleshoot the Rosemount 8800 Series Vortex Flowmeter System

Wireless: Micro Motion Coriolis and Rosemount Smart Magnetic and Vortex Flowmeters

Course 2383 CEUs: .7

This course is intended for anyone that is involved with installing, wiring, configuring and troubleshooting a Micro Motion Coriolis, Rosemount 8700 Magnetic & 8800 Vortex flowmeters with a 775 Wireless THUM. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers.

Overview

This 1-day course consists of a blend of lectures and hands-on exercises that cover a basic overview of wireless capabilities with a Micro Motion Coriolis, Rosemount 8700 Series Magnetic and 8800 Series Vortex meters. Based on customer need, the class can be taught for each individual products. The course provides a step by step process for the following: how to install and wire a 775 Smart Wireless THUM to each transmitter, how to configure the THUM, how to configure the 1420 Wireless Gateway to the THUM using AMS Device Manager , and how to add and view the Micro Motion and Rosemount transmitters to the gateway.

Prerequisites

General understanding of the HART protocol and operation and configuration of a Micro Motion Coriolis, Rosemount 8700 Magnetic and 8800 Vortex meters is assumed.

Topics

- Explain the Fundamentals for how a Micro Motion Coriolis, Rosemount 8700 Series Magnetic & 8800 Series Vortex Flowmeters Work with a 1420 Wireless Gateway and 775 Smart THUM Adapter
- Install and Wire a 775 Smart THUM to Micro Motion and Rosemount Transmitters
- Connect to and Configure the Micro Motion and Rosemount Transmitters to work with a 1420 Wireless Gateway
- Configure a 775 Smart THUM and the Transmitters to Communicate on the Gateway using AMS Device Manager

For Rosemount training information please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.

Rosemount 8700 Smart Magnetic and 8800 Series Vortex Flowmeters

Course 2394 CEUs: .7

This combined class is intended anyone that is involved with properly configuring and troubleshooting a Rosemount 8700 Smart Magnetic & 8800 Smart Vortex Flowmeters. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers.

Overview
This 1-day course is an abbreviated version of the 2340 and 2341 courses for Rosemount 8700 Series Magnetic and 8800 Series Vortex meters. Typically 2/3 of the course time is spent on Rosemount's 8800 Vortex flowmeter and 1/3 on Rosemount's 8700 Magnetic Flowmeter. Theory of operation, meter components and installation of each flowmeter are covered. The focus of the class is to provide a hands-on experience configuring and reviewing the most common troubleshooting issue and best practices for resolution.

Prerequisites
This being a 1-Day class covering two flowmeters, some prior experience working with Rosemount's Magnetic and Vortex flowmeters is recommended. However students with no past experience can also benefit if their learning objectives are to get a basic introduction to operation, installation, configuration and troubleshooting. For all attendees, it is assumed they have a basic understanding of the fundamentals of flow measurement, electricity, analog & frequency signal processing.

Topics
After attending the course the student will be able to do the following for both the Rosemount Magnetic and Vortex flowmeters:

- Briefly Explain the Fundamentals for How Each Fowmeter Works and the Function of the Key Components
- Have a Basic Understanding of the Installation Best Practices for Orienting, Mounting and Wiring the Sensor and Transmitter
- Perform a Basic Configuration of the Metering System for Various Applications
- Diagnose and Know How to Correct the Most Common Meter and Process Issues

Micro Motion Coriolis and Rosemount Smart 8700 Magnetic Flowmeters

Course 2384 CEUs: .7

This combined class is intended anyone that is involved with properly configuring and troubleshooting a Micro Motion flow and density meter and Rosemount 8700 Smart Magnetic Flowmeters. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers.

Overview This 1-day field class provides hands-on training on both the Coriolis and Magnetic Flowmeters. Typically 2/3 of the course time is spent on Micro Motion's Coriolis meter and 1/3 on Rosemount's 8700 Magnetic Flowmeter. Theory of operation, meter components and installation of each flowmeter are covered. The focus of the class is to provide a hands-on experience configuring and troubleshooting best practices. Students will learn the Micro Motion Series 1000/2000 transmitters using one of these configuration tools; Prolink III, HC475, AMS Device Manager or Series 3000 display interface devices. Public field classes typically use Prolink III for configuring the Micro Motion transmitters and the HC475 will be used for the Rosemount 8700 Magnetic flowmeter. Customers can choose which configuration device is used for classes held at their site.

Prerequisites Some prior experience working with Micro Motion Coriolis & Rosemount 8700 Magnetic flowmeters is recommended. However students with no past experience can also benefit. A basic understanding of the fundamentals of flow measurement, electricity, analog and frequency signal processingis assumed.

Topics
After attending the course the student will be able to do the following for both Micro Motion's Coriolis and Rosemount 8700 Magnetic flowmeters:

- Briefly Explain the Fundamentals for How Each Flowmeter Works and the Function of the Key Components
- Basic Understanding of the Installation Best Practices for Orienting, Mounting and Wiring the Sensor and Transmitter
- Perform a Basic Configuration of the Metering System for Various Applications
- Diagnose and Know How to Correct the Most Common Meter and Process Issues

Micro Motion Coriolis and Rosemount Smart 8800 Vortex Flowmeters

Course 2387 CEUs: .7

This combined class is intended anyone that is involved with properly configuring and troubleshooting a Micro Motion flow and density meter and Rosemount 8800 Smart Vortex Flowmeters. Typical job functions include; maintenance technicians, instrument technicians and instrumentation engineers.

Overview This 1-day field class provides hands-on training on both the Coriolis and Vortex Flowmeters. Typically 2/3 of the course time is spent on Micro Motion's Coriolis meter and 1/3 on Rosemount's 8800 Vortex Flowmeter. Theory of operation, meter components and installation of each flowmeter are covered. The focus of the class is to provide a hands-on experience configuring and troubleshooting best practices. Students will learn the Micro Motion Series 1000/2000 transmitters using one of these configuration tools; Prolink III, HC475, AMS Device Manager or Series 3000 display interface devices. Public field classes typically use Prolink III for configuring the Micro Motion transmitters and the HC475 will be used for the Rosemount 8800 Vortex flowmeter. Customers can choose which configuration device is used for classes held at their site.

Prerequisites Some prior experience with Micro Motion Coriolis & Rosemount 8800 Vortex flowmeters.. A basic understanding of the fundamentals of flow measurement, electricity, analog and frequency signal processing.

Topics Students will be able to do the following for both Micro Motion's Coriolis and Rosemount 8800 Vortex flowmeters:

- Briefly Explain the Fundamentals for How Each Flowmeter Works and the Function of the Key Components
- Have a Basic Understanding of the Installation Best Practices for Orienting, Mounting and Wiring the Sensor and Transmitter
- Perform a Basic Configuration of the Metering System for Various Applications
- Diagnose and Know how to Correct the Most Common Meter and Process Issues
- Configure the Metering System to Measure Available Process Variables from the Device for Their Application
- Learn a Step by Step Process to Perform Basic Troubleshooting of the Most Common Meter and Process Issues

Tank Gauging Technical Product Training

Course RTG101 CEUs: 3.5

This course is customized for service, project, and sales engineers. The course includes both practical and theoretical training.

Overview
This 5-day Tank Gauging Technical Product Training focuses on the 5900S system, our Wireless Tank Gauging System, a little about Rex and Pro, as well as other field equipment relevant for the Rosemount Tank Gauging system. The training covers installation, configuration and troubleshooting of our products, as well as general TankMaster functions. Students who complete this course will:

- correctly perform installation and setup procedures
- properly configure Tank Gauging System
- plan a Wireless installation
- perform basic troubleshooting

Prerequisites
This course is suitable for service, project, and sales engineers, and is a good start for new employees and customers.

Topics

- System Overview
- Perform basic troubleshooting
- 2410 TankHub
- 5900 Gauges
- Rosemount 2240S
- Rosemount 2230 Display
- 5300/5400 Gauges
- Field Communication
- Electrical and Mechanical Installation
- System Configuration
- LPG/LNG
- Wireless
- AMS Wireless Snap-On
- Gateway
- Emulation
- SIL
- Troubleshooting

Tank Master Training

Course RTG102 CEUs: 3.5

This course is customized for service, project, and sales engineers. The course includes both practical and theoretical training.

Overview
This 4-day TankMaster Training covers more detailed information about TankMaster functions. This course is suitable for anyone who works with TankMaster as well as for customers who use WinOpi as the operators' interface. Among other useful functions in TankMaster, the training covers batch-handling, Custom Views, and Redundancy. Students who complete this course will:

- correctly perform System Configuration
- properly configure Host Communication
- properly use Redundancy
- perform basic troubleshooting

Prerequisites
It is required that you have previously attended the Technical Product Training or have good knowledge of the Rosemount Tank Gauging System.

Topics

- System Configuration
- WinOpi Tools
- Host Communication and OPC
- TankMaster Batch
- Custom Views and Translation
- TankMaster to Enraf
- Network Basics
- Redundancy
- TankMaster.net
- Administrator Program, Backup & Restore
- Troubleshooting

For Rosemount Tank Gauging training info please refer to the appropriate contact on page 118.
For regional training center contacts refer to pages 116-117.
Visit: www.emersonprocess.com/education for current dates, locations and enrollments.