

ROC & FloBoss Training for engineers and technicians using these flexible devices, which are widely used by natural gas production, pipeline, and distribution companies to measure and control gas flow, is scheduled regularly at regional training centers, and available elsewhere upon request.



ROC Engineering I

Course 1200 CEUs: 3.2

This Fisher Controls course is for engineers, technicians, and others involved in system operation and maintenance of ROC products.

Overview

This 4-1/2 day course provides an overall working knowledge of the ROC 300 series (ROC 312 and ROC 364) and an overview of RAS products. Students are presented with a comprehensive view of the hardware and software in the ROC family and then are taught how to completely configure a working unit.

Students who complete this course will be able to effectively configure, operate and maintain the ROC products.

Prerequisites

Students should have an understanding of personal computer (PC) operation.

Topics

- Overview ROC & FloBoss Hardware
- Overview of ROCLINK 800 Software
- Configuring a ROC
- Basic Communication
- Operating the ROC Products
- Maintaining and Troubleshooting the ROC and Products
- Basic FST Use
- Discussing and Explaining Typical Oil & Gas Process Applications
- Calibration of A/I and A/O Modules

Price \$2,050

Location	Start Dates 2009
Marshalltown, IA	2/2, 7/13
Edmonton, AB	4/20, 8/4, 11/2
Grande Prairie, AB	6/15

Note: In Canada, flow computations will be taught using metric units. Exercises using imperial units are available as an option.

ROC and FloBoss Engineering II

Course 1210 CEUs: 3.2

This Fisher Controls course is an advanced course for experienced ROC users. Students are typically engineers and technicians with responsibility for day-to-day ROC operation, and system integrators.

Overview

This 4-1/2 day course provides background and exercises that allow students to learn to effectively implement advanced features and functions of the ROC product line. Topics that are covered include hands-on labs for connecting, configuring, and troubleshooting hardware and software.

Prerequisites

Course 1200, Fundamentals of ROC or FloBoss Engineering I

Topic Options Are:

- ROC 407 Advanced Concepts
 - General Operation
 - Managing Flash Memory (User Programs)
 - MVS Operation and Temperature Calibration
 - Multi-dropping the MVS
- ROC/HART
 - HART Basics
 - Connecting/Configuring Point-to-Point & Multi-Drop HART Instruments
- ROC/MODBUS Configuration
 - MODBUS Basics & Communications
 - Host and Slave Configuration
- ROC Communications
 - Communications Basics
 - RS232 & RS485/422 Basics and Lab
 - Dialup Communications Basics and Lab
- FST Guidelines
 - FST Structure
 - Processor Loading Considerations
 - Application Overview
- PID Control
 - PID Structure
 - Application and Use of ROC PID Control

Price \$2,050

Location	Start Dates 2009
Marshalltown, IA	3/2

ROC and FloBoss Troubleshooting and Problem Solving

Course 1217 CEUs: 2.1

This Fisher Controls course is designed to provide ROC and FloBoss users with a broad experience in troubleshooting and field repair of ROC and FloBoss products.

Overview

This 3-day course teaches the student how to identify problems, determine their causes, and take the proper corrective action for quick resolution. In this lab-intensive course, stations will be set up with faulty equipment and students will be challenged to identify and correct errors and malfunctions. The lab stations include common and not-so-common problem scenarios that have been collected from our field support group and from the factory repair department.

Prerequisites

Course 12XX, Fundamentals of ROC or FloBoss Engineering I

Topics

- ROC/FloBoss Hardware Overview
- Configuration Software Review- all 4 programs
- Troubleshooting Procedures and Plans
- Planning Maintaining Schedules
- Problem Prevention

Price \$1,700

Location	Start Dates 2009
Marshalltown, IA	3/30, 10/5

To enroll in ROC & FloBoss courses please call 800-338-8158 or 641-754-3771. For additional contact information refer to the appropriate contact on page 119. Updated dates & locations are available on our website at www.emersonprocess.com/education.

FloBoss Engineering I

Course 1220 CEUs: 3.2

This Fisher Controls course is for field technicians and others who configure FloBoss to perform AGA flow calculations.

Overview

This 4-1/2 day course teaches the student how to configure the FloBoss 100, 400, 500 series products for Electronic Flow Measurement (EFM). Included is a review of hardware and software as they apply to flow measurement. The course layout emphasizes hands-on configuration and set-ups using case histories to underscore the economic impact of configuration errors and oversights.

Students who complete this course will be able to configure the FloBoss products.

Prerequisites

Some experience with personal computers (DOS and Windows) would be helpful.

Topics

- FloBoss Hardware Review
- Flow Measurement Review
 - Overview on MVS Product
 - Set up Multi-Dropping on MVS
- FloBoss Configuration
- Basic Use of Database Configuration
- AGA Report Generation
- ROCLINK 800
- Basic FST Use

Price \$2,050

Location Marshalltown, IA **Start Dates 2009**
6/1, 9/14

ROC809 Engineering I

Course 1240 CEUs: 3.2

This Fisher Controls course is for engineers, technicians, and others involved in system operation and maintenance of ROC809.

Overview

This 4-1/2 day course provides an overall working knowledge of the ROC809. Students are presented with a comprehensive view of the hardware and software in the ROC family and then are taught how to completely configure a working unit.

Students who complete this course will be able to effectively configure, operate and maintain the ROC products.

Prerequisites

Students should have an understanding of personal computer (PC) operation.

Topics

- Overview ROC Hardware
- Overview of ROCLINK 800 Software
- Configuring a ROC
- Basic Communication
- Operating the ROC Products
- Maintaining and Troubleshooting the ROC and Products
- Basic FST Use
- Discussing and Explaining Typical Oil & Gas Process Applications
- Calibration of A/I and A/O and RTD Modules

Price \$2,050

Location Marshalltown, IA **Start Dates 2009**
4/27, 8/3, 11/9

DS800 for ROC809 Programming

Course 1241 CEUs: 2.1

This Fisher Controls course is for engineers, field technicians and others who configure ROC809 to perform User Programming on this product.

Overview

This 3-day course shows the student the ROC809 in 5 different languages. The course layout emphasizes hands-on programming and exercises on the ROC809 using the DS800 development suite.

Students who complete this course will be able to program the ROC809.

Prerequisites

Some experience with personal computers and ROC 809 Engineering I (Course 1240).

Topics

- Program Languages
- Sequential Function Chart
- Ladder Diagram
- Function Block Diagram
- Structured Text
- Instruction List
- ROCLINK 800

Price \$1,800

Location Marshalltown, IA **Start Dates 2009**
5/4, 8/10, 11/16

