

Manufacturing

Industrial Hydraulic Equipment Troubleshooting Course Description

COURSE AGENDA

Day 1

- Safety Practices
- Introduction to Hydraulics
- Interpreting ANSI Symbols
- Pascal's law
- Applying Pressure & Force
- Fluid Flow
- Hydraulic Power Transmission
- Accumulators
- Hands-on Lab

Day 2

- Hydraulic Pumps
- Hydraulic Actuators
- Hands-on Lab
- Hydraulic Variables
- Pressure Constraints
- Hands-on Lab

Day 3

- Conductors and Sealers
- Reservoirs
- Valves
- Types of Flow Control
- Hands-on Lab
- Flow Control Methods
- Pressure Controls
- Hands-on Lab

Day 4

- Counterbalance Circuit
- Hands-on Lab
- Sequence Circuit
- Hands-on Lab



COURSE NUMBER: MFG236

Course Purpose

This course provides the knowledge and skills required to supervise the installation, maintenance, and troubleshooting of hydraulic systems.

At the completion of this course, participants will be able to:

- Demonstrate best practice safety procedures when working with hydraulic systems
- Identify potential hydraulic hazards
- Match a given hydraulic component's name with the ANSI symbol and describe its function
- Describe the lockout procedure
- Discuss types and uses of hydraulic fluids
- Use a hydraulic trainer to connect, operate, analyze and troubleshoot the operation of sample circuits
- Identify proper name and function of all hydraulic components, circuit action of failing components and indicators or manual valve operators that could be used to isolate failed components

Who Should Attend

Individuals such as engineers, supervisors, or other personnel responsible for operation of hydraulically maintained and operated devices should attend this course.

Prerequisites

To successfully complete this course, a basic understanding of the following topics is required:

- Working knowledge of basic shop mathematics
- Familiarity with industrial equipment

Student Materials

To enhance and facilitate your learning experience, the following materials are provided as part of the course package:

- *Student Manual*, which contains the topical outline, safety precautions, and course related hand-outs including exercises.

Hands-On Practice

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises. These exercises focus on the skills introduced in each lesson.

To complete the exercises, you will use a hydraulic training workstation. Because the basic skills taught in the course apply to all hydraulic applications, the hands-on exercises permit you to apply what you have learned in your workplace environment.

Course Length

This is a four-day course.

Course Number

The course number is MFG236

IACET CEUs

CEUs Awarded: 2.8



To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at <http://www.rockwellautomation.com/training>

www.rockwellautomation.com

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