

FLUID POWER COURSES

HYDRAULIC TROUBLESHOOTING



DESCRIPTION

This class will start out with an introduction to hydraulics and teach the participant how to successfully maintain and troubleshoot industrial hydraulics. The course will be a hands-on instructor led class that will teach theory and principles up to advanced troubleshooting skills. An in-depth study of pressure control, flow control, directional control, cylinders, motors, pumps, and more.

OUTLINE

- Introduction to Hydraulic Principles
- Hydraulic Filters and Reservoirs
- Hydraulic Pumps (Fixed and Variable)
- Pressure Control in Hydraulics
- Flow Control Valves
- Directional Control Valves
- Hydraulic Cylinders
- Pilot Operated Control Valves
- Hydraulic Accessories; Accumulators, and Flow Devices

PREREQUISITES

There are no prerequisites required for this course other than an interest in hydraulics and a willingness to participate in an instructor-led, hands-on classroom environment.

This class is an excellent entry course for apprentices and a great refresher course for general, production mechanics, journey men in machine repair, pipe fitters, and electricians.

COURSE LENGTH

32 hours.

PERFORMANCE OBJECTIVES

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

- Demonstrate a thorough knowledge of hydraulic systems.
- Successfully troubleshoot a hydraulic system.
- Properly select the correct valve for a job.
- Correctly maintain an industrial hydraulic system.
- Control contamination.
- Troubleshoot by reading schematics.
- Identify components from circuit diagrams.
- Understand piloting.
- Distinguish between aeration and cavitation.