

Advanced Hydraulics



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. This class is ideal for properly maintaining not only basic hydraulic components, but advanced hydraulics that relate to rotation and positioning using proportional and servo valves.

Outline

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

Prerequisites

Technical Training LLC's Hydraulic Systems class or equivalent knowledge.

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.
- Contamination control.
- Troubleshoot by reading schematics.
- Identify components from circuit diagrams.
- Understanding of piloting.
- Cartridge valves and operation.
- Working knowledge of proportional and servo valves.