

Pneumatics



Description

This course will provide the participant with an in depth understanding of the pneumatics that they will encounter in plant maintenance. The course will take the participant from the beginning level to a very in-depth knowledge of pneumatic systems. The “hands-on” learning environment that is supported with workbooks, handouts, visual aids and live pneumatic circuits makes this an ideal learning environment. This course is excellent for general maintenance and production maintenance to skilled trades.

Outline

- Introduction to Pneumatics
- The Basic Pneumatic System
- Compressed Air Theory
- Air Compression and Distribution
- Air Treatment
- Actuators
- Directional Control Valves
- Basic Pneumatic Circuits
- Pneumatic Symbology
- Build Circuits

Prerequisites

There are no prerequisites other than a predisposition to learn and a willingness to participate in “hands-on” training.

Course Length

32 hours.

Performance Objectives

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

- Demonstrate a working knowledge of pneumatic systems used in industry.
- Troubleshoot a pneumatic system from the source to actuator.
- Select the proper component for the application.
- Correctly maintain a pneumatic system.
- Understand the theory and working of a pneumatic system.
- Determine why air cylinder “ fails to move the load” , or “ moves the load too slowly.”
- Determine why a solenoid operated directional control valve fails to operate.
- Understanding of piloting.
- Control of contamination.
- Troubleshoot from a print or schematic.