

Fluid Power Training

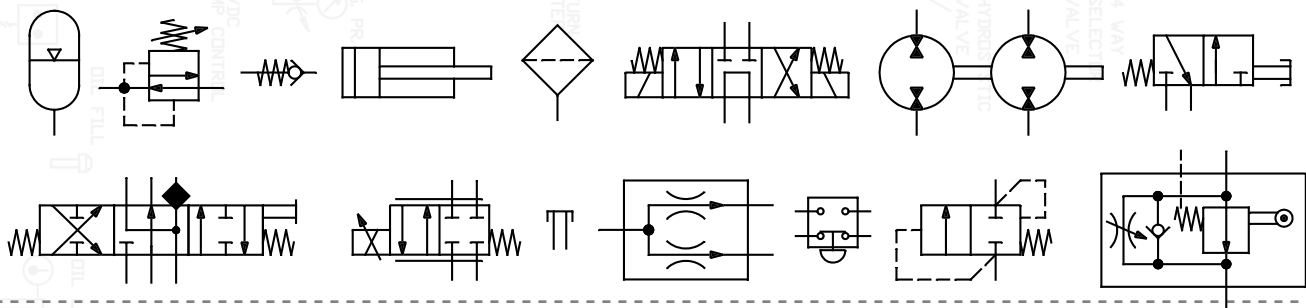
Fluid power courses to increase the skills and productivity of your maintenance employees.

Customized Courses:

On-site, custom courses designed to address the work your maintenance personnel and engineers must perform to keep your systems running efficiently.

Pre-formatted courses:

- Industrial Hydraulic Maintenance
- Circuits and Circuit Reading
- Industrial Hydraulic Technology



Target Audience: Anyone who desires to increase their understanding of fluid power components and systems.

Training locations: We can provide on-site training in your facility or in a convenient nearby location.

Training times: PPC offers instruction when it is convenient for your company. Courses can be taught day or night and adjusted to fit your work schedule.

About the Instructor:

- A.A.S. degrees in Fluid Power and Flexible Automation/Robotics
- Certified Fluid Power Specialist
- Hydraulic System Engineer
- 10+ years experience
- Trained over 500 students

317-849-5115 / 800-875-5196

Basic Fluid Power Course - Sample Outline

These subjects and concepts can be customized to provide the information needed to educate your staff on maintaining and troubleshooting the equipment in your manufacturing systems.

1) Terminology

Preparation for the class by learning the terminology of fluid power and the concepts behind the terms.

2) Transmitting Force Through Fluid

A study of Pascal's Law. Turning fluid power into mechanical force. How cylinders work. Mechanical force multiplication.

3) Energy Transmission Using Hydraulics

Hydraulic transmission of energy. The nature of hydraulic fluids. Accumulators. Displacement pumps. Velocity vs flow rate. The effects of heat in a hydraulic system.

4) Controlling Hydraulic Energy

Devices that harness the power created in hydraulic systems. Hydraulic symbol review.

5) Energy Transmission Using Pneumatics

Air compression. Air expansion. Pneumatic energy transmission. Flow rate.

6) Controlling Pneumatic Energy

Devices that harness the power created in pneumatic systems. Pneumatic symbol review.

7) Hydraulic Pumps and Compressors

Vane pumps. Piston pumps. Gear pumps. Gerotor pumps. Pressure compensation. Piston compressors.

8) Check Valves, Cylinders and Motors

Check valve types and operation. Cylinder types and operation. Motor types and operation.

9) Flow Control Valves

Flow control valves types and operation.

10) Directional Control Valves

Directional control valve types and operation.

11) Pressure Control Valves

The many types of pressure control valves, their operation and application.

12) Hydraulic Fluid Handling

Reservoirs. Filtration. Cooling.

13) Pneumatic Air Handling

Filtration. Cooling.

14) Hydraulic Fluid Piping and Connectors

Types of piping. Size. Threads. Wall thickness. Piping materials. Couplings and fittings.