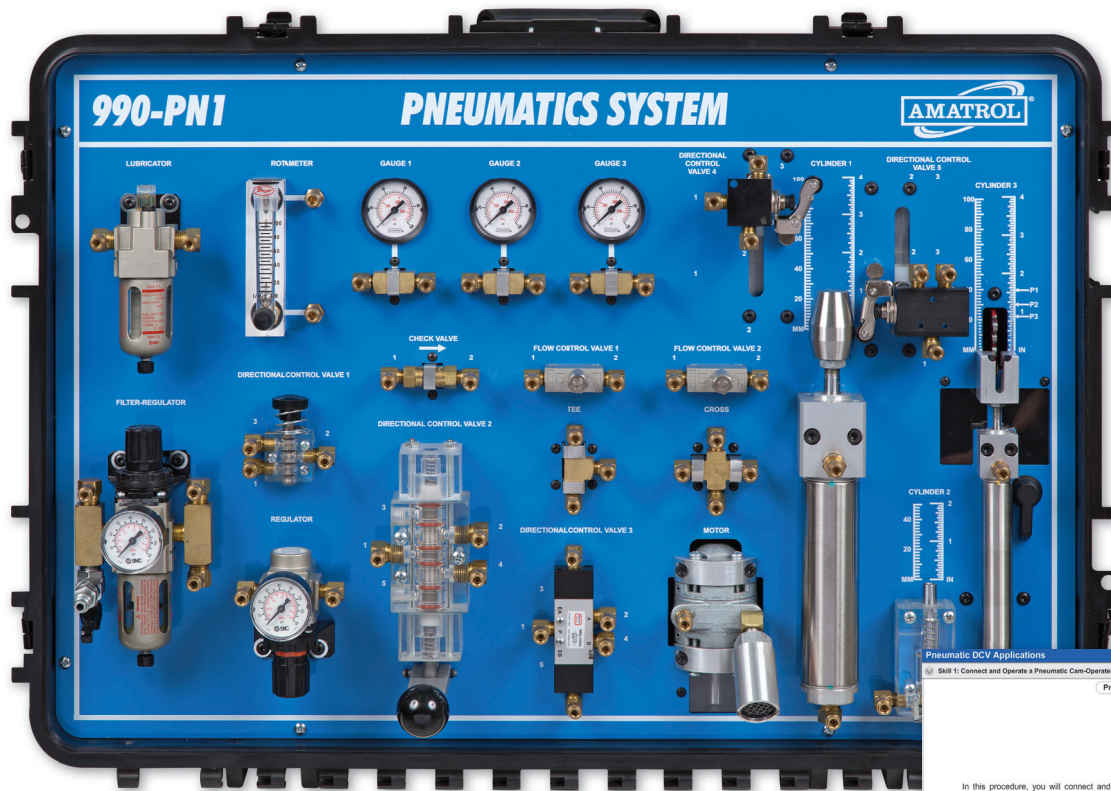


Portable Pneumatics Learning System

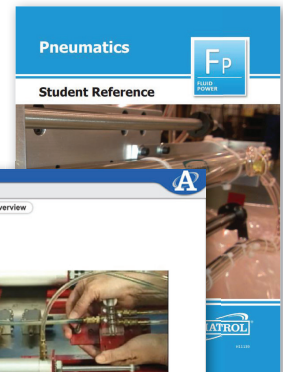
990-PN1

Fp

FLUID
POWER



990-PN1



Interactive Multimedia Curriculum and
Student Reference Guide

Learning Topics:

- Pneumatic Power Systems
- Pneumatic Circuits
- Schematics
- Pressure and Flow
- Air Flow and Resistance
- Speed Control Circuits
- Flow Control Valves
- Directional Control Valves
- Cam Valves
- Air Logic
- Pneumatic Maintenance

Amatrol's Portable Pneumatics Learning System (990-PN1) teaches basic and intermediate pneumatic concepts. Pneumatic power is a foundation of industry used in many applications across a wide variety of fields, such as agriculture, pharmaceuticals, and automation. Learners will gain critical hands-on experience operating pneumatic cylinders, flow controls, directional control valves, air motors, and pressure gauges. This system requires a compressed air supply, a Hand Tool Package (41221), and a computer.

This portable, highly-durable learning system features real-world pneumatic components, including a rotameter, pressure gauges, flow control valves, directional control valves, and much more! Users will learn to use pneumatic hoses included with the system to create working pneumatic circuits from schematics and practice skills, such as connecting and reading a flowmeter and operating a cam-operated sequence circuit. Amatrol's commitment to quality and detail ensures that learners will work with components they'll actually use on the job.



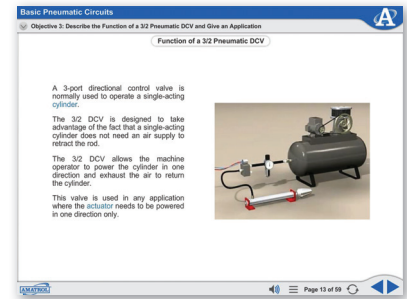
Technical Data

Complete technical specifications available upon request.

Portable case
Rotameter
Pressure Gauges, 0-1000 PSI (3)
Lubricator
Pressure Regulator, Non-Relieving
Filter/Regulator, Manifold
Check Valve
Tee
Cross
Flow Control Valves (2)
Air Motor
Directional Control Valve, Lever
Directional Control Valve, Pilot
Directional Control Valve, Push Button
Directional Control Valve, 3/2 Cam
Directional Control Valve, 5/2 Cam
Large Double-Acting Cylinder, 1 1/2" bore
Small Double-Acting Cylinder, 3/4" bore
Single-Acting Cylinder
Loose Components Kit
Micronic Filter Patch
Impingement Device
Syndrome, 10cc
Filter Element, 5 micron
Filter Element, 20 micron
Filter Element, 70 micron
Lever Arm Link Assembly
Hose Kit
6" Hose Assembly
12" Hose Assembly
18" Hose Assembly
24" Hose Assembly
12" Hose with one quick connect
Multimedia Curriculum (M11139)
Instructor's Guide (C11139)
Install Guide (D11139)
Student Reference Guide (H11139)
Additional Requirements:
Compressed Air Supply (2 CFM @ 100 PSIG)
Hand Tool Package (41221)
Computer (Visit www.amatrol.com/support/computer-requirements-for-details).
Utilities:
Electricity: 120VAC/60Hz/1 phase

Study Pneumatic Components and Practice on Real-World Equipment

Amatrol's Portable Pneumatics Learning System packs a full array of basic and intermediate pneumatic theory and skills into a powerful mobile workstation. Major topic areas include various pneumatic and speed control circuits, directional control valves, air flow and resistance, and flow control and cam valves. Learners will study, for example, the applications, schematic symbol, and operation of a 3/2 pneumatic directional control valve (DCV). They will then implement this knowledge by practicing the hands-on skill of using a 3/2 manually-operated DCV to operate a single-acting pneumatic cylinder.



Interactive Multimedia Demonstrates Hands-On Skills



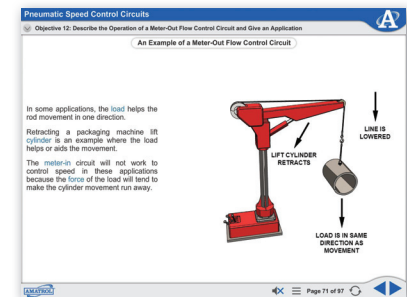
Air Filter on the 990-PN1

Learn Pneumatic Maintenance Skills

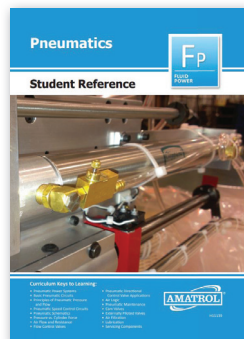
Because air is filled with contaminants, like dirt, pollen, and water vapor, pneumatic equipment may experience rusted pipes, worn parts, and broken seals if not properly and carefully maintained. On the 990-PN1, learners will study common sources of contamination, how the dew point and humidity can affect pneumatic equipment, and why eliminating air leaks is critical. They will also gain hands-on experience with skills like selecting and changing air filters, connecting and adjusting a lubricator, and calibrating gauges.

Engaging, Highly-Interactive Multimedia

Amatrol's curriculum features a highly-interactive, multimedia format that includes stunning 3D graphics and videos, voiceovers of all text, and interactive quizzes and exercises designed to appeal to learners with different learning styles. The 990-PN1's curriculum teaches learners a variety of basic and intermediate pneumatics concepts. For example, learners will study a variety of different types of speed control circuits and gain experience connecting and operating meter-out flow control circuits, as well as exhaust port, pressure port, and independent speed control circuits. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



Interactive Multimedia with 3D Graphics



Student Reference Guide

A sample copy of the Pneumatics Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training, making it the perfect course takeaway.

