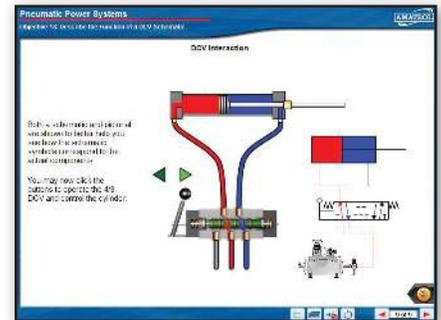
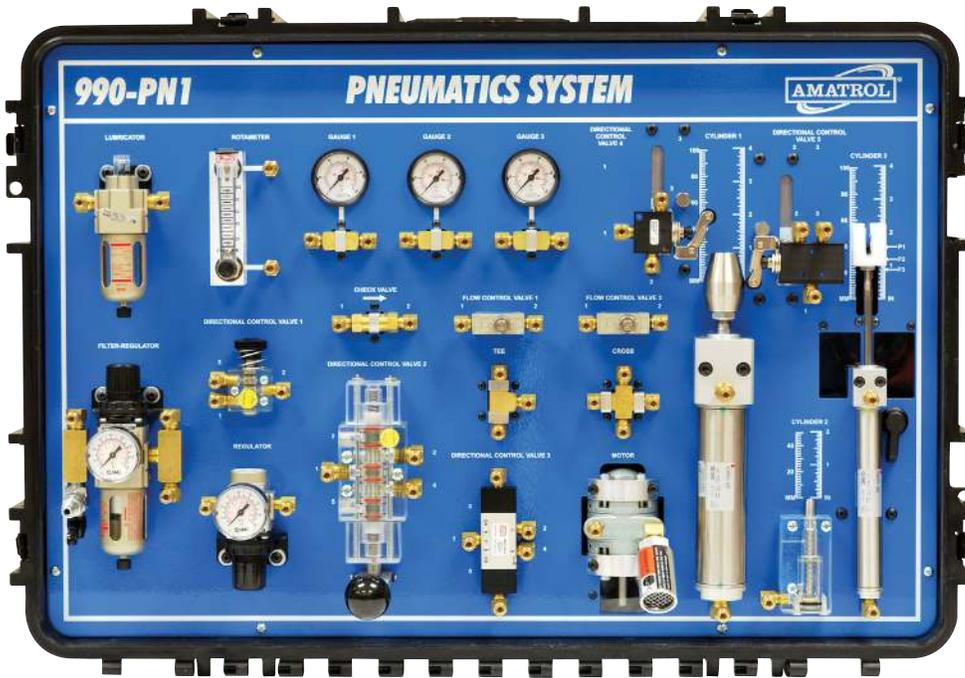


# Portable Pneumatics Learning System

990-PN1

F P

FLUID  
POWER



990-PN1 Multimedia



## Learning Topics:

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

Amatrol's Portable Pneumatics Learning System (990-PN1) is a mobile option for bringing Amatrol's topnotch products and world-class curriculum to environments that lack the space for full-size trainers or where trainers are needed in multiple facilities. The 990-PN1 allows learners to practice hands-on skills and study basic and intermediate pneumatic concepts, such as the application and operation of pneumatic cylinders, flow controls, directional control valves, air motors, and pressure gauges.

The 990-PN1 includes real-world pneumatic components mounted on a silkscreened panel for easy identification within a portable case that features wheels and a handle. Learners can 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. The portable pneumatics system maintains Amatrol's standard of topflight quality within this new, highly adaptable product as a way to reach even more learners and continue transforming the global workforce one life at a time.



## Technical Data

Complete technical specifications available upon request.

### Portable Pneumatics Trainer

- Rotameter
- Pressure Gauge, 0-1000 PSI (3)
- Lubricator
- Pressure Regulator, Non-Relieving
- Filter/Regulator, Manifold
- Check Valve
- Tee
- Cross
- Flow Control Valve (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
- Syringe, 10cc
- Filter Element, 5 micron
- Filter Element, 10 micron
- Filter Element, 70 micron
- Lever Arm Link Assembly

### Hose Kit

- 6" Hose Assembly
- 12" Hose Assembly
- 18" Hose Assembly
- 24" Hose Assembly

### Multimedia Curriculum (M11139)

### Instructor's Guide (C11139)

### Additional Requirements:

See <http://www.amatrol.com/support/computer-requirements>

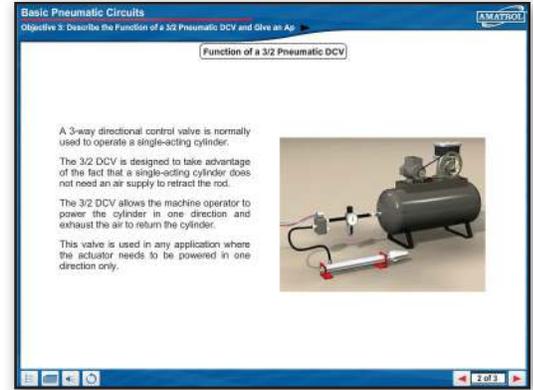
### Utilities Required:

Compressed Air Supply: Regulated 5 CFM @ 100 PSIG

## Study Pneumatic Components and Practice on Real-World Equipment

If desk space and a computer are available, the 990-PN1 can bring real-world pneumatics training to any environment. The 990-PN1 features a full array of pneumatic theory and skills packed into a powerful mobile workstation. Delivered via Amatrol's world-class e-learning, the 990-PN1's curriculum provides the same thorough explanation and instruction of pneumatic concepts found in printed manuals, but now they're featured in this highly interactive format that features audio and graphical elements in addition to text. Major topic areas include various pneumatic circuits, air flow control, resistance, measurement, and many more.

As a specific example, learners will study the components, operation, schematic symbol, and applications of a 3/2 pneumatic directional control valve (DCV). Learners then implement this theoretical knowledge by practicing the hands-on skill of using a 3/2 manually-operated DCV to operate a single-acting pneumatic cylinder. The 990-PN1 utilizes industry-standard pneumatic components to familiarize learners with equipment they'll encounter on job sites.



3/2 DCV in 990-PN1's Multimedia

## Pneumatic Maintenance

Because air is filled with 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, the importance of dew points and humidity in relation to pneumatic equipment, and the importance of eliminating air leaks, and then practice skills such as selecting and changing air filters, connecting and adjusting a lubricator, and calibrating gauges.



Air Filter on the 990-PN1

## Portable Workstation

The 990-PN1 panel is housed within a durable storage case that features wheels and a handle for transportation, a lock for safety, and a storage pouch within the front cover for storing loose components. This efficient, portable product offers flexibility when a trainer is used at multiple facilities without sacrificing the quality that Amatrol is known for.

