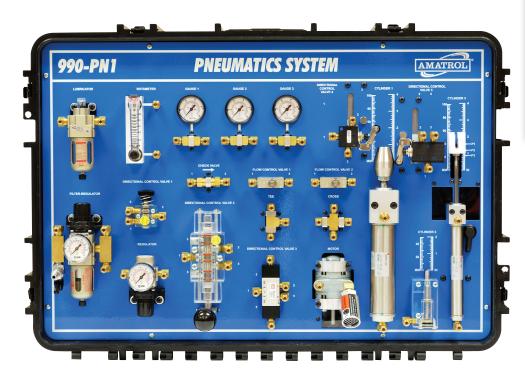
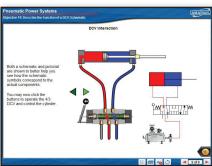
# **Portable Pneumatics Learning System**

990-PN1







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 porta-

ble pneumatics system maintains Amatrol's standard of topflight quality within this new, highly adapt-

able 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**

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 handson skill of using a 3/2 manually-operated DCV to operate a single-acting pneumatic cylinder. The 990-PN1 utilizes industrystandard 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



Air Filter on the 990-PN1

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.

## **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.



