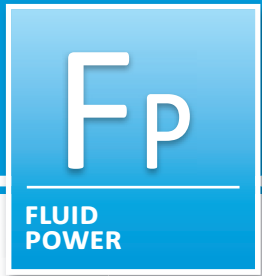


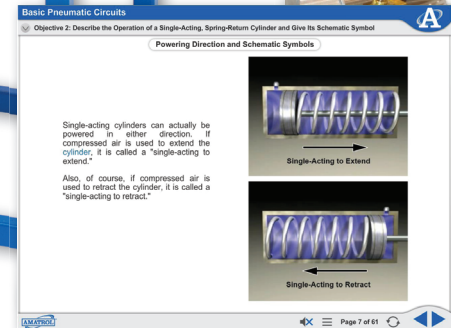
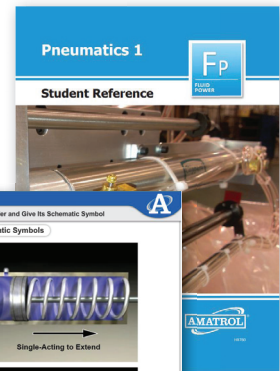
Pneumatics 1 Learning System

96-PNE1



*Pneumatics 1 Learning System
with Optional Mobile Technology Workstation*

Student Reference Guide



Interactive Multimedia Curriculum

Learning Topics:

- Pneumatic Power Systems
- Basic Pneumatic Circuits
- Principles of Pneumatic Pressure and Flow
- Pneumatic Speed Control Circuits
- Circuit Connections
- Pneumatic Schematics
- Pressure v Cylinder Force
- Pneumatic Leverage
- Air Flow and Resistance
- Air Flow Control and Measurement
- Flow Control Valves

Amatrol's high school pneumatics training system (96-PNE1) teaches learners how to operate and install basic pneumatic systems, analyze performance, and design basic pneumatic circuits. Pneumatic power is a foundation of industry used in applications across fields like agriculture, pharmaceuticals, automation, and many more!

The high school pneumatics training system includes a basic pneumatics panel, basic pneumatics instrumentation panel, and a pneumatic hose and fittings set. The system features industrial-quality components to prepare learners for what they will encounter on the job. Learners will use these components to study major topic areas, such as pneumatic power systems, basic pneumatic circuits, principles of pneumatic pressure and flow, and pneumatic speed control circuits. The system can also be expanded with Amatrol's Pneumatics 2 Learning System to teach intermediate pneumatic knowledge and skills.



Technical Data

Complete technical specifications available upon request.

Basic Pneumatics Panel

- Air Motor Assembly
- Spring Return Cylinder Assembly
- Cylinder Assembly, 1 1/8-in.
- Flow Control Assembly (2)
- Lever-Operated Assembly
- Cylinder Assembly, 1 1/2-in.
- Rail Assembly, 10-in.
- Rail Assembly, 11-in.

Basic Pneumatics Instrumentation Panel

- Pressure Gauge Assembly (3)
- Filter Regulator Assembly
- Rotometer Assembly
- Manometer Assembly

Pneumatic Hose and Fittings Package (85-PHF)

- Hose Assembly, 42-in.
- Hose Assembly, 36-in. (2)
- Hose Assembly, 24-in. (4)
- Hose Assembly, 16-in. (4)
- Hose Assembly, 12-in. (2)
- Cross Assembly
- Basic Pneumatics Coiled Hose Assembly Tee (2)

Multimedia Curriculum (NB780)

Instructor's Guide (CB780)

Installation Guide (DB780)

Student Reference Guide (HB780)

Additional Requirements:

With optional multimedia: Computer, see requirements: <http://www.amatrol.com/support/computer-requirements/>

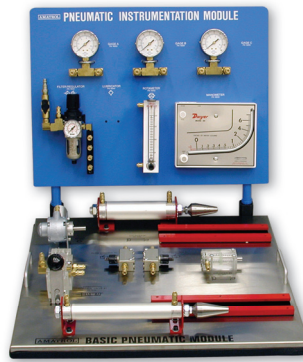
Recommended Options:

Mobile Technology Workstation (82-610)

Utilities Required:

Conditioned Shop Air, Dry and Filtered (2 CFM @ 100 PSI)

Study Pneumatic Components and Practice on Real-World Equipment



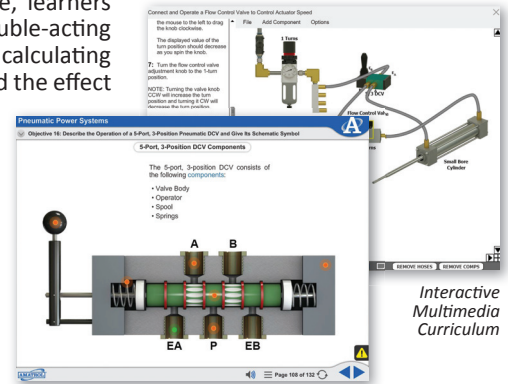
Amatrol's high school pneumatics training system features a variety of industry-standard pneumatic components, including an air motor, cylinders, pressure gauges, filter regulator, rotameter, manometer, and many more! Learners will use these components to practice skills, such as: using a cross to connect three circuit branches together; connecting and operating a unidirectional pneumatic motor using a 3-way, manually-operated directional control valve; converting between gauge and absolute pressure; connecting and reading a flowmeter; and connecting and operating a pressure port speed control circuit.



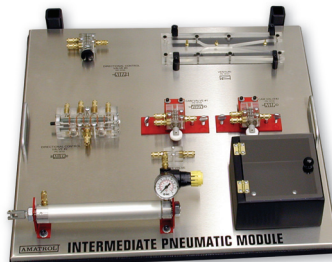
In-Depth Foundational Pneumatics Curriculum

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 high school pneumatics curriculum teaches learners about circuit connections, single-acting cylinder circuits, pneumatic leverage, pressure and volume, and speed control. For example, learners will study topics like: the operation of a double-acting pneumatic cylinder; the function of a muffler; calculating the force output of a cylinder in retraction; and the effect of actuator load changes on flow control valve operation.

The curriculum also features a virtual trainer option that allows learners to gain skills through realistic simulation before using the real equipment. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



Expand Your System To Teach Intermediate Pneumatics Concepts and Skills



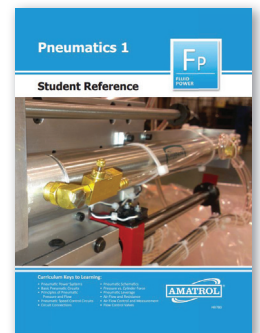
96-PNE2

and operating an externally air-piloted directional control valve, connecting and operating a vacuum generator, and designing a pneumatic seal-in circuit.

Users who want to move beyond basic pneumatics can expand their system by adding the optional Pneumatics 2 Learning System (96-PNE2). This system teaches learners intermediate pneumatic topics like pneumatic directional control valve applications, vacuum systems, and air logic. Industrial-quality components include a pushbutton valve assembly, Venturi block assembly, and a load cylinder assembly. Learners will be able to practice hands-on skills, such as connecting

Complimentary Student Reference Guide

A sample copy of the Pneumatics 1 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.



Student Reference Guide

