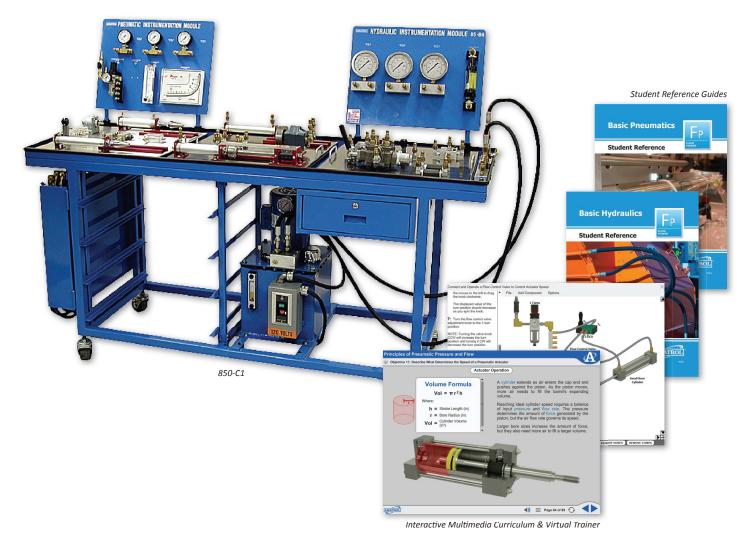
Basic Fluid Power Learning System – Single Surface Bench

850-C1





Learning Topics:

- Hydraulic Power Systems
- Basic Hydraulic Circuits
- Principles of Hydraulic Pressure and Flow
- Hydraulic Speed Control
- Pressure Control Circuits
- Pneumatic Power Systems
- Basic Pneumatic Circuits
- Principles of Pneumatic Pressure and Flow
- Pneumatic Speed Control Circuits
- Air Flow Control and Measurement

Amatrol's Basic Fluid Power Learning System – Single Surface Bench (850-C1) teaches learners the fundamentals of two bedrocks of industry: hydraulic and pneumatic power. Hydraulics and pneumatics are used in countless applications throughout industry in fields like automotive, pharmaceutical, packaging, and mining. This fluid power training system includes three panels on its work surface and can store up to four additional panels under the work surface for expanded hydraulic and pneumatic training.

The basic fluid power training system includes a controls technology bench with a hydraulic power supply and Amatrol's basic pneumatics and hydraulics systems. These systems feature industrial-quality components to prepare learners for what they will encounter on the job. Major topics covered by the system's multimedia curriculum include hydraulic and pneumatic power systems, basic hydraulic and pneumatic circuits, principles of pneumatic and

and pneumatic circuits, principles of pneumatic and hydraulic pressure and flow, and hydraulic and pneumatic speed control.



Technical Data

Complete technical specifications available upon request.

Controls Technology Bench Hydraulic Power Supply Basic Hydraulics Actuator Module

isic Hydraulics Actuator Modi CAM Operators (2) Hydraulic Motor Assembly Flow Control Assembly Flywheel with Key

Basic Hydraulics Valves Module

Relief/Sequence Valve Pressure Reducing Valve Assembly Needle Valve Assembly Check Valve Assembly Directional Control Valve Assembly

Basic Hydraulics Instrumentation Panel Flow Meter Assembly Gauge and Manifold Assembly

Gauge and Manifold Assembly

Basic Pneumatics Actuator/Valve Panel

Air Motor Assembly

Spring Return Cylinder Assembly Flow Control Assembly Level-Operated Assembly

Basic Pneumatics Instrumentation Panel

Pressure Gauge Assembly Filter Regulator Assembly Rotameter Assembly Manometer Assembly

Hydraulic Hose and Fittings Package Pneumatic Hose and Fittings Package Bench Manifold Kit Multimedia Curriculum (NB831/MB834) Instructor's Guide (CB831/CB834) Installation Guide (DB831/DB834) Student Reference Guide (HB831/HB834) Additional Requirements:

Hydraulic Oil (16391 or 16393) Hand Tool Package (41220) Computer (Visit www.amatrol.com/support/ computer-requirements for details.)

Utilities Required:

Electric (110-220 VAC/50-60 Hz/1 phase) Compressed Air Supply (2 CFM @ 100 PSIG/ 0.06 cmm @ 690 kPa)

Options:

Intermediate Hydraulics (85-IH) Advanced Hydraulics (85-AH) Electro-Hydraulics (85-EH) Intermediate Pneumatics (85-IP) Advanced Pneumatics (85-AP) Electro-Pneumatics (85-EP)

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

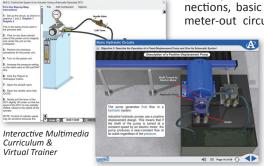
Amatrol's basic fluid power training system features a welded-steel workbench with a hydraulic manifold and power supply and includes the basic hydraulics and pneumatics modules. These systems feature a wide variety of real-world components, including pressure reducing valves, needle valves, check valves, directional control valves, an air motor, a flow control assembly, pressure gauges, and rotameter and manometer assemblies. These industry-standard components allow learners to practice hands-on skills, such as connecting and adjusting the pressure setting of a sequence circuit, designing a hydraulic circuit that uses a pressure reducing valve, and connecting a pneumatic circuit given a schematic.



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 850-C1 curriculum teaches learners about

basic hydraulic and pneumatic concepts, such as circuit connections, basic motor circuits, fluid friction, meter-in and meter-out circuits, pressure reducing valves, schematics,



pressure and volume, and flow control valves. 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 and Advanced Hydraulic and Pneumatic Concepts and Skills



Users who want to move beyond basic hydraulics and pneumatics can easily expand their system by adding optional learning systems, such as intermediate (85-IH) and advanced (85-AH) hydraulics, intermediate (85-IP) and advanced (85-AP) pneumatics, and electro-hydraulic (85-EH) and electro-pneumatic (85-EP) systems.





85-EH, 85-IP, & 85-IH

Student Reference Guide

Sample copies of the Basic Hydraulics and Basic Pneumatics Student Reference Guides are also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guides take the entire series' technical content contained in the learning objectives and combines them into perfectly-bound books. Student Reference Guides supplement this course by providing condensed, inexpensive reference tools that learners will find invaluable once they finish their training, making them the perfect course takeaways.



