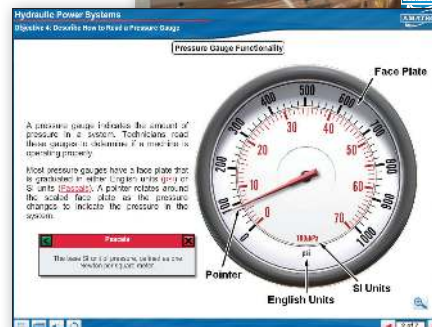
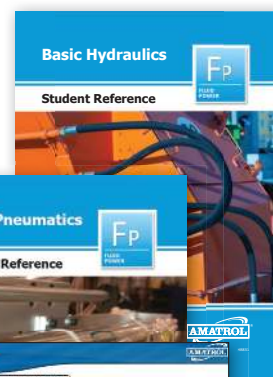


Basic Fluid Power Learning System

850-C1



850-C1



Interactive Multimedia and Student Reference Guides

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 (850-C1) covers the fundamentals of two bedrocks of industry, hydraulic and pneumatic power, and their basic circuits. Hydraulics and pneumatics are used in innumerable applications across industry in fields such as automotive, pharmaceutical, packaging, mining, and many more. The 850-C1 fits three panels at the same time on its work surface and stores an additional four panels under the work surface to accommodate a wide array of options for expanded hydraulic and pneumatic skill-building.

The 850-C1 includes a controls technology bench with a hydraulic power supply and Amatrol's Basic Pneumatics (85-BP) and Hydraulics (85-BH) Learning Systems. This system features industrial quality components for durability and to help learners better prepare for what they will encounter on the job. Major topics covered by the 850-C1 include hydraulic and pneumatic power systems, basic hydraulic 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 (850-CTB-A)

Hydraulic Power Supply (85-HPS)

Basic Hydraulic Actuator Module

- CAM Operator, 1-1/8-in. Bore
- CAM Operator, 1-1/2-in. Bore
- Hydraulic Motor Assembly
- Flow Control Assembly
- Flywheel with Key

Basic Hydraulic Valves Module

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

Basic Hydraulic Instrumentation Panel

- Flow Meter 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
- Rotometer Assembly
- Manometer Assembly

Hydraulic Hose and Fittings Package (85-HHF)

Pneumatic Hose and Fittings Package (85-PHF)

Bench Manifold Kit (16141)

Student Curriculum (BB831 / BB834)

Instructor's Guide (CB831 / CB834)

Installation Guide (DB831 / DB834)

Student Reference Guide (HB831 / HB834)

Additional Requirements:

- Hydraulic Oil (16391)
- Hand Tool Package (41220)

Utilities:

- Electricity (120 VAC/60 Hz/1 phase)
- Pneumatic Power Supply or Conditioned (Dry and Filtered) Shop Air

Build Pneumatic and Hydraulic Skills on One System

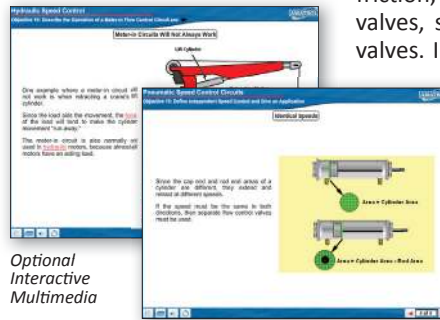
The 850-C1 features a welded-steel workbench with a hydraulic manifold and power supply and includes the 85-BH and 85-BP learning systems that feature an array of real-world components, including pressure reducing valves, needle valves, check valves, directional control valves, an air motor, a flow control assembly, pressure gauges, and rotometer and manometer assemblies. This learning system also includes hydraulic and pneumatic hose and fittings packages. These components will be used 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.



850-C1 with Optional 85-EF

Unmatched Foundational Knowledge with Optional Interactive Multimedia

The 850-C1's world-class curriculum provides comprehensive foundational knowledge for both pneumatics and hydraulics by exploring topics like circuit connections, basic motor circuits, fluid friction, meter-in and meter-out circuits, pressure reducing valves, schematics, pressure and volume, and flow control valves. In addition to the provided printed curriculum, Amatrol offers an optional interactive multimedia version. This version provides all of the knowledge from the printed curriculum with the addition of stunning 3D graphics, audio voiceovers, and interactive activities and quizzes all in a self-paced format suitable for classroom or individual study.



Optional Interactive Multimedia

Optional Hydraulic & Pneumatic Systems Available

Additional learning systems are available to extend the capabilities of the 850-C1 Learning System include intermediate (85-IH) and advanced (85-AH) level hydraulics and intermediate (85-IP) and advanced (85-AP) level pneumatics, the Electro-Hydraulic Learning System (85-EH), and the Electro-Pneumatics Learning System (85-EP).



85-IH



Student Reference Guide

Sample copies of the Basic Hydraulic and Basic Pneumatics Student Reference Guides are included with the learning system. Sourced from the multimedia curricula, these Student Reference Guides takes the entire series' technical content contained in the learning objectives and combines them into perfect-bound books.

