

# Basic Fluid Power Learning System – Double Sided A-Frame Bench with One Hydraulic Manifold

850-CD2

Fp

FLUID  
POWER



850-CD2 (shown with optional systems)



850-CD2 (back) (shown with optional systems)

Student Reference Guides

Basic Hydraulics

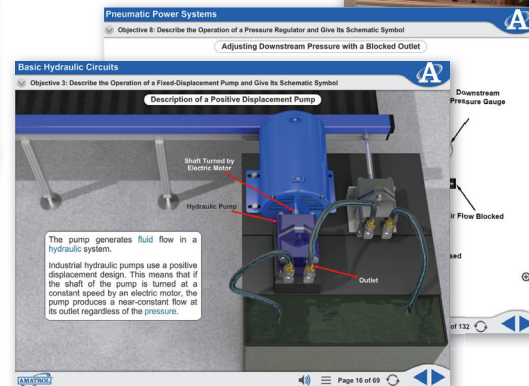
Fp  
FLUID  
POWER

Student Reference

Basic Pneumatics

Fp  
FLUID  
POWER

Student Reference



Interactive Multimedia Curriculum

## Learning Topics:

- Hydraulic & Pneumatic Power Systems
- Basic Hydraulic & Pneumatic Circuits
- Pumps
- Needle, Relief, Check, Flow Control, Sequence, & Pressure Reducing Valves
- Hydraulic & Pneumatic Schematics
- Principles of Hydraulic & Pneumatic Pressure & Flow
- Hydraulic & Pneumatic Speed Control
- Pressure Control Circuits

Amatrol's Basic Fluid Power Learning System – Double Sided A-Frame Bench with One Hydraulic Manifold (850-CD2) maximizes training space for teaching industrial pneumatic and hydraulic skills. In addition to the included Basic Hydraulics (85-BH) and Basic Pneumatics (85-BP) panels, the system includes a controls technology workbench, a hydraulic power unit, multimedia student curriculum, student reference guides, and much more! The system features standard industrial-grade components and provides learners with real-world experience they would normally only attain on the job.

The basic fluid power training system teaches learners the fundamental principles of hydraulics and pneumatics, such as pressure and flow, basic circuits, pumps, valves, and speed control. The system also allows customers to customize their learning experience by incorporating additional systems, such as intermediate hydraulics or pneumatics, advanced hydraulics or pneumatics, and electro-fluid power.

AMATROL®

## Technical Data

Complete technical specifications available upon request.

A-Frame Double Sided Controls Technology Bench  
Hydraulic Power Supply  
Basic Hydraulic Actuator Panel  
Basic Hydraulic Valves Panel  
Basic Hydraulic Instrument Panel  
Hydraulic Hose and Fittings Package  
Basic Pneumatic Actuator/Valve Panel  
Basic Pneumatic Instrument Panel  
Pneumatic Hose and Fittings Package  
Bench Manifold Kit  
Multimedia Curriculum (NB831/MB834)  
Instructor's Guides (CB831/CB834)  
Installation Guides (DB831/DB834)  
Student Reference Guides (HB831/HB834)

### Additional Requirements:

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

### Utilities Required:

Electric (110-220 VAC/50-60 Hz/1 Phase)  
Pneumatic Power Supply or Conditioned (Dry and Filtered) Shop Air (2 CFM @ 100 PSIG/0.06cm<sup>3</sup> @ 690 kPa)

### Options:

Up to three additional single panel systems can be added from the following:

- Basic Hydraulics (85-BH)
- Intermediate Hydraulics (85-IH)
- Advanced Hydraulics (85-AH)
- Electro-Hydraulics (85-EH)
- Basic Pneumatics (85-BP)
- Intermediate Pneumatics (85-IP)
- Advanced Pneumatics (85-AP)
- Electro-Pneumatics (85-EP)
- Electro-Fluid Power (85-EF)

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

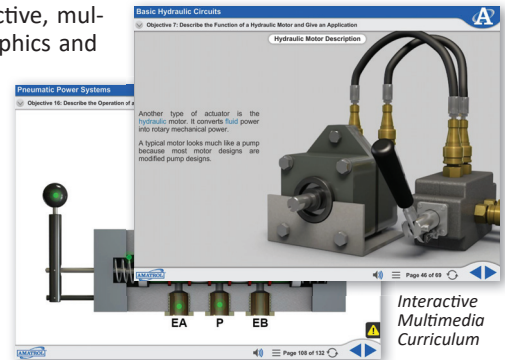


Double-Sided Design Maximizes Training Area

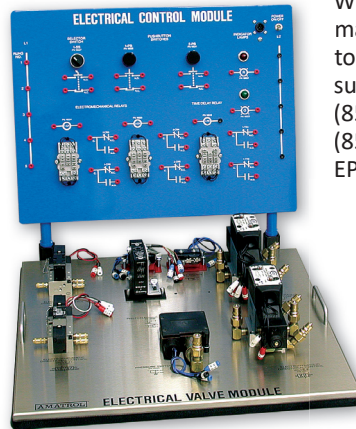
The 850-CD2 combines both basic hydraulic and pneumatic training in one powerful training unit that maximizes training space by allowing learners to use panels on each side of the unit simultaneously. Standard and optional training system panels can be configured in a wide variety of ways to customize training for learners' specific needs. The system features a hydraulic power unit and hydraulic hose rack to allow learners to practice hands-on skills, such as connecting basic hydraulic circuits.

## 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-CD2 curriculum teaches learners about the foundational concepts of both hydraulics and pneumatics. For example, learners will study basic hydraulic and pneumatic circuits, as well as hydraulic and pneumatic speed control. The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.



## Expand Your System for Additional Learning Opportunities



Optional 85-EF & 85-IP Systems

When you're ready to go beyond basic hydraulics and pneumatics, you can add optional learning systems to the 850-CD2 to extend its capabilities to explore more advanced concepts, such as Intermediate Hydraulics (85-IH), Advanced Hydraulics (85-AH), Electro-Hydraulics (85-EH), Intermediate Pneumatics (85-IP), Advanced Pneumatics (85-AP), Electro-Pneumatics (85-EP), and Electro-Fluid Power (85-EF). These optional systems integrate seamlessly with the 850-CD2 and teach intermediate to advanced hydraulic and pneumatic concepts, including electrical relay control of hydraulic and pneumatic systems.

## Student Reference Guides

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 combine 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.

