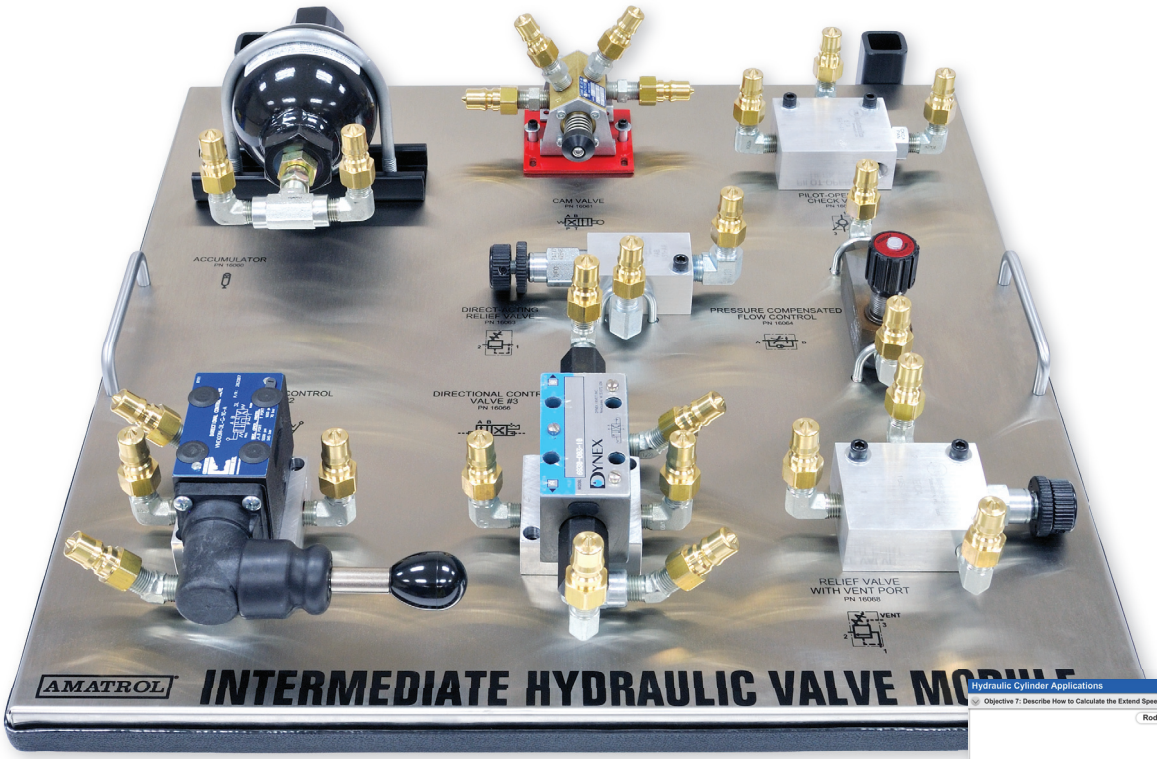
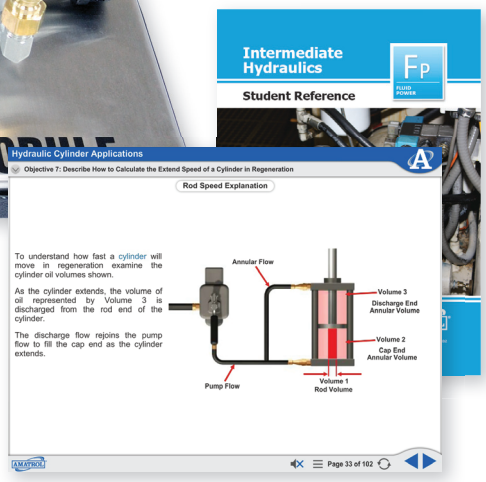
Intermediate Hydraulics Learning System

85-IH

FP
FLUID POWER



85-IH



Interactive Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Hydraulic Directional Control Valve Applications
- Hydraulic Cylinder Applications
- Regeneration Circuits
- Synchronization Circuits
- Hydraulic Relief Valve Operation
- Remote Pressure Control
- Hydraulic Check Valve Applications
- Pressure Port Check Valve Circuit
- Accumulator Applications
- Accumulator Circuits

Amatrol's Intermediate Hydraulics training system (85-IH) introduces advanced hydraulic components (pilot-operated check valves, two-position directional control valves, telescoping cylinders, etc.), explains how each works, and then shows how they are used in real-world applications like elevators, punch presses, backhoes, and many more. Learners will study concepts like pressure intensification and cylinder regeneration while also being able to operate, install, design, and troubleshoot hydraulic components.

This hydraulic training system includes directional control valves, relief valves, a flow control valve, a check valve, and an accumulator. Amatrol learning systems use industrial-grade components displayed on hand-welded, painted and silk-screened panels, and workbenches made from top-flight materials. The skills and principles offered in this hydraulics training system builds on the fundamentals taught by the Basic Hydraulics learning system (85-BH), but also leads to additional, more advanced learning systems such as Advanced Hydraulics (85-AH) and Electro-Hydraulics (85-EH).

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Technical Data

Complete technical specifications available upon request.

Intermediate Valve Module
- Accumulator
- Cam Valve
- Pilot-Operated Check Valve
- Relief Valve
- Pressure-Compensated Flow Control
- Directional Control Valves
- Relief Valve with Vent Port

Interactive Multimedia Curriculum (MB832)
Instructor's Guide (CB832)
Installation Guide (DB832)
Student Reference Guide (HB832)
Additional Requirements:
- One of the following: 850-H1, 850-HD1, 850-C1, 850-CD1, or 85-BH
- Accumulator Charging Assembly (79-552)

Utilities:
- Supplied by Required System

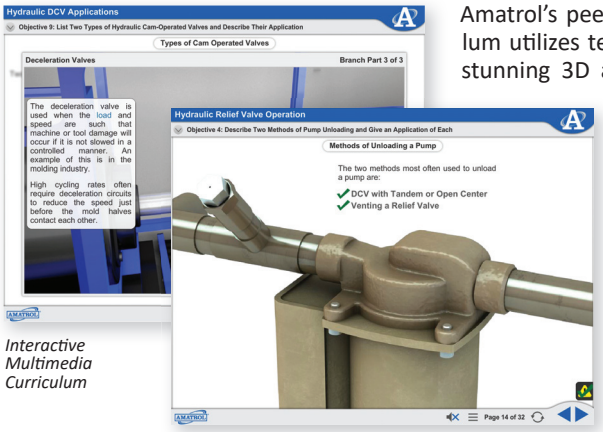
Real World Applications

The 85-IH teaches how different valves and cylinders introduced by this learning system are implemented in real-world applications, such as on dump trucks, hydraulic presses, or conveyor drive systems used on soft drink bottling lines. As an example, learners will study two types of cam-operated valves, their construction, and how their designs are optimal for switching from a high flow to a low flow in order to operate a cylinder at a slow rate for the rest of the stroke. Learners will see how each of these valves are implemented in industry-relevant applications like an injection molding machine before practicing skills on a cam valve included with the 85-IH trainer.

850-H1 with 85-BH and 85-IH

World-Class Multimedia Curriculum for Hydraulics Training

From the physical practice of assembling accumulator circuits to the detailed equation for calculating the maximum pressure in a pilot-operated check valve, Amatrol's thorough and precise interactive hydraulics curriculum lends itself to both self-paced and traditional teaching methods. Within this course, learners will study topics like the function of a hydraulic cam-operated valve, the operation of a pressure-compensated flow control valve, methods of pump unloading, and how actuator relaxation occurs in a multi-actuator circuit.

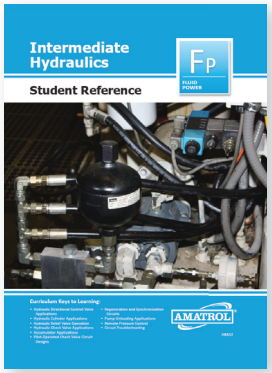


Interactive Multimedia Curriculum

Amatrol's peerless interactive multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

Student Reference Guide

A sample copy of this course's Student Reference Guide is included with the learning system. Sourced from the curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.



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