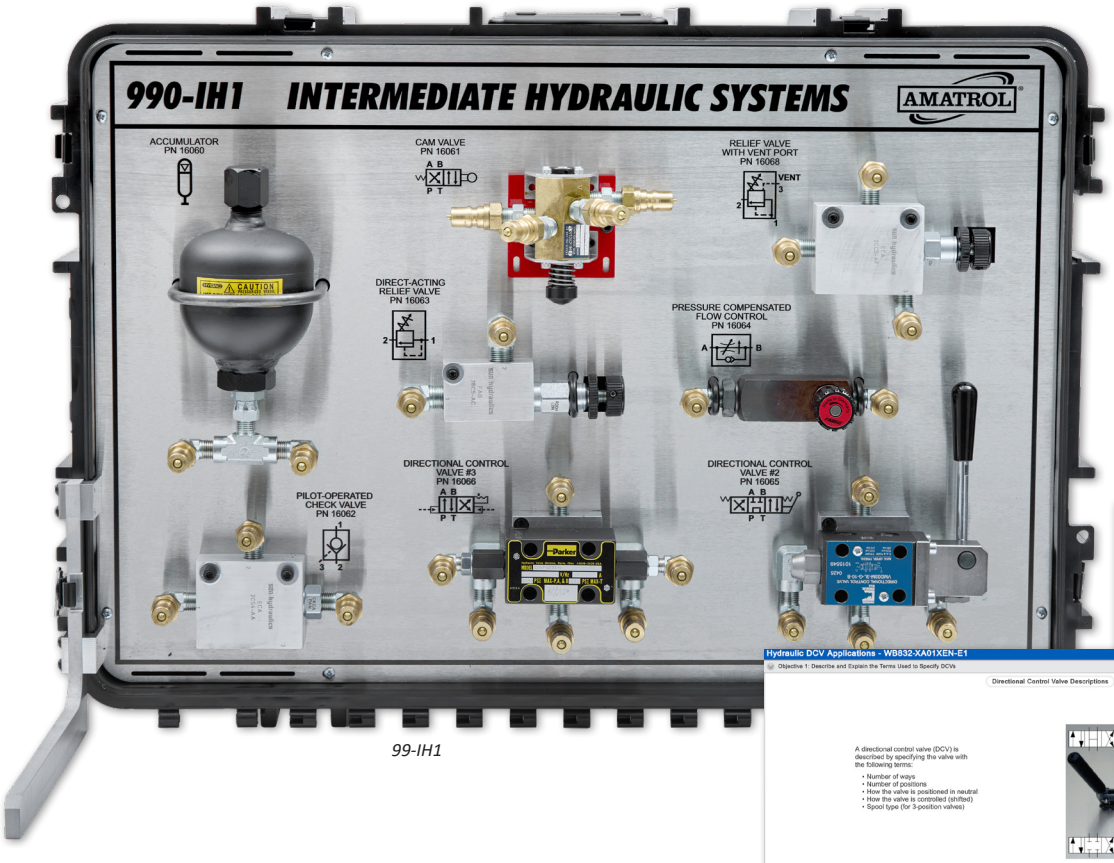
Portable Intermediate Hydraulics Learning System

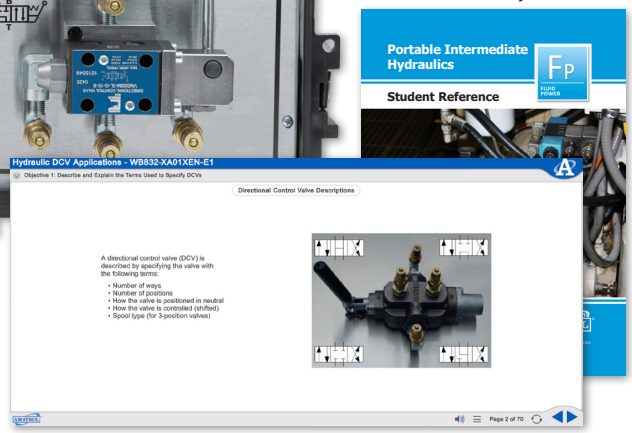
99-IH1

FLUID POWER



99-IH1

Student Reference Guide



Interactive Multimedia Curriculum

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 Portable Intermediate Hydraulics Learning System (99-IH1) introduces advanced hydraulic components, including pilot-operated check valves, two-position directional control valves, and telescoping cylinders. The training system explains how each works and then shows how they relate to real-world applications in elevators, punch presses, backhoes, and more. Users will learn concepts like pressure intensification and cylinder regeneration while also mastering hands-on skills related to operating, installing, designing, and troubleshooting hydraulic components.

The Portable Intermediate Hydraulics trainer includes directional control valves, relief valves, a flow control valve, a check valve, and an accumulator. It builds upon the fundamentals taught by the Portable Basic Hydraulics Learning System (990-BH1) to help learners gain experience with components they'll see on the job.

AMATROL®

Technical Data

Complete technical specifications available upon request.

Portable Console with Two Directional Control Valves
Relief Valve with Vent Port
Direct-Acting Relief Valve
Cam Valve
Pilot-Operated Check Valve
Accumulator
Multimedia Curriculum (M19143)
Instructor's Guide (C19143)
Installation Guide (D19143)
Student Reference Guide (H19143)
Additional Requirements:
Portable Basic Hydraulics Learning System (990-BH1)
Accumulator Charging Assembly (79-552)
Utilities Required:
Electric (100-240 VAC/50-60 Hz/1 phase)

Study Advanced Hydraulics Components and Practice on Real-World Equipment

The Portable Intermediate Hydraulics trainer teaches how different valves and cylinders 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 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 hands-on skills with real valves.

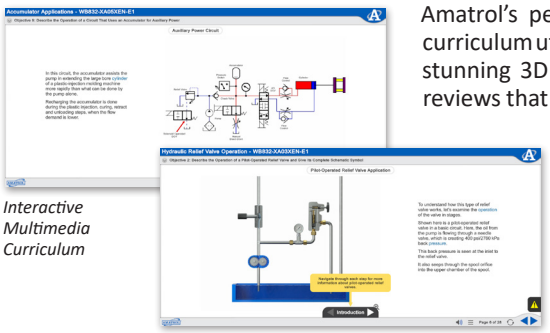




Gain Hands-On Skills with Real Industrial Components

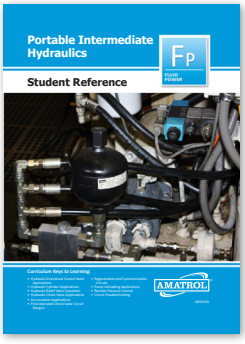
Engaging, Highly Interactive Multimedia Curriculum

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 Portable 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 eLearning 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 the Portable Intermediate Hydraulics 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 a convenient student resource. 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.

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2400 Centennial Blvd. Jeffersonville, IN 47130 USA 800.264.8285 812.288.8285 www.amatrol.com
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