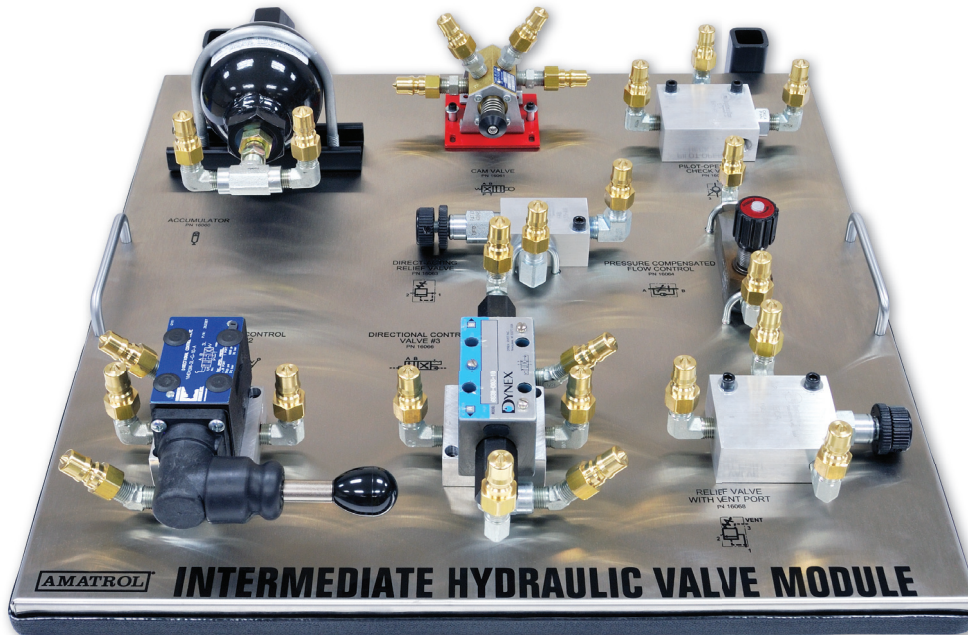
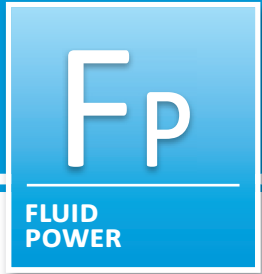


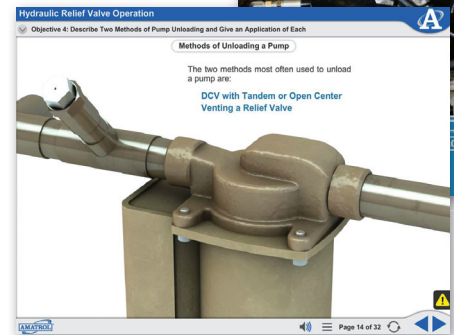
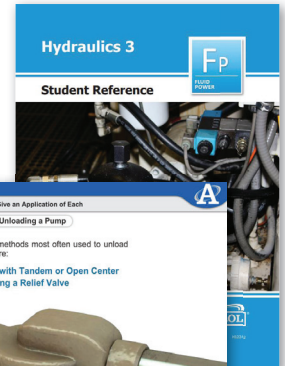
Hydraulics 3 Learning System

96-HYD3



The Hydraulics 3 Learning System uses the Intermediate Hydraulic Valve Module (85-IH).

Student Reference Guide



Interactive Multimedia Curriculum

Learning Topics:

- Hydraulic Relief Valve Operation
- Pump Unloading Applications
- Remote Pressure Control
- Hydraulic Check Valve Applications
- Pressure Port Check Valve Circuits
- Pilot-Operated Check Valve Circuit Design
- Accumulator Applications
- Accumulator Operation
- Accumulator Circuits
- Accumulator Sizing

Amatrol's Hydraulics 3 Learning System (96-HYD3) builds upon the knowledge and skills taught by the Hydraulics 1 and 2 Learning Systems. Hydraulics 3 focuses on more advanced skills and topics, such as hydraulic relief valve operation, hydraulic check valve circuit design, and accumulator applications.

The 96-HYD3 curriculum uses the same Intermediate Hydraulic Valve Module as the 96-HYD2, which features real-world, heavy-duty hydraulic components students will encounter on the job. These components include control valves, relief valves, flow control valves, check valves, and accumulators. The in-depth multimedia curriculum teaches learners both relevant knowledge and hands-on skills related to these components, such as pump unloading applications, pressure port check valve circuits, and accumulator circuits and sizing.



Technical Data

Complete technical specifications available upon request.

Multimedia Curriculum (M12242)
Instructor's Guide (C12242)
Installation Guide (D12242)
Student Reference Guide (H12242)

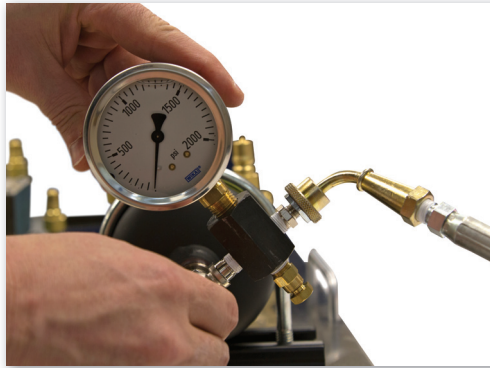
Additional Requirements:

Hydraulics 1 Learning System (96-HYD1)
Hydraulics 2 Learning System (96-HYD2)
Computer (Visit www.amatrol.com/support for computer requirements for details.)

Utilities Required:

Compressed Air Supply (2 CFM @ 100 PSIG/
0.142 cmm @ 690 kPa)

Study Hydraulic Components and Practice on Real-World Equipment



Hands-On Practice with Real-World Equipment

The 96-HYD3 uses the same Intermediate Hydraulic Valve Module as the 96-HYD2, which features a variety of real-world, industrial-quality hydraulics components that learners will encounter on the job. These components include an accumulator, control valves, relief valves, flow control valves, and check valves. Users will practice relevant hands-on skills like connecting and operating pilot-operated relief valves and P-port check valve circuits.

Learn Advanced Hydraulic Skills

Building upon the Hydraulics 1 and 2 Learning Systems, the 96-HYD3 teaches learners a variety of advanced hydraulic concepts and skills. For example, learners will study hydraulic relief valves, check valves, and accumulators. Relevant skills taught include connecting a pilot-operated relief valve to unload a pump by venting, calculating the pilot pressure required to open a POC valve, and designing an accumulator circuit to compensate for leakage.



96-HYD1 with 96-HYD2

Engaging, Highly-Interactive Multimedia

Hydraulic Relief Valve Operation
Objective 2: Describe the Operation of a Pilot-Operated Relief Valve and Give its Complete Schematic Symbol

Accumulator Applications
Objective 4: Describe How to Pre-Charge a Gas-Loaded Accumulator

Pre-Charging a Gas-Loaded Accumulator

For safety reasons, gas-loaded accumulators are not shipped under pressure. Instead, they are pre-charged on site.

A valve located under a protective cap on top of the accumulator injects nitrogen or argon gas to pre-charge an accumulator.

A gauge and charging assembly connects the gas supply bottle to the accumulator valve and controls the pre-charging.

Interactive
Multimedia
Curriculum

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 combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills.

Student Reference Guide

A sample copy of the Hydraulics 3 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 one perfectly-bound book. 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.

