Electro-Hydraulic Testing Station

87-MS9



Student Reference Guide



Learning Topics:

- Station Operation
- Station Adjustment
- Electro-Hydraulic Test System
- Programmable Electronic Pressure Transducer
- Module Sequencing
- Pick and Place Manipulator
- Hydraulic Clamp Module
- Station Sequencing
- Manual/Auto/Reset Functions

Amatrol's Mechatronics Electro-Hydraulic Testing Station (87-MS9) allows learners to gain valuable product testing skills used in automated processes by studying topics like station operation and adjustment, module sequencing, and station sequencing. This learning system will allow learners to practice and study how products are tested on an automated line, how these skills are integrated within a larger automated process, and an example of how hydraulics are utilized on an automated line. The 87-MS9 requires either an Allen-Bradley CompactLogix or Siemens S7300 Mechatronics Learning System (870-MPC) and integrates seamlessly with Amatrol's full Mechatronics System or can be used with just the Torque Assembly (87-MS6) and Inventory Storage (87-MS7) Stations.

This learning system features a hydraulic press module, part clamp module, hydraulic power unit, and more! Among other demonstrations, the 87-MS9's clamp module will pick up a test valve and the hydraulic press module will hold a test manifold against the valve body. Learners will use these and other components to practice operating, programming, and adjusting real-world mechatronics equipment. Amatrol uses components that learners will find on-the-job in order to give the best opportunity to build confidence and industrial competencies.

Technical Data

Complete technical specifications available upon request

Mobile Workstation with slotted work surface **Operator Station Hydraulic Part Clamp Module Hydraulic Power Unit Pressure Transducer System Traverse Module Pneumatic Distribution Module Electrical Distribution Module Electro-pneumatic Valve Manifold** Digital I/O Interface Student Curriculum - Interactive PC-Based Multimedia (Processor Specific) Instructor's Guide (Processor Specific) Installation Guide (Processor Specific) Student Reference Guide (Processor Specific) **Additional Requirements:** Mechatronics Learning System: Allen-Bradley CompactLogix (870-AB); or Siemens S7300 (870-PS7) Computer, see requirements: http://www.amatrol.

com/support/computer-requirements/ **Utilities Required:** 100-240V/50-60Hz/1ph electrical Compressed air

Hydraulic oil (16393 or 16391)

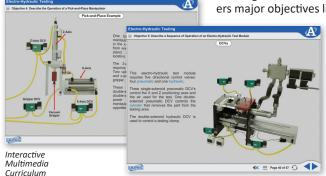
Practice Programming, Operating, and Adjusting Real Automation Equipment

The 87-MS9 includes a hydraulic press module with horizontal hydraulic cylinder and electro-hydraulic valve; hydraulic power unit; pressure transducer system; part clamp module; an operator station with lockout/tagout; and more. Learners will use these components to practice vital mechatronics skills, such as: adjusting, programming, and operating a programmable electronic pressure transducer; designing PLC programs that sequence a pick-and-place manipulator and hydraulic clamp module; and operating an electro-hydraulic test system.

Study Station Sequencing Concepts and Knowledge, Then Apply Hands-On Skills

This learning system also includes Amatrol's world-class curriculum which combines strong theoretical knowledge and concepts with hands-on skills for the best industrial competency-

> building on the market. The 87-MS9's curriculum covers major objectives like the sequence of operation of



an electro-hydraulic test station and the operation of an electro-hydraulic test station with manual/auto/reset functions. The curriculum is presented in a highly interactive multimedia format. This multimedia features stunning 3D graphics, videos, voiceovers of all text, and interactive quizzes and activities.

Amatrol's World-Class Mechatronics Training with Siemens and Allen-Bradley PLCs

The 87-MS9 is just one of the world-class mechatronics training options offered by Amatrol. Other mechatronics stations include Pick and Place Feeding (87-MS1), Gauging (87-MS2), Orientation Processing (87-MS3), Sorting/Buffering (87-MS4), Servo Robotic Assembly (87-MS5-P2),

Torque Assembly (87-MS6), Inventory Storage (87-MS7), and CNC Mill - Denford CNC Micromill (87-MS8M60).

Additionally, Amatrol offers Mechatronics PLC training with both Siemens S7300 and Allen-Bradley CompactLogix PLCs. While an Amatrol Mechatronics line can feature just Allen-Bradley or Siemens PLCs, this automated line also allows for a mix so that learners can train on industry's two most widely-utilized PLCs simultaneously.





Student Reference Guide

A sample copy of the Electro-Hydraulic Testing Station Student Reference Guide is also included with the system for your evaluation. Sourced from the system's multimedia 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.

