Mechatronics Sorting-Buffering Station Learning System

87-MS4

AUTOMATION

87-MS4

Mechatronics (AB CompactLogix L16/Studio 5000)
Student Reference
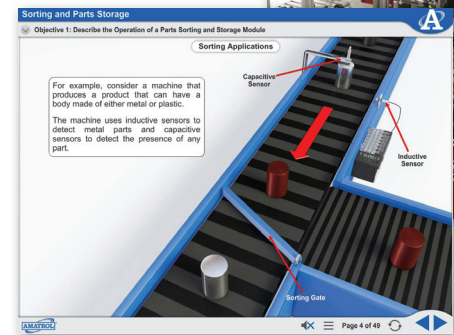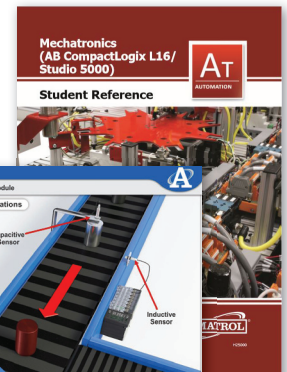
Interactive Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Photoelectric Sensor Adjustment
- Flat Belt Conveyor Adjustment
- Manual Operation
- Machine Operator Functions
- Sorting Module Sequencing
- Parts Queuing Module Sequencing
- PLC Program Design for Station Sequencing

Amatrol's Sorting-Buffering Station (87-MS4) is station 4 of the 870 Mechatronics Learning System and allows learners to gain valuable product testing skills used in automated processes by studying topics like photoelectric sensor adjustment, manual operation, sorting module sequencing, and more. 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 examples of how sorting-buffering is utilized on an automated line. The 97-MS4 requires either an Allen-Bradley CompactLogix or Siemens S7300 Mechatronics Learning System (870-MPC).

This mechatronics learning system features photoelectric sensors, flat belt conveyors, queuing and sorting, and more! 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 provide the best opportunity to build confidence and industrial competencies.

AMATROL®

Sorting-Buffering Training for Real-World Applications

The 87-MS4 is a mobile workstation with slotted work surface that contains an operator station, belt conveyor module, part sorting module, buffer module, proximity sensing module, parts set, a pneumatic distribution module as well as an electrical distribution module, an electro-pneumatic valve manifold, and a digital I/O interface module. Learners will use these components to practice vital mechatronics skills, such as: adjusting ball screw drives and synchronous belts; designing PLC programs for sequencing; and more.

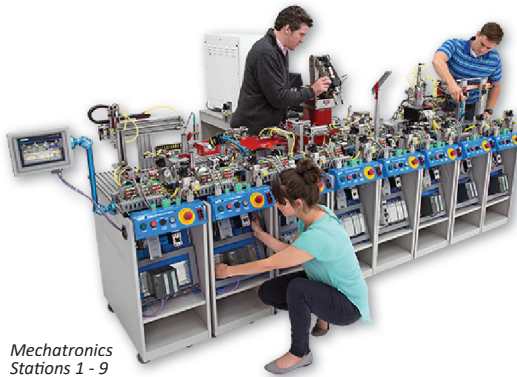## Stellar Curriculum Provides Crucial Sorting-Buffering Skills

The selected PLC that operates this station includes Amatrol's world-class mechatronics curriculum, which combines strong theoretical knowledge and concepts with hands-on skills for the best industrial competency-building on the market. This thorough, exceptionally detailed curriculum is built to begin with the basics and steadily advance to more complex concepts and skills. The Sorting-Buffering station teachers interfacing, problem solving, programming, sequencing and operation for sorting, queuing, flat belt conveyors, photo-electric sensors and inductive sensors. This station performs the role of sorting parts by material type in the process of assembling a working industrial control valve. This station starts the process of quality inspections in the process of assembling a working industrial directional control valve.
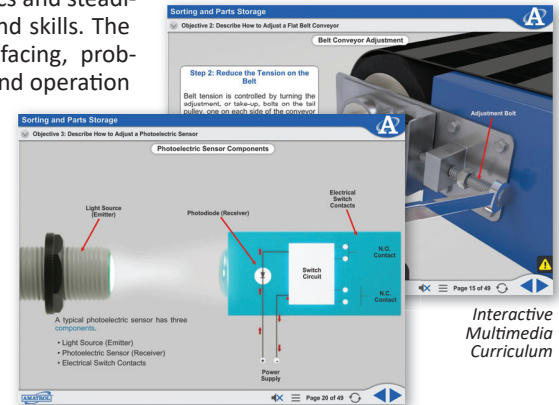
Interactive Multimedia Curriculum

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

The 87-MS4 is just one of the world-class mechatronics training options offered by Amatrol. Other mechatronics stations include Pick and Place (87-MS1), Gauging (87-MS2), Orientation Processing (87-MS3), Servo Robotic Assembly (87-MS5-P2), Torque Assembly (87-MS6), Inventory Storage (87-MS7), and CNC Mill-Denford CNC Micromill (87-MS8M60), and Mechatronics Hydraulic Press Learning System (87-MS9).

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.

Mechatronics Stations 1 - 9

Student Reference Guide

A sample copy of the Mechatronics 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.