Mechatronics Torque Assembly Station

87-MS6

87-MS6, compatible with either Siemens or Allen Bradley processors

Processor Specific Multimedia Curriculum and Student Reference Guide

Learning Topics:

- Variable Speed Motors
- Clutches
- Electric Traverse Slide
- Inductive Sensor
- Magnetic Reed Switches
- Variable Speed PWM (Pulse Width Modulator)
- Pneumatic Gripper
- DC Motor Torque
- Automated Torque System

Amatrol's Torque Assembly Station (87-MS6) is the sixth station of the 870 Mechatronics Learning System and allows learners to gain valuable product testing skills used in automated processes by practicing the operation, adjustment, and programming of a torque assembly system. 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 examples of how automated torque assembly is utilized in real-world environments. The 87-MS6 requires either an Allen-Bradley CompactLogix or Siemens S7300 Mechatronics Learning System (870-MPC) and the Torque Assembly (87-MS6) and Inventory Storage (87-MS7) Stations.

This mechatronics learning system features real-world components like variable speed motors, electric traverse slide, magnetic reed switches pneumatic gripper, and more! Learners will use these and other components to study station operation, actuator adjustment, module sequencing, and station sequencing. 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
Operator Station
- Screw Torque Module
- Part Clamp Module
- Electric Traverse Module
- Pneumatic Distribution Module
- Electrical Distribution Module
- Electro-pneumatic Valve Manifold
- Digital I/O Interface Module

Eject Bin with Bracket
Acrylic Valve Body, 1 ¼-in. x 1 ¼-in. x 15/16-in.
Lockout/Tagout
- Safety Lock Hasp
- Lockout Safety Tag
- 2-Key Padlocks
- Cable, DB9 Male-DB9 Male, 3-in.
- Power Cord Jumper

Multimedia Student Curriculum (M25084)
Teacher's Assessment Guide (C25084)
Install Guide (D25084)
Student Reference Guide (H25084)
Additional Requirements:
- Mechatronics Learning System (870-AB):
  - Allen-Bradley CompactLogix or (870-PS7)
  - Siemens S7300
- Computer, see requirements: http://www.amatrol.com/support/computer-requirements/

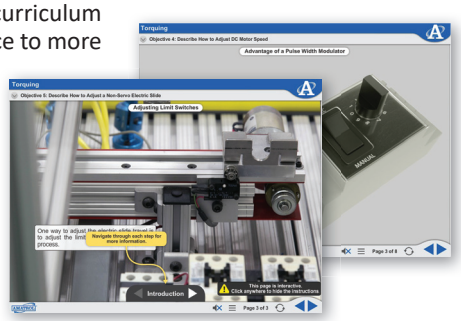
Utilities:
- Electricity (120 VAC/60 Hz/1 phase)
- Compressed Air

Use Real-World Training to Adjust DC Motor Speed

The 87-MS6 is a mobile workstation with slotted work surface that contains an operator station, screw torque module, part clamp module, electric traverse module, 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 motor starter overloads and DC motor speed; sequencing non-servo electric slides and torque clamp modules; and operating an automated torque system.

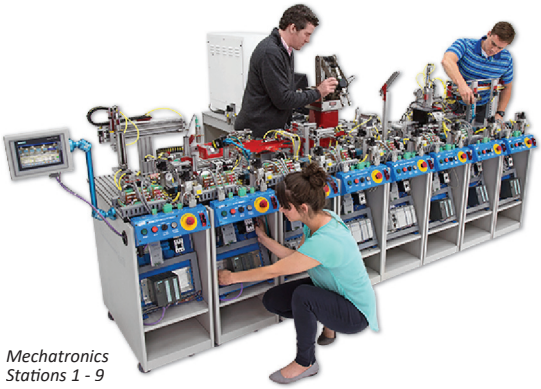
World-Class Torque Assembly Curriculum and Hands-On Skills

Amatrol's world-class curriculum, which comes with the selected PLC, 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 skill. The Torque Assembly station teaches interfacing, problem solving, programming, sequencing and much more. This station starts the process of assembling a working industrial directional control valve. Interactive multimedia is included for select Allen Bradley and Siemens processors.



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

The 87-MS6 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), Inventory Storage (87-MS7), and CNC Mill – Denford CNC Micromill (87-MS8M60), and Mechatronics Hydraulic Press Learning System (87-MS9).

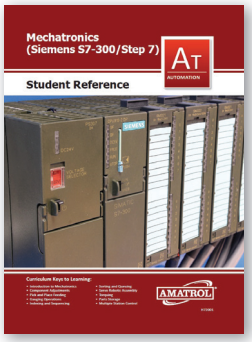


Mechatronics Stations 1 - 9

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 Mechatronics 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.



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