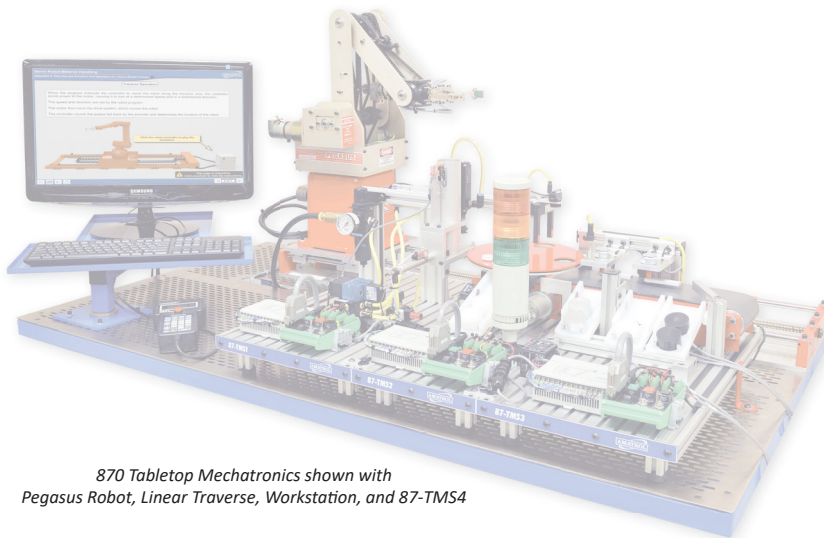
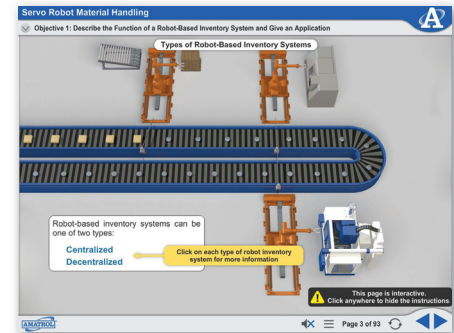


# Tabletop Mechatronics Servo Robot Learning System

87-TMS4



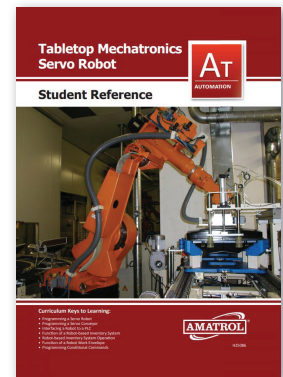
870 Tabletop Mechatronics shown with Pegasus Robot, Linear Traverse, Workstation, and 87-TMS4



Interactive Multimedia Curriculum and Student Reference Guide



87-TMS4



## Learning Topics:

- Programming a Servo Robot
- Programming a Servo Conveyor
- Interfacing a Robot to a PLC
- Function of a Robot-Based Inventory System
- Robot-Based Inventory System Operation
- Function of a Robot Work Envelope
- Programming Conditional Commands

Amatrol's Servo Robot Station for Table Top Mechatronics (87-TMS4) provides robot integration for Table Top Mechatronics with the Pegasus servo robot mounted on a traverse. Fully supported by Amatrol's curriculum, learners will practice robot programming and robot interfacing to Amatrol's portable mechatronics system to create applications such as a robot-based inventory station. The ability to expand a tabletop mechatronics system to include a servo robot is unmatched in the industry.

To update the Table Top Mechatronics System for operation with the Pegasus robot, this robot integration package includes three conveyor chute assemblies and a feeder assembly all equipped with sensors. These sensors are wired to the mechatronics system's PLC to indicate when parts are present. Additionally, this system contains replacement foot supports, used to adjust system height, and other items required to interface the servo robot and servo traverse to 870 Tabletop Mechatronics System.



## Technical Data

Complete technical specifications available upon request.

### Feeder Assembly with Limit Switch

(3) Parts Storage Chutes

(3) Foot Spacers

(2) Mounting Feet and Hardware

Student Curriculum – Interactive PC-Based  
Multimedia (M25086)

Instructor's Guide (C25086)

Instructor's Resource Print CD (K25086)

Installation Guide (D25086)

Student Reference Guide (H25086)

### Additional Requirements:

Adds to 870-PT or 87-PE series Tabletop  
Mechatronics Learning System

880-RA2-1-B Pegasus Robot

88-LT2-A Linear Traverse

88-200-3 Flexible Workstation

Computer, see requirements: [http://www.](http://www.amatrol.com/support/computer-requirements/)

[amatrol.com/support/computer-requirements/](http://www.amatrol.com/support/computer-requirements/)

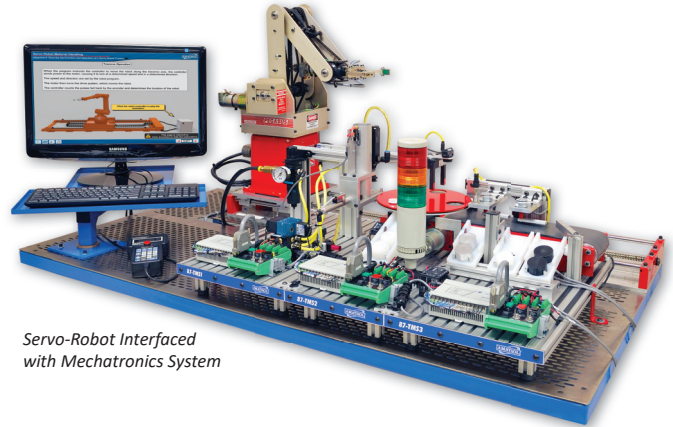
### Utilities Required:

100-240V/50-60Hz/1ph electrical

Compressed air

## Servo Robot Training on a Tabletop Mechatronics System!

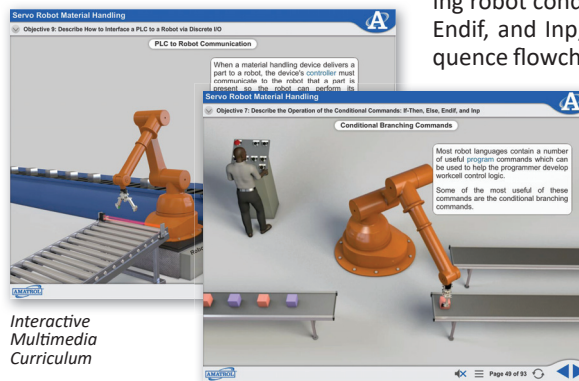
Amatrol's Tabletop Mechatronics Servo Robot Learning System proves that you can have all the features of a larger mechatronics system with the space-saving footprint of a tabletop system. Wired into the mechatronic system's PLC, the 40-inch long, servo-controlled linear traverse provides the robot with full access to the automated line. As parts are sorted by the mechatronics system and transferred to the appropriate conveyor chute, sensors read their presence and provide inputs to the system's PLC. Based on these inputs and the learner's programming, the PLC program will direct the robot to perform the desired request, such as returning specific parts to the parts feeder to keep the process running while ignoring rejected parts.



Servo-Robot Interfaced  
with Mechatronics System

## Real-World Robot Interfacing and Programming Taught Using Interactive Multimedia

Amatrol's interactive multimedia teaches learners mechatronics robot applications commonly used in real-world mechatronics systems, such as robot work envelope. In addition to teaching robot conditional commands such as If-Then, Else, Endif, and Inp, learners are taught how to create sequence flowcharts to help them visually organize their



Interactive  
Multimedia  
Curriculum

thoughts allowing them to select the best programming instructions for the task. Presented using animations, text, audio, and interactions that engage the learner and keep them focused on their work, this learning system's curriculum seamlessly integrates with the Tabletop Mechatronics curriculum to create an unmatched learning experience.

## Student Reference Guide

A sample copy of the Tabletop Mechatronics Servo Robot Learning System's 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.

