# **Mechatronics Vision Inspection Learning System - Siemens S7-1500**

87-VS1S715





### **Learning Topics:**

- Machines Vision Basics
- Machine Vision Software
- Vision Applications
- Camera Optics
- Light Quality
- Adjusting System Settings
- Application Design
- System Operation
- Application Set-Up
- System Configuration

Amatrol's Mechatronics Vision Inspection Learning System - Siemens S71500 (87-VS1S715) uses a camera to examine parts traveling through the 870 Mechatronics system and signals a PLC to reject or accept the parts based on programmed characteristics. Vision inspection systems are vital learning tools for quality control professionals, automated line technicians, and maintenance technicians working in an automated environment. These systems are used in industries such as plastics when looking for short shots or color deviations, assembly for part orientation, and machining when checking parts for correct size, chips, or fractures.

The 87-VS1S715 includes a vision camera with integrated lighting, PC Vision programming software, a flexible mounting fixture, training work surface, discrete I/O cabling to PLC, Power Over EtherNet power supply module, sample parts set, interactive multimedia curriculum, and a student reference guide. The Vision Inspection system includes interactive multimedia curriculum covers that machine vision basics and software, camera optics, light quality, application design, and system operation.



#### **Technical Data**

Complete technical specifications available upon request.

Vision Camera with Integrated IO, Lighting, and Ethernet Communications
Power Supply
PC Vision Programming Software
Articulated Mounting Fixture
Training Work Surface
Training Parts Set
Cable Set
Multimedia Curriculum (M33738)
Instructor's Guide (C33738)
Installation Guide (D33738)
Student Reference Guide (H33738)
Additional Requirements:
Any 87-MS Mechatronics Cart

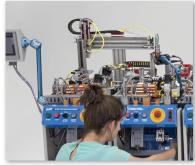
Any 87-MS Mechatronics Cart
Mechatronics Learning System (870-S715)
Computer, See requirements: http://www.amatrol.
com/support/computer-requirements

### Learn to Incorporate a Vision System into an Automated Process

The major component of Vision Inspection is an industrial vision camera. This real-world component allows learners to gain hands-on skills with equipment that they'll actually see in the field, which will develop both competence and confidence. The camera features discrete input/output, integrated lighting built into the body of the camera, EtherNet output to a personal computer, and PC Vision programming software.

## Integrates with a Variety of Mechatronics Carts or Used with PLC to Learn the Basics

Vision Inspection can be used with any of Amatrol's 870 Mechatronics stations, which include pick and place feeding, gauging, orientation processing, sorting / buffering, servo robotic assembly, torque assembly, inventory storage, CNC mill, and hydraulic press. Vision Inspection can also be used outside of the mechatronics line when hooked to a mechatronics cart's PLC so that learners can focus first on studying the basic operation and functions of the camera before moving onto more advanced topics and skills.



Vision Inspection shown attached to Mechatronics Cart 2: Gauging Station

### **Practice Real-World Vision System Skills**

This highly versatile learning system can be used to practice a variety of real-world applications, such as connecting and verifying the functionality of a Machine Vision camera, using Machine Vision software to capture component images, adjusting system lighting to vary image quality, using image software to identify the characteristics of a vision component, and configuring and operating a Machine Vision system for identification, sorting, and assembly verification.

### **Build Job-Ready Vision System Skills and Knowledge with Interactive Multimedia**



Machine Vision includes highly interactive multimedia packed with theoretical knowledge regarding vision systems and their applications within real-world envi-

ronments. This curriculum covers basic programming of vision systems, how to perform inspections, how to output discrete signals to the PLC, how to inspect results using PC software, and much more! This interactive multimedia includes a wide array of topics and skills with audio, cutting-edge 3D animations and illustrations, and video.

#### **Student Reference Guide**

A sample copy of the Mechatronics Vision Inspection 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 perfect-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.

