

# PLC Learning System, Siemens S7-1500 | Multimedia Courseware

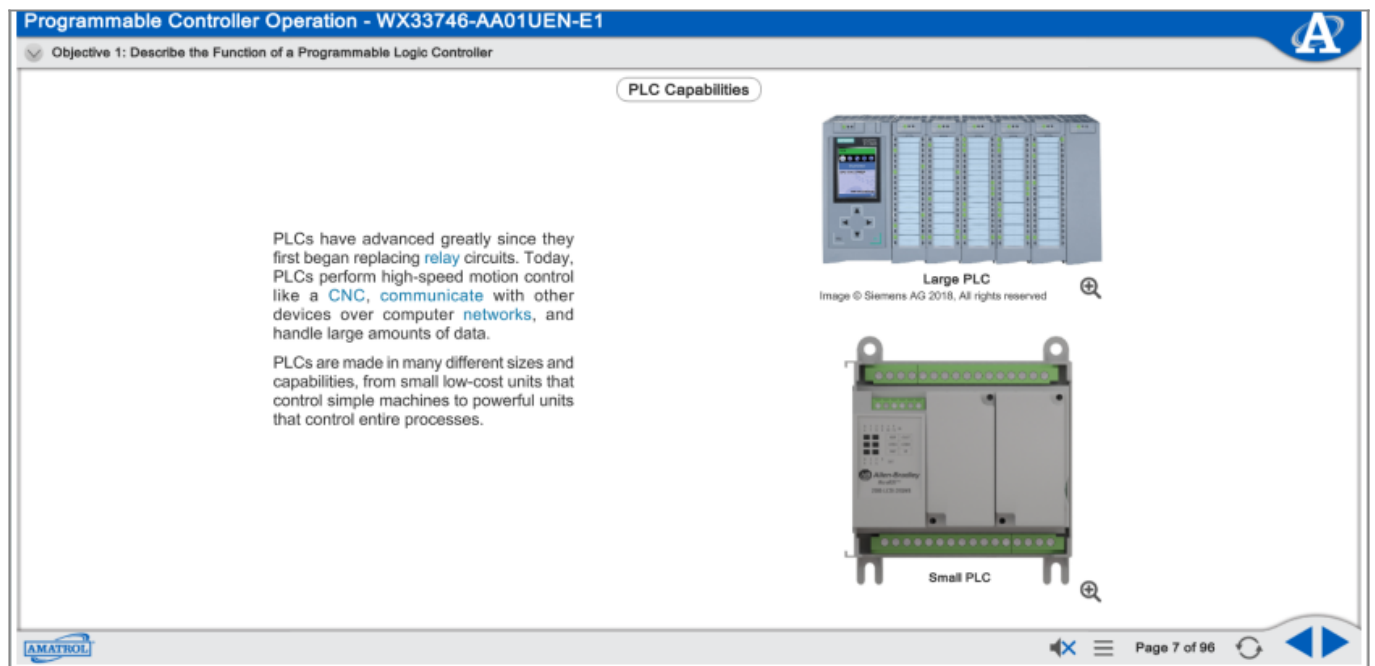
Programmable Controller Operation - WX33746-AA01UEN-E1

Objective 1: Describe the Function of a Programmable Logic Controller

PLC Capabilities

PLCs have advanced greatly since they first began replacing relay circuits. Today, PLCs perform high-speed motion control like a CNC, communicate with other devices over computer networks, and handle large amounts of data.

PLCs are made in many different sizes and capabilities, from small low-cost units that control simple machines to powerful units that control entire processes.



## PLC Learning System, Siemens S7-1500: M33746

PLC training is essential for important advanced manufacturing roles, such as industrial maintenance technicians. Amatrol's Multimedia Courseware – PLC Learning System, Siemens S7-1500 (M33746) teaches learners essential Siemens S7-1500 PLC concepts applicable throughout modern industry. Amatrol's Siemens S7-1500 PLC eLearning course covers vital PLC training topics like PLC operation, programming, motor control, event sequencing, timer instructions, and counter instructions.

### In-Depth Curriculum

#### In-Depth, Comprehensive Siemens S7-1500 PLC Curriculum Connected to Real-World Skills

Amatrol's eLearning curriculum is unique in that it thoughtfully combines in-depth theoretical knowledge with practical, hands-on skills. This powerful combination of knowledge and skills solidifies understanding and creates a strong foundation for pursuing more advanced skills.

For example, the Siemens S7-1500 PLC eLearning course covers important topics, such as:

#### Programmable Controller Operation

Learners begin with an introduction to programmable controller operation. Individual lessons focus on topics like types of PLC programming languages, the basic operation of a PLC, and PLC communications and program execution. Learners will also practice skills, such as powering up a Siemens S7-1500 PLC, configuring and testing a point-to-point PROFINET network, and running and monitoring a PLC program using TIA Portal software.

#### Basic PLC Programming

Learners will study the basics of PLC programming. Individual lessons focus on topics like project creation, PLC addressing, and basic program instructions. Learners will also practice skills, such as creating and configuring a PLC project using TIA Portal, entering a PLC logic program using TIA Portal, and editing a PLC program using TIA

Portal.

## **PLC Timer Instructions**

Learners using Amatrol's Siemens S7-1500 PLC eLearning course will study various aspects of PLC timer instructions. Individual lessons focus on topics like on-delay timers, off-delay and retentive timers, and time-driven sequencing. Learners will also practice skills, such as entering and operating a PLC program that uses a non-retentive on-delay PLC timer instruction, entering and operating a PLC program that uses a retentive PLC timer instruction, and entering and operating a time-driven sequence PLC program.

## **PLC Counter Instructions**

Learners will also study various aspects of PLC counter instructions. Individual lessons focus on topics like count up instructions, count down instructions, and count up/down instructions. Learners will also practice skills, such as entering and operating a PLC program that uses a PLC count up instruction, entering and operating a PLC program that uses a PLC count down instruction, and designing a PLC program that controls a conveyor queue station.

## **Multimedia**

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### **Highly-Interactive Multimedia Format Appeals to All Learning Styles**

Amatrol's Siemens S7-1500 PLC eLearning course curriculum features a highly-interactive multimedia format. Stunning 3D animations, videos, pictures, voiceovers of all text, and interactive quizzes and exercises bring learning to life. Amatrol's multimedia curriculum contains elements that will appeal to every learning style, keeping learners motivated and engaged.

### **Anytime, Anywhere Access Promotes Self-Paced Learning**

In today's fast-paced, technology-driven world, it's more important than ever to extend the reach of industrial skill training beyond the borders of traditional classrooms. Amatrol's eLearning meets the challenge for flexibility by offering in-depth, comprehensive technical skills training via an intuitive, easy-to-use web-based Learning Management System (LMS).

With anytime, anywhere online access, Amatrol's eLearning allows learners to set their own pace at home, on the job, in a traditional class setting, or a blended approach of these options. Click here to learn more about [Amatrol's eLearning and LMS](#).

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