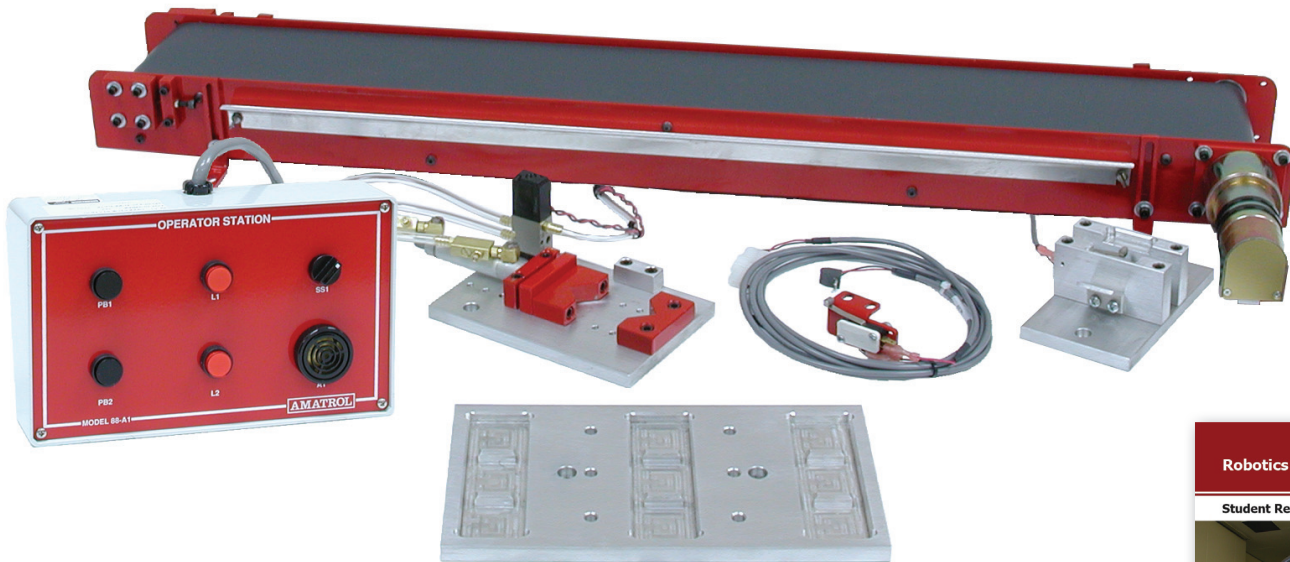
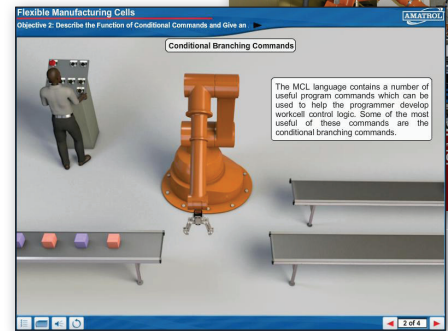
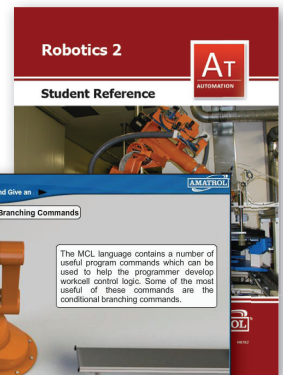


# Robotics 2 Learning System

96-ROB2A



96-ROB2A



Interactive Multimedia and Student Reference Guide

## Learning Topics:

- Application Development
- CNC Machine Loading
- Robot Workcell Envelope
- Flexible Manufacturing Cells
- Servo Conveyor Operation
- Quality Control
- Robot Operation Interface
- Production Control
- Operator Input Interface
- Relational and Arithmetic Operators

Amatrol's Robotics 2 Learning System (96-ROB2A) covers a variety of topics and skills related to the Pegasus robot, including application development, flexible manufacturing cells, quality control, and production control. More specifically, learners will begin the course by learning how to connect a conveyor to the Pegasus robot, how to control the conveyor, and how to develop a robot program. Learners will then develop programs to make a robot load and unload multiple automated machines, learn commands that can be used in quality control applications, and use variables with mathematic functions, input instructions, and relational operators.

Robotics 2 includes a variety of heavy-duty components that add onto the Robotics 1 Learning System (96-ROB1A), vastly expanding the scope of industrial applications and skills offered to learners. These Robotics Learning Systems are part of Amatrol's Project Based Learning program, which introduces high school students to knowledge and skills directly applicable to careers in engineering, manufacturing, and industrial maintenance. With the ever increasing use of automation and robots in advanced manufacturing, these Robotics Learning Systems are absolutely vital to training future members of the workforce.



## Technical Data

Complete technical specifications available upon request.

Operator Station (88-A1-A)

Inspection Station (88-A2)

Assembly Station (88-A3)

Palletizing Module (88-A4)

Feeder (88-F1)

Sensor (88-A9)

Linear Servo Conveyor (88-LC1-A)

Multimedia Curriculum (MB762)

Instructor's Guide (CB762)

Student Reference Guide (HB762)

Additional Requirements:

Robotics 1 Learning System (96-ROB1)

Computer: See requirements: <http://www.amatrol.com/support/computer-requirements>

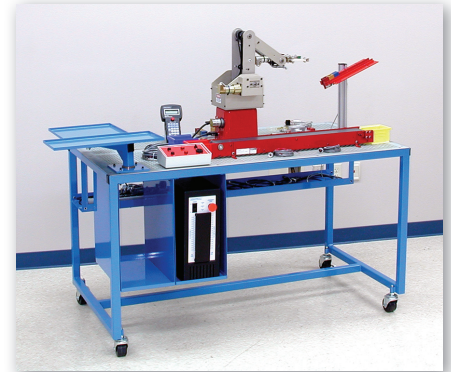
Utilities:

Electricity (120 VAC/60 Hz/1 phase)

Air Supply: 5 CFM @ 100 PSIG

## Design a Robot Program that uses a Servo Conveyor

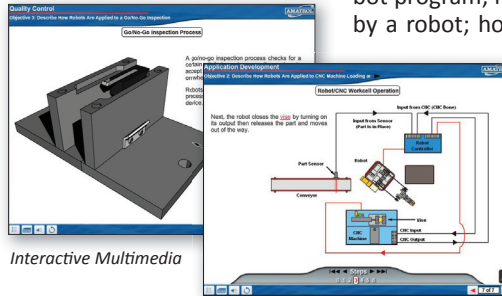
The Robotics 2 Learning System includes an operator station, inspection station, assembly station, palletizing module, feeder with sensor, and a linear servo conveyor. When integrated with the 96-ROB1A, these heavy-duty components allow learners to practice skills like programming teach points on a double-jointed robot arm using the full range of its work envelope; designing a robot program that uses a servo conveyor; entering a robot program that uses a variable name; and designing a robot program that stops a production process if a quality standard is not met.



96-ROB2A with the 96-ROB1A

## Learn How to Vary the Speed of a Conveyor Controlled by a Robot

In addition to components, this system includes stunning interactive multimedia curriculum that covers topics in application development, manufacturing cells, and production and quality control. Specifically, learners study learning objectives like: the steps used to develop a robot program; how to vary the speed of a conveyor controlled by a robot; how robots are used to measure parts; and the function and operation of loop commands. This curriculum offers the depth and detail of knowledge for which Amatrol's curriculum is well known, but adds 3D graphics, videos, interactive quizzes and exercises, and voiceovers of the text. Amatrol's multimedia curriculum is designed for both self-paced and classroom learning and can be used anywhere with a computer.



Interactive Multimedia

## Amatrol's Project Based Learning: Building Problem-Solving, Teamwork, and STEM Skills

Robotics 2 is only one learning system within Amatrol's expansive Project Based Learning program. Project Based Learning offers real-world industrial concepts and industry-applicable hands-on skills for high school students. Designed to teach valuable problem-solving, teamwork, and STEM skills and provide a strong base to build toward advanced manufacturing careers, Project Based Learning features systems in areas like electrical, electronics, fluid power, thermal, and more in addition to automation.

## Student Reference Guide

A sample copy of the Robotics 2 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.

