Sensors

Description

The Industrial Sensors trainer employs a wide variety of Festo industrial sensors in typical applications: optical and capacitive proximity sensors, optical retroreflective sensors, and various cylinder inductive and magnetic limit switches.

Skills

- Identify components
- Software application
- Component troubleshooting
- Sensor alignment

Knowledge

- Troubleshooting
- Proper sensors integration techniques
- Object detection methods
- Focuses on the development of academic knowledge, employability skills, and technical skills. As students progress through the curriculum, the classroom instructor uses a detailed rubric to subjectively evaluate the student's skill and proficiency.
- Sensors and switch types

Objectives

- Identify the use of sensors in industry and day-to-day devices.
- Identify basic electrical components and circuit symbols.
- Define the difference between AC and DC electrical current.
- Apply the basic principle of connection and circuit technology for proximity sensors.
- Test the switching distances of two inductive proximity sensors.

Activities

- Lesson 1 Introduction to Sensors
- Lesson 2 Electricity and Pneumatics
- Lesson 3 Component Identification
- Lesson 4 Safety
- Lesson 5 Detecting the Speed of a Gear
- Lesson 6 Sensing the Position of a Valve Slide
- Lesson 7 Inspecting Food Tins
- Lesson 8 Sorting Washers
- Lesson 9 Measuring the Thickness of Steel Discs
- Lesson 10 Sorting Flat Seals
- Lesson 11 Controlling a Belt Tensioner
- Lesson 12 Monitoring an Electrically-Operated Gate
- Lesson 13 Feeding Crown Caps
- Lesson 14 Sorting Workpieces
- Lesson 15 Detecting Ladder Rungs
- Lesson 16 Monitoring Fill Levels
- Lesson 17 Detecting Transport Cases
- Lesson 18 Checking Threads
- Lesson 19 Monitoring Material Feed
- Lesson 20 Communication

Standards

DEPCO courseware is developed from the Manufacturing Skill Standards Council (MSSC) and the National Skill Standards Board (NSSB). Close correlation with these standards will provide students with the skills and knowledge necessary for success in the workplace.

Module Includes:

Training Manuals, Instructor's Manual, Installation CD, Sensors Detection Set, Profile Plate and Stand, Mountable Power Supply, 4 mm Safety Plug Cable Set, Multimeter, Test Extension Leads, Calculator, Ruler, Safety Glasses (2), Headphones (2)

Computer is required and sold separately.

Requirements
Computer required and sold separately.
Á
Á