## **Electrical and Controls Module Level 2**

# **Networking and Communications**

## **General Information**

Course Number: M-108

Format: Instructor led

Length: 4 hours

Maximum Students: 8

#### **Audience**

This course is for maintenance technicians, supervisors, and people who support the conveyor system.

## **Customer Requirements**

A room with a projector and a marking board with markers

## **Prerequisites**

- A general knowledge of mechanical and electrical systems
- A general knowledge of safety and Lockout/Tag out procedures
- A working knowledge of tools and test equipment

#### **Benefits**

This course is designed to increase knowledge and skills to safely identify networking and fieldbus issues.

## **Course Objectives**

Upon completion of this course, the student should be able to:

- Describe the general rules of communications
- Describe the troubleshooting steps for Ethernet
- Describe the troubleshooting steps for fieldbus

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## **Topics**

## 1. General

1/2 Hour

a. Safety

#### 2. General Rules

1/2 Hour

- a. Addressing
- b. Protocol
- c. Baud rate

## 3. Ethernet

1 Hour

a. Troubleshooting

## 4. Fieldbus

2 Hours

- a. Profibus troubleshooting
- b. ASi troubleshooting
- c. DCan troubleshooting