

# Industrial Soldering Training | eLearning Course



## eLearning Course: M17463

Amatrol's Multimedia Courseware - Industrial Soldering (M17463) eLearning course covers industrial soldering techniques commonly used within a control enclosure by industrial maintenance technicians. Applications for these techniques include soldering various connectors to wire, wire-to-wire, and wire-to-terminals. Other major topic areas include solder types, soldering safety, and tool operation.

## In-Depth Industrial Soldering Curriculum

### **What is Soldering?**

Soldering is the process of bonding two metal objects together using a binding agent. The binding agent, called solder, is a metal alloy that has a much lower melting point than the objects being fused together. Soldering is commonly used to connect electrical circuits because it is a quick process. Solder can also be easily removed without damaging the base metals.

### **What is the Soldering Process? What is a Solder Joint?**

A solder joint is created by bringing two metal objects and the solder together, and heating them until the solder melts. The melted solder flows between the two objects and forms a chemical bond after it is cooled. If done properly, the bond will be airtight and waterproof.

Electrical solder joints have both electrical conductivity and mechanical strength properties. Soldered joints have low resistance to electrical current, so they do not affect the operation of electrical circuits or low-power electronic circuits. They also increase the strength of mechanical connections, such as spliced wires.

## Interactive eLearning with Learning Management System

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

Amatrol's industrial soldering eLearning course features interactive eLearning curriculum that integrates various types of learning methods to create an engaging, effective learning experience. Amatrol's multimedia [eLearning](#) curriculum includes text with voiceovers, videos, 3D animations, pictures, and interactive activities, quizzes, and self-reviews. Specific industrial soldering topics covered include: soldering basics; soldering techniques; desoldering techniques; and electrical panel soldering applications. Within these topics, learners will study objectives like soldering and inspecting a connection on a printed circuit board; desoldering a connection using a

