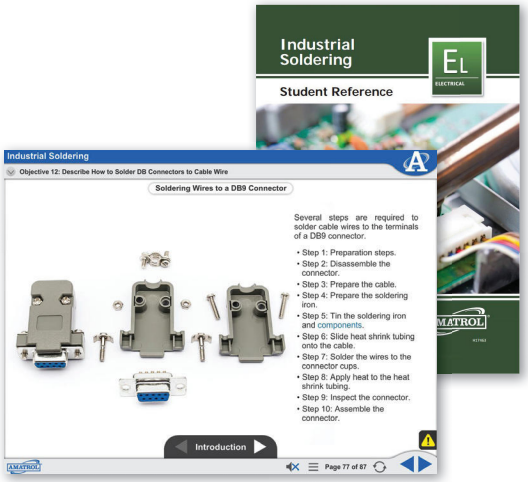
Industrial Soldering Learning System

85-MT6BB

EL
ELECTRICAL



Interactive Multimedia Curriculum and Student Reference Guide

85-MT6BB

Learning Topics:

- Soldering Basics
- Application of Soldering
- Solder Connection Types
- Soldering Techniques
- Safety Rules
- Inspecting Soldering Bong
- Desoldering Techniques
- Types of Solder Wick
- Electric Panel Soldering Applications
- DB Connectors

Amatrol's Industrial Soldering Learning System (85-MT6BB) 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. This industrial soldering training system requires Electrical Wiring (850-MT6B) and VFD/PLC Wiring (85-MT6BA).

The industrial soldering training system includes a soldering iron, heat gun, potentiometer, burnishing tool, de-solder pump plastic vacuum, and more! These components will be used to practice skills like soldering and inspecting a connection on a printed circuit board and soldering a DB-9 connector to a Modbus cable. Amatrol uses real-world, industrial-grade components for its learning systems both for durability to stand up to frequent use and to allow learners to build confidence and competency with equipment they'll actually use on the job.

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Technical Data

Complete technical specifications available upon request.

Soldering Station
Fume Remover
De-soldering Tool Set
Solder Components Panel
Soldering Component Hardware
Student Curriculum – Interactive PC-Based Multimedia (M17463)
Instructor's Guide (C17463)
Installation Guide (D17463)
Student Reference Guide (H17463)
Additional Requirements:
Adds to 850-MT6B Electrical Wiring Learning System and 85-MT6BA VFD/PLC Wiring Learning System
Computer. For requirements, see http://www.amatrol.com/support/computer-requirements
Utilities Required:
Requires 120V/60Hz/1ph electrical
Recommended: 17440 Consumables Package

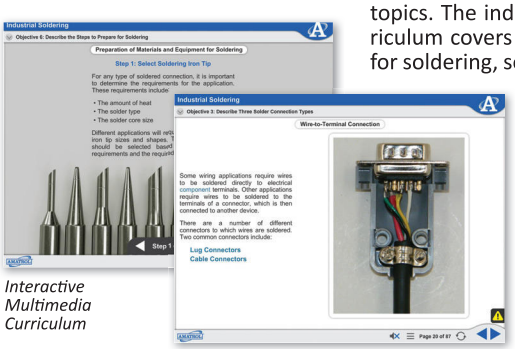
Build Skills Like Using a Pump Plastic Vacuum to De-Solder a Connection

In addition to the soldering iron, heat gun, and burnishing tool, this learning system features a circuit board assembly LED, wire brush, heat sink clamp, wire strippers, pliers, and more. As an example of how these tools are used, learners first study how to how to solder DB connectors to cable wire and then will use the supplied tools to solder a DB-9 connector to a Modbus cable.

Industrial Soldering Learning System

Study Soldering Connection Types, Inspection, and Safety within Stunning Multimedia Curriculum

Amatrol's world-class curriculum combines vital theoretical knowledge with applicable hands-on skills in order to strengthen the connection between the 'how' and 'why' of important industrial topics. The industrial soldering training system's included curriculum covers objectives like four types of solder, tools used for soldering, soldering safety rules, soldering bond inspection, and how to solder DB connectors to a cable wire. In addition to the included printed curriculum, Amatrol also offers all of these topics and skills in an interactive multimedia format. This multimedia features stunning 3D graphics and video, audio voiceovers of all of the text, and interactive quizzes and activities.

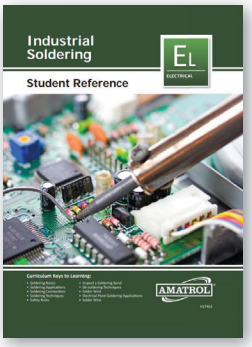


Interactive Multimedia Curriculum

Expand Learning Options Through VFD/PLC and HMI Wiring Skills

The industrial soldering training system is just one expansion that can be added to electrical wiring (850-MT6B) to develop additional industrial wiring skills. Others include the required VFD/PLC (85-MT6BA) and the HMI Wiring (85-MT6BC). The VFD/PLC Wiring training system will cover how to wire a VFD and PLC to a control panel using industrial components like a Siemens PLC, terminal blocks, and an Allen-Bradley VFD. The HMI Wiring training system teaches wiring an HMI, analog wiring, and EtherNet cabling into a control panel mounted PLC.

Add to the 850-MT6B



Student Reference Guide

A sample copy of the Industrial Soldering 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.

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SOLDERING MAINTENANCE LEARNING SYSTEM
This system adds to the Electrical Wiring Learning System (85-MT6B).

Soldering Station

Fume Remover

De-soldering Tool Set

Solder Components Panel

Soldering Component Hardware

Student Curriculum
The student curriculum supplied with each module shall be designed in a skill-based format that focuses on teaching industry-relevant tasks. This curriculum shall be designed for use in both self-directed student learning and group instruction formats. The objectives shall be accomplished by organizing the learning material into a series of learning activity packets, which are further subdivided into three or more segments per packet. All learning materials needed shall be contained in the packets including text material, laboratory equipment activities, and any multimedia directions. No external text sources shall be required. The specific cognitive skills taught by each text passage shall be identified next to the passage. Each lab activity shall be identified by the industrial task taught. All activities shall be highly detailed with step-by-step instructions to facilitate a self-directed learning environment. A combination of step-by-step enabling activities and creative, problem-solving activities shall be provided. A self-review of five to ten questions shall be provided after each segment.

Teacher's Assessment Guide
The teacher's assessment guide shall contain student data sheets, data sheet solutions, self-review answers, quizzes, quiz answers, student skill record sheets, and assessment directions. The student data sheets shall be designed with data collection blanks to permit students to record data without consuming the learning activity packets. A quiz shall be provided for each packet. A question shall be provided in each quiz for each cognitive objective taught and correlated as such. All tasks listed in the packet shall be listed on personalized student record sheets. Detailed instructions and any supplemental material shall be provided for the teacher to perform live assessment of each student.

Amatrol Model No. 85-MT6BA or equal

85-MT6BB
INDUSTRIAL SOLDERING LEARNING SYSTEM

MODULE 1 INDUSTRIAL SOLDERING APPLICATIONS

SEGMENT 1	**SOLDERING BASICS**
OBJECTIVE 1	Define soldering and give an application
OBJECTIVE 2	Describe three types of solder and give an application for each
OBJECTIVE 3	Describe three solder connection types
OBJECTIVE 4	Describe tools used for soldering
SEGMENT 2	**SOLDERING TECHNIQUES**
OBJECTIVE 5	List six safety rules for soldering
OBJECTIVE 6	Describe the steps to prepare for soldering
OBJECTIVE 7	Describe the basic steps to solder a connection
OBJECTIVE 8	Describe how to inspect a soldering bond
SKILL 1	Solder and inspect a connection on a printed circuit board
SEGMENT 3	**DESOLDERING TECHNIQUES**
OBJECTIVE 9	Describe five types of solder wick
OBJECTIVE 10	Describe how to desolder a connection using a solder wick
SKILL 2	Desolder a connection using a solder wick
OBJECTIVE 11	Describe how to desolder a connection using a solder sucker pump
SKILL 3	Desolder a connection using a solder sucker pump
SEGMENT 4	**ELECTRIC PANEL SOLDERING APPLICATIONS**
OBJECTIVE 12	Describe how to solder DB connectors to cable wire
SKILL 4	Solder a DB9 connector to a Modbus cable
OBJECTIVE 13	Describe how to solder wire to the terminals of an electrical component
SKILL 5	Solder wires to the terminals of an electrical component