

CONSULTANTS TO THE ELECTRONICS INDUSTRY

- MANUFACTURING START-UP
- PROCESS EVALUATION
- SUBCONTRACTOR QUALIFICATION
- EQUIPMENT EVALUATION
- LEAD-FREE, ESD, PROCESS AND QUALITY AUDITS

THE LEADER IN HI-TECH TRAINING

- EXPERT TRAINING IN THE LATEST TECHNOLOGIES
- INDUSTRY-DEMANDED CERTIFICATIONS

PCB TECHNOLOGY

- **QUALITY & INSPECTION**
IPC-A-610 INSTRUCTOR & OPERATOR CERTIFICATION
- **SOLDERING & ASSEMBLY**
IPC J-STD-001 INSTRUCTOR & OPERATOR CERTIFICATION
- **BARE BOARD INSPECTION**
IPC-A-600 INSTRUCTOR & OPERATOR CERTIFICATION
- **REWORK & REPAIR**
IPC-7711 INSTRUCTOR & OPERATOR CERTIFICATION
IPC-7721 INSTRUCTOR & OPERATOR CERTIFICATION
- **HAND SOLDERING SKILLS**
SOLDERING BASICS, THROUGH-HOLE & SURFACE MOUNT TRAINING

CABLE & WIRE HARNESS TECHNOLOGY

- **QUALITY & INSPECTION**
IPC-A-620 INSTRUCTOR & OPERATOR CERTIFICATION
- **HANDS-ON LABS**
SOLDERING, CRIMPING & HARNESS ASSEMBLY TRAINING

FIBER OPTICS TECHNOLOGY

- **INSTALLER & TECHNICIAN CERTIFICATION**
- **FUNDAMENTALS**
- **TERMINATIONS & CLEANING**

LEAD-FREE HAND SOLDERING OPERATOR CERTIFICATION

Wires & Terminals, Through-Hole & Surface Mount Hand Soldering Training & Certification Program

J-STD-001 / IPC-A-610

COURSE DESCRIPTION

Customize this course by selecting only the days/modules that meet your training requirements. Lead-Free Hand Soldering Operator Certification introduces the basics of soldering in Wires & Terminals, Through-Hole and Surface Mount Technologies and Rework. Students will learn about electrostatic discharge, industry terminology, equipment familiarization and the accept/reject criteria for all three technologies. Hands-on efforts include the soldering and inspection of five (5) different types of terminal connections; the assembly, soldering, inspection and rework of two (2) through-hole boards with 100 inspection points; and the assembly, soldering, inspection and rework of a surface mount board with over sixty components. This program is a "hands-on" experience. With approximately 75% of the time spent doing, students experience the technology first hand.

WHO SHOULD BECOME CERTIFIED

Lead-Free Hand Soldering Operator Certification is a course designed to teach the fundamentals of soldering technology and rework. Anyone involved in the assembly of electronics with Wires & Terminals, Through-Hole and Surface Mount components should be certified to this program.

WHAT STUDENTS RECEIVE

All successful participants will be awarded an EPTAC Certificate of Training.

PREREQUISITES

An understanding of the English language, both oral and written is all that is required to benefit from EPTAC's Lead-Free Hand Soldering Operator Certification Program. ESL Students are encouraged to inquire.

CLASS SIZE

Maximum number of students is limited to ten (10) in order to provide greater instructor interaction and a complete hands-on experience. Call early to reserve your space.

MATERIALS For each class, all the necessary tools and materials will be supplied. Students are welcome to bring their own documents if they wish.

LOCATION Classes are held at EPTAC's Corporate Training Center located just 35 miles from Boston and at locations throughout the US and Canada.

ON-SITE TRAINING Please call a training consultant and ask about customized course content, on-site training and training around your production schedules.

REGISTRATION For up to date pricing and more information on any of the EPTAC programs, or to enroll, please call us toll free or visit eptac.com.

TOLL FREE: **1-800-64-EPTAC**
 FAX: **603-296-2377**
 E-MAIL: **REGISTER@EPTAC.COM**
 WEB: **EPTAC.COM**

COURSE OUTLINE

DAY 1

- Introduction to Lead-Free Soldering
- Specifications/Applicable Documents
- Terms and Definitions
- Tools and Material Selection and Maintenance
- Procedures in Making a Good Solder Joint
- Soldering Technology-Wires & Terminals
- Acceptability Criteria
- Wire Preparation
- Terminal Connections and Soldering
- Practical Session-Soldering Terminals

DAY 2

- Introduction to Through-Hole
- Specifications/Applicable Documents
- Electrostatic Discharge
- Through-Hole Terms and Definitions
- Tools and Material Selection and Maintenance
- Procedures in Making a Good Solder Joint
- Soldering Technology - Through-Hole
- Practical Session-Through-Hole Practice Board
- Instructor/Student Review

DAY 3

- Acceptability Criteria
- Solder Rework Techniques – Through-Hole
- Through-Hole Component Removal Methods
- Practical Session-Through-Hole Rework-Practice Board
- Instructor/Student Review
- Practical Session-Through-Hole Test Board
- Instructor Inspection/Feedback

DAY 4

- Introduction to Surface Mount
- Specifications/Applicable Documents
- Surface Mount Terms and Definitions
- Tools and Material Selection and Maintenance
- Procedures in Making a Good Solder Joint
- Soldering Technology – Surface Mount
- Practical Session-Surface Mount Practice Board
- Instructor/Student Review

DAY 5

- Acceptability Criteria
- Solder Rework Techniques – Surface Mount
- Surface Mount Component Removal Methods
- Practical Session-Surface Mount Rework-Practice Board
- Instructor/Student Review
- Practical Session-Surface Mount Test Board
- Instructor Inspection/Feedback
- Course Summary/Review