**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

# J-STD-001 CERTIFIED IPC SPECIALIST

IPC's J-STD-001 Operator Training & Certification Program

**J-STD-001**

## COURSE DESCRIPTION

J-STD-001 Certified IPC Specialist is a comprehensive, knowledge-based series of courses that certify students to the methods and procedures presented in the J-STD-001 document. Designed for experienced operators, the series helps workers interpret the J-STD-001 specification through lecture, demonstration and labs.

The program is divided into 5 one day modules, each covering a different technology or area of soldered electronic assemblies. Students may be trained and certified in any combination of modules that includes module 1. These courses address all three classes of manufacturing in Wires and Terminals, Through-hole, and Surface Mount Technologies.

*For on-site training, this course can be taught in either Lead or Lead-free Solder.

## WHO SHOULD BECOME CERTIFIED

The course emphasis is on J-STD-001 document interpretation. Experienced assemblers who wish to gain in depth background on soldering practices should become certified to this program.

## WHAT STUDENTS RECEIVE

For each module, students who successfully complete the program will receive:

- The J-STD-001
- An IPC Certificate of Training

## PREREQUISITES

This knowledge-based course requires the ability to understand and interpret technical information. As this course is designed to compliment existing soldering skills, prior soldering experience is recommended. Familiarity with the J-STD-001 is beneficial.

## CLASS SIZE

Maximum number of students is limited to ten (10) to provide greater instructor interaction. 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 - MODULE 1 OVERVIEW OF J-STD-001

Students will learn the requirements of J-STD-001 and related standards as they apply to operators and inspectors involved in the assembly of products to the requirements of J-STD-001.

**Module 1 is a prerequisite to all other modules.**

- Course Overview
- Safety
- EOS/ESD
- Classes of Equipment
- Solder Theory
- Solderability
- Solder Flux and Solder Alloys
- Facilities, Tools & Equipment Training
- PTH - Assembly/Solder
- Surface Mount Technology
- Cleaning
- Module 1 Review
- Module 1 Examination

### DAY 2 - MODULE 2 - WIRES & TERMINALS

Students will learn the requirements of J-STD-001, and demonstrate the skills for stripping and tinning wire and hand soldering wires of different gauges to various types of commonly used solder terminals.

- Wire Preparation
- Solder to Terminals
- Terminal Inspection
- Wire & Terminal Demonstration
- Wire & Terminal Lab
- Module 2 Review
- Module 2 Examination

### DAY 3 - MODULE 3 - THROUGH-HOLE TECHNOLOGY

Students will learn the requirements of J-STD-001, and demonstrate the skills for preparing and mounting Through-Hole components to PWBs.

- Lead Preparation
- Component Mounting
- PTH Inspection Criteria
- PTH Soldering Demonstration
- PTH Lab
- Module 3 Review
- Module 3 Examination

### DAY 4 - MODULE 4 - SURFACE MOUNT TECHNOLOGY

Students will learn the requirements of J-STD-001, and demonstrate the skills for preparing and mounting Leaded and Leadless Surface Mount components to PWBs.

- SMT Criteria
- SMT Inspection Criteria
- SMT Demonstration
- SMT Lab
- Module 4 Review
- Module 4 Examination

### DAY 5 - MODULE 5 - INSPECTION METHODOLOGY

Students will learn the quality and inspection requirements of J-STD-001.

- Theory of Inspection, SPC
- Defect Definition and Disposition
- Inspection Skills Demonstration
- Inspection Skills Lab
- Module 5 Review
- Module 5 Examination