



Boost understanding and hands-on soldering skills ...

# IPC J-STD-001

## *Requirements for Soldered Electrical and Electronic Assemblies* Training and Certification Program



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IPC J-STD-001, *Requirements for Soldered Electrical and Electronic Assemblies*, has emerged as the preeminent authority for electronics assembly manufacturing worldwide. The standard describes materials, methods and verification criteria for producing high-quality soldered leaded and lead-free interconnections. It emphasizes process control and establishes industry-consensus requirements for a broad range of electronic connections.

### Choose from Two Tiers of Instruction

- **Certified IPC Application Specialist (CIS)** training focuses on the knowledge and hand skills employees need to produce high-quality soldered interconnections. Course fee covers: classroom and laboratory training, a written exam, skills evaluation, a copy of the standard and certification.
- **Certified IPC Trainer (CIT)** training provides expanded information and materials to prepare individuals to deliver Certified IPC Application Specialist (CIS) training. Assembly process engineers, quality assurance supervisors, training managers and others responsible for the quality and reliability of soldered electronic assemblies are ideal candidates for the instructor program. Instructor training is not a beginner soldering course, so all candidates must have hand-soldering experience. Course fee covers: soldering labs and demonstrations, classroom instruction and an exam, certification and comprehensive materials for preparing and delivering CIS training.

### Why earn IPC J-STD-001 certification?

Certification in this industry-developed and approved hands-on solder training and certification program helps enhance employee skills and performance. In addition, if your company uses J-STD-001— or is considering its adoption — you can use the certification program to address the standard's training requirement. Both the CIT and CIS programs provide individuals with a portable credential that recognizes their soldering skills and understanding of this internationally recognized standard.

# Training Modules

CIT training prepares the instructor to teach all of the CIS modules. However, in CIS training only the first module is a required element. Other modules may be covered based on your company's specific needs.

- General requirements such as safety, tools and electrostatic discharge (ESD)
- Wire- and terminal-assembly requirements, demonstrations and laboratory
- Through-hole technology requirements, demonstrations and laboratory
- Surface mount technology requirements, demonstrations and laboratory
- General soldered connection acceptance requirements (including lead free)
- Test methods and related standards
- Statistical process control methodology
- Inspection skills

## CIT Program Extras

To help assure CIT candidates' future success as trainers, the CIT program also includes:

- How to establish and maintain the integrity of the certification program
- Steps to effectively use the lesson plan and materials
- Tips on inspection
- Essential trainer skills

Training materials provided to CITs include:

- Instructor guide with lesson plans, reference material and training guidance
- A copy of IPC J-STD-001, *Requirements for Soldered Electrical and Electronic Assemblies*, and its handbook
- One copy each of the following standards: J-STD-002, *Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires*; J-STD-003, *Solderability Tests for Printed Boards*; J-STD-004A, *Requirements for Soldering Fluxes*; J-STD-005, *Requirements for Soldering Pastes*; J-STD-006, *Requirements for Electronic Grade Solder Alloys and Fluxed and Non-Fluxed Solid Solders for Electronic Soldering Applications*; and IPC-9191, *General Guidelines for Implementation of Statistical Process Control (SPC)*
- Artwork for soldering test boards (Note: Certification center will provide standardized test boards for CIT candidates. Test kits based on this artwork are recommended for CIS soldering demonstrations.)
- Written tests with answer keys
- A CD-ROM with full-color visual aids and electronic copies of training-support forms

Make an investment in continuous improvement and quality enhancement today — with the **IPC J-STD-001, Requirements for Soldered Electrical and Electronic Assemblies Training and Certification Program!**

*"We apply IPC standards in our company. Since there is an IPC trainer in our company, it is much easier for the IPC standards to be explained to, and understood by, the operators. Our customers are happy with the quality of our products, and we can be proud of that."*

**Suciu Florin**  
**Benchmark Company**  
**Romania**

*"The IPC-J-STD 001, IPC-A-610, IPC-7711/7721 and IPC-WHMA-A-620 certification programs have been successfully incorporated throughout the Airborne Instrumentation Systems Division of the Naval Air Weapons Center, China Lake California. They provide a consistent evaluation of the quality and reliability of our products. The greatest attribute of the certification program is the real-time instructor interaction which provides identification and, most importantly, resolution of every area of misunderstanding for each trainee individually. We could not provide the high level of consistently reliable electronic products to train our nation's warfighters without the IPC certification programs' support."*

**Kirk Armstrong**  
**Head, Advanced Telemetry Technology Branch**  
**Head, Quality Assurance WID**  
**Sidewinder TM-Program Manager**  
**NAWCWD**

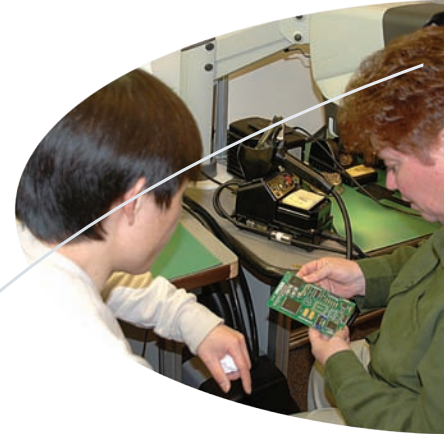


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