

Training Overview

IPC J-STD-001 (Rev F)

Requirements for Soldered Electrical & Electronic Assemblies

J-STD-001 Overview

'J Standard 001', is the sole industry-consensus standard covering soldering materials and processes. This standard describes materials, methods and verification criteria for producing quality soldered interconnections and assemblies. This revision contains easy to understand requirements, & illustrations are provided for clarity.

Previous conflicts with other IPC and industry standards have been resolved and this standard fully complements IPC-A-610.

Training objective

To qualify & certify candidates, as J-STD-001 Certified IPC Specialists (CIS).

To provide hands-on instruction and training on specific modules in the IPC J-STD-001 document.

Upon satisfactory completion of the course, candidates will be capable of making correct "accept/reject" decisions, using the acceptability requirements within the standard. And be capable of creating soldered connections that meet the requirements.

The Program

The training is provided by a Certified IPC Trainer (CIT), with theory being carried out with the aid of the IPC document, PowerPoint slides, flipcharts & DVD's. A detailed study of the standard is made reviewing the processes, requirements and classifications.

Each optional training module (except module 5 below) will provide practical demonstrations & tuition at the bench. Soldering irons, components, hand tools, PCBs, solders & fluxes etc are provided, & the soldering process & theories are discussed & put into practise.

Who should become a J-STD-001 Certified IPC Specialist?

Operators, technicians, engineers, test technicians, quality assurance personnel and others responsible for the quality and reliability of electronic assemblies, are all excellent candidates for the program.

Program Pre-Requisites

Ideally, candidates should have minimal soldering skills & some experience in electronic assembly, but this is not essential. Certification in, or an understanding of, IPC-610 (Acceptability of Electronic Assemblies) would also be an advantage.

Certification

In order to attain IPC J-STD-001 certification, candidates must pass the simple online 'open book, multiple-choice tests', & prove their ability to carry out standard hand soldering processes, to an acceptable level.

The certificate is valid for 2 years, following module 1 completion, after which, the candidate will have the option to re-certify.

Mandatory training module (theoretical training only)

- Module 1: Introduction, Policies & Procedures, J-STD-001 Overview

Optional training modules (theoretical & practical training)

- Module 2: Wires and Terminal Assembly/Soldering Requirements
- Module 3: Through-Hole Mounting & termination
- Module 4: Surface Mounting of Components
- Module 5: Inspection Skills (*no soldering, suitable for inspectors*)

(NOTE: module 5 is automatically awarded, if modules 1 to 4 have been satisfactorily completed)

Program duration

The course duration is 1 day per module, depending on trainee experience

What do you need to provide?

For the theoretical lectures (modules 1 & 5), a training, meeting, or conference room (or any uninterrupted area) is required.

For the practical sessions, bench space with powered sockets & adequate lighting are required.

What do STEM Training provide?

IPC Standards (for training only), flipchart, handouts, laptop, iPads for tests (one per candidate), projector & screen.

And for practical sessions, soldering systems, fume displacers, iron tips, practise PCB's (& associated components), solders, fluxes, cleaning agents, hand tools & protective mats (if required).

