

## Training Overview

### IPC J-STD-001 (Rev G)

### 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. All include inspection skills)

- 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 sessions, 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, tablets 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).

