IPC®

Get certified on the industry's most widely used inspection standard . . .

IPC-A-610

Acceptability of Electronic Assemblies
Training and Certification Program

With its comprehensive criteria for printed circuit board assemblies, IPC-A-610 is the most widely used inspection standard in the electronics industry — and has earned an international reputation as the source for end-product acceptance criteria for consumer and high reliability printed circuit assemblies. Now updated to lead free, and available in many languages, IPC-A-610 has been embraced by original equipment manufacturers and electronics manufacturing services companies worldwide. This training is available in several languages.

Choose from Two Tiers of Instruction

• **Certified IPC Application Specialist (CIS)** training focuses on what line workers, operators, inspectors and buyers need to know to inspect or make acceptance/rejection decisions. Course fee covers: classroom training and an exam, 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. Trainers and quality supervisors versed in electronic assembly are excellent candidates for this training, as are engineering and manufacturing supervisors who have assembly responsibilities. Course fee covers: classroom training and an exam, certification and comprehensive materials for preparing and delivering CIS training.

Why earn IPC-A-610 certification?

Certification in this industry-traceable program demonstrates your commitment to continuous improvement of product quality and reliability. Both the CIT and CIS programs provide individuals with a portable credential that represents their understanding of IPC-A-610.

Training Modules

CIT training prepares the instructor to teach all of the CIS modules. However, in CIS training only Modules 1 and 2 are required elements. Other modules may be covered based on your company's specific needs.

- Purpose and application of IPC-A-610
- Hardware installation
- Soldering criteria, including lead-free connections
- Soldered connection requirements for connecting to terminals
- Soldered connection requirements for plated-through holes
- Surface mounting criteria for chip components, leadless and leaded chip carriers
- Swaged hardware, and heatsink requirements of mechanical assemblies
- Component mounting criteria for DIPS, socket pins and card edge connectors
- Jumper wire assembly requirements
- Solder fillet dimensional criteria for all major SMT component groups
- Soldering, such as tombstoning, dewetting, voiding and more
- Criteria for component damage, laminate conditions, cleaning and coating

*Photo courtesy of
Electronics Yorkshire*

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
- Instructor guide with lesson plans, reference material and training guidance
- A copy of IPC-A-610D, *Acceptability of Electronic Assemblies*
- Written tests with answer keys
- A CD-ROM with visual aids and electronic copies of training-support forms

Make an investment in continuous improvement and quality enhancement today — with the
IPC-A-610, *Acceptability of Electronic Assemblies* **Training and Certification Program!**

"When we approach a new customer, the fact that our people have been certified to IPC-A-610 is a big selling point. It gives the customer confidence in our ability to provide quality product to the industry's highest standards."

Rich Breault
President
Lightspeed Manufacturing

"Training staff to IPC-A-610 is a central part of our ongoing training program. The IPC course has helped to raise quality awareness throughout our manufacturing process and provided a sound basis for further specialized training. Amongst the reasons S2S has chosen to pursue the IPC standard is that companies are increasingly asking for this in advance of any further discussions. The company also realizes that training in general provides many benefits, including staff confidence and, consequently, better staff retention."

Alan Dukinfield
Managing Director
S2S Electronics – UK