



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 & IPC-7721 Instructor & Operator Certification

Hand Soldering Skills

- Soldering Basics, Wires & Terminals, Through-Hole and Surface Mount Training

PCB Fundamentals

- Component Identification
- Electrostatic Discharge

CABLE & WIRE HARNESS TECHNOLOGY

Quality & Inspection

- IPC-A-620 Instructor & Operator Certification

Hands-On Labs

- Crimping & Harness Assembly Training

TECHNICAL SUPPORT

- Manufacturing Start-Up
- Process Evaluation
- Subcontractor Qualification
- Equipment Evaluation
- Lead-Free, ESD, Process and Quality Audits

IPC-A-620 CERTIFIED IPC TRAINER WITH OPTIONAL LABS

IPC/WHMA-A-620 Instructor Training & Certification Program

IPC/WHMA-A-620

COURSE DESCRIPTION

This 4-day, lectured course is a comprehensive, instructor-level certification that teaches inspection and assembly criteria for all three classes of cable and wire harness assembly. This course is based on the IPC/WHMA-A-620, "Requirements and Acceptance for Cable and Wire Harness Assemblies", the most widely used inspection specification for the cable and wire harness assembly industry.

OPTIONAL HANDS-ON LABS

This is an optional 1-day, hands-on lab for those who would like to practice the skills of the criteria they have learned throughout the week by following an assembly print and building a harness assembly.

WHO SHOULD BECOME CERTIFIED

This course is for anyone responsible for the quality and reliability of cable and wire harness assemblies—including trainers, engineers, quality supervisors, inspectors and manufacturing personnel responsible for quality assurance.

WHAT STUDENTS RECEIVE

Everyone who successfully completes the lecture program will receive instructional materials necessary for conducting CIS training:

- IPC/WHMA-A-620
- Instructor Guide
- Course visuals on CD-ROM
- Certified IPC Specialist Exams
- IPC Certificate of Training
- EPTAC Certificate of Training (Lab only)

PREREQUISITES

An understanding of the Cable and Wire Harness Assembly Industry and an understanding of the English language, both oral and written are all that is required to benefit from EPTAC's IPC-A-620 Certified IPC Trainer with Hands-on Labs Program.

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
email: register@eptac.com
Web: www.eptac.com

COURSE OUTLINE

DAY 1

- Module 1: Introduction/Policy and Procedures
- Module 2: Requirements and Acceptance for Cable and Wire Harness Assemblies and Applicable Documents
- Module 3: Wire Preparation
- Module 4: Soldered Terminations
- Module 5: Crimp Terminations

DAY 2

- Review and Review Exercise
- Module 5 (cont.): Crimp Terminations
- Module 6: Insulation Displacement (IDC)
- Module 7: Ultrasonic Welding
- Module 8: Splices
- Module 9: Connectorization

DAY 3

- Review and Review Exercise
- Module 9 (cont.): Connectorization
- Module 10: Molding / Potting
- Module 11: Cable Assemblies and Wires
- Module 12: Marking Labeling
- Module 13: Coaxial and Twinaxial Cable Assemblies
- Module 14: Wire Bundle Securing

DAY 4

- Review and Review Exercise
- Module 14 (cont.): Wire Bundle Securing
- Module 15: Shielding
- Module 16: Cable/Wire Harness Protective Coverings
- Module 17: Installation
- Module 18: Solderless Wrap
- Module 19: Testing/Review

DAY 5 - OPTIONAL HANDS-ON LABS

Module 1: Lab Overview

- Review harness assembly print, materials and tooling

Module 2: Wire Prep and Solder Termination – no soldering

- Cut and semi-stripping five wires
- Install wires onto the harness board

Module 3: Lug Crimp Terminations

- Cut, strip and crimp two styles of lug-type terminals
- Install wires onto the harness board

Module 4: Pin Crimp Terminations

- Cut, strip and crimp two styles of pin terminals
- Install wires onto the harness board

Module 5: Coaxial Terminations

- Cut, strip RG59 wire; assemble two coaxial connections
- Install wires onto the harness board

Module 6: IDC Terminations

- Cut, strip CAT5 wire; crimp two IDC connectors
- Install wires onto the harness board

Module 7: Mass Terminations

- Cut, ribbon cable; crimp two mass termination connectors

Module 8: Harness Securing

- Secure the cable using tie-wraps and lacing cord