



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
- IPC-6012 Instructor & Operator Certification

Rework & Repair

- IPC-7711 & IPC-7721 Instructor & Operator Certification

Hand Soldering Skills

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

PCB Fundamentals

- Component Identification
- Electrostatic Discharge

PCB Design

- Essentials of PCB Design
- IPC Designer Certification

COUNTERFEIT COMPONENTS

IDEA-STD-1010

- Seminars & Workshops
- IDEA-STD-1010 Essentials
- SAE AS5553 Counterfeit Electronics

CABLE & WIRE

HARNESST 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 (additional fee applies)

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.

PREREQUISITES

- Completion of IPC's on-line IPC Essentials program*
- Completion of IPC's on-line Policies & Procedures program*
- Understanding of the Cable Wire Harness Industry
- Understanding of the English language, oral and written

*In order for IPC Certification to be issued, completion of these two on-line programs must be completed outside of class via IPC's website. If the IPC Enhanced Policies and Procedures Exam is also listed, in the IPC Pre-Course section, complete this exam on-line outside of class.

CLASS SIZE

Maximum number of students is limited to ten (10) to provide greater instructor interaction. Call early to reserve your space.

eTRAINING On-line training is available for some courses. Please inquire.

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

COURSE OUTLINE

DAY 1

- Module 1: General and Applicable Documents
- Module 2: Wire Preparation
- Module 3: Soldered Terminations
- Module 4: Crimp Terminations

DAY 2

- Review and Review Exercise
- Module 4 (cont.): Crimp Terminations
- Module 5: Insulation Displacement (IDC)
- Module 6: Ultrasonic Welding
- Module 7: Splices
- Module 8: Connectorization

DAY 3

- Review and Review Exercise
- Module 8 (cont.): Connectorization
- Module 9: Molding / Potting
- Module 10: Cable Assemblies and Wires
- Module 11: Marking Labeling
- Module 12: Coaxial and Biaxial Assemblies
- Module 13: Wire Bundle Securing

DAY 4

- Review and Review Exercise
- Module 13 (cont.): Wire Bundle Securing
- Module 14: Shielding
- Module 15: Cable/Wire Harness Protective Coverings
- Module 16: Finished Assembly Installation
- Module 17: Testing
- Module 18: High Voltage
- Review and Exams

DAY 5 - OPTIONAL HANDS-ON LABS (additional fee applies)

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