





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 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 SPECIALIST WITH OPTIONAL LAB

IPC/WHMA-A-620 Operator and Inspector Training & Certification Program

IPC/WHMA-A-620

COURSE DESCRIPTION

This 4-day, lectured course is a comprehensive, operator-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 engineers, quality supervisors, inspectors and manufacturing personnel responsible for quality assurance.

PREREQUISITES

- n Understanding of the Cable Wire Harness Industry
- n Understanding of the English language, oral and written

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:

- Policies and Procedures
- General and Applicable Documents
- Preparation
- Measuring Cable Assemblies and Wires
- Testing Cable Assemblies
- · Review and testing

Module 2:

- Crimp Terminations
- Insulation Displacement Connections
- Review and testing

DAY 2

Module 3:

- Soldered Terminations
- High Voltage
- · Review and testing

Module 4:

- Connectorization
- Molding/Potting
- Review and testing

DAY 3

Module 5:

- Ultrasonic Welding
- Splices
- · Review and testing

Module 6:

- Marking and Labeling
- Wire Bundle Securing
- Finished Assembly Installation
- · Review and testing

Module 7:

- Coaxial and Biaxial Assemblies
- · Review and testing

Module 8:

- Electrical Shielding
- Cable/Wire Harness Protective Coverings
- Review and testing

DAY 5 - OPTIONAL HANDS-0N 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