ADVANCED HAND SOLDERING TRAINING

Professional Training Course
Course Code: KR-023
Location: Microsolder Kft. Training Room, 1037 Budapest, Kiscsillag u. 18.
We can also organize this course on-site outside the indicated dates upon request.

Course Objective:
To establish or expand participants' knowledge for consistently performing high-quality hand soldering and rework tasks. The course focuses on teaching the correct execution of hand soldering and certain rework operations for through-hole and surface-mounted components.

Course Method:
Theoretical and practical training in Hungarian/English, accompanied by a slide presentation. Participants will have the opportunity to discuss practical issues they encounter and receive consultation.

Who Is It For?
Staff members involved in executing, inspecting, supervising, or managing hand soldering and/or certain rework soldering operations during circuit board assembly processes.

Curriculum (Total Duration: 2 Days, 16 Hours)

A. Theoretical Training (6 hours)

1. **General Soldering Knowledge**
   - Basic concepts and principles of soldering technology
   - The process of creating a soldered joint
   - Types and characteristics of solders
   - Purpose, types, and properties of fluxes
   - Acceptability criteria for soldered joints

2. **Hand Soldering Technology**
   - Soldering tools
   - Selection and handling of soldering tips
   - Materials and auxiliary substances used
   - Correct execution of hand soldering
   - Common hand soldering errors, their causes, and how to eliminate them
   - Inspection of hand soldering
   - Occupational safety in hand soldering

3. **Post-Soldering Repairs (Rework)**
    - Definition of repair and rework
    - Relevant IPC standards for repair and rework
    - Reworking through-hole soldering joints
    - Reworking surface-mounted soldering joints
    - Materials and tools for rework purposes
    - Soldering and desoldering using soldering irons and desoldering tweezers
    - Common rework errors and how to avoid them

B. Practical Training (10 hours)

- Task overview — soldering and desoldering through-hole and surface-mounted components
- Demonstration of task execution
- Practice exercises
- Evaluation of task execution
- Practicing necessary corrections if needed
- Re-evaluation of task execution

Knowledge Assessment and Certification:
Written final test, minimum passing score: 70%.
Correct execution of practical tasks with soldering results acceptable according to IPC-A-610 Class 3.
Participants who meet the requirements will receive a written certificate of course completion.

Microsolder Kft. is an IPC member, an authorized IPC distributor, an authorized IPC training center, and an IPC QML (Qualified Manufacturer Listing) auditor.