

# Rework & Repair of PCB Assemblies

# Scope:

The basic system reliability depends grossly on the integrity of interconnecting elements, which always outnumbers of components in a printed circuit board assembly. Desirable practice to make them "**Do it Right the first time**" through an adequate process control. However occasionally in few cases rework and repair of Printed Board assemblies becomes unavoidable from the point of view of non availability of costly and critical components, unacceptability of unduly long downtime.

The main thrust is to be given to the "Methods tools and materials' to be used as standard inputs for repairing or reworking a particular workmanship/assembly problem.

## Objective:

The course is aimed at equipping the participant with the requisite knowledge and skill to learn rework/repair as standard process oriented operation as per recommended standards.

## Target Participants:

Production/QA/ Service personnel concerned with electronic product manufacturing/ evaluation.

#### Duration: 3 days

## **Course Contents:**

- Basic aspects of soldering, Material control, solderability etc.,
- Fundamentals of Printed Circuit Boards, Types, mounting practices, quality aspects
- Basic concepts of rework, repair, modification, applicable standards, preparatory conditions
- Rework and repair techniques, component removal & replacement through hole and surface mount components, methods of solder removal, repair of damaged PCB patterns
- Quality Assurance of assemblies and joints, and Safety precautions
- Precautions in handling of static sensitive devices



# Methodology

- **Course delivery :** STQC courses are normally delivered in English. However, depending upon the need the course are also delivered in Hindi or regional languages as desired. The STQC- courses are class room type and conducted at STQC Centres.
- **Faculties:** The faculties / trainers for this course are well qualified and experienced Scientists from STQC and have domain specific expertise.
- **Course Material:** The delegates will receive a course book prepared by STQC during the commencement of course. In addition, for hands on practice set of tools and kits will also be demonstrated / provided as appropriate / applicable.

## **Benefits**

Upon qualification of this course, participants will be able to perform more professionally.

## Further Information

For venue and dates of open advertised courses, please visit STQC website and contact course coordinator STQC Directorate, New Delhi.

Onsite course and /or tailor made courses can also be offered on specific request.