



Surface Mount Technology

Scope:

Electronic Production worldwide has undergone a revolutionary change in both components and manufacturing techniques. Surface Mounted Assembly (SMA) is totally new kind of automated electronic assembly that uses a totally different kind of device package. The technology as a whole called Surface Mount Technology (SMT) is capable of meeting all the three primary requirements of electronic assemblies, namely size reduction, cost reduction and better reliability. The technology is applicable to all equipments, be it military or industrial products.

Objective:

After attending this course the participant with the requisite knowledge & skill to perform soldering of Surface Mount assemblies using hand soldering & reflow soldering.

Target Group:

Production/QA/R&D personnel concerned with electronic product manufacturing/evaluation either already using Surface Mount Devices or planning to use Surface Mount Technology.

Course contents:

- Fundamentals of conventional through hole technology.
- Introduction to Surface Mount Technology
- Materials selection like solder paste, cleaning solvents etc.,
- Surface Mount components, packages, substrates etc.,
- Soldering of Surface Mount Assemblies using Dual wave and reflow soldering
- Inspection of Surface Mount assemblies
- Rework and repair of Surface Mount Soldered joints



Course Structure:

The course curriculum will meet the requirements of Process Control as per ISO 9000 and workmanship quality as per relevant standards. Pre lunch session will be spent on theoretical lectures on the various aspects of Surface Mount Technology followed by hands on training and demonstration in the post lunch session. Relevant tutorial video films/slides will also be shown.

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.