

SMT Process Workshop

Customers attending this workshop will receive hands-on experience and gain valuable knowledge of the SMT process. They will gain the confidence to better handle their process manufacturing issues.

Intended Audience:

Any process engineers, equipment operators and maintenance personnel responsible for the SMT process, operation, engineering and equipment.

Objectives:

Upon completion of the course, the student will be better qualified to troubleshoot and rectify day-to-day process problems that occur during manufacturing.

SMT Overview:

This module provides an introductory overview of the SMT manufacturing process. It describes the production line and the various steps of the manufacturing process. With high-level overviews of each production step, the student will gain a basic understanding of the SMT industry. Materials such as PCB's, solder paste, stencils and squeegees are also covered. The overview provides a complete look into the SMT process.

Basic and Ultra-fine Pitch Stencil Printing:

By learning the skills required to perform successful printing, the student will master stencil printing for all applications. Printing is the most important step in the process as most of the opportunities for defects originate at that point. The 4 key elements of stencil printing are discussed in detail. The discussion on these elements include specific details about the manufacturing process, selection process and things to consider when ordering and using stencils, squeegees, solder paste and PCB's. This information is extremely beneficial when trying to determine which types of materials and tooling is best suited for your application.

Dispensing:

Adhesive dispensing for "bottom side" passives and flip chip underfill are an important step in the process. This presentation will discuss the basics of dispensing and its optimization.

Problem Solving and Troubleshooting:

Problem solving and troubleshooting of process issues are crucial in maintaining and improving SMT assembly performance and quality. This workshop will discuss the fundamentals for effective problem solving and troubleshooting techniques.

Prerequisites:

Ability to read and write the English language, a minimum of 30 days experience in SMT automated assembly, practices and procedures.

Course Duration:

3 Days

Classes begin each day at 9:00AM and end at 4:30PM.

(times are approximate and determined by each day's progress)