



SMTA Online Training Courses

Assembly Essentials Package

Includes 6 courses:

- Stencil Printing
- Component Placement
- Reflow Soldering
- Wave Soldering
- Rework - ***NEW!***
- Cleaning - ***NEW!***

Low-cost

Self-paced

***Electronics
manufacturing
fundamentals***

***Great for
technicians,
new engineers,
even sales and
management!***

**Enroll In The
Assembly Essentials Package Today!**

www.smta.org/training

Assembly Essentials Package Course Descriptions

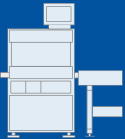
Printing 101



Stencil Printing 101

Identify and learn to prevent print defects like shorting, opens, non-wetting, and more. Become familiar with materials and equipment like solder paste, squeegee blades, PCBs, stencils, printing parameters, and basic process development.

Placement 101



Component Placement 101

Learn about component types as they affect placement, process steps including machine set up and repair cycle, equipment parts like nozzles and vision systems, and the ability to identify defects such as polarity, missing components, billboards, etc.

Reflow 101



Reflow Soldering 101

Gain a basic understanding of the reflow soldering process including profiling and fixturing, baseline process parameters and their influence on solder joint quality, common process defects like bridging, opens, tombstoning, solder balls and more.

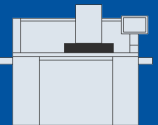
Wave 101



Wave Soldering 101

Review all aspects of the wave solder process to understand different methods of applying flux, different types of preheat designs, and how the boards should interact with the solder wave.

Rework 101



Rework 101 - NEW!

Step through the rework process for both SMT and through-hole components, understanding critical temperature and moisture considerations, heating methods, and types of acceptance criteria.

Cleaning 101



Cleaning 101 - NEW!

Understand the importance of knowing when to clean, failure mechanisms associated with not cleaning or not cleaning properly, equipment options, material compatibility, cleanliness standards and process basics.