



## The Importance of On-Site Training for PCB Assembly

If there is one way to guarantee world-class results in the electronics industry, it's by ensuring factory floor technicians enjoy consistent, regular training. Regular training ensures that assembly line technicians use standardized methods, generating efficiencies and improving the assembly process.

While most PCB assembly companies develop standardized methods and teach them to their staff, changes generally get implemented in an ad hoc manner. Eventually, this leads to a situation where line technicians use different, and often not entirely compatible, methods for assembly.

### On-Site Training Advances Where Formal Training Leaves Off

PCB assembly companies need to implement highly standardized training schedules to guarantee top-quality services for their clients. Similarly, electronics manufacturers that rely on PCB assemblers can implement consistent training schedules to ensure that manufacturability is prioritized from the very beginning of the design process.

[Chris Ellis of MC Assembly](#) points out that many electronics manufacturers don't design for ease of manufacturability. They engineer their products to address consumer needs, but often neglect assembly concerns that can make their products' assembly more efficient.

In this instance, it's up to PCB assembly companies to offer guidance. If a bill of materials has hundreds of different part numbers, a PCB company would have to dedicate multiple pick-and-place machines to complete the order – but most PCB assembly companies don't have unlimited resources to dedicate to purchasing redundant machinery.

This is where on-site training comes in. When line technicians are deeply aware of the advantages and limitations of the specific tools they are using, they become empowered to suggest improvements on a project-by-project basis. This is something that only a handful of PCB assembly brands can do.

Formal training helps technicians and supervisors deliver broad, high-level input to the PCB assembly process, but it is machine-specific on-site training that allows minute details to be adjusted. However, many PCB line technicians are not formally trained – putting even greater importance on company training.

### Why Aren't Most PCB Technicians Formally Trained?

On one hand, it's surprising just how many line technicians in the PCB assembly industry lack formal training. On another, it is something to be expected, since vocational and engineering schools often do not offer coursework that focuses on the industry.

Many line technicians come from a similar background, like electrical engineering. This helps deliver a broad familiarity with the PCB process, but does not offer the kind of specialized knowledge that a line technician could use to, for instance, suggest a money-saving process improvement to a supervisor.

On-site PCB training that focuses on the specifics of industry-leading hardware bridges the gap between general knowledge and worksite-specific experience.