



7 Manufacturing Methods to Reduce Costs in Your Assembly

Tooling can be an expensive startup cost for your project. Hand tools can cost from \$100 to \$1,500, die sets and applicators can be \$4,000, and machines can be \$10,000 or more. These costs could crush your budget and send you back to the drawing board. Our Engineers can help design a harness that uses parts with ready-made tooling. There are no tooling charges if we are able to use tooling that we already have, and this could save months on your project timeline by not having to wait for tooling to arrive.

Volume is the first cost saving that most people think about. Generally, the larger the volume the more the setup costs can be spread out. Instead of taking 1-hour setup to build 10 assemblies where each assembly carries 1/10th of the setup costs, if you build 100 now each assembly only carries 1/100th of the setup cost. Volume also allows the manufacturer to use different tooling. Manufacturers should look at the total build time of setup plus cycle. If you are building thousands of an assembly, you may use a fully automatic machine that has a little longer setup time but a much faster cycle time.

Blanket Orders are commonly used to help a buyer save time by sending one purchase order for a 6-12 month period, but they also can save costs. A blanket order allows the contract manufacturer to send a blanket order to their material providers and often receive volume discounts that are passed onto you the customer. The best part is you can still keep your release volumes lower to keep your inventory low!

Loose Versus Reel terminals can mean huge labor cost differences. Many engineers call out loose piece terminals because loose was found on a catalog shop or they had hand tooling in their office for prototypes. Hand tools work well for prototypes but not production. The best practice is to call out on the bill of materials both the loose piece or reeled terminal part number.

Franchised lines not only allow TLC Electronics to have access directly to top manufacture personnel and resources, but it also means we are able to get factory direct pricing. The savings is passed onto our customers. Factory direct also saves time and transportation costs.

Providing Wire Specifications instead of Wire Manufacture will save you not only costs, but also time. Some customers list a manufacture of wire, shrink tubing or cable management on the bill of materials. This forces us to use that specific brand name product. We work with customers to choose a UL type or Mil Spec number. This allows TLC Electronics to buy these products using bulk discounts, use them for multiple customers and keep them in our inventory.

Design Registration is another advantage you have when working with TLC Electronics. We not only receive factory direct support and pricing, but also get discounts for working with you to design in product. These savings are passed onto our customer, but we need to be working with you on the design so please make sure to contact us early in the design phase.