

Abstract

To cope with increasing competition in the business environment, manufacturers have to make continuous effort to improve production process and solve quality problems with the purpose of enhancing customer satisfaction.

This research aimed at studying quality problems of Electronics-Flexible Print Circuits (E-FPC) with particular emphasis on residual copper being left on the product leading to product malfunction. The study involves the analysis of cutting process and the design of cutting pattern using the Theory of the Solution of Inventive Problems. The means for improvement were proposed by increasing the cutting area to avoid the copper region. The amount of residual copper after cutting process were then investigated. Two types of cutting pattern are found to reduce residual copper. Based on the Analysis of Variance, it was found that the least amount of residual copper (159.47 pieces) was associated with the cutting pattern that utilized both the front and back of the product.