

# **Using FMEA & Weibull analysis to forecast the bearing lifetime of routing machine – a case study of a PCB**

## **Company**

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## **ABSTRACT**

In recent years, changes in market strategy, machining of mass production from the past, and gradually a small amount of high quality, which also makes the product quality control and predict the behavior of the machine parts life before production more and more attention. In the printed circuit board(PCB) factory, the machines have to maintain a 24-hour production, if unable to maintain normal operation, the production yield of the product is not low, it is to direct disposal of the unit. In order to enhance the production of machine operating time, and the product can maintain a certain quality level, it is necessary to implement machine regular maintenance work. In order to assess the life time of the machine parts, this study reliability analysis method most commonly used in manufacturing - Weber analysis and FMEA(Failure Mode and Effects Analysis), explore the life of the machine parts forecasting, maintenance cycle, to enhance competitive advantage and cost reduction strategies. The study was to predict the life of the molding machine maintenance outsourcing project routing process of the printed circuit board to investigate, collect A company history machine equipment maintenance outsourcing data and to maintain the highest proportion of part - bearing based.

Keyword: PCB 、 Weibull analysis 、 FMEA