

Abstract

One of the machines in the Secondary department of PT PID Ongkowidjojo is the Maker machine. This machine is responsible for cigarette production. In the production process, seven types of defects were identified, namely tears on the wrapper, porous cigarettes, improper overlap, detachment of wrapper and tipping, varying diameters, varying tipping lengths, and the absence of filters in cigarettes. These defects render the production process ineffective and inefficient. Therefore, a study is needed to analyze the process by initially collecting data.

Initial data collected over a period of 3 months showed that defects such as porosity and tears on the wrapper had the highest Risk Priority Number (RPN) values. Thus, improvement recommendations are necessary to reduce the RPN values. The recommended improvements will be implemented over a two-week period to observe the decrease in RPN values. After the implementation, the existing data will be used in the Failure Mode and Effect Analysis (FMEA) to measure the average RPN values after the improvements. The results show a decrease in the RPN value for porosity from 269.5 to 126 and for tears on the wrapper from 231 to 136.5.

Kata Kunci : *Cigarette, Reject, Fault Tree Analyst, FMEA*