

ABSTRACT

PT. Baruna Trayindo Jaya is a manufacturing company that produces cable trays. Based on observations and research that has been done, there are product defects or defects in the product during the manufacturing process. The purpose of this study using the six sigma method is to be able to identify and analyze and provide suggestions to reduce the number of product defects produced through the six sigma approach. Based on the calculation of process capability and the sigma value in improving product quality is 12000 DPMO with a sigma value of 3.8. Based on FMEA, it can be seen that the cause of product defects is defects in the surface holes, defects in the jointing holes. Based on the calculation of the RPN in order to determine the highest priority focus is the surface hole defect which has an RPN value of 252 with a severity level of 6. The proposed improvements are in the form of work SOPs, checksheets, one point lesson and design. It is hoped that this research can be useful for PT. Baruna Trayindo Jaya in providing input and an overview of quality control in order to reduce defects in products.

Keywords: Quality Control, Six Sigma, Cable Tray