ABSTRACT

Competition and technological advances have forced today's consumers are more critical of the products offered. Consumers tend to choose an affordable product with good quality. While in the producers, they try to meet consumers' wants and needs.

The producers tried to keep production costs down to more affordable communities in the market price. If the production cost is pressed then the quality on offer is also declined. Therefore, producers reduce production costs by pressing the number of reject and rework in order to keep product quality. Two things that suck and the company's budget process in general.

PT. Alkindo Mitraraya (PT. AMR), which produces resin realize these opportunities. Thus improving the quality of the product of PT. AMR done by reducing the failure processes and products continuously. One of the tools that quality improvement is discussed in this research, six sigma.

Six Sigma is a quality improvement tool by conducting focus on product and process control. With DMAIC method (Define, Measure, Analyze, Improve and Control) to identify problems occurring in the measured and analyzed to improve quality by controlling the processes and products continuously. The purpose of Six Sigma is reducing failure and create zero defect products. Measurement of Six Sigma done by calculating the process capability, the number of failures of products or DPMO (Defect Per Million Opportunities) and the sigma level for the process.

Keywords: Six Sigma, DMAIC, DPMO, zero defects, resin, improving the quality