

ABSTRACT

Transportation needs, especially two-wheeled vehicles, increase continuously and significantly in the last two years. This matter generates an intense competition among companies in the automotive sector. PT. AWP as one of the companies in manufacturing industry which produces automobile parts, feels that it has to increase its competitiveness by improving the quality of the product. The improvement can be done by using six sigma methods, which its reliability have been recognized and adopted by major corporation world-class.

The problems which is faced by PT. AWP is the high number of defect products in the process of Painting. One of its product is cover inner white. The number of cover inner white defect products from January 2011 – March 2011 reaches to 25.259 which is 68,18% of total inspections. Although the company has rework, the company will remain to be disadvantaged in terms of efficiency because of extra costs and time, but it does not add value. Therefore, to improve the quality of processed Painting, we can use six sigma.

Six sigma method consists of two parts : people power and process. People power is a person who plays a role in running the six sigma process to improve quality. Without the role of the people power, the process of six sigma will not run properly. Power process commonly known by the stages of DMAIC : Define, Measure, Analyze, Improve and Control. Based on the DMAIC stages, we could found the proposed improvements which will be given to the PT. AWP to improve quality control.

Keywords : *Six Sigma, CTQ, DPMO, Quality Improvement, Painting.*