

ABSTRACT

PT. Goodrich PINDAD Aeronautical Systems Indonesia is a company who does the supply of aerospace components worldwide. To support the success of its business, PT. PINDAD Goodrich is committed to maintaining the quality of the product. This is realized by applying the quality control system for each production process. But then, the company is still faced with the problem of quality, this is the existence of a defective product that does not have specifications, especially on products actuator body. In period April 2009 - January 2010 the number of reject rate, which is owned by the actuator body has passed the 5% tolerance limit set by the company.

Leaving from the above, it will be done to control the number of defects that occur with one of the methods of Six Sigma quality control. The main principle of Six Sigma is to achieve perfection (3.4 DPMO) by controlling the processes that occur. As for the stages in the implementation of Six Sigma is Define, Measure, Analyze, Improve, Control (DMAIC). But the research is carried out until the stage of improvement. Define is the determination of Six Sigma projects, the mapping process, and formulation of Critical to Quality (CTQ). At the phase of measure conducted by measuring stability process, and the sigma value products at the output level. In the analyze phase, carried out the stability analysis, sigma-value analysis, and cause-effect analysis to identify causes factors of defects. In the improve phase, carried out the proposal of defect's improvements and the priority of improvements which can be used as a reference by the company.

Based on the data, it is known that most contribute to critical product is the product type actuator body by defect type identified are the defect size is not correct, the caliber is not appropriate and not appropriate geometry. Sigma value of Actuator Body for a period of week 5 up to week-44 in 2009 to 2010 was amounted to 3.57. Factors that cause the occurrence of these defects are in terms of man (for example, less precise, less thorough, fatigue), machine (for example, lack of regular maintenance), method (for example, setting complicated machinery) and materials (for example, tensile strength and power press less) exist. To overcome these problems, improvement efforts are required in accordance with existing problems such as providing field training, performance maintenance on a regular basis, giving rewards and punishments, documentation and system data produce of in complete and others.

Keyword : six sigma. defect, Critical to Quality (CTQ), sigma level.