

ABSTRACT

PT Genta Trikarya is a company manufacturing industry that produces acoustic guitar and ukulele to the music industry. The average production per month as many as 860 pieces. According to the company, January 2015 until October 2015 the number of defect products are fluctuate, and some exceed the standard defect companies are 3%. Based on historical company data, the largest defective is the defect of acoustics gelombang that will be the focus of this research.

This research used a method of six sigma to reduce defect waves. Stage in six sigma are namely DMAIC (Define, Measure, Analyze, Improve, and Control). The Define Stage, identify problems that finally found which is “gelombang defect” with the percentage of 31,88% defect. And continued to the Measure Stage that measuring stability process (Control Chart p) and capabilities process (DPMO and levels of sigma), with the results obtained that there is the process that out of control. After knew that there is a process that is not controlled, and then on Analyze Stage to determines the priorities of repair of “gelombang defect” and find roots of the cause. The Improve Stage is the establishment of repair proposal to reduce “gelombang defect”.

The improvements proposal are given to the human factor, machine, and environment as the causes of defect waves. The proposal for improvement are, make a warning display setting of processing time on the machine, make the tools to cool the side body, to increase the alarm system buzzer timer on the machine, and provides generator as a source of reserve electricity.

Keywords: Acoustic Guitar, Side Body, Six Sigma, CTQ, FMEA, Defective Gelombang.