ABSTRACT

PT Sinar Terang Logam Jaya (PT STALLION) is a company engaged in manufacturing producing parts (spare parts) special categories of vehicles are motorcycles both single part and sub-assembly parts. Oil Lock Collar products is one of the products produced by the company with the highest defect during the year of 2015. Problems in producing Oil Lock Collar is a defect product whose value is above the tolerance defect company that is 2%. The defect of concern is defect triming, chipped, and wrinkles.

Improvements made by the Six Sigma approach to the method DMAIC (Define, Measure, Analyze, Improve, Control). In the define phase, to identify problems, mapping core processes using SIPOC diagram, identify CTQ and the type of defect that occurs. In the measure phase measurements using the process stability control map p and sigma process capability at 4.524. In the analyze phase is to identify the root cause of the defect determination using the fishbone diagram and method 5 why's and the calculation of the value of the RPN in FMEA. At this stage of the preparation of the proposed improvements Improve done to reduce defect triming, chipped and wrinkles.

Proposed improvements obtained to overcome the defect triming ie manufacturing work instructions mounting machine parts to dies tured and manufacture sheets for operator supervision. Proposed improvements obtained to overcome the chipped defect namely the addition of a stopper on a press machine dies. Proposed improvements obtained to overcome the defects of wrinkles is manufacturing work instructions for the cleaning of dies and dies cleansing warning display and manufacturing schedule periodic cleaning procedures for the implementation of storage area of sheet metal.

Keyword: *Oil Lock Collar, Six Sigma, Critical to Quality* (CTQ), *Defect, DMAIC*