

## **ABSTRACT**

*PT. XYZ is a manufacturing company that produces rubber automotive components. One of its product is Cushion Seat Mount FU 150 (45149-25G00) which can be found on Suzuki Satria FU 150. There is a lot of demand but there is a lot of defective too so that cause a loss for company and customer. Based on production data and number defective components of Cushion Seat Mount FU 150 (45149-25G00) on March 2014-February 2015, defective products which produced during one year is occur above tolerance boundary that considered by the company which is 0,5%. Therefore, this research will identify factors that cause defective products and give proposed improvements that can be minimizing or eliminating defect causes in PT. XYZ.*

*This research used six sigma method which consists of five stages, define, measure, analyze, improve, and control. At define stage is done CTQ identification and mapping of production process. At measure stage is done measurement of process stability and measurement of process capability. At analyze stage has found four causes of defective product that will be given the proposed improvements. The proposed improvement at improve stage there are procurement of small digital thermometer in the factory, procurement of display as reminder for adjustment of press machine, procurement of display as reminder to the operator to cleaning the mold properly, socialization about how to bumping properly, and make a door at the factory and close the hole in the wall.*

*Keywords: Cushion Seat Mount FU 150 (45149-25G00), defective product, six sigma, DMAIC*