

ABSTRACT

PT. Adyawinsa Stamping Industries is a business part of PT Adyawinsa that produces a variety of vehicle parts, from the service part to the construction part. PT. Stamping Industries Adyawinsa always strive to maintain the quality of the production, but in reality PT. Adyawinsa Stamping Industries still have quality problems. There are many product defects claim and defective product which exceeds the company's defect tolerance.

From the data obtained from Quality Division, products with the highest level of claims are Bracket Sub Assy Lower Arm which used as a shock arbsorbser for cars. Bracket Sub Assy Lower Arm consists of three parts, namely Bracket Lower Controlling Inner, Bracket Lower Controlling Outer, dan Extension Floor Cross Rear Side. Based on Quality Divison's data, Extension Floor Cross Rear Side is part with the highest level of defect, so quality improving will be conducted for that part.

Six Sigma methods is used and using the DMAIC which is define, measure, analyze, and improve. In the define phase, seven types of defects identified which 86.44% are caused by burry, crack, and bending. Measure phase shows DPMO process at 5883,015 and average sigma level is 4,02088. Then the analyze phase used to analyze the root cause of the problem to make some proposed improvement. Some of the proposed improvements are work instructions making, make some additional inspections, and the provision of tools such as displays, industrial fan, and lubricants.

Key Words: *Six Sigma, DMAIC, Stamping process.*