

ABSTRACT

PT. XYZ is one of the manufacturing companies that produces the manufacture of motorcycle spare parts, one of the spare parts produced is the Adjuster Comp Chain Type K45 spare parts. The process that is the focus of this research is the bending process stages in plate making. There is a defect that has the largest defective number, namely scratch where there is a scratch on the surface of the plate and dented where there is a dent on the surface of the plate when the bending process is carried out due to the plate sliding on the dies. So that the shape and size of the plate does not match the dies. Therefore, given the design of improvement proposals to improve the stages of the bending process that are problematic by using the DMAI (Define, Measure, Analyze, Improve) method.

DMAI is an iterative process that provides structure and guidelines for improving processes in any workplace. First, the define stage identifies the CTQ of products and processes, data on the number of production and the number of defects, types of defects, and the flow of the production process. The two measure stages discuss the measurement of process stability and capability. The three Analyze stages analyze the root of the problem with a fishbone diagram, 5's why and determine the priority of repairs using FMEA. The four stages of improve design a problematic process stage improvement proposal using 5W + 1H.

The results of the proposed improvement design are in the form of supporting tools and visual displays using the DMAI method. Provision of support tools to minimize plate errors shifting from the dies of this tool which are located on the right and left sides of the dies. Making a visual display to minimize plate errors is not in accordance with dies to remind operators of the provisions of placing plates on dies.

Keywords : Adjuster, Bending, Six Sigma, DMAI, Defect