# ABSTRACT

S.T.P Rubber as one of home manufacturing business industry that produce motorcycle spare part (rubber base barium) is one of company that is being trying to increase quality of product in order to still vie with others conspecific company which more and more in numbers in a few this year . Until now, the company still be given on problem quality of that is existence of defect product that is is not fulfills specification. Problems of this defect product becomes a real thing crusial for soon to solve because it classic problem and loss generated not a few. To solve the problem, hence need to be done repair of quality by determining critical product that giving contribution of biggest defect and identifies defect type happened as seeking guidance of root cause of product handicap appearance later on will be followed up based on repair proposal to operation system of quality.

Leaving from above matter hence the researcher try to control handicapped amount that happened with one of method of quality operation that is Six Sigma. Six Sigma is a method of systematic quality operation, erudite and every decision based on the fact and the data. Especial principle of Six Sigma is reaching perfection (3, 4 DPMO) with controlling process that happened. As for steps in implementation of Six Sigma are Define, Measure, Analyze, Improve, and Control (DMAIC). But, in this research only be conducted until improve phase. On the Phase of Define, identified to factors having an effect on the quality of case critical product and need to be done by the repair process. Then at the phase of Measure conducted by measuring the performance of quality at the output and process level. After the existing condition measured, hence be continued with the next step that is Analyze, where at this phase will be identified the sources and the cause of incidence the quality problem at case critical product and analyze stability and capability process. And at the improve phase will be given a technical repair proposal and process for minimizing the incidence of handicap at critical product

Based on calculation which has been done, knowable that critical product that is very contribution is type product Filter Shogun with defect type identified are tear/perforated defect, defect is not intact, white defect, and sarmentose defect. Influencing factors are from the angle of man ( for example unable to beware of, unable to check, fatigue, wrong measures raw material, etc), equipment ( for example not available of timer, and measuring instrument of cutting compond), , area ( for example lay out which is not regular and lack of lighting), machine ( for example lack of periodical maitenance and calibration to measuring instrument), and method ( for

example inexistence of good inspection method to raw material). To overcome the problems, we need to be done repair effort as according to the problemss for example by doing incoming inspect tightly regular and, periodical maintenance, giving of reward and punishment, documentation and system data produce of in complete, repair of job desk employee, and compilation of good organization chart, etc.

Key words : Six Sigma, defect product, DPMO, sigma value, quality control