

ABSTRACT

PT Inti Bagas Perkasa represent one of subsidiary company of PT. PG Rajawali II special projected to handle commercialisation brakes put on the brakes from bagasse, start from brake shoe up to brake pads of car and motor. Even Though, the company still be given on the quality problem that is the existence of brake product "IBP Brake Pads" which do not fulfill the specification/defects. Defected product is a lavish thing because it means that we using the resources which have no value added. That's why, Inti Bagas Perkasa Co. needs to do improvement and control to minimize defected products by finding and controlling some factors that influence the quality of their products(*Critical To Quality*) which later on will be pursued to repair the system proposal of operation the quality of brake product "IBP Brake Pads".

Leaving from above matter hence the researcher try to control defected 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 brake product "IBP Brake Pads" and need 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 brake product "IBP Brake Pads" 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 defect at brake product "IBP Brake Pads".

Pursuant to measurement conducted with the quality data from October 2007 untill March 2008 hence be known that the critical factors of quality (CTQ) found on brake product "IBP Brake Pads" is the product density, product strength, matching form, and product thickness. The fourth's critical to quality have characteristics that are barst defect, kembang defect, gompel defect, plate defect, unsymmetrical defect, and thickness defect. Then, those are given some priority improvement for brake defect of IBP Brake pads based on causes defect factors.

Keywords: Product defect, Critical to Quality (CTQ), DPMO, Six Sigma.