ABSTRACT

PT. Agronesia (Division of Engineering Rubber Industry) is an industrial manufacturing company with the trademark "Inkaba" which produce technical rubber products for industrial needs. This research focus on the type of rubber step Back Aspira (AB). In the rubber production process step AB, waste discovered defects that can affect product quality. Based on company data, the average defect rate that occurred was 2.63% (limit of tolerance of companies below 2%). Therefore, the need to design an improvement to minimize waste defect.

In an effort to minimize waste defect, use Lean six sigma methods with DMAI stages, which define, measure, analyze, and improve. In the define phase, carried depiction SIPOC and VSM mapping to define the problem occurred, is waste defect. Measure phase, made the determination CTQ, KPI's waste defect, measurement stability and process capability is known that the performance of rubber production process step AB is still not stable, with an average sigma level of 4,0829σ. Phase analyze, determine the root cause of the problem using a fishbone diagram, 5 why's, and FMEA is known that the dominant defect found in rubber production process step AB is uneven. The last stage of this research that improve phase which is a draft proposal to minimize waste defect consisting of design the display, addition of tools cleanliness to the engine area, design the cutting compound tools namely rail rubber cutter, and a mechanism to make the process of replacement parts on the machine.

Keywords : *Lean six sigma, Waste Defect, Display, Andon.*