ABSTRACT

PT. Aswi Perkasa *is a company that produces wallets, named Planet Ocean and Teddy Bear. Planet Ocean is produced more than Teddy Bear. Until now, the company is still facing the product quality problems. Quality problems is indicated by the large number of defects generated in a wallets production with an average percentage of defects amount 1.94% over the tolerance limits amount 1%. The improvement can be done by using Six Sigma method, in order to achieve zero defect.*

In Six Sigma there are five steps, called DMAIC (*Define, Measure, Analyze, Improve, Control*). *In define phase, researcher defined Planet Oceans production process and determined CTQ. In measure phase, researcher calculated the process stability, DPMO and sigma level. In analyze phase, researcher analiyzed problems to determine the root cause by using fish bone diagram. In improve phase, researcher given an improvement to reduce the number of defects and identified priority of improve by using FMEA.*

In this research, CTQ that are identified are stitching tidiness, product hygiene, and physical perfection of product. Based on those CTQ there are five types of defect, that are slip stitch, loose stitch, embroidery defect, screen printing defects, and unmatched shape. By using the pareto diagram are known three types of defect of the most influential, they are slip stitch, loose stitch and embroidery defect. Those types of defect are caused by several factors, they are slipshod operators, lack discipline operators, operators in a hurry, no checked machines, didn't fit setting machine, and the smell of glue. To respond the problems, researcher proposes improvement by making SOP, making mall picture, tight control, installating exhaust fan, using mask, adding operators, supplying water on production floor.

Keywords :Six Sigma, fish bone diagram, Failure Mode and Effect Analysis