

ABSTRACT

PT. Lestari Mahaputra Buana (LMB) is one of pencil manufacture companies. Pencil type that is investigated in this research focuses on colour pencil. In colour pencil production, researcher found waste defect that is affecting production target achievement. According to company data, the average of defect rate from Januari to December in 2013 is above company tolerance limit which is above 3%. Therefore that, it should be designed an improvement to pencil production process in attempt to minimize waste defect.

Lean manufacturing method is used in attempt to minimize waste defect. This research is started with primer data collection that will be processed, and then produce Value Stream Mapping (VSM) and Process Activity Mapping (PAM) current state which is useful for mapping stream and time beforehand. After that it is conducted identification type of dominant defect using Pareto diagram, using Fishbone diagram and 5 Why for identification waste defect cause. From Pareto diagram result is known that the focus from this research identifies problem and root cause of the waste defect type occurrence which is called not full stamping. Tools of lean manufacturing that are written in the form of pokayoke and display is used as problem solving.

Based on utilization of lean manufacturing tools, the proposed design of improvement consist of preventive maintenance activities implementation, conducting training and assisting system for employees, establish display and hollow location on the locking rod spring.

Keyword: Lean Manufacturing, Waste Defect, Value Stream Mapping, Process Activity Mapping, Pokayoke, Display