

ABSTRACT

PT. Marin Liza Pharmacy is a manufacturing company that produces various kinds of solid and semi-solid pharmaceuticals. The focus of this research is on semi-solid Whitfield ointment based on observations, there are several wastes found in the production process. The waste that is the focus of this research is waste waiting time. The method to minimize this waste is to propose a design using lean manufacturing. The study began by making observations to obtain data that supports the mapping of the Whitfield ointment production process that occurs using the Operation Process Chart (OPC), Process Activity Mapping (PAM), and Value Stream Mapping (VSM). So the total time of the known Non Value Added process is 121061.3 seconds or 68% of the lead time. After that, an analysis of the root causes of waste waiting time was carried out using 5 whys and fishbone diagrams. The results of the analysis of the causes of this waste can be used to determine the proposed design in the form of a filler machine maintenance schedule using preventive maintenance to reduce non-value added. Conditions in the future, the proposed design can eliminate waiting time and repair time which causes waste waiting time. Based on the future state, the total non-value added time can be reduced by 12170 seconds which is obtained from the elimination of waiting time and repair time.

Keywords: Lean Manufacturing, Waste Waiting Time, Value Stream Mapping, 5 Whys, Preventive Maintenance