

ABSTRACT

CV. ABC Offset is a printing company with make to order system, which hanger sample is a product being ordered constantly by textile companies. In January, February, June, August and October the amount production did not reach the demand (73%, 80%, 92%, 71%, dan 50%). It was due to the problem that inhibit production. Based on field observation and questionnaire data processing, it was known that the dominant waste occurred in the production process of hanger sample were waste waiting and waste inventory, where the research will be focused on waste waiting. Effort to minimize the waste in this research will be done with lean manufacturing approach. The research will be started by collecting data, such as production process flow, cycle time, questionnaire, demand data, production data, number of operators and work hour. After that, value stream mapping (VSM) and process activity mapping (PAM) current state will be made for mapping the process flow. The next step is identifying the root cause of waste waiting using fishbone diagram, pareto diagram and 5 whys. After the root cause is known, the proposed improvement is made to minimize waste waiting where the subject that will be used are facility layout planning and product design. Then, value stream mapping (VSM) future state will be made for mapping the flow process and improvements that will be proposed.

Keywords: lean manufacturing, value stream mapping, process activity mapping, waste waiting, facility layout planning