

ABSTRACT

CV Wira Utama is one of garmen industry that located in Cimahi. Based on production data from January to December 2018, there were delays in shipments caused by unachieved production targets. The shirt was one of the products that were routinely produced and became the object of this research. In the process of producing the shirt it was found that there were works in process (WIP) on several work stations. WIP was indicated as a waste of inventory which made longer production time, so that the production target was not achieved. The approach that can be used to eliminate or minimize waste in production systems is lean manufacturing. Based on these problems, with a lean manufacturing approach, value stream napping is applied to know the flow of the production process and process activity mapping is applied to identify waste. Cause and effect diagram are used to identify the root causes of waste inventory. Furthermore, the proposed improvement was designed to reduce the causes of waste of inventory by applying a kanban. After the proposed improvement has been implemented, then the future state mapping could be created. The result of this study was decreasing number of WIP which by 66.25%.

Keywords: *Lean Manufacturing, Value Stream Mapping, Process Activity Mapping, Waste Inventory, Kanban*