ABSTRACT

CV. WK *was established in 2000. The company is engaged in the production of Plastic Injection and also Mold Maker, which aims to provide production services, especially in the field of plastic. The type of plastics product studied in this study focused on the blue* AHM *oil bottle cap. Based on company data, there are some delays in delivery of* AHM *oil cap product in January to October 2016. Based on the problem of delay in delivery, then by using lean manufacturing approach is mapping the current value stream mapping* (VSM) *to know the manufacture of products from ordering until the product is sent to the customer, then mapping the activity process mapping* (PAM) *current state by describing the production process activities that will be grouped into the category of value added, non value added, and necessary non value added activities on each workstation, so that the result of identification of waste inventory Amounted to 99.15%. Therefore, it is necessary to proposed improvements to minimize waste inventory on injection molding and finishing areas with lean manufacturing approach.*

The next step, identify the root cause of waste inventory with fishbone diagram and 5 why's. And for the stage of problem solving on every root cause of waste inventory can apply kanban system.

Based on the implementation of kanban system, the production control card and the proposed improvement of product design to support the running of kanban system in the form of post kanban design, where the defect component, and the tools in WIP transportation on the injection molding and finishing area.

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