ABSTRACT

PT AGRONESIA Division Inkaba is the company that produces product that use rubber as raw materials. Inkaba company produces products in different sectors, such as EM PS-100 from the automotive sector. Company uses the make to order system the production system. The company set a target of every part of the production of EM PS-100 based on customers. However, the targets set can not be achieved. Target that can't be achieved is 1.45% in compounding, 15.40% in vulcanization, 0.05% in callendering, and 29.55% in injection. This is happened due to the presence of some waste in the production process EM PS-100.

Research phase begins with the making of current state mapping, carried out to illustrate the flow of material and information on the production process EM PS-100. Waste contained in the value stream mapping by 81.41% with lead time 1307.39 sec/unit. After that the detailed mapping was carried out using the process mapping activity. Waste identification is then performed using the checklist. The root cause of the onset of the waste that has been identified will be translated using fishbone diagrams and 5 why. Solving problems performed for each root cause of waste using lean manufacturing.

After the improvement is done by giving suggestions to use lean manufacturing, the value of the percentage of waste is obtained by 69.38%. The percentage of waste is reduced by 12.03%. Lead time of production processes EM PS-100 is 793.95 seconds/unit or in other words there is a decline of 531.44 seconds/unit while daily targets that must be met is 270 unit.

Keywords: EM PS-100, Lean Manufacturing, Value Stream Mapping, Process Activity Mapping, 5S, Takt Time, Jidoka, Kanban.