ABSTRACT

PT Agronesia (Rubber Engineering Industry Division) is a manufacturing industry company with a trademark "Inkaba" which produces kinds of rubber products engineering for industrial needs. Rubber type studied in this study focus on the type of rubber bellows. The problems that come up are the lack of production and the late delivery of rubber bellows to consumers. Based on the problems that occur, it is necessary to design improvements to minimize the waiting time by lean manufacturing approach.

The research phase begins with the collection of primary data which is then processed so as to produce value stream mapping and Process Activity Mapping (PAM) current state that is useful for mapping the flow and process time that occurs. Obtained information on the lead time of production amounted to 14210,72 seconds with total non value added time 3767,47 seconds. Total time include waste waiting is 10654,85 second. The next phase, identification of waste waiting as waiting for the printing process, waiting for extrude machine repair, and wait for setup press machine on Monday using fishbone diagram and 5 whys. The root cause of the problem that occurs is because the division of workload operators by the company only pay attention to the process without calculating the time, the compound distribution of the raw material warehouse is only done when the compound in the production area has been thinned, and the absence of a regular maintenance schedule. The problem solving phase for each root cause of the waste waiting time was conducted using 5W1H analysis to describe the detail of the problem and determine the proposed improvement plan by lean manufacturing method such as load eveling and preventive maintenance.

Keyword : Lean Manufacturing, Waste Waiting, Load Leveling, Preventive Maintenance