

ABSTRACT

PT Agronesia (Divisi Industri Teknik Karet) is a manufacturing company which produces vehicle parts and other industrial needs made from synthetic or natural rubber. The research that is conducted focuses on rubber bellow product. In the production process of rubber bellow, it is discovered that there is waste motion that affects the length of production time, causing problem in production targets and delivery time. Based on the case that occurs, an improvement is needed in order to minimize waste motion by implementing 5S system with Lean Manufacturing approach. The initial stage of this research is collecting the primary and secondary data in order to make a depiction of the whole process and its time with Value Stream Mapping (VSM) and Process Activity Mapping (PAM) current state. Through PAM it is known that there are 4846.30 seconds non value added activities occur, which the 404.83 seconds of it are categorized as waste motion. The next stage is to find the root cause of waste using fishbone diagram and 5 Whys. The root causes of waste motion are there is no storage available for operator's working tools, there is no specific working table and appropriate working tools for cutting process, and there is no storage available for cleaning tools. To minimize waste motion is done by implementing 5S method and designing working tools that are made to lessen operator's movement.

Keywords : *Lean manufacturing, Waste motion, 5S System*