ABSTRACT

PT. Nagoya INA Engineering is a company engaged in the industry of rubber, PVC and plastic. The products of this company are seal switches, lever seals, brecket¸covernut seals, etc. In the production area in Nanjung the most commonly used machines are 3in1 machines and press machines. From products whose production process uses 3 in1 machines and press machines, brecket seals have the highest demand levels from January 2018 to July 2018. In January 2018 - October 2018 PT. Nagoya returns late product shipments. The product that most often delays shipping is a brecket seal. To research the brecket seal production process, research was conducted at PT. Nagoya located on Nanjung. After doing the research, it was found that activities classified as exhaust movements. NVA is needed to find a time of 88 seconds and a lead time of 1334 seconds. The first step is to collect data, and the data is processed and the production flow mapping is carried out using Value Stream Mapping and Process Activity Mapping. Based on the discarded movements found, the root causes were examined using 5 Why. The movement of waste is minimized by making improvements using lean manufacturing. The first stage of the improvement design was carried out by implementing 5S to reduce the exhaust movement. To achieve the objectives of 5S carried out when arranging with the approval of the production aids produced. From the design of proposed improvements, lead time is reduced by 32% or equal to 909 seconds with a decrease in NVA time of 88 seconds and an NNVA time of 336 seconds.

Key Words: Brecket Seal, Value Stream Mapping, Process Activity Mapping, Waste Motion, Lean Manufacturing, 5S