

ABSTRACT

PT. Asmar Nakama Partogi is a manufacturing company engaged in electroplating services. This research will focus on the production process of zinc and nickel barrels. Based on company data, PT. Asmar Nakama Partogi lost product sales in July – December 2020. The problem is indicated by the presence of waste in the production process. With a lean manufacturing approach, identification and mapping are carried out using process activity mapping and value stream mapping. In value stream mapping, the lead time value of the production process was 4634. And on the identification of process activity mapping, it was found that there was a waste motion of 639 seconds in the production of zinc and nickel plating barrels. So it needs improvement to minimize the waste that occurs. The next stage is the lean manufacturing tool, namely 5whys. Next, to solve the cause of the waste motion, by applying the 5S method. Proposed improvements are made by designing improvements to minimize motion waste by applying seiri, seiton, seiso, seiketsu, and shitsuke in the work area. From the proposed improvement design, a mapping of the production process was carried out on the future state value stream and the lead time was reduced by 3995 seconds.

Keywords— Lean Manufacturing, Process Activity Mapping, Value Stream Mapping, Waste, 5S.