ABSTRACT

The automotive industry in Indonesia is growing rapidly, driven by the increasing use of motorcycles which has also advanced related industries, such as motors, spare parts, and accessories. Motorcycle accessories are now an important element for users. Demand for various types of accessories, ranging from body protection to aesthetic elements. One of them is the spare parts and accessories industry. UD. KS PRO is one of the businesses engaged in spare parts and accessories, one of which is a motorcycle paddock. In the production process there are several main activities, namely, Cutting, Bending, Punch, Welding, Platting, and Assembly. In the paddock production process, it has been identified that the production time reaches 5704.3 seconds, which is the longest production duration. The existence of inefficient transportation activities causes waste in the form of waiting activities in each process which causes the paddock to have the longest time. Therefore, this study aims to identify the most critical waste to be evaluated and given improvements to the Paddock product manufacturing process with the Lean manufacturing method. This research uses the Process Activity Mapping (PAM) approach through grouping activities based on Value Added (VA), Non-Value Added (NVA), and Necessary Non Value Added (NNVA), while Value Stream Anlysis Tools (VALSAT) is used in giving weight to existing waste. The results showed that the main waste identified in the manufacturing process of paddock products was the waiting time between production stages. Therefore, the addition of a roller conveyor is carried out so that employees no longer need to move goods manually, but instead use the help of a roller conveyor. The results of this research are expected to provide concrete and sustainable solutions to improve waste transportation activities in the company and can increase efficiency.

Keywords: *Production Activity, Lean Manufacturing, Paddock, Value Stream Mapping (VSM)*