

ABSTRACT

PT. XYZ is a stated-owned enterprise company engaged in electronics for industry and infrastructure. In this research focuses on one type of product manufactured by PT. XYZ, solar module with 260WP type. In the production process found waste transportation that affect the achivement of production targets. Based on field observations and collected data, waste transportation is caused by poor layout resulting backtracking movement with a total distance 25,68 meters. This affect the timing of the transfer of material.

Efforts to minimize wate transportation is to use Lean Manufacturing approach. The initial phase of this research is to describe Value Stream Mapping (VSM) and Process Activity Mapping (PAM) to map the the existing processing time and process flow. The next stage identifes the root cause of waste transportation problems by using fishbone diagram and analyzes the root cause of the problem using 5whys.

Resolving the root cause of the problem is to design the proposed improvement using one of Lean Manufacturing tools that is the design of the facility layout improvement. Then describes the Value Stream Mapping (VSM) future state to map the condition of the process flow after the improvement.

Keywords: lean manufacturing, waste transportation, value stream mapping, process activity mapping, facility layout planning