

ABSTRACT

PT. Kharisma Printex is a company engaged in painting services on grey fabric. During the production process there is some waste were found such as waste transportation, defects, waiting, inventory overproduction and motion. In this research, the focus of research is waste waiting. Waste waiting can be seen from the activities of waiting experienced by the machine or operator. Based on the results obtained using a questionnaire to identifying waste, waste waiting occupy the top 3 positions. Hence the design for improvements to minimize waste waiting is needed.

Lean manufacturing methods are used to minimize waste waiting. Research began with the mapping of grey fabric printing process that occurs with the use of value stream mapping (VSM) and process activity mapping (PAM). Value stream mapping (VSM) and process activity mapping (PAM) is also useful to identifying waste on PT Kharisma Printex. After mapping the current state then calculate takt time to determine the focus of the department to be studied. The next stage is to identify the dominant cause of waste waiting using fishbone diagram and 5 *whys*.

The dominant causes of waste waiting is minimized by implementing preventive maintenance, the use of software to determine the required amount of spare parts, training and reducing changeover time.

keywords : lean manufacturing, waste waiting, value stream mapping, process activity mapping, takt time, fishbone, 5 *whys*, preventive maintenance