

## ABSTRACT

PT. Perkebunan Nusantara VIII Ciater is a company engaged in the production of black tea. The company is processing two types of black tea namely Orthodox and CTC or Chrushing, Tearing, and Curling. In this study only focused on orthodox black tea production process. Based on the observation the problem that discovered is the company's production amount were decreasing every year that can be caused by several factors. One of the factors is because of the waste motion that is on the milling area precisely on the screening workstation. The waste motion is there are many tea powder the result of screening process that fell, so the workers need to take the tea powder repeatedly using a container that long enough and need to arrange it to shelf before going to the enzymatic oxidation process. Based on the problems that occur the company needs a settlement to reduce or eliminate the waste motion on production floor with lean manufacturing concept. By implementing it, the effort to overcome the waste is we need to make the existing mapping of value stream mapping (VSM) and process activity mapping (PAM). And next is to analyze the cause of the waste by using fishbone diagram and five whys. Furthermore, the results of the analysis can be made to proposed to minimize the waste motion.

Primary data processing is done by creating value stream mapping and activity process mapping current state to know the lead time of tea production process of PT. Perkebunan Nusantara VIII known as 67644,5 seconds with time value added time which is 34904,47 of total lead time. The next stage is researchers need to identify the root cause of waste motion by using fishbone diagram and five whys. The next stage after found the root cause of the problem is to do a 5W1H analysis to analyze the problem and the proposed design that will be given with display and product design. The proposals are improvement funnel of DIBN machine, display to remainder operator and design cover of hole DIBN machine. After the implementation of proposed improvements, there is a change in lead time which is 62647,11 seconds with time value added time which is 34404,47 seconds of the total lead time.

Keyword : Lean, Lean Manufacturing, Waste Motion, Fishbone, Five Whys