

ABSTRACT

PT. Progressio Indonesia (Pronesia) is a company engaged in the convection. The production system used in the PT. Pronesia is making to order ie production based on orders received. PT. Pronesia produces several types of clothing products of which t-shirts, jackets, training pants, and shirts office. However, in September 2015 the production of which is being run by PT. Pronesia is a product of this kind of shirts, so the researchers focused only on product research object shirt. Demand shirts in September 2015 as many as 2550 pcs with a target production of 2318 pcs that have been added to the allowance 1% of the company, so that the target production of shirts per month is reached, but the allowance of 1% resulting in a buildup of work in process and stacking of finished good in warehouse cause problems in the delivery quality. Setelah do identify waste, there is three waste with the highest percentage, one of which is waste inventory by 16%.

In an effort to minimize waste inventory, use lean manufacturing methods. This Research phase begins with the collection of primary data, further data processing. The initial stage of data processing is to map the value stream mapping. The next phase, to identify waste and continued by identifying the dominant cause of the waste inventory using a fishbone diagram. Phase problem resolution for each root causes of inventory waste in the form of line balancing, pulls system with kanban production, and job rotation.

Based on the use of lean manufacturing tools, the design of the proposed improvements obtained in the form of grouping several activities, controls the amount of production to fit the needs, and doing job rotation so that the ability of the operator can be balanced.

Keywords: Waste Inventory, Lean Manufacturing, Value Stream Mapping, Line Balancing, Pull System, Kanban, Job rotation.

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