

ABSTRACT

PT Dirgantara Indonesia is the only manufacturing company in Indonesia which produce aircraft. One part manufactured by PT Dirgantara Indonesia is flange part. In this part of production activities, production delays up two months of planning. One cause of this delays production is a waste that happened by 77% over the activities that add value at 23%. For this, attempt repairs to eliminate waste by using lean manufacturing techniques.

The first step in this research is to describe the flange part production process by using Value Stream Mapping and clarify by using Process Activity Mapping. In this step, obtained the activity percentage delay 62%, value added 23%, transportation 1%, and inspection 14%. The cause of wastage that occurs in this part production activities is waiting time caused a large number of production lots exceeds the production capacity in the majority of the work station and the execution of critical parts thus delaying the other part execution. The next step, do the proposed improvements to reduce waste by using 5S, andon, and reduction the number of production lots. The next step create Value Stream Mapping to know the flange part of the production process after the proposed improvements. In this step, obtained the activity percentage delay 42%, inspection 15%, value added 38%, and transportation 5%.

Key word : Lean Manufacturing, Value Stream Mapping, Process Activity Mapping, Andon, Flange Part, PT Dirgantara Indonesia