ABSTRACT

PT. Dirgantara Indonesia is the first aerospace industry and the one and only in Indonesia and in Southeast Asia. Production system used make to order system. PT. DI have 3 departemen*t or 3 main area, such as Raw Material Warehouse & Pre-cutting* Departemen*t, Heat Treatment & Metal Forming Departement, and Surface Treatment* Departemen*t. The object is a part called Stringer which has a part number 332A2130042401 and the production target is 120 units per month. The waste in production floor is 29,8% and the lead time 31785,6 seconds or 529,76 minutes.*

In order to do that, the Value Stream Mapping is established to draw the value stream and improvement to elimination waste is made lean manufacturng technics. The research phase begin with the Current State Drawing to identify the waste that occured. Then, the Detailed Mapping using Process Activity Mapping is made and results in the most activities that happened like operation 70,2 %, delay 23,53 %, inspection 2,28%, and transportation 3,99%. The cause of the greatest waste is the waste of waiting time to increase the lead time. Then the future state design is began to get the strategy and solution about the problem.

The solution for the problem are making a Continuous flow, applying the full work methods, fishbone diagram, 5S, and standardization work. The lead time at this stage is 24355,6 seconds or 405,92 minutes.

Key Words: Stringer Parts, Lean Manufacturing, Value Stream Mapping, Process Activity Mapping.