

ABSTRACT

PT Dirgantara Indonesia is a company that produces aerospace products. In the production process of Wing NC212, PT Dirgantara Indonesia still has problems in the form of waste defects. Waste defect is a condition where the product produced is not in accordance with predetermined standards, cause the product becoming delayed due to a rework or repair process. PT Dirgantara Indonesia classifies the causes of defects that appear as N508 (Workmanship), N450 (Need CAU Investigation), N901 (Part Reject as a Result of Tool) and N903 (Design). In this final project, the method used to minimize the waste defect is the lean manufacturing method. The study began by making observations to obtain data that supports the creation of Value Stream Mapping (VSM) and Process Activity Mapping (PAM). Based on the current state mapping, the total inventory time during the NC212 wing manufacturing activity is 20,570,134 hours and the total cycle time is 13,537,627 hours. There were also 12 types of defects found. After that, the dominant defect was selected using a Pareto diagram and the root cause of the defect was searched using 5 whys. After making the proposed improvement design, based on the future state mapping, the Total Inventory Time changed to 16,246.396 hours and the Total cycle time changed to 12,793,627 hours.

Keywords: Lean Manufacturing, Waste Defect, Value Stream Mapping, Process Activity Mapping, 5 Whys