IMPLEMENTATION OF LEAN MANUFACTURING PROCESS FOR IMPROVEMENT OF PRODUCTION (CASE STUDY AT. EKAMAS FORTUNA MALANG)

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ABSTRACT

PT. Ekamas Fortuna is a company engaged in the production of paper, which needs to continuously improve its productivity to increase profits as much as possible by trying to reduce costs, improve quality and timely delivery to customers. To achieve these objectives the company must be aware of any activity that increases the value added (value added) of products (services / goods), waste (waste), what often occurs and can shorten the production process. Therefore we need an approach to lean manufacturing.

With a lean strategy, the company is expected to increase the ratio of value added (value added) of waste. Minimization of waste will be very useful for companies in the face of increasingly severe competition. Understanding the conditions described in the company’s Big Picture Mapping. Waste is identified with the seven waste, then the mapping in detail with Value Stream Analysis Tools (VALSAT) and analyzed the root causes.

Based on the results of seven waste waste questionnaire which has been given to division heads, managers, supervisors and employees associated with the production process provisions of the maximum score of 10 (most often) and a minimum of 0 (never happened). Thus obtained 4 highest average score that is waiting (29.17%), Defect (21, 87%), Unnecessary Motion (20, 83%) and the Unnecessary Inventory (16, 67%). The average score is multiplied by a factor of wastage multiplier detailed mapping, to obtain details of the dominant mapping tools is Process Activity Mapping (31%) and Supply Chain Response Matrix (25, 64%). Lead time in the production of paper for 162 minutes, after the proposed improvements were made available lead time reduction by 72 minutes. So the lead time gained by 90 minutes, by reducing the waiting time upon arrival of raw material for the process to the production floor.

Keywords: Lean Manufacturing, Big Picture Mapping, Seven Waste, Value Stream Analysis Tools (VALSAT), waiting, defects, Unnecessary Motion, Unnecessary Inventory, Mapping tools, Process Activity Mapping, Supply Chain Response Matrix, lead time.