

ABSTRAK

PT. Jotun Indonesia merupakan salah satu perusahaan yang bergerak di industri cat dan pelapis di Indonesia. Dalam produksi diketahui PT. Jotun Indonesia menghadapi beberapa masalah seperti adanya defect ataupun delay yang tinggi dalam proses produksi. Penelitian ini dilakukan untuk menerapkan prinsip lean manufacturing, yang merupakan salah satu metode yang dapat digunakan untuk meningkatkan efisiensi dalam proses produksi di PT. Jotun Indonesia dengan mengurangi pemborosan dan meningkatkan value di sepanjang proses produksi. Penelitian dilakukan dengan melakukan observasi, wawancara, dan pengumpulan data historis di PT. Jotun Indonesia untuk mengumpulkan data-data seperti proses produksi, waktu proses, faktor penyesuaian, faktor kelonggaran, dan struktur value stream proses produksi. Berdasarkan penelitian ini, diketahui bahwa dalam current state proses produksi di PT. Jotun Indonesia membutuhkan total lead time sebanyak 422,01 menit, dengan process cycle efficiency sebesar 58,89%. Defect rate dalam current state sebanyak 5% dalam proses dissolving, 10% dalam proses let down, dan 8% dalam proses filling. Diketahui waste yang sering muncul adalah waste berupa defect, waiting, dan transport, yang masing-masing terjadi karena berbagai faktor manusia, mesin, material, metode, atau lingkungan. Usulan perbaikan yang diajukan diantaranya adalah pembuatan one point lesson pembuatan one point lesson dalam proses pemindahan barang jadi dan pencetakan manual label, pengadaan workshop quality control, dan penambahan fasilitas kerja berupa pallet mover Linde T20 AP/1153 dan DeVree Volumetric Filling Machine. Setelah menerapkan usulan perbaikan, diperkirakan terdapat perubahan pada total lead time menjadi 382,35 menit, dengan process cycle efficiency sebesar 64,26%. Defect rate dalam proses filling berubah menjadi 3%. Terdapat pengurangan total lead time sebesar 39,66 menit dan peningkatan process cycle efficiency sebesar 5,38%.

Kata kunci: Cat, Lean, Waste

ABSTRACT

PT. Jotun Indonesia is a company engaging in the paint and coating industry. During production it is known that PT. Jotun Indonesia faced problems such as defects and high amount of delays during the production process. This research is done to apply lean manufacturing, one of the method that can be used to increase the efficiency of the production process in PT. Jotun Indonesia by reducing waste and of value along the production process. Research is conducted through observation, interview, and collection of historical data in PT. Jotun Indonesia to collect data such as the production processes, process time, adjustment factors, allowance factors, and the value stream structure. According to the results of the research, it is known that in the current state, the production process in PT. Jotun Indonesia requires 422,01 minutes in total lead time, with a process cycle efficiency of 58,89%. Defect rates in the current state is equal to 5% in the dissolving process, 10% in the let down process, and 8% in the filling process. Wastes that usually occur include defects, waiting, and transport, each caused by factors such as man, machine, material, method, and environmental factors. Proposed improvements include the making of a one point lesson in the product transport and manual label printing process, the planning of quality control workshop, and purchase of work facilities which includes the Linde T20AP/1153 pallet mover and DeVree Volumetric Paint Filling Machine. After applying such proposed improvements, a change of total lead time to 382,35 minutes is estimated, with a process cycle efficiency of 64,26%. Defect rate in the filling process changed to 3%. A decrease of 39,66 minutes in total lead time and increase of 5,38% in process cycle efficiency is obtained.

Keywords: Paint, Lean, Waste