

ABSTRAK

PT. Sinar Harapan Plastik bergerak dalam bidang *manufacturing* mainan tunggangan anak-anak berbahan dasar plastik, seperti diantaranya yaitu *cars*, *tricycle*, *truck*, dan *caracters*. Didalam proses produksinya, perusahaan tidak terlepas dari beberapa masalah yang menyebabkan terganggunya kelancaran produksi, salah satu produk yang sering mengalami ketidaktercapaian target produksi yaitu produk komponen *body* mainan mobil SMJ 572, dengan capaian target produksi 83% pada bulan April 2021, sedangkan produk SMJ 572 merupakan produk unggulan yang setiap hari memiliki permintaan order yang cukup tinggi. Pada saat ini proses produksi di PT. Sinar Harapan Plastik memiliki masalah *waste* (pemborosan) diantaranya yaitu disebabkan karena terdapat *defect* dan *transportation* sehingga membut adanya *lead time* pada saat proses produksi berlangsung. Dalam mengevaluasi permasalahan ini perlu diadakan pengkajian lebih lanjut untuk mengetahui faktor-faktor penyebab sehingga dapat dihasilkan usulan perbaikan upaya pencegahan masalah tersebut, Perusahaan perlu meningkatkan kualitas proses produksinya dengan cara yaitu menggunakan pendekatan *lean manufacturing*. Pengolahan data meliputi Penyusunan *Current State Value Stream Mapping*, Pemetaan dengan menggunakan *Process Activity Mapping*, Identifikasi 7 *waste* dari aktifitas produksi berdasarkan NNVA dan NVA, Penyusunan *future Stream Mapping*. Berdasarkan diagram Pareto diatas dapat diketahui bahwa terdapat 5 *waste* pada produksi *body* SMJ 572 adalah *transportation*, *Motion*, *waiting*, *inventory*, dan *process*. *Waste transportation* memiliki persentase 59.5% dengan waktu total 14348 detik, *WasteMotion* memiliki persentase 29.0% dengan waktu total 6987 detik, *waste waiting* memiliki persentase 5.0% dengan waktu total 1203 detik, *waste inventory* memiliki persentase 4.0% dengan waktu total 974 detik, dan *waste process* memiliki persentase 2.5% dengan waktu total 601 detik. Usulan perbaikan yang dilakukan menyebabkan berkurangnya waktu proses, yaitu pada *Process Activity Mapping* ,dan *lead time*. Dari hasil perbaikan pada *Process Activity Mapping* untuk waktu siklus awal 72111.5 detik menjadi 69789.9 detik, dan dari hasil perbaikan *lead time* untuk perhitungan awal 3.83 hari menjadi 3.81 hari.

Kata Kunci : *Lean Manufacturing*, *Mainan SMJ 572*, *Value Stream Mapping*, *Process Activity Mapping* .

ABSTRACT

PT. Sinar Harapan Plastik is engaged in manufacturing children's toy rides made of plastic, such as cars, tricycles, trucks, and characters. In the production process, the company cannot be separated from several problems that cause disruption to the smooth production, one of the products that often experience failure to achieve production targets is the SMJ 572 car body component product, with a production target of 83% in April 2021, while the SMJ 572 product is a superior products that every day has a fairly high order demand. At this time the production process at PT. Sinar Harapan Plastik has a waste problem, one of which is caused by defects and transportation so that there is a lead time during the production process. In evaluating this problem, it is necessary to conduct further studies to determine the causal factors so that suggestions for improvement in prevention of these problems can be produced. The company needs to improve the quality of its production process by using a lean manufacturing approach. Data processing includes Preparation of Current State Value Stream Mapping, Mapping using Process Activity Mapping, Identification of 7 wastes from production activities based on NNVA and NVA, Preparation of Future Stream Mapping. Based on the Pareto diagram above, it can be seen that there are 5 wastes in the production of the SMJ 572 body, namely transportation, motion, waiting, inventory, and process. Waste transportation has a percentage of 59.5% with a total time of 14348 seconds, WasteMotion has a percentage of 29.0% with a total time of 6987 seconds, waste waiting has a percentage of 5.0% with a total time of 1203 seconds, waste inventory has a percentage of 4.0% with a total time of 974 seconds, and waste process has a percentage of 2.5% with a total time of 601 seconds. The proposed improvements will reduce processing time, namely in Process Activity Mapping, and lead time. From the results of the improvement in Process Activity Mapping for the initial cycle time of 72111.5 seconds to 69789.9 seconds, and from the results of the improvement in the lead time for the initial calculation of 3.83 days to 3.81 days.

Keywords: Lean Manufacturing, SMJ 572 Toys, Value Stream Mapping, Process Activity Mapping.