

ABSTRAK

USULAN PERBAIKAN LINTASAN PRODUKSI MINYAK HERBA SINERGI MENGGUNAKAN *VALUE STREAM MAPPING* DAN PENDEKATAN SIMULASI

Studi Kasus : PT Herba Emas Wahidatama

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PT HEW merupakan perusahaan manufacture yang bergerak dalam bidang industri obat tradisional dan pangan olahan. Dalam proses produksinya, MHS melalui 3 tahapan proses yaitu pengolahan, pengemasan primer dan pengemasan sekunder. Permasalahan yang terjadi adalah target produksi dari proses pengemasan, baik primer maupun sekunder belum tercapai. Tidak tercapainya target produksi tersebut disebabkan oleh terdapatnya waste yang menyebabkan aktivitas produksi berjalan kurang optimal. Penelitian ini menggunakan *value stream mapping* untuk memetakan seluruh aliran informasi dan material guna mengidentifikasi *waste* yang ada di dalam proses produksi. Setelah diidentifikasi, akan ada usulan perbaikan untuk mereduksi *waste* yang ada. Dalam membuat usulan perbaikan akan digunakan pula simulasi untuk mengoptimalkan usulan perbaikan dan mengetahui output produksi dari usulan perbaikan. Penelitian dimulai dengan pengambilan data waktu menggunakan *stopwatch time study*. Waktu proses digunakan dalam *value stream mapping* untuk mengetahui alur proses dan *lead time* produksi. Beberapa *waste* yang ditemukan yaitu *unnecessary inventory* berupa WIP, *defect*, *unnecessary motion*, *inappropriate processing*, *excessive transportation* dan *waiting time*. Penelitian ini menghasilkan usulan perbaikan yang terdiri atas 5 tindakan. Usulan perbaikan menghasilkan target produksi meningkat menjadi 140%, *production lead time* berkurang sebanyak 34.57%, *total cycle time* berkurang sebanyak 51.85%, *line efficiency* meningkat sebanyak 9.51% dan aktivitas *non value added* berkurang sebanyak 61.53%.

Kata Kunci : *Simulation, value stream mapping, waste*

ABSTRACT

PROPOSED IMPROVEMENT OF SYNERGY HERBAL OIL PRODUCTION LINE USING VALUE STREAM MAPPING AND SIMULATION APPROACH

Case Study : PT Herba Emas Wahidatama

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PT HEW is a manufacturing company engaged in the traditional medicine and processed food industry. In the production process, MHS goes through 3 stages of processing, namely processing, primary packaging and secondary packaging. The problem that occurs is that the production target of the packaging process, both primary and secondary, has not been achieved. The failure to achieve the production target is caused by the presence of waste which causes production activities to run less than optimally. This study uses value stream mapping to map the entire flow of information and materials to identify waste in the production process. Once identified, there will be proposed improvements to reduce the existing waste. In making the proposed improvement, simulation will also be used to optimize the proposed improvement and determine the production output of the proposed improvement. The study began with time data collection using a stopwatch time study. Processing time is used in value stream mapping to determine the process flow and production lead time. Some of the wastes found were unnecessary inventory in the form of WIP, defects, unnecessary motion, inappropriate processing, excessive transportation and waiting time. This study resulted in a proposed improvement consisting of 5 actions. The proposed improvement resulted in the production target increasing to 140%, production lead time reduced by 34.57%, total cycle time reduced by 51.85%, line efficiency increased by 9.51% and non-value added activities decreased by 61.53%.

Key Words : Simulation, value stream mapping, waste