

Peningkatan efisiensi proses produksi cat tembok dengan penerapan Value Stream Mapping dan Waste Assessment Model = Increasing the efficiency of wall paint production process by implementing Value Stream Mapping and Waste Assessment Model

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Abstrak

Dalam ketatnya persaingan dalam industri cat domestik, perusahaan dituntut untuk mengejar perbaikan dalam segala aspek, termasuk efisiensi operasional. Peningkatan efisiensi produksi melalui pengurangan pemborosan merupakan salah satu solusi untuk meningkatkan efisiensi perusahaan secara keseluruhan. Penelitian ini bertujuan untuk meningkatkan efisiensi proses produksi cat waterbased di PT X melalui identifikasi dan eliminasi pemborosan. Metode Value Stream Mapping (VSM), Waste Assessment Model (WAM), dan Process Activity Mapping (PAM) diterapkan untuk mencapai tujuan tersebut. Ditemukan bahwa overproduction, inventory, dan defect merupakan jenis pemborosan yang paling dominan dalam current state proses produksi. Berdasarkan analisis bersama pihak perusahaan, rekomendasi perbaikan yang dirumuskan dengan metode 5W-1H berupa penggunaan kemasan jumbo untuk bahan tertentu, penerapan metode organisasi 5S, perubahan layout pada floor produksi atas, penerapan papan Kanban di area forklift, perubahan pada bon resmi permintaan RM, dan penerapan pergantian peran dalam proses filling. Alhasil, pada future state, value ratio meningkat 1,7%, cycle time berkurang 6,56%, standard time berkurang 7,25%, lead time berkurang 6,55%, waktu kegiatan value adding berkurang 3,06%, waktu kegiatan non-value adding berkurang 13,82%, dan waktu kegiatan necessary nonvalue adding berkurang 3,64%.

.....As the competition in the domestic paint industry intensifies, companies are required to pursue improvements in all aspects. Increasing production efficiency through waste reduction is one of the possible ways to improve a company's overall operational efficiency. This study aims to improve the efficiency of water-based paint production process at PT X through the elimination of waste. Value Stream Mapping, Waste Assessment Model, and Process Activity Mapping are applied to achieve this goal. Based on a joint analysis with the company, the recommendations for improvement formulated using the 5W-1H method include the use of jumbo packaging for certain materials, the application of the 5S organizational method, changes to the layout on the upper production floor, the application of Kanban boards in the forklift area, changes to the official receipt for RM requests, and role shuffling in the filling process. As a result, in the future state, the value ratio increased by 1.7%, cycle time decreased by 6.56%, standard time decreased by 7.25%, lead time decreased by 6.55%, value added activity time decreased by 3.06%, non-value adding activity time is reduced by 13.82%, and necessary but non-value adding activity time is reduced by 3.64%.