

ABSTRACT

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Thesis

A Lean Manufacturing Analysis for Waste Reduction Through Value Stream Mapping in PT X

This study delves into Company X's production shortfall, investigating instances where actual output falls short of established targets. By comparing station-specific production targets with October's production data, inconsistencies emerged, primarily due to varied production capacities across stations. To comprehensively address this issue, the study utilizes value stream mapping (VSM) analysis, Ishikawa diagrams, waste assessment tools (including waste assessment questionnaires and waste relationship matrices), and Value Stream Analysis Tools (VALSAT). The analysis involves creating a comprehensive big-picture mapping of the production process flow, identifying activities at each station through a detailed process activity mapping. The study systematically explores root causes of production disruptions, including capacity variations. Inclusive of the analysis results, which shed light on the intricacies of the production challenges, actionable recommendations are proposed. One significant recommendation is the development of a revised PAM, as well as a standard work process using checklists specifically in the process of mixing and filling. This proposed standardization aims to streamline operations, reduce variability, and contribute to overall process improvement.

Keywords : Production Process, Waste Assessment Model (WAM), Process Activity Mapping (PAM), Value Stream Mapping, Continuous Improvement

ABSTRAK

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Skripsi

Analisis Lean Manufacturing Untuk Pengurangan Waste Melalui Value Stream Mapping di PT X

Studi ini menyelidiki kekurangan produksi Perusahaan X, menyelidiki kejadian-kejadian di mana output aktual berada di bawah target yang ditetapkan. Dengan membandingkan target produksi spesifik stasiun dengan data produksi bulan Oktober, muncul ketidakkonsistenan, terutama karena beragamnya kapasitas produksi antar stasiun. Untuk mengatasi masalah ini secara komprehensif, studi ini menggunakan analisis value stream mapping (VSM), diagram Ishikawa, alat penilaian limbah (termasuk kuesioner penilaian limbah dan matriks hubungan limbah), dan Value Stream Analysis Tools (VALSAT). Analisisnya melibatkan pembuatan pemetaan gambaran besar yang komprehensif tentang alur proses produksi, mengidentifikasi aktivitas di setiap stasiun melalui pemetaan aktivitas proses secara rinci. Studi ini secara berkala mengeksplorasi akar penyebab gangguan produksi, termasuk variasi kapasitas. Termasuk hasil analisis, yang menjelaskan seluk-beluk tantangan produksi, rekomendasi yang dapat ditindaklanjuti juga diusulkan. Salah satu rekomendasi penting adalah pengembangan PAM yang telah direvisi, serta standar proses kerja yang menggunakan checklist khususnya dalam proses pencampuran dan pengisian. Standardisasi yang diusulkan ini bertujuan untuk menyederhanakan operasi, mengurangi variabilitas, dan berkontribusi terhadap perbaikan proses secara keseluruhan.

Kata Kunci: Proses Produksi, Waste Assessment Model (WAM), Process Activity Mapping (PAM), Value Stream Mapping, Continuous Improvement

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