

ABSTRAK

USULAN PERBAIKAN LINI PRODUKSI MATRAS BERDASARKAN PENDEKATAN *LEAN MANUFACTURING* DAN *ACTIVITY BASED COSTING* DI PT. XYZ

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Reduksi biaya produksi melalui eliminasi pemborosan merupakan salah satu strategi dalam mempertahankan daya saing perusahaan manufaktur saat ini. Indikasi pemborosan tersebut ditemukan pada PT. XYZ yang merupakan perusahaan manufaktur *spring bed* dan *foam bed*. Penelitian ini bertujuan untuk mengidentifikasi pemborosan dalam aliran produksinya dan menyusun usulan perbaikan menggunakan integrasi *waste assessment model*, *value stream mapping* dan *value stream analysis tools*, serta analisis biaya melalui *activity based costing*. Hasil identifikasi mengungkapkan *over-production* dan *excess inventory* sebagai pemborosan kritis yang memicu pemborosan lainnya. Berdasarkan kedua pemborosan tersebut, dilaksanakan pemetaan lebih lanjut menggunakan *process activity mapping* dan *supply chain response matrix* yang terpilih menurut keterkaitannya dari *value stream analysis tools*. Hasil pengolahan dipaparkan dalam *cost integrated value stream mapping* yang menunjukkan biaya tidak bernilai tambah harian mencapai Rp 1.911.550,16 dan total waktu selain dari aktivitas bernilai tambah sebesar 9408,6 menit. Berdasarkan temuan tersebut, dirumuskan delapan usulan perbaikan dengan potensi reduksi biaya sebesar Rp 556.654,94 dan reduksi waktu sebesar 5123,128 menit.

Kata Kunci: *lean manufacturing*, *waste assessment model*, *value stream mapping*, *value stream analysis tools*, *activity based costing*, *over-production*, *excess inventory*

ABSTRACT

USULAN PERBAIKAN LINI PRODUKSI MATRAS BERDASARKAN PENDEKATAN *LEAN MANUFACTURING* DAN *ACTIVITY BASED COSTING* DI PT. XYZ

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Production cost reduction through waste elimination is one of the current strategies for maintaining the competitiveness of manufacturing companies. Indications of such waste were found at PT. XYZ, a manufacturer of spring beds and foam beds. This study aims to identify waste in its production flow and propose improvements using the integration of waste assessment models, value stream mapping, and value stream analysis tools, as well as cost analysis through activity-based costing. The identification results revealed that overproduction and excess inventory are critical forms of waste that lead to other types of waste. Based on these two types of waste, further mapping was conducted using process activity mapping and a supply chain response matrix, which were selected based on their relevance from the value stream analysis tools. The results were presented in a cost-integrated value stream mapping, revealing daily non-value-added costs of IDR 1.911.550,16 and total non-value-added time of 9408,6 minutes. Based on these findings, eight improvement proposals were formulated with a potential cost reduction of IDR 556.654,94 and a time reduction of 5123,128 minutes.

Keywords: lean manufacturing, waste assessment model, value stream mapping, value stream analysis tools, activity based costing, over-production, excess inventory