

ABSTRAK

Bima Triaji Wardana. 2025. *Minimasi Waste Produksi Side Chair Dengan Lean Manufacturing Di UD Mustika Agung Magetan. Skripsi*. Program Studi Teknik Industri, FT, Universitas PGRI Madiun. Pembimbing (I) Aloysius Tommy Hendrawan, ST.,MT. Pembimbing (II) Halwa Annisa Khoiri, S,Si.,M.,Si.

Untuk menghasilkan produk yang berkualitas, perusahaan perlu menjaga keseimbangan lintasan produksi yang optimal. Keseimbangan tersebut hanya dapat dicapai secara efektif dan efisien apabila perusahaan mampu meminimalkan pemborosan (*waste*). Hal ini penting, mengingat perusahaan manufaktur cenderung menggunakan banyak material, yang berpotensi menimbulkan pemborosan dalam proses produksinya. Terkait 7 hubungan antar pemborosan terjadi 2 *waste* yang terjadi di UD. Mustika Agung yaitu pemborosan yang muncul dalam proses produksi *side chair* adalah terdapat produk *defect* dan *inventory* yaitu penumpukan *side chair*. Penumpukan *side chair* setengah jadi terjadi akibat adanya antrean pada proses finishing.. Usaha yang dapat dilakukan diantaranya dengan cara mengurangi pemborosan (*waste*), salah satunya dapat tercapai dengan penerapan *Lean Manufacturing* dan bagaimana rekomendasi perbaikan untuk mereduksi pemborosan (*waste*) yang terjadi pada proses produk *side chair* berdasarkan hasil proses *Value State Mapping* (VSM). Hasil penerapan *lean manufacturing* di UD. Mustika Agung menunjukkan identifikasi jenis-jenis pemborosan yang terjadi, yang ditunjukkan melalui klasifikasi pemborosan berdasarkan *cycle time current state map* yaitu VA 5935 menit, NNVA yaitu transportasi 90 menit, dan NVA yaitu 50 menit. Setelah perbaikan dilakukan, *cycle time* pada peta keadaan mendatang menjadi VA 3045 menit, NNVA 65 menit, dan NVA menjadi 10 menit.

Kata Kunci : *lean manufacturing, waste relationship matrix*

ABSTRACT

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To produce quality products, companies need to maintain optimal production line balance. This balance can only be achieved effectively and efficiently if the company is able to minimize waste. This is important, considering that manufacturing companies tend to use a lot of materials, which have the potential to cause waste in their production process. Related to the 7 relationships between waste, 2 wastes occurred at UD. Mustika Agung, namely waste that occurs in the side chair production process is the presence of defective products and inventory, namely the accumulation of side chairs. The accumulation of half-finished side chairs occurs due to queues in the finishing process. Efforts that can be made include reducing waste, one of which can be achieved by implementing Lean Manufacturing and how recommendations for improvements to reduce waste that occurs in the side chair product process based on the results of the Value State Mapping (VSM) process. The results of the implementation of lean manufacturing at UD. Mustika Agung show the identification of the types of waste that occur, which are shown through the classification of waste based on the cycle time current state map, namely VA 5935 minutes, NNVA namely transportation 90 minutes, and NVA namely 50 minutes. After the repairs were made, the cycle time on the future state map became VA 3045 minutes, NNVA 65 minutes, and NVA became 10 minutes.

Keywords : lean manufacturing, waste relationship matrix