

ABSTRAK

PT. Jatim Taman Steel Mfg *plant* Gresik merupakan perusahaan yang bergerak di bidang *Hot Rolled Steel Flat* dan *Round Bar* yang digunakan sebagai bahan baku utama pembuatan per daun (*leaf spring*), pada saat ini perusahaan ingin meningkatkan tingkat produksi tetapi masih banyak *waste* yang terjadi pada lini produksi. Dari permasalahan diatas maka bagaimana mengidentifikasi pemborosan, dan memberikan usulan perbaikan untuk meminimalis pemborosan pada produk *flat bar* dan juga memberikan usulan perbaikan di PT. Jatim Taman Steel Mfg *plant* Gresik. Pendekatan yang dipakai adalah pendekatan *Lean Manufacturing* dengan pemahaman kondisi perusahaan digambarkan dalam *current state value stream mapping*. Pemborosan diidentifikasi dengan kuesioner *seven waste*, lalu dilakukan pemetaan secara detail dengan VALSAT. Dari hasil pengolahan *kuesioner* didapatkan nilai rata rata pemborosan *waiting* (4,5), *defect* (4,4), *inappropriate processing* (4,2), *unnecessary motion* (3,1), *excessive transportation* (3), *unnecessary inventory* (2,8), *overproduction* (2,4). Skor rata – rata hasil dari *kuesioner* tersebut dikonversikan kedalam matriks VALSAT, didapatkan *mapping tools* yang dominan yaitu *process activity mapping* (148,4), *supply chain response matrix* (76), *quality filter mapping* (46,2) setelah itu didapatkan *future state value stream mapping* dan FMEA yang memiliki nilai RPN tertinggi pada tiap mode kegagalan. Usulan diberikan berdasarkan nilai RPN tertinggi yaitu *waste waiting* dengan melakukan *preventive maintenance & standart setting parameter* mesin agar *waste waiting* dapat diminimalisasi.

Kata Kunci : *Lean Manufacturing, Seven Waste, Current State Value Stream Mapping, VALSAT, Future State Value Stream Mapping, FMEA*

ABSTRACT

PT. Jatim Taman Steel Mfg plant Gresik is a company engaged in the field of Hot Rolled Steel Flat and Round Bar which is used as the main raw material for making leaves (leaf spring), at this time the company wants to increase the level of production but there are still many wastes that occur in the production line . From the above problems, how to identify waste, and propose improvements to minimize waste on flat bar products and also provide suggestions for improvements in PT. Jatim Taman Steel Mfg plant Gresik. The approach used is the Lean Manufacturing approach with an understanding of the condition of the company described in the current state value stream mapping. Waste is identified with the seven waste questionnaire, then mapping in detail with VALSAT. From the results of questionnaire processing, the average value of waiting waste (4.5), defect (4.4), inappropriate processing (4.2), unnecessary motion (3.1), excessive transportation (3), unnecessary inventory (2, 8), overproduction (2,4). The average score from the questionnaire was converted into VALSAT matrix, the dominant mapping tools were obtained (148.4) process activity mapping, supply chain response matrix (76), quality filter mapping (46.2) after that obtained future state value stream mapping and FMEA which has the highest RPN value in each failure mode. The proposal is given based on the highest RPN value, namely waste waiting by doing preventive maintenance & standard parameter setting of the machine so that the waste waiting can be minimized.

Keywords: Lean Manufacturing, Seven Waste, Current State Value Stream Mapping, VALSAT, Future State Value Stream Mapping, FMEA