

ABSTRAK

Persaingan pada dunia industri menuntut perusahaan untuk selalu kompetitif dengan adanya berbagai macam teknologi manufaktur yang semakin inovatif. Oleh karena itu perusahaan PT. XYZ harus terus-menerus melakukan perbaikan dengan langkah perbaikan pada lini produksi. Permasalahan yang terjadi adalah perusahaan belum meningkatnya produktivitas dalam mencapai target produksi, selain masalah pekerja penyebabnya tidak seimbangnya gerakan dan layout kerja yang tidak sesuai mengakibatkan terjadinya *bottleneck* pada stasiun *module assembly* dan juga masalah produk cacat (*defect*) yang masih terjadi selama proses produksi, transportasi, waiting, material transfer yang belum efektif juga merupakan faktor semakin lamanya proses produksi. Untuk mengevaluasi terjadinya masalah-masalah dan aktivitas-aktivitas yang merupakan suatu tujuh pemborosan (*seven waste*), Alat yang paling efektif untuk penanganan permasalahan pemborosan tersebut yaitu *Lean Manufacturing*. Dari perbaikan tersebut didapatkan peningkatan produktivitas dari *Throughput* bulan juli untuk type LDA DSW meningkat sebesar 7% dan menghasilkan *saving time* sebesar 74,99 sec, LDA SW meningkat sebesar 4% dan menghasilkan *saving time* sebesar 65,93 sec, LDA E17 meningkat sebesar 8% dan menghasilkan *saving time* sebesar 70,09 sec, LDA 6L meningkat sebesar 4% dan dan menghasilkan *saving time* sebesar 76,20 sec. Dan juga didapatkan peningkatan rasio produktifitas bulan juli terhadap bulan april yakni LDA DSW meningkat 0,4%, LDA SW meningkat 1,2%, LDA E17 meningkat 0,4% dan LDA 6L meningkat 0,9% dari bulan april.

Kata kunci : *Lean manufacturing, seven waste, Throughput, bottleneck*

ABSTRACT

Competition in the industrial world requires companies to always be competitive. This competition is driven by several factors, within which one of the commonly known factors is a wide range of increasingly innovative manufacturing technology. Regarding this background, PT. XYZ company must continually make improvements to the remedial measures on the production line. The root problem that occurred is that the company had not been able to increase productivity in order to achieve its production targets. In addition to labor issues, the root causes of the problem were the imbalance of the labor movement and the production layout, which in turn caused in the module assembly stations, the bottleneck and also the problem of defective products (defects) that occurred during the process of production. Transportation, waiting process, and the materials that had not been transferred effectively also were factors that lengthen the production process. To evaluate the occurrence of problems and activities that are included in the seven waste categories, we proposed to use the Lean Manufacturing approach that is known as an effective tool for solving waste problems in a manufacturing system. The result showed that the improvements made by using the Lean Manufacturing approach were that the increased productivity obtained from the throughput in July for LDA DSW type by 7%, as well as a saving time 74.99 secs, for LDA SW the increasing value was by 4% and the saving time was 65.93 secs, for LDA E17 it was increased by 8% and the saving time was of 70.09 secs, and for LDA 6L it was increased by 4% and the saving time was 76.20 secs. We also obtained increasing values of LDA DSW productivity ratio in July against the April in the amount of 0.4%, for SW LDA of almost 1.2%, for LDA E17 increased by 0.4%, and by 0.9% for LDA 6L.

Keywords: *Lean manufacturing, seven waste, Throughput, bottleneck*