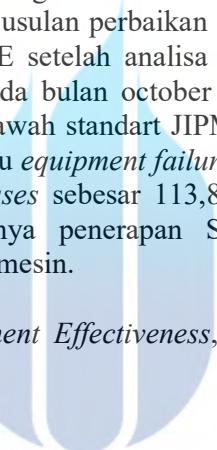# ABSTRAK

Perusahaan tempat penulis melakukan penelitian adalah perusahaan yang bergerak di industri manufaktur baterai. Belum adanya *Total productive Maintenance* pada perusahaan mengakibatkan produktivitas rendah dan tingginya angka kerusakan. Faktor utama yang mempengaruhi nilai OEE adalah faktor *downtime* mesin, *performance* mesin serta tingkat *defect* yang tinggi. Tujuan penelitian ini adalah Mengidentifikasi penyebab utama *downtime* pada mesin yang paling berpengaruh menjadi turunnya efektivitas mesin dan Memberikan solusi cara peningkatan efektifitas mesin *envelope*. Penulis bermaksud menghitung nilai OEE yang kemudian dilanjutkan menganalisa variable OEE dan membuat diagram *fishbone* selanjutnya membuat usulan perbaikan dengan 5W1H dari hasil analisa dan mensimulasikan nilai OEE setelah analisa perbaikan dilakukan. Dari hasil penelitian diketahui bahwa pada bulan october 2019 memiliki persentase OEE sebesar 46,81% yang jauh dibawah standart JIPM . Sedangkan hasil dari *Six Big Losses* persentase tertinggi yaitu *equipment failure losses sebesar* 172,4 *hours dan idling and minor stopages losses* sebesar 113,8 *hours*. Dikarenakan kurangnya pemeliharaan mesin, kurangnya penerapan SOP, dan kurangnya pelatihan kemampuan operator terhadap mesin.

Kata Kunci : *Overall Equipment Effectiveness*, *Total productive Maintenance,* 5W1H dan *Six Big losses.*

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ABSTRACT

The company where the author conducted the research is a company engaged in the battery manufacturing industry. The absence of Total productive Maintenance at the company resulted in low productivity and a high rate of damage. The main factors that affect the value of OEE are machine downtime, machine performance and high defect levels. The purpose of this research is to identify the main causes of downtime on the most influential machines to decrease the effectiveness of the machine and provide solutions for how to increase the effectiveness of envelope machines. The author intends to calculate the OEE value, then continue to analyze the OEE variable and make a fishbone diagram, then make improvement suggestions with 5W1H from the analysis results and simulate the OEE value after the repair analysis is carried out. From the research results it is known that in October 2019 the OEE percentage was 46.81% which was far below the JIPM standard. While the results of the Six Big Losses, the highest percentage were equipment failure losses of 172.4 hours and idling and minor stopages losses of 113.8 hours. Due to lack of machine maintenance, lack of application of SOPs, and lack of training in machine operator skills.

Keywords : Overall Equipment Effectiveness, Total Productive Maintenance,

5W1H dan Six Big losses.