

## ABSTRAK

Proses produksi sering kali terhenti disebabkan adanya masalah pada mesin produksi. Gangguan pada mesin produksi akan menimbulkan kerugian bagi perusahaan berupa hilangnya waktu produksi, tidak tercapainya target produksi, dan adanya biaya *maintanance* yang harus dikeluarkan untuk mengoptimalkan kinerja mesin produksi. Penelitian ini mengukur efektivitas mesin sehingga diperoleh nilai *OEE* dari mesin *Filter Press* di PT. Permata Hijau Palm Oleo-Belawan periode Januari-November 2021, kemudian menentukan nilai *Six Big Losses* dan menganalisa nilai menggunakan *diagram pareto*, dari hasil yang diperoleh ditentukan akar penyebab masalah. Berdasarkan hasil penelitian, nilai *OEE* yang diperoleh masih ada dibawah standar (85%) yaitu April 84,74%, Juli 83,50%, dan November 81,11%. Pengaruh paling besar terjadinya losses time yaitu *Idling & Minor Stopages Losses* sebesar 52,83%. Berdasarkan analisis penyebab terjadinya kegagalan yaitu kerusakan mesin, mesin sering *breakdown* dan teknisi kurang memahami kemampuan mesin, sehingga disarankan untuk lebih memperhatikan kinerja mesin dengan melakukan perawatan mesin secara berkala dan perbaikan sistem perekutan teknisi.

**Kata Kunci:** *Overall Equipment Effectiveness (OEE), Six Big Losses, Idling & Minor Stoppages Losses, Fractination.*

## **ABSTRACT**

*The production process is often stopped due to problems with the production machine. Disruptions to production machines will cause losses for the company in the form of loss of production time, failure to achieve production targets, and maintenance costs that must be incurred to optimize the performance of production machines. This study measures the effectiveness of the machine so that the OEE value is obtained from the Filter Press machine at PT. Permata Hijau Palm Oleo-Belawan period January-November 2021, then determine the value of Six Big Losses and analyze the value using a Pareto diagram, from the results obtained the root cause of the problem is determined. Based on the results of the research, the OEE value obtained is still below the standard (85%) namely April 84.74%, July 83.50%, and November 81.11%. The biggest influence on the occurrence of losses time is Idling & Minor Stopages Losses of 52.83%. Based on the analysis of the causes of failure, namely engine damage, machines often breakdown and technicians do not understand the capabilities of the machine, so it is advisable to pay more attention to machine performance by carrying out regular machine maintenance and repairing the technician recruiting system.*

**Keywords:** *Overall Equipment Effectiveness (OEE), Six Big Losses, Idling & Minor Stoppages Losses, Fractination.*