

## ABSTRAK

PT Perkebunan Nusantara IV PKS Bah Jambi ialah salah satu perusahaan yang berak pada bidang agroindustry pengolahan kelapa sawit yang menghasilkan produk *crude palm oil* dan *palm kernel*. Tujuan penelitian ini ialah untuk mengukur efektivitas mesin *screw press* dengan metode *Overall Equipment Effectiveness* (OEE) dan *six big losses*. *Overall Equipment Effectiveness* (OEE) merupakan metode yang dapat digunakan untuk mengukur efektivitas mesin yang didasarkan pada 3 faktor yaitu ketersediaan waktu kerja (*availability*), performa mesin (*performance*) dan kualitas produk (*quality*). Hasil perhitungan nilai OEE pada mesin *screw press* diperoleh nilai rata-rata OEE ialah 68,28 %. Nilai OEE yang rendah diakibatkan oleh faktor *performance rate* dan *availability rate* yang belum memenuhi standar nilai OEE. Hasil analisa *six big losses* dapat diketahui *losses* yang berkontribusi besar terhadap penurunan efektivitas mesin *screw press* ialah *idle and minor stoppage losses*, rata-rata *idle and minor stoppage losses* pada mesin *screw press* ialah 10,35% dengan total *time losses* selama 120 jam. Penyebab *idle and minor stoppage losses* yaitu karena sering terjadi waktu henti untuk menunggu kedatangan bahan baku. Kuantitas bahan baku yang tidak konsisten dapat menyebabkan pemberhentian sementara waktu produksi untuk menunggu kedatangan bahan baku (TBS).

**Kata kunci:** *Overall Equipment Effectiveness* (OEE), *Six Big Losses*, *Idling Minor Stoppages Losses*, *Mesin Screw Press*.

## **ABSTRACT**

*PT Perkebunan Nusantara IV PKS Bah Jambi is a company engaged in the palm oil processing agro-industry that produces crude palm oil and palm kernel products. The purpose of this study is to measure the effectiveness of the screw press machine using the Overall Equipment Effectiveness (OEE) method and six big losses. Overall Equipment Effectiveness (OEE) is a method that can be used to measure the effectiveness of the machine based on 3 factors, namely the availability of working time (availability), machine performance (performance) and product quality (quality). The results of the calculation of the OEE value on the screw press machine obtained an average OEE value of 68.28%. The low OEE value is caused by the performance rate and availability rate factors that have not met the OEE value standard. The results of the six big losses analysis show that the losses that contribute greatly to the decrease in the effectiveness of the screw press machine are idle and minor stoppage losses, the average idle and minor stoppage losses on the screw press machine are 10,35% with a total time loss of 120 hours. The cause of idle and minor stoppage losses is because there is often downtime to wait for the arrival of raw materials. Inconsistent raw material quantities can lead to temporary production stoppages while awaiting the arrival of raw materials (FFB).*

**Keywords:** *Overall Equipment Effectiveness (OEE), Six Big Losses, Idling & Minor Stoppage Losses, Screw Press Machine.*