

RINGKASAN

Perumda Perkebunan Kahyangan Jember merupakan salah satu produsen kopi robusta utama di Kota Jember dan merupakan Badan Usaha Milik Daerah Jember yang bergerak pada bidang perkebunan, dan agroindustri bernama Bagian Pemasaran dan Pengembangan Bisnis yang mengelolah hasil perkebunannya berupa kopi sangrai dan kopi bubuk. Efektifitas mesin menjadi faktor penting dalam proses produksi, mesin *Korin Vertical Packaging* pada proses pengemasan sering terjadi *downtime* akibat permasalahan pada mesin saat produksi berlangsung. Penelitian ini tujuan untuk (1) analisis pengukuran kinerja mesin dengan metode OEE, (2) menganalisis faktor yang mempengaruhi kinerja mesin dengan *six big losses*, dan (3) merumuskan rekomendasi perbaikan yang tepat berdasarkan hasil analisis *fishbone* dan memberikan teknik pemeliharaan dengan metode *total productive maintenance*.

Penelitian ini bertempat di Perumda Perkebunan Kahyangan Jember pada bulan Desember 2024 – Januari 2025, dengan alat yang digunakan pada penelitian ini alat tulis, laptop, kamera atau *smartphone*, *microsoft excel* dan bahan yang digunakan pembukuan data produksi olahan kopi sangrai dan kopi tahun 2023-2024, pembukuan *downtime* mesin, pembukuan *machine working Time*, pembukuan produk cacat, penjadwalan perawatan mesin, standar operasional prosedur penggunaan mesin, artikel penelitian yang mendukung penelitian.

Dalam perhitungan OEE mengukur dengan tiga kategori yaitu *availability*, *performance* dan *quality* untuk mengidentifikasi *six big losses*. Hasil penelitian menunjukkan rata-rata nilai OEE sebesar 29%, dengan rata-rata nilai *availability* 85%, *performance* 23%, dan *quality* 85%. Sedangkan, losses yang signifikan mempengaruhi nilai efektifitas *idling and minor stoppages* 31%, *equipment Failure* 31% dan *Setup Time Losses* 26%. Hasil analisis *fishbone* dilakukan perumusan rekomendasi meningkatkan efisiensi mesin *korin vertical packaging* dengan *Focused Improvement* untuk dilakukan perbaikan sebagai langkah awal dalam usaha peningkatan produktivitas dan efisiensi mesin *Korin vertical packaging* dengan membuat *Planned Maintenance* yaitu jadwal perawatan mesin, *Planned downtime* dan pengecekan mesin sebelum dan sesudah digunakan.

SUMMARY

Perumda Kahyangan Jember Plantation is one of the main robusta coffee producers in Jember City and is a Jember Regionally Owned Enterprise engaged in plantations, and the agro-industry is called the Marketing and Business Development section which manages the plantation products in the form of roasted coffee and coffee powder. Machine effectiveness is an important factor in the production process, Korin Vertical Packaging machines in the packaging process often experience downtime due to problems with the machine during production. An analysis of engine performance measurement using the OEE method was carried out, analyzing the factors that affect engine performance with six big losses, and formulating appropriate improvement recommendations based on the results of fishbone analysis and providing maintenance techniques with the total productive maintenance method.

This research took place at Perumda Kahyangan Plantation Jember in December 2024 – January 2025, with the tools used in this study stationery, laptops, cameras or smartphones, Microsoft Excel and materials used for bookkeeping data on the production of roasted and processed coffee in 2023-2024, machine downtime bookkeeping, machine working time bookkeeping, defective product bookkeeping, machine maintenance scheduling, standard operating procedures for the use of machinery, research articles that support research. In the calculation of OEE, it measures with three categories, namely availability, performance and quality to identify the six big losses. The results showed an average OEE score of 29%, with an average availability score of 85%, performance 23%, and quality 85%. Meanwhile, significant losses affected the effectiveness of idling and minor stoppages by 31%, equipment failure by 31% and Setup Time Losses by 26%.

The results of the fishbone analysis were carried out by the formulation of recommendations to improve the efficiency of vertical packaging korin machines with Focused Improvement to be improved as the first step in an effort to increase the productivity and efficiency of vertical packaging korin machines by making Planned Maintenance, namely machine maintenance schedules, Planned downtime and checking the machine before and after use.