

ANALISIS POTENSI PENINGKATAN EFEKTIVITAS MESIN PENGERING (TRAY DRYER) PADA PENGOLAHAN TEH PUTIH

INTISARI

Permasalahan pada Pusat Penelitian Teh dan Kina (PPTK) terjadinya penurunan performa mesin pada proses produksi pengeringan untuk memproduksi teh putih sehingga memperlama dalam proses pengeringan bahan baku teh putih. Pemecahan permasalahan tersebut dapat dilakukan menggunakan metode *OEE*, *Overall Equipment Effectiveness (OEE)* yang gunanya untuk mengetahui seberapa efektif proses produksi mesin berjalan sehingga dengan penelitian ini dapat diketahui nilai dari *Overall Equipment Effectiveness* pada mesin produksi pengering teh putih PPTK sehingga mesin dapat kembali bekerja secara optimal

Metode yang digunakan adalah perhitungan *OEE* dengan mempertimbangkan ketersediaan waktu produksi, performa kerja mesin dan peralatan produksi, serta kualitas produk yang dihasilkan. Adanya pengukuran efektivitas mesin diharapkan dapat memberikan informasi terhadap PPTK dalam menentukan efektivitas atau tidaknya kebijakan perawatan yang telah dilakukan

Kinerja mesin pengering *tray dryer* belum sesuai dengan standar *OEE*. Berdasarkan hasil perhitungan yang telah dilakukan rata – rata nilai *Overall Equipment Effectiveness* adalah 76,87%. Kinerja mesin *Tray dryer* selama 17 hari kerja rata-rata nilai *Availability Rate* 81,67%, *Performance Rate* 94,12% , dan *Quality Rate* 100%. Potensi dapat ditingkatkan sehingga nilai *OEE* menjadi 84,31% dengan menaikkan parameter nilai *Availability Rate*.

Kata Kunci : Efektivitas, *OEE*, Performa Mesin, Kinerja Mesin



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**POTENTIAL ANALYSIS OF INCREASING THE EFFECTIVENESS OF THE TRAY
DRYER MACHINE IN WHITE TEA PROCESSING**

ABSTRACT

The problem at the Tea and Quinine Research Center (PPTK) is that there is a decrease in machine performance in the drying production process for producing white tea so that it prolongs the drying process of white tea raw materials. Solving these problems can be done using the *OEE* method, Overall Equipment Effectiveness (*OEE*) which is used to find out how effectively the machine's production process is running so that this research can determine the value of *Overall Equipment Effectiveness* on the PPTK white tea dryer production machine so that the machine can return to work optimally.

The method used in the calculation of *OEE* by considering the availability of production time, work performance of machines and production equipment, and the quality of the resulting product. The existence of the machine effectiveness measurement was expected to provide information to PPTK in determining the effectiveness or not of the maintenance policy that has been carried out.

Performance of the *tray dryer* was not in accordance with the *OEE* standard. Based on the results of calculations that have been carried out the average value of *Overall Equipment Effectiveness* is 76.87%. The performance of the machine *Tray dryer* for 17 working days had an average *Availability Rate* of 81.67%, a *Performance Rate* of 94.12%, and a *Quality Rate* of 100%. The potential could be increased so that the value of *OEE* becomes 84.31% by increasing the *Availability Rate's* parameter.

Keywords: Effectiveness, *OEE*, Machine Performance, Machine Performance