

## **ABSTRACT**

*PT. CUC is a company engaged in the manufacturing industry for the manufacture of can packaging. The types of cans produced are very diverse, ranging from tuna cans, sardine cans, aerosol cans, milk cans, beverage cans, biscuit cans, and many more. To increase the production effectiveness of PT. CUC has implemented preventive maintenance in all parts of the production department. However, the implementation is still not optimal, especially in the Golden Eagle engine, the general can department, which still experiences a lot of damage when the engine is operating. This study aims to measure the value of the effectiveness of the machine, find the root cause of the problem and provide recommendations for improvements with Total Productive Maintenance. Based on the results of calculations using the OEE method from July 2022 - December 2022, the values obtained were 40%, 46%, 48%, 40%, 58%, and 41% respectively. The OEE value for that period has not reached the world class standard value applied, which is 85%. Next, an analysis of the Six Big Losses factors that influence the OEE value is carried out. The breakdown and reduce speed factor values of the six big losses on the golden eagle machine are 18% and 22%. Furthermore, an analysis using a fishbone diagram is carried out to find out the root causes of the problems that occur from the six big losses by considering human, machine, method, material and environmental factors.*

***Keywords: Effectiveness, Total Productive Maintenance (TPM), Overall Equipment Effectiveness (OEE), Six Big Losses, Fishbone Diagram***

## ABSTRAK

PT. CUC merupakan perusahaan yang bergerak dibidang industri manufaktur pembuatan kemasan kaleng, Jenis-jenis kaleng yang diproduksi sangat beragam, mulai dari kaleng tuna, kaleng sarden, kaleng aerosol, kaleng susu, kaleng minuman, kaleng biskuit, dan masih banyak lagi. Untuk meningkatkan efektivitas produksi PT. CUC telah menerapkan *preventive maintenance* diseluruh bagian departemen produksi. Namun dalam pelaksanaannya masih belum optimal khususnya pada mesin *golden eagle* departemen *general can* yang masih mengalami banyak kerusakan saat mesin beroperasi. Penelitian ini bertujuan untuk mengukur nilai efektivitas mesin, mencari akar penyebab masalah dan memberikan usulan perbaikan dengan *Total Productive Maintenance*. Berdasarkan hasil perhitungan menggunakan metode OEE dari bulan Juli 2022 – Desember 2022, berturut-turut diperoleh nilai 40%,46%,48%,40%,58%, dan 41%. Nilai OEE periode tersebut belum mencapai nilai *standart world class* yang diterapkan yaitu 85%. Selanjutnya dilakukan analisis faktor *Six Big Losses* yang mempengaruhi nilai OEE. Nilai faktor *breakdown* dan *reduce speed* dari *six big losses* pada mesin *golden eagle* yaitu sebesar 18% dan 22%. Selanjutnya dilakukan analisis menggunakan diagram *fishbone* untuk mengetahui akar penyebab masalah yang terjadi dari *six big losses* dengan mempertimbangkan faktor manusia, mesin, metode, material dan lingkungan.

**Kata Kunci:** Efektivitas, *Total Productive Maintenance* (TPM), *Overall Equipment Effectiveness* (OEE), *Six Big Losses*, *Diagram Fishbone*