

ABSTRAK

Reliability Centered Maintenance (RCM) merupakan suatu metode analisis pemeliharaan yang digunakan untuk menganalisa dan memperbaiki sistem pemeliharaan yang berfokus untuk meningkatkan kehandalan mesin. Permasalahan yang terjadi pada mesin produksi PT. Indesso Culinaroma Internasional adalah masih terjadinya kegagalan mesin yang menyebabkan berhentinya proses produksi di luar jadwal *Preventive Maintenance* (PM) selama 240,2 jam yang terjadi pada periode juli sampai november 2019. Oleh sebab itu dilakukan penelitian terhadap mesin dengan waktu kegagalan mesin tertinggi dari 8 mesin kritis yang menyebabkan mesin berhenti berproduksi. Penelitian dilakukan dengan pengolahan data *Time Between Failure* (TBF) sesuai pola distribusi probabilitasnya yang kemudian dihitung tingkat kehandalan mesin sebelum dan sesudah dilakukannya perbaikan interval waktu *preventive maintenance*. Hasil analisisnya menunjukkan bahwa mesin amixon mengalami peningkatan kehandalan sebesar 25,35 % apabila dilakukan perbaikan *preventive maintenance* selama 5,17 jam atau setelah 2 kali mesin amixon melakukan proses produksi.

Kata Kunci: *Maintenance, Preventive Maintenance (PM), Reliability Centered Maintenance (RCM), Reliability*



ABSTRACT

Reliability Centered Maintenance (RCM) is a maintenance analysis method used to analyze and improve maintenance systems that focus on improving machine reliability. The problems that occur in PT. Indesso Culinaroma Internasional is that there are still machine failures that cause the production process to stop outside the Preventive Maintenance (PM) schedule for 240.2 hours that occurred in the period July to November 2019. Therefore, a study was conducted on the machine with the highest engine failure time of 8 critical machines which caused the machine to stop producing. The research was conducted by processing Time Between Failure (TBF) data according to the probability distribution pattern which then calculated the level of machine reliability before and after the preventive maintenance time interval repair was made. The results of the analysis show that the amixon machine has increased reliability by 25,35 % when preventive maintenance repairs are carried out for 5.17 hours or after 2 times the amixon machine carries out the production process.

Keywords: *Maintenance, Preventive Maintenance (PM), Reliability Centered Maintenance (RCM), Reliability*

