

**Evaluasi jadwal perawatan mesin Jeanologia Laser dengan pendekatan *Overall Equipment Effectiveness (OEE)* untuk melakukan perbaikan perawatan dengan Metode *Reliability Centered Maintenance (RCM)* dan *Risk Based Maintenance (RBM)* (Studi Kasus : Departement Laundry PT. Eratex Djaja)**

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**ABSTRAK**

PT Eratex Djaja merupakan perusahaan Garment. Produk yang dihasilkan oleh perusahaan merupakan pakaian jadi. Kegiatan *maintenance* yang ada di PT Eratex Djaja terbagi menjadi dua, yaitu *preventive maintenance* serta kegiatan *corrective maintenance* yang dilakukan jika mesin mengalami kegagalan fungsi. Kegagalan fungsi pada mesin Jeanologia Laser masih cukup tinggi. Oleh karena itu, diperlukan kegiatan pencegahan untuk meningkatkan reliabilitas mesin.

Metode yang dilakukan adalah *Reliability Centered Maintenance*, yaitu dengan menganalisis *failure* yang terjadi dengan menggunakan analisa *Failure Mode and Effect Analysis* dan *Decision Worksheet*, sedangkan Metode *Reliability Based Maintenance* yaitu metode kuantitatif yang menghitung suatu akibat apabila mesin mengalami kegagalan fungsi yang kerugiannya berupa materi dan menganalisa apabila kerugian terjadi perusahaan dapat menerima ataupun tidak akibat dari kerugian materi tersebut.

Hasil dari analisa ini yaitu Sistem elektronik menimbulkan 120 kerusakan, sedangkan pada sistem yang lain masih lebih kecil jumlah kerusakannya. Dalam analisa FMEA terdapat 18 *Failure Mode* yang dihasilkan, sedangkan dengan metode RBM didapatkan nilai risiko yang diterima PT Eratex Djaja apabila mesin Jeanologia Laser mengalami kerusakan yaitu sebesar Rp 491.596.592

**Kata kunci :** *Failure Mode and Effect Analysis, Reliability Cencentered Maintenance, Risk Based Maintenance, Overall Equipment Effectiveness*

***Evaluate the Jeanologia Laser machine maintenance schedule with the Overall Equipment Effectiveness (OEE) approach to make maintenance improvements with the Reliability Centered Maintenance (RCM) and Risk Based Maintenance (RBM) Method (Case Study: Department of Laundry PT. Eratex Djaja)***

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**ABSTRACT**

*PT Eratex Djaja is a Garment company. The product produced by the company is apparel. Maintenance activities at PT Eratex Djaja are divided into two, namely preventive maintenance and corrective maintenance activities carried out if the machine fails. Malfunction of the Jeanologia Laser machine is still quite high. Therefore, exertion activities are needed to increase machine reliability.*

*The method used is Reliability Centered Maintenance, namely by analyzing failures that occur by using the Failure Mode and Effect Analysis and Decision Worksheet analysis, while the Reliability Based Maintenance Method is a quantitative method that calculates an effect if the machine has a malfunction of material loss and analyzes if losses occur companies can receive or not result from material losses.*

*The results of this analysis are that the electronic system caused 120 damage, while in other systems the damage was still smaller. In the FMEA analysis there were 18 Failure Modes produced, while the RBM method obtained the risk value received by PT Eratex Djaja if the Jeanologia Laser machine was damaged, amounting to Rp.491,596,592*

**Keywords** : *Failure Mode and Effect Analysis, Reliability Cencetered Maintenance, Risk Based Maintenance, Overall Equipment Effectiveness*