

ABSTRAK

Pada industri konveksi, efektivitas mesin produksi merupakan faktor penting yang memengaruhi kelancaran proses produksi, produktivitas, dan kemampuan perusahaan dalam memenuhi permintaan pelanggan. Tingginya frekuensi kerusakan mesin dan *downtime* dapat menyebabkan terhambatnya proses produksi serta menurunkan efektivitas penggunaan mesin. Esduabelas masih menghadapi permasalahan pada mesin jahit yang disebabkan oleh penerapan sistem pemeliharaan *corrective maintenance*, yaitu pemeliharaan yang dilakukan setelah terjadi kerusakan. Penelitian ini bertujuan untuk mengetahui kondisi pemeliharaan mesin jahit yang diterapkan perusahaan, mengukur nilai *Overall Equipment Effectiveness* (OEE) sebelum dan sesudah penerapan *Total Productive Maintenance* (TPM), serta mengetahui pengaruh penerapan TPM terhadap efektivitas mesin jahit. Hasil penelitian menunjukkan bahwa pemeliharaan menggunakan metode TPM diperoleh nilai rata-rata *Availability Rate* sebesar 99,82%, *Performance Rate* menjadi 95,16%, *Quality Rate* menjadi 99,96%, dan OEE menjadi 94,95%. Hasil penelitian menunjukkan bahwa penerapan *Total Productive Maintenance* (TPM) mampu meningkatkan nilai OEE mesin jahit di Esduabelas.

Kata Kunci: Pemeliharaan, *Corrective Maintenance*, *Total Productive Maintenance* (TPM), *Overall Equipment Effectiveness* (OEE)

ABSTRACT

In the garment industry, machine effectiveness is a critical factor influencing the smoothness of the production process, productivity, and the company's ability to meet customer demand. High frequency of machine breakdowns and downtime can disrupt production and reduce machine effectiveness. Esduabelas continues to face problems with its sewing machines caused by its implementation of a corrective maintenance system, which is maintenance performed after a breakdown occurs. This study aims to determine the condition of the sewing machine maintenance implemented by the company, measure the Overall Equipment Effectiveness (OEE) before and after the implementation of Total Productive Maintenance (TPM), and determine the effect of TPM on sewing machine effectiveness. The results show that maintenance using the TPM method resulted in an average Availability Rate of 99.82%, a Performance Rate of 95.16%, a Quality Rate of 99.96%, and an OEE of 94.95%. The results indicate that the implementation of Total Productive Maintenance (TPM) can increase the OEE value of sewing machines at Esduabelas.

Keywords: *Maintenance, Corrective Maintenance, Total Productive Maintenance (TPM), Overall Equipment Effectiveness (OEE)*