

TOTAL PRODUCTIVE MAINTENANCE (TPM) PADA PERAWATAN MESIN JAHIT MENGGUNAKAN OVERALL EQUIPMENT EFFECTIVENESS (OEE) DI CV. CAHAYA SETIA MULYA

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis system perawatan pada mesin produksi yang digunakan oleh CV. Cahaya Setia Mulia dan menganalisis faktor-faktor yang mempengaruhi tinggi rendahnya nilai OEE pada mesin jahit dengan focus melakukan perencanaan *Total Productive Maintenance* yang didukung oleh pendekatan *Overall Equipment Effectiveness*. *Overall Equipment Effectiveness* digunakan untuk mengetahui tingkat produktivitas dari mesin produksi yaitu mesin jahit. Hasil analisis menunjukkan bahwa tingkat *downtime* menjadi hambatan bagi perusahaan dalam melakukan proses produksi karena menurunnya kecepatan dan performa mesin. Hal ini disebabkan oleh kurangnya perawatan pada mesin jahit yang digunakan. Hasil perhitungan nilai OEE menunjukkan bahwa mesin jahit sudah mencapai standar persentase *world class* yang dianjurkan oleh *Japan Institute Of Plant Maintenance*. Dari perhitungan *Six Big Losses* ditemukan bahwa kerugian terbesar yang terjadi adalah *defect losses*. Terdapat tiga penyebab dari terjadinya kerugian, faktor penyebab tersebut meliputi faktor manusia, metode, dan mesin.

Kata kunci: Kegagalan, Pengendalian, Produksi, OEE

TOTAL PRODUCTIVE MAINTENANCE (TPM) ON SEWING MACHINE MAINTENANCE USING OVERALL EQUIPMENT EFFECTIVENESS (OEE) AT CV. MULYA LOYAL LIGHT

ABSTRACT

This study aims to analyze the maintenance system for production machines used by CV Cahaya Setia Mulia and to examine the factors that influence the high and low Overall Equipment Effectiveness (OEE) values of sewing machines, with a focus on planning Total Productive Maintenance (TPM) supported by the OEE approach. OEE assesses the productivity level of production machines, specifically sewing machines. The results of the analysis indicate that downtime significantly hinders the company's production process due to reduced speed and machine performance, which can be attributed to insufficient maintenance of the sewing machines. The OEE value calculations reveal that the sewing machines have achieved the world-class percentage standard recommended by the Japan Institute of Plant Maintenance. Furthermore, the Six Big Losses assessment identified defect losses as the most significant issue. The analysis identified three primary causal factors for these losses: human factors, methods, and machines.

Keywords: Failure, Control, Production, OEE

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