

## ABSTRAK

Perusahaan yang berada di kawasan industri Suryacipta Karawang merupakan perusahaan yang bergerak di bidang manufaktur komponen kebutuhan part elektronik kecil hingga besar, salah satu dari produknya yaitu part base stand untuk perakitan printer. Penelitian ini bertujuan untuk meningkatkan waktu downtime pada mesin spot welding. Metode yang digunakan adalah OEE dan six big losses. Metode ini diangkat karena menunjang program continuous improvement yang ada di Perusahaan dan TPM, Objek yang diteliti yaitu mesin spot welding dalam proses produksi part base stand. Tahapan pertama meningkatkan efisiensi produksi pada mesin spot welding adalah dengan melakukan pengukuran efektivitas mesin spot welding dengan menggunakan metode OEE, kemudian dilanjutkan pengukuran six big losses dicari faktor yang membuat downtime pada mesin spot welding. Hasil dari perhitungan diperoleh nilai OEE rata-rata 95%. Berdasarkan perhitunagn six big losses, equipment failure losses sebesar 8%, set up and adjust losses sebesar 1%, idling and minnor stop page sebesar 8%, reduce speed losses sebesar 1,83%, defect losses 1,83% dan scrap losses sebesar 0%. Hasil analisis diagram fishbone yaitu tingginya nilai downtime. Perhitungan dapat dirumuskan rekomendasi perbaikan dengan cara memperhatikan dan meningkatkan perawatan pada mesin dan melakukan preventive maintenance. Untuk beroperasi secara efektif dan efisien, perusahaan perlu memastikan bahwa tidak ada gangguan produksi yang disebabkan oleh kerusakan, penghentian dan kegagalan mesin. Overall Equipment Effectiveness (OEE) merupakan metode pengukuran efektivitas keseluruhan suatu mesin produksi yang melibatkan pengukuran tingkat efektivitas waktu, tingkat kinerja mesin, serta tingkat kualitas produk yang dihasilkan.

**Kata Kunci :** *Overall Equipment Effectiveness, Six Big Losses, Preventive Maintenance*



**KARAWANG**

## ABSTRACT

*The company located in the Suryacipta Karawang industrial area is a company engaged in manufacturing components for small to large electronic parts; one of its products is a base stand part for printer assembly. This study aims to increase uptime on spot welding machines; the method used is OEE and six big losses. This method was chosen because it supports the continuous improvement program in the company and TPM. The object studied is the spot welding machine in the base stand part production process. The first stage of increasing production efficiency on the spot welding machine is by measuring the effectiveness of the spot welding machine using the OEE method, then continuing with measuring the six big losses to find factors that cause downtime on the spot welding machine. The results of the calculation obtained an average OEE value of 95%. Based on the calculation of the six big losses, equipment failure losses were 8%, setup and adjustment losses were 1%, idling and minor stoppage were 8%, reduced speed losses were 1.83%, defect losses were 1.83%, and scrap losses were 0%. The results of the fishbone diagram analysis are high downtime values. Calculations can formulate recommendations for improvement by paying attention to and improving machine maintenance and conducting preventive maintenance. To operate effectively and efficiently, companies need to ensure that there are no production disruptions caused by damage, stoppages, and machine failures. Overall Equipment Effectiveness (OEE) is a method of measuring the overall effectiveness of a production machine that involves measuring the level of time effectiveness, the level of machine performance, and the level of product quality produced.*

**Keywords:** Overall Equipment Effectiveness, Six Big Losses, Preventive



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