ANALISIS EFEKTIVITAS MESIN CACAH GELAS PLASTIK DENGAN METODE *OVERAL EQUIPMENT EFFECTIVENESS* (OEE)

Naufal Rizki Oktavianto

ABSTRAK

Penelitian ini bertujuan untuk menganalisis efektivitas mesin cacah gelas plastik dalam proses produksi menggunakan metode Overal Equipment Effectiveness (OEE) dan Six Big Losses. Berdasarkan Evaluasi OEE pada Bulan Oktober 2022, nilai efektivitas mesin cacah gelas plastik tercatat sebesar 57,16%, di bawah standar OEE dunia 85%. Dalam six big Losses, ditemukan bahwa breakdown losses merupakan faktor terbesar yang memengaruhi efektivitas mesin sebesar 18%. Dalam pembuatan diagram pareto ditemukan bahwa Break down losses merupakan faktor terbesar, dengan nilai pareto 51%. Hal ini disebabkan pisau pencacah yang buruk, menyebabkan gelas plastik tidak terpotong dengan baik dan memerlukan waktu dan upaya tambahan untuk perbaikan. Solusi yang diusulkan dengan penyusunan kembali Standar Operasional Prosedur (SOP) yang jelas untuk pemelihataan rutin, pelatihan operator mengenai pengoperasiao yang benar, pemeliharaan berkala pada motor listrik, penggunaan mata pisau berkualitas tinggi. Diharapkan dengan mengimplementasian solusi ini, efektivitas mesin cacah gelas plastik dapat meningkat, downtime dapat dikurangi, dan nilai OEE dapat ditingkatkan.

Kata kunci : *Mesin cacah gelas plastik, OEE, Six Biglosses*

ANALYSIS OF THE EFFECTIVENESS OF PLASTIC CRUSHING MACHINE WITH THE OVERALL EQUIPMENT EFFECTIVENESS (OEE) METHOD

Naufal Rizki Oktavianto

ABSTRACT

This research aims to analyze the effectiveness of the plastic glass shredder machine in the production process using the Overall Equipment Effectiveness (OEE) and Six Big Losses methods. Based on the OEE evaluation in October 2022, the effectiveness value of the plastic glass shredder machine was recorded at 57.16%, below the global OEE standard of 85%. In the Six Big Losses analysis, it was found that breakdown losses were the biggest factor affecting machine effectiveness, accounting for 18%. In the Pareto diagram, it was discovered that breakdown losses were the major factors, with Pareto values of 51%.This issue was caused by the poor condition of the shredding blades, resulting in improper cutting of the plastic glass and requiring additional time and effort for repairs. Proposed solutions include revising the Standard Operating Procedures (SOP) for routine maintenance, providing training for operators on proper operation, conducting regular maintenance on electric motors, and using high-quality shredding blades. It is expected that by implementing these solutions, the effectiveness of the plastic glass shredder machine can be improved, downtime can be reduced, and the OEE value can be increased.

Keywords: *Plastic glass shredder machine, OEE, Six Big Losses*