

ABSTRAK

PT Adi Satria Abadi (ASA) adalah perusahaan penyamakan kulit kambing dan domba serta produsen sarung tangan, yang berlokasi di Desa Banyakan 1, Sitimulyo, Piyungan, Bantul, Yogyakarta. Pada Divisi *Shaving*, mesin Alleti 1300 sering mengalami masalah, dengan *downtime* rata-rata 6,28% dari waktu tersedia antara April 2023 hingga Maret 2024, sedangkan mesin dikatakan baik apabila *downtime*-nya kurang dari 3%. Selama periode tersebut, PT ASA memiliki persentase *defect* rata-rata bulanan sebesar 2,472%. *Downtime* dan *rework* akibat *defect* menyebabkan kerugian waktu dan biaya, serta potensi keluhan konsumen karena tidak terpenuhinya permintaan produk. Oleh karena itu, diperlukan tindakan pencegahan untuk meminimalisasi penyebab *losses* pada mesin Alleti 1300.

Metode *Overall Equipment Effectiveness* (OEE) digunakan untuk menilai efektivitas mesin Alleti 1300 dengan mengukur *availability rate*, *performance efficiency*, dan *quality of product*. Hasil perhitungan OEE membantu untuk mengetahui kinerja atau performa mesin. Analisis *losses time* menggunakan metode *Six Big Losses* dan diagram pareto mengungkap faktor utama penyebab *losses*. Selanjutnya, *Fishbone diagram* digunakan untuk menganalisis akar masalah. Usulan perbaikan dirumuskan melalui *Focus Group Discussion* (FGD) antara peneliti, operator mesin, dan manajemen perusahaan.

Hasil penelitian menunjukkan bahwa nilai rata-rata *Overall Equipment Effectiveness* (OEE) mesin Alleti 1300 di PT ASA selama April 2023 hingga Maret 2024 sebesar 77,797%, yang berarti masih di bawah standar OEE yaitu >85%. Analisis *Six Big Losses* mengidentifikasi faktor penyebab pemborosan yaitu *reduced speed losses* (37,008%), *idling and minor stoppages losses* (34,18%), dan *breakdown losses* (9,72%) yang secara keseluruhan menyumbang 80,91% dari total pemborosan. Usulan perbaikan meliputi penerapan program pemeliharaan mandiri (*autonomous maintenance*) untuk meningkatkan tanggung jawab dan pengetahuan operator, perbaikan SOP untuk memastikan sistem produksi yang saling mendukung antar divisi, pelatihan pekerja dan pengawasan inspeksi yang lebih ketat untuk menghindari *human error*, serta perbaikan perencanaan produksi dengan sistem informasi terintegrasi guna mendukung produksi yang efektif dan efisien.

Kata kunci: *Overall Equipment Effectiveness* (OEE), *Six Big Losses*, PT ASA

ABSTRACT

PT Adi Satria Abadi (ASA) is a company specializing in goat and sheep leather tanning and glove manufacturing, located in Desa Banyakan 1, Sitimulyo, Piyungan, Bantul, Yogyakarta. In the shaving division, the Alleti 1300 machine frequently encounters issues, with an average downtime of 6.28% of available time between April 2023 and March 2024. as machine is considered good if its downtime is less than 3%. During this period, PT ASA had a monthly defect rate of 2.472%. Downtime and rework due to defects result in time and cost losses, as well as potential customer complaints due to unmet product demand. Therefore, preventive measures are needed to minimize the causes of losses on the Alleti 1300 machine.

The Overall Equipment Effectiveness (OEE) method is used to assess the effectiveness of the Alleti 1300 machine by measuring availability rate, performance efficiency, and product quality. OEE calculations help to determine the machine's performance. Loss time analysis using the Six Big Losses method and Pareto diagram reveals the main factors causing losses. Next, Fishbone diagram are used for root cause analysis. I

mprovement proposals are formulated through Focus Group Discussion (FGD) between researchers, machine operators, and company management.

The research results show that the average Overall Equipment Effectiveness (OEE) of the Alleti 1300 machine at PT ASA from April 2023 to March 2024 is 77.797%, which is below the OEE standard of >85%. Six Big Losses analysis identifies the main causes of losses as reduced speed losses (37.008%), Idling and minor stoppage losses (34.18%), and breakdown losses (9.72%), which together contribute 80.91% of total losses. Improvement proposals include implementing an autonomous maintenance program to increase operator responsibility and knowledge, improving SOPs to ensure a supportive production system across divisions, providing worker training and stricter inspection supervision to avoid human error, and improving production planning with an integrated information system to support effective and efficient production.

Keywords: *Overall Equipment Effectiveness (OEE), Six Big Losses, PT ASA*