

ABSTRAK

Perusahaan manufaktur perlu mempertahankan tingkat produksi mereka untuk memenuhi permintaan pelanggan. Setiap kali masalah kapasitas muncul, segera mereka mencari peningkatan lembur, jumlah shift, membeli mesin dan peralatan baru. Sebagai alternatif, mereka harus fokus pada pemanfaatan sumber daya yang lebih baik dan peningkatan kinerja mesin yang ada yang mengarah pada peningkatan kinerja peralatan, pengurangan kemacetan, mengurangi waktu henti secara keseluruhan, meningkatkan kinerja operator dan meminimalkan waktu penyiapan dan bentuk utama lainnya dari kerugian, sehingga memungkinkan dalam keputusan investasi pembelian mesin baru. Dalam penelitian ini dilakukan upaya untuk menerapkan pemeliharaan produktif total untuk mencapai efektivitas peralatan keseluruhan (OEE) mendekati standar kelas dunia. Analisis hasil menunjukkan bahwa, kerugian *downtime* bukan satu-satunya parameter yang mempengaruhi, tetapi waktu *idle* mesin adalah yang lain faktor yang menambah variasi dalam OEE. PT Marutake Miyama Indonesia merupakan perusahaan yang bergerak di bidang otomotif yang tujuan utamanya menginginkan target produksi yang direncanakan dapat terpenuhi dengan baik. Akan tetapi karena faktor yang memiliki *persentase* terbesar dari faktor *six big losses* adalah *reduce speed losses* (37,32%) yang bisa menghambat proses produksi sehingga pencapaian target produksi masih jauh dari harapan. Selama periode tahun 2021 di peroleh nilai OEE (69,03%-79,12%), *availability rate* (80,61%-88,71%), *performance efficiency* (79,25%-93,03%) *quality rate* (99,93%-99,98%). Nilai OEE tertinggi pada bulan Desember sebesar (79,12%). Dan nilai OEE terendah pada bulan Juni (69,03%). Apa yang telah dilakukan di PT Marutake Miyama Indonesia diharapkan dapat menjadi langkah awal peningkatan efektifitas mesin yang nantinya akan sampai pada penerapan *Total Productive Maintenance* (TPM).

Kata Kunci: *Availability rate, Overall Equipment Effectiveness Performance efficiency, Quality rate, Six Big Losses, Total Productive Maintenance (TPM)*

ABSTRACT

Manufacturing companies need to maintain their production levels to meet customer demands. Whenever capacity problems arise immediately, they seek to increase over time, the number of shifts and purchase new machinery and equipment. Alternatively, they should focus on better resource utilization and performance improvement of existing machines leading to improved equipment performance, reduced bottlenecks, reduced overall downtime, improved operator performance, and minimized setup time and other major forms of loss, thereby enabling investment decisions to purchase new machines. In this study, an attempt was made to implement total productive maintenance to achieve overall equipment effectiveness (OEE) approaching world-class standards. Analysis of the results showed that downtime loss was not the only influencing parameter, but engine idle time was another factor that adds to the variation in OEE. PT Marutake Miyama Indonesia is a company engaged in the automotive sector whose main goal is to meet the planned production targets. However, the factor that has the largest percentage of the six big losses factor was reduced speed losses (37.32%) which could hamper the production process so that the achievement of production targets is still far from expectations. During the 2021 period, they were the OEE value (69.03%-79.12%), availability rate (80.61%-88.71%), performance efficiency (79.25%-93.03%) quality rate (99.93%-99.98%). The highest OEE value was in December of (79.12%). And the lowest OEE value was in June (69.03%). It had been conducted at PT Marutake Miyama Indonesia was expected to be the first step in increasing the effectiveness of the machine that would eventually lead to the implementation of Total Productive Maintenance (TPM).

Keywords: *Availability rate, Overall Equipment Effectiveness Performance efficiency, Quality rate, Six Big Losses, Total Productive Maintenance (TPM)*