ABSTRAK

Kunci kesuksesan dari setiap *Manufacturing Optimization Strategies* adalah mesin yang andal, salah satu metode mengukur tingkat keberhasilan penerapan TPM adalah melalui pengukuran nilai *Overall Equipment Effectiveness* (OEE). Salah satu penyebab terganggunya proses produksi yaitu kurang baiknya manajemen pemeliharaan pada mesin produksi. Salah satu hambatan yang dihadapi pada proses produksi perusahaan adalah tingginya *downtime* pada lini produksi *Radial Drilling Machine,* dengan rata-rata *downtime* yang terjadi pada periode bulan Januari – Juli 2019 sebesar 490,75 menit/bulan. Secara rata-rata pencapaian OEE dari *Radial Drilling Machine* selama periode bulan Januari – Juli 2019 hanya sebesar 73%, dengan masing-masing nilai rata-rata *Availability* 96%, *Performance* 77% dan *Quality* sebesar 99%. Pencapaian ini tidak memenuhi standar kondisi ideal mesin atau peralatan OEE kelas dunia yaitu sebesar 85% karena rendahnya nilai *Performance*. Penyebab rendahnya nilai *Performance* ini adalah tingginya nilai dari *Reduce Speed Losses* atau kerugian yang disebabkan oleh berkurangnya kecepatan mesin dalam proses produksi. Tingginya nilai *Reduce Speed Losses* adalah sebesar 2013 menit dari *Total Time Losses* yaitu sebesar 6050 menit yang diketahui dari hasil analisa menggunakan *Pareto Chart* dan *Fishbone Diagram.*

Kata Kunci : *Overall Equipment Effectiveness* (OEE), *Availability, Performance, Quality, Six Big Losses, Pareto Chart, Reduce Speed Losses, Downtime*

ABSTRACT

The key to the success of any Manufacturing Optimization Strategies is a reliable machine, one method of measuring the success rate of implementing TPM is through measuring the value of Overall Equipment Effectiveness (OEE). One of the causes of disruption in the production process is the lack of good maintenance management on production machines. One of the obstacles faced in the company's production process is the high downtime on the Radial Drilling Machine production line, with an average downtime that occurs in the January - July 2019 period of 490.75 minutes / month. On average, the OEE achievement of Radial Drilling Machines during the period January - July 2019 was only 73%, with an average value of 96% Availability, 77% Performance, and Quality of 99%. This achievement does not meet the ideal conditions for world-class OEE machines or equipment, namely 85% due to the low Performance value. The cause of this low Performance value is the high value of Reduce Speed Losses or losses caused by reduced engine speed in the production process. The high value of Reduce Speed Losses is 2013 minutes from Total Time Losses, which is 6050 minutes which is known from the analysis using Pareto Chart and Fishbone Diagram.

Keywords: Overall Equipment Effectiveness (OEE), Availability, Performance, Quality, Six Big Losses, Pareto Chart, Reduce Speed Losses, Downtime