

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). PT. SUCACO, Tbk. merupakan perusahaan yang beroperasi dibidang manufaktur pembuatan kabel yang tidak lepas dari masalah yang berkaitan dengan efektivitas mesin atau peralatan. 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 mesin PEXCCVIB (CCVB), dengan rata-rata *downtime* yang terjadi pada periode bulan Januari – Desember 2018 sebesar 1162,75 menit/bulan, jauh melebihi target *downtime* yang direncanakan yaitu sebesar 120 menit/bulan. Secara rata-rata pencapaian OEE dari mesin CCVB selama periode bulan Januari – Desember 2018 hanya sebesar 73%, dengan masing-masing nilai rata-rata *Availability*, *Performance* dan *Quality* sebesar 97%, 76% dan 99,2%. Pencapaian ini tidak memenuhi standar kondisi ideal peralatan OEE kelas dunia yaitu sebesar 85%. Lalu diketahui juga bahwa *Reduce Speed Losses* merupakan *losses* tertinggi dari mesin CCVB yang menyebabkan rendahnya efektivitas kinerja mesin, *downtime* yang disebabkan oleh *Machine Breakdown* mempengaruhi kinerja mesin dan menyebabkan menurunnya kecepatan mesin dalam menghasilkan *output*. Hasil ini didapatkan melalui faktor *Six Big Losses* yang berpengaruh terhadap rendahnya efektivitas mesin CCVB diketahui dengan analisa *Pareto Chart* dan *Fishbone Diagram* dengan total *Time Loss* dari *Reduce Speed Losses* sebesar 99024 menit dari total *Time Loss* sebesar 115245 menit.

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

MERCU BUANA

ABSTRACT

The key to the success of every Manufacturing Optimization Strategies is a reliable machine, one of the methods of measuring the success rate of implementing TPM is through measuring the Overall Equipment Effectiveness (OEE) value. PT. SUCACO, Tbk. is a company that operates in the field of cable manufacturing which can not be separated from problems related to the effectiveness of the machine or equipment. One of the causes of the disruption of the production process is the lack of maintenance management on the production machine. One obstacle faced in the company's production process is the high downtime in the PEXCCVIB (CCVB) engine production line, with an average downtime occurring in the January-December 2018 period of 1162.75 minutes / month, far exceeding the planned target downtime that is 120 minutes / month. On average, the achievement of OEE from CCVB machines during the January-December 2018 period was only 73%, with an average availability, performance and quality of 97%, 76% and 99.2%, respectively. This achievement does not meet the ideal conditions for world-class OEE equipment, which is 85%. Then it is also known that Reduce Speed Losses are the highest losses from the CCVB engine which causes low effectiveness of engine performance, downtime caused by Machine Breakdown affects engine performance and decreases engine speed in producing output. These results are obtained through the Six Big Losses factor that affects the low effectiveness of the CCVB engine known by Pareto Chart analysis and Fishbone Diagrams with the total Time Loss of Reduce Speed Losses of 99024 minutes from the total Time Loss of 115245 minutes.

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

MERCU BUANA