

## ABSTRAK

PT. Nutech Pundi Artha merupakan salah satu perusahaan yang bergerak di bidang jasa *manufactur*, produk yang dihasilkan merupakan permintaan dari *customer* dan produk yang dihasilkan adalah *Hardboard OD260, Assy Felt 2SJ, Mat Luggage Compartment Floor, Mat Trunk Floor, Carpet Lug Floor*. Berdasarkan data perusahaan pada Januari 2017 sd Desember 2017, *Hardboard OD260* merupakan produk yang paling banyak diproduksi. Mesin *cutting 05* merupakan mesin utama yang digunakan untuk memproduksi *Hardboard OD260*. Mesin dapat dikatakan baik apabila dapat berfungsi dengan efektif dan efisien dalam menghasilkan output dari prosesnya. Tujuan dari penelitian ini adalah mengetahui nilai OEE mesin *cutting 05* apakah efektif atau tidak serta mengetahui manakah *Six Big Losses* yang paling besar. Dari hasil persentase dan perhitungan nilai *Availability* berkisar 94%-97%, dan nilai *Performance Efficiency* berkisar 8%-80%, untuk nilai *Rate of Quality* 95% - 98%. Lalu diperoleh hasil persentase dan perhitungan nilai OEE (*Overall Equipment Effectiveness*), yang berkisar 7%-75%, dengan rata-rata nilai OEE pada bulan Januari hingga Desember 2017 yaitu sebesar 41%. Dimana nilai tertinggi OEE terdapat pada bulan Desember 2017 yaitu sebesar 75%, hal tersebut dikarenakan pada Bulan Desember mesin memiliki ketersediaan waktu yang banyak, performa mesin baik dan hasil produksi yang dihasilkan juga besar. Sedangkan nilai terendah OEE terdapat pada Bulan Juni 2017 yaitu sebesar 7%, penyebabnya ialah sedikitnya ketersediaan waktu, performa mesin jelek, dan hasil produksi juga sedikit. Untuk faktor *six big losses* yang memberikan kontribusi terbesar terhadap nilai OEE pada mesin *cutting 05* adalah *Reduce Speed Loss* dengan rata-rata nilai sebesar 4,45%. Usulan perbaikan agar nilai efektivitas menjadi tinggi adalah membuat sistem *autonomous maintenance* terhadap mesin.

Kata Kunci: *Overall Equipment Effectiveness, Six Big Losses, Mesin Cutting, Availability, Performance, Rate of Quality*

## ABSTRACT

PT. Nutech Pundi Artha is one of the companies engaged in services manufacturing, the products produced are requests from customers and the products produced Hardboard OD260, Assy Felt 2SJ, Mat Luggage Compartment Floor, Mat Trunk Floor, Carpet Lug Floor. Based on company data from January 2017 to December 2017, Hardboard OD260 is the most produced product. Machine cutting 05 is the main machine used to produce Hardboard OD260. The machine can be said to be good if it can function effectively and efficiently in generating output from the process. The purpose of this study is to determine the value of OEE machines cutting 05 whether effective or not and find out which Six Big Losses are the biggest. The percentage results and calculation of values Availability ranged from 94% -97%, and values Performance Efficiency ranges from 8% -80%, for the Rate of Quality 95% - 98%. Then obtained the percentage results and calculation of OEE (Overall Equipment Effectiveness), which ranged from 7% -75%, with an average OEE value in January to December 2017 which was 41%. Where the highest value of OEE is in December 2017 which is 75%, this is because in December the machine had a lot of time, the performance of the machine was good and the results of the production were also large. While the lowest value of OEE is in June 2017 which is 7%, the cause is the lack of time, poor engine performance, and little production. For the factor six big losses which gives the biggest contribution to the OEE value on machine cutting 05 is Reduce Speed Loss with an average value of 4,45%. The proposed improvement so that the value of effectiveness becomes high is to make the system autonomous maintenance of the machine.

Keywords: Overall Equipment Effectiveness, Six Big Losses, Cutting Machine, Availability, Performance, Rate of Quality