

## ABSTRAK

### **Penerapan *Total Productive Maintenance* Pada Mesin Unit Goss Magnum Untuk Peningkatan Efisiensi Produksi Dengan Metode *Overall Equipment Effectiveness* (OEE) Di PT. Gramedia Printing Group**

PT. Gramedia Printing Group merupakan perusahaan yang bergerak dibidang industri percetakan dengan hasil produksinya berupa koran, majalah, tabloid atau sejenisnya untuk kebutuhan dalam negeri maupun luar negeri. Dimana dalam produksinya tidak terlepas dari masalah yang berhubungan dengan efektivitas mesin/peralatan yang diakibatkan oleh *six big losses*. Oleh karena itu dalam mempertahankan kualitas produk serta keefektifan dan efisiensi kinerja mesin/peralatan, PT. Gramedia Printing Group melakukan pemeliharaan mesin dan peralatan secara periodik untuk menanggulangi dan mencegah masalah tersebut.

Tahapan pertama dalam usaha peningkatan efisiensi produksi pada perusahaan ini adalah dengan melakukan pengukuran efektivitas mesin Unit Goss Magnum 2 dengan menggunakan metode *Overall Equipment Effectiveness* (OEE) yang kemudian dilanjutkan dengan pengukuran OEE *six big losses* untuk mengetahui besarnya efisiensi yang hilang pada keenam faktor *six big losses* yaitu *breakdown losses, set up and adjustment losses, reduce speed losses, idling and minor stoppages, rework losses* dan *yield scrap losses*.

Berdasarkan hasil perhitungan OEE di mesin Unit Goss Magnum 2 selama periode Januari 2012 – Desember 2012 diperoleh nilai *Overall Equipment Effectiveness* (OEE) berkisar antara 63,34% - 84,52% dengan rata-rata nilai OEE adalah 78,14%. Kondisi ini menunjukkan bahwa kemampuan mesin Unit Goss Magnum 2 dalam mencapai target dan dalam pencapaian efektivitas penggunaan mesin/peralatan belum mencapai standar *World Class* karena nilai OEE kurang dari 85%.

Faktor *six big losses* yang memberikan kontribusi terbesar terhadap nilai OEE pada mesin Unit Goss Magnum 2 adalah *Reduce Speed Losses* dengan rata-rata nilai sebesar 11,06%, kemudian disusul dengan *Idling and Minor Stoppages Losses* sebesar 8,51%, *Yield/Scrap Losses* sebesar 6,86%, *Set up/Adjustment Losses* sebesar 2,76% dan *Breakdown Losses* sebesar 1,17%.

**Kata kunci** : *Overall Equipment Effectiveness (OEE), Six Big Losses, Breakdown Losses, Set Up And Adjustment Losses, Reduce Speed Losses, Idling And Minor Stoppages, Rework Losses, Yield Scrap Losses.*

## ABSTRACT

### ***Implementation of Total Productive Maintenance at Goss Magnum Machines Unit 2 to Increase Production Efficiency with Overall Equipment Effectiveness Methods in PT. Gramedia Printing Group***

PT. Gramedia Printing Group is a company engaged in the printing industry with its products such as newspapers, magazines, tabloids or the like to the needs of domestic and overseas. Where the production cannot be separated from problems related to the effectiveness of the machines/equipment caused by the six big losses. Therefore in maintaining the quality of products as well as the effectiveness and efficiency of the performance of machines/equipment, PT. Gramedia Printing Group doing maintenance machines and equipment periodically to this problem.

The first stage in an effort to increase efficiency in the production of this company is by measuring the effectiveness of Goss Magnum machines Unit 2 using the Overall Equipment Effectiveness (OEE), which was followed by six big losses OEE measurements to determine the magnitude of the efficiency loss at the sixth factor six big losses the breakdown losses, set up and adjustment losses, reduce speed losses, idling and minor stoppages, rework scrap losses and yield losses.

Based on the calculation of OEE in Goss Magnum machines Unit 2 during the period January 2012 - December 2012 obtained value of Overall Equipment Effectiveness (OEE) ranged between 63,34% - 84,52% with an average value of OEE is 78,14%. This indicates that the ability of Goss Magnum machines Unit 2 in achieving their goals and in achieving effective use of machines/equipment has not reached the standard for World Class OEE value is less than 85%.

Six big losses factor that contributes most to the value of OEE on Goss Magnum machines Unit 2 is Reduce Speed Losses with an average value of 11,06%, followed by Idling and Minor Stoppages Losses amounted to 8,51%, Yield / Scrap Losses amounted to 6,86%, Set up/Adjustment Losses by 2,76% and 1,17% Breakdown of Losses.

**Keywords** : ***Overall Equipment Effectiveness (OEE), Six Big Losses, Breakdown Losses, Set Up And Adjustment Losses, Reduce Speed Losses, Idling And Minor Stoppages, Rework Losses, Yield Scrap Losses.***