ANALISIS EFEKTIVITAS MESIN GILING DENGAN MENGGUNAKAN METODE *OVERALL EQUIPMENT EFECTIVINESS* Studi Kasus pada PT Madubaru Yogyakarta

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ABSTRAK

PT Madu Baru (PG/PS Madukismo) merupakan sebuah perusahaan penghasil gula berskala besar dengan sistem produksi *continuous production* yang terdiri atas beberapa stasiun kerja, antara lain Stasiun Ketel, Stasiun *Power House*, Stasiun Gilingan, Stasiun Pemurnian, Stasiun Penguapan, Stasiun Masakan/ Kristalisasi, Stasiun Puteran, serta Stasiun Penyelesaian. Pada penelitian ini terdapat permasalahan pada mesin giling tersebut yaitu pelumas cepat habis, pisau patah, roll gilingan tumpul, rantai lepas, mesin kotor. *Delay* mesin giling dari bulan Mei 2016 sampai Juli 2018 memilikki *delay* terbesar pada bulan Mei 2018 sebesar 29,19 jam dan total *delay* terkecil pada bulan Desember 2016 sebesar 2,50 jam. Hal tersebut berdampak pada proses produksi gula di PT Madubaru. Pada penelitian ini bertujuan untuk mengetahui efektivitas dan produktivitas mesin giling pada stasiun gilingan dan mengetahui faktor utama penyebab kegagalan mesin giling dengan metode *Overal Equipment Effectiveness* (OEE). hasil pengolahan*Overal Equipment Effectiveness* (OEE) di PT Madubaru Yogyakartadidapatkan hasil bahwa nilai *Overal Equipment Effectiveness* (OEE) belum memenuhi standar dikarenakan nilai rata rata OEE sangat rendah yaitu sebesar 29,43% dan standar nilai OEE untuk perusahaan kelas dunia idealnya adalah > 85 %. untukfaktor utama yang paling berpengaruh terhadap menurunya efektivitas mesin giling yaitu *Reduced Speed Losses* dengan *time loss* sebesar 150.37Jam dengan persentasi27%.

Kata kunci : *Total Productive Maintenance, Overall Equipment Effectiveness, Six Big Losses, Total Production Ratio*

ABSTRACT

The PT. Madubaru (Madukismo Sugar Factory) is a big-scale sugar producer company, with the continuous production system consisting of several working stations, namely the Kettle Station, Power House Station, Milling Station, Purification Station, Evaporation Station, Crystallization/Cuisine Station, Lapping Station, and Finishing Station. In this research, there are problems on the milling machine: the lubricant runs out quickly, the blade is broken, the blunt mill rolls, the loose chain, and the dirty machine. The milling machine delay from May 2016 till July 2018 had the biggest delay in May 2018 as many as 29.19 hours, and the smallest total delay was on December 2016 as many as 2.50 hours. Those matters affected the sugar production process at the PT. Madubaru. This research aims to ind out the effectiveness and productivity of the milling machine at the milling station, and to find out the main factor causing the milling machine failure, by using the method of Overall Equipment Effectiveness (OEE). The process results of the OEE at the PT. Madubaru Yogyakarta were obtained, that the OEE value had not yet met the standard because the OEE average values was very low, which was 29.43%, and the standard OEE value for the ideal world-class company is more than 85%. For the most influential main factor against the decrease of the milling machine effectiveness was the Reduced Speed Losses, with the time loss was 150.37 hours, and the percentage of 27%.

***Keywords**: Total Productive Maintenance, Overall Equipment Effectiveness, Six Big Losses, Total Production Ratio*

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