

ABSTRAK

Muchamad Gufron, 2020, ANALISIS *OVERALL EQUIPMENT EFFECTIVENESS (OEE)* DALAM MEMINIMALISASI *DEFFECT* PADA MESIN *BLOW BOTOL* (STUDI KASUS PERUSAHAAN MINUMAN DI PANDAAN, PASURUAN), Tugas akhir, Program Study: Teknik Industri Universitas PGRI Adi Buana Surabaya, Dosen Pembimbing Drs. Rusdiyantoro, ST., MT.

Guna tetap menjaga keefektifitasan mesin *blow* botol dan tetap menjaga persaingan di dunia industri yang semakin ketat, maka diperlukan untuk mengetahui nilai rasio mesin *blow* botol agar tetap memenuhi klasifikasi yang sesuai, adapun hal-hal yang ditunjukkan sebagai berikut: untuk mengetahui nilai rasio mesin *blow* botol sebagai pedoman bagian mana saja yang perlu adanya peningkatan di antara tiga variabel yaitu *availability*, *performance*, *quality* dan mengetahui nilai *losses* yang paling signifikan di dalam enam kerugian. Maka dalam penelitian ini menggunakan metode *Overall Equipment Effectiveness (OEE)* yang fungsinya untuk mengetahui efektifitas penggunaan dan pemanfaatan mesin, peralatan, waktu serta material dalam sebuah proses produksi. Dan didapatkan bahwa mesin *blow* botol sering terjadi gangguan atau kerusakan di beberapa bagiannya, maka terjadi ketidak seimbangan produktifitas kinerja mesin *blow* botol tersebut sehingga masih belum bisa memenuhi nilai standart OEE yang sudah ditetapkan sebesar >85%, pada mesin *blow* botol 4 *cavity* mendapatkan nilai 82,47 dan mesin *blow* botol 6 *cavity* mendapatkan nilai 50,79% juga variabel dalam penelitian ini seperti *availability* 86,48% masih dibawah nilai standart OEE 90%, *performance* 96,14% sudah memenuhi nilai standart OEE 95%, *quality* 99,06 sudah memenuhi nilai standart OEE 99% sedangkan variabel dalam mesin *blow* botol 6 *cavity* mendapatkan nilai *availability* 72,85% masih dibawah nilai standart OEE 90%, *performance* 67,92% masih dibawah nilai standart OEE 95%, *quality* 98,82% masih dibawah nilai standart OEE 99%. Dan pada nilai *six big losses* yang paling signifikan pada mesin *blow* botol 4 *cavity* adalah *idling and minor stoppage losses* dengan nilai sebesar 12,245%, sedangkan pada mesin *blow* botol 6 *cavity* adalah *reduce speed losses* dengan nilai sebesar 37,755%. Sehingga diperlukan adanya peningkatan lagi guna untuk mengurangi turunya nilai OEE pada mesin tersebut.

Kata kunci: *availability*, *performance*, *quality*, *Overall Equipment Effectiveness (OEE)*, *six big losses*, mesin *blow* botol

ABSTRACT

Muchamad Gufron, 2020, OVERALL EQUIPMENT EFFECTIVENESS (OEE) ANALYSIS IN MINIMIZING DEFFECT IN BLOW BOTTLE MACHINE (CASE STUDY OF DRINK COMPANY IN PANDAAN, PASURUAN), Final Project, Study Program: Industrial Engineering, University of PGRI Adi Buana Surabaya, Drs. Rusdiyantoro, ST., MT.

In order to maintain the effectiveness of bottle blow machines and maintain competition in the increasingly stringent industry, it is necessary to know the value of the ratio of blow bottle machines in order to meet the appropriate classification, as for the things intended as follows: to find out the value of the bottle blow machine ratio as a guideline which parts need to be increased among the three variables namely availability, performance, quality and find out the value of losses that are the most significant in the six losses. So in this study using the Overall Equipment Effectiveness (OEE) method whose function is to determine the effectiveness of the use and utilization of machinery, equipment, time and material in a production process. And it was found that the bottle blow machine often interruption or damage in some parts, then there was an imbalance in productivity of the performance of the bottle blow machine so that it still could not meet the OEE standard value that has been set >> 85%, on the 4 cavity bottle blow machine get a value of 82, 47 and 6 cavity bottle blow machines get a value of 50.79% also variables in this study such as the availability of 86.48% is still below the standard value of OEE 90%, performance 96.14% meets the OEE standard value of 95%, quality 99.06 meets the 99% OEE standard value while the variable in the 6 cavity bottle blow machine gets an availability value of 72.85% still below the 90% OEE standard value, 67.92% performance is still below the OEE 95% standard value, 98.82% quality is still below 99% OEE standard value. And on the value of six big losses the most significant on a 4 cavity bottle blow machine is idling and minor stoppage losses with a value of 12,245%, while on a 6 cavity bottle blow machine is a reduce speed losses with a value of 37.755%. So it is necessary to increase again in order to reduce the decline in OEE value on the machine.

Keywords: *availability, performance, quality, Overall Equipment Effectiveness (OEE), six big losses, bottle blow machine*