

## ABSTRAK

Industri makanan yang bergerak pada industri pembuatan permen jelly selalu dituntut untuk terus meningkatkan kemampuan daya saingnya agar dapat bersaing, faktor teknologi, efisiensi pekerjaan, perawatan mesin dan penekanan harga (*cost*) menjadi sangatlah penting. Tujuan dari penelitian ini adalah untuk mengetahui bagaimana kondisi maintenance perusahaan dari dan bagaimana tingkat efektivitas dari mesin *processing mogul line 5* serta bagaimana rekomendasi yang tepat untuk meningkatkan efektivitas dari mesin tersebut. Penelitian ini di lakukan dengan menggunakan metode *Overall Equipment Effectiveness (OEE)*, *Six Big Losses*, dan FMEA. Setelah dilakukan penelitian Sebelum perbaikan didapatkan nilai rata – rata *Overall Equipment Effectiveness (OEE)* mesin bulan Januari – Maret 2020 sebesar 71 %, dengan presentase *Availabilty Ratio* sebesar 86%, *Performance Ratio* sebesar 88%, dan *Quality Ratio* sebesar 94%. Setelah dilakukan perbaikan dengan meminimalisir *Six Big Losses* dengan metode FMEA didapatkan nilai rata – rata OEE mesin *processing mogul line 5* bulan April – Mei 2020 sebesar 79%, dengan presentase *Availability Ratio* sebesar 91%, *Performance Ratio* sebesar 92% dan *Quality Ratio* sebesar 94%. Adapun perbaikan yang dilakukan adalah melengkapi WI dan SOP penggunaan mesin, melakukan pelatihan secara berkala kepada operator mengenai penggunaan dan pemeliharaan mesin, dan melakukan *daily maintenance*.

Kata Kunci : *Efisiensi*, *Pemeliharaan*, *Overall Equipment Effectiveness*, *Six Big Losses*, dan *FMEA*

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## ABSTRACT

*Food industry that engaged in the jelly candy industry are always required to continue to improve their competitiveness. In order to be competitive, technological factors, work efficiency, machine maintenance and price (cost) become very important. The purpose of this study is to find out how the company's maintenance conditions and how the level of effectiveness of Mogul line 5 processing machines and how the right recommendations to increase the effectiveness of these machines. This research was conducted using the Overall Equipment Effectiveness (OEE) method, Six Big Losses, and FMEA. After doing research Before repairing, the average value of Overall Equipment Effectiveness (OEE) of the machine from January to March 2020 was 71%, with a percentage of 86% Ratio, Performance Ratio of 88%, and Quality Ratio of 94%. After repairs By minimizing Six Big Losses with the FMEA method, the average OEE processing line for Mogul processing machines in April - May 2020 is 79%, with an availability ratio of 91%, a Performance Ratio of 92% and a Quality Ratio of 94%. The improvements made are to complete the WI and SOP for the use of the machine, conduct regular training to operators on the use and maintenance of the machine, and perform daily maintenance*

*Keywords: Efficiency, maintenance, Overall Equipment Effectiveness, Six Big Losses, FMEA*



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