ANALISIS *OVERALL EQUIPMENT EFFECTIVENESS* PADA MESIN PARUT KELAPA DI CV. MUBAROKFOOD CIPTA DELICIA, KUDUS

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ABSTRAK

Jenang adalah makanan khas dari Kudus, yang terbuat dari campuran tepung, gula, dan santan sebagai bahan utamanya. Jenang menjadi makanan khas yang telah didistribusikan ke seluruh Indonesia, bahkan luar negeri. Potensi itulah yang menyebabkan industri penghasil jenang bertumbuh. Makanan khas satu ini telah menjadi sumber pendapatan masyarakat Kudus.

Sebagai industri makanan dengan potensi besar, perlu memiliki kinerja yang baik, agar industri tersebut semakin maju. Proses produksi jenang di CV. Mubarokfood Cipta Delicia memiliki kendala, yaitu stasiun kerja pemarutan kelapa yang akan dibuat santan, mesinnya menghasilkan *scrap* bahan. Selain itu penggunaan mesin yang belum efektif karena sering menganggur menjadi masalah tersendiri. Untuk memperbaiki kondisi itu maka digunakan metode *Overall Equipment Effectiveness* (OEE), analisis *Six Big Losses*, Diagram Pareto dan Ishikawa, serta *Fault Tree Analysis* (FTA) untuk mengetahui akar penyebab dari kerugian-kerugian yang ada.

Hasil pengukuran rata-rata nilai *Overall Equipment Effectiveness* mesin parut kelapa yang didapat sebesar 74,61%. Dari analisis Six Big Losses didapatkan bahwa kerugian *Idling and Minor Stoppages* menjadi kerugian yang paling tinggi sebesar 19,02%. Kerugian lain adalah *Reduced Speed* dan *Yield Losses* dengan nilai 15,62% dan 9,66%. Ketiga kerugian tersebut dianalisis melalui *Fault Tree Analysis* untuk mengetahui akar penyebab dari kejadian. Penyebab yang paling sering muncul akan menjadi titik utama untuk dirumuskannya rekomendasi yang sesuai.

Kata Kunci: *Fault Tree Analysis* (FTA), Jenang, *Overall Equipment Effectiveness* (OEE), *Six Big Losses*

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OVERALL EQUIPMENT EFFECTIVENESS ANALYSIS OF COCONUT GRATER MACHINE IN CV. MUBAROKFOOD CIPTA DELICIA, KUDUS

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ABSTRACT

Jenang is a traditional typical food from Kudus, made from flour, sugar, and coconut milk mixture as their main material. Jenang become a food that distributed to whole Indonesia, even overseas. That big potention make this kind of industry grows up. This typical food industry become a source of income as Kudus society.

As a good potention industry, they want a good performance that makes the industry more progessive. The process of jenang making in CV. Mubarokfood Cipta Delicia has a problem, from the working station of coconut grating. The machine keep producing scrap of product. Furthermore, the usage of machine is not effective enough, since there are idle of time.

To improve the condition of that machine, some method were used, such as Overall Equipment Effectiveness (OEE), Six Big Losses, Pareto and Ishikawa Diagram, and Fault Tree Analysis (FTA) to know the causes of each losses that happened. The calculation that has been done, obtained he average number of Overall Equpment Effectivenes of grater machine namely 74,61%. From Six Big Losses analysis, obtained a result as Idling and Minor Stoppages losses is a highest losses, namely 19,02%. Other losses that affect the results are Reduced Speed and Yield Losses with 15,62% and 9,66% respectively. Those three losses were analyzed using Fault Tree Analysis to know the causes of that losses. Cause that affect three losses will be a key point to make a appropriate recommendation.

Keywords: Fault Tree Analysis (FTA), Jenang, Overall Equipment Effectiveness (OEE), Six Big Losses

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