

ABSTRAK

Judul : Pengukuran *Overall Equipment Effectiveness* dan Perbaikan Performa Mesin YM Laser Dengan *Fault Tree Analysis* di PT. Pratama Abadi Industri
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Dalam perkembangan dunia industri di era globalisasi perekonomian Indonesia yang semakin meningkat telah membangun iklim persaingan industri manufaktur atau industri dalam bidang sepatu olahraga tidak hanya antar perusahaan dalam negeri tetapi juga harus bersaing dengan perusahaan dari negara-negara lain. PT. Pratama Abadi Industri merespon situasi tersebut dengan berupaya untuk meningkatkan efektifitas dan efisiensi penggunaan mesin melalui peningkatan performa mesin. PT. Pratama Abadi Industri sedang berencana untuk meningkatkan \performa mesin di salah satu mesin yang dimiliki yaitu YM Laser. Mesin YM Laser ini merupakan mesin utama dari proses pembuatan sepatu olahraga.. Pendekatan yang dilakukan yaitu dengan menggunakan metode *Overall Equipment Effectiveness* serta *Fault Tree Analysis*. Mesin YM Laser mempunyai nilai rata - rata *Overall Equipment Effectiveness* sebesar 75.89% .Setelah dilakukan penelitian dengan metode *Overall Equipment Effectiveness (OEE)* ditemukan akar permasalahan *Six Big Losses* yaitu *reduce speed*, lalu diteliti akar permasalahan dari *reduce speed* menggunakan diagram sebab akibat dan ditemukan faktor mesin adalah penyebab utama dari *reduce speed*. maka dapat diusulkan perbaikan dengan *Fault Tree Analysis* pada faktor mesin.

Kata Kunci : *Overall Equipment Effectiveness, Performance Ratio, Six Big Losses, Fault Tree Analysis.*

ABSTRACT

Title : Measurement of Overall Equipment Effectiveness and Performance Improvement of YM Laser Machines With Fault Tree Analysis at PT. Pratama Abadi Industri.

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In the development of the industrial world in the era of globalization of the Indonesian economy which has increasingly developed a competitive climate of manufacturing or industrial industries in the field of sports shoes not only among domestic companies but also must compete with companies from other countries. PT. Pratama Abadi Industri responded to the situation by trying to improve the effectiveness and efficiency of the use of the engine through improving engine performance. PT. Pratama Abadi Industri is planning to increase the engine's performance on one of the engines owned by YM Laser. This YM Laser machine is the main engine of the process of making sports shoes. The approach taken is by using the Overall Equipment Effectiveness method and Fault Tree Analysis. YM Laser machines have an overall value of Overall Equipment Effectiveness of 75.89%. After research with the Overall Equipment Effectiveness (OEE) method found the root cause of the Six Big Losses, namely reduce speed, then examined the root cause of reduce speed using causal diagrams and found factors the engine is the main cause of reducing speed. then it can be proposed improvements with Fault Tree Analysis on machine factors.

Keywords: Overall Equipment Effectiveness, Performance Ratio, Six Big Losses, Fault Tree Analysis.