

## ABSTRAK

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Program Studi : Teknik Industri  
Judul Laporan Skripsi : Analisa Perbaikan Waktu Setup Pada Mesin *Press SEYI 110T* Menggunakan Metode *Single Minute Exchange of Die (SMED)* di *PT. Eureka*  
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Indusri otomotif terus tumbuh dan berkembang seiring dengan meningkatnya mobilitas masyarakat dan bangkitnya ekonomi nasional pasca pandemic Covid-19. Meningkatnya permintaan pasar menjadi tantangan tersendiri bagi PT. Eureka sebagai produsen komponen otomotif. Banyaknya varian model produk yang harus diproduksi berdampak pada tinginya jumlah *changeover* Dies. Selama periode Januari s/d Agustus 2022 tercatat jumlah penggantian Dies di mesin press Seyi 110T mencapai 1.187 kali. Tingginya tingkat *changeover* Dies membuat pencapaian output produksi di mesin press Seyi 110T tidak mencapai target. Saat ini tingginya *changeover* Dies tidak dapat dihindari, karena permintaan dari customer meningkat hampir di semua varian model yang ada, sehingga perbaikan yang dapat dilakukan perusahaan adalah mereduksi waktu setup *changeover* Dies nya, agar tingginya jumlah *changeover* tidak mengurani efisiensi produksi. Tujuan penelitian ini adalah melakukan perbaikan waktu setup *changeover* dies menggunakan metode *Single Minute Exchange of Die (SMED)*. Proses *changeover* tipe dies Progressive di mesin press SEYI 110T melewati tahapan aktivitas sebanyak 25 aktivitas, dengan rata-rata waktu *changeover* sebelum perbaikan sebesar 40,23 menit. Implementasi metode SMED yang pertama yaitu tahap merubah aktivitas internal menjadi aktivitas eksternal didapatkan sembilan aktivitas yang dapat dirubah menjadi aktivitas eksternal, perubahan ini dapat mereduksi waktu sebesar 13,47 menit. Sedangkan pada tahap perampingan semua aspek aktivitas, terdapat lima aktivitas yang diperbaiki, dari perbaikan tersebut disimulasi dapat mereduksi waktu sebesar  $\pm 9$  menit. Sehingga total waktu yang dapat direduksi dengan implementasi metode SMED pada proses *setup changeover* Dies di mesin press SEYI 110T adalah sebesar 22,47 menit. Dengan reduksi waktu tersebut diketahui dapat menaikkan produktivitas mesin sebesar 3 %.

**Kata Kunci** : SMED, *Setup*, *Changeover*, *Dies*

## ABSTRACT

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Title Internship Report : Analysis of Improvement Setup Time on SEYI 110T Press machine using Single Minute Exchange of Die (SMED) method in PT. Eureka  
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*The automotive industry continues to grow and develop in line with the increasing mobility of the community and the rise of the national economy after the Covid-19 pandemic. The increasing market demand is a challenge for PT. Eureka as an automotive component manufacturer. The number of product model variants that must be produced has an impact on the high number of changeovers Dies. During the period from January to August 2022, it was recorded that the number of Dies shifts on the Seyi 110T press machine reached 1,187 times. The high changeover rate of Dies made the achievement of production output in the Seyi 110T press machine does not reach the target. Currently the high changeover Dies cannot be avoided, because demand from customers increases in almost all existing model variants, so the improvement that can be done by the company is to reduce the time of its changeover Dies setup, so that the high number of changeovers does not reduce production efficiency. The purpose of this study was to improve the setup time of changeover dies using the Single Minute Exchange of Die (SMED) method. The Progressive dies type changeover process in the SEYI 110T press machine went through 25 activity stages, with an average changeover time before repair of 40.23 minutes. The implementation of the first SMED method, namely the stage of converting internal activities into external activities, obtained nine activities that can be converted into external activities, this change can reduce time by 13.47 minutes. While at the stage of streamlining all aspects of activity, there were five activities that were improved, from these improvements simulated to reduce time by  $\pm 9$  minutes. So that the total time that can be reduced by the implementation of the SMED method in the Dies changeover setup process on the SEYI 110T press machine is 22.47 minutes. With this time reduction, it is known to increase machine productivity by 3%.*

**Keywords:** SMED, Setup, Changeover, Dies