

## INTISARI

Penulisan tugas akhir bertujuan untuk mengidentifikasi faktor penyebab tingginya *downtime* mesin saat *set up* pergantian cetakan pada mesin *injection stretch blow molding* dan melakukan perbaikan dengan pendekatan penerapan metode *Single Minute Exchange of Dies* (SMED). Penerapan metode SMED dilakukan dengan mengkonversikan sebanyak mungkin aktivitas *internal set up* menjadi aktivitas eksternal *set up*, menghilangkan dan meminimalisir kegiatan yang tidak perlu. Hasil observasi pada proses *set up* sebelum perbaikan mengidentifikasi sebanyak 74 aktivitas yang terdiri dari 67 aktivitas *internal set up* termasuk dua *idle* dan tujuh aktivitas *eksternal set up*. Dari 67 aktivitas *internal set up*, 11 aktivitas dikonversi menjadi *eksternal set up*. Mengurangi pemborosan dilakukan dengan cara menghilangkan dan meminimalisir gerakan kerja terhadap 13 aktivitas (9, 17, 21, 31, 33, 39, 42, 43, 49, 50, 55, 56, 57). Perbaikan yang diperoleh adalah berkurangnya waktu *downtime* mesin *injection stretch blow molding* dari 7 jam 30 menit 14 detik menjadi 5 jam 23 menit 33 detik dengan presentase 29,64%.

Kata kunci: *Downtime*, *Set up*, SMED, Aktivitas Internal dan Eksternal

## **ABSTRACT**

*This study aims to identify the cause of high engine downtime when the set up of mold substitutions on the injection stretch blow molding machine and make improvements with the method of applying Single Minute Exchange of Dies (SMED) methods. The application of the SMED method was carried out by the ability to convert as many internal activity as possible set up into external activities set up, eliminating and minimizing unnecessary activities. Results of observation on the process of set up before repair, identified as many as 74 activity consisting of 67 internal activity set up including two idle and seven external activities set up. From 67 internal activity set ups, 11 activities were converted to external set up. Reducing waste was done by eliminating and minimizing work movement to 13 activities (9, 17, 21.31, 33, 39, 42, 43, 49, 50, 55, 56, 57). The downtime of stretch blow molding decreased to a percentage of 29,62% from 7 hours 30 min 14 seconds to 5 hours 23 minutes 33 seconds.*

*Keywords: Downtime, Set up, SMED, Internal activity and extenenal*