ABSTRACT

REDUCE DEFECT OUTFLOW OUTER PRESS PART WITH QUALITY CONFIRMATION LINE AND JUNDATE PROCESS DESIGN USING DMAIC METHOD AND WORK DESIGN ANALYSIS (CASE STUDY IN PT. TOYOTA MOTOR MANUFACTURING INDONESIA)

Quality checking process in the press shop, especially for the outer press part performed on conveyor output machine. At this process there are problems because of checking process is performed on a moving conveyor so it is difficult to detect defects in the surface of the part. This is what causes the defect outflow numbers is too high 446 ppm, futhermore another effects is bad ergonomics also felt by workers during the checking process. By using the methods of the DMAIC approach to design concept of quality checking process outer press part. In this study discussed about design of quality confirmation Line and jundate process based on Work Design Analysis and Ergonomic. So expect with the change of the quality checking process can reduce the defects outflow in accordance with the target of 60 ppm and with a target BEP ≤ 2 months.

Key word : Quality checking process, Defect Outflow, DMAIC, Work Design Analysis, Quality confirmation line & Jundate process

ABSTRAK

MENURUNKAN *DEFECT OUTFLOW OUTER PRESS PART* DENGAN RANCANG BANGUN *LINE* KONFIRMASI KUALITAS DAN PROSES JUNDATE MENGGUNAKAN METODE DMAIC DAN ANALISA PERANCANGAN KERJA
(STUDI KASUS DI PT. TOYOTA MOTOR MANUFACTURING INDONESIA)

Proses pengecekan kualitas di *press shop* khususnya untuk *outer press part* dilakukan diatas konveyor *output* mesin. Pada proses tersebut terdapat permasalahan karena pengecekan dilakukan diatas konveyor yang bergerak sehingga sulit untuk mendeteksi *defect* di permukaan *part*. Hal inilah yang menyebabkan angka *defect outflow* tinggi sebesar 446 Ppm, selain itu efek ergonomi yang buruk juga dirasakan oleh pekerja pada saat melakukan proses pengecekan. Dengan menggunakan metode pendekatan DMAIC konsep dirancanglah proses pengecekan kualitas yang tepat untuk *outer press part*. Pada penelitian ini dibahas mengenai rancang bangun *Line* Konfirmasi kualitas dan Jundate berdasarkan Analisa Perancangan Kerja dan Prinsip Ergonomi yang tepat. Sehingga diharapkan dengan adanya perubahan proses pengecekan kualitas dapat menurunkan angka *defect outflow* sesuai dengan target yaitu 60 Ppm dan dengan target BEP ≤ 2 bulan.

Kata Kunci : Proses pengecekan Kualitas, Defect Outflow, DMAIC, Analisa Perancangan kerja, Line Konfirmasi & Jundate