

## ABSTRAK

Departemen Research & Development perusahaan ban bertugas melakukan penelitian dan pengembangan produk dengan bantuan mesin pengetesan seperti *Tensile strength* dan *Dynamic Mechanical Analysis* untuk pengukuran data compound sebagai bahan baku utama ban. Laboratorium R&D hanya memiliki sebuah mesin curing untuk mencuring sampel compound test. Persentase waktu produksi mesin tersebut yang tidak dapat mencapai 50% jam kerja dianggap tidak optimal. Perlu dilakukan perhitungan nilai *Overall Equipment Effectiveness* (OEE) dan analisa *Six Big Losses* untuk mengukur kinerja mesin. Didapatkan nilai OEE sebesar 39%-52%. Faktor *Six Big Losses* yang mempengaruhi nilai OEE adalah *Reduced Speed Losses* sebesar 71% dan *Set Up & Adjustment Losses* sebesar 14%. Diberikan usulan perbaikan diantaranya melakukan *preventive maintenance*, melaksanakan *autonomous maintenance*, menambah jumlah mold, dan mengganti waktu *set up*.

Kata kunci: Mesin Curing; Compound; OEE; Six Big Losses



## ABSTRACT

*The Research & Development department of a tire company is tasked with conducting product research and development with the help of testing machines such as Tensile Strength and Dynamic Mechanical Analysis for measuring compound data as the main raw material for tires. The R&D laboratory only has one curing machine for curing compound test samples. The percentage of the machine's production time which cannot reach 50% of working hours is considered not optimal. It is necessary to calculate the value of Overall Equipment Effectiveness (OEE) and analysis of Six Big Losses to measure engine performance. Obtained an OEE value of 39%-52%. Six Big Losses factors that affect the OEE value are Reduced Speed Losses by 71% and Set Up & Adjustment Losses by 14%. Suggestions for improvements include carrying out preventive maintenance, carrying out autonomous maintenance, increasing the number of molds, and changing the set up time.*

Keywords: *Curing Machine; Compound; OEE; Six Big Losses*

