# ABSTRAK

PT Denso Indonesia adalah suatu perusahaan manufaktur yang bergerak dibidang otomotif. Dalam proses pembuatan produknya, PT Denso Indonesia mengalami penurunan jumlah produksi, yang disebabkan oleh banyaknya *losses* yang terjadi di Mesin *Tube Welding Radiator*. Untuk mengetahui dan meminimumkan *losses* yang terjadi maka diperlukan adanya evaluasi efektivitas dari proses produksi Mesin *Tube Welding Radiator*. Penelitian ini bertujuan untuk mengukur efektivitas Mesin *Tube Welding* dengan menggunakan metode *Overall Equipment Efectiveness (OEE)*, menghitung nilai *six big losses* dan mengidentifikasi faktor penyebab *six big losses* dengan menggunakan *Fishbone Analysis*, memberikan saran perbaikan serta dapat mengimplementasikanya untuk meningkatkan efektivitas dari Mesin *Tube Welding Radiator*. Hasil pengukuran nilai *Overall Equipment Efectiveness (OEE)* pada mesin *Tube Welding Radiator* memiliki nilai rata-rata yaitu 83,16 %. Berdasarkan pengukuran *six big losses*, *loss time* tertinggi yaitu *reduced speed losses* dikarenakan adanya waktu yang terbuang pada saat proses produksi. Dilakukan perbaikan dengan cara membuat *jig centering* material dan pergantian air biasa menjadi air RO. Dan perusahaan harus segera mengganti part-part yang sudah *abnormal* pada mesin *Tube Welding Radiator*.

Kata Kunci : *Overall Equipment Efectiveness (OEE), six big losses, fishbone analysis, Total Productive Maintenance (TPM)*

# *ABSTRACT*

*PT Denso Indonesia is a manufacturing company engaged in automotive. In the process of making its products, PT Denso Indonesia experienced a decrease in the amount of production, which was caused by the many losses that occurred in the Tube Welding Radiator Machine. To find out and minimize the losses that occur, it is necessary to evaluate the effectiveness of the production process of the Tube Welding Radiator Machine. This study aims to measure the effectiveness of the Tube Welding Machine by using the Overall Equipment Efectiveness (OEE) method, calculate the value of six big losses and identifying the causes of six big losses by using Fishbone Analysis, providing suggestions for improvement and can implement it to improve the effectiveness of the Tube Welding Radiator Machine. The measurement results of the Overall Equipment Efectiveness (OEE) value on the Tube Welding Radiator machine have an average value of 83.16%. Based on the measurement of six big losses, the highest loss time is reduced speed losses due to the time wasted during the production process. Improvements were made by making jig centering material and turning ordinary water into RO water. And companies must immediately replace parts that are already abnormal on the Tube Welding Radiator machine.*

*Keywords : Overall Equipment Efectiveness (OEE), six big losses fishbone analysis, Total Productive Maintenance (TPM)*