

ABSTRACT

Based PT. XYZ's machine breakdown data, the ILA-0005 machine is the most frequently breakdowned machine so it needs maintenance procurement. Total Production Maintenance (TPM) is an approach in Preventive Maintenance that can be used by a company to evaluate the effectiveness of their facilities. The evaluation is undertaken to improve the facility Overall Equipment Effectiveness (OEE) score and to eliminate the major losses known as Six Big Losses. This research is conducted on ILA-0005 machine at PT. XYZ which is an automotive company. The data processing conducted based on the historical data from 2016-2017, and based on the calculation, results obtained that the OEE score in 2016 is 88.734% and in 2017 is 83.859%. The international standard score of OEE is 85% and from the calculation of OEE score in 2016 has reached the world class standard but in 2017 there was a decrease. On the calculation of Six Big Losses, the machine shows that the percentage of machine losses in 2016 is the most dominant with the Idling and minor stoppage loss is 43.33% and the Reduced Speed Loss is 55.47% in 2017. The result of this research can then be used to show that the effectiveness of ILA-0005 machine remains to be improved by focusing on eliminating the most dominant losses. Furthermore, by applying the concept of 8 pillars of Total Productive Maintenance (TPM) which focuses on the pillars of Autonomus Maintenance.

Keywords: Maintenance, Preventive Maintenance, TPM, OEE, Six Big Losses, *Autonomus Maintenance*