ABSTRACT

PT. XYZ *is manufacturing company engaged in the manufacture of military in Indonesia. PT.* XYZ *becomes a military equipment industry managed by* BUMN. *The Yasda machine is a machine that is used continuously to fulfil the production target, so the the Yasda machine has the highest frequency of damage up ti 33 tmes from 2016 to 2018. It is necessary to implement activities that can increase Yasda's engine requirements. In this research to improve machine effectiveness, namely by applying Total Productive Maintenance (TPM). Before implementing the TPM, it was using the Overall Equipment Efectiveness (OEE) method to analyse existing conditions from the use of Yasda machine. Based on the calculation using the OEE method from 2016 to 2018, value OEE is 77% in 2016, 96% in 2017, and 88% in 2018. The OEE value in 2016 has ereached the World Class Standartd value provided by 85%. Then this research seeks to increase OEE values to reach world class standard values. Furthermore, the factor analysis of Six Big Losses that affect the OEE value is carried out. The value of the Idling and Minor Stoppage factor of Six Big Losses on the Yasda machine is 31%. Futhermore, an analysis is carried out using fishbone diagrams to find out the root causes of problems that occur from six big losses by considering human, machine, environmental, and material factors.*

Keywords: Total Production Maintenance (TPM), *Overall Equipment Effectiveness* (OEE), *Six Big Losses, fishbone* diagram.