ABSTRACT

PT XYZ is a manufacturing company operating in the industrial sector in Tangerang. This company operates in the heavy equipment industry, the main products produced by PT XYZ are the manufacture of bodies for heavy equipment and heavy equipment parts. This PT has been operating for a long time in the field of body and heavy equipment manufacturing, which has been running for decades and plays an active role in meeting the needs of heavy construction equipment. In 2021 PT To analyze the efficiency of the Pega 357 machine, namely using the Overall Equipment Effectiveness (OEE) method. To evaluate and maximize the Pega 357 machine, namely using the Total Productive Maintenance (TPM) method. Six Big Losses or calculation of six losses is used to look for factors that influence low OEE values such as Equipment Failure, Setup Adjustment Losses, Idling and Minor Stoppages, Reduce Speed Losses, Process Defect Losses, and Reduced Yield Losses. The average OEE of the Pega 357 machine from November 2021 to October 2022 is 51%, not yet reaching the JIPM standard of 85%. The main factors causing low OEE are availability rate and performance efficiency. Reduce Speed Losses (33.72%) and idle/stop losses (22.5%) were the biggest losses. The proposed solution is to implement TPM with three main pillars: autonomous maintenance, planned maintenance, and quality maintenance to increase machine effectiveness and performance.

Keywords Total Productive Maintenance and Overall Equipment Effectiveness.