ABSTRACT

PT XYZ is a company that produces and distributes frozen processed foods made from seafood, which are processed into processed products, both to domestic and foreign markets. The main focus of this research is to evaluate the condition of the machine, determine the influence factors in the six big losses, and formulate maintenance policies to improve the effectiveness of the machine. The laska bowl cutter machine was chosen as the object of research because it has the highest number of damage frequencies compared to other machines at PT XYZ. The TEEP method is used to measure machine effectiveness which is calculated from utilization with overall equipment effectiveness (OEE). Many factors affect the effectiveness calculation results, and the factor with the highest percentage is evaluated with fault tree analysis (FTA). And these findings are used as the basis for maintenance policy. The effectiveness measurement showed that the Laska Bowl Cutter machine was in poor condition and not running optimally. The average OEE value was 81% and less than the world-class JIPM standard (85%). This also applies to the average total effective equipment performance (TEEP) value of 45%. The low OEE and TEEP are caused by the lack of asset utilization, such as production capacity and operating time that are not used optimally so that it affects the value of the six big losses, namely the idling and minor stoppages losses factor of 20% and reduced speed losses of 16%. A proposed maintenance policy involving FTA analysis and the implementation of autonomous maintenance on a scheduled basis is proposed to prevent machine breakdowns.

*Keywords — **OEE, TEEP, Six Big Losses, Fault Tree Analysis***