

ABSTRACT

PT. Perhutani Pine Chemical Industry (PPCI) is a forest product management company under the Department of Environment and Forestry (DLK). PPCI is one of the factories that manages gondorukem and turpentine derivatives in Indonesia. The low PPCI boiler machine production rate in 2021 which can only produce as much as 507 tons/month from a machine production capacity of 1920 tons/month is the focus of the problem in this research. The results of the realization of the resulting output indicate that the production capacity according to the production capacity of the boiler engine operation has not yet been achieved, which is indicated by the low actual value found in the field. The purpose of this study is to increase the effectiveness of the Boiler engine. The method uses the calculation of Overall Equipment Effectiveness (OEE) with the Total Productivity Maintenance (TPM) approach, then calculations are carried out to determine the level of efficiency decline in each of the six big losses factors. The results obtained that the OEE value obtained from the calculation is 85%. The factor for decreasing the OEE value is the performance rate with the percentage value of six big losses in the form of idling and minor stoppage loss of 7% and reduced speed loss of 7%. The analysis is used to determine the main factors causing the loss using a fishbone diagram and an analysis is carried out using the 8 pillars of TPM in conditions that are suitable for the company.

Keyword: *Overall Equipment Effectiveness, Total Productivity Maintenance, Six Big Losses, Fishbone*