

ABSTRACT

PL1250 machine is one of the machines used in the manufacture of cover on-off in PT XYZ that has the highest frequency of damage. Machine damage causes downtime. Downtime causes the production process being stopped because the machine could not operate. This leads to a decrease in productivity because the machine cannot produce the product to the fullest. Based on the problem, evaluation of machine performance is done on PL1250 machine using Overall Equipment Effectiveness (OEE) and Overall Resource Effectiveness (ORE) method. The purpose of the machine performance evaluation is to determine the effectiveness of machine use and resource availability, as well as to know the losses arising during the production process is based on six big losses. OEE is a method of measuring machine effectiveness by multiplying availability, performance efficiency, and quality rate. Whereas ORE is a more profound method of measuring machine effectiveness by considering the availability of resources (human, machine, material, and method). The results showed that the average OEE value was 76.54% and the ORE value was 73.53% which was under the global standard of 85%. The low effectiveness of the machine is influenced by the two most dominant losses, that are reduced speed loss idling and minor stoppages loss. The cause of low effectiveness is influenced by human, machinery, materials, and methods.

Keywords: Downtime, Effectiveness, Overall Equipment Effectiveness, Overall Resource Effectiveness, Six Big Losses