ABSTRACT

Madukismo Sugar Factory as a company which has agricultural industry with the main products is sugar. One of the factors to support the production activity in the company is the preparation of machines production. To get it, the company needs a good treatment system. In this case, the objects of the research are the component of critical machines that are roll machine I, roll machine II, and roll machine IV.

Consequence Driven Maintenance (CDM) as a continual treatment system which has a preventively purpose to decrease the damage and to increase the repair. The measurement of the CDM succession in the maintenance work can be knew in the ratio grade of Gross Production Hours (GPH) that is a total production time and down time which is a total time needed to doing e treatment such as LDT (Logistic Delay Time), and ADT (Administrative Delay Time). Ideally more time available more product that can be produced.

According to analysis result of the average preventive treatment, roll machine I has 1.27 hours, roll machine II has 1.33 hours, and roll machine IV has 1.11 hours. The average of the corrective treatment, roll machine I has 1.19 hours, roll machine II has 1.11 hours, and roll machine IV has 1.21 hours. The reliability value of roll machine I is 82 %, roll machine II is 91 %, and roll machine IV is 93 %. From the review and calculation with CDM, the result is the percentage of production time reach over 90 % which get from comparison between percentage of down time and machine production time. It means that the review and calculation of CDM is good. Total cost real treatment for the milling machine equal to Rp 80.433.800 and total cost treatment result of calculation equal to Rp 71.829.479,4. Is so that got by decreasing cost equal to Rp 8.604.320,6.

Keywords: preventive maintenance, consequence driven maintenance, downtime