

ABSTRACT

Maintenance is all activities that aim to keep the equipment in the best condition. The maintenance process includes testing, measurement, replacement, adjustment and repair. Maintenance is divided into 3 types, Preventive Maintenance, Predictive Maintenance, Breakdown Maintenance, Corrective Maintenance. By doing maintenance on machinery and production facilities, it certainly requires a costs. In this case, the costs incurred during maintenance of the machine are scheduled and periodic. To overcome the maintenance costs that are too large, then cost control is carried out with the Life Cycle Cost method with Dynamic Maintenance Cost. PT. Sandy Globalindo is a private company that produces several motorbike spare parts. PT. Sandy Globalindo has a corrective and preventive maintenance policy in dealing with damaged engine. CNC Milling A machine is one of several machines owned by PT. Sandy Globalindo. This machine has the highest frequency of damage. Based on the existing problems, an analysis of the minimum total cost, optimal age and the optimal number of maintenance crew on the CNC Milling A PT. Sandy Globalindo by using the Life Cycle Cost method with Dynamic Maintenance Cost. So, the minimum cost of the CNC Milling A machine is Rp. 604,320,835, - with an eleven-year engine life and by adding one maintenance crew.

Keywords : *Maintenance, Mesin CNC Milling, Life Cycle Cost, Dynamic Maintenance Cost*