ABSTRACT

PT Pudak Scientific is a company engaged in the manufacture of aircraft parts industry. Meeting the precise and timely demand of aerospace parts from customers becomes a major corporate responsibility. However, Loss Revenue often occurs due to engine breakdown. So that cause because the production target is not achieved, the product reject, and the delay of delivery. One of the machines that often experience breakdown is Mori seiki NH4000 DCG. Mori seiki NH4000 DCG is the finishing machine for Blank fork End product. The demand for this part is quite large, making it a tough Task for the Mori Seiki NH4000 DCG machine. But because the breakdown of the machine is high enough to cause production targets every month are often not met. In addition, Maintenance activities that have not noticed the characteristics of engine damage, as well as the distribution of historical data of the machine causing less effective and efficient actions resulted in substantial Maintenance costs. Based on the results of risk analysis of Mori Seiki NH4000 DCG engine damage, in terms of performance loss System caused by a large enough that is 3.773% of machine production capacity per year. This figure exceeds the risk acceptance criteria by the company that is 2%. Therefore it is necessary to find the appropriate Maintenance policy for the Mori Seiki NH4000 DCG machine. The approach is to use Reliability Centeres Maintenance and Risk Based Maintenance. Based on the above two approaches obtained the appropriate interval time so that the Maintenance activities more effective and can improve the efficiency of treatment by reducing the cost of care previously Rp167.506.286, - per year, to Rp139.994.493, - per year. With the policy is expected to reduce engine breakdown and performance loss caused. So the number of risks that arise for the future are within the criteria of acceptance set by the company.

Keywords*: *Preventive Maintenance, Reliability centered Maintenance, risk based Maintenance, Performance loss