

ABSTRACT

Ilham Rahmadi, NIT. 51145350.T, 2018“*The Effect of Lack of Maintenance of Seawater Cooling Pumps Against the Smoothness of Main Engine Cooling Systems in the MV. Glovis Desire*”, Program Diploma IV, Technical Department, Semarang Marchant Marine Polytechnic, 1st Supervisor: H. Amad Narto, M.Pd.,M.Mar.E. and 2nd Supervisor: Dr. Winarno, S.ST.,M.H.

In order to support the smooth operation of the main engine required auxiliary machinery to support the work of the main engine, as well as proper and economically safe maintenance and capable of carrying out maintenance programs regularly and planned. Pump work that is not optimal, of course, in cooling the main engine will certainly cause heat and high pressure. And this auxiliary machinery must be operated at any time, so that when the main engine is operated there will be no interference. One of the auxiliary machineries in question is the seawater cooling pump aircraft in the main engine which in this writing has decreased pressure and capacity so that the cooling system of the main engine is not smooth due to mechanical seal damage and corrosion or blockage by dirt. So that routine maintenance is needed so that there is no decrease in the performance of the sea water cooling pump.

The method used in this thesis is the Fishbone Analysis method and Fault Tree Analysis as a method to determine the problem factors and events that exist in the problem. The formulation of the problem of this research is what factors cause the lack of maintenance on the cooling pump of sea water, how the impact is caused, and how the efforts are made on the existing problem.

Based on the results of this research, it was concluded that the cause of lack of maintenance in seawater cooling pumps is the lack of supervision of pumps and unplanned maintenance systems. The impact of these factors is a decrease in pump performance, and efforts made to avoid a decrease in pump performance is to make maintenance schedules in accordance with PMS (Planned Maintenance System) and conduct routine monitoring and maintenance.

Keywords: Maintenance, Seawater Cooling Pump, Cooling System, Main Engine.