ABSTRACT

Nur Anis, 2017, NIT : 50135005.T "*identify the cause of decreasing the working pressure of freshwater generator coolant pump in MV. Meratus Batam*", minithesis of Technical Program, Diploma IV Program, Merchant Marine Polythecnic Semarang, Supervising professor I: H. Sumarno S.P, MM M.Mar. E and Supervising professor II: Adi Oktavianto ST.MM.

MV. Meratus Batam have three generator and can be operated only two generator that is the generator number two and generator number three. Generator have important function to support operational fluency and maneuvering, because generator as electric source power on the ship. The most important parts of the generator is cooling pump diesel motor at the generator. On the running condition sometime we found some trouble like as which happened at the cooling pump diesel motor at the generator number one side that is the pump was not produce maximal pressure, not consist the normal pressure for cooling process diesel motor at generator.

The method used is the method of Urgency, Seriousness, Growth, which is one tool to arrange the order of priority issues to be solved, by determining the level of urgency, seriousness, and the development of issues by determining 1 - 5 or 1 - 10. Data collection techniques are done through Observation, documentation and literature study directly on subjects relating to generator cooling pump.

The results obtained from this study that the decrease of the working pressure of generator cooler freshwater pump is due to leakage of pipe connection from the thermostat to the pump suction, there is crust at the impeller and rupture of mechanical seals and leeway on the part shaft bearing. To overcome the above problems in order to perform at the pump to be optimal need to be repaired on the system that is damaged. Replace broken spare part with new ones and checking also record machine component and report to the company.

Keywords : pump, generator, cooling water.