

ABSTRACT

Krisna Pratama, 2018, NIT: 50134910.T, “*Optimization of ballast pump treatment for the smooth filling of the ballast tank on MT. Medelin Total*”, Essay of Technical Departement, Diploma IV Program, Politeknik Ilmu Pelayaran Semarang, 1st guide : Achmad Wahyudiono, M.M.,M.Mar.E 2nd guide : Laksmi Setyorini, S.Pd.,M.Si

The vessel is a means of transport, related to the amount of cargo and mileage compared to other transportation, the ship becomes the right choice. In the operation of the vessel during sailing vessels or in carrying out loading and unloading activities shall be able to maintain the condition of the ship to remain in a stable state. Based on this the authors are interested in raising the problems that occur in the engine room, especially on the ballast pump. Title that the author uses is "Optimization of ballast pump treatment for the smooth filling of the ballast tank". The purpose of this study is to determine the effect of treatment on the ballast pump is less than optimal.

Given the importance of the function of the ballast pump, the existence of the aircraft should be treated well according to PMS (Plant Maintenance System), in this case the author uses SWOT method, where this method is to analyze within the organization that can systematically assist in the preparation of plans to achieve goals. Based on the results of the analysis, the application of PMS (Plant Maintenance System) has not been executed according to the procedure, the quality and the delay of spare part delivery and the amount of garbage at certain port which resulted the ballast pump maintenance less than optimal, so the effort needs to be done to keep the ballast pump treatment optimally.

After the authors make observations of the factors above can the author convey as follows. The application of PMS (Plant Maintenance System) has not been executed according to the procedure due to the erosion of impeller, the quality and the delay of spare part delivery there is continuous damage and the delay of loading and unloading activities, the amount of waste at certain ports result in less maximum pressure of ballast pump. So that required the maintenance of routine according to schedule PMS (Plant Maintenance System) which have been determined, giving spare part according to manual standard book and company / ship side request to port side to carry out cleaning area of sandar. And this thesis is expected to be useful for the engineers to be a guide care, operate and improve.

Keywords: Optimization, maintenance, ballast pump.