ABSTRACT

Ghazian luthfi alam, 2018, NIT: 50134957.T, "Optimalisasi kinerja turbocharger guna meningkatkan performa motor induk pada kapal LPG/C Gas Ambalat", skripsi Program Studi Teknika, Program Diploma IV, Politeknik Ilmu Pelayaran Semarang, Pembimbing I: H. Amad Narto, M.Pd, M.Mar.E dan Pembimbing II: Sri Purwantini SE, M.Pd, MM

. Diesel motor is a type of internal combustion engine (internal combustion engine), the engine that combustion process occurs in the fuel cylinder engine itself. The process of combustion inside the cylinder determines the amount of power generated by the diesel motor. To produce the perfect combustion required the existence of a system that supports the maximum work, namely air compressing and air cooling system In the compressed air entry system, the components work together to provide air with the right amount and temperature for the process of flushing and the combustion process inside cylinder engine. Diesel motor components that function for suppliers and increase the amount of air that is inserted into the engine cylinder is a turbocharger

The research method used is the method of Strength, Weakness, Opportunity, Threat (SWOT), one of the methods using factors to identify the occurrence of damage by determining factor weight, support, and urgency comparison, which is further detailed in the summary value table for reference create an organizational map matrix. This data collection technique is done through literature study, distributing questionnaires as well as direct observation of subjects related to turbochargers

From the results of research conducted problems that occur is arising abnormal vibrations in the turbocharger and the incidence of abnormal sounds at the time of turbocharger is in operation that incompatible turbocharger performance is not maximal so that the performance of the host machine. To prevent abnormal vibration of the Turbocharger it is necessary to take care based on working hours in accordance with the guidelines of the manual or if there is suspicion of abnormalities on a component on the Turbocharger. To prevent abnormal sounds when Turbocharger is in operation ie Rinsing Turbine Boots by using fresh water should be carried out periodically according to working hours and must follow the instructions in the manual book.

Keyword: Turbocharger, SWOT, Turbin