

## **ABSTRACT**

**Irfan Dwi Risnandar**, 48114202.T, 2017, "*the effect of diesel supply to the motor work in MT. Madelin Expo* ", Diploma Program IV, Teknika, Merchant Marine Polytechnic Semarang, Supervisor I: F. Pambudi Widiatmaka, ST., M.T. and Supervisor II: Winarno, S.ST., M.H

*One reason for the lack of air rinse into the combustion chamber is the result of the work of Turbocharger and Intercooler is not the maximum so that the combustion in the cylinder did not get the corresponding combustion or combustion is less than perfect. In normal circumstances turbocharger can produce a pressure of 2.3 kg / cm<sup>2</sup> and rinse intercooler air temperature 55 ° C at room temperature 41oC machine and sea water temperature 30oC, whereas in these circumstances the resulting pressure turbocharger down to 1.4 kg / cm<sup>2</sup> and temperature rinse intercooler rose to 63oC in the engine room temperature 41oC and 30 C temperature of sea water.*

*Making this thesis is basically aimed to develop or pouring, thoughts, and experience into written form concerning various problems that occurred onboard, particularly those related to the lack of air supply rinse related to malfunctioning of supporting devices like turbocharger and intercooler to the maximum, who followed the evidence and facts that can be accounted, the making of this thesis also has several general purpose and special purpose.*

*The research were conducted on the main engine will indirectly lead to problems related to the main engine. So that through these studies the problems that occur will be solved and results in a jawaban. Hasil of the study are expected to be useful for officers machines or machinist, readers and friends also have similar problems, to be used as guidance in order to obtain rinse optimum air in the combustion process in diesel motors main.*

**Keywords:** *turbochager, intercooler, supporting device .*