

ABSTRACT

Dhimas Aji Prabowo, NIT. 50135024.T, 2018 "*Analysis of decreasing condenser work on freon condensation refrigerator machine food in MT. Gas Natuna*", Diploma IV Program, Teknika, Semarang Merchant Marine Polytechnic, 1st Supervisor : Agus Hendro Waskito, M.M., M.Mar.E, 2nd Supervisor : Sri Murdiwati, S.Sos, M.Si

The cooling machine is a series of auxiliary machining machines capable of working to produce cold temperatures or temperatures. The cooling machine is divided into two refrigerators and accommodation cooling machines. The refrigerator has 4 main components: Compressor, Condenser, Expansion Valve, and Evaporator. Refrigerator itself has a very important role that is preserving foodstuffs in order to survive longer for the purposes of crew ship in a long period of time during the voyage.

The method used in this thesis is Qualitative Descriptive method with the technique of fishbone analysis and fault tree analysis as a method to determine the causes and efforts to overcome them. The problem formulation of this research is what factors lead to the slow condensation of freon on the condenser, how efforts to facilitate the occurrence of condensation of freon on the condenser.

The results of this study concluded that the cause of the slow condensation of condenser is the condensation of condenser pipes, the presence of air in the condenser, leakage of the condenser, the lack of cooling water in the condenser and the lack of freon in the installation. Efforts made to facilitate the condensation of freon condensation is to clean the condenser pipes, remove the air in the condenser, increase the cooling water supply in the condenser and increase the freon in the installation.

Keywords: Condensation Freon, Condenser, Refrigerator.