

ABSTRACT

Edi Sugiyarto, 2018, NIT: 51145376.T, “*Damage Analysis of Diesel Engine Generator Exhaust Valve in MV. Pan Energen*”, Program Diploma IV, Technical, Merchant Marine Polytechnic of Semarang, Adviser I: Abdi Seno, M.Si., M.Mar.E and Adviser II: Capt. H. Suherman, M.Mar

A diesel engine is an internal combustion engine in which air is compressed to a high enough temperature to ignite diesel fuel injected into a cylinder, where combustion and emission drive the piston that converts the chemical energy in fuel into mechanical energy. The availability of a power source is absolute for the smooth operation of the ship, for example for lighting, navigation equipment and auxiliary engine, and others. The condition of the exhaust valve in the diesel generator is very influential on the condition of the generator. The existence of flue gas valve damage can affect the condition of the operation of diesel generator, so the condition of the exhaust valve must be maintained.

Research method that writer use in preparation of this thesis is descriptive qualitatif research method. In this case the authors use the fishbone and fault tree analysis method as a data analysis technique to analyze the existing problems in the diesel generator, which factors are causing the damage of the exhaust valve diesel generator engine, the impact and what efforts are made to overcome the factors of the problem by identifying various factors.

Based on the results of research that has been done on the MV. Pan Energen on September 4, 2016 up to September 6, 2017, it can be concluded that the damage of diesel generator exhaust valve is caused by two factors, namely unsuitable valve gap caused by the operation and lack of inspection and the cooler system for fresh water didn't work maximally. To overcome these factors can be adjusted exhaust gas supply according to time, maintenance cooling fresh water system.

Keywords: *diesel, generator, valve, exhaust gas.*