ABSTRACT

OPERATIONAL OPTIMIZATION LUBRICATING OIL PURIFIER

MITSUBISHI SJ10G AT MV. MUSI RIVER SHIPS

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Lubricating oil purifier is a device which function to purify the engine lubricating oil. An equipment which is like a kidney of the main engines and auxiliary engines. Lubricating oil which enter the engine must be clean from a mixture of water or other impurities. Often there is oil leakage in purification process that resulted in the purifier is not running optimally. So, it is necessary operational optimization for lubricating oil purifier.

In to overcome the issues above, it is made operational standards and procedures for checking routine which is based on interviews with the crew, solving the problem ever conducted, and based on the manual book of the purifier. In addition to optimize the results of purification used an analysis based on the determination of the viscosity of oil temperatur that enter purifier using kinematic viscosity ISO diagrams. For analyzing the selection disc gravity based on density and rate of flow of oil by using nomogram gravity disc.

As a results acheived in the field project, it is made operational standards and procedures purifier periodic inspection of mechanical and electric parts. Given those two things were expected the damage that happen in the purifier can be minimized. The results from the analysis of viscosity and the selection of disc gravity is used to obtain the ideal viscosity less than 25 Cst, viscosity is got at a temperature of 80-90°C. For the election of gravity obtained size 78. For gravity disc size 78, the oil discharge can be increased to 1200 L/h.

Keywords : purifier, optimal, viscosity, gravity disc