

ABSTRACT

Yoga Purwa Mahendra, 2018, NIT: 51145394.T, "*Identification of the Effects of Air on Against the Performance of Mother Machine In MV. KT 02*", thesis Teknika Study Program, Diploma IV Program, Polytechnic of Semarang Sailing Scout, Supervisor I: Dwi Prasetyo, M.M, M.Mar E, Supervisor II: Andy Wahyu Hermanto, M.T

The air starting system (air starting) is one of the most important parts of the initial start system for diesel parent engines on board. The initial start has an important role where the diesel motor in its operation is intended for smooth shipping operations. Using high pressure air media should be able to fully press the valve and then push the piston down from TMA to TMB. High pressure air is an important part that affects the performance of the Mains Machine. The purpose of this study is to know about the factors causing the master machine can not be distart when the air carrier has been supplied, and efforts to overcome them. In writing this essay, the author describes the theory about the air start system as a foundation for solving existing problems.

The method used in this research is descriptive (when viewed from the aspect of presentation level) and also qualitative (when viewed from data processing), then analyzed by fishbone analysis method to determine problem of each factor and problem solving with Fault Tree Analysis method. to determine which issues are the top priority. In this case the technique of collecting data in the form of approach to the object through observation, interview directly on the subject and using documents and data related to the process of starting water.

Based on the results of research that has been done by the writer on the ship can be concluded that the influence of air passenger to the performance of the parent machine is caused by several factors, namely 1) Lack of air pressure in the water recervoir, caused by high pressure pipes leak and compressor not working properly, 2) Starting valve does not work, caused by the air valve start valve is not elastic, valve wear (spindle). To overcome these factors can be done by checking the start air system, especially on the components of the installation of air starting system (air starting), and do maintenance in accordance with the engine manual book. So that the operation of the parent machine, especially during the initial start can run smoothly.

Keywords: water starting system, Fault Tree Analysis, Fishbone Analysis