

ABSTRACT

Ahmad Faisal Taufiq, 2018, NIT: 50134929 T, “*Identification of Exhaust Gas Economiser's Performance's Decrease and that Effect Steam Production at Sea Passage at MV. NYK Vega with SWOT Analysis Method*”, Technical Thesis, Diploma IV Program, Merchant Marine Polytechnic Semarang, Material Adviser (I): Drs. Edy Warsopurnomo, M.M., M.Mar.E. Methodologi and Writing Adviser (II): Nur Rohmah, S.E., M.M.

The Exhaust Gas Economizer is a device which used to generate steam by using waste heat from the main engine exhaust gas casing and hot purification machine. Lack of steam production when using EGE at sea voyage in MV.NYK Vega fire A / E turbine generator not applicable, thus it is necessary to have additional power source to fit on reefer container. To cope while the Engineer uses two diesel A / E generators to meet the source requirements. The purpose of this research was to look at its impact on steam production at the time of voyage in MV. NYK Vega and to find out what can be done to improve EGE's performance on steam production at sea passage in MV. NYK Vega.

This research uses qualitative descriptive method using data analysis technique strengths, weaknesses, opportunities, and threats (SWOT) is systematic identification of various factors to formulate company. Data collection is done by interview, documentation, observation by observing at maintenance and repair time in MV. NYK Vega.

After identified the impact of EGE on steam production at the time of voyage in MV. NYK Vega is an inactive A / E turbine generator at sea voyage and sparks due to soot build up in EGE. Efforts are made to improve EGE performance on steam production during sea passage in MV. NYK Vega is analyzing where leak may occur at EGE system, by overhauling the high pressure boiler circulating pump, replace the mechanical seal, gasket at pump, and keep watch the leakage area every day at sea passage or at port.

Keywords: *Steam, Exhaust Gas Economizer, Sea passage.*