

ABSTRACT

Muhammad Rizal Tifana, 50135033.T, 2017, "Optimizing *Deck Water Seal To Work Improvement Inert Gas System* in MT. Tanker Victory", Diploma IV, Technical, Semarang Merchant Marine Polytechnic, Supervisor I: Achmad Wahyudiono, M.M., M.Mar.E and Supervisor II: Capt. Agus Hadi Purwantomo, M.Mar.

Deck Water Seal may function to prevent it from happening backflow (back flow) of gas hydrocarbon (gas cargo) from the tank to the cargo area should be free of gas (safe area) where the appliance is installed Inert Gas. The inert gas used in inert gas carrier to the cargo tank and to maintain a positive pressure in the hold and space Interbarrier. This is done in order to prevent the formation of a combustible mixture. For cargo tank inerting operation is a necessary preliminary before operated for examination or drydock but can be time consuming. Inerting is also required before moving on to the gas-free condition loaded condition. Regarding the inerting level, before spraying with toxic gas, the tank must have an oxygen content of less than 5 percent but sometimes a lower number is required by unloading terminals. Prior to aeration, inerting process must have the hydrocarbon content below 2 persen. Oleh therefore mainly devoted to tankers carrying crude oil (crude oil) or refined oil (oil product) size of 20,000 DWT (Dead Weight Tonnage) must be equipped with a Fixed inert Gas System.

SWOT analysis is a strategic planning method used to evaluate strengths, weaknesses, opportunities, and threats in a research project, a SWOT analysis is a form of situation analysis by identifying various factors systematically to strengths, weaknesses, opportunities, and threats from the environment to formulate the strategy to be taken.

Care deck water seals are very important in the operation of IGS, is one of them cared for components that support the performance of the deck water seal as demister pad, inert gas blower. In demister pad there are other components that deck seal pump and drain valve. Likewise role in inert gas blower is no safety valve, mast riser, non return valve. The component is very important to support the performance of the deck water seal. Officer can carry out maintenance activities with both the deck water seal, so that the work of the deck water seal can work optimally when operating on IGS in ship.

Keywords: Inert Gas System, Deck Water Seal, SWOT metode.