

ABSTRACT

Tomy Dwi Nugroho, NIT.51145485.T, 2018 "*Identify damage of pressure relief valve on gas carrier in MT. GAS KALIMANTAN*", Program of Diploma IV, , Marchant Marine Polytechnic of Semarang, 1st Supervision: Achmad Wahyudiono. M.M. , M.Mar.E and 2nd Supervision: Poernomo Dwi Atmojo. SH. MH.

Pressure relief valve is an instrument that works when there is overpressure on the inlet nozzle. In the design to be open proportionally when there is an abnormal (in this case (over pressure) on a plant and will close when the plant back to normal (normal pressure). Mean of Damage pressure relief valve in here is, the pressure relief valve not closed back after the pressure is drop when the tank is overpressure.

The method used in this thesis is fishbone analysis and fault tree analysis. The method as to determine the problem factors and events that exist in the problem. The problem formulation of this research is. The cause of damage to the relief valve, how the impact caused from the damage of the relief valve on the cargo tank, and how the handling efforts to be done to overcome the damage to the relief valve.

Based on the results of this study concluded that the cause of damage to the pressure relief valve is a leakage on the pilot supply line and accompanied by the increase in pressure in the tank of the estuary due to the thermal expansion (heat expansion). The impacts of the causal factors are the loss of cargo evaporating the air and the damage of supporting equipment in the cargo tank, and the attempts to avoid and handle the event are by routine checks and maintenance. And if the incident happens immediately do the closure manually after the pressure decreases. That is, by pushing the seat cover using nitrogen gas on the nozzle located in the body pressure relief valve.

Key Words :Identification, Damage, Pressure relief valve