

ABSTRACT

Agus Tri Handoko, 2018, NIT: 50134925. T, “*Corrosion Analysis On The Inert Gas Generator Combustion Chamber On MT.Sambu*”, Technical Thesis, Diploma IV Program, Merchant Marine Polytechnic Semarang, Material Adviser (I): Dwi Prasetyo, MM, M.Mar.E. Methodologi and Writing Adviser (II): Nur Rohmah, S.E., M.M.

Inert gas generator is a device similar to boiler, where fuel is burned to make the flue gas containing oxygen less than 5%. Damage to the combustion chamber *inert gas generator* caused by several types of corrosion. Including: (1) *intergranular corrosion*, (2) *crevice corrosion*, (3) *pitting corrosion* (4) *erosion corrosion*. in MT. Sambu caused by *intergranular corrosion* corrosion factor so that the combustion chamber undergoes a change of shape (perforated) that resulted in sea water as a cooling medium on the wall scrubber into the combustion chamber so that there is no burning in the combustion chamber *inert gas generator*. The purpose of this research is, to determine what factors are causing the corrosion in the inert gas generator combustion chamber on MT. Sambu moreover, this research aims to determine what efforts are made to the *inert gas generator* combustion chamber is not quickly exposed to corrosion in the MT. Sambu.

This research uses qualitative descriptive method and using data analysis technique *strengths, weaknesses, opportunities, and threats* (SWOT) is systematic identification of various factors to formulate strategy. Data collection is done by interview, observation, documentation, by observing at the overhaul time on MT. Sambu.

After identifying the factors which causing acceleration of corrosion in the *inert gas generator combustion chamber*, so that causing corrosion on *inert gas generator* combustion chamber on MT. Sambu is: the fresh water *flushing the valve* is damaged, and the result showed factors which caused corrosion in the *inert gas generator* combustion chamber are the fresh water flushing was damaged and the less cooling air conditioning pressure of *cooling jacket*. The efforts which are done in order to make the *inert gas generator* combustion chamber corrosion on the MT. Sambu has good performance are to make the schedule for maintaining the fresh water flushing valve regulary. After stopping the operation of *inert gas generator* must be maintained regulary. Regular maintenance at fresh water *flushing valve*, and at the *scrubber pump*.

Keywords: Corrosion, *Inert Gas Generator*, Combustion Chamber.