

ABSTRACTION

Yohanes Canis Minoris Diaz, 2018, NIT: 50134953 T, "*The influence of evaporator work on fresh water generator to the amount of fresh water production on LPG/C Lady Margaux*", thesis of Technical Department, Diploma IV Program, Semarang Merchant Marine Polytechnic, Supervisor I: Agus Hendro Waskito, M.M.,M.Mar.E, Supervisor II: Ir. Fitri Kensiwi.

Fresh Water Generator is one of the auxiliary engines on board that serves to convert sea water into fresh water by distillation in a state of vacuum for fresh water supply. fresh water aboard is essential for crew accommodation and also for smooth work or machinery on ships that use fresh water for cooling media or for other purposes. The working principle of the Fresh Water Generator is to separate the salt content of seawater by evaporating it in the vacuum so that the boiling point of the seawater decreases and the sea water can evaporate below 100°C. Problems and disturbances on the Fresh Water Generator will affect the amount of freshwater production on board, therefore the condition of the auxiliary machinery should be kept as good as possible.

The research method that the writer uses in the preparation of this thesis is SWOT research method as data analysis technique to analyze existing problems at Fresh Water Generator, that is looking for what factors cause the decreasing of freshwater production result at Fresh Water Generator and what effort can be done to overcome these problems by identifying various factors systematically on strengths, weaknesses, opportunities, and threats. These factors are processed so that the strategy will be obtained to overcome these problems.

Based on the results of research that has been done on LPG / C ship Lady Margaux, it can be concluded that the decrease of freshwater production at Fresh Water Generator is caused by five factors, namely 1) Leakage on rubber seal separator, 2) Condition plate plate Evaporator crusty, 3) Condition of old machine, 4) Condition of sea water filter that can not function properly, 5) Damage to salinometer. To overcome these factors can be done by replacing the rubber seal separator with a new one and checking the vacuum pressure regularly, performing maintenance and cleaning of the Fresh Water Generator more often than has been scheduled on Planned Maintenance Schedule.

Keywords: Fresh Water Generator, SWOT, Evaporator.