

ABSTRACT

Muhammad Arif Ramli, 2018, NIT: 50134912 T, "*Decreases Function Of The Marine Growth Prevention System To Sea Water Cooling System Laut In MT. Gandin* ", *Teknika Study Progres, Diploma Program IV, Merchane Marine Of Politecnic Semarang, Supervisor I: Sarifuddin, M.Pd., M.Mar.E., Supervisor II: Capt. Marihot Simanjuntak, M.M.*

Marine Growth Prevention System is an auxiliary aircraft used to provide dual protection on board. Copper anodes produce ions that will react with seawater, where they can potentially inhibit the growth of marine biota. With the help of aluminum hydroxide as flocculation released by copper. This is called dual protection, where the system can be gained protected from bio-fouling and corrosion processes. The problem in the MGPS system can affect the sea water cooling system on board, because it is necessary to handle the disturbance in the MGPS system, that is by performing repair and maintenance on the components and the correct operation according to the instruction manual manual book.

The method used in this study is the SWOT method, which is a strategic planning method used to evaluate strengths, weaknesses, opportunities (opportunities), and threats on a project. So the use of this method can be used to evaluate in case of decline in function on the Marine Growth Prevention System on board.

The result of the research shows that the factors causing the decrease of Marine Growth Prevantion System (MGPS) on board the MT.Gandini vessel are not operating in accordance with SOP, ship environment and unsuitable anode usage. Impacts resulting from the decline in the function of the Marine Growth Prevention System (MGPS) on board the MT.Gandini vessels may result in accumulation of anodes and damage such as strains, seawater pipes and cooler tubes and condensers. Efforts to maintain the Marine Growth Prevention System (MGPS) on board the MT.Gandini vessel can work optimally by performing treatment according to procedures such as overhaul treatment tanks, replacing anodes and performing blowing. So the protection of seawater pipes from marine biota and rust can be prevented.

Keywords:*Marine Growth Prevention System, Cooling Sea Water System, Vessel.*