ABSTRACT

Arif Kuncara, 2018, NIT : 50134990.T, *"Analisis meningkatnya suhu air pendingin motor induk di M.V. ANGELA"*, Skripsi Program Studi Teknika, Program Diploma IV, Politeknik Ilmu Pelayaran Semarang, Pembimbing I: Nasri, M.T .M .Mar.E. dan Pembimbing II: Adi Oktavianto ST.MM.

On the M.V. ANGELA, The main engine as the main driving force is a very important machinery, an important part to support the condition of the master machine is a cooling system, cooling system is a system that serves to keep the engine temperature in ideal conditions. There are two types of cooling system that is open and closed, in the ship where cadets practice using closed cooling system, cooling system consists of several components so that maintenance needs to be done on the cooling system components to work optimally so as not to interfere with the performance of the parent machine.

The method used in this research is the method of Strength Weaknesses Opportunities Threats (SWOT), which is a form of situation analysis by identifying various factors systematically to the strengths (strenghts), weaknesses (weaknesses), opportunities (opportunities) and threats (threats) from the environment to formulate the strategy to be taken. Data collection techniques are done through observation, documentation and literature study directly on subjects related to cooling system.

The results obtained from this research that one part of the cooling system components that pumps damage to the mechanical seal resulting in cooling water temperature increases. While the cause of damage to the mechanical seal is caused by lack of maintenance on the mechaical seal so that working hours on mechanical seal runs out and there is exhaustion of the material resulting in damage from the strength of the seal itself to block the liquid. To overcome the above problems in order to perform at the pump manjadi optimally need to be replaced on the mechanical seal is damaged, and set the maintenance schedule on the cooling water pump to avoid unexpected problems.

Key words : ***Cooling system, Pump, Mechanical seal..***