

ABSTRACT

Rabbani Aswan Danu, 2018, NIT : 51145386.T, “Analisa kebocoran pipa pemanas tangki *service* bahan bakar di MV. Bente”, skripsi Program Studi Teknika, Program Diploma IV, Politeknik Ilmu Pelayaran Semarang, Pembimbing I : Drs. Edy Warso, MM, M.Mar.E. dan Pembimbing II : Capt. Samsul Huda, MM, M.Mar.

On board the MV. Bente, pippa fuel heater in general on the ship is in the fuel tank, which runs because there is fluid flowing in the pipe that is hot steam coming from the boiler. Because of the great importance of the function of the fuel heating pipe it must be kept performance, ranging from maintenance , the temperature of steam heat generated boiler to heat the fuel, as well as conditions of fuel quality that is in the fuel service tank. If the fuel heating pipe in the service tank will greatly disrupt ship operations.

Fishbone Analysis or Fish Bone Chart is one of the methods in improving quality. Also often this diagram is called a cause-effect diagram or cause-effect where this diagram uses verbal data (non-numerical) or qualitative data. Fault Tree Analysis is a technique used to identify risks that contribute to failure. This method is done with a top down approach, which begins with the assumption of failure or loss of the event of the peak (Top Event) and then details the causes of a Top Event to a root cause.

The results obtained from this research that the cause of leakage pipe heater fuel service tank is the presence of water content in the pipe that allows the pipe corrosion and easy to leak. The cause of the presence of water content in the heating pipe is the performance of the boiler is not good. That's because the abnormal combustion process caused by evaporation of water formed H₂ in fuel. So as to produce hot steam that has a high water content intensity.

Keywords: auxiliary engine, planning maintenance system, running hours.