

## ABSTRACT

**Johan Harkam Pradana**, 50135000.T, 2017 *“The analysis of leakage Jacket Cooling Main Air Compressor on Mv. Ultra Alpha”* minithesis of Technical Programe, Diploma IV Programe, Merchant Marine Polythecnic Semarang, Supervising professor I A. Agus Tjahjono, M.M., M.Mar.E and Supervising professor II Daryanto, SH.MM.

*On board the MV. Ultra Alpha has an air compressor which is an important factor for producing compressed air to be used as air starting at the host machine and auxiliary machine, and also used for services such as filter, net nozzle and others, and for air services on the deck eg Wind In the same time we encounter some problems such as those occurring on the cooler of the Main Air Compressor jacket so that the cooling is not maximal and occurs over heat on the compressor cylinder the compressor likes to stop, and the air pressure on the water Reservoir decreases that occurs At the time of maneuvering.*

*The method used is the method of Urgency, Seriousness, Growth, which is one tool to set the priority size to be completed, the way by determining the level of urgency, seriousness, and development with option 1 - 5 or 1 - 10. Techniques through data through observation, documentation And literature studies directly on leakage of the Air Compressor main coolant jacket.*

*The results of this study are cooling of the main air compressor coolant jacket is due to damage of cylinder head gasket, compressor valve damage, jacket pump pressure is too high, and keroposnya pipe cooling jacket. To solve the above problem on the Main Air Compressor so that it can be pursued in order to perform the piston, do the flame packing, the selection of amplifier or reinforcement or jacket pipe with new, maintenance and repair to all components of the compressor according to the manual. Books to prevent damage, and to operate on compressor clocks running compressors.*

*Keywords ; Main Air Compressor, leakage, packing*