## **ABSTRACT**

Miftahul Huda, 2018, NIT: 51145449.T, "Analysis Of The Effect Of Gear Motor Cranes On Smooth Loading (With SPSS Method) And Loading And Unloading Optimization Strategies At MV. Pan Clover (With SWOT Method)", thesis Teknika Study Program, Diploma IV Program, Merchant Marine Polytechnic Of Semarang, Supervisor I: Dr. A.Agus Tjahjono, MM., M.Mar.E., Supervisor II: Capt. Dwi Antoro, MM, M,Mar.

A crane is an auxiliary plane on a ship that functions as a medium for moving goods and lowering and raising from the ship to the ship or from the dock to the ship. And the crane is driven by an electric motor and continued by using hydraulics as a mechanism that works using the law of the pascal where the crane can lift heavy loads by using small actuators with high pressure hydraulic oil media.

The purpose of this study was to determine the causes and impact of the lack of maintenance of gear motor cranes for the process of supporting the loading and unloading of the SPSS and SWOT methods.

The results showed the correlation coefficient  $X_1$  was 0.270 so that the effect of gear motor crane had a positive effect on the smooth loading and unloading of 27.0%. It can be concluded that the gear motor crane affects the smooth loading and unloading is weak. The correlation coefficient value of  $X_2$  is 0.319 so that crane care has a positive effect on the smooth loading and unloading of 31.9%. It can be concluded that crane care affects the smooth loading and unloading is medium. Correlation coefficient values  $X_1$  and  $X_2$  indicate that the magnitude of the coefficient of determination shown by the value of Adjusted R Square has a value of 0.820, this means that the variable gear motor crane is able to be explained by the maintenance of 82.0% loading and unloading cranes while the rest is explained by other factors, which was not examined in this study. Thus it can be concluded that the gear motor crane and crane maintenance for smooth loading and unloading are very strong. Strategy in optimizing the smooth loading and unloading in the MV. Pan Clover, which is regular maintenance and routine checking.

**Keywords:** Gear crane motors, crane maintenance, smooth loading and unloading.