ABSTRACT

Hendra Wirawan, 2018, NIT: 51145412. T, "**Influence quality and lubricating oil optimalisation strategy and maintenance bearing about main engine crankshaft performance MV. Armada Serasi (case study about Taruna semester VIII PIP Semarang tahun 2018)**", Engine program, Diploma IV program, Merchant Marine Polytechnic of Semarang, the 1st Supervisor: Dr. A. Agus Tjahjono, M.Si, M.Mar., and the 2nd Supervisor : Budi Joko Raharjo,MM.

The main purposes of this research were to find out the quality of lubricating oil and bearing maintenance according to the procedure on the performance of the main engine crankshaft and to determine the strategy for optimizing crankshaft performance in the MV. Armada Serasi

The research method used by study and findings during research in conveying the problem is the regression method and by generating quantitative data and information to support the research in order to describe and spell out the object clearly, the data collection techniques based on questionnaires using a Likert scale and documentation. Researchers used the validity test, reliability test, normality test, hetero credit test, multicollinearity test. The analytical method used is simple regression analysis, multiple regression and SWOT (strengths, weaknesses, opportunities, dan threats).

The results from this result were showed (1) the regression coefficient value of X1 was 0.385 work on the quality of lubricating oil had a positive effect on crankshaft performance of 38.5% and have weak tendency (2) the regression coefficient value of X2 was 0.322 work on bearing maintenance had a positive effect on the crankshaft performance of 32% Weak tendency (3) Regression coefficient values X1 and X2 have showed that the magnitude of the coefficient of determination showed by the Adjusted value of R Square have coefficient value of 0.431, based on this calculation according the method used give the explanation that the performance variable of the crankshaft available data to explain that the quality of lubrication oil and bearing maintenance by 43% and stand on medium scale and another research were explained by other factors not examined in this research (4) the result from SWOT method use for this research showed that the crankshaft performance position in 2nd quadrant is Diversification with the research strategy that should have good cooperation between senior engineer officers and engine ratings in order to take action on crankshaft inspection and give correct lubrication oil specifications supply.

Key words: lubrication oil quality, bearings maintenance, crankshaft performance.