

## ABSTRACT

**Faizal Khairul Imam**, 2018, NIT : 50134905.T, "*Analysis of the influence of ball bearing damage to the ballast pump performance in MV. Sari Indah.*", Program Studies Diploma IV, Merchant Marine Polytechnic Semarang, Supervisor I : Dwi Prasetyo, MM, M.Mar. E, Supervisor II: Laksmi Setyorini, S.pd, M.Si

Work rather than ballast pumps is very important in the effort of loading and unloading operations on board. The need for maintenance, repair and attention to the ballast pump is one jobs of engineer do for the smooth operation of unloading. Ball bearings are an important component of ballast pumps because they can be widely used and important. The purpose of this research is to find out anything that affects the performance of ballast pumps caused by damage from ball bearings in MV. Sari Indah and impact on ballast pump and how to overcome the damage.

In this writing the authors use descriptive qualitative methods and data analysis techniques with SWOT is the identification of various factors in a systematic manner that aims to reveal facts, circumstances, phenomena, variables and circumstances that occur when the study runs and provide data as it is so that in this study get the results research that actually takes place in MV. Sari Indah. The result of the research shows that ball bearing damage on ballast pump caused by PMS (Plant Maintenance System) is not executed according to the requirement, the quality of ball bearings that do not meet the standard and there is contamination of dust and dirt.

The purpose of this research is to know what causes of ball bearing damage on the ballast pump, any impact if ball bearing damage occurs on the ballast pump, and any attempt to prevent the occurrence of ball bearing damage on the ballast pump for the ballast pump to work with the maximum, and not inhibiting loading or unloading process on board. In the implementation of the identification can be obtained the factors and effects caused, and the results can be used to find alternative improvements so that ball bearing damage to the ballast pump can be reduced.

Key Word: Ball bearing, maintenance, repair and ballast pump.