

ABSTRACT

Adhadi Pranoto, NIT. 51145306.T, 2018 “*Identification breakage of high pressure pipe steering gear in MT. As Marine Mpat*”, Program Diploma IV, Teknika, Merchant Politecnic of Semarang, Pembimbing I: Nasri, M T.M. Mar.E dan Pembimbing II: Capt. Suherman. M.Mar.

Steering Gear is one of the auxiliary machining systems used for the ship's steering system to keep the operation of the ship running smoothly when the ship moves from the starting point to the end of a port. The writing of this thesis is to “*Identify breakage of high pressure pipe steering gear in MT.As Marine Mpat*”, thus experiencing a leak in the hydraulic pipe. The problem formulation in this study is what are the impacts and risks that can be caused from hydraulic oil leakage on hydraulic steering gear, and how to deal with the leakage in hydraulic steering gear oil.

The method used by the author is a descriptive research methodology with the Fishbone method and Fault Tree Analysis. Fishbone is used to expose factors that cause breakage in *high pressure pipe steering gear*. And FTA is to find the root cause and attempt to analyze the problem. Based on the results of research conducted during the sailing practice on the MT. As Marine Mpat by researchers about the causes of leakage in the *high pressure hydraulic pipe steering gear* such as moisture in the pipe, leakage on the pipe connection and corrosion in the pipe can occur leakage in the hydraulic steering gear oil. Then the cause of the attempt was put into action such as repairing leaks in the pipe high pressure steering gear.

The results of this study indicate that there is a leak in the high pressure steering gear pipe in the MT. As Marine Mpat. Due to lack of maintenance there is moisture in the pipe, leakage on pipe connections and corrosion. So that the steering leaf operates abnormally.

Keywords : *high pressure pipe steering gear*.