

## ABSTRACT

**Nadika Alifudin Rizal**, 2017, NIT : 49124520.T, *Analisa kerusakan pada klep gas buang motor induk di MT. Pertamina Gas 1 dengan metode Fishbone dan FTA*, Program Studi Diploma IV, Politeknik Ilmu Pelayaran Semarang, Pembimbing I : Heri Sularno, M.H. M.Mar.E, Pembimbing II : Nita Setiyaningsih, S.pd.,M.Hum

The main engine is fuel ignition method. In the diesel engine fuel is injected into the cylinders contain high pressure air. One part of the main engine is very important is the gas valve exhaust because if there is a problem with the valve exhaust gas, greatly affect the performance of main engine because it is then the need for rapid handling problems that often occur at the valve exhaust is excess working hours valve, the effect of the use of spare parts, maintenance that is not optimal.

Given the importance of the function of the exhaust valve, it must be cared for and maintained properly and for the better in the repair or maintenance in this paper author use the method approach, FTA and Fishbone. Where this method is to identify problems or dangers that arise in the operation of the system. FTA and Fishbone can be defined as a system and form of assessment of a design or existing process or operation with a view to identify and evaluate the problems that can be described the causes, consequences and treatment appropriate to bring it closer to the start or to function again and to prevent more going back so that operations run smoothly and efficiently.

At the end part of this thesis The author presents conclusions and saran.untuk troubleshoot problems that occur with Fishbone method is the use of spare parts (valve seating) the original, do the planned work schedule, perform system planned work, the replacement valve working hours. With the FTA method is suitable working hours valve replacement, the replacement of spare parts on the exhaust valve, the use of spare parts (valve seating) are original, always perform routine maintenance on the valve, make improvements cooling system.

Keywords: diesel engine, exhaust valve, FTA, Fishbone