ABSTRACT

Johan Prabowo Saputra, 2018, NIT:51145477 T, "Analisi Patahnya Batang Piston Pada Kompresor Di MT. Asike 1", Script of Technical Study Program, Diploma IV Program, Semarang Merchant Marine Polytechnics, 1st Supervisor: H. Mustholiq, MM, 2nd Supervisor: Capt. Ali Imran Ritonga, MM, M.Mar

The role of the compressor engine in a ship is very important. Therefore, maintenance of the compressor should be done regularly to avoid damage to the compressor. If treatment is not done, problems will arise. One of them is a broken piston rod on the compressor. As happened on the ship where the author conducts research.

On that basis, the researcher formulates the problem of whether the cause of the broken piston rod in MT. Asike 1, what is the impact of fracture of piston rod compressor, and how to overcome the broken piston rod used in making research report.

Data analysis methods used by researchers in the delivery of the problem is the Fishbone method used to describe the factors causing the fracture of the compressor piston rod. Based on the results of research conducted by researchers during practice sail in MT. Asike 1 on the causes of broken piston rods on the compressor is the lack of knowledge of the crew on the maintenance procedures and the correct installation of compressor components, the lack of attention to the running hours of each compressor component, the influence of ambient temperature and damage to the metal bearing. Due to the above problems the production of pressurized air and the process of movement becomes obstructed.

Based on the results of the above ship analysis can be concluded that the actions performed by the crew of the ship for treatment is still less appropriate. As for the researcher's suggestion is it is better to prevent the occurrence of broken piston rod on the compressor always pay attention to the factors causing the broken piston rod by way of socialization and training about the correct treatment procedure and how to overcome the broken piston rod is correct, make the data running hours on each component which is attached and notify the new crew in case of a crew change. It is recommended before the repair, maintenance and replacement of spare parts held meetings in advance to run well and the risk of broken piston rods can be prevented.

Keywords: Compressor, Ruuning Hours, Maintenance Procedures