

ABSTRACT

Bayu Gustianto, 2018, NIT: 49124564 T, "Optimization of steam turbine performance to cargo oil pump in MT. Pungut ", thesis Teknika Studies Program, Diploma Program IV, Polytechnic Studies Sailing Semarang, Supervisor I; H. Amad Narto, M.Pd., M.Mar.E., Supervisor II: Capt, Arika Palapa, M.Si, M.Mar

The present auxiliary machineries on ships have several propulsion media such as diesel, electric motor and steam, one of the auxiliary machineries on board using steam as the driving force is a steam turbine connected to a cargo oil pump (COP). A good steam turbine will produce the perfect turn. And the parts to be kept in mind are the shaft that serves as the main component where the discs are installed along the axis, turbine blades or rows of blades that serve as a tool that accepts the force of the vapor kinetic energy through the nozzle.

The cause of damaged inlet steam valve and steam turbine shaft with cargo oil pump shaft is caused by several causes. From damaged turbine shafts on bearing and gear coupling. The effect of damaged bearing and gear coupling will affect the straightness of the turbine shaft with the shaft cargo oil pump. And damaged valve steam inlet caused by leakage of steam from inside valve because packing and washer which have been damaged, so that steam entering into turbine become not maximal.

Prevention can be done to avoid damage to the turbine shaft with cargo oil pump shaft by always doing maintenance and routine checks on bearing and gear coupling. And to prevent leaking of the inlet steam valve by looking at the condition of packing and washer, if it is damaged must be replaced with new packing and washer.

Keywords: Optimization, performance, steam turbine, MT. Pungut.