STUDY OF MODEL SLEEVE BEARING DAMAGE ON GENERATING SYSTEM IN PT KERTAS LECES

Author: OKY SUMENGKAR
NRP: 2102 100 038
Department: Mechanical Engineering FTI-ITS
Thesis adviser: Ir. YUSUF KAEHANI, MSc.Eng

Abstract
Bearing is one of mechanical components that should bear shaft loads, until its rotation can perform in fine, safe, and longevity. If bearing is not working properly then achievement of all systems will perform badly. Therefore bearing in machineries can be equalized its role with foundation at building. The usage of bearing is very wide in industries. In this Final Projects, damage sleeve bearing at generating system in PT. KERTAS LECES is analysed.

In this Final Projects, the research uses tachometry of vibration of sleeve bearing in part of turbine ECT. Testing tool used is transducer velocity pickup. Hereinafter, dynamic viscosity of lubricating oil is calculated, maximum pressure, energy loss and calculate will be the next, then compared to actually condition.

From the analysis that has been conducted, the existence of damage at one of bearing at generating system encumbering that accepted bearing head and shoulders is above admissible limits. Energy Losses is still relatively small compared with the power generated. The flow rate of lubricant that passes to bearing is below expected need with lubrication need.

Keyword: sleeve bearing, pressure, energy, lubricant flow rate