

TRIBOLOGICAL STUDY AND ANALYSIS OF JOURNAL BEARING USING DIFFERENT BIO-LUBRICANTS

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A PROJECT REPORT

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Abstract

Wear is the major cause for material loss and degradation of machine element. Any reduction in wear can result in improved performance. This is made possible by reducing friction. Lubricant is an effective means of controlling friction. This reduces wear and it has wide application in operation of machine element such as bearing. Various lubricants are presently used to reduce friction and wear between mechanical interacting surfaces but mineral oils are known for higher manufacturing cost and low biodegradability. Due to raising factor about environment among bio lubricants are more focused. Several research works are going on in order to develop bio-lubricant and to have tribological study between interacting mechanical surfaces.

But our study mainly highlights the tribological study on journal bearing at different speeds and at different loads, so that finally we can select best bio lubricant for journal bearing on the basis of low coefficient of friction and high load carrying capacity.