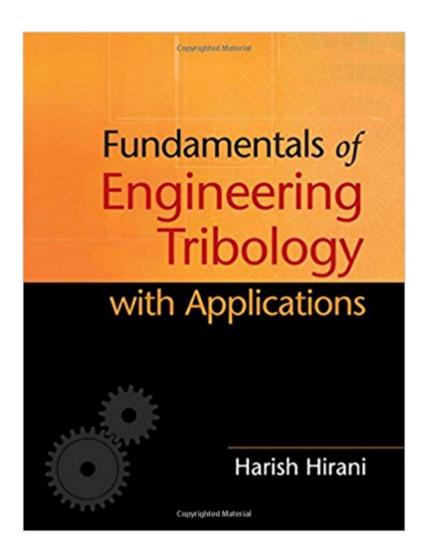


## The book was found

# Fundamentals Of Engineering Tribology With Applications





# **Synopsis**

Tribology is related to friction, wear and lubrication of machine elements. Tribology not only deals with the design of fluid containment systems like seals and gasket but also with the lubrication of surfaces in relative motion. This book comprehensively discusses the theories and applications of hydrodynamic thrust bearing, gas (air) lubricated bearing and elasto-hydrodynamic lubrication. It elucidates the concepts related to friction, including coefficient of friction, friction instability and stick-slip motion. It clarifies the misconception that harder and cleaner surfaces produce better results in wear. Recent developments, including online condition monitoring (an integration of moisture sensor, wear debris and oil quality sensors) and multigrid technique, are discussed in detail. The book also offers design problems and their real-life applications for cams, followers, gears and bearings. MATLAB programs, frequently asked questions and multiple choice questions are interspersed throughout for easy understanding of the topics.

## **Book Information**

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#### Customer Reviews

This book introduces the basic concepts of tribology and its applications related to friction, wear and lubrication of machine elements. Real-life applications, MATLAB programs and multiple choice questions are provided throughout the text for easy understanding of the topics.

Harish Hirani received his PhD from the Indian Institute of Technology, Delhi. He was a visiting researcher at Massachusetts Institute of Technology, USA, from 2003 to 2004. He has published

nearly 35 papers in national and international journals. His areas of interest are semi-active magneto rheological bearing, rolling element bearing, hydrodynamic bearing and seals.

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