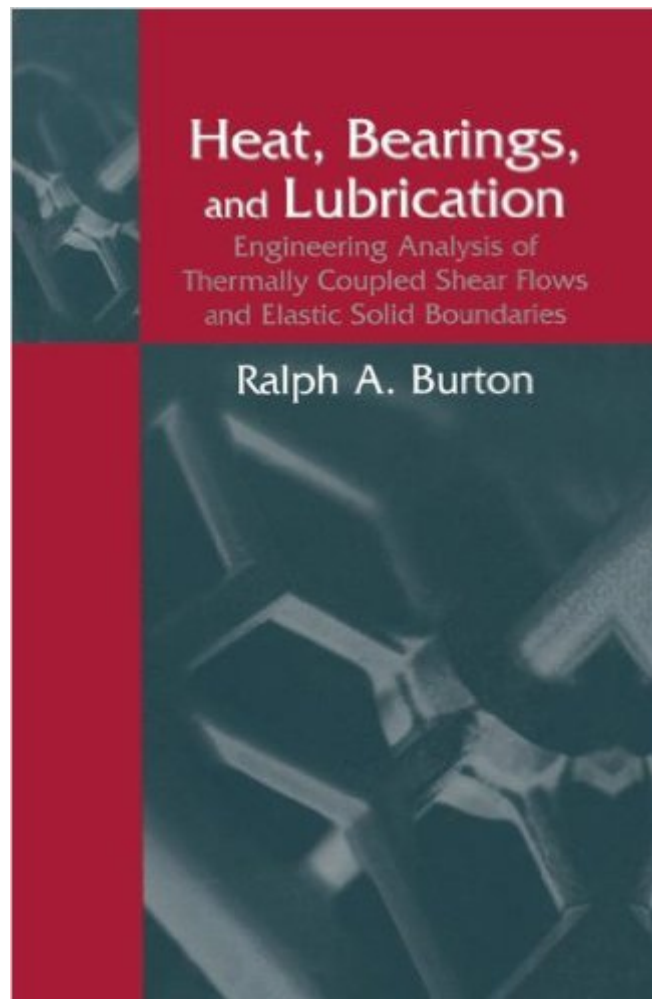


The book was found

# Heat, Bearings, And Lubrication: Engineering Analysis Of Thermally Coupled Shear Flows And Elastic Solid Boundaries



## Synopsis

A systematic treatment of the thermal and elastic deformation of bearings, seals, and other machine elements under a wide variety of conditions, with particular emphasis on failure mechanisms when high speeds or loads cause significant frictional heating and on methods for predicting and avoiding such failures. Intended for designers and mechanical engineers responsible for high-performance machinery, the book is unique in discussing instabilities driven by frictional heating and thermal expansion and in developing a theoretical approach to engineering design in those cases in which the thermal problems are pivotal. It thus provides a guide as to what is important in the development of high-performance engineering systems. References to recent publications, new material that fill gaps in the literature, a consistent nomenclature, and a large number of worked examples make this a useful text and reference for both researchers and practising engineers.

## Book Information

Hardcover: 217 pages

Publisher: Springer; 2000 edition (December 17, 1999)

Language: English

ISBN-10: 0387987983

ISBN-13: 978-3540228608

Product Dimensions: 6.1 x 0.6 x 9.2 inches

Shipping Weight: 15.4 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (1 customer review)

Best Sellers Rank: #4,992,254 in Books (See Top 100 in Books) #91 inÂ Books > Engineering & Transportation > Engineering > Mechanical > Tribology #1986 inÂ Books > Engineering & Transportation > Engineering > Mechanical > Machinery #2944 inÂ Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Manufacturing

## Customer Reviews

I worked for a very short time for a company that had tribology issues with their gear pumps, and I purchase this book to have a reality check on what I thought about their problems. Although it addresses mostly what happens in the bearings, with the studies and formulas revolving around the bearings and shafts, it allows you see what happens with the gears attached to that shaft and the hydrodynamics around the assembly. I am a passionate bibliophile, but regardless, I think this is a must have book, for somebody that deals with bearings and pumps, as it is nothing more damaging to a pump assembly then bad bearing choices, poor understanding of the thermodynamics and thus

poor lubricity.

[Download to continue reading...](#)

Heat, Bearings, and Lubrication: Engineering Analysis of Thermally Coupled Shear Flows and Elastic Solid Boundaries Grease Lubrication in Rolling Bearings Solid Lubrication Fundamentals and Applications (Materials Engineering) A Need For Speed ( C ): The Quantum Effects Of An Elastic-Solid Aether Theory of Elastic Stability (Dover Civil and Mechanical Engineering) The Physics and Mathematics of Adiabatic Shear Bands (Cambridge Monographs on Mechanics) Compact Heat Exchangers for Energy Transfer Intensification: Low Grade Heat and Fouling Mitigation High Heat (Nikki Heat) Edge of the Heat Box Set Books 1-7: Edge of the Heat Firefighter Romance Scientific Charge-Coupled Devices (SPIE Press Monograph Vol. PM83) G Protein-Coupled Receptors in Drug Discovery (Drug Discovery Series) Stability Estimates for Hybrid Coupled Domain Decomposition Methods (Lecture Notes in Mathematics) Lubrication Fundamentals (Mechanical Engineering) Lubrication in Practice, Second Edition (Mechanical Engineering) Mosfet Modeling for VLSI Simulation: Theory And Practice (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology) The Physics And Modeling of Mosfets (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology (Unnumbered)) Bearings and Azimuths: Step by Step Guide (Surveying Mathematics Made Simple) Bearings and Azimuths (Surveying Mathematics Made Simple Book 1) Stability of Structures: Elastic, Inelastic, Fracture and Damage Theories The Scientific and Clinical Application of Elastic Resistance

[Dmca](#)