Engineering Tribology
Successful tribological solutions to real design problems—in areas as diverse as plain journal bearings, rolling-element bearings, heavily loaded gear teeth, and cams and followers—require skills from a wide range of disciplines, such as mechanical engineering, surface and lubricant chemistry, materials science, and physics. Engineering Tribology provides engineers with a thorough, interdisciplinary understanding of the principles underlying the subject’s engineering aspects while indicating important material constraints. Topics include qualitative and quantitative descriptions of engineering surfaces; the development of both elastic and platic stresses when such surfaces are brought into contact; the underlying mechanisms of friction, surface distress, and wear; the generation of thick pressurized fluid films in both hydrostatic and hydrodynamic bearings; the important features of elasto-hydrodynamic lubrication; mechanisms of boundary lubrication; the design of dry and marginally lubricated bearings; and the principles underpinning the design and operation of rolling contacts and bearings. Problems and answers are provided. This book will be welcomed by student, designers, and researchers in the engineering and physical sciences.

**Book Information**

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**Customer Reviews**

Good book. This edition has everything needed for an introduction to Tribology. Starting with the most basic models the book works up to include multiple disciplines in analyzing tribological problems. I look forward to the next edition for the increased polish and details. I found "Applied Tribology" by Khonsari to have more detail on the topics of interest to me.
I don't recommend this book very highly for an introductory text to tribology. First of all, this book is full of formulas, but doesn't have a single example of how to use them! Since the formulas themselves are often not completely explained, the reader is left wondering exactly how to *use* the formulas. Second of all, I'm sure this book had no proofreader as the amount of typos and errors in formulas throughout is ridiculous. The amount of incorrect formulas makes you rather untrustworthy of using any of the other formulas in the book -- who's to know if they're correct without re-deriving everything? For an introductory text to tribology, I recommend "Introduction to Tribology" by Bhushan. The topic is more concisely and clearly explained, the formulas have fewer issues, and there are *example problems*!

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