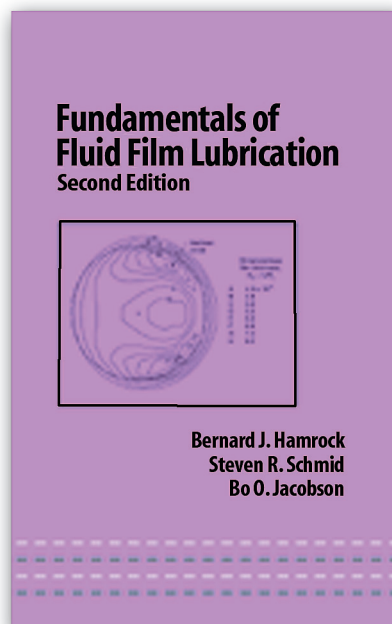


## Book Review

# Fundamentals of Fluid Film Lubrication, Second Edition

By Bernard J. Hamrock, Ohio State University, Columbus, Ohio, Steven R. Schmid, University of Notre Dame, Notre Dame, Ind. and Bo O. Jacobson, Lund University, Sweden, and published by, Marcel Dekker, Inc., 2004. Hard cover, 750 pages.

**Reviewer: Dr. Robert M. Gresham,  
TLT Contributing Editor**



**T**his book is an update of the earlier first edition. The book is well written by renowned experts in the field. It is highly technical as required with any serious treatment of the topic. It also contains clear in-depth descriptions of theory, numerous formula and equations, appropriate references, etc. The book is written as a textbook including worked examples and problems at the end of the chapters.

The intended audience for this book is senior undergraduate and graduate engineering students and professional engineers, who encounter machine elements that use fluid film lubrication. Thus, it is not for the casual reader, yet on a more superficial level, because of the clear explanations, one can read portions of the chapters and easily learn the basic concepts.

As compared to the first edition, there are more problems to aid in learning and much expanded references, all of which add significantly

to the meat of the book. Further, while many sections are identical in both editions, the chapters in which they reside have been expanded with new sections to reflect our increased knowledge. A good example is the expanded section on surface topography, where there have been significant advances in the last ten years. Additionally, some chapters have been deleted and/or absorbed into other chapters. However, there are new chapters titled: "Dynamically Loaded Journal Bearings," and "General Solution for Stresses and Deformations in Dry Contacts."

As stated earlier this is a book for the serious student of the subject. The strength of the book is in its logical layout, clear explanations and extensive references. Anyone who purchased the first edition will want to keep his or her library updated with this second edition. Also, professors, who are teaching these topics, will want to seriously consider this book as their primary text. <<