



Fundamentals of Tribology (2nd Edition)

By Ramsey Gohar, Homer Rahnejat

[Download now](#)

[Read Online](#) 

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat

Fundamentals of Tribology deals with the fundamentals of lubrication, friction and wear. It begins by introducing the readers to the importance of tribology in everyday life and a brief history of the subject. It then describes the nature of rough surfaces and mechanics of contacting elastic solids and their deformation under load and friction in their relative motion. The book goes on to discuss the importance of lubricant rheology with respect to viscosity and density. Then, the principles of hydrodynamic lubrication are covered with derivations of the governing Reynolds and energy equations. Applications of hydrodynamic lubrication in various forms of bearings - journal bearings, thrust bearings and externally pressurized bearings - are outlined. The important and still evolving subject of elastohydrodynamic lubrication is treated in some detail, both at its fundamentals as well as its applications in thin shell or overlay bearings, cam-followers and internal combustion engine pistons. The fundamentals of biotribology are also covered, particularly its applications to endo-articular mammalian joints such as hip and knee joints and their arthroplasty. In addition there is a treatment of the rapidly emerging knowledge of tribological phenomena in lightly-loaded vanishing conjunctions (nanotribology) in natural systems and very small devices such as MEMS and high density data storage media.

This book targets the undergraduate and postgraduate body as well as engineering professionals in industry, where often a quick solution or understanding of certain tribological phenomenon is sought. The book can also form an initial basis for those interested in research into certain aspects of tribology.

 [Download Fundamentals of Tribology \(2nd Edition\) ...pdf](#)

 [Read Online Fundamentals of Tribology \(2nd Edition\) ...pdf](#)

Fundamentals of Tribology (2nd Edition)

By Ramsey Gohar, Homer Rahnejat

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat

Fundamentals of Tribology deals with the fundamentals of lubrication, friction and wear. It begins by introducing the readers to the importance of tribology in everyday life and a brief history of the subject. It then describes the nature of rough surfaces and mechanics of contacting elastic solids and their deformation under load and friction in their relative motion. The book goes on to discuss the importance of lubricant rheology with respect to viscosity and density. Then, the principles of hydrodynamic lubrication are covered with derivations of the governing Reynolds and energy equations. Applications of hydrodynamic lubrication in various forms of bearings - journal bearings, thrust bearings and externally pressurized bearings - are outlined. The important and still evolving subject of elastohydrodynamic lubrication is treated in some detail, both at its fundamentals as well as its applications in thin shell or overlay bearings, cam-follower and internal combustion engine pistons. The fundamentals of biotribology are also covered, particularly its applications to endo-articular mammalian joints such as hip and knee joints and their arthroplasty. In addition there is a treatment of the rapidly emerging knowledge of tribological phenomena in lightly-loaded vanishing conjunctions (nanotribology) in natural systems and very small devices such as MEMS and high density data storage media.

This book targets the undergraduate and postgraduate body as well as engineering professionals in industry, where often a quick solution or understanding of certain tribological phenomenon is sought. The book can also form an initial basis for those interested in research into certain aspects of tribology.

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat Bibliography

- Sales Rank: #4412735 in Books
- Brand: Imperial College Press
- Published on: 2012-06-04
- Original language: English
- Number of items: 1
- Dimensions: 8.90" h x 1.20" w x 6.10" l, 1.72 pounds
- Binding: Hardcover
- 460 pages

 [Download Fundamentals of Tribology \(2nd Edition\) ...pdf](#)

 [Read Online Fundamentals of Tribology \(2nd Edition\) ...pdf](#)

Download and Read Free Online Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat

Editorial Review

From the Inside Flap

Fundamentals of Tribology deals with the fundamentals of lubrication, friction and wear. It begins by introducing the readers to the importance of tribology in everyday life and a brief history of the subject. It then describes the nature of rough surfaces and mechanics of contacting elastic solids and their deformation under load and friction in their relative motion. The book goes on to discuss the importance of lubricant rheology with respect to viscosity and density. Then, the principles of hydrodynamic lubrication are covered with derivations of the governing Reynolds and energy equations. Applications of hydrodynamic lubrication in various forms of bearings journal bearings, thrust bearings and externally pressurized bearings are outlined. The important and still evolving subject of elastohydrodynamic lubrication is treated in some detail, both at its fundamentals as well as its applications in thin shell or overlay bearings, cam-followers and internal combustion engine pistons. The fundamentals of biotribology are also covered, particularly its applications to endo-articular mammalian joints such as hip and knee joints and their arthroplasty. In addition there is a treatment of the rapidly emerging knowledge of tribological phenomena in lightly-loaded vanishing conjunctions (nanotribology) in natural systems and very small devices such as MEMS and high density data storage media.

This book targets the undergraduate and postgraduate body as well as engineering professionals in industry, where often a quick solution or understanding of certain tribological phenomenon is sought. The book can also form an initial basis for those interested in research into certain aspects of tribology.

Users Review

From reader reviews:

Jonathan Head:

Nowadays reading books be than want or need but also become a life style. This reading habit give you lot of advantages. The advantages you got of course the knowledge the particular information inside the book that improve your knowledge and information. The data you get based on what kind of guide you read, if you want send more knowledge just go with training books but if you want sense happy read one with theme for entertaining like comic or novel. Often the Fundamentals of Tribology (2nd Edition) is kind of e-book which is giving the reader unstable experience.

Pedro Dillon:

Does one one of the book lovers? If so, do you ever feeling doubt when you are in the book store? Try to pick one book that you find out the inside because don't judge book by its include may doesn't work is difficult job because you are frightened that the inside maybe not as fantastic as in the outside appear likes. Maybe you answer might be Fundamentals of Tribology (2nd Edition) why because the amazing cover that make you consider in regards to the content will not disappoint a person. The inside or content will be fantastic as the outside or cover. Your reading 6th sense will directly guide you to pick up this book.

Lisa Martin:

Is it anyone who having spare time and then spend it whole day through watching television programs or just resting on the bed? Do you need something new? This Fundamentals of Tribology (2nd Edition) can be the response, oh how comes? A book you know. You are consequently out of date, spending your extra time by reading in this new era is common not a nerd activity. So what these guides have than the others?

Roderick Grubb:

As we know that book is important thing to add our know-how for everything. By a publication we can know everything we want. A book is a group of written, printed, illustrated or blank sheet. Every year was exactly added. This book Fundamentals of Tribology (2nd Edition) was filled regarding science. Spend your free time to add your knowledge about your technology competence. Some people has diverse feel when they reading some sort of book. If you know how big benefit of a book, you can feel enjoy to read a publication. In the modern era like currently, many ways to get book you wanted.

Download and Read Online Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat #R7YVC40TW6N

Read Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat for online ebook

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat books to read online.

Online Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat ebook PDF download

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat Doc

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat Mobipocket

Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat EPub

R7YVC40TW6N: Fundamentals of Tribology (2nd Edition) By Ramsey Gohar, Homer Rahnejat