The book was found

Lubrication Fundamentals, Third Edition, Revised And Expanded

Copyrighted Material

ExxonMobil

Lubrication Fundamentals

Third Edition, Revised and Expanded

Don M. Pirro | Martin Webster | Ekkehard Daschner

CRC Press
Taylor & Francis Group

Copyrighted Material
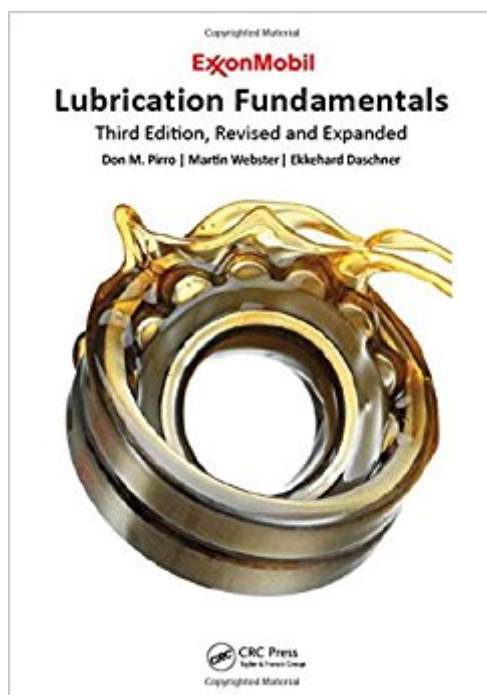
Synopsis

Careful selection of the right lubricant(s) is required to keep a machine running smoothly. Lubrication Fundamentals, Third Edition, Revised and Expanded describes the need and design for the many specialized oils and greases used to lubricate machine elements and builds on the tribology and lubrication basics discussed in previous editions. Utilizing knowledge from leading experts in the field, the third edition covers new lubrication requirements, crude oil composition and selection, base stock manufacture, lubricant formulation and evaluation, machinery and lubrication fundamentals, and environmental stewardship. The book combines lubrication theory with practical knowledge, and provides many useful illustrations to highlight key industrial, commercial, marine, aviation, and automotive lubricant applications and concepts. All previous edition chapters have been updated to include new technologies, applications, and specifications that have been introduced in the past 15 years. WhatÃ¢â ¬â„¢s New in the Third Edition: Adds three new chapters on the growing renewable energy application of wind turbines, the impact of lubricants on energy efficiency, and best practice guidelines on establishing an in-service lubricant analysis program Updates API, SAE, and ACEA engine oil specifications, descriptions of new engine oil tests, impact of engine and fuel technology trends on engine oil Includes the latest environmental lubricant tests, definitions, and labelling programs Compiles expert information from ExxonMobil publications and the foremost international equipment builders and industry associations Covers key influences impacting lubricant formulations and technology Offers data on global energy demand and interesting statistics such as the worldwide population of nuclear reactors, wind turbines, and output of hydraulic turbines Presents new sections on the history of synthetic lubricants and hazardous chemical labeling for lubricants   Whether used as a training guide for industry novices, a textbook for students to understand lubrication principles, or a technical reference for experienced lubrication and tribology professionals, Lubrication Fundamentals, Third Edition, Revised and Expanded is a "must read" for maintenance professionals, lubricant formulators and marketers, chemists, and lubrication, surface, chemical, mechanical, and automotive engineers.

Book Information

Hardcover: 608 pages
Publisher: CRC Press; 3 edition (March 17, 2016)
Language: English
ISBN-10: 149875290X

ISBN-13: 978-1498752909

Product Dimensions: 7.2 x 1.2 x 10.2 inches

Shipping Weight: 3.1 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars   1 customer review

Best Sellers Rank: #671,005 in Books (See Top 100 in Books)   #210 inÃ Â Books > Science & Math > Chemistry > Industrial & Technical   #367 inÃ Â Books > Engineering & Transportation > Engineering > Mechanical > Machinery   #370 inÃ Â Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Industrial Design

Customer Reviews

"Ã¢â ¬Â| a key foundation reference which any serious practitioner in our field should haveÃ¢â ¬â ¢and read... it could easily fit into the course materials used in some of the new undergraduate programs arising in our universities."Ã¢â ¬â ¢Robert M. Gresham, Society of Tribologists and Lubrication Engineers"This book is of great value for those working in industries where effective lubrication is a key factor for obtaining solutions with a high reliability. The book gives an excellent description of the lubrication mechanisms and the impact of lubricant selection on performance. The authors have done a great job in compiling lubrication knowledge of so many applications in a single book."Ã¢â ¬â ¢Piet M. Lugt, SKF Engineering and Research Centre, University of Twente, The Netherlands "Ã¢â ¬Â|an intensely practical and thorough reference resource, both for those involved in the practical side of lubricants and lubrication such as designers, lubricant salespersons and service engineers, and also for researchers who should know more about lubricants and lubricated machines. I heartily recommend it."Ã¢â ¬â ¢Tribology Letters, June 2016

Don M. Pirro is the global alliance technical manager at ExxonMobil Research and Engineering, Paulsboro, New Jersey. He started his career in 1978 as a test engineer for Ingersoll RandÃ¢â ¬â„¢s Turbo Compressor Division. He has more than 36 years of lubrication experience with ExxonMobil in various technical positions. He is the author or contributing editor of several scholarly articles on synthetic lubes, environmental awareness applications, grease technology, lubricant interchangeability, used oil analysis, and marine lubricants. He graduated from Rutgers University, New Brunswick, New Jersey, with degrees in mechanical engineering and business administration. Ekkehard Daschner is the industrial lubricant section head and greases technology program lead at ExxonMobil Research and Engineering, Paulsboro, New Jersey. Daschner earned

his mechanical engineering degree in Germany and started his career in an aluminum company. In 1982, he joined the Mobil Oil AG R&D laboratory in Germany supporting product development projects. After holding various positions in technical support, he was appointed Area Sales Director and Brand Manager in Germany and the European headquarters in London and Brussels, and later served as European and later as Global Industrial and Marine Equipment Builder Services Manager.

Martin Webster is a senior research associate at ExxonMobil Research and Engineering, Annandale, New Jersey. He earned his BS and MS in aeronautical engineering and his PhD in tribology from Imperial College, London, UK. In 1986, he was awarded the Bronze Medal in tribology from the Institute of Mechanical Engineers in the UK. After spending four years working in the UK, he joined ExxonMobil in 1989. At ExxonMobil, Martin has held various positions in research and product development and is currently involved in the study of fundamental lubrication mechanisms at the companyÃ¢ ¬â„¢s Corporate Strategic Research Laboratory.

Very comprehensive book on lubrication.

Download to continue reading...

Lubrication Fundamentals, Third Edition, Revised and Expanded Tribology Data Handbook: An Excellent Friction, Lubrication, and Wear Resource (Handbook of Lubrication) Third Eye: Third Eye Activation Mastery, Easy And Simple Guide To Activating Your Third Eye Within 24 Hours (Third Eye Awakening, Pineal Gland Activation, Opening the Third Eye) Lubrication Fundamentals, Second Edition (Mechanical Engineering) Solid Lubrication Fundamentals and Applications (Materials Engineering) Fundamentals of Fluid Film Lubrication (Mechanical Engineering (Marcel Dekker)) Fundamentals of Fluid Film Lubrication (Mechanical Engineering) Lubrication Fundamentals (Mechanical Engineering) Solve Your Child's Sleep Problems: Revised Edition: New, Revised, and Expanded Edition Organizational Behavior and Public Management, Third Edition, Revised and Expanded (Public Administration and Public Policy) Old Testament Parallels (New Revised and Expanded Third Edition): Laws and Stories from the Ancient Near East Introduction to Set Theory, Third Edition, Revised and Expanded (Chapman & Hall/CRC Pure and Applied Mathematics) Principles of Colloid and Surface Chemistry, Third Edition, Revised and Expanded (Undergraduate Chemistry: A Series of Textbooks) Haydn: A Creative Life in Music (Third Revised and Expanded Edition) Irrational Exuberance: Revised and Expanded Third Edition Dealing with People You CanÃ¢ ¬â„¢t Stand, Revised and Expanded Third Edition: How to Bring Out the Best in People at Their Worst (Business Books) On Doctoring: New, Revised and Expanded Third Edition Tumors in Domestic Animals, Third edition, Revised and Expanded The Perigee Visual Dictionary of

Signing: Revised & Expanded Third Edition Fundamentals of Polymer Engineering, Revised and Expanded (Plastics Engineering)