Basic Decompression Theory and Application 3rd Edition

Bruce R. Wienke
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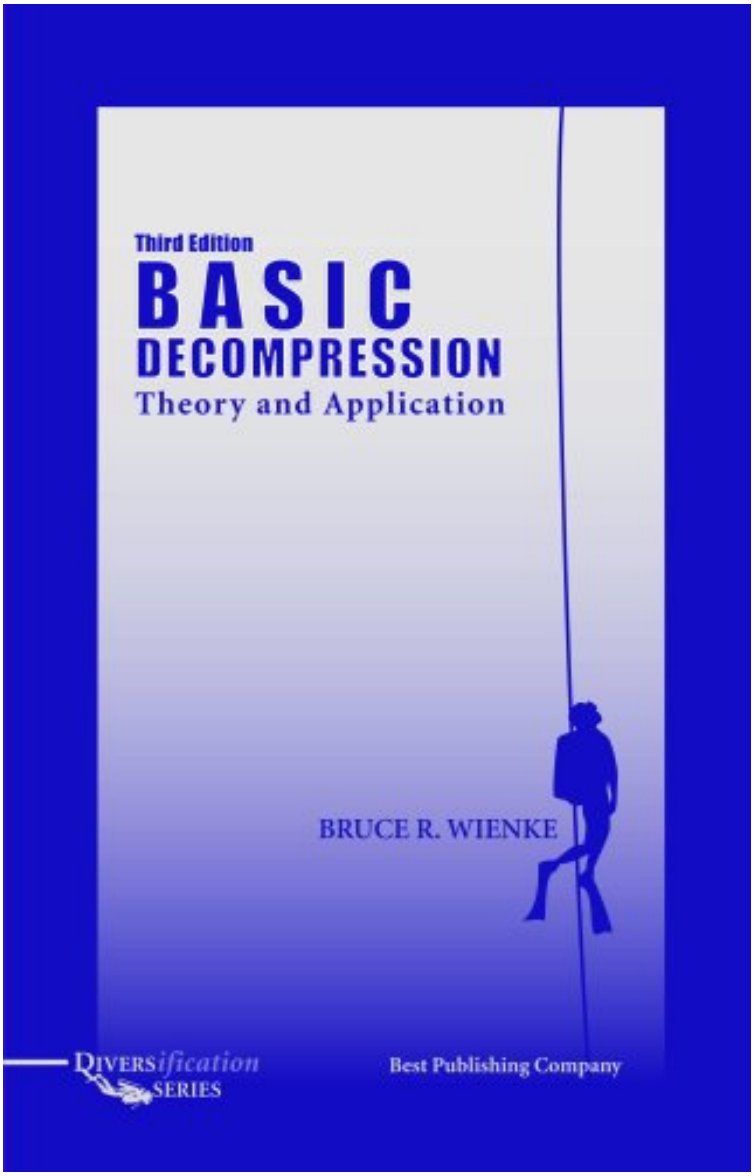

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Bruce R. Wienke : Basic Decompression Theory and Application 3rd Edition before purchasing it in order to gage whether or not it would be worth my time, and all praised Basic Decompression Theory and Application 3rd Edition:

5 of 5 people found the following review helpful. Comprehensive and thoroughBy techdiverI have also read Wienke's "Technical Diving in Depth" and "Reduced Gradient Bubble Model in Depth" in addition to this one; I must say that

this is my favorite.I found that in contrast with the two above mentioned books, Wienke is not being too brief, or too divergent and succeeds in justifying the title of the book. That said, someone who has read the other two books will identify a fair amount of regurgitating text.I would recommend this book to anyone who feels competent with mathematics (an A-Level should be suffice), and seeks to find more about the inner mechanisms of diving algorithms. Finally if I were to buy only one book out of the three this would be it.What I liked best from this book was the exercise section at the end of each chapter.What I disliked most was the use of imperial units.4 of 4 people found the following review helpful. Completely Mathematics - Pretend You Are In SchoolBy Peter R.This book examines the mathematics behind decompression, and so it is titled THEORY. If you like mathematics, formulas, lots of symbols, working with equations ... Oh Baby, this book is for you. If you are looking for a book on understanding decompression, technically, then ok. For example, you are a robotic engineer, and you want to build a specialized sub. My guess is that this book can be used in very advanced courses of decompression, in the classroom. Possibly for those with a MATH degree already in their hip pocket, next to their utility knife.2 of 2 people found the following review helpful. it's basic decompression theory but it's profoundBy Karen NgDoing my divemaster helped me to pick up my interest in physics which is why I ordered this book. What divers learn in decompression theory was the superficial one, but this book shows you all the detailed information and equations of how and why decompression occurs. From molecules to gases to pressures, it was all very detailed. Unless you have a deep and growing interest for physics and decompression theory, otherwise reading it from the PADI encyclopedia would be good enough for your knowledge. The need to understand this book requires a lot of patience and time. But once you manage to know what's going on with the contents and equations, I'm sure your love for decompression theory will grow by depth.

The new 2008 - 3rd Edition of BASIC DECOMPRESSION THEORY AND APPLICATION has been extended and updated, with new material added and new chapters. It takes all rudiments of decompression theory and phase mechanics to considerable depth, while focusing on diving applications in a historical perspective. Topics span many disciplines, and the targeted audience is the commercial diver, hyperbaric scientist, doctor, physical scientist, technical diver, and instructor. The intent of the 3rd Edition is to present a working view of decompression in diving, mostly focusing on theory with application, including equations. The discussion is neither a medical nor physiological synthesis. Such aspects are simplified, and for some certainly oversimplified. Nonetheless, it is directed toward the diver and reader with some rudimentary understanding of decompression. Background in the physical or life sciences is helpful but certainly not necessary. Discussed are the mechanics of tissue gas exchange, bubbles and nucleation, supersaturation, perfusion and diffusion. Also included are chapters on: Mixed Gases and Decompression; Decompression Tables, Meters and Models;Decompression Risks and Statistics; Diving Maladies and Drugs; Altitude Procedures; References and numerical examples (with solutions) are included for more detail and extended diver analysis. The 1st and 2nd Editions of this publication were a sellout in the diving community, and the 3rd Edition is even more detailed, comprehensive, and up-to-date. The author asks that the reader...Have fun with the exercises at the end of each chapter...

About the AuthorBruce Wienke is a Program Manager in the Nuclear Weapons Technology/Simulation and Computing Office at the Los Alamos National Laboratory (LANL). He received a B.S. in physics and mathematics from Northern Michigan University, M.S. in nuclear physics from Marquette University and Ph.D. in particle physics from Northwestern University. He contributes to underwater symposiums, decompression workshops, and is the author of many books on the subject. He is an Instructor Trainer with the National Association of Underwater Instructors (NAUI) and is a Master Instructor with the Professional Association of Diving Instructors PADI). He also serves as a consultant for decompression algorithms in the diving industry.