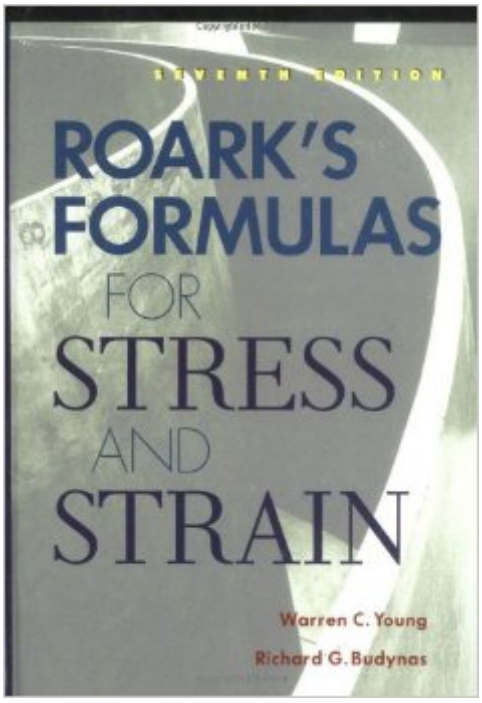
Roark's Formulas For Stress And Strain



Synopsis

Solutions-based approach to quick calculations in structural element design and analysis Now updated with 30% new material, Roark Formulas for Stress and Strain, Seventh Edition, is the ultimate resource for designers, engineers, and analysts who need to calculate loads and stress. This landmark reference from Warren Young and Richard Budynas provides you with equations and diagrams of structural properties in an easy-to-use, thumb-through format. Updated, with a user-friendly page layout, this new edition includes expanded coverage of joints, bearing and shear stress, experimental stress analysis, and stress concentrations, as well as material behavior coverage and stress and strain measurement. Youâ ™ll also find expanded tables and cases; improved notations and figures in the tables; consistent table and equation numbering; and verification of correction factors.

Book Information

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Average Customer Review: 4.4 out of 5 starsÂ Â See all reviewsÂ (23 customer reviews)

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Customer Reviews

I have three editions of this book: the classic 4th edition, the useless 5th edition and this, the 7th edition.The 4th edition has simple format, is easy to use, but lacks methods for more sophisticated hand analyses and is sparse on explanations. The 5th is best used for a doorstop.This edition is an excellent combination of the usefullness of the 4th edition with modern and more advanced methods.The layout of each section has excellent explanatory material and provides the simple 4th edition type equations backed with more involved/advanced formulas which are very useful.My hat is off to the authors. This is probably the best reference for those nasty stress and deflection hand

calculations we all have to do from time to time.

THIS IS NOT A REVIEW ON THIS BOOK --- THIS IS A COMMENT FOR MARKETPLACE SELLERS FOR THIS BOOK AND ALL ENGINEERING BOOKS --- YOU NEED TO LIST WHICH EDITION YOU ARE SELLING, AS THIS IS VERY IMPORTANT FOR THE BUYERS TO KNOW! DIFFERENT EDITIONS CAN BE IN DIFFERENT UNIT SYSTEMS, AND MOST PEOPLE ONLY WANT TO HAVE A PARTICULAR EDITION (FIRST, LATEST, ETC)! --- THANKS!

The usefulness of this book does not require many words. It has most any formula you'll need with plenty of options for boundary conditions of the situation. I ordered this as "good condition" and that was an accurate description: it's a little rough, but has all the information in it. If you want a pristine book, go with new, but realize the information in it is still the same as a used one, just ignore the underlines, etc. The rating is for the book, however, and it is great.

During my years as Structural Calculyst this book was always on my right side on my desk, and when I needed it, it was ready to help me find my way. One really very good Engineer has never found all formulas in his head, instead he should be able of finding them out on good references and really know how to usethem all. This is the best reference book you are going to find when formulas is your subject, just buy it!The only book I know better than this one is written in German and few people are able to read in German, so!

This Book contains every fromula that i would ever need during my Mechanical Engineering Course.It is quite easy to use, and the print is clear the index is user friendly

Roark's has been and remains an excellent resource for the structural engineer and designer regardless of the edition. This is a referance I use on a daily basis. Typically the first book I reach for.

I agree with those reviewers who say that the tables are not clearly labeled. Otherwise, the wealth of information in this single volume is incredible. For instance, there is detailed information on the loading of tapered cantilevered beams as well as the magnification of shear stress in very short beams. Very few other works have this specific information, especially with worked examples showing the application.

A great book I've referred to for decades. The main problem I see in its usage is the neglect of non-linear effects. An unknowledgeable material scientist or engineer calculates a stress or deflection and then thinks it can be applied to failure analysis. The component will take a far greater load before it fails due to the non-linear effects. For example, the initial force to deflect a trampoline 1 inch may be 1 lb, but at 24 inch it is 200 lb (not 24 lb, the linear answer). It's the same with structures when they start deforming.

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