



Stability of Structures: Principles and Applications, Chai Hong Yoo, Sung Chil Lee, Butterworth-Heinemann, 2011, 012385122X, 9780123851222, 523 pages. The current trend of building more streamlined structures has made stability analysis a subject of extreme importance. It is mostly a safety issue because Stability loss could result in an unimaginable catastrophe. Written by two authors with a combined 80 years of professional and academic experience, the objective of Stability of Structures: Principles and Applications is to provide engineers and architects with a firm grasp of the fundamentals and principles that are essential to performing effective stability analysts. Concise and readable, this guide presents stability analysis within the context of elementary nonlinear flexural analysis, providing a strong foundation for incorporating theory into everyday practice. The first chapter introduces the buckling of columns. It begins with the linear elastic theory and proceeds to include the effects of large deformations and inelastic behavior. In Chapter 2 various approximate methods are illustrated along with the fundamentals of energy methods. The chapter concludes by introducing several special topics, some advanced, that are useful in understanding the physical resistance mechanisms and consistent and rigorous mathematical analysis. Chapters 3 and 4 cover buckling of beam-columns. Chapter 5 presents torsion in structures in some detail, which is one of the least well understood subjects in the entire spectrum of structural mechanics. Strictly speaking, torsion itself does not belong to a topic in structural stability, but needs to be covered to some extent for a better understanding of buckling accompanied with torsional behavior. Chapters 6 and 7 consider stability of framed structures in conjunction with torsional behavior of structures. Chapters 8 to 10 consider buckling of plate elements, cylindrical shells, and general shells. Although the book is primarily devoted to analysis, rudimentary design aspects are discussed. The accompanying website will include additional formulas and problems based on the author's software which is currently being used in corporations. The website will also include equations and examples based on their personal experiences. In addition, the website will include a solutions manual for those who wish to use the book as a text book for a two-semester course. Engineers, Architects, designers, and researcher will find this print/website combination a valuable guide both in terms of its applications of verification of design of structures. Balanced presentation for both theory and practice Well-blended contents covering elementary to advanced topics Detailed presentation of the development Computer programs will be made available through the senior author's web page.

Theory of Beam-Columns, Volume 2 Space Behavior and Design, Wai-Fah Chen, Toshio Atsuta, May 15, 2007, Technology & Engineering, 732 pages. This second volume of a two-volume work discusses systematically the complete theory of space beam-columns. It presents principles and methods of analysis for beam-columns in ....

Advanced analysis and design of plated structures, Vladimír Kříž, Miroslav Kálok, 1991, Technology & Engineering, 333 pages. .

Construction Hazardous Materials Compliance Guide Mold Detection, Abatement and Inspection Procedures, Roger Dodge Woodson, 2012, Technology & Engineering, 260 pages. While it would appear that contractors are not affected by the liabilities of the work of others, it is important that they understand the documentation that establishes ....

Stability of large structures , K. A. Zalka, G. S. T. Armer, 1992, Technology & Engineering, 261 pages. .

Endurance of mechanical structures physical and statistical approaches, Jaroslav Nešomec, Jan Drexler, Dec 1, 1990, Technology & Engineering, 464 pages. Very Good, No Highlights or Markup, all pages are intact..

Introduction to the Theory of Thin-Walled Structures , Noel W. Murray, 1986, Technology & Engineering, 447 pages. .

Structural Stability of Steel Concepts and Applications for Structural Engineers, Theodore V. Galambos, Andrea E. Surovek, Apr 18, 2008, Technology & Engineering, 373 pages. This work on structural stability has been written primarily as a textbook to provide a clear understanding of theoretical stability behaviour. It will give readers a basic ....

Geometrically Nonlinear Spatial Beam Theory A Study of Static Behavior of Large Deformable Spatial Beams Subjected to Arbitrary Loading in Small Strain Regime, Satyaki Bhattacharjee, 2011, , 100 pages. In real life many structures undergo large deformation staying in linearly elastic regime. Objective of this book is to study the response of spatial beams under arbitrary loading ....

Stability Theory and Its Applications to Structural Mechanics , Clive L. Dym, 2002, Technology & Engineering, 191 pages. An integration of modern work in structural stability theory, this volume focuses on the Koiter postbuckling analyses, with mathematical notions of stability of motion. In ....

Thin-walled bars with open profiles , Morris S. Ojalvo, 1990, Technology & Engineering, 188 pages. .

Thin-walled structures a collection of papers on the stability and strength of thin-walled structural members and frames, Amos Henry Chilver, 1967, Technology & Engineering, 303 pages. .

Structural stability design steel and composite structures, Yuhshi Fukumoto, 1997, Technology & Engineering, 422 pages. A significant amount of research has been undertaken in Japan over the last forty years on the difficult problems of the stability of steel and steel-and-concrete composites ....

Advanced mechanics of materials , Robert Davis Cook, Warren Clarence Young, 1985, Technology & Engineering, 539 pages. Treats topics by extending concepts and procedures a step or two beyond elementary mechanics of materials and emphasizes the physical view -- mathematical complexity is not ....

Stability problems in engineering structures and components , Institute of Physics (Great Britain). Stress Analysis Group, 1979, , 428 pages. .

Buckling of Bars, Plates, and Shells , Robert M. Jones, Jan 1, 2006, Buckling (Mechanics), 824 pages. .

The current trend of building more streamlined structures has made stability analysis a subject of extreme importance. It is mostly a safety issue because Stability loss could result in an unimaginable catastrophe. Written by two authors with a combined 80 years of professional and academic experience, the objective of Stability of Structures: Principles and Applications is to provide engineers and architects with a firm grasp of the fundamentals and principles that are essential to performing effective stability analysts.

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