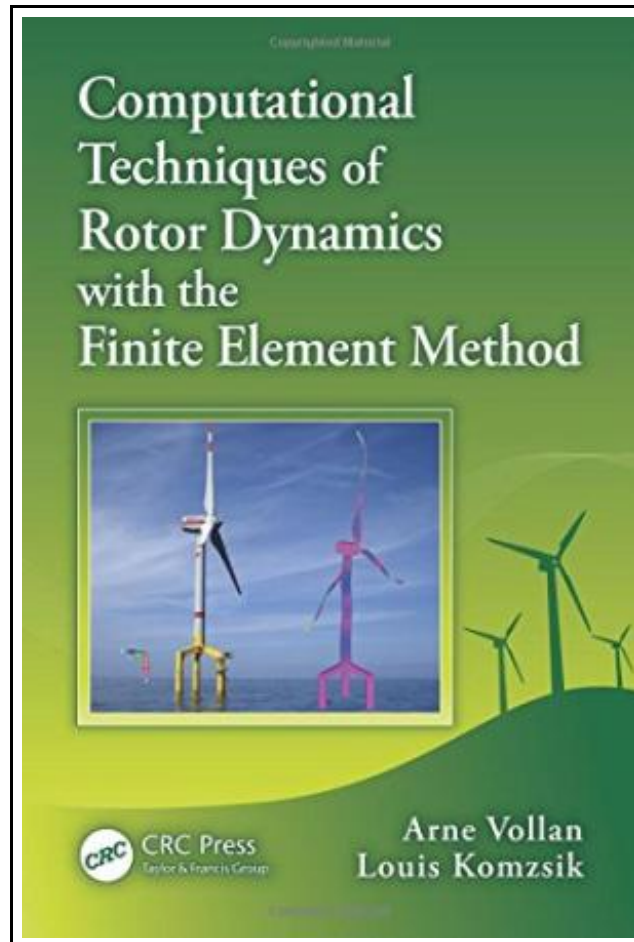# Computational Techniques of Rotor Dynamics with the Finite Element Method (Hardback)

Filesize: 4.18 MB

Reviews

This book is really gripping and intriguing. it was writtern very perfectly and beneficial. I am easily will get a enjoyment of looking at a created ebook.
(Jaeden Stiedemann Sr.)

COMPUTATIONAL TECHNIQUES OF ROTOR DYNAMICS WITH THE FINITE ELEMENT METHOD (HARDBACK)

To read **Computational Techniques of Rotor Dynamics with the Finite Element Method (Hardback)** eBook, you should click the web link below and save the document or have accessibility to additional information which might be relevant to COMPUTATIONAL TECHNIQUES OF ROTOR DYNAMICS WITH THE FINITE ELEMENT METHOD (HARDBACK) ebook.

Taylor Francis Inc, United States, 2012. Hardback. Book Condition: New. 244 x 163 mm. Language: English . Brand New Book. For more than a century, we have had a firm grasp on rotor dynamics involving rigid bodies with regular shapes, such as cylinders and shafts. However, to achieve an equally solid understanding of the rotational behavior of flexible bodies-especially those with irregular shapes, such as propeller and turbine blades-we require more modern tools and methods. Computational Techniques of Rotor Dynamics with the Finite Element Method explores the application of practical finite element method (FEM)-based computational techniques and state-of-the-art engineering software. These are used to simulate behavior of rotational structures that enable the function of various types of machinery-from generators and wind turbines to airplane engines and propellers. The book s first section focuses on the theoretical foundation of rotor dynamics, and the second concentrates on the engineering analysis of rotating structures. The authors explain techniques used in the modeling and computation of the forces involved in the rotational phenomenon. They then demonstrate how to interpret and apply the results to improve fidelity and performance. Coverage includes: * Use of FEM to achieve the most accurate computational simulation of all gyroscopic forces occurring in rotational structures * Details of highly efficient and accurate computational and numerical techniques for dynamic simulations * Interpretation of computational results, which is instrumental to developing stable rotating machinery * Practical application examples of rotational structures dynamic response to external and internal excitations * An FEM case study that illustrates the computational complexities associated with modeling and computation of forces of rotor dynamics * Assessment of propellers and turbines that are critical to the transportation and energy industries Useful to practicing engineers and graduate-level students alike, this self-contained volume also serves as an invaluable reference for researchers...

Read Computational Techniques of Rotor Dynamics with the Finite Element Method (Hardback) Online

Download PDF Computational Techniques of Rotor Dynamics with the Finite Element Method (Hardback)

Related PDFs

[PDF] Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .

Access the web link listed below to get "Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications ." PDF file.

Read Book »

[PDF] Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Access the web link listed below to get "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]" PDF file.

Read Book »

[PDF] Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]

Access the web link listed below to get "Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]" PDF file.

Read Book »

[PDF] Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)

Access the web link listed below to get "Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)" PDF file.

Read Book »

[PDF] Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625)

Access the web link listed below to get "Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625)" PDF file.

Read Book »

[PDF] History of the Town of Sutton Massachusetts from 1704 to 1876

Access the web link listed below to get "History of the Town of Sutton Massachusetts from 1704 to 1876" PDF file.

Read Book »