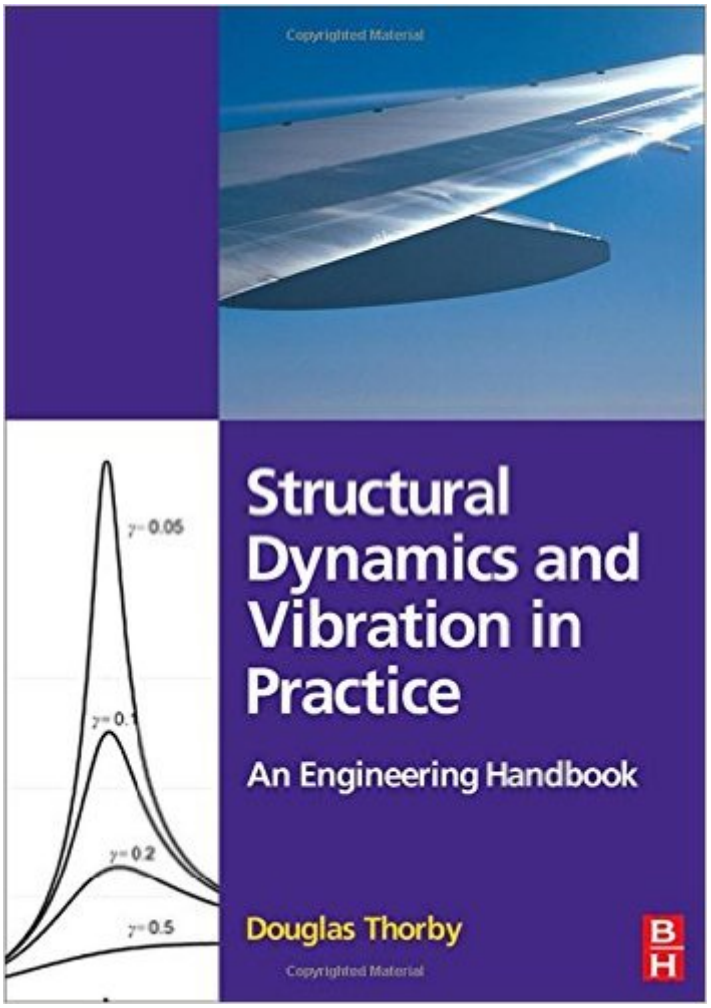
Structural Dynamics And Vibration In Practice: An Engineering Handbook



Synopsis

This straightforward text, primer and reference introduces the theoretical, testing and control aspects of structural dynamics and vibration, as practised in industry today. Written by an expert engineer of over 40 years experience, the book comprehensively opens up the dynamic behavior of structures and provides engineers and students with a comprehensive practice based understanding of the key aspects of this key engineering topic. Key featuresâ ¢ Worked example based makes it a thoroughly practical resourceâ ¢ Aimed at those studying to enter, and already working in industry;â ¢ Presents an applied practice and testing based approach while remaining grounded in the theory of the topicâ ¢ Makes the topic as easy to read as possible, omitting no steps in the development of the subject;â ¢ Includes the use of computer based modelling techniques and finite elementsâ ¢ Covers theory, modelling testing and control in practiceWritten with the needs of engineers of a wide range of backgrounds in mind, this book will be a key resource for those studying structural dynamics and vibration at undergraduate level for the first time in aeronautical, mechanical, civil and automotive engineering. It will be ideal for laboratory classes and as a primer for readers returning to the subject, or coming to it fresh at graduate level. It is a guide for students to keep and for practicing engineers to refer to: its worked example approach ensures that engineers will turn to Thorby for advice in many engineering situations. 1. Presents students and practitioners in all branches of engineering with a unique structural dynamics resource and primer, covering practical approaches to vibration engineering while remaining grounded in the theory of the topic2. Written by a leading industry expert, with a worked example lead approach for clarity and ease of understanding3. Makes the topic as easy to read as possible, omitting no steps in the development of the subject; covers computer based techniques and finite elements

Book Information

Paperback: 420 pages
Publisher: Butterworth-Heinemann; 1 edition (March 4, 2008)
Language: English
ISBN-10: 0750680024
ISBN-13: 978-0750680028
Product Dimensions: 6.7 x 0.8 x 9.6 inches
Shipping Weight: 1.9 pounds (View shipping rates and policies)
Average Customer Review: 4.0 out of 5 starsÂ Â See all reviewsÂ (1 customer review)
Best Sellers Rank: #1,446,364 in Books (See Top 100 in Books) #65 inÂ Books > Engineering &

Transportation > Engineering > Civil & Environmental > Structural Dynamics #715 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural #1104 inÂ Books > Science & Math > Physics > Dynamics

Customer Reviews

Complete topic coverage and would make a good textbook. With my being out of grad school for 30 years I found it less than practical for my daily work.

Structural Dynamics and Vibration in Practice: An Engineering Handbook Matrix Analysis of Structural Dynamics: Applications and Earthquake Engineering (Civil and Environmental Engineering) Structural Dynamics by Finite Elements (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Sound and Structural Vibration, Second Edition: Radiation, Transmission and Response Soil Dynamics with Applications in Vibration and Earthquake Protection Vibration of Mechanical and Structural Systems: With Microcomputer Applications Vibration Damping of Structural Elements Modal Testing, Theory, Practice, and Application (Mechanical Engineering Research Studies: Engineering Dynamics Series) Stress, Strain, and Structural Dynamics: An Interactive Handbook of Formulas, Solutions, and MATLAB Toolboxes Dynamics of Structures (4th Edition) (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Dynamics of Structures (5th Edition) (Prentice-Hall International Series I Civil Engineering and Engineering Mechanics) Dynamics of Structures (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Earthquake Engineering: Damage Assessment and Structural Design (Methods & Applications in Civil Engineering) Structural Dynamics: Theory and Applications Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series, Vol. 15) Structural Dynamics: Theory and Computation Mechanical Vibrations: Theory and Application to Structural Dynamics Introduction to Structural Dynamics and Aeroelasticity (Cambridge Aerospace Series) Structural Stability of Steel: Concepts and Applications for Structural Engineers Structural Analysis and Synthesis: A Laboratory Course in Structural Geology