



behavior.

*"This book enables engineers to understand the dynamics of rotating machines, starting from the most basic explanations and then proceeding to detailed numerical models and analysis"--Provided by publisher.*

*The book aims to be reading for asset maintenance management in a perspective of whole life cycle of any type of physical asset. It deals with acquisition management, including economic models to evaluate its life cycle, and the maintenance policies to adopt during its life until withdrawal. It also covers vital areas such as EAM/CMMS systems and its integration with the many technologies that are used to aid condition monitoring and the internet of things to improve maintenance management and to increase equipment availability. This will equip readers with new management methodologies, their requisites, and its importance to the improvement of corporate competitiveness. Key Features • Presents life cycle analysis in asset management • Attribution of tools to improve the life cycle of equipment • Provides assistance on the diagnosis of the maintenance state • Presentation of the state-of-the-art of technology to aid maintenance • Explores integration of EAM/CMMS systems with internet of things*

*"Second Edition provides new material on coupling ratings, general purpose couplings versus special purpose couplings, retrofitting of lubricated couplings to nonlubricated couplings, torsional damping couplings, torque meter couplings, and more."*

**Computational Design of Rolling Bearings**

**Vibrations of Rotating Machinery**

**Machine Tool Metrology**

**Industrial Handbook**

**Cutting Tool Technology**

**Fundamentals to Applications**

**Theory and Applications**

This handy reference source, is a companion volume to the author's Engineers' Guide to Pressure Equipment. Heavily illustrated, and containing a wealth of useful data, it offers inspectors, engineers, operatives, and those maintaining engineering equipment a one stop everyday package of information. It will be particularly helpful in guiding users through the legislation that regulates this field. Legislation has very important implications for works inspection and in-service inspection of mechanical plant. An Engineers' Guide to Rotating Equipment is packed with information, technical data, figures, tables and checklists. Details of relevant technical standards, the legislation and Accepted Codes of Practice (AcoPs) published by various bodies such as HSE and SAFed, are provided in addition to a number of website addresses and contact details. COMPLETE CONTENTS: Engineering fundamentals Bending, torsion, and stress Motion and dynamics Rotating machine fundamentals: Vibration, balancing, and noise Machine elements Fluid mechanics Centrifugal pumps Compressors and turbocompressors Prime movers Draught plant Basic mechanical design Materials of construction The machinery directives Organisations and associations.

This comprehensive sister volume to Cliff Matthews' highly successful Handbook of Mechanical Works Inspection gives a detailed coverage of pressure equipment and other mechanical plant such as cranes and rotating equipment. Key features: Accessible source of information Lavishly illustrated with numerous diagrams, photographs, and tables A wealth of valuable information Detailed, comprehensive coverage Written in easily accessible style A 'must buy' reference book The Handbook of Mechanical In-Service Inspection is a vital source of information for: plant owners and operators maintenance engineers inspection engineers from insurance companies and 'competent bodies' who perform in-service inspection health and safety operatives engineers operating pressure systems and mechanical plant all those concerned with the safe and efficient operation of machinery, plant, and pressure equipment. All engineering pressure systems and other types of mechanical equipment must be installed, operated, and maintained properly. It must be safe and comply with standards, regulations, and guidelines. In-service inspection is more formally controlled by statutory requirements than other types of inspection. The Handbook of Mechanical In-service Inspection puts a good deal of emphasis on the 'compliance' aspects and the 'duty of care' requirements placed on plant owners, operators, and inspectors. The book is suitable for those who operate pressure systems, lifting equipment, and similar mechanical plant are subject to rigorous inspection from external bodies as a matter of course. All operators have a duty to conduct in-service checks and internal inspection procedures to ensure the safe, reliable, and economic running of their equipment.

This book presents the proceedings of the 9th IFToMM International Conference on Rotor Dynamics. This conference is a premier global event that brings together specialists from the university and industry sectors worldwide in order to promote the exchange of knowledge, ideas, and information on the latest developments and applied technologies in the dynamics of rotating machinery. The coverage is wide ranging, including, for example, new ideas and trends in various aspects of bearing technologies, issues in the analysis of blade dynamic behavior, condition monitoring of different rotating machines, vibration control, electromechanical and fluid-structure interactions in rotating machinery, rotor dynamics of micro, nano and cryogenic machines, and applications of rotor dynamics in transportation engineering. Since its inception 32 years ago, the IFToMM International Conference on Rotor Dynamics has become an irreplaceable point of reference for those working in the field and this book reflects the high quality and diversity of content that the conference continues to guarantee.

**New Trends and Developments**

**Dynamics of Rotating Machines**

**A Practical Guide**

**11-13 September 2012, Imeche London, UK**