

The Management Of Maintenance And Engineering Systems In Hospitality Industries Wiley Service Management Series

The extensively revised second edition of Terry Wireman's landmark introduction to CMMS has been written to assist anyone investigating the possibility of using a computer in the maintenance function. It provides the information needed to successfully evaluate, select, and implement a system. Readers unfamiliar with the earlier book will discover how progressive companies are using computer programs to achieve cost reduction and control the maintenance of any facility.

Here are the results of an audit of the FAA's mgmt. and maint. of air traffic control facilities. The FAA has invested billions of dollars in new equipment for handling increasingly higher levels of air traffic in more complex airspace. However, the facilities that house those systems are deteriorating. As FAA begins implementing plans for the Next Generation Air Transp. System, it will be critical to determine the type and number of facilities that will be needed to support the envisioned architecture. This audit determined if FAA has: (1) developed and implemented a comprehensive strategy to effectively manage the replacement, repair, and modernization of its air traffic control facilities; and (2) allocated sufficient funds to carry out those activities. Illus.

This unique resource covers aircraft maintenance program development and operations from a managerial as well as technical perspective. Readers will learn how to save money by minimizing aircraft downtime and slashing maintenance and repair costs. * Plan and control maintenance * Coordinate activities of the various work centers * Establish an initial maintenance program * Develop a systems concept of maintenance * Identify and monitor maintenance problems and trends

Now in its second edition and written by a highly acclaimed maintenance professional, this comprehensive and easy-to-understand resource provides a short review of all the major discussions going on in the management of the maintenance function. This revision of a classic has been thoroughly updated to include advances in technology and thinking and is sure to be found useful by maintenance professionals everywhere. It's the perfect reference for any maintenance professional that needs a quick update on any specific area within the subject. Contains five entirely new chapters, including Dealing with Contracts, 5S, Lean Maintenance, PM Optimizing, and Fire Fighting. Offers a complete survey of the field, an introduction to maintenance and a review of maintenance management. Provides a manual for cost reduction and a primer for the stockroom. Includes a training regime for new supervisors, managers and planners.

Utilize your assets effectively, safely, and profitably.

The 1990s have seen a worldwide growth in companies investment in maintenance in terms of labour cost, equipment investment and its application. This text provides engineers with a compendium of maintenance procedures and techniques.

If you have been living the day to day pressures and struggles of doing maintenance, then this is definitely a book for you. Life of a maintenance is typically a struggle as most industries end up being reactive all the times.

To be able to compete successfully both at national and international levels, production systems and equipment must perform at levels not even thinkable a decade ago. Requirements for increased product quality, reduced throughput time and enhanced operating effectiveness within a rapidly changing customer demand environment continue to demand a high maintenance performance. In some cases, maintenance is required to increase operational effectiveness and revenues and customer satisfaction while reducing capital, operating and support costs. This may be the largest challenge facing production enterprises these days. For this, maintenance strategy is required to be aligned with the production logistics and also to keep updated with the current best practices. Maintenance has become a multidisciplinary activity and one may come across situations in which maintenance is the responsibility of people whose training is not engineering. This handbook aims to assist at different levels of understanding whether the manager is an engineer, a production manager, an experienced maintenance practitioner or a beginner. Topics selected to be included in this handbook cover a wide range of issues in the area of maintenance management and engineering to cater for all those interested in maintenance whether practitioners or researchers. This handbook is divided into 6 parts and contains 26 chapters covering a wide range of topics related to maintenance management and engineering.

The field of maintenance is hard to approach because the language is strange. This book introduces the fundamentals of maintenance and will allow the outsider to understand the jargon. The book offers a complete survey of the field, a review of maintenance management, a manual for cost reduction, a primer for the stock room, and a training regime for new supervisors, managers and planners.

The complete Strategic Maintenance Management Body of Knowledge is a six-book set, including Reliabilityweb.com's Strategic Maintenance Management Series. The Business of Maintenance Management: Far too much effort has been spent reacting to failures and maintaining our way to reliability. To truly maintain assets, we need stability. We need to stop creating defects that are unplannable. Business value can only be attained in a stable environment. The Business of Maintenance Management provides the strategies to stabilize organizations and deliver true business value. The Processes of Maintenance Management: Process-dependent organizations are sustainable. People dependency is a risk. The Processes of Maintenance Management starts with the base of preventative maintenance (PM) program development. PM programs are the foundation of maintenance best practices. The next section moves into the actual workflow and processes of maintenance. Both the PM programs and the process are managed with the CMMS, the final section of the book. The Enablers of Maintenance Management: There are various functions that enable maintenance. If they are not implemented and supported, optimized maintenance is unattainable. The most obvious enabler is MRO inventory and purchasing where both stock and critical spares must be optimized. The enabler of sustained quality, training, is covered, along with operator-driven reliability. The 10 Rights of Asset Management: This book covers all aspects of asset lifecycle management, thus ensuring true asset value attainment over lifecycle. A Practical Guide to Organizational Engineering: This book describes how to define a best-in-class organization and how to develop the necessary skills within your team. Discover how to develop meaningful meetings and KPIs, in support of the business process, and how to use these to engineer an efficient and effective organization that is sustainable and evolves with your needs and level of maturity. Failure Codes to Failure Modes: Without actionable data, there is no way to identify worst offenders in Pareto format. Failure Modes to Failure Codes explains exactly how to start capturing a true failure mode in support of reliability-centered maintenance (RCM). All that's required is the knowledge to configure the CMMS product.

Effective resource management and reliable equipment are essential for optimum plant performance. Computer-Managed Maintenance Systems goes beyond the simple selection and implementation of a CMMS. It also defines the changes in infrastructure, management philosophy and employee skills that must be implemented to gain maximum benefits from the CMMS. The book is designed to address the information needs of all levels of plant management. In this new edition, the authors have added a chapter specifically on the latest technology, Application Solution Providers (ASP) that has revolutionized the way CMMS are used and the benefits they can offer to a business. This solution provides integrated software, hardware and networking technology along with Information Technology (IT) consulting services into an outsourced package. A new appendix on Key Performance Indicators has also been added. Comprehensive, practical guide that covers selection, justification, and implementation of an effective CMMS in any facility All levels of plant management will find useful information in this step-by-step guide Includes a new chapter on ASP technologies

This text addresses in great detail the requirements for designing, implementing, and managing programs and procedures for the maintenance of major building elements from the foundation to the roof, including interior and exterior support systems and sitework

elements. Topics include facilities as assets, major renovations, preventative maintenance, special maintenance considerations, and designing for building maintenance.

This comprehensive reference explains and demonstrates successful management techniques for all aspects of maintenance, repair and improvements for buildings, machinery, equipment and grounds. It gives you guidance for organizing and staffing your department, estimating and budgeting, scheduling and controlling work, improving productivity, and bolstering the importance of your role in the organization.

This book provides the reader with the key multi functional engineering building blocks required for implementing proper Maintenance and Facilities Management. It is an accumulation of more than 30 years of 'on the job' multi disciplined general engineering knowledge and is a synopsis of the expert training gained. It has been written to assist Managers, Engineers, Tradesmen, Apprentice tradesmen or D.I.Y. specialists. System 'know how', increasing equipment efficiency, tight budget control, cost cutting implementation and freeing up capital are paramount to a business's survival. By applying the practical principles and practices outlined. Using hard and soft skills, a business and its personnel will quickly reap the benefits and rewards. This is most effective book I have ever read and truly covers every aspect of Maintenance and Facilities Management. It is compelling, interesting, and ground breaking in its method and approach. I have already applied the material here to excellent effect and would highly recommend this book for any aspiring engineer or manager as the one book they would ever need on the subjects. I think it will become a standard work in the years to come. - James Hayes - Lead Electrical Engineer, EESL A 'must read' for anyone involved in maintenance!! Brilliant!! - Peter Rafferty - Mechanical Engineer, FMS

Maintenance has become one of the most important aspects of industrial activities. It directly affects quality, productivity, profit, safety and environment. This compact yet comprehensive book deals with almost all the maintenance systems available in literature. These systems are divided into groups and subgroups, and the text gives, for better understanding, a comparison of these on the basis of their advantages and disadvantages. Besides, the text discusses the methods of selecting a maintenance system for industrial plants as well as for individual equipment. It focuses on the policies, strategies and options that can be adopted for selecting a proper maintenance system. KEY FEATURES : Presents the maintenance system in the form of a simple and logical flow chart that is easy to understand, follow and use. Discusses Total Productive Maintenance (TPM), Reliability Centred Maintenance (RCM), and Quality Maintenance (QM). Describes the various systems along with explanation, comparison and stages. The book is intended for undergraduate and postgraduate students of Engineering (Mechanical/Industrial and Production Engineering) and postgraduate students of management. In addition, practising managers should find the book quite useful.

Uptime describes the combination of activities that deliver fewer breakdowns, improved productive capacity, lower costs, and better environmental performance. The bestselling second edition of Uptime has been used as a textbook on maintenance management in several postsecondary institutions and by many companies as the model framework for their maintenance management programs. Following in the tradition of its bestselling predecessors, Uptime: Strategies for Excellence in Maintenance Management, Third Edition explains how to deal with increasingly complex technologies, such as mobile and cloud computing, to support maintenance departments and set the stage for compliance with international standards for asset management. This updated edition reflects a far broader and deeper wealth of experience and knowledge. In addition, it restructures its previous model of excellence slightly to align what must be done more closely with how to do it. The book provides a strategy for developing and executing improvement plans that work well with the new values prevalent in today's workforce. It also explains how you can use seemingly competing improvement tools to complement and enhance each other. This edition also highlights action you can take to compensate for the gradual loss of skills in the current workforce as "baby boomers" retire.

"The Maintenance Management Framework" describes and reviews the concept, process and framework of modern maintenance management of complex systems; concentrating specifically on modern modelling tools (deterministic and empirical) for maintenance planning and scheduling. It will be bought by engineers and professionals involved in maintenance management, maintenance engineering, operations management, quality, etc. as well as graduate students and researchers in this field.

Recent advancements in information systems and computer technology have led to developments in equipment and robotic technology that have permanently changed the characteristics of manufacturing equipment. Equipment Management in the Post-Maintenance Era: A New Alternative to Total Productive Maintenance (TPM) introduces a new way of thinking to help high-tech organizations manage an increasingly complex equipment base. It also facilitates the fundamental understanding of equipment management those in traditional industries will need to prepare for the emerging microchip era in equipment. Kern Peng shares insights gained through decades of managing equipment performance. Using a systems model to analyze equipment management, he introduces alternatives in equipment management that are currently gaining momentum in high-tech industries. The book highlights the fundamental internal flaw in maintenance organizational setup, presents new approaches to replace maintenance functional setup, and illustrates a time-tested transformation and implementation process to help transition your organization from the maintenance era to the new post-maintenance era. Breaks down the history of equipment into five phases Provides a clear understanding of equipment management fundamentals Introduces alternatives in equipment management beyond the mainstream principles of maintenance management The book examines maintenance management logistics, including planning and budgeting, training and people development, customer services and management, vendor management, and inventory management. Supplying a comprehensive look at the history of equipment management, it analyzes current maintenance practice and details approaches that can significantly improve the effectiveness and efficiency of your equipment management well into the future.

Facilities management is a broad-based discipline that calls into play architectural, construction, engineering, and management and human skills-- particularly for running and maintaining commercial, institutional, academic, and industrial buildings. This book will cover the essential role and responsibilities of the facilities manager as it pertains to building maintenance. If you're a newcomer to facilities management you will find this book an excellent introduction to managing maintenance. Already an established professional? You'll be able to brush up on the latest technological and regulatory trends affecting how complex facilities should be successfully maintained by way of risk assessment. The book contains ample, ready-to-use assessment forms and resources for extended practical information. Highlights include: • Coverage of key components of facilities maintenance management including risk management , building safety, operations and purchasing, staffing, and more • Guidance on new trends including "lean building maintenance" and Green Building specs (Green Spec) like LEED • Guidance on legal contracts, safety regulations, energy efficiency, and more • Specific management guidance by building type including apartments, office buildings, hotels and resorts, government buildings, schools, transport facilities and many others.

The Handbook of Maintenance Management Industrial Press Inc.

Gets professionals quickly on-line with all the crucial design concepts and skills they need to dramatically improve the maintainability of their products or systems. Maintainability is a practical, step-by-step guide to implementing a comprehensive maintainability program within your organization's design and development function. From program scheduling, organizational interfacing, cost estimating, and supplier activities, to maintainability prediction, task analysis, formal design review, and maintainability tests and demonstrations, it describes all the planning and organizational aspects of maintainability for projects under development and * Schools readers in state-of-the-art maintainability design techniques * Demonstrates methods for quantitatively measuring maintainability at every stage of the development process * Shows how to increase effectiveness while reducing life-cycle costs of already existing systems or products * Features numerous case studies, sample applications, and practice exercises * Functions equally well as a professional reference and a classroom text. Independent cost analysis studies indicate that an inordinately large percentage of the overall life-cycle cost of most systems/products is currently taken up by maintenance and support. In fact, for many large-scale systems, maintenance and support have been shown to account for as much as 60% to 75% of overall life-cycle costs. At a time of fierce global competition, long-term cost effectiveness is a major competitive advantage that manufacturers simply cannot afford to underestimate. Clearly then, to remain competitive in today's international marketplace, companies must institute programs for reducing system maintenance and support costs-- comprehensive programs that are an integral part of the design and development process from its earliest conceptual stages. This book shows you how to implement such a program within your organization's design and development function. From program scheduling, organizational interfacing, cost estimating, and supplier activities, to maintainability prediction, task analysis, formal design review, and maintainability tests and demonstrations, it describes all the planning and organizational aspects of maintainability for projects under development while schooling you in the use of the full range of proven design techniques--including methods for quantitatively measuring maintainability at every stage of the development process. The authors also clearly explain how the principles and practices outlined in Maintainability can be applied to the evaluation of systems/products now in use both to increase their effectiveness and reduce long-term costs. While theoretical aspects of maintainability are discussed, the authors' main purpose in writing this book is to help get professionals quickly on-line with the essential maintainability concepts and skills. Hence, in addition to clarity of presentation and a rational hierarchical format, Maintainability features many case studies and sample applications that help to clarify the points covered, and numerous practice exercises that help engineers to test their mastery of the concepts and techniques covered. Maintainability is an invaluable professional tool for engineers from all disciplines who are involved with the design, testing, prototyping, manufacturing, and maintenance of products and systems. It also serves as a superior course book for graduate-level programs in those disciplines.

Managing Systems and Documentation addresses the main systems necessary for the successful operation of a maintenance organization, such as performance control, work control and documentation. It shows how they can be modelled, their function and operating principles, and the main problems encountered in operation. It is the third of three stand-alone companion books with the aim of providing better understanding of maintenance operations, in order to identify problems and prescribe effective solutions. This is one of three stand-alone volumes designed to provide maintenance professionals in any sector with a better understanding of maintenance management, enabling the identification of problems and the delivery of effective solutions. * The third of three stand-alone companion books, focusing on the main systems necessary for the successful operation of a maintenance organization * Covers the maintenance of plant, production and operations assets in industry and service sectors, including manufacturing, food and process engineering, minerals and mining, transport, power and IT * Includes review questions, exercises and case studies * Clearly specified objectives and learning outcomes are given for each chapter, including a route map to link each chapter to the rest of the topics covered

This work sets out to furnish all levels of engineering management with the material necessary to provide cost-effective maintenance, discussing the functional design of products as well as the identification of failure systems that permit scheduled maintenance procedures. This second edition presents information on ISO 9000 requirements, utilities management, the use of bar-coding in maintenance efforts, plant re-arrangement and minor construction, and more.

"As the only reference that provides vital information in a concise and easy-to-use format, Benchmarking Best Practices in Maintenance Management will provide users with all the necessary tools to be successful in benchmarking maintenance management. As a revision of the author's previously successful resource, World Class Maintenance Management, it presents a logical, step-by-step methodology that will enable a company to conduct a cost-effective benchmarking effort. It presents an overview of the benchmarking process, a self analysis, and a database of the results of more than 100 companies that have used the analysis. "This is an excellent reference manual. I believe it should be in the hands of every manager, engineer, and supervisor in the maintenance field." --James A. Collier, University of Arkansas"

This informative resource will aid plant engineers in organizing their maintenance function while minimizing maintenance activities and costs. It will provide a framework of options allowing maintenance decision makers to select the most successful way for them to manage their specialty.

This book introduces readers to essential strategies, practices, and benchmarking for asset maintenance in operations intensive industries. Drawing on a case study from the oil and gas sector, it offers a methodology and practical solutions to help maintenance practitioners select and formulate an asset maintenance strategy, and to establish best maintenance practices at an organizational level using the frameworks developed here. It is intended for industry practitioners, young maintenance professionals, and students of engineering management who aspire to a career in operations intensive industries.

This book explores the domain of software maintenance management and provides road maps for improving software maintenance organizations. It describes full maintenance maturity models organized by levels 1, 2, and 3, which allow for benchmarking and continuous improvement paths. Goals for each key practice area are also provided, and the model presented is fully aligned with the architecture and framework of software development maturity models of CMMI and ISO 15504. It is complete with case studies, figures, tables, and graphs. Recent Advances in Maintenance and Infrastructure Management is a collection of papers highlighting the state of the art in maintenance of large structures and management of infrastructures. The papers selected in this book are written by international experts from academia and industry, and were presented during the past three International Conference on Maintenance Management (MM Conferences) held from 2005 to 2007 and organized by CNIM (Italian National Committee for Maintenance). The selected papers are categorized into four thematic areas: 1. reliability and maintenance; 2. mathematical modeling and metrics for maintenance; 3. maintenance management and organization, and; 4. facilities management and contracting. The papers cover topics ranging from embedded sensors for diagnostics of structures to organizational issues related to effective maintenance planning. Recent Advances in Maintenance and Infrastructure Management provides readers with a snapshot of the latest developments in the tools and techniques used to conduct maintenance of complex infrastructures and systems. The book will be of interest to researchers and practitioners in academia and industry involved in planning and deployment of maintenance operations. Additionally, this can serve as a reference text for advanced courses in operations management, and structural health monitoring.

This book promotes and describes the application of objective and effective decision making in asset management based on mathematical models and practical techniques that can be easily implemented in organizations. This comprehensive and timely publication will be an essential reference source, building on available literature in the field of asset management while laying the groundwork for further research breakthroughs in this field. The text provides the resources necessary for managers, technology developers, scientists and engineers to adopt and implement better decision making based on models and techniques that contribute to recognizing risks and uncertainties and, in general terms, to the important role of asset management to increase competitiveness in organizations.

For over three decades, Terry Wireman has specialized in the improvement of maintenance and reliability. As an international expert in maintenance management, he has assisted hundreds of clients in North America, Europe and the Pacific Rim to improve their maintenance effectiveness. Through a new 10-volume Maintenance Strategy series, the author makes his expertise in the field accessible to industrial and facility organizations everywhere.

This new edition of an informative and accessible book guides building surveyors and facilities managers through the key aspects of property maintenance and continues to be of value to both students and practitioners. With the increasing cost of new-build, effective maintenance of existing building stock is becoming ever more important and building maintenance work now represents nearly half of total construction output in the UK. Building Maintenance Management provides a comprehensive profile of the many aspects of property maintenance. This second edition has been updated throughout, with sections on outsourcing; maintenance planning; benchmarking and KPIs; and current trends in procurement routes (including partnering and the growth of PFI) integrated into the text. There is also a new chapter on the changing context within which maintenance is carried out, largely concerned with its relationship to facilities management. More coverage is given of maintenance organisations and there are major updates to relevant aspects of health and safety and to contract forms.

Bridge Maintenance, Safety, Management, Life-Cycle Sustainability and Innovations contains lectures and papers presented at the Tenth International Conference on Bridge Maintenance, Safety and Management (IABMAS 2020), held in Sapporo, Hokkaido, Japan, April 11–15, 2021. This volume consists of a book of extended abstracts and a USB card containing the full papers of 571 contributions presented at IABMAS 2020, including the T.Y. Lin Lecture, 9 Keynote Lectures, and 561 technical papers from 40 countries. The contributions presented at IABMAS 2020 deal with the state of the art as well as emerging concepts and innovative applications related to the main aspects of maintenance, safety, management, life-cycle sustainability and technological innovations of bridges. Major topics include: advanced bridge design, construction and maintenance approaches, safety, reliability and risk evaluation, life-cycle management, life-cycle sustainability, standardization, analytical models, bridge management systems, service life prediction, maintenance and management strategies, structural health monitoring, non-destructive testing and field testing, safety, resilience, robustness and redundancy, durability enhancement, repair and rehabilitation, fatigue and corrosion, extreme loads, and application of information and computer technology and artificial intelligence for bridges, among others. This volume provides both an up-to-date overview of the field of bridge engineering and significant contributions to the process of making more rational decisions on maintenance, safety, management, life-cycle sustainability and technological innovations of bridges for the purpose of enhancing the welfare of society. The Editors hope that these Proceedings will serve as a valuable reference to all concerned with bridge structure and infrastructure systems, including engineers, researchers, academics and students from all areas of bridge engineering.

With its easy-to-read writing style, Productivity and Reliability-Based Maintenance Management provides a strong yet practical foundation on Total Productive Maintenance (TPM). This comprehensive practical guide departs from the wait-failure-emergency repair cycle that plagues many industries today. Instead, this text takes a proactive and productive maintenance approach, focusing on how to avoid failure in the first place. By using real-world case studies in every chapter, the author reinforces the importance of sound and proactive maintenance practices. The use of end-of-chapter problems and discussion questions helps to solidify concepts presented. Productivity and Reliability-Based Maintenance Management is a powerful educational tool for students as well as maintenance professionals and managers. This volume was previously published under the same title in 2004 by Pearson Education, and has been reprinted with permission through an arrangement with the author.

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