Subsea Engineering Handbook Free Ebook Download

Theory & Practice
The Ocean Engineering Handbook
A Handbook for Onshore and Offshore Wind Turbines
Offshore Operations and Engineering
Pipelines and Risers
Mechanical Engineer's Data Handbook
Integrity and Safety Handbook
Standard Handbook of Petroleum and Natural Gas Engineering:
Wind Energy Engineering
Introduction to Coastal Engineering and Management
Handbook of Ocean Wave Energy
Oil and Gas Pipelines
Mechanical Engineer's Reference Book
North Sea Oil and Gas, British Industry and the Offshore Supplies Office
Design and Optimization of Metal Structures

Marine Structural Design
Corrosion Protection for the Oil and Gas Industry
Cathodic Protection and High-Efficiency Coating
Offshore Installation Practice
Design, Construction and Maintenance
Geosynthetics and Their Applications
Handbook of Offshore Oil and Gas Operations
Marine Technology and Operations
Handbook of Offshore Engineering (2-volume set)
Hydronautics
Ship and Mobile Offshore Unit Automation
A Practical Guide
Health, Safety, and Environmental Management in Offshore and Petroleum Engineering
Subsea Pipeline Design, Analysis, and Installation
Corrosion Control for Offshore Structures
Fundamental Design and Automation Technologies in Offshore Robotics
Universal Well Control
Structural Engineer's Pocket Book British Standards Edition
Springer Handbook of Ocean Engineering

Bridge Engineering Handbook
Volume 1
Drilling Engineering Handbook
Subsea Valves and Actuators for the Oil and Gas Industry
Mooring System Engineering for Offshore Structures

HERRING RONNIE

Theory & Practice Gulf Professional Publishing
Pipelines and Risers
The Ocean Engineering Handbook Elsevier
A variable game changer for those companies operating in hostile, corrosive marine environments, Corrosion Control for Offshore Structures provides critical corrosion control tips and techniques that will prolong structural life while saving millions in cost. In this book, Ramesh Singh explains the ABCs of prolonging structural life of platforms and pipelines while reducing cost and decreasing the risk of failure. Corrosion Control for Offshore Structures places major emphasis on the popular use of cathodic protection (CP) combined with high efficiency coating to prevent subsea corrosion. This reference begins with the fundamental science of corrosion and structures and then moves on to cover more advanced topics such as

cathodic protection, coating as corrosion prevention using mill applied coatings, field applications, and the advantages and limitations of some common coating systems. In addition, the author provides expert insight on a number of NACE and DNV standards and recommended practices as well as ISO and Standard and Test Methods. Packed with tables, charts and case studies, Corrosion Control for Offshore Structures is a valuable guide to offshore corrosion control both in terms of its theory and application. Prolong the structural life of your offshore platforms and pipelines Understand critical topics such as cathodic protection and coating as corrosion prevention with mill applied coatings Gain expert insight on a number of NACE and DNV standards and recommended practices as well as ISO and Standard Test Methods. *A Handbook for Onshore and Offshore Wind Turbines* Gulf Professional Publishing Hydronautics focuses on the major scientific and engineering disciplines related to ocean technology. This book provides information pertinent to the development of offshore oil production. Organized into seven chapters, this book starts with an overview of the basic description of the primary ocean resources, and then proceeds with a discussion of the ocean environment, which is the major field of the various branches of oceanology.

This text then explores the technical detail on marine vehicle systems, including the state-of the-art on ships, platforms, submersibles. Other chapters discuss the ocean dynamics, including waves, current, and coastal waters. This book explores as well the discipline of navigation, underwater navigation, and the general characteristics of navigation systems. The final chapter deals with policy planning, with emphasis on the basic principles needed for policy decisions and the role of government in this field. This book is a valuable resource for marine scientists and marine engineers.

Offshore Operations and Engineering Elsevier

This book introduces readers to various types of offshore platform geometries. It addresses the various environmental loads encountered by these structures, and provides detailed descriptions of the fundamentals of structural dynamics in a classroom style, helping readers estimate damping in offshore structures and grasp these aspects' applications in preliminary analysis and design. Basic concepts of structural dynamics are emphasized through simple illustrative examples and exercises. Design methodologies and guidelines, which are FORM based concepts, are explained through a selection of applied sample structures. Each chapter also features tutorials and exercises for self-learning. A dedicated chapter on stochastic dynamics helps students

to extend the basic concepts of structural dynamics to this advanced domain of research. Hydrodynamic response of offshore structures with perforated members is one of the most recent research applications, and has proven to be one of the most effective means of retrofitting offshore structures. In addition, the book integrates the concepts of structural dynamics with the FORM-evolved design of offshore structures, offering a unique approach. This new edition is divided into seven chapters, each of which has been updated. Each chapter also includes a section on frequently asked Questions and Answers (Q&A), which enhances understanding of this complex subject through easy and self-explanatory text. Furthermore, the book presents valuable content with respect to new and recent research carried out by the author in structural dynamics. All numeric examples have been re-checked with more additional explanations. New exercises have been added to improve understanding of the subject matter. Computer coding is also included (wherever possible) to aid computer-based learning of the contents of the book. The book can serve as a textbook for senior undergraduate and graduate courses in civil, structural, applied mechanics, mechanical, aerospace, naval architecture and ocean engineering programs. The book can also serve as a text for professional

learning and development programs or as a guide for practicing and consulting offshore structural engineers. The contents of this book will be useful to graduate students, researchers, and professionals alike.

Pipelines and Risers

Springer

Ship and Mobile Offshore Unit Automation: A Practical Guide: A Practical Guide gives engineers a much-needed reference on relevant standards and codes, along with practical case studies on how to use these standards on actual projects and plans. Packed with the critical procedures necessary for each phase of the project, the book also gives an outlook on trends of development for control and monitoring systems, including usage of artificial intelligence in software development and prospects for the use of autonomous vessels. Rounding out with a glossary and introductory chapter specific to the new marine engineer just starting, this book delivers a source of valuable information to help offshore engineers be better prepared to safely and efficiently design today’s offshore unit control systems. Helps readers understand the worldwide offshore unit regulations necessary for monitoring systems and automation installation, including ISO, IEC, IEEE, IMO, SOLAS AND MODU, ABS, DNVGL, API, NMA and NORSOK Presents real-world examples that apply standards Provides tactics on how to procure control and monitoring systems specific to the

offshore industry Mechanical Engineer's Data Handbook Elsevier Fundamental Design and Automation Technologies in Offshore Robotics introduces technological design, modelling, stability analysis, control synthesis, filtering problem and real time operation of robotics vehicles in offshore environments. The book gives numerical and simulation results in each chapter to reflect the engineering practice yet demonstrate the focus of the developed analysis and synthesis approaches. The book is ideal to be used as a reference book for senior and graduate students. It is written in a way that the presentation is simple, clear, and easy to read and understand which would be appreciated by graduate students. Researchers working on marine vehicles and robotics would be able to find reference material on related topics from the book. The book could be of a significant interest to the researchers within offshore and deep see society, including both academic and industrial parts. Provides a series of latest results in, including but not limited to, motion control, robotics, and multi-vehicle systems towards offshore environment Presents recent advances of theory, technological aspects, and applications of robotics in offshore environment Offers a comprehensive and up-to-date references, which plays an indicative role for further study of the reader

Integrity and Safety

Handbook CRC Press
Petroleum engineering now has its own true classic handbook that reflects the profession's status as a mature major engineering discipline. Formerly titled the Practical Petroleum Engineer's Handbook, by Joseph Zaba and W.T. Doherty (editors), this new, completely updated two-volume set is expanded and revised to give petroleum engineers a comprehensive source of industry standards and engineering practices. It is packed with the key, practical information and data that petroleum engineers rely upon daily. The result of a fifteen-year effort, this handbook covers the gamut of oil and gas engineering topics to provide a reliable source of engineering and reference information for analyzing and solving problems. It also reflects the growing role of natural gas in industrial development by integrating natural gas topics throughout both volumes. More than a dozen leading industry experts-academia and industry-contributed to this two-volume set to provide the best , most comprehensive source of petroleum engineering information available.
Standard Handbook of Petroleum and Natural Gas Engineering: Thomas Telford
Offshore Installation Practice describes the main requirements and applications for safe offshore installation and operation. This book discusses the arrangements to be accepted by national and international classification

and certification authorities with respect to flare systems, fuel gas and crude oil burning, fire protection, fire detection and extinction, heat exchangers, and piping design. The importance of life-support systems is also highlighted. This book is comprised of 18 chapters and begins by introducing the reader to offshore gas and oil production platforms, with emphasis on safety considerations for fixed drilling/production platforms, produced fluid systems, and the gas injection compression system. The discussion then turns to piping systems; fuel gas and crude-oil burning arrangements; flare systems; and equipment for offshore-related projects, such as storage tankers and barges, compensator systems, and floating production and storage units. The chapters that follow focus on safety shutdown systems; the design of submersibles and diving equipment; and the basic principles of fire protection systems. This book concludes by considering the regulatory requirements for the prevention of oil pollution arising from offshore oil and gas exploration. This monograph will be useful as a reference work for those engaged in the design and installation of offshore units.

Wind Energy Engineering

Butterworth-Heinemann

Compiled with the help of an internationally acclaimed panel of experts, the Ocean Engineering Handbook is the most complete reference available for

professionals. It offers you comprehensive coverage of important areas of the theory and practice of oceanic/coastal engineering and technology. This well organized text includes five major sections: M *Introduction to Coastal Engineering and Management* Elsevier An industrial book that analyses various theoretical problems, optimizes numerical applications and addresses industrial problems such as belt-conveyor bridge, pipeline, wind turbine power, large-span suspended roof and offshore jacket member. Multi-storey frames and pressure vessel-supporting frames are discussed in detail. The book’s emphasis is on economy and cost calculation, making it possible to compare costs and make significant savings in the design stages, by, for example, comparing the costs of stiffened and un-stiffened structural versions of plates and shells. In this respect, this book will be an invaluable aid for designers, students, researchers and manufacturers to find better, optimal, competitive structural solutions. Emphasis is placed on economy and cost calculation, making it possible to compare costs and make significant savings in the design stages of metal structures Optimizes numerical applications and analyses various theoretical and industrial problems, such as belt-conveyor bridge, pipeline, wind turbine power, large-span suspended roof and

offshore jacket member An invaluable aid for designers, students, researchers and manufacturers to find better, optimal, competitive structural solutions

Handbook of Ocean Wave Energy Academic Press

A comprehensive and detailed reference guide on the integrity and safety of oil and gas pipelines, both onshore and offshore Covers a wide variety of topics, including design, pipe manufacture, pipeline welding, human factors, residual stresses, mechanical damage, fracture and corrosion, protection, inspection and monitoring, pipeline cleaning, direct assessment, repair, risk management, and abandonment Links modern and vintage practices to help integrity engineers better understand their system and apply up-to-date technology to older infrastructure Includes case histories with examples of solutions to complex problems related to pipeline integrity Includes chapters on stress-based and strain-based design, the latter being a novel type of design that has only recently been investigated by designer firms and regulators Provides information to help those who are responsible to establish procedures for ensuring pipeline integrity and safety

Oil and Gas Pipelines John Wiley & Sons

• Updated edition of a best-selling title • Author brings 25 years experience to the work •

Addresses the key issues of economy and environment Marine pipelines for the transportation of oil and gas have become a safe and reliable way to exploit the valuable resources below the world’s seas and oceans. The design of these pipelines is a relatively new technology and continues to evolve in its quest to reduce costs and minimise the effect on the environment. With over 25years experience, Professor Yong Bai has been able to assimilate the essence of the applied mechanics aspects of offshore pipeline system design in a form of value to students and designers alike. It represents an excellent source of up to date practices and knowledge to help equip those who wish to be part of the exciting future of this industry.

Mechanical Engineer's Reference Book Elsevier

This book is a contribution to the history of a vital stage of UK technical and economic development, perhaps the most important since the Second World War. It shows, from an industrial viewpoint, how the British handled the exploitation of their most significant natural resource gain of the 20th century. Notwithstanding the nearly 30 years of government support through the Offshore Supplies Office, the UK has not reaped the full benefit of the North Sea discoveries; this book attempts to explain why. It will assist governments and industries faced with future instances of unforeseen, specialist and large-scale new demand

to manage their reactions more effectively. It also throws light on how governments can pursue strategic industrial objectives while leaving market mechanisms to function with minimal interference, something some administrations – perhaps even the British – may wish to do now or in the future. Covers the entire period from the first well offshore Britain until the dismantling of the specific British industrial policy measures for offshore supplies Based in large measure upon archives not previously accessed and the private testimony/papers of participants 'Drills down' to the level of individual company decisions through case study and other material The only properly researched description of how the world's first major local content initiative developed

North Sea Oil and Gas, British Industry and the Offshore Supplies Office Gulf Professional Publishing

First Published in 1999: The Bridge Engineering Handbook is a unique, comprehensive, and state-of-the-art reference work and resource book covering the major areas of bridge engineering with the theme "bridge to the 21st century."

Design and Optimization of Metal Structures Elsevier

Universal Well Control gives today's drilling and production engineers a modern guide to effectively and responsibly manage rig operations. In a post-Macondo industry, well control continues to

require higher drilling costs, a waste of natural resources, and the possibility of a loss of human life when kicks and blowouts occur. The book delivers updated photos, practice examples and methods that are critical to modern well control information, ensuring engineers and personnel stay safe, environmentally responsible and effective. Complete with all phases of well control, the book covers kick detection, kick control, loss of control and blowout containment and killing. A quick tips section is included, along with templated. step-by-step methods to replicate for non-routine shut-in methods. Bonus equipment animations are included, along with a high number of visuals. Specialized methods are covered, including dual gradient drilling and managed pressure drilling. Provides a practical training guide that is focused on well control, including expanded subsea coverage Includes well kill procedures, with added kill sheets and bonus video equipment animations Helps readers understand templated steps for non-routine shut-in methods, such as the lubricate and bleed method and variable mud volume

Marine Structural Design Elsevier Offshore Structures: Design, Construction and Maintenance, Second Edition covers all types of offshore structures and platforms employed worldwide. As the ultimate reference for selecting, operating and

maintaining offshore structures, this book provides a roadmap for designing structures which will stand up even in the harshest environments. Subsea pipeline design and installation is also covered in this edition, as is the selection of the proper type of offshore structure, the design procedure for the fixed offshore structure, nonlinear analysis (Push over) as a new technique to design and assess the existing structure, and more. With this book in hand, engineers will have the most up-to-date methods for performing a structural lifecycle analysis, implementing maintenance plans for topsides and jackets and using non-destructive testing. Provides a one-stop guide to offshore structure design and analysis Presents easy-to-understand methods for structural lifecycle analysis Contains expert advice for designing offshore platforms for all types of environments

Corrosion Protection for the Oil and Gas Industry

Springer

A marine engineer will need to have a broad background of knowledge within several aspects of marine design and operations. These aspects relate to the design of facilities for offshore applications and evaluation of operational conditions for marine installation and modification/maintenance works. Such needs arise in the marine industries, in the offshore oil and gas industry as well as in the offshore renewable industry. Developed from

knowledge gained throughout the author's engineering career, this book covers several of the themes where engineers need knowledge and also serves as a teaser for those who will go into more depth on the different thematic aspects discussed. Details of qualitative risk analysis, which is considered an excellent tool to identify risks in marine operations, are also included. The book is the author's attempt to develop a text for those in marine engineering science who like a practical and solid mathematical approach to marine engineering. It is the intention that the book can serve as an introductory textbook for master degree courses in marine sciences and be of inspiration for teachers who will extend the course into specialisation courses on stability of vessels, higher order wave analysis, nonlinear motions of vessels, arctic offshore engineering, etc. The book could also serve as a handbook for PhD students and researchers who need a handy introduction to solving marine technology related problems.

Cathodic Protection and High-Efficiency Coating

WIT Press

Piping and valve engineers rely on common industrial standards for selecting and maintaining valves, but these standards are not specific to the subsea oil and gas industry. Subsea Valves and Actuators for the Oil and Gas Industry delivers a needed reference to go beyond the standard to specify how to select,

test, and maintain the right subsea oil and gas valve for the project. Each chapter focuses on a specific type of valve with a built-in structured table on valve selection, helping guide the engineer to the most efficient valve. Covering subsea-specific protection, the reference also gives information on high pressure protection systems (HIPPS) and discusses corrosion management within the subsea sector, such as Hydrogen Induced Stress Cracking Corrosion (HISC). Additional benefits include understanding the concept of different safety valves in subsea, selecting different valves and actuators located on subsea structures such as Christmas trees, manifolds, and HIPPS modules, with a full detail review including sensors, logic solver, and solenoid which is designed to save cost and improve the reliability in the subsea system. Rounding out with chapters on factory acceptance testing (FAT) and High Integrity Pressure Protection Systems (HIPPS), Subsea Valves and Actuators for the Oil and Gas Industry gives subsea engineers and managers a much-needed tool to better understand today's subsea technology. Understand practical information about all types of subsea valves and actuators with over 600 visuals and several case studies Learn and review the applicable standards and specifications from API and ISO in one convenient location Protect your assets with a high-

pressure protection system (HIPPS) and subsea-specific corrosion management including Hydrogen Induced Stress Cracking Corrosion (HISC)
Offshore Installation Practice Gulf Professional Publishing
This is the first book in the petroleum sector that sheds light on the real obstacles to sustainable development and provides solutions to each problem encountered. Each solution is complete with an economic analysis that clarifies why petroleum operations can continue with even greater profit than before while ensuring that the negative environmental impact is diminished. The new screening tools and models proposed in this book will provide one with proper guidelines to achieve true sustainability in both technology development and management of the petroleum sector.
Design, Construction and Maintenance Subsea Engineering Handbook
Geosynthetics and their applications is a book to which students (at all levels) and engineers in search of novel approaches to solutions for civil engineering problems can refer. The topics presented are based on major field application areas for geosynthetics in civil engineering. The straightforward and concise presentation of topics in the book will be helpful for those with limited experience of geosynthetics, while more experienced users will easily be able to find information relating to solutions to specific

engineering problems. The inclusion of case histories and practical aspects of the application of geosynthetics, along with recent developments and references, makes this book a valuable resource for practising engineers, students and researchers alike.