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Handbook of Polyethylene Pipe - 2012-02

Published by the Plastics Pipe Institute (PPI), the Handbook describes how polyethylene piping systems continue to provide utilities with a cost-effective solution to rehabilitate the underground infrastructure. The book will assist in designing and installing PE piping systems that can protect utilities and other end users from corrosion, earthquake damage and water loss due to leaky and corroded pipes and joints.

The Topkapi Scroll - Gülru Necipoğlu 1996-03-01

Since precious few architectural drawings and no theoretical treatises on architecture remain from the premodern Islamic world, the Timurid pattern scroll in the collection of the Topkapi Palace Museum Library is an exceedingly rich and valuable source of information. In the course of her in-depth analysis of this scroll dating from the late fifteenth or early sixteenth century, Gülru Necipoğlu throws new light on the conceptualization, recording, and transmission of architectural design in the Islamic world between the tenth and sixteenth centuries. Her text has particularly far-reaching implications for recent discussions on vision, subjectivity, and the semiotics of abstract representation. She also compares the Islamic understanding of geometry with that found in medieval Western art, making this book particularly valuable for all historians and critics of architecture. The scroll, with its 114 individual geometric patterns for wall surfaces and vaulting, is reproduced entirely in color in this elegant, large-format volume. An extensive catalogue includes illustrations showing the underlying geometries (in the form of incised "dead" drawings) from which the individual patterns are generated. An essay by Mohammad al-Asad discusses the geometry of the muqarnas and demonstrates by means of CAD drawings how one of the scroll's patterns could be used to design a three-dimensional vault.

Chemical Engineering Design Gavin Towler 2012-01-25

Chemical Engineering Design, Second Edition, deals with the application of chemical engineering principles to the design of chemical processes and equipment. Revised throughout, this edition has been specifically developed for the U.S. market. It provides the latest US codes and standards, including API, ASME and ISA design codes and ANSI standards. It contains new discussions of conceptual plant design, flowsheet development, and revamp design; extended coverage of capital cost estimation, process costing, and economics; and new chapters on equipment selection, reactor design, and solids handling processes. A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data, and Excel spreadsheet calculations, plus over 150 Patent References for downloading from the companion website. Extensive instructor resources, including 1170 lecture slides and a fully worked solutions manual are available to adopting instructors. This text is designed for chemical and biochemical engineering students (senior undergraduate year, plus appropriate for capstone design courses where taken, plus graduates) and lecturers/tutors, and professionals in industry (chemical process, biochemical, pharmaceutical, petrochemical sectors). New to this edition: Revised organization into Part I: Process Design, and Part II: Plant Design. The broad themes of Part I are flowsheet development, economic analysis, safety and environmental impact and optimization. Part II contains chapters on equipment design and selection that can be used as supplements to a lecture course or as essential references for students or practicing engineers working on design projects. New discussion of conceptual plant design, flowsheet development and revamp design Significantly increased coverage of capital cost estimation, process costing and economics New chapters on equipment selection, reactor design and solids handling processes New sections on fermentation, adsorption, membrane separations, ion exchange and chromatography Increased coverage of batch processing, food, pharmaceutical and biological processes All equipment chapters in Part II revised and updated with current information Updated throughout for

latest US codes and standards, including API, ASME and ISA design codes and ANSI standards Additional worked examples and homework problems The most complete and up to date coverage of equipment selection 108 realistic commercial design projects from diverse industries A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data and Excel spreadsheet calculations plus over 150 Patent References, for downloading from the companion website Extensive instructor resources: 1170 lecture slides plus fully worked solutions manual available to adopting instructors

Sampling Source Book - C L Thomas 2013-10-22

The Sampling Source Book is an invaluable guide to the world's literature on sampling and provides a timely and much needed focus on what is a diverse and important subject. Based on an exhaustive search of the world's literature, this index contains bibliographic references to journal articles, patents, conference proceedings, books, technical reports and standards. Details of databases searched and outlines are provided as to how the searches were conducted to facilitate update of the data by users of the index. The material contained in this source book has been assessed by specialists in sampling operations; assuring relevance of the material included. Comprehensive lists of suppliers of sampling equipment, consultants and professional bodies with expertise and interests in sampling are also presented.

Handbook of Hydraulic Resistance - I. E. Idelchik 2005

Product Dimensions: 9.7 x 6.6 x 2.1 inches The Handbook has been composed on the basis of processing, systematization, and classification of the results of a great number of investigations published at different time. The essential part of the book is the outcome of investigations carried out by the author. The present edition of this Handbook should assist in increasing the quality and efficiency of the design and usage of industrial power engineering and other constructions and also of the devices and apparatus through which liquids and gases move.

The Antitrust Paradox - Robert Bork 2021-02-22

The most important book on antitrust ever written. It shows how antitrust suits adversely affect the consumer by encouraging a costly form of protection for inefficient and uncompetitive small businesses.

Chemical Engineering Fluid Mechanics - Ron Darby 2016-11-30

This book provides readers with the most current, accurate, and practical fluid mechanics related applications that the practicing BS level engineer needs today in the chemical and related industries, in addition to a fundamental understanding of these applications based upon sound fundamental basic scientific principles. The emphasis remains on problem solving, and the new edition includes many more examples.

Logistics Operations and Management - Reza Farahani 2011-05-25

This book provides a comprehensive overview of how to strategically manage the movement and storage of products or materials from any point in the manufacturing process to customer fulfillment. Topics covered include important tools for strategic decision making, transport, packaging, warehousing, retailing, customer services and future trends. An introduction to logistics Provides practical applications Discusses trends and new strategies in major parts of the logistic industry

Bridge Scour and Stream Instability Countermeasures:

Experience, Selection, and Design Guidance Third Edition - U. S. Department of Transportation 2015-10-27

The purpose of this document is to identify and provide design guidelines for bridge scour and stream instability countermeasures that have been implemented by various State departments of transportation (DOTs) in the United States. Countermeasure experience, selection, and design guidance are consolidated from other FHWA publications in this document to support a comprehensive analysis of scour and stream instability problems and provide a range of solutions to those problems. The results of recently completed National Cooperative Highway

Research Program (NCHRP) projects are incorporated in the design guidance, including: countermeasures to protect bridge piers and abutments from scour; riprap design criteria, specifications, and quality control, and environmentally sensitive channel and bank protection measures. Selected innovative countermeasure concepts and guidance derived from practice outside the United States are introduced. In addition, guidance for the preparation of Plans of Action ...

Carbon Dioxide Sequestration and Related Technologies - Ying Wu
2011-07-05

Carbon dioxide sequestration is a technology that is being explored to curb the anthropogenic emission of CO₂ into the atmosphere. Carbon dioxide has been implicated in the global climate change and reducing them is a potential solution. The injection of carbon dioxide for enhanced oil recovery (EOR) has the dual benefit of sequestering the CO₂ and extending the life of some older fields. Sequestering CO₂ and EOR have many shared elements that make them comparable. This volume presents some of the latest information on these processes covering physical properties, operations, design, reservoir engineering, and geochemistry for AGI and the related technologies.

Working Guide to Process Equipment, Third Edition - Norman Lieberman
2008-05-18

Diagnose and Troubleshoot Problems in Chemical Process Equipment with This Updated Classic! Chemical engineers and plant operators can rely on the Third Edition of *A Working Guide to Process Equipment* for the latest diagnostic tips, practical examples, and detailed illustrations for pinpointing trouble and correcting problems in chemical process equipment. This updated classic contains new chapters on Control Valves, Cooling Towers, Waste Heat Boilers, Catalytic Effects, Fundamental Concepts of Process Equipment, and Process Safety. Filled with worked-out calculations, the book examines everything from trays, reboilers, instruments, air coolers, and steam turbines...to fired heaters, refrigeration systems, centrifugal pumps, separators, and compressors. The authors simplify complex issues and explain the technical issues needed to solve all kinds of equipment problems. Comprehensive and clear, the Third Edition of *A Working Guide to Process Equipment* features: Guidance on diagnosing and troubleshooting process equipment problems Explanations of how theory applies to real-world equipment operations Many useful tips, examples, illustrations, and worked-out calculations New to this edition: Control Valves, Cooling Towers, Waste Heat Boilers, Catalytic Effects, and Process Safety Inside this Renowned Guide to Solving Process Equipment Problems • Trays • Tower Pressure • Distillation Towers • Reboilers • Instruments • Packed Towers • Steam and Condensate Systems • Bubble Point and Dew Point • Steam Strippers • Draw-Off Nozzle Hydraulics • Pumparounds and Tower Heat Flows • Condensers and Tower Pressure Control • Air Coolers • Deaerators and Steam Systems • Vacuum Systems • Steam Turbines • Surface Condensers • Shell-and-Tube Heat Exchangers • Fire Heaters • Refrigeration Systems • Centrifugal Pumps • Separators • Compressors • Safety • Corrosion • Fluid Flow • Computer Modeling and Control • Field Troubleshooting Process Problems

Process Engineering and Design Using Visual Basic®, Second Edition - Arun Datta 2013-09-20

Software tools are a great aid to process engineers, but too much dependence on such tools can often lead to inappropriate and suboptimal designs. Reliance on software is also a hindrance without a firm understanding of the principles underlying its operation, since users are still responsible for devising the design. In *Process Engineering and Design Using Visual Basic*, Arun K. Datta provides a unique and versatile suite of programs along with simultaneous development of the underlying concepts, principles, and mathematics. Each chapter details the theory and techniques that provide the basis for design and engineering software and then showcases the development and utility of programs developed using the material outlined in the chapter. This all-inclusive guide works systematically from basic mathematics to fluid mechanics, separators, overpressure protection, and glycol dehydration, providing basic design guidelines based on international codes. Worked examples demonstrate the utility of each program, while the author also explains problems and limitations associated with the simulations. After reading this book you will be able to immediately put these programs into action and have total confidence in the result, regardless of your level of experience. Companion Visual Basic and Excel files are available for download on under the "Downloads/Updates" tab on this web page.

Fundamentals of Nuclear Science and Engineering Second Edition - J. Kenneth Shultis 2007-09-07

Since the publication of the bestselling first edition, there have been

numerous advances in the field of nuclear science. In medicine, accelerator based teletherapy and electron-beam therapy have become standard. New demands in national security have stimulated major advances in nuclear instrumentation. An ideal introduction to the fundamentals of nuclear science and engineering, this book presents the basic nuclear science needed to understand and quantify an extensive range of nuclear phenomena. New to the Second Edition— A chapter on radiation detection by Douglas McGregor Up-to-date coverage of radiation hazards, reactor designs, and medical applications Flexible organization of material that allows for quick reference This edition also takes an in-depth look at particle accelerators, nuclear fusion reactions and devices, and nuclear technology in medical diagnostics and treatment. In addition, the author discusses applications such as the direct conversion of nuclear energy into electricity. The breadth of coverage is unparalleled, ranging from the theory and design characteristics of nuclear reactors to the identification of biological risks associated with ionizing radiation. All topics are supplemented with extensive nuclear data compilations to perform a wealth of calculations. Providing extensive coverage of physics, nuclear science, and nuclear technology of all types, this up-to-date second edition of *Fundamentals of Nuclear Science and Engineering* is a key reference for any physicists or engineer.

Handbook of Technical Writing - Charles T. Brusaw 1997-08-15

New to this edition: Up-to-date information on on-line research and computer resources. A unique four-way access system enables users of the *Handbook of Technical Writing* to find what they need quickly and get on with the job of writing: 1. The hundreds of entries in the body of the *Handbook* are alphabetically arranged, so you can flip right to the topic at hand. Words and phrases in bold type provide cross-references to related entries. 2. The topical key groups alphabetical entries and page numbers under broader topic categories. This topical table of contents allows you to check broader subject areas for the specific topic you need. 3. The checklist of the writing process summarizes the opening essay on "Five Steps to Successful Writing" in checklist form with page references to related topics, making it easy to use the *Handbook* as a writing text. 4. The comprehensive index provides an exhaustive listing of related and commonly confused topics, so you can easily locate information even when you don't know the exact term you're looking for.

Effective Project Management Robert K. Wysocki 2011-09-26

Expert guidance on ensuring project success—the latest edition! Many projects fail to deliver on time and within budget, and often-poor project management is to blame. If you're a project manager, the newest edition of this expert and top-selling book will help you avoid the pitfalls and manage projects successfully. Covering the major project management techniques including Traditional (Linear and Incremental), Agile (Iterative and Adaptive), and Extreme, this book lays out a comprehensive overview of all of the best-of-breed project management approaches and tools today. You'll learn how to use these approaches effectively to achieve better outcomes. Fresh topics in this new edition include critical chain project management, using the Requirements Management Lifecycle as a key driver, career and professional development for project managers, and more. This book is packed with step-by-step instruction and practical case studies, and a companion web site offers additional exercises and solutions. Gives new or veteran project managers a comprehensive overview of the best-of-breed project management approaches and tools today Shows readers, through step-by-step instruction and practical case studies, how to use these tools effectively Updated new edition adds new material on career and professional development for project managers, critical chain project management, and more If you're seeking to improve your professional project management skills, the latest edition of this popular, successful, and in-depth book is the place to start. Visit <http://wysockiepm.com/> for support materials and to connect with the author.

Pipeline Rules of Thumb Handbook - E.W. McAllister 2015-08-03

Now in its sixth edition, *Pipeline Rules of Thumb Handbook* has been and continues to be the standard resource for any professional in the pipeline industry. A practical and convenient reference, it provides quick solutions to the everyday pipeline problems that the pipeline engineer, contractor, or designer faces. *Pipeline Rules of Thumb Handbook* assembles hundreds of shortcuts for pipeline construction, design, and engineering. Workable "how-to" methods, handy formulas, correlations, and curves all come together in this one convenient volume. Save valuable time and effort using the thousands of illustrations, photographs, tables, calculations, and formulas available in an easy to use format Updated and revised with new material on project scoping,

plastic pipe data, HDPE pipe data, fiberglass pipe, NEC tables, trenching, and much more A book you will use day to day guiding every step of pipeline design and maintenance

Statistical Power Analysis for the Behavioral Sciences - Cohen
2013-05-13

Statistical Power Analysis is a nontechnical guide to power analysis in research planning that provides users of applied statistics with the tools they need for more effective analysis. The Second Edition includes: * a chapter covering power analysis in set correlation and multivariate methods; * a chapter considering effect size, psychometric reliability, and the efficacy of "qualifying" dependent variables and; * expanded power and sample size tables for multiple regression/correlation.

Process Engineering and Design Using Visual Basic - Arun Datta
2007-10-08

Software tools are a great aid to process engineers, but too much dependence on such tools can often lead to inappropriate and suboptimal designs. Reliance on software is also a hindrance without a firm understanding of the principles underlying its operation, since users are still responsible for devising the design. In *Process Engineering Piping Handbook* - Mohinder L. Nayyar 1999-11-04

Instant answers to your toughest questions on piping components and systems! It's impossible to know all the answers when piping questions are on the table - the field is just too broad. That's why even the most experienced engineers turn to *Piping Handbook*, edited by Mohinder L. Nayyar, with contribution from top experts in the field. The Handbook's 43 chapters--14 of them new to this edition--and 9 new appendices provide, in one place, everything you need to work with any type of piping, in any type of piping system: design layout selection of materials fabrication and components operation installation maintenance This world-class reference is packed with a comprehensive array of analytical tools, and illustrated with fully-worked-out examples and case histories. Thoroughly updated, this seventh edition features revised and new information on design practices, materials, practical applications and industry codes and standards--plus every calculation you need to do the job.

Cranes - Ing J. Verschoof 2002-11-15

This second edition of *Cranes - Design, Practice, and Maintenance* has been thoroughly updated. Many new photographs are included and the latest information on developments in equipment and crane technology has been added. The chapter on standards has also been revised to include a comprehensive guide to current legislation. This unique book discusses and explains the technical issues and considerations in a practical way, offering a comprehensive review of the different types of cranes and their uses. Heavily illustrated with photographs and line drawings, this title continues to be of considerable interest to crane designers, crane manufacturers and suppliers, crane users, project managers, health and safety specialists, and consultants involved in a wide range of industries. TOPICS COVERED INCLUDE: Introduction Wire ropes Drives: calculating motor powers Brakes Standards Sagging and slapping of the wire ropes Rock and roll of the spreader Machinery trolleys versus wire rope trolleys Twin lift Positioning Automatic equipment identification (AEI) Construction and calculation methods on strength and fatigue Wheels and tracks.

Piping System Fundamentals - Ray T. Hardee 2012

National Electrical Code - National Fire Protection Association 2010 Safe, efficient, code-compliant electrical installations are made simple with the latest publication of this widely popular resource. Like its highly successful previous editions, the National Electrical Code 2011 spiral bound version combines solid, thorough, research-based content with the tools you need to build an in-depth understanding of the most important topics. New to the 2011 edition are articles including first-time Article 399 on Outdoor, Overhead Conductors with over 600 volts, first-time Article 694 on Small Wind Electric Systems, first-time Article 840 on Premises Powered Broadband Communications Systems, and more. This spiralbound version allows users to open the code to a certain page and easily keep the book open while referencing that page. The National Electrical Code is adopted in all 50 states, and is an essential reference for those in or entering careers in electrical design, installation, inspection, and safety.

Effective Help Desk Specialist Skills - Darril Gibson 2014-10-27

All of today's help desk support skills, in one easy-to-understand book The perfect beginner's guide: No help desk or support experience necessary Covers both "soft" personal skills and "hard" technical skills Explains the changing role of help desk professionals in the modern

support center Today, everyone depends on technology--and practically everyone needs help to use it well. Organizations deliver that assistance through help desks. This guide brings together all the knowledge you need to succeed in any help desk or technical support role, prepare for promotion, and succeed with the support-related parts of other IT jobs. Leading technology instructor Darril Gibson tours the modern help desk, explains what modern support professionals really do, and fully covers both of the skill sets you'll need: technical and personal. In clear and simple language, he discusses everything from troubleshooting specific problems to working with difficult users. You'll even learn how to manage a help desk, so it works better and delivers more value. Coverage includes: • How the modern help desk has evolved • Understanding your users' needs, goals, and attitudes • Walking through the typical help desk call • Communicating well: listening actively and asking better questions • Improving interactions and handling difficult situations • Developing positive attitudes, and "owning" the problem • Managing your time and stress • Supporting computers, networks, smartphones, and tablets • Finding the technical product knowledge you need • Protecting the security of your users, information, and devices • Defining, diagnosing, and solving problems, step by step • Writing it up: from incident reports to documentation • Working in teams to meet the goals of the business • Using ITIL to improve the services you provide • Calculating help desk costs, benefits, value, and performance • Taking control of your support career Powerful features make it easier to learn about help desk careers! • Clear introductions describe the big ideas and show how they fit with what you've already learned • Specific chapter objectives tell you exactly what you need to learn • Key Terms lists help you identify important terms and a complete Glossary helps you understand them • Author's Notes and On The Side features help you go deeper into the topic if you want to • Chapter Review tools and activities help you make sure you've learned the material Exclusive Mind Mapping activities! • Organize important ideas visually--in your mind, in your words • Learn more, remember more • Understand how different ideas fit together

Gas Pipeline Hydraulics - Shashi Menon 2013

This book is concerned with the steady state hydraulics of natural gas and other compressible fluids being transported through pipelines. Our main approach is to determine the flow rate possible and compressor station horsepower required within the limitations of pipe strength, based on the pipe materials and grade. It addresses the scenarios where one or more compressors may be required depending on the gas flow rate and if discharge cooling is needed to limit the gas temperatures. The book is the result of over 38 years of the authors' experience on pipelines in North and South America while working for major energy companies such as ARCO, El Paso Energy, etc.

Handbook of Fluid Dynamics - Richard W. Johnson 2016-04-06

Handbook of Fluid Dynamics offers balanced coverage of the three traditional areas of fluid dynamics--theoretical, computational, and experimental--complete with valuable appendices presenting the mathematics of fluid dynamics, tables of dimensionless numbers, and tables of the properties of gases and vapors. Each chapter introduces a different fluid

The Safety Relief Valve Handbook - Marc Hellemans 2009-08-31

The Safety Valve Handbook is a professional reference for design, process, instrumentation, plant and maintenance engineers who work with fluid flow and transportation systems in the process industries, which covers the chemical, oil and gas, water, paper and pulp, food and bio products and energy sectors. It meets the need of engineers who have responsibilities for specifying, installing, inspecting or maintaining safety valves and flow control systems. It will also be an important reference for process safety and loss prevention engineers, environmental engineers, and plant and process designers who need to understand the operation of safety valves in a wider equipment or plant design context. No other publication is dedicated to safety valves or to the extensive codes and standards that govern their installation and use. A single source means users save time in searching for specific information about safety valves The Safety Valve Handbook contains all of the vital technical and standards information relating to safety valves used in the process industry for positive pressure applications. Explains technical issues of safety valve operation in detail, including identification of benefits and pitfalls of current valve technologies Enables informed and creative decision making in the selection and use of safety valves The Handbook is unique in addressing both US and European codes: - covers all devices subject to the ASME VIII and European PED (pressure equipment directive) codes; - covers the safety

valve recommendations of the API (American Petroleum Institute); - covers the safety valve recommendations of the European Normalisation Committees; - covers the latest NACE and ATEX codes; - enables readers to interpret and understand codes in practice Extensive and detailed illustrations and graphics provide clear guidance and explanation of technical material, in order to help users of a wide range of experience and background (as those in this field tend to have) to understand these devices and their applications Covers calculating valves for two-phase flow according to the new Omega 9 method and highlights the safety difference between this and the traditional method Covers selection and new testing method for cryogenic applications (LNG) for which there are currently no codes available and which is a booming industry worldwide Provides full explanation of the principles of different valve types available on the market, providing a selection guide for safety of the process and economic cost Extensive glossary and terminology to aid readers' ability to understand documentation, literature, maintenance and operating manuals Accompanying website provides an online valve selection and codes guide.

Servitization and Physical Asset Management - Michael John Provost 2018-12-31

Servitization and Physical Asset Management, third edition, was developed to provide a structured source of guidance and reference information on the business opportunities linked to servitization and the management of physical assets. A growing trend in the global economy, servitization focuses on the actual deliverables of an asset from the perspective of the customer: electricity instead of the power plant, thrust instead of the engine, mobility instead of a plane or a car. The book offers high-level overviews of how to servitized and manage assets from a variety of perspectives, reviewing nearly 1,500 books, magazine articles, papers and presentations and websites. Written by Michael J. Provost, Ph.D., and a subject matter expert in modeling, simulation, analysis and condition monitoring, Servitization and Physical Asset Management, third edition, is an invaluable reference to those considering providing asset management services for the products they design and manufacture. It is also meant to support middle management wishing to know what needs to be done to look after the assets they are responsible for and who to approach for help, and academics doing research in this field. Michael Provost, is a British engineer with a doctoral degree in thermal power from Cranfield University.

Cameron Hydraulic Data - 2018-09-15

Handbook of PVC Pipe Design and Construction - 2012

A new, expanded edition of the authoritative handbook now available from Industrial Press for the first time.

Practical C++ Programming - Steve Oualline 2003

Practical C++ Programming thoroughly covers: C++ syntax · Coding standards and style · Creation and use of object classes · Templates · Debugging and optimization · Use of the C++ preprocessor · File input/output.

Managing aquifer recharge - UNESCO 2021-11-25

Assessment of Parabolic Trough and Power Tower Solar Technology Cost and Performance Forecasts -

Carbon Dioxide Capture and Storage - IPCC 2005-12-19

IPCC Report on sources, capture, transport, and storage of CO₂, for researchers, policy-makers and engineers.

Fluid Flow Handbook - Saleh Jamal 2002-03-26

Helps in analyzing and designing fluid flow and piping systems projects. This work, blending theoretical review and engineering practicality, provides a treatment of pumps, pipes and piping systems, hydraulics, and hydrology. With illustrations, this handbook offers a discussion on issues critical to civil engineers.

Piping and Pipeline Calculations Manual - Philip Ellenberger 2014-01-22

Piping and Pipeline Calculations Manual, Second Edition provides engineers and designers with a quick reference guide to calculations, codes, and standards applicable to piping systems. The book considers in one handy reference the multitude of pipes, flanges, supports, gaskets, bolts, valves, strainers, flexibles, and expansion joints that make up these often complex systems. It uses hundreds of calculations and examples based on the author's 40 years of experiences as both an engineer and instructor. Each example demonstrates how the code and standard has been correctly and incorrectly applied. Aside from advising on the intent of codes and standards, the book provides advice on compliance. Readers will come away with a clear understanding of how piping systems fail and

what the code requires the designer, manufacturer, fabricator, supplier, erector, examiner, inspector, and owner to do to prevent such failures. The book enhances participants' understanding and application of the spirit of the code or standard and form a plan for compliance. The book covers American Water Works Association standards where they are applicable. Updates to major codes and standards such as ASME B31.1 and B31.12 New methods for calculating stress intensification factor (SIF) and seismic activities Risk-based analysis based on API 579, and B31-G Covers the Pipeline Safety Act and the creation of PhMSA

Fundamentals of Thermal-fluid Sciences - Yunus A. Çengel 2021

"This text is an abbreviated version of standard thermodynamics, fluid mechanics, and heat transfer texts, covering topics that engineering students are most likely to need in their professional lives"--

Engineering Thermofluids - Mahmoud Massoud 2005-12-05

Thermofluids, while a relatively modern term, is applied to the well-established field of thermal sciences, which is comprised of various intertwined disciplines. Thus mass, momentum, and heat transfer constitute the fundamentals of th- mofluids. This book discusses thermofluids in the context of thermodynamics, single- and two-phase flow, as well as heat transfer associated with single- and two-phase flows. Traditionally, the field of thermal sciences is taught in univer- ties by requiring students to study engineering thermodynamics, fluid mechanics, and heat transfer, in that order. In graduate school, these topics are discussed at more advanced levels. In recent years, however, there have been attempts to in- grate these topics through a unified approach. This approach makes sense as thermal design of widely varied systems ranging from hair dryers to semicond- tor chips to jet engines to nuclear power plants is based on the conservation eq- tions of mass, momentum, angular momentum, energy, and the second law of thermodynamics. While integrating these topics has recently gained popularity, it is hardly a new approach. For example, Bird, Stewart, and Lightfoot in Transport Phenomena, Rohsenow and Choi in Heat, Mass, and Momentum Transfer, El- Wakil, in Nuclear Heat Transport, and Todreas and Kazimi in Nuclear Systems have pursued a similar approach. These books, however, have been designed for advanced graduate level courses. More recently, undergraduate books using an - tegral approach are appearing.

Michi ne Drawi ng - K. L. Narayana 2009-06-30

About the Book: Written by three distinguished authors with ample academic and teaching experience, this textbook, meant for diploma and degree students of Mechanical Engineering as well as those preparing for AMIE examination, incorporates the latest st

Temporary Structure Desi gn Christopher Souder 2014-11-10

A comprehensive guide to temporary structures in construction projects Temporary Structure Design is the first book of its kind, presenting students and professionals with authoritative coverage of the major concepts in designing temporary construction structures. Beginning with a review of statistics, it presents the core topics needed to fully comprehend the design of temporary structures: strength of materials; types of loads on temporary structures; scaffolding design; soil properties and soil loading; soldier beam, lagging, and tiebacks; sheet piling and strutting; pressure and forces on formwork and falsework; concrete formwork design; falsework; bracing and guying; trestles and equipment bridges; and the support of existing structures. Temporary structures during construction include scaffolding, formwork, shoring, ramps, platforms, earth-retaining structures, and other construction structures that are not part of the permanent installation. These structures are less regulated and monitored than most other parts of the construction process, even though they are often supporting tons of steel or concrete—and the safety of all workers on the site depends on these structures to perform as designed. Unfortunately, most tragic failures occur during construction and are usually the result of improperly designed, constructed, and/or maintained temporary structures. Temporary Structure Design fills an important need in the literature by providing a trusted, comprehensive guide to designing temporary construction structures. Serves as the first book to provide a design-oriented approach to the design of temporary structures Includes coverage of the various safety considerations inherent in temporary structure design and construction Provides information on estimating cost and schedules for these specialized structures Covers formwork and falsework, as well as personnel protection, production support, environmental protection, and foundational structures If you're a student or a professional working in the field of construction or structural engineering, Temporary Structure Design is a must-have resource you'll turn to again and again.

Structural Engineer's Pocket Book British Standards Edition
Cobb 2020-12-17

The Structural Engineer's Pocket Book British Standards Edition is the only compilation of all tables, data, facts and formulae needed for scheme design to British Standards by structural engineers in a handy-sized format. Bringing together data from many sources into a compact, affordable pocketbook, it saves valuable time spent tracking down

information needed regularly. This second edition is a companion to the more recent Eurocode third edition. Although small in size, this book contains the facts and figures needed for preliminary design whether in the office or on-site. Based on UK conventions, it is split into 14 sections including geotechnics, structural steel, reinforced concrete, masonry and timber, and includes a section on sustainability covering general concepts, materials, actions and targets for structural engineers.