

Prestressed Concrete Analysis And Design Naaman

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Reinforced and Prestressed Concrete F. K. Kong 1998-04 This highly successful textbook has been comprehensively revised for two main reasons: to bring the book up-to-date and make it compatible with BS1110 1985; and to take into account the increasing use made of microcomputers in civil engineering. An important chapter on microcomputer applications has been added.

Prestressed Concrete Analysis and Design Antoine E. Naaman 2012-01-01

Reinforced Concrete Design to Eurocode 2 Giandomenico Toniolo 2017-05-09 This textbook describes the basic mechanical features of concrete and explains the main resistant mechanisms activated in the reinforced concrete structures and foundations when subjected to centred and eccentric axial force, bending moment, shear, torsion and prestressing. It presents a complete set of limit-state design criteria of the modern theory of RC incorporating principles and rules of the final version of the official Eurocode 2. This textbook examines methodological more than notional aspects of the presented topics, focusing on the verifications of assumptions, the rigorosness of the analysis and the consequent degree of reliability of results. Each chapter develops an organic topic, which is eventually illustrated by examples in each final paragraph containing the relative numerical applications. These practical end-of-chapter appendices and intuitive flow-charts ensure a smooth learning experience. The book stands as an ideal learning resource for students of structural design and analysis courses in civil engineering, building construction and architecture, as well as a valuable reference for concrete structural design professionals in practice.

Reinforced Concrete Design to Eurocodes Prab Bhatt 2014-02-28 This established and popular textbook has now been extensively rewritten and expanded in line with the current Eurocodes. It presents the principles of the design of concrete elements and also the design of complete structures, and provides practical illustrations of the theory. It explains the background to the Eurocode rules and goes beyond the c

Structural Concrete M. Nadim Hassoun 2012-05-01 Emphasizing a conceptual understanding of concrete design and analysis, this revised and updated edition builds the student's understanding by presenting design methods in an easy to understand manner supported with the use of numerous examples and problems. Written in intuitive, easy-to-understand language, it includes SI unit examples in all chapters, equivalent conversion factors from US customary to SI throughout the book, and SI unit design tables. In addition, the coverage has been completely updated to reflect the latest ACI 318-11 code.

Partial Prestressing, From Theory to Practice M.Z. Cohn 2012-12-06 These volumes contain the edited documents presented at the NATO-Sponsored Advanced Research Workshop (ARW) on Partial Pre8tre88ing, from Theory to Practice, held at the CE8TP Research Centre of Saint-Remy-les-Chevreuse, France, June 18-22, 1984. The workshop was a direct extension of the International Symposium on Nonlinearity and Continuity in Pre8tre88ed Concrete, organized by the editor at the University of Waterloo, Waterloo, Canada, July 4-6, 1983. The organization of the NATO-ARW on Partial Prestressing was prompted by the need to explain and reduce the wide direrences of expert oph:iipn- on the subject, which make more difficult the accep tance of partial prestressing by the profession at large. Specifically, the workshop attempted to: - produce a more unified picture of partial prestressing, by con fronting and, where possible, reconciling some conflicting American and European views on this subject; - bring theoretical advances on partial prestressing within the grasp of engineering practice; - provide the required background for developing some guidelines on the use of partial prestressing, in agreement with existing structural concrete standards. The five themes selected for the workshop agenda were: (1) Problems of Partially Prestressed Concrete (PPC). (2) Partially Prestressed Concrete Members: Static Loading. (3) PPC Members: Repeated and Dynamic Loadings. (4) Continuity in Partially Prestressed Concrete. (5) Practice of Partial Prestressing.

Limit Analysis and Concrete Plasticity M.P. Nielsen 2016-04-19 First published in 1984, Limit Analysis and Concrete Plasticity explains for advanced design engineers the principles of plasticity theory and its application to the design of reinforced and prestressed concrete structures, providing a thorough understanding of the subject, rather than simply applying current design formulas. Updated and revised th

ACI Manual of Concrete Practice American Concrete Institute 2002

Reinforced and Prestressed Concrete Design Eugene J. O'Brien 1995 Emphasises a 'total' approach to the design and qualitative understanding of structures. It encourages the student to develop an intuitive comprehension of the behaviour of the complete structure and incorporates the new Eurocode (EC2) where appropriate.

Design of Reinforced Concrete Jack C. McCormac 2005 Publisher Description

Prestressed Concrete Shrikant B. Vanakudre, Ashish A. Yaligar Prestressed Concrete provides a comprehensive coverage of the theoretical and practical aspects of the subject and includes the latest developments in the field of prestressed concrete construction. It incorporates the latest Indian Standard specifications and codes regulating prestressed concrete construction. The book introduces the properties of the materials and prestressing systems used in the PSC construction. Topics discussed on analysis of PSC sections for flexure, deflection, shear and torsion. In addition to this, analysis and design of various prestress concrete elements such as continuous beams, composite sections, one way slabs, two way slabs, flat slabs, grid floors, compression members, tension members, pipes, piles and tanks are discussed. Analysis and design of various PSC structures such as bridges, sleepers, pavements and poles are also covered. Construction techniques are well illustrated through numerous figures and a number of illustrative examples. Objective questions illustrated are quite useful for those appearing for competaive examinations. The content of this book serve the needs of both students and professionals.

Prestressed Concrete Edward G. Navy 2010 Completely revised to reflect the new ACI 318-08 Building Code and International Building Code, IBC 2009, this popular book offers a unique approach to examining the design of prestressed concrete members in a logical, step-by-step trial and adjustment procedure. Integrates handy flow charts to help readers better understand the steps needed for design and analysis. Includes a revised chapter containing the latest ACI and AASHTO Provisions on the design of post-tensioned beam end anchorage blocks using the strut-and-tie approach in conformity with ACI 318-08 Code. Offers a new complete section with two extensive design examples using the strut-and-tie approach for the design of corbels and deep beams. Features an addition to the elastic method of design, with comprehensive design examples on LRFD and Standard AASHTO designs of bridge deck members for flexure, shear and torsion, conforming to the latest AASHTO specifications. Includes a revised chapter on slender columns, including a simplified load-contour biaxial bending method which is easier to apply in design, using moments rather than loads in the reciprocal approach. A useful construction reference for engineers.

Prestressed Concrete Bridges Christian Menn 2012-12-06 This book was written to make the material presented in my book, Stahlbetonbrucken, accessible to a larger number of engineers throughout the world. A work in English, the logical choice for this task, had been contemplated as Stahlbetonbrucken was still in its earliest stages of preparation. The early success of Stahlbetonbrucken provided significant impetus for the writing of Prestressed Concrete Bridges, which began soon after the publication of its predecessor. The present work is more than a mere translation of Stahlbetonbrucken. Errors in Stahlbetonbrucken that were detected after publication have been corrected. New material on the relation between cracking in concrete and corrosion of reinforcement, prestressing with unbonded tendons, skew-girder bridges, and cable-stayed bridges has been added. Most importantly, however, the presentation of the material has been extensively reworked to improve clarity and consistency. Prestressed Concrete Bridges can thus be regarded as a thoroughly new and improved edition of its predecessor.

Design of Prestressed Concrete R. I. Gilbert 1990-09-13 Providing both an introduction to basic concepts and an in-depth treatment of the most up-to-date methods for the design and analysis of concrete of structures, "Design of Prestressed Concrete" will service the needs of both students and professional engineers.

Design of Prestressed Concrete to Eurocode 2, Second Edition Raymond Ian Gilbert 2017-01-27 The design of structures in general, and prestressed concrete structures in particular, requires considerably more information than is contained in building codes. A sound understanding of structural behaviour at all stages of loading is essential. This textbook presents a detailed description and explanation of the behaviour of prestressed concrete members and structures both at service loads and at ultimate loads and, in doing so, provide a comprehensive and up-to-date guide to structural design. Much of the text is based on first principles and relies only on the principles of mechanics and the properties of concrete and steel, with numerous worked examples. However, where the design requirements are code specific, this book refers to the provisions of Eurocode 2: Design of Concrete Structures and, where possible, the notation is the same as in Eurocode 2. A parallel volume is written to the Australian Standard for Concrete Structures AS3600-2009. The text runs from an introduction to the fundamentals to in-depth treatments of more advanced topics in modern prestressed concrete structures. It suits senior undergraduate and graduate students and also practising engineers who want comprehensive introduction to the design of prestressed concrete structures. It retains the clear and concise explanations and the easy-to-read style of the first edition, but the content has been extensively re-organised and considerably expanded and updated. New chapters cover design procedures, actions and loads; prestressing systems and construction requirements; connections and detailing; and design concepts for prestressed concrete bridges. The topic of serviceability is developed extensively throughout. All the authors have been researching and teaching the behaviour and design of prestressed concrete structures for over thirty-five years and the proposed new edition of the book reflects this wealth of experience. The work has also gained much from Professor Gilbert active and long-time involvement in the development of standards for concrete buildings and concrete bridges.

Failures in Concrete Structures Robin Whittle 2012-11-01 Some lessons are only learned from mistakes but, it's much cheaper to learn from someone else's mistakes than to have to do so from your own. Drawing on over fifty years of working with concrete structures, Robin Whittle examines the problems which he has seen occur and shows how they could have been avoided. The first and largest part of the *Prestressed Concrete Design* M.K. Hurst 2017-12-21 Prestressed concrete is widely used in the construction industry in buildings, bridges, and other structures. The new edition of this book provides up-to-date guidance on the detailed design of prestressed concrete structures according to the provisions of the latest preliminary version of Eurocode 2: Design of Concrete Structures, DD ENV 1992-1-1: 1992. The emphasis throughout is on design - the problem of providing a structure to fulfil a given purpose - but fundamental concepts are also described in detail. All major topics are dealt with, including prestressed flat slabs, an important and growing application in the design of buildings. The text is illustrated throughout with worked examples and problems for further study. Examples are given of computer spreadsheets for typical design calculations. Prestressed Concrete Design will be a valuable guide to practising engineers, students and research workers.

Reinforced Concrete Fundamentals Phil M. Ferguson 1988-01-18 This Fifth Edition maintains the basic Ferguson approach in which design procedures stem from and provide the basis for a clear understanding of the behavior of reinforced concrete. Behavior of reinforced concrete members and assemblages at every load stage is illustrated with illustrations and photos, and calculation models that relate to the physical behaviors are provided to help students and practitioners recognize and assess various design situations. To avoid confusion, many of the examples now use customary or English units, rather than SI units as in the Fourth Edition. This edition conforms to the technical changes in the '83 and '86 revisions to the ACI Building Code. In this edition, service load analysis of stresses, computations of deflection and distribution of reinforcement to control crack widths have been incorporated with the sections that treat analysis and design of flexural members. Material relating to seismic design has been revised and expanded, and more emphasis has been placed on developing conceptual models for design.

Design of Concrete Structures Arthur H. Nilson 2011-06-01 The 14th edition of the classic text, Design of Concrete Structures, is completely revised using the newly released 2008 ACI (American Concrete Institute) Code. This new edition has the same dual objectives as the previous editions; first to establish a firm understanding of the behavior of structural concrete, then to develop proficiency in the methods used in current design practice. Design of Concrete Structures covers the behavior and design aspects of concrete and provides updated examples and homework problems. New material on slender columns, seismic design, anchorage using headed deformed bars, and reinforcing slabs for shear using headed studs has been added. The notation has been thoroughly updated to match changes in the ACI Code. The text also presents the basic mechanics of structural concrete and methods for the design of individual members for bending, shear, torsion, and axial force, and provides detail in the various types of structural systems applications, including an extensive presentation of slabs, footings, foundations, and retaining walls.

Theory and Design of Bridges Petros P. Xanthakos 1994 Indeed, this essential working reference for practicing civil engineers uniquely reflects today's gradual transition from allowable stress design to Load and Resistance Factor Design by presenting LRFD specifications - developed from research requested by AASH-T0 and initiated by the NCHRP - which spell out new provisions in areas ranging from load models and load factors to bridge substructure elements and foundations.

Design of Prestressed Concrete to AS3600-2009 Raymond Ian Gilbert 2016-02-17 The design of structures in general, and prestressed concrete structures in particular, requires considerably more information than is contained in building codes. A sound understanding of structural behaviour at all stages of loading is essential. This textbook presents a detailed description and explanation of the behaviour of prestressed concrete

Reinforced and Prestressed Concrete Design to EC2 Eugene Obrien 2017-09-01 Concrete is an integral part of twenty-first century structural engineering, and an understanding of how to analyze and design concrete structures is a vital part of training as a structural engineer. With Eurocode legislation increasingly replacing British Standards, it's also important to know how this affects the way you can work with concrete. Newly revised to Eurocode 2, this second edition retains the original's emphasis on qualitative understanding of the overall behaviour of concrete structures. Now expanded, with a new chapter dedicated to case studies, worked examples, and exercise examples, it is

an even more comprehensive guide to conceptual design, analysis, and detailed design of concrete structures. The book provides civil and structural engineering students with complete coverage of the analysis and design of reinforced and prestressed concrete structures. Great emphasis is placed on developing a qualitative understanding of the overall behaviour of structures.

PRESTRESSED CONCRETE MUTHU K. U. 2016-01-18 The book begins with a brief introduction, helping the reader to understand the fundamentals of stress concept and prestressed concrete systems. The discussion then follows to explain the computation of different losses and estimation of ultimate flexural and shear strength. Important codal provisions viz. IS1343-2012, Eurocode EN2 and BSEN-1:2004 are also highlighted in this text. For clear understanding of the materials, the text is supported by a good number of figures and tables. Besides covering the important topics on design and analysis of anchorage zone stresses and analysis of continuous beam, the book also discusses composite construction and circular prestressing. The book is designed as a textbook for the senior level undergraduate and postgraduate students of civil engineering and construction technology. KEY FEATURES

Prestressed Concrete Analysis and Design Antoine E. Naaman 2004-01-01

Concrete Design to EN 1992, Second Edition Lawrence Martin 2005-12-16 The transition from national standards for concrete structural design to Eurocode EN 1992 is the biggest change to concrete design for decades. This new edition of Concrete Design explains the key differences between BS1110 and EN1992, and teaches the fundamentals of the design of concrete structures to comply with the Eurocodes. With many illustrations and worked examples, this accessible textbook teaches the essentials of concrete design to EN1992 to students and professionals alike.

Principles of Reinforced Concrete Design Mete A. Sozen 2014-07-14 Encouraging creative uses of reinforced concrete, Principles of Reinforced Concrete Design draws a clear distinction between fundamentals and professional consensus. This text presents a mixture of fundamentals along with practical methods. It provides the fundamental concepts required for designing reinforced concrete (RC) structures, emphasizing principles based on mechanics, experience, and experimentation, while encouraging practitioners to consult their local building codes. The book presents design choices that fall in line with the boundaries defined by professional consensus (building codes), and provides reference material outlining the design criteria contained in building codes. It includes applications for both building and bridge structural design, and it is applicable worldwide, as it is not dependent upon any particular codes. Contains concise coverage that can be taught in one semester Underscores the fundamental principles of behavior Provides students with an understanding of the principles upon which codes are based Assists in navigating the labyrinth of ever-changing codes Fosters an inherent understanding of design The text also provides a brief history of reinforced concrete. While the initial attraction for using reinforced concrete in building construction has been attributed to its fire resistance, its increase in popularity was also due to the creativity of engineers who kept extending its limits of application. Along with height achievement, reinforced concrete gained momentum by providing convenience, plasticity, and low-cost economic appeal. Principles of Reinforced Concrete Design provides undergraduate students with the fundamentals of mechanics and direct observation, as well as the concepts required to design reinforced concrete (RC) structures, and applies to both building and bridge structural design.

Prestressed Concrete Design to Eurocodes Prab Bhatt 2012-05-23 Ordinary concrete is strong in compression but weak in tension. Even reinforced concrete, where steel bars are used to take up the tension that the concrete cannot resist, is prone to cracking and corrosion under low loads. Prestressed concrete is highly resistant to stress, and is used as a building material for bridges, tanks, shell roofs, floors, buildings, containment vessels for nuclear power plants and offshore oil platforms. With a wide range of benefits such as crack control, low rates of corrosion, thinner slabs, fewer joints and increased span length; prestressed concrete is a stronger, safer, more economic and more sustainable building material. The introduction of the Eurocodes has necessitated a new approach to the design of prestressed concrete structures and this book provides a comprehensive practical guide for professionals through each stage of the design process. Each chapter focuses on a specific aspect of design Fully consistent with Eurocode 2, and the associated parts of Eurocodes 1 and 8 Examples of challenges often encountered in professional practice worked through in full Detailed coverage of post-tensioned structures Extensive coverage of design of flat slabs using the finite element method Examples of pre-tensioned and post-tensioned bridge design An introduction to earthquake resistant design using EC 8 Examining the design of whole structures as well as the design of sections through many fully worked numerical examples which allow the reader to follow each step of the design calculations, this book will be of great interest to practising engineers who need to become more familiar with the use of the Eurocodes for the design of prestressed concrete structures. It will also be of value to university students with an interest in the practical design of whole structures.

Prestressed Concrete Antoine E. Naaman 1983-01-01

Reinforced Concrete Edward G. Navy 2009 Now reflecting the new 2008 ACI 318-08 Code and the new International Building Code (IBC-2006), this cutting-edge text has been extensively revised to present state-of-the-art developments in reinforced concrete. The text analyzes the design of reinforced concrete members through a unique and practical step-by-step trial and adjustment procedure. It is supplemented with flowcharts that guide readers logically through key features and underlying theory. Hundreds of photos of tests to failure of concrete elements help readers visualize this behavior. Ideal for practicing engineers who need to contend with the new revisions of the ACI, IBC, and AASHTO Codes.

Construction Failure Jacob Feld 1996-12-26 First published in 1968, Jacob Feld's Construction Failure has longbeen considered the classic text on the subject. Retaining all ofthe key components of Feld's comprehensive exploration of the rootcauses of failure, this Second Edition addresses a multitude ofimportant industry developments to bring this landmark work up todate for a new generation of engineers, architects, andstudents. In addition to detailed coverage of current design tools,techniques, materials, and construction methods, ConstructionFailure, Second Edition features an entire chapter ontheburgoning area of construction litigation, including a thoroughexamination of alternative dispute resolution techniques. Like theoriginal, this edition discusses technical and procedural failuresof many different types of structures, but is now supplemented withnew case studies to illustrate the dynamics of failure in actiontoday. Jacob Feld knew thirty years ago that in order to learn from ourmistakes, we must first acknowledge and understand them. With thisrevised volume, Kenneth Carper has ensured that Feld'ssnow-posthumous message will continue to be heard for years tocome. Jacob Feld's comprehensive work on failure analysis has now beenskillfully amended to address current design and constructiontools, materials, and practices. Building on the first edition'speerless examination of the causes and lessons of failure,Construction Failure, Second Edition provides you with expandedcoverage of: * Technical, procedural, structural, and nonstructural failures * Natural hazards, earthworks, soil and foundation problems, andmore * Reinforced, precast and prestressed concrete, steel, timber,masonry, and other materials * Responsibility and litigation concerns, dispute avoidance, andalternative dispute resolution techniques * Construction safety issues * Many different types of structures, including dams andbridges Construction Failure has as much to teach us today as it did thirtyyears ago. This revised volume is an essential resource for designengineers, architects, construction managers, lawyers, and studentsin all of these fields.

Design of Prestressed Concrete Structures T.Y. Lin 2013

Reinforced and Prestressed Concrete Yew-Chaye Loo 2018-08-31 This text presents the theoretical and practical aspects of analysis and design, complemented by numerous design examples.

Concrete Segmental Bridges Dongzhou Huang 2020-01-11 Segmental concrete bridges have become one of the main options for major transportation projects world-wide. They offer expedited construction with minimal traffic disruption, lower life cycle costs, appealing aesthetics and adaptability to a curved roadway alignment. The literature is focused on construction, so this fills the need for a design-oriented book for less experienced bridge engineers and for senior university students. It presents comprehensive theory, design and key construction methods, with a simple design example based on the AASHTO LRFD Design Specifications for each of the main bridge types. It outlines design techniques and relationships between analytical methods, specifications, theory, design, construction and practice. It combines mathematics and engineering mechanics with the authors' design and teaching experience.

Bridge Design António J. Reis 2019-06-10 A comprehensive guide to bridge design Bridge Design - Concepts and Analysis provides a unique approach, combining the fundamentals of concept design and structural analysis of bridges in a single volume. The book discusses design solutions from the authors' practical experience and provides insights into conceptual design with concrete, steel or composite bridge solutions as alternatives. Key features: Principal design concepts and analysis are dealt with in a unified approach. Execution methods and evolution of the static scheme during construction are dealt with for steel, concrete and composite bridges. Aesthetics and environmental integration of bridges are considered as an issue for concept design. Bridge analysis, including modelling and detail design aspects, is discussed for different bridge typologies and structural materials. Specific design verification aspects are discussed on the basis of present design rules in Eurocodes. The book is an invaluable guide for postgraduate students studying bridge design, bridge designers and structural engineers.

Structural Design for Fire Safety Andrew H. Buchanan 2017-01-30 Structural Design for Fire Safety, 2nd edition Andrew H. Buchanan, University of Canterbury, New Zealand Anthony K. Abu, University of Canterbury, New Zealand A practical and informative guide to structural fire engineering This book presents a comprehensive overview of structural fire engineering. An update on the first edition, the book describes new developments in the past ten years, including advanced calculation methods and computer programs. Further additions include: calculation methods for membrane action in floor slabs exposed to fires; a chapter on composite steel-concrete construction; and case studies of structural collapses. The book begins with an introduction to fire safety in buildings, from fire growth and development to the devastating effects of severe fires on large building structures. Methods of calculating fire severity and fire resistance are then described in detail, together with both simple and advanced methods for assessing and designing for structural fire safety in buildings constructed from structural steel, reinforced concrete, or structural timber. Structural Design for Fire Safety, 2nd edition bridges the information gap between fire safety engineers, structural engineers and building officials, and it will be useful for many others including architects, code writers, building designers, and firefighters. Key features: • Updated references to current research, as well as new end-of-chapter questions and worked examples. •Authors experienced in teaching, researching, and applying structural fire engineering in real buildings. • A focus on basic principles rather than specific building code requirements, for an international audience. An essential guide for structural engineers who wish to improve their understanding of buildings exposed to severe fires and an ideal textbook for introductory or advanced courses in structural fire engineering.

Fundamentals Of Pre-Stressed Concrete S. K. Roy 2011

Concrete Slabs L.A. Clarke 1984-06-26 This book provides an up-to-date description of the latest procedures for analysis and design of reinforced concrete slabs. It explains the yield line method of analysis and Hillerborg's strip method of design, and discusses the basic North American and British practices.

FRP Composites for Reinforced and Prestressed Concrete Structures Perumalsamy Balaguru 2008-11-05 High strength fibre composites (FRPs) have been used with civil structures since the 1980s, mostly in the repair, strengthening and retrofitting of concrete structures. This has attracted considerable research, and the industry has expanded exponentially in the last decade. Design guidelines have been developed by professional organizations in a number of countries including USA, Japan, Europe and China, but until now designers have had no publication which provides practical guidance or accessible coverage of the fundamentals. This book fills this void. It deals with the fundamentals of composites, and basic design principles, and provides step-by-step guidelines for design. Its main theme is the repair and retrofit of un-reinforced, reinforced and prestressed concrete structures using carbon, glass and other high strength fibre composites. In the case of beams, the focus is on their strengthening for flexure and shear or their stiffening. The main interest with columns is the improvement of their ductility; and both strengthening and ductility improvement of un-reinforced structures are covered. Methods for evaluating the strengthened structures are presented. Step by step procedures are set out, including flow charts, for the various structural components, and design examples and practice problems are used to illustrate. As infrastructure ages worldwide, and its demolition and replacement becomes less of an option, the need for repair and retrofit of existing facilities will increase. Besides its audience of design professionals, this book suits graduate and advanced undergraduate students.

Non-Metallic (FRP) Reinforcement for Concrete Structures L. Taerwe 2004-06-02 Dealing with a wide range of non-metallic materials, this book opens up possibilities of lighter, more durable structures. With contributions from leading international researchers and design engineers, it provides a complete overview of current knowledge on the subject.

Prestressed Concrete Bridges Nigel R. Hewson 2003 Prestressed concrete decks are commonly used for bridges with spans between 25m and 450m and provide economic, durable and aesthetic solutions in most situations where bridges are needed. Concrete remains the most common material for bridge construction around the world, and prestressed concrete is frequently the material of choice. Extensively illustrated throughout, this invaluable book brings together all aspects of designing prestressed concrete bridge decks into one comprehensive volume. The book clearly explains the principles behind both the design and construction of prestressed concrete bridges, illustrating the interaction between the two. It covers all the different types of deck arrangement and the construction techniques used, ranging from in-situ slabs and precast beams; segmental construction and launched bridges; and cable-stayed structures. Included throughout the book are many examples of the different types of prestressed concrete decks used, with the design aspects of each discussed along with the general analysis and design process. Detailed descriptions of the prestressing components and systems used are also included. Prestressed Concrete Bridges is an essential reference book for both the experienced engineer and graduate who want to learn more about the subject.