

1. Record Nr.	UNINA9910457995003321
Autore	Bai Yong
Titolo	Marine structural design [[electronic resource] /] / Yong Bai
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier, 2003
ISBN	1-281-07043-2 9786611070434 0-08-053583-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (627 p.)
Disciplina	627/.98
Soggetti	Offshore structures - Design and construction Naval architecture Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Marine Structural Design; Copyright Page; Preface; Table of Contents; Part I: Structural Design Principles; Chapter 1. Introduction; 1.1 Structural Design Principles; 1.2 Strength and Fatigue Analysis; 1.3 Structural Reliability Applications; 1.4 Risk Assessment; 1.5 Layout of This Book; 1.6 How to Use This Book; 1.7 References; Chapter 2. Wave Loads for Ship Design and Classification; 2.1 Introduction; 2.2 Ocean Waves and Wave Statistics; 2.3 Ship Response to a Random Sea; 2.4 Ship Design for Classification; 2.5 References Chapter 3. Loads and Dynamic Response for Offshore Structures3.1 General; 3.2 Environmental Conditions; 3.3 Environmental Loads and Floating Structure Dynamics; 3.4 Structural Response Analysis; 3.5 Extreme Values; 3.6 Concluding Remarks; 3.7 References; 3.8 Appendix A: Elastic Vibrations of Beams; Chapter 4. Scantling of Ship's Hulls by Rules; 4.1 General; 4.2 Basic Concepts of Stability and Strength of Ships; 4.3 Initial Scantling Criteria for Longitudinal Strength; 4.4 Initial Scantling Criteria for Transverse Strength; 4.5 Initial Scantling Criteria for Local Strength; 4.6 References Chapter 5. Ship Hull Scantling Design by Analysis5.1 General; 5.2 Design Loads; 5.3 Strength Analysis using Finite Element Methods; 5.4 Fatigue Damage Evaluation; 5.5 References; Chapter 6. Offshore

Structural Analysis; 6.1 Introduction; 6.2 Project Planning; 6.3 Use of Finite Element Analysis; 6.4 Design Loads and Load Application; 6.5 Structural Modeling; 6.6 References; Chapter 7. Limit-State Design of Offshore Structures; 7.1 Limit State Design; 7.2 Ultimate Limit State Design; 7.3 Fatigue Limit State Design; 7.4 References; Part II: Ultimate Strength

Chapter 8. Buckling/Collapse of Columns and Beam-Columns8.1 Buckling Behavior and Ultimate Strength of Columns; 8.2 Buckling Behavior and Ultimate Strength of Beam-Columns; 8.3 Plastic Design of Beam-Columns; 8.4 Examples; 8.5 References; Chapter 9. Buckling and Local Buckling of Tubular Members; 9.1 Introduction; 9.2 Experiments; 9.3 Theory of Analysis; 9.4 Calculation Results; 9.5 Conclusions; 9.6 Example; 9.7 References; Chapter 10. Ultimate Strength of Plates and Stiffened Plates; 10.1 Introduction; 10.2 Combined Loads; 10.3 Buckling Strength of Plates

10.4 Ultimate Strength of Un-Stiffened Plates10.5 Ultimate Strength of Stiffened Panels; 10.6 Gross Buckling of Stiffened Panels (Overall Grillage Buckling); 10.7 References; Chapter 11. Ultimate Strength of Cylindrical Shells; 11.1 Introduction; 11.2 Elastic Buckling of Unstiffened Cylindrical Shells; 11.3 Buckling of Ring Stiffened Shells; 11.4 Buckling of Stringer and Ring Stiffened Shells; 11.5 References; Chapter 12. A Theory of Nonlinear Finite Element Analysis; 12.1 General; 12.2 Elastic Beam-Column With Large Displacements; 12.3 The Plastic Node Method; 12.4 Transformation Matrix

12.5 Appendix A: Stress-Based Plasticity Constitutive Equations

---

## Sommario/riassunto

This new reference describes the applications of modern structural engineering to marine structures. It will provide an invaluable resource to practicing marine and offshore engineers working in oil and gas as well as those studying marine structural design. The coverage of fatigue and fracture criteria forms a basis for limit-state design and re-assessment of existing structures and assists with determining material and inspection requirements. Describing applications of risk assessment to marine and offshore industries, this is a practical and useful book to help engineers conduct structural

---

2. Record Nr.	UNISALENTO991003340259707536
Autore	Born, Max
Titolo	Atomic physics / by Max Born ; from the original translation of John Dougall ; revised by the author in collaboration with R. J. Blin-Stoyle
Titolo uniforme	Moderne Physik. English 344219
Edizione	[7th ed.]
Descrizione fisica	xiv, 459 p. : 11 p. of plates, ill. 23 cm
Classificazione	AMS 81V45 AMS 81V35
Altri autori (Persone)	Blin-Stoyle, Roger John Dougall, John
Disciplina	539.7
Soggetti	Nuclear physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"The German edition...which appeared in 1933 under the title Moderne Physik, had its origin in a course of lectures...at the Technical College, Berlin-Charlottenburg Includes index
Nota di bibliografia	Bibliography: p. 443-446