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Nota di contenuto	Structural Reliability; Contents; Foreword; Preface; Chapter 1. Introduction; 1.1 An old history; 1.2 A modern attitude; 1.3 Reliability: a definition; 1.4 Which risk is acceptable?; 1.5 Today; 1.6 A little glossary; 1.7 The structure of this book; Chapter 2. Preliminary Approach to Reliability in Mechanics; 2.1 General points; 2.1.1 Reliability methods in mechanics; 2.1.2 A new attitude: overcoming obstacles; 2.2 Theoretical reliability in mechanics; 2.2.1 Reliability approach in mechanics; 2.2.2 Variables-component-system chain; 2.2.3 Theoretical reliability; 2.3 Stochastic modeling 2.3.1 Modeling based on available information2.3.2 Construction of a stochastic model; 2.3.3 Random variable or stochastic process; 2.4 Mechanical modeling; 2.4.1 Representation model of physics; 2.4.2 Balance between resources and needs; 2.5 Mechanical-reliability coupling; 2.5.1 Reliability sensitivity analysis; 2.5.2 Reliability analysis; 2.5.3 Complexity of mechanical-reliability coupling; 2.5.4 Actors in mechanical-reliability coupling; 2.6 Fields of application; 2.6.1 Reliability of offshore marine structures; 2.6.2 Soil mechanics; 2.6.3

Regulation; 2.6.4 Stochastic dynamics
 2.6.5 Integrity of structures 2.6.6 Stability; 2.7 Conclusion; Chapter 3.
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 Variables; 3.1.2 Design model; 3.1.3 Illustration; 3.2 Definitions and
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 3.3.2 Joint probability density; 3.3.3 Moments and correlation; 3.3.4
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 4.4.1 Principle

Sommario/riassunto

This book describes the main methods used in the reliability of
 structures and their use in the design process leading to reliable
 products. This title provides the understanding needed to implement
 the variety of new reliability software programs.