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Nota di contenuto	Guideline for Improving Plant Reliability through Data Collection and Analysis; Contents; Preface; Acknowledgments; 1 Introduction; 1.1. Background; 1.2. Taxonomy; 1.3. Data Aggregation/Sharing; 2 Definitions; 2.1. Introduction; 2.2. Discussion of Key Reliability Terms; 2.3. Glossary of Terms; 3 Methods of Analysis; 3.1. Introduction; 3.2. Basic Concepts of Data Analysis; 3.2.1. Failure Data; 3.2.2. Need for Correct Failure Modes; 3.2.3. Types of Systems-Repairable or Nonrepairable; 3.2.4. Reliability versus Availability; 3.2.5. Types of Data-Censoring; 3.2.6. Definitions 3.2.7. Dealing with Censored Data 3.2.8. Common Cause Failures; 3.2.9. Predictive versus Descriptive Methods; 3.3. Data Manipulation Examples; 3.3.1. Methods of Analysis; 3.4. Cyclical Service; 3.5. Batch Service; 3.6. Standby Service; 3.7. Failures Following a Repair; 3.8. Selecting an Operating Mode; 3.9. Analysis Based on Statistical Inferences; 3.9.1. Modeling Reliability Parameters for the Population; 3.9.2. The Weibull Distribution; 3.9.3. Graphical Method for Estimating

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I.1.8. Certification of a Subscriber

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## Sommario/riassunto

Written by reliability data experts, the book gives plant managers and supervisors the guidance they need to collect, and use with confidence, process equipment reliability data for risk-based decisions. Focusing on the process industries, it provides the protocol and techniques to collect and organize high quality plant performance, maintenance, and repair data from your own operations, and includes methods and examples on how the data can be converted into useful information for engineering, maintenance, safety, and loss prevention. This data can be used for: facility reliability/availabilit

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