

1. Record Nr.	UNINA9910808873803321
Autore	Zio Enrico
Titolo	An introduction to the basics of reliability and risk analysis // Enrico Zio
Pubbl/distr/stampa	Singapore, : World Scientific, c2007
ISBN	1-62198-031-6 1-281-12174-6 9786611121747 981-270-741-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (237 p.)
Collana	Series on quality, reliability & engineering statistics ; ; v. 13
Disciplina	620/.00452
Soggetti	Reliability (Engineering) Risk assessment
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.
Nota di contenuto	Contents; 1 . Introduction; 2 . Basic concepts of safety and risk analysis; 3 . Methods for hazard identification; 4 . Basics of probability theory for applications to reliability and risk analysis; 5 . Reliability of simple systems; 6 . Availability and maintainability; 7 . Fault tree analysis; 8 . Event tree analysis; 9 . Estimation of reliability parameters from experimental data; Appendix A: Table of Standard Normal Cumulative Distribution; Appendix B: Table of Chi-square Cumulative Distribution
Sommario/riassunto	The necessity of expertise for tackling the complicated and multidisciplinary issues of safety and risk has slowly permeated into all engineering applications so that risk analysis and management has gained a relevant role, both as a tool in support of plant design and as an indispensable means for emergency planning in accidental situations. This entails the acquisition of appropriate reliability modeling and risk analysis tools to complement the basic and specific engineering knowledge for the technological area of application. Aimed at providing an organic view of the subject, this book pro