Record Nr. UNISALENTO991003238019707536 Autore Macdonald, Dave, 1942-Titolo Practical industrial safety, risk assessment and shutdown systems for industry [e-book] / Dave Macdonald Amsterdam: Oxford: Newnes, 2004 Pubbl/distr/stampa 9780750658041 **ISBN** 0750658045 Descrizione fisica xviii, 354 p.: ill.; 27 cm Collana Practical professional books from Elsevier Disciplina 629.895 Soggetti Automatic control Industrial safety Risk assessment Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Note generali Includes index Includes bibliographical references (p. 27-29) and index Nota di bibliografia Nota di contenuto Introduction to Safety Instrumentation; Hazards and Risk Reduction; Hazard Studies; Safety Requirements Specifications; Technology Choices and the Conceptual Design Stage; Basic Reliability Analysis Applied to Safety Systems; Safety in Field Instruments and Devices; Engineering the Safety System : Hardware; Engineering: the Application Software; Overall Planning: IEC Phases 6,7 and 8; Installation and Commissioning (IEC Phase 12); Validation, Operations and Management of Change; Justification for a Safety Instrumented System; Practicals 1-8; Practical Answers; Glossary Sommario/riassunto This is a book for engineers that covers the hardware and software aspects of high-reliability safety systems, safety instrumentation and shutdown systems as well as risk assessment techniques and the wider spectrum of industrial safety. Rather than another book on the discipline of safety engineering, this is a thoroughly practical guide to the procedures and technology of safety in control and plant engineering. This highly practical book focuses on efficiently implementing and assessing hazard studies, designing and applying international safety practices and techniques, and ensuring high

reliability in the safety and emergency shutdown of systems in your

plant. This book will provide the reader with the most up-to-date standards for and information on each stage of the safety life cycle from the initial evaluation of hazards through to the detailed engineering and maintenance of safety instrumented systems. It will help them develop the ability to plan hazard and risk assessment studies, then design and implement and operate the safety systems and maintain and evaluate them to ensure high reliability. Finally it will give the reader the knowledge to help prevent the massive devastation and destruction that can be caused by today's highly technical computer controlled industrial environments. * Helps readers develop the ability to plan hazard and risk assessment studies, then design, implement and operate the safety systems and maintain and evaluate them to ensure high reliability * Gives the reader the knowledge to help prevent the massive devastation that can be caused by today's highly technical computer controlled industrial environments * Rather than another book on the discipline of safety engineering, this is a thoroughly practical guide to the procedures and technology of safety in control and plant engineering