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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Contents -- Systems Failure Analysis Introduction -- Downsizing the Hidden Factory -- Systems and Systems Failure Analysis Concepts -- Identifying Potential Failure Causes -- Fault-Tree Analysis -- Fault-Tree Analysis Special Topics -- Fault-Tree Analysis Quantification -- Failure Mode Assessment and Assignment -- Pedigree Analysis -- Change Analysis -- Analytical Equipment -- Mechanical and Electronic Failures -- Leaks -- Contaminants -- Design Analysis -- Statistics and Probability -- Design of Experiments -- Corrective Action -- Post-Failure-Analysis Activities -- Component Failure Causes and Suggested Analysis Methods -- Index.
Sommario/riassunto	Systems Failure Analysis gives your product teams the tools and concepts to get at the root causes of defects and failures in complex manufacturing and engineered systems.. The techniques described can be applied to assessing and preventing a "show stopper" failure that brings an organization to a halt as well as to finding and correcting root causes of unacceptable variations in a system. The methods described in Systems Failure Analysis can help you identify and evaluate all potential failure causes and avoid just jumping to conclusions about the perceived obvious ones. Quantifying the "hidden factory" of process variations also can help prevent failures and improve productivity and yields by reducing scrap or rework. The techniques in Systems Failure

Analysis focus on a team approach, and it is written as a practical reference for all members of your product or failure analysis team including: Engineering Quality assurance Manufacturing technicians Purchasing personnel Field service personnel Operators or other users In both development and failure analysis, identifying all potential causes of failure can save valuable time. Several proven methods are discussed, including: Brainstorming Ishikawa diagrams The 5-whys approach Mind mapping Fault tree analysis In particular, fault tree analysis is covered in detail as the preferred in many cases for its systematic coverage. The book then describes several technologies to objectively evaluate potential causes. Written for development and manufacturing engineers, inspection specialists, quality assurance personnel, purchasing personnel, and field service engineers, Systems Failure Analysis will help any organization that produces or procures complex systems in the aerospace, defense, automotive, biomedical, electronic, energy, and process industries. The book is based on a course for organizations producing or procuring complex, high-technology systems.
