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Nota di contenuto	Inherently Safer Chemical Processes: A Life Cycle Approach; Contents; 1. Introduction; 1.1 .Objectives, Intended Audience and Scope of This Book; 1.1.1. Objectives; 1.1.2. Intended Audience; 1.1.3. Scope; 1.2 Integration of this Guidance with Other CCPS Guidance; 1.3 Organization of the Book; 1.4 History of Inherent Safety; 2. The Concept of Inherent Safety; 2.1 Process Risk Management and Inherent Safety; 2.2 Inherent Safety Defined; 2.3 Inherently Safer Approaches; 2.4 Layers of Protection; 2.5 Levels of Inherent Safety; 2.6 Worked Example; 2.7 Summary 3. The Role of Inherently Safer Concepts in Process Risk Management3. 1 Integrating Inherent Safety in Process Risk Management Systems; 3.2 Timing for Consideration of Inherently Safer Options; 3.3 Inherent Safety Constraints; 3.4 Resolving Inherent Safety Issues; 3.5 Inherently Safer Strategies; 3.6 Summary; 4. Inherently Safer Strategies; 4.1 Definition of Inherently Safer Strategies; 4.2 Minimize; 4.2.1 Reactors; 4.2.2 Continuous Stirred Reactors; 4.2.3 Tubular Reactors; 4.2.4 Loop Reactors; 4.2.5 Reactive Distillation; 4.2.6 Storage of Hazardous

Materials; 4.2.7 Process Piping
 4.2.8 Process Equipment
 4.3 Substitute; 4.3.1. Reaction Chemistry;
 4.3.2 Solvents; 4.3.3 Refrigerants and Firefighting Agents; 4.4
 Moderate; 4.4.1 Dilution; 4.4.2 Refrigeration; 4.4.3 Less Severe Process
 Conditions; 4.4.4 Secondary Containment-Dikes and Containment
 Buildings; 4.5 Simplify; 4.5.1 Inherently Robust Process Equipment;
 4.5.2 Vacuum; 4.5.3 Runaway Reactions; 4.5.4 Containment Vessels;
 4.5.5 Heat Transfer; 4.5.6 Liquid Transfer; 4.5.7 Reactor Geometry;
 4.5.8 Distributed Control Systems; 4.5.9 Separation of Process Steps;
 4.5.10 Limitation of Available Energy; 4.6 Other Strategies
 4.6.1 Limitation of Effects
 4.6.2 Global Hazards; 4.6.3 Avoid Incorrect
 Assembly; 4.6.4 Making Status Clear; 4.7 Summary; 5. Life Cycle
 Stages; 5.1 General Principles Across All Life Cycle Stages; 5.2
 Research; 5.2.1 Inherently Safer Synthesis; 5.2.2 Types of Hazards
 Associated With Research; 5.2.3 Research Stage-Hazards Identification
 Methods; 5.3 Process Development; 5.3.1 Unit Operations - General;
 5.3.2 Unit Operations - Specific; 5.4 Detailed Design and Construction;
 5.4.1 Process Design Basis; 5.4.2 Equipment; 5.4.3 Process Controls;
 5.4.4 Supporting Facilities; 5.4.5 Batch Processes
 5.4.6 Other Design Considerations
 5.5 Operations, Maintenance, and
 Modifications; 5.5.1 Preservation of Inherent Safety; 5.5.2 Inherent
 Safety - Continuous Improvement; 5.6 Decommissioning; 5.7
 Transportation; 5.7.1 Location Relative to Raw Materials; 5.7.2 Shipping
 Conditions; 5.7.3 Transportation Mode and Route Selection; 5.7.4
 Improved Transportation Containers; 5.7.5 Administrative Controls;
 5.7.6 Management of Transportation Containers On-site; 6. Human
 Factors; 6.1 Overview; 6.2 Operability and Personnel Safety; 6.3
 Maintainability; 6.4 Error Prevention; 6.4.1 Knowledge and
 Understanding
 6.4.2 Design of Equipment and Controls

Sommario/riassunto

Inherently Safer Chemical Processes presents a holistic approach to making the development, manufacture, and use of chemicals safer. It discusses strategies for substituting more benign chemicals at the development stage, minimizing risk in the transportation of chemicals, using safer processing methods at the manufacturing stage, and decommissioning a manufacturing plant. Since the publication of the original concept book in 1996, there have been many developments on the concept of inherent safety. This new edition provides the latest knowledge so that engineers can derive maximum bene
