Record Nr. UNISA996212583303316 Process control engineering / / edited by M. Polke with the **Titolo** collaboration of U. Epple and M. Heim and contributions by W. Ahrens [and twenty six others] Weinheim, [Germany]:,: VCH,, 1994 Pubbl/distr/stampa ©1994 **ISBN** 1-281-84289-3 9786611842895 3-527-61573-3 3-527-61572-5 Descrizione fisica 1 online resource (489 p.) Disciplina 660.2815 670.42 Soggetti Process control Systems engineering 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 and index. Nota di contenuto Process Control Engineering; Contents; 1. Introduction; 2. Information Structures in Process Control Engineering; 2.1. Principles; 2.2. Architectural Principles for Information Structuring; 2.3. Applications in Process Control Engineering; 3. Knowledge about the Process; 3.1. Principles; 3.2. Analysis Methods for Process Quantities; 3.3. Process Models; 3.4. Modeling; 3.5. Management and Utilization of Information; 4. From Process Knowledge to Process Control; 4.1. Principles; 4.2. Feedback Control; 4.3. Optimal Control; 4.4. Binary Control; 4.5. Operational Control of Process Plants 5. The Process Control System and its Elements: Process Sensor Systems5.1. Principles; 5.2. Process Sensor System Technology; 5.3. Sensor Systems for Special Applications; 5.4. The Market for Sensors and Sensor Systems; 5.5. Field Installation and Cable Routing; 6. The Process Control System and its Elements: Process Actuator Systems; 6.1. Principles: 6.2. Actuator Systems for Material and Energy Streams:

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Sommario/riassunto

This book surveys methods, problems, and tools used in process control engineering. Its scope has been purposely made broad in order to permit an overall view of this subject. This book is intended both for interested nonspecialists who wish to become acquainted with the discipline of process control engineering and for process control engineers, who should find it helpful in identifying individual tasks and organizing them into a coherent whole. A central concern of this treatment is to arrive at a consistent and comprehensive way of thinking about process control engineering an