Record Nr. UNINA9910830108903321 Multiproduct plants [[electronic resource] /] / edited by Joachim Rauch; **Titolo** translated by Karen du Plooy Pubbl/distr/stampa Weinheim;; [Cambridge],: Wiley-VCH, c2003 **ISBN** 1-280-52021-3 9786610520213 3-527-60506-1 3-527-60207-0 Descrizione fisica 1 online resource (246 p.) Altri autori (Persone) RauchJoachim Disciplina 660.2807 Soggetti Chemical plants 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. Multiproduct Plants; Contents; Preface; Editor and Authors; Part 1 Basic Nota di contenuto Concepts: 1 Definitions of Multiproduct Plants and Flexibility Demands: 1.1 Definitions and Concepts: 1.2 Flexibility Demands of Multiproduct Plants; 1.3 References; 2 Application Areas; 2.1 General; 2.2 Research and Development; 2.3 Production; 2.4 References; 3 Concepts; 3.1 The Discontinuously Operated Standard Multiproduct Plant; 3.1.1 General; 3.1.2 Structure of the Plant; 3.1.2.1 Basic Construction; 3.1.2.2 The Agitated Reactor Vessel as Central Apparatus 3.1.3 Application of Discontinuously Operated Multiproduct Plants3.2 Continuously Operated Standard Multiproduct Plants; 3.2.1 Plant Structure: 3.2.2 Technical Limitations: 3.2.3 Plant Types: 3.2.3.1 Continuously Operated Single-Line Multiproduct Plants for a Small Number of Very Similar Products (Type 1, Synthesis-Oriented); 3.2.3.2 Continuously Operated Single-Line Multiproduct Plants for a Single Product Class (Type 2, Product-Class-Oriented); 3.2.3.3 Continuously Operated Multiline Multiproduct Plants for More Than One Product Class (Type 3, Synthesis- and Product-Class-Oriented) 3.2.4 Examples of Processes in the Different Plant Types 3.2.5 Example

of a Process Modification; 3.2.6 Special Aspects of Process Engineering;

3.3 Modular Multiproduct Plants; 3.3.1 Definitions; 3.3.2 Plant Structure; 3.3.3 Application Areas and Limitations; 3.4 Multiproduct

Plants with Pipeline Manifolds; 3.4.1 Introduction; 3.4.2 Plant Structure; 3.4.3 Application Areas; 3.4.4 Variants of the Discontinuously Operated Standard Multiproduct Plant; 3.5 Pipeless Plants; 3.5.1 Introduction; 3.5.2 Plant Structure; 3.5.3 Application Areas; 3.6 Plants with Multipurpose Apparatus

3.6.1 Multipurpose Apparatus with Design Based On Shovel Driers3.6.2 Multipurpose Apparatus with Design Based On Equipment for Highly Viscous Products; 3.6.3 Multipurpose Apparatus with Design Based On Conic Mixers; 3.6.4 Multipurpose Apparatus with Design Based On Agitated Pressure Nutsch Filters or Nutsch-Filter Driers; 3.7 Peripheral Equipment of Multiproduct Plants; 3.7.1 General; 3.7.2 Peripheral Facilities for Individual Plants; 3.7.3 Peripheral Facilities for the Entire Operation; 3.7.4 Peripheral Facilities for Logistics; 3.7.5 Peripheral Facilities for Cleaning; 3.8 References

Part 2 Planning and Operating of Multiproduct Plants4 Machinery and Apparatus; 4.1 Introduction; 4.2 Basic Requirements and Constructive Solutions; 4.3 Cleaning in Place (CIP); 4.4 Established Types of Machinery and Apparatus for Multiproduct Plants; 4.4.1 General; 4.4.2 Examples of Established Types of Machinery and Apparatus; 4.4.3 Special Apparatus for Modular Multiproduct Plants; 4.5 Pumps; 4.6 References; 5 Pipelines and Connections Technology; 5.1 General; 5.2 Design of Pipelines and Hose Lines; 5.2.1 Pipelines; 5.2.2 Hose Lines; 5.3 Flanges, Couplings, and Seals; 5.4 Valves 5.5 Pigging Technology

Sommario/riassunto

In the chemical industry, just in time delivery and ever more efficient processes are prime requisites for competitiveness. High end products require a wide product diversity resulting in lower quantities of each single product. The answer to the problem are multiproduct plants designed to meet changing requirements. Already at design stage, different potential requirements are taken into consideration allowing technical equipment to be installed according to the desired product. Reconfiguration can be achieved quickly through exchange of readily available components without costly refitting o