Record Nr. UNINA9910823735803321 **Titolo** Chemical process equipment: selection and design / / James R. Couper ... [et al.] Pubbl/distr/stampa Amsterdam;; Boston,: Elsevier, c2005 **ISBN** 1-281-00964-4 9786611009649 0-08-047647-3 Edizione [2nd ed.] Descrizione fisica 1 online resource (833 p.) Altri autori (Persone) CouperJames R Disciplina 660/.283 Soggetti Chemical engineering - Equipment and supplies Chemical processes - Equipment and supplies Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover; Contents; Preface to the second edition; Preface to the first edition; Contributors; 0. RULES OF THUMB: SUMMARY; 1. INTRODUCTION; 1.1. PROCESS DESIGN; 1.2. EQUIPMENT; 1.3. CATEGORIES OF ENGINEERING PRACTICE; 1.4. SOURCES OF INFORMATION FOR PROCESS DESIGN; 1.5. CODES, STANDARDS, AND RECOMMENDED PRACTICES; 1.6. MATERIAL AND ENERGY BALANCES; 1.7. ECONOMIC BALANCE; 1.8. DESIGN SAFETY FACTORS; 1.9. SAFETY OF PLANT AND ENVIRONMENT: 1.10. STEAM AND POWER SUPPLY: 1.11. DESIGN BASIS; 1.12. LABORATORY AND PILOT PLANT WORK; 2.

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Comprehensive and practical guide to the selection and design of a wide range of chemical process equipment. Emphasis is placed on real-world process design and performance of equipment. Provides examples of successful applications, with numerous drawings, graphs, and tables to show the functioning and performance of the equipment. Equipment rating forms and manufacturers' questionnaires are collected to illustrate the data essential to process design. Includes a chapter on equipment cost and addresses economic concerns.\* Practical guide to the selection and design of a wide ra