1. Record Nr. UNINA9910457675803321 Autore Sinnott R. K. Titolo Chemical engineering design [[electronic resource] /] / R.K. Sinnott Pubbl/distr/stampa Oxford, : Elsevier Butterworth-Heinemann, 2005 **ISBN** 1-280-94863-9 9786610948635 0-08-049255-X Edizione [4th ed.] Descrizione fisica 1 online resource (1065 p.) Coulson & Richardson's chemical engineering;; 6 Collana Altri autori (Persone) CoulsonJ. M (John Metcalfe) RichardsonJ. F (John Francis) 660 Disciplina Soggetti Chemical engineering Engineering Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Previous ed.: 1999. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover; Copyright; Table of Contents; Preface to Fourth Edition; Preface to Third Edition; Preface to Second Edition; Preface to First Edition; Series Editor's Preface; Acknowledgement; 1 Introduction to Design: 1.1. INTRODUCTION: 1.2. NATURE OF DESIGN: 1.2.1. The design objective (the need); 1.2.2. Data collection; 1.2.3. Generation of possible design solutions; 1.2.4. Selection; 1.3. THE ANATOMY OF A CHEMICAL MANUFACTURING PROCESS: 1.3.1. Continuous and batch processes: 1.4. THE ORGANISATION OF A CHEMICAL ENGINEERING PROJECT; 1.5. PROJECT DOCUMENTATION; 1.6. CODES AND **STANDARDS** 1.7. FACTORS OF SAFETY (DESIGN FACTORS)1.8. SYSTEMS OF UNITS: 1.9. DEGREES OF FREEDOM AND DESIGN VARIABLES. THE MATHEMATICAL REPRESENTATION OF THE DESIGN PROBLEM; 1.9.1. Information flow and design variables: 1.9.2. Selection of design variables; 1.9.3. Information flow and the structure of design problems: 1.10. OPTIMISATION; 1.10.1. General procedure; 1.10.2. Simple models; Example 1.1; 1.10.3. Multiple variable problems; 1.10.4. Linear

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## Sommario/riassunto

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