

1. Record Nr.	UNINA9910784526203321
Autore	Biermann Christopher J
Titolo	Handbook of pulping and papermaking [[electronic resource] /] Christopher J. Biermann
Pubbl/distr/stampa	San Diego, : Academic Press, c1996
ISBN	1-281-11886-9 9786611118860 0-08-053368-X
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (783 p.)
Disciplina	676
Soggetti	Pulping Papermaking
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 indexes.
Nota di contenuto	Front Cover; Handbook of Pulping and Papermaking; Copyright Page; Contents; Preface To The Second Edition; Preface To The First Edition; Acknowledgments; Abbreviations; List of Color Plates; Chapter 1. Introduction and the Literature; 1.1 Introduction to Papermaking; 1.2 Introduction to the Literature; 1.3 Abstract Indices; 1.4 Technical and Trade Journals; 1.5 Reference Books; 1.6 Textbooks; 1.7 Chemistry Reference Books; 1.8 Other References; 1.9 Annotated Bibliography; Exercises; Chapter 2. Wood and Fiber Fundamentals; 2.1 Wood and Bark; 2.2 Wood Chips and Sawdust 2.3 Wood Chip Preparation and Handling at the Pulp Mill 2.4 Solid Wood Measurement; 2.5 Wood Chip Measurement; 2.6 Wood Chemistry; 2.7 Wood and Fiber Physics; 2.8 Properties of Selected Wood Species; 2.9 Nonwood and Recycled Fiber Considerations; 2.10 Annotated Bibliography; Exercises; Chapter 3. Pulping Fundamentals; 3.1 Introduction to Pulping; 3.2 Mechanical Pulping; 3.3 Chemi-mechanical Pulping; 3.4 Related Pulping Methods; 3.5 Semi-Chemical Pulping; 3.6 General Chemical Pulping; 3.7 Soda Pulping; 3.8 Kraft Pulping; 3.9 Sulfite Pulping; 3.10 Other Pulping Methods; 3.11 Market Pulp 3.12 Annotated Bibliography Exercises; Chapter 4. Kraft Spent Liquor Recovery; 4.1 Chemical Recovery; 4.2 Pulp Washing; 4.3 Liquor Evaporation; 4.4 Recovery Boiler; 4.5 Cooking Liquor Regeneration-The

Causticizing Process; 4.6 Annotated Bibliography; Exercises; Chapter 5. Pulp Bleaching; 5.1 Introduction; 5.2 Bleaching Mechanical Pulps; 5.3 Measurement of Lignin Content; 5.4 Bleaching Chemical Pulps; 5.5 Annotated Bibliography; Exercises; Chapter 6. Refining and Pulp Characterization; 6.1 Introduction to Refining; 6.2 Refining; 6.3 Pulp Characterization; 6.4 Pulp Properties versus Performance 6.5 Annotated Bibliography Exercises; Chapter 7. Paper and Its Properties; 7.1 Introduction; 7.2 General Grades of Paper; 7.3 Specific Types of Paper; 7.4 Basic Paper Properties; 7.5 Physical Properties of Paper; 7.6 Mechanical Properties of Paper; 7.7 Chemical Analysis of Paper; 7.8 Basic Optical Tests of Paper; 7.9 Sheet Splitting of Paper; 7.10 Annotated Bibliography; Exercises; Chapter 8. Stock Preparation and Additives for Papermaking; 8.1 Introduction; 8.2 Fiber Preparation and Approach; 8.3 Raw Materials; 8.4 Functional Additives; 8.5 Control Additives; 8.6 Wet End Chemistry 8.7 Annotated Bibliography Exercises; Chapter 9. Paper Manufacture; 9.1 Introduction; 9.2 The Paper Machine; 9.3 The Headbox; 9.4 The Fourdrinier Wet End; 9.5 Twin Wire Formers; 9.6 The Cylinder Machine; 9.7 The Press Section; 9.8 The Dryer Section; 9.9 Post Drying Operations; 9.10 Paper Machine Broke System; 9.11 Conversion; 9.12 Coating; 9.13 Annotated Bibliography; Exercises; Chapter 10. Fiber from Recycled Paper; 10.1 Introduction; 10.2 Recycled Fiber Preparation; 10.3 Recycled Fiber Recovery; 10.4 Annotated Bibliography; Exercises; Chapter 11. Environmental Impact; 11.1 Introduction 11.2 Water Pollution

Sommario/riassunto

In its Second Edition, Handbook of Pulping and Papermaking is a comprehensive reference for industry and academia. The book offers a concise yet thorough introduction to the process of papermaking from the production of wood chips to the final testing and use of the paper product. The author has updated the extensive bibliography, providing the reader with easy access to the pulp and paper literature. The book emphasizes principles and concepts behind papermaking, detailing both the physical and chemical processes. Key Features* A comprehensive introduction to the physical a
