

1. Record Nr.	UNINA9910824071103321
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Titolo	Environmentally friendly production of pulp and paper // Pratima Bajpai
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2010]
ISBN	1-118-07432-7 1-283-07217-3 9786613072177 0-470-64964-X 0-470-64965-8
Descrizione fisica	1 online resource (375 pages)
Disciplina	676/.042
Soggetti	Pulping - Environmental aspects Papermaking - Environmental aspects Sustainable 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	Environmentally Friendly Production of Pulp and Paper; Contents; Preface; 1. Introduction; 1.1 Superior Operating Procedures; 1.2 Process Modifications; 1.3 Process Redesign; 1.4 Recycling; References; 2. Overview of Pulp and Papermaking Processes; 2.1 Raw Material Preparation and Handling; 2.2 Pulp Manufacturing; 2.3 Pulp Washing and Screening; 2.4 Pulp Bleaching; 2.5 Stock Preparation; 2.6 Papermaking; 2.7 Chemical Recovery; References; 3. Environmental Issues of the Pulp and Paper Industry; 3.1 Effluent Toxicity; 3.2 Air Emissions; References; 4. Emissions from Pulp and Papermaking 4.1 Kraft Pulping 4.2 Sulfite Pulping; 4.3 Mechanical Pulping; 4.4 Recycled Fiber Processing; 4.5 Papermaking; References; 5. Cleaner Production Measures in Pulp and Paper Processing; 5.1 Kraft Pulping; 5.2 Sulfite Pulping; 5.3 Mechanical and Chemimechanical Pulping; 5.4 Recycled Paper Processing; 5.5 Papermaking; References; 6. Recent Developments in Cleaner Production; 6.1 Use of Cooking Catalyst; 6.2 Organo Solvent Pulping; 6.3 Black Liquor Gasification; 6.4 Removal of Chelating Agents; 6.5 Energy-Efficient Thermomechanical Pulping

Processes

6.6 Recovery of Boiler Ash and Carbon Dioxide Gas to Produce Recycled Mineral Fillers 6.7 Impulse Technology for Dewatering of Paper; 6.8 Condebelt Process; 6.9 Internal Heat Pumps; 6.10 Total Site Integration Tools; 6.11 Wastewater Treatment for Water Recovery and Reuse; 6.12 Biotechnologies for Cleaner Paper Production; References; Glossary and Abbreviations; Subject Index

Sommario/riassunto

Implementing Cleaner Production in the pulp and paper industry The large-and still growing-pulp and paper industry is a capital- and resource-intensive industry that contributes to many environmental problems, including global warming, human toxicity, ecotoxicity, photochemical oxidation, acidification, nitrification, and solid wastes. This important reference for professionals in the pulp and paper industry details how to improve manufacturing processes that not only cut down on the emission of pollutants but also increase productivity and decrease costs. Environmentally Friendl
