

1. Record Nr.	UNINA9910855364803321
Autore	Manfredi Vail
Titolo	Eucalyptus Kraft Pulp Refining / / by Vail Manfredi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031472855
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (0 pages)
Disciplina	676.2
Soggetti	Natural products Building materials Forests and forestry Industrial engineering Production engineering Natural Products Wood, fabric, and textiles Forestry Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1 Introduction -- Chapter 2 The Beautiful History of Paper -- Chapter 3 The Wood Pulping Processes -- Chapter 4 The Modern Paper -- Chapter 5 Wood as Raw Material Source -- Chapter 6 The Fibers Cell Wall -- Chapter 7 The Pulps (Fibers) Characteristics -- Chapter 8 Refining the Chemical Pulps -- Chapter 9 The Refining Models, or 'Theories' -- Chapter 10 Refining operating Variables -- Chapter 11 Refining Process Control -- Chapter 12 Refining Strategies -- Chapter 13 Refining Process Optimization. .
Sommario/riassunto	This book presents a brief history of papermaking followed by comments regarding wood as a source of fibers, including its chemical and anatomical characteristics and the influence of these aspects on the quality of the pulp produced. In addition, the author describes the effects of the pulping process, mainly a chemical process, on pulp quality and how these wood characteristics influence both the refining process as the quality of the final paper. The book further provides a

broad discussion, based on experimental results, on the contribution of the main operating refining variables and the main strategies that can be used industrially to optimize the operating results. From this evaluation, the parameter that complements the specific edge load theory is identified. This parameter is related to the retention time of the fiber flocs inside the refiner. Presents a broad evaluation of the operational refining variables and their effects on refining operational results; Discusses opportunities for optimizing refining results, including a new strategy for refining disks design; Identifies and discusses the missing parameter in the SEL - Specific Edge Load Refining Theory. . .
