

Book Reviews

Primer of Pulping and Papermaking,

K.L. Patrick (Ed.); Miller Freeman Books, USA, 1999, 106 pages, ISBN 0-87930-577-0, US\$ 25.00

As we begin the twenty-first century, paper and board production exceeds some 287 million metric tons annually. This is truly a global industry with profound economic, social and environmental implications. Its structure use of raw materials and efficiency of manufacture are therefore of great interest and importance.

The Primer of Pulping and Papermaking, technologies and production practices. This book provides an in-depth contemporary guide to the technologies employed at the various stages of pulping and papermaking.

The initial chapter gives a multinational overview of the industry, outlining the changing environmental and economic factors in raw material production and paper manufacture. Raw material preparation focuses mainly on wood and the mechanical processes used for chipping.

An extensive chapter on chemical pulping describes and discusses the merits of the Sulphate process versus the Kraft process, and cold soda process. The modifications to the processes are detailed, and the effect on the efficiency with respect to energy, biomass, reagents and the environment. Mechanical pulping and its variations are examined in the same concise manner providing facts and figures on yields, costs and energy requirements.

The papermaking and coating technologies are described and illustrated with the machinery used within the industry. The re-cycling and de-inking of paper waste are also examined.

The book is an excellent primer for the Pulping and Papermaking industries clearly written with an extensive glossary that would aid the novice in familiarisation. This book also provides considerable information for any professional within or allied to the industry.

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Pulp & Paper Dictionary

3rd ed.; J.R. Lavigne (Ed.); Miller Freeman Books, USA, 1999, 452 pages, ISBN 0-87930-578-7, US\$ 69.00

The pulp and paper industry is a huge multinational industry, continually expanding in volume and product range. The Pulp & Paper Dictionary is therefore an important contribution to technical communication within the industry and with allied industries such as surface coatings and adhesives.

The Pulp & Paper Dictionary 3rd edition is an essential acquisition for all professionals allied to the paper making process. The introduction begins with the historical paper making process. Then moves on to describe the current methods of physical and chemical pulping. This places the main body of the dictionary in context. Typical industrial processes are particularly well described and represented with diagrams. At the end of each process, information is given about the type of paper products that may be produced, also their quality and durability. A brief resume describing how the process has changed and improved and the advantages of certain processes by way of their yield and capital cost. The papermaking process is described in the same excellent accessible manner including additional information on pigments, fillers and sizing.

The main body of the text contains 6750 terms from all facets of pulp and paper manufacturing. Other terms associated with the industry from process control; wood processing; research & development and recycling are included. The descriptions are concise and well cross-referenced, where appropriate this includes: synonyms in common use; descriptions of tests used in the manufacturing process; references to applicable industry standards and laws and characterisations of paper grades with respect to size, weight, finish and colour.

The book is an expanded up-to-date edition, clearly written and well cross-referenced. The Pulp & Paper Dictionary 3rd edition is an essential acquisition for those employed directly within the industry. It would also be a valuable reference work for those associated with the industry in any capacity.

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