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Handbook on Pulp and Paper Processing

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Description

The pulp and paper industry comprises companies that use wood as raw material and produce pulp, paper, board and other cellulose based products. The pulp and paper sector presents one of the energy intensive and highly polluting sectors within the Indian economy and is therefore of particular interest in the context of both local and global environmental discussions. Increases in productivity through the adoption of more efficient and cleaner technologies in the manufacturing sector will be most effective in merging economic, environmental, and social development objectives. Papers are mostly used product starting from writing to packaging. It plays an important role in commercial field as well as in academic field also. Without paper nothing is expressible and reliable, so paper is part and parcel of our life. Adequate amount of raw materials for processing paper and pulp is available. Bamboo is the main raw material for Indian paper industry. New bamboo areas even at high cost are being trapped. Some of the examples of high yield pulping process are mechanical process, semi chemical process, alkaline chemical process, sulfite process, etc. Physical strength properties of paper depend on the quality of raw material, its pulping, bleaching and subsequent paper making processes. Technology has made it easy to process these raw materials in an economic and lucrative way to meet the global demand. Raw materials like, straw, bagasse, wood, bamboo is almost available in most of the places. So it is great opportunity for the entrepreneurs to start up such kind of industry. Paper Industry has tremendously increased in India in the last 20 to 30 yrs. The Paper industry is a priority sector for foreign collaboration and foreign equity participation up to 100% receives automatic approval by Reserve Bank of India. Several fiscal incentives have also been provided to the paper industry, particularly to those mills which are based on non conventional raw material.
Some of the fundamentals of the book are bleaching of bamboo cold, high yield semi

chemical pulping of mixture of bamboo and mixed hardwoods, sulphate semi chemical process, kraft green liquor semi chemical process, neutral sulphite semi chemical process, thermo mechanical pulps for newsprint, zeta potential concept in paper sizing, sodium carbonate in alkali extraction during bleaching bamboo , maintenance engineering in pulp and paper industry, design and application of refiners in stock preparation, paper machine effluent etc.
This book explains about the various raw material, their processing and utilizations and also the possible waste treatment of such paper and pulp making industry. To draw attention for manufacturing quality product with all possible latest technologies is the main purpose of this book. The book is very resourceful for new entrepreneurs, technocrats, existing units and research scholars.

Content

Chemical Modification for Property Improvement
Conclusions
47. AN APPROACH TO â€˜INPLANT COLOUR REDUCTIONâ€™ OF BLEACH PLANT EFFLUENT USING CALCIUM HYPOCHLORITE
Experimental
Discussion
48. DESILICATION OF SULPHATE WEAK BLACK LIQUOR BY THE ADDITION OF LIME
Experimental
Procedure of Desilication
Results & Discussion
49. TREATMENT OF PULP & PAPER MILL WASTES
Pulp and Paper Industry Water Consumption
Nature and Effect of Impurities
Primary Treatment
Sedimentation Units
Sludge Handling & Disposal
Secondary Treatment
50. DECOLOURIZATION OF WASTE WATER FROM BLEACHED-KRAFT PULP & PAPER MILL USING ALUM AND CLAY
Materials and Methods
Results and Discussion
Sludge Blanket
Effluent Quality
Colour Removal
Removal of Suspended Solids
COD Reduction
Conclusion
Â¬51. REMOVAL OF SOLUBLE SILICA FROM SULPHATE GREEN LIQUOR
Experimental
Carbonation
Green Liquor Analysis
Results & Discussion
52. TRENDS IN ASH CONTENT OF STRAW PULPS-AN EXPLANATION
Experimental

Rice Straw
Writing and Prints Paper
Grease Proof Paper
Wrapping Paper
Straw Board
Fibre Boards
Wheat Straw
Writing & Printing Paper
Greaseproof Paper
Straw Board
Jute Sticks
Writing and Printing Paper
Wrapping Paper Pulp Yield and Sheet Characteristics
Straw Board
Newsprint Grade Refiner Groundwood Pulp
Constitution of Hemicellulose
Greaseproof Paper, Strength Properties of Standard Sheet
Building Board
Bagasse
Writing and Printing Paper
Wrapping Papers
Rayon Grade Pulps
Greaseproof paper
Straw Board
Fiber Board
Newsprint
Cotton Stem
Writing and Printing Paper
Miscellaneous Raw Materials
Arecanut Husk
Ground Nut Shells
Tea Stem
Caster Stems (Ricinus Communis, linn)
Sun Flower Stalk
Arhar Sticks (Cajanus SP) and Jawar Stalk (Sorghum SP)
Sugar Cane Leaves
Paddy Husk
57. PROVISION OF CAPTIVE POWER GENERATION IN A 30 TPD AGRO-BASED PAPER PLANT AS A MEANS OF IMPROVING CAPACITY UTILIZATION

Capacity Utilization
Power Availability
Captive Power Plant
Recommended Scheme
Features of the Scheme
Fixed Costs
Variable Costs
Average Cost of Power Generation
Economics and Discussion
Conclusion
58. ENERGY CONSERVATION IN PULP AND PAPER INDUSTRYâ€”SOME THOUGHTS
Paper Industry
Deliberations
Total Energy Concept
In-Plant Power Generation
Energy Distribution and Utilization
Overdesign and Capacity Utilization of the Equipment
Energy Aduit
Short Term-Long Term Action Programme
Short Term Schemes
Long Term Schemes
Generation
Short Term
Long Term
Transmission
Short Term
Long Term
Utilization
Short Term
Long Term
Waste Streams
Energy Conservation Approaches
Factor Affecting Energy Efficiency
Research and Development
National Energy Programme
Summary and Conclusions

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