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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

1. BLEACHING OF BAMBOO COLD

SODA PULPS

Results and Discussions

Constant Conditions

Pretreatment with Acid

Pretreatment with Alkali

Bleaching Conditions in Different Stages

Effect of Peroxide in Alkali Pretreatment

Pretreatment with Dye

Bleaching Conditions in Different Stages

Conclusions

Experimental

Raw Materials

Bleaching

2. HIGH YIELD SEMI-CHEMICAL PULPING OF

MIXTURE OF BAMBOO AND

MIXED HARDWOODS

Raw Material

Experimental and Results

Sulphate Semi-Chemical Process

Kraft Green Liquor-Semi-Chemical Process

Neutral Sulphite Semi-Chemical Process

Discussion

Sulphate Semi-Chemical Process

Green Liquor Semi-Chemical Process

Neutral Sulphite Semi-Chemical Process

Conclusion

3. DEVELOPMENT IN HIGH YIELD PULPING PROCESS

Mechanical Process

Semichemical Process

Chemical Process

Alkaline Chemical Process

Sulfite process

Organic Catalyst to High Yield Pulping

AQ Pulping Technology

Polysulfide-AQ Process

Alkaline Sulfite-AQ Pulping

Experimental

4. THERMO-MECHANICAL PULPS FOR NEWSPRINT

MANUFACTURE FROM TROPICAL PINES

Raw Materials

Experimental

Preparation of Thermo-Mechanical Pulps

Results and Discussions

5. A STUDY ON REPLACEMENT OF SODIUM

SULPHATE BY AQ-LARGE SCALE TRIAL

Anthraquinone an Aid to Pulping

Laboratory Scale Investigations at Central Research Laboratory, Dalmianagar

Plant Trial with AQ

Evaluation of Mill Pulp

Discussion and Results

Conclusions

6. ZETA POTENTIAL CONCEPT IN PAPER SIZING

Electro Kinetic (Zeta) Potential-A Concept

The Theory of Electrical Double Layer

Sternâ€™s Modified Double Layer

The Meaning and Limitations in the Application of

Electro Kinetic Theory

to the Paper Sizing

Behaviour of Alum in Water

Electro Kinetic Properties of Alum-rosin

Size Precipitate and the Sized Fibre

Conclusion

Nomenclature

Greeks

7. ECONOMICS OF BAMBOO AND HARDWOOD PULPING

BY ANTHRAQUINONE CATALYSED-KRAFT-PROCESS

Experimental Design & Observations

Results & Discussions

Conclusion

8. EFFECT OF BLEACHED PULP VISCOSITY ON STRENGTH

PROPERTIES OF BAMBOO SULFATE PULP

Experimental

Pulping

Bleaching

Physical Strength Properties

Chemical Analysis

Observations and Discussions

Conclusion

9. ALKALI/OXYGEN DELIGNIFICATION AND

BLEACHING OF SODA BAMBOO PULP

Experimental

Discussions

Conclusions

10. ALKALI/OXYGEN DELIGNIFICATION AND BLEACHING

OF SODA BAMBOO PULP, BAMBOO + MIXED HARD

WOOD PULP (70 : 30) AND MIXED HARDWOOD PULP

Experimental and Results

Discussions

Conclusion

11. SODIUM CARBONATE IN ALKALI EXTRACTION DURING

BLEACHING BAMBOO (*D. STRICTUS*) PULP

Experimental

Study on Sequentially Chlorinated (H/C) Pulp

Study on Chlorinated Pulp

Results and Discussion

Conclusions

12. EFFECT OF HEMICELLULOSES ON

UNBLEACHED SOFTWOOD KRAFT PULP

Materials and Methods

Enzyme Treatments

Bleaching Experiments

Chemical Composition and Kappa Number Analyses

Microscopic Analysis

Numerical Measurement of Colour

Results and Discussion

Chemical Changes After Enzyme Treatment

Bleaching Experiments

Graff \sim Stain

Numerical Measurement of Colour

Accessibility Changes and Simons \sim Stain

Deuterium Oxide Exchange

Simons \sim Stain

Conclusions

13. THERMODYNAMIC FUNCTIONS OF THE

REACTION BETWEEN LIGNIN AND

HYDROGEN PEROXIDE DURING BLEACHING

Experimental

Isolation of Thiolignin

Preparation of Hydrogen Peroxide Solution

Reaction of Thiolignin with Hydrogen Peroxide

Results and Discussion

Analysis of Kinetic Data

Order of the Reaction and Variation of Rate

Constant with Reaction Parameters

Validity of Arrhenius Equation (Reaction Rates and

Temperature Changes)

Estimation of various Thermodynamic Functions

Conclusions

14. SEQUENTIAL BLEACHING

Experimental Procedure

Discussions of the Results

Bleach Consumption

Physical and Chemical Properties

Pollution Load of the Filtrate

Conclusion

15. MANUFACTURE OF CORRUGATING MEDIUM PAPER

UTILIZING 100% BAGASSE FURNISH

Process Suggested for Making

Corrugating Medium from 100% Bagasse

Fibre Preparation

Depithing at Paper Mills

Digestion Cycle

Stock Preparation

16. EFFECTIVE UTILIZATION OF CHEMICALS IN

PULP AND PAPER MILLS

Digester House

Chemical Recovery Section

Bleach Plant

Chemical and Stock Preparation

Effluents

17. EFFECTIVE USE AND RECOVERY OF

CHEMICALS IN COLD SODA PULPING

Experimental

Chemical Treatment of *E. Tereticornis*

Eta Reed Sulphate Pulping

Evaporation and Burning Properties of Kraft and

Cold Soda Spent liquors

Results and Discussions

Chemical Consumption

Pulp Properties

Composition of Liquors

Pollution Loads

Properties of Spent Liquors

Material Balances

Conclusions

18. EFFECTIVE USE AND RECOVERY OF CHEMICALS IN

COLD SODA PULPING WITH PARTIALLY CLOSED SYSTEM

Chemical Treatment of *E. Tereticornis*

Results and Discussions

Conclusions

19. MAINTENANCE ENGINEERING IN PULP

AND PAPER INDUSTRY

Inspection

Lubrication

Servicing

Maintenance Problems

20. LIMITATION TO SATISFACTORY OPERATION OF

WET END OF PAPER MACHINE

Basis Weight Profile

Head Box Pulsation

Drainage Formation and Sheet Structure

The Head Box

Rectifier Roll Head Boxes

Micro Turbulence Head Boxes

Web Formers

Twin Wire Forming

Schmidt Classification

Norman Classification

High Consistency Forming

Ancillary Equipments

Wet Web Strength

Limitations of Water Removal on Pressing

Conclusion

21. DESIGN AND APPLICATION OF REFINERS

IN STOCK PREPARATION

Conical Refiners

Shallow Angle Refiner

Steep Angle Refiners

Double Disc Refiners

Safety Devices

Influence of Machine Variables on Refining

Batch Refining

Machine Refiners

22. WET FELT DESIGNING TECHNIQUES

Pressing

Case Study

Recommendations

23. MODERNIZATION AND OPTIMUM UTILIZATION OF

EVAPORATORS FOR HARDWOOD BLACK LIQUORS-MILL

EXPERIENCE

Hardwood Black Liquors

Recovery Boilers and Required Liquor

Solids

Original Evaporator Units

Installation of a Pump in Between First

Pass and Second Pass of Concentration Effects of
Both Units

Conversion of Concentration Effect of

First (OLD) Unit to a Finisher

Introduction of a New Finisher Effect

Utilization of Vent Vapour from Finisher

Changing the Liquor Entry from Tangential to Radial and
Modification of Flash Chamber

Utilization of Vapour from Improvised Finisher of

Old Street

Conclusions

24. PAPER MACHINE EFFLUENT

Experimental

Discussions

Mode of Treatment for Paper Machine Effluent

Results

Conclusion

25. CONICAL REFINERS AND WIDE-ANGLE REFINERS IN

CONTINUOUS AND BATCH REFINING SYSTEMS FOR

BAMBOO AND HARDWOOD FURNISH

Introduction

Types of Refining Systems in the Mill

Conical and Wide Angle Refiners Strength, Development and Power Consumption

26. USE OF "NO PICK" ROLL IN PAPER MACHINE PRESS

SECTION BASED ON SHORT-FIBRED TROPICAL

HARDWOODS AND AGRICULTURAL RESIDUES

Theoretical Considerations

The Problem

Press Section Before Modification

Press Section After Modification

Discussion

Conclusions

27. CONSUMPTION OF FURNACE OIL IN

RECOVERY BOILERS

Storage

Viscosity

Velocity

Turbidity & Causticity

Silica

Inverse Solubility

Organic Content and Calorific Value

28. NECESSITY TO RENOVATE AND

MODERNIZE PAPER MACHINE

Fourdrinier Part

Press Part

Dryer Section

Calender Stacks

Pope Reel

Conclusion

29. WET END OPERATION OF A PAPER MACHINE

Approach Flow

Head Box

The Slice

Approach System, Head Box and Slice at W.C.P.M.

Sheet Formation and Drainage on the Fourdrinier

Shake

Suction Boxes

Dandy Roll

The Couch

Conclusion

30. CLEANING SYSTEM-SHOWER FOR PAPER MACHINE

Mechanical Cleaning

Classification of Water Shower

Wire Cleaning Shower

Knock off Shower

Trim Knock-off Shower

Couch Roll Cleaning Shower

Return Roll Cleaning Shower

Dandy Cleaning Shower

Felt Shower

Special Features of Water Showers

Material of Construction

Insert Type Nozzle

Protective Shell

Programming

Filters

31. SUITABILITY OF KENAF CTMP FOR LINERBOARD

Experimental

Raw Material

Particle Size

Reduction and Washing

Injection Process

Fiberizing and Refining

Kraft Pulping

Pulp Testing and Handsheet Formation and Testing

Results and Discussion

Andritz Sprout-Bauer Pulping Trials

FPL Pulping Trials

Kenaf and Loblolly Pine Pulp Blends

Conclusions

**32. NEWSPRINT FROM BLENDS OF KENAF CTMP
AND DEINKED RECYCLED NEWSPRINT**

Experimental

Results and Discussion

Conclusion

33. FEASIBILITY OF USING KENAF

CHEMITHERMOMECHANICAL PULP IN

PRINTING AND WRITING PAPER

Results and Discussion

Andritz Sprout-Bauer and FPL Pulping Trials

Postbrightened Kenaf Thermomechanical Pulp

Conclusions

Experimental

Raw Material, Particle Size Reduction, and Material Wash

Injection Process

Fiberizing and Refining Process

Testing of Pulp and Forming and Testing of Handsheets

Postbrightening of Kenaf TMP

Brightness Reversion

34. MESTA/KENAF AS RAW MATERIAL FOR KRAFT PULPING

Raw Material

Experimental

Chemical Constituents of Mesta

Pulping and Sheet Making

Discussion

Physical Characteristics

Chemical Constituents

Pulping Bleaching and Black Liquor Characteristics

Morphological Studies

Properties of Pulp Sheets

Fibre Classification Results

Conclusions

35. RESPONSE OF KENAF VARIETY, HC-583

TO DIFFERENT LEVELS OF NITROGEN

Materials and Methods

Results and Discussion

Plant Height

Basal Diameter of Stalk

Dry Yield of Stalk

Increase in Dry Yield of Stalk per Kg. N Applied

Conclusion

36. PREHYDROLYSED KRAFT COOKING OF JUTE STICK (EFFECT OF PREHYDROLYSIS CONDITION)

Experiments

Raw Materials

Digestion

Bleaching

Chlorine Water Bleaching

Analysis of the Pulp

Results & Discussion

A. Effect of Prehydrolysis Treatment on the Chemical Composition of Jute Stick

B. Loss of α -Cellulose and Lignin after Prehydrolysis and Kraft Cooking of Jute Stick

Results of Bleached Pulps

Conclusions

37. HIGH YIELD PULP FROM JUTE STICKS

38. GREASE PROOF PAPERS FROM SULPHITE JUTE STICK PULP

Raw Material

Pulping

Conclusion

39. CHEMICAL RECOVERY BOILERS FOR PULP MILLS

USING AGRICULTURAL RESIDUES AS RAW MATERIALS

Present and Future Prospects of Agricultural Residue Usage in India

Advantages of Use of Agricultural Residues

Special Shelter Type Design for Smaller Units

40. PROBLEMS IN BL EVAPORATION IN INDIAN RAW MATERIALS

Black Liquor Screening

Black Liquor Soap Problem

Carbonaceous Deposits

Scale Formation and its Removal

Results Achieved

Technical

Vapour Side Scale

Method of Feeding Black Liquor

Mixed Feed

Quintuple Effect & Forced Circulation Evaporator

Forced Circulation Evaporator

41. UTILIZATION OF UNCONVENTIONAL RAW MATERIALS

Advantages at a Glance for New Process

Cooking Liquor and Position of pH (Cold) during Pulping

Pulping Conditions and Delignification

Yield and General Properties of Pulp

Chemical Composition of Unbleached Pulp

Bleaching of Pulp

Paper Making Properties

Black Liquor and Recovery

Environmental Protection

Air Protection

Water Protection

Future Looks

Sulfite Shuttles into Space

42. UTILIZATION OF AGRICULTURAL RESIDUES USING MECHANO-CHEMICAL PULPING PROCESS

Pilot Plant Trials at Cellulose and Paper Branch,

Forest Research institute and colleges, Dehradun

Production of Rice Straw Pulp

Production of Wheat Straw Pulp

Production of Bagasse Pulp

Production of Paper

Mechano Chemical Pulping on Industrial Scale

Chemical Preparation

Cooking

Search for Alternative Raw Material

Variables in the Process

Modification of Bagasse Pulping by Partial Replacement of

Sodium Hydroxide by Sodium Carbonate

Addition of Sodium Sulphide in Cooking Liquor in

Bagasse Pulping

Conclusion

43. FEASIBILITY OF RECYCLED NEWSPAPERS HARDBOARDS

Experimental Design and Analysis

Materials

Processing

Acetylation

Adhesive Application

Board Manufacture

Testing

Results and Discussion

Static Bending Properties

Tensile Strength Properties

Water Absorption and Thickness Swell

Linear Expansion

Concluding Remarks

44. RESTORING BONDING STRENGTH TO RECYCLED FIBERS

Dry-Fiberized Fiber Characteristics

Mechanical Treatment

Fractionation

Strength Additives

Chemical Treatments

Blending with Virgin Fiber

Papermaking Variables

Wet-Formed Papers

Pressing

Air-Formed Papers

Conclusions

Methods and Materials

45. CHEMICAL MODIFICATION OF AGRO-FIBER FOR THERMOPLASTICIZATION

Experimental Procedures

Esterification Procedure

Thermal Analysis

Pressing of Esterified Fiber

Electron Microscopy of Pressed Fiber

Swelling of Pressed Fiber in Water

Results and Discussion

Esterification of Lignocellulosics

Thermal Analysis

Swelling of Pressed Fiber Pellets in Water

Conclusions

46. POTENTIALS FOR COMPOSITES FROM JUTE AND

ALLIED FIBERS

Plant Utilization for Composites

Potential Composites for Agro-Resources

Geotextiles

Filters

Sorbents

Structural Composites

Non-structural Composites

Molded Products

Packaging

Combinations with Other Resources

Chemical Modification for Property Improvement

Conclusions

47. AN APPROACH TO "INPLANT COLOUR REDUCTION"™ 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

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

53. MINI LIME TREATMENT OF DISSOLVING

PULP MILL COLOURED EFFLUENT

Sources of Colour in the Pulp Mill

Effluent

Present Work

Chlorination of Lime Treated Effluent

Calcining of Effluent Sludge

Causticization Using Lime Obtained from Effluent Sludge

Conclusion

54. COLOUR AND COD REDUCTION OF

BLEACH EFFLUENTS

Experimental

Results and Discussions

Colour of the Effluents

Phenolic Compounds

Rate of Colour Reduction

Chemical Oxygen Demand

Conclusions

55. EFFECT OF pH ON SULPHITE PULPING OF

HOLOCCELLULOSE OF E. TERETICORNIS

Experimental

Preparation of Cooking Liquor

Titration of Cooking Liquor

Sulphite Pulping

Neutral Sulphite Pulping

Preparation of Cooking Liquor

Chemical Analysis of Sulphite and

Neutral Sulphite Cooked Holocellulose

Results and Discussion Effect of pH and

Cooking Time on Yield

Effect of pH and Cooking Time on Klason Lignin

Effect of pH and Cooking Time on Alpha-Cellulose

Effect of pH and Cooking Time on

Pentosans

Effect of pH and Cooking Time on

Acidic Sugar

Effect of pH and Cooking Time

On Methoxyl and Acetyl Groups

56. UTILIZATION OF AGRICULTURAL RESIDUES

FOR PULP, PAPER AND BOARD

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
Areca nut 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 Audit
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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