Chemical Recovery in the Alkaline Pulping Processes
Revised Edition
Co-edited by Robert P. Green and Gerald Hough

1992. 208 pp., 8-1/2" x 11" soft cover
Item Number: 0102B046

Shipping Weight: 2 pounds
ISBN: 0898522552

Contents include: evaporation and concentration of black liquor; noncondensible gases; tall oil soap recovery; chemical recovery and process; chemistry; equipment; cooking liquor preparation; and, lime reburning: the rotary lime kiln.

Table of Contents

1 Introduction and Principals of Chemical Recovery
   Early development
   Overview of the chemical recovery system

2 Evaporation and Concentration of Black Liquor
   Introduction
   General properties of black liquor
   Heat transfer fundamentals
   Evaporation process equipment
   Multiple effect evaporator performance
   Interaction with pulp mill operations
   Instrumentation and process control
   Auxiliary operations in the evaporation plant

3 Noncondensible Gases
   Introduction
   Composition of NCG
   Properties of NCG
   Ignition sources
   Transporting NCG
   Scrubbing NCG
   Burning NCG
   Conclusion

4 Tall Oil Soap Recovery
   Introduction
   Soap removal methods
   Soap handling equipment
   Other factors in tall oil soap recovery
Book
"Chemical Recovery in the Alkaline Pulping Processes"
Revised Edition
Co-edited by Robert P. Green and Gerald Hough

5 Chemical Recovery Process Chemistry
Chemical recovery boilers
Overview of burning chemistry
Material and energy balances
Single particle burning
Char bed burning
Deposits and plugging
Air emissions

6 Chemical Recovery - Equipment
Introduction
Pressure parts
Air and liquor systems
Chemical recovery boiler auxiliary systems
Chemical recovery boiler selection criteria
Safety
Outlook

7 Cooking Liquor Preparation
Introduction
Process description
Recassicizing plant equipment
System design
Calculations for the recassicizing plant

8 Lime Reburning: The Rotary Lime Kiln
Introduction
Overview of lime reburning process
Loading and sizing considerations
Lime production process equipment
Auxiliary lime kiln operations
Instrumentation
Lime testing
Air emission control

Appendix
Index
Conversion Factors for SI Units
TAPPI Vision Statement
TAPPI PRESS Publications
Ordering and Shipping Information