

ASH TREATMENT SYSTEM



FEATURES

- Reduced chemical make-up costs
- Higher steam generation
- Extended Recovery Boiler operating cycle.
- Reduced soot blowing requirements.
- Reduced boiler water make-up
- Reduced maintenance required for water washing

BENEFITS

As mills decrease their effluents and emissions, they increase the contaminant chemicals in their chemical recovery systems. Not all these chemicals are required for the process and, in fact, some of these chemical components can cause problems in the chemical recovery cycle. Elements such as potassium and chloride can cause corrosion and increased saltcake deposition in the chemical recovery boiler. The challenge is to reduce these chemicals to manageable levels while maximizing recovery of valuable saltcake.

Lundberg has a proven Ash Treatment System for removing chloride and potassium from the chemical recovery loop. The system enhances the efficiency of the chemical recovery process while consuming a minimum amount of energy. The systems are selected and designed to meet each kraft mill's unique operating requirements and chemical characteristics.

CONTACT

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LUNDBERG'S AREAS OF EXPERTISE

BY-PRODUCT RECOVERY

- Tall Oil Soap
- Turpentine
- Acidulation
- Condensing
- Storage
- Storage

CHEMICAL HANDLING AND STORAGE

- Sulfur
- Caustic
- Acids
- Sulfur Dioxide
- Storage
- Vaporization

CHEMICAL GENERATION

- Sulfur Dioxide
- NSSC Pulping Liquor
- Sulfite/Bisulfite Pulping Liquor

EVAPORATORS FOR PULPING LIQUOR

- Multiple-Effect
- Strong Liquor Concentrators
- Pre-Evaporation
- Falling Film
- Vapor Recompression
- Crystallizer
- REX Technology

FOAM CONTROL

- Washer Filtrate
- Weak Liquor Storage
- Soap Skimming
- Foambreaker for Light Foam
- Soap Concentrator for Heavy Foam and Soap

HEAT RECOVERY AND UTILIZATION

- Blow Heat
- Pre-Evaporation
- Digester Heaters and Circulation
- Direct Contact Gas Coolers
- TMP
- Heavy Liquor Heaters
- Waste Heat Boilers
- Condensers
- Hot Water
- Systems
- Steam Generation

LUNDBERG CUSTOM EQUIPMENT

- Pressure/Vacuum Relief Valves (PVRV)
- Flame Arresters
- Jacketed Valves
- Lundberg Soap Separator/Soap Skimming Rake
- Heat Exchangers
- SO₂ Gas Fans
- Heavy Liquor Heaters

POLLUTION CONTROL

- Black Liquor Oxidation
- Condensate Stripping
- Noncondensable Gas
- Direct Fired Oxidizer (DFO)
- Plywood Industry
- Regenerative Thermal Oxidizer (RTO)
- Wet Electrostatic Precipitator (ESP)
- Weak
- Steam
- TRS
- Collection
- Strong
- Heat Exchangers
- Strong
- Air
- MeOH / BOD
- Incineration
- Dilute
- Steam Tunnel Condensate Evaporator
- Regenerative Catalytic Oxidizer (RCO)
- COD
- Scrubbers
- SOG

SPECIAL SYSTEMS

- White Liquor Oxidation
- Sulfur Addition – Kraft Liquor
- Reausticizing – White Liquor
- Ash Treatment Systems – Saltcake
- Air
- Molecular Oxygen

TURNKEY

- Engineering
- Complete EPC