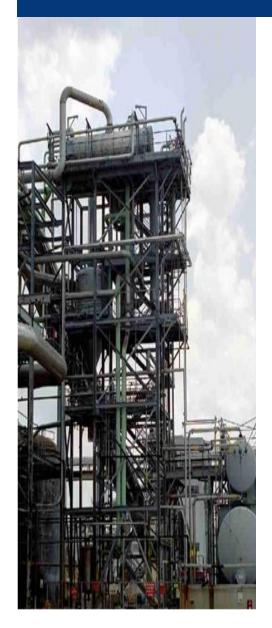
TURPENTINE RECOVERY



FEATURES

- Vertical condensers for falling film operation
- Condensing occurs inside the tubes for continuous self-cleaning and positive NCG removal
- NCG leaving the system is properly conditioned to minimize turpentine loss
- Decanter design minimizes turpentine content in the underflow
- All gas and condensate exposed parts utilize stainless steel construction
- Flooded decanter design

BENEFITS

Environmental regulations make it important for all mills to control volatile organic emissions. One of the largest and easiest to control volatile organic components in a softwood kraft mill is turpentine. Removal of the turpentine from the condensate also removes it as a toxin in the effluent treatment system. In addition, turpentine can be a valuable by-product for many facilities.

Lundberg has been the leading supplier of turpentine recovery systems for over 25 years. More than 100 systems have been installed with the scope of supply ranging from process engineering and major equipment to complete EPC projects.

CONTACT

Lundberg 13201 Bel-Red Road Bellevue, Washington 98005

425.283.5070

www.lundberg-us.com



LUNDBERG'S AREAS OF EXPERTISE

■ BY-PRC	DUCT RECOVERY					
	☐ Tall Oil Soap	Acidulation		Storage		
	☐ Turpentine	☐ Condensing		Storage		
☐ CHEMIC	CAL HANDLING AND STOR			3		
	Sulfur					
	☐ Caustic					
	Acids					
	☐ Sulfur Dioxide	☐ Storage		Vaporization		
□ CHEMIC	CAL GENERATION	- Clorage		Vaponzation		
— OF IEIVIIC	Sulfur Dioxide					
	☐ NSSC Pulping Liquor					
	Sulfite/Bisulfite Pulping Lice	u.or				
	RATORS FOR PULPING LI					
L EVAFOI		QUUK		Vanor Decemprossion		
	Multiple-Effect			Vapor Recompression		
	Strong Liquor Concentrators			☐ Crystallizer ☐ REX Technology		
	Pre-Evaporation			REX Technology		
	Falling Film					
☐ FOAM C						
	Washer Filtrate	Weak Liquor Storage	ч	Soap Skimming		
	Foambreaker for Light Foa					
_	☐ Soap Concentrator for Hea	•				
☐ HEAT R	ECOVERY AND UTILIZATI	ON	_			
	Blow Heat	Condensers	Ш	Systems		
	☐ Pre-Evaporation					
	Digester Heaters and Circ	ulation				
	■ Direct Contact Gas Cooler	'S				
	☐ TMP	Hot Water		Steam Generation		
	☐ Heavy Liquor Heaters					
	■ Waste Heat Boilers					
☐ LUNDBE	ERG CUSTOM EQUIPMEN	Т				
	☐ Pressure/Vacuum Relief V	alves (PVRV)				
	☐ Flame Arresters					
	☐ Jacketed Valves					
	☐ Lundberg Soap Separator	/Soap Skimming Rake				
	☐ Heat Exchangers	Heavy Liquor Heaters				
	☐ SO ₂ Gas Fans	, ,				
☐ POLLUT	TION CONTROL					
	☐ Black Liquor Oxidation	☐ Weak		Strong		
	☐ Condensate Stripping	☐ Steam		Air		
		TRS	_	MeOH / BOD	☐ COD	
	■ Noncondensible Gas	☐ Collection		Incineration	Scrubbers	
	- Noncendonoisie ede	Strong		Dilute	Sog	
	☐ Direct Fired Oxidizer (DFC			- 2ato	_ 000	
	☐ Plywood Industry	Heat Exchangers		Steam Tunnel Condensate I	-vaporator	
	Regenerative Thermal Oxi	ĕ		Regenerative Catalytic Oxid		
	☐ Wet Electrostatic Precipita	, ,		- regenerative catalytic cata	1201 (1100)	
	L SYSTEMS					
- OI LOIA	White Liquor Oxidation	☐ Air	П	Molecular Oxygen		
	Sulfur Addition – Kraft Liqu		_	Wolecular Oxygen		
	Recausticizing – White Liq					
	Ash Treatment Systems –					
☐ TURNKI		Januare				
- IONINI	_					
	☐ Engineering☐ Complete EPC					
	- Complete EPC					