



PRO.THERM

PROCESS AND THERMAL SYSTEMS

STEAM GENERATION, HEAT TRANSFER & ENERGY CONSERVATION SPECIALISTS

Continuous Blowdown Heat Recovery System Inquiry Sheet

CUSTOMER INPUTS				
Installed Steam Capacity	(LB/HR)			
Size of Each Boiler	(LB/HR)			
Maximum Steam Load	(LB/HR)			
Average Steam Load	(LB/HR)			
Operating Steam Pressure	(PSIG)			
Continuous Blowdown as % of Steam Generation	(%)			
Fuel Cost	(\$/MMBTU)			
Average Boiler Efficiency	(%)			
Operating Hours per Year	(HRS/YR)			
Maximum Cold Makeup Water Flow	(LB/HR)			
Average Cold Makeup Water Flow	(LB/HR)			
Average Cold Makeup Water Temp	(F)			
Deaerator Operating Pressure	(PSIG)			
Maximum Continuous Blowdown Flowrate	(LB/HR)			
Average Continuous Blowdown Flowrate	(LB/HR)			
Required Delivery Date				
PROTHERM DESIGN DATA				
Percent Flash Steam (From Table Below)	(%)			
Steam Recovery to Deaerator	(LB/HR)			
Heat Recovery to Deaerator	(BTU/HR)			
Hot Water Available for Heat Rec.	(LB/HR)			
Hot Water Heat Rec. to Cold Water	(BTU/HR)			
Total Heat Recovery, Water+Steam	(BTU/HR)			
Total Fuel BTU's Saved	(BTU/HR)			
Total \$ Saved per Hour	(\$/HR)			
Total \$ Saved per Year	(\$/YR)			
Cont BD Heat Recovery Equipment Cost	(\$)			
Cont BD Heat Recovery Installation Cost	(\$)			
Cont BD Heat Recovery Total Installed Cost	(\$)			
Simple Payback	(YEARS)			
CONTACT INFORMATION				
Name:		E-mail:		
Company:		Phone:		
Address:		Cell:		
		Fax:		
PERCENT FLASH FROM PRESSURE TO 5 PSIG		Pressure (PSIG)	% Flash	This analysis assumes a cold water makeup temperature of 55-70 F and a cold water flow rate of at least 5 times the continuous blowdown rate. This results in a blowdown temperature to sewer of approximately 105 F. For cases significantly different from these conditions, consult Protherm for analysis.
Pressure (PSIG)	% Flash	180	16.4%	
60	8.5%	200	17.3%	
80	10.3%	220	18.1%	
100	11.8%	240	18.9%	
120	13.1%	260	19.7%	
140	14.3%	280	20.4%	
160	15.4%	300	21.1%	

*Attach Additional Sheets if Needed.