

LAKEPORT BREWERY: WATERCARE SYSTEM ROI

FINANCIAL SAVINGS COMPARISON

Plant Specifics	USING
Evaporative condensers - 750 tons	350
Chiller size - 800 tons	350
Operating days per year	365
Power costs kw/hr	\$0.066
Water costs m3 (\$3.86/1,000 gals)	\$1.02
Chemical costs per month	\$420
Manpower cost per month	\$150
Cleaning costs per year	\$1,200
Repair costs per year	\$1,000

Standard Assumptions	
System efficiency	.70 kw/ton
Water required to operate	.0073M3/Hr/ton
Average operating load	70%

Costs to operate & maintain the system	PREVIOUS	NEXTEQ	SAVINGS	%	NON-ENERGY
Water	\$46,009	\$38,647	\$7,361	16%	\$7,361
Descaling/Cleaning/Maintenance	\$1,200	\$0	\$1,200	100%	\$1,200
Chemical treatment	\$5,040	\$0	\$5,040	100%	\$5,040
Operator interface	\$1,800	\$900	\$900	50%	\$13,601
Energy to run plant	\$119,383	\$101,476	\$17,907	15%	
Energy to run fans	\$8,357	\$7,103	\$1,254	15%	
Energy to run pumps	\$9,551	\$5,730	\$3,820	40%	
Totals	\$191,339	\$153,857	\$37,483	20%	

Return on Investment		
	ANNUALLY	MONTHLY
Savings with system installed	\$37,483	\$3,124
Installed cost of system	\$16,800	
ROI - Months	5.4	

NON-ENERGY SAVINGS OF \$13,601

ENERGY RELATED SAVINGS OF \$23,882

ENERGY SAVINGS ARE RESULT OF NON-CHEMICAL DESCALING OF CONDENSER TUBES

1st YEAR WATER SAVINGS of 16% and 24% IN YEAR 2

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