



# Maximicer

Put ice machine waste water to good use with the MaximICER heat exchanger. This patented system recycles the waste water from an ice machine to significantly lower the temperature of incoming fresh water. This provides energy savings for the ice machine by decreasing ice harvest cycle times, increasing production, and increasing ice availability in the bin.

The MaximICER works through a simple, hassle free process. Waste water from the ice machine enters the reservoir tank of the MaximICER. As fresh water enters the MaximICER, it flows through the reservoir tank allowing the cold from the waste water to transfer to the fresh water without the two sources mixing. This reduction of temperature significantly lowers the cooling load of the ice machine's refrigeration system, extending the life of the ice machine while improving its performance and production.

Connections		
Inlet Water Connections	ICE-1800	3/8" tube fitting
	ICE-S	
	ICE-H	1/2" tube fitting
Drain Water Connections	ICE-1800	3/4" PVC fitting
	ICE-H	
	ICE-S	
Specifications		
Maximum Operating Pressure		150 psi
Minimum Operating Pressure		30 psi

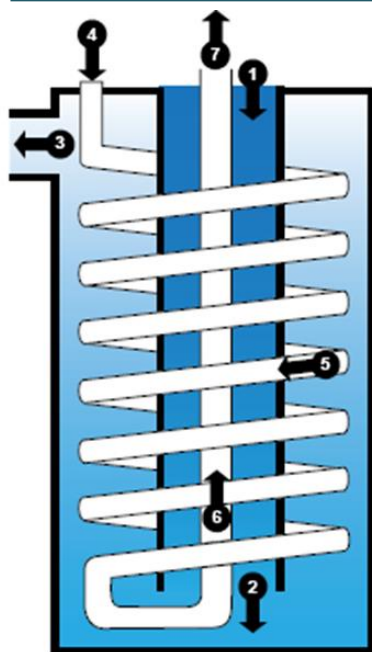
## Applications

**ICE-1800** Best for ice machines over 300 pounds per day.

**ICE-H** Hoshizaki North American cube ice machines only.

**ICE-S** All flake or shaved ice machines.

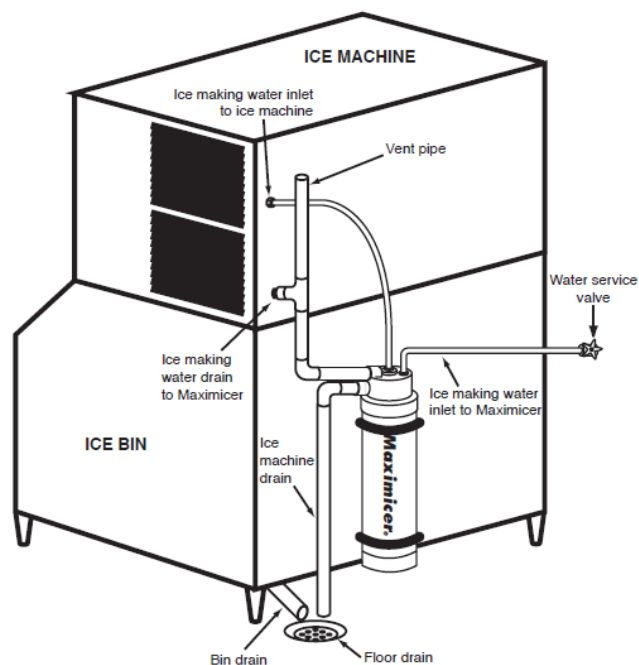
## How it Works



- 1 Cold waste water from the ice machine enters the counter flow tube of the Chill system.
- 2 Waste water enters the reservoir of the Chill system.
- 3 As more cold waste water enters the reservoir, it pushes the warm waste water to the drain.
- 4 Fresh water enters the stainless tubing of the Chill system.
- 5 As the water flows through the tubing, it's chilled by the surrounding waste water in the reservoir.
- 6 Fresh water flows up the counter flow tube, where it's chilled further by the coldest waste water entering the reservoir.
- 7 Chilled, fresh water enters the ice machine, where it's easily converted to ice.

## FEATURES AND BENEFITS:

- Lowers temperature of incoming fresh water.
- Produces more ice by shortening the ice making cycle times.
- Optimizes ice availability in the bin.
- Saves electricity by filling the bin faster and allowing the ice machine to shut off.
- Extends the life of the ice machine by lowering compressor head pressure.
- Reduces air conditioning costs (for air-cooled ice machines)
- Utilizes patented anti-mineralization technology.
- Models available for all types of ice machines.



# The Chill ICE Calculator

Ice Maker Capacity (lbs/day)	400	600	800	1000	1200	1800	2400
Actual Daily Production using mfg's 90-70 specs (lbs/day)**	330	460	700	820	1,075	1,350	1,875
Annual Ice Production (lbs)	120,450	167,900	255,500	299,300	392,375	492,750	634,375

## Increase ICE production by 30%!

Extra Ice Production (lbs/day)	99	138	210	246	322.5	405	562.5
Increased Ice Production (lbs/year)	36,135	50,370	76,650	89,790	117,713	147,825	205,313
Value of Additional Ice @ \$0.01 /lb	\$361.35	\$503.70	\$766.50	\$897.90	\$1,177.13	\$1,478.25	\$2,053.13

Current Daily Ice Production	<input type="text"/>	X	0.3	X	365	=	<input type="text"/>	LBS
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## Save on Electricity by 30%!

Typical kWh to produce 100lbs of Ice	8.5	8.3	6.1	5.9	5.7	6.1	5.6
kWh usage per day (daily production/100)	28.05	38.18	42.7	48.38	61.275	82.35	105
*kWh per 100	\$1,023.83	\$1,393.57	\$1,558.55	\$1,765.87	\$2,236.54	\$3,005.78	\$3,832.50
Annual Savings of 30%	\$307.15	\$418.07	\$467.57	\$529.76	\$670.96	\$901.73	\$1,149.75

Total Electric Bill	<input type="text"/>	X	$\left( \frac{\text{Daily ice prod.}}{100} \right)$	kWh	X	0.3	X	365	\$	<input type="text"/>
kWh Used	<input type="text"/>			per 100 lbs.						

= values to be inserted for your calculation

\* Check your electric bill - Divide total cost by kWh costs. Stated Rate does not include misc. costs and fees

\*\* Ice productions are general manufacturer's ranges. Check yours. Field conditions, Air & Water temp determine actual production increases. Check each manufacturers kWh specs for actual numbers - Divide 24 hour production by 100.

FEMP has [calculated<sup>1</sup>](#) that the required ENERGY STAR-qualified product is cost-effective if priced no more than \$1,515 above the less efficient alternative. The most efficient level saves the average user more money: \$1,620. The complete cost-effectiveness example and associated assumptions are provided in Table 1.

TABLE 1. LIFETIME SAVINGS FOR EFFICIENT AIR-COOLED ICE MACHINES			
	Best Available <sup>a</sup> Model	Required Model	Less Efficient Model
Annual Ice Production (lb)	100,000	100,000	100,000
Energy Consumption Rate (kWh/100 lb)	6.8	7.0	9.8
Annual Energy Use (kWh/year)	6,800	7,000	9,800
Annual Energy Cost	\$612	\$630	\$882
Lifetime Energy Cost	\$3,680	\$3,785	\$5,300
Lifetime Energy Cost Savings	\$1,620	\$1,515	=====
<sup>a</sup> More-efficient products may have been introduced to the market since this information was published.			

