# SYSTEMS IV the CHILLTECH SERIES

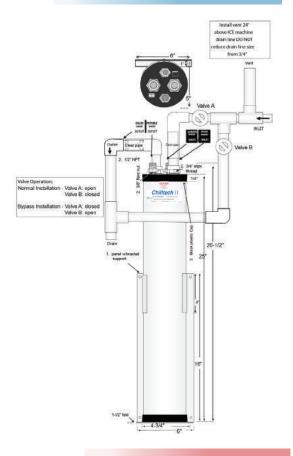
The **EXCLUSIVE** ChillTech Heat Exchange system lowers incoming water tempuratures to ice makers. This results in significantly reduced ice making cycle times, while lowering the kWh consumption by 20% or more and increasing ice making capacity by 20% or more!

#### **Bypass Installation Valve operation:**

Normal Installation - Valve A: open

Valve B: closed Bypass Installation - Valve A: closed

Valve B: open



**INSTALL VENT 24" ABOVE ICE MACHINE DRAIN LINE - DO NOT REDUCE DRAIN LINE SIZE FROM 3/4"** 



#### **Benefits**

- Increases ice production up to 20% or more!
- Lowers kWh consumption by up to 20%
- · Stand alone product
- · No electricity required
- · Easily connects to cold water feed line
- · 2 year parts warranty

	MODELS	
Model	Part #	Availability
ChillTech Slim	CTSlim	In Stock
ChillTech 1	CTI	In Stock
ChillTech 2	CTII	In Stock
ChillTech 3	CTIII	In Stock
Shipping Line Size		

#### Accessories:

ScaleGone



Inhibits limescale build-up by dispensing controlled amount of Citryne compound, ideal for heat exchange equipment. Consider ScaleGone 1 for all equipment that heats or cools water in areas that even has low levels of hardness.

## the CHILLTECH ADVANTAGE



### ChillTech Series by SYSTEMS

The Marketplace is full of poor performing commercial ice machines. Most buyers purchase what they need at the time, and nothing more. Most businesses grow, and of course, the ice machine does not grow with them. Purchasing ice is expensive to say the least.

Performance on all ice machines is measured by ambient air temperature and incoming water temperature. Years ago a restaurant owner told us he loved his ice machine except that it didn't make enough ice in the summer and made too much ice in the winter. We heard this over and over.

#### **Temperature Reduction**

We have found ChillTech not only reduces freeze times but also increased harvest weight which in turn reduces the amount of water purged at the cycles end. This means a highly reduced KWH consumption per 100 pounds of ice and a reduction in gallons of water used per pounds of ice harvested.

The exclusive ChillTech system will significantly reduce water temperature to incoming ice makers. This will reduce ice maker cycle times while increasing the ice making capacity of the ice maker by up to 30 percent.

Less kWh cost to the consumer results in a lower electric bill... This results in the ChillTech's ability to pay for itself in less than

Systems IV® has developed ChillTech to be a very simple add on to existing or new ice machines. Designed to sit on the floor or attached via a simple mounting bracket that can be attached to the wall or the side of the bin for additional support.



a year and in many cases in 6 months or

ChillTech catches that wonderful free energy and transfers the cold left over water to the incoming warmer water in it's system to bring the temperature down by up to 30%. The result is an ice maker that makes much more ice in the days and months and even vears to come on FREE energy.

The ChillTech attaches to the existing drain line, and is very fast to install. MAINTENANCE FREE.

#### **Significant Reduction in** Ice Maker cycle times.

#### · ChillTech Slim -

ALL Under Counter Makers (Modular up to 600 lbs/day)

#### ChillTech I -

Up to 1,200 lbs/day cuber (Hoshizaki^ models up to 600 Ibs/day)

#### ChillTech II -

Up to 2,400 lbs/day cuber (Hoshizaki^ models up to 1,800 lbs/day)

#### ChillTech III -

Over 2,400 lbs/day cuber (Hoshizaki^ models 2,000 to 2,400 lbs/day)

"Reduce energy consumption by 20% or more and increase ice production by up to 30% or more while extending the life of your ice makers."



The ChillTech "Family"







#### We developed the ChillTech to be simple...

Installation requires nothing more than taking the existing drain tubing from the ice maker itself and installing it to the inlet line and then installing the continuation drain line to the drain. The inlet potable water line to the ice maker needs to be routed to the marked flare fitting and the continuation to the ice maker from the flare fittings. It would be advisable, although not necessary to wrap the continuing water line to the ice maker with insulation. This would maintain the cold temperatures the ChillTech brings to the ice maker. An ice maker installed with a Systems IV® ChillTech will reduce freeze times.

Cooler temperatures mean less heat. Heat is wear. So, the customer can expect to find lower temperatures surrounding the ice maker - the condenser if air-cooled will discharge a slightly cooler air since it has less heat to remove due to lighter load or temperature of the water. All the components will last longer as they are now operating for a shorter period of time.

## How long will it take for the customer to know the ChillTech is working?

Almost immediately... The moment the customer has the **ChillTech** installed; it is working. There is no BREAK-IN period.

The essence of simplicity is generally what works! Today, **GREEN** is the issue... This product is about as green as it gets!

#### **Words from LARRY...**

"We have found that not only did we reduce freeze times, we increased harvest weight which in turn reduces the amount of water purged at the cycles end. This means a reduced KWH consumption per 100 pounds of ice, and a reduction in gallons of water used per pounds of ice harvested.

Your customers will benefit in many was by using **ChillTech**.

Remember, there are no electrical hook ups, the unit is self cleaning, reduces water consumption, increases capacity, has no moving parts, is maintenance free and is simple to install to new or, in particular, existing installations."



ChillTech I Horizontal Install



## the CHILLTECH ADVANTAGE 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 (Ibs)	120,450	167,900	255,500	299,300	392,375	492,750	634,375	

### **Increase ICE production by 30%!**

Extra Ice Production (lbs/day) Increased Ice Production (lbs/year)	99	138	210	246	322.5	405	562.5
	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** 

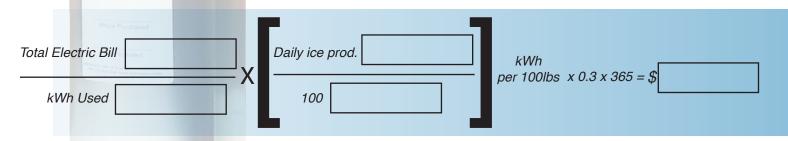


 $x 0.3 \times 365 =$ 

LBS

### Save on Electricity by 30%!

Typical kWh to produce 100lbs of Ice 5.6 8.5 8.3 6.1 5.9 5.7 6.1 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% \$418.07 \$307.15 \$467.57 \$529.76 \$670.96 \$901.73 \$1,149.75



= values to be inserted for your calculation

<sup>\*\*</sup> Ice productions are general manufacturers 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.



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

## the CHILLTECH ADVANTAGE

# Installation guide

Install vent 24" above ICE machine drain line DO NOT reduce drain line size

Installation requires nothing more than taking the existing drain tubing from the ice maker itself (wastewater) and installing it to the inlet of the 3/4" slip (marked inlet) and then installing the continuation drain marked 3/4" slip (outlet) to the drain. 1/2" male thread pipe for potable water.

The Inlet potable water line to the ice maker needs to be routed to the marked (inlet) NPT fitting and the continuation to the ice maker from the (outlet) 1/2" NPT fitting. It would be advisable, although not necessary, to wrap the continuing water line to the ice maker with insulation. This would maintain the cold temperatures the **ChiliTech** brings to the ice maker.

An ice maker installed with a **Systems IV® ChillTech** will reduce freeze times and increase ice making production. There are no electrical hook-ups. The unit is self cleaning, reduces water consumption, increases capacity, has no

moving parts, is maintenance free and is simple to install

to new or in particular to an existing installation.

We recommend using clear pipe sections before & after the ChillTech to ensure that water is not constantly running.

Typical ChillTech Ice Maker Installation

#### **Material List:**

10 ft. - 3/4" SCH 40 PVC pipe

3 ea. - 3/4" SCH 40 PVC slip tee

4ea. - 3/4" SCH 40 PVC slip 90° elbow

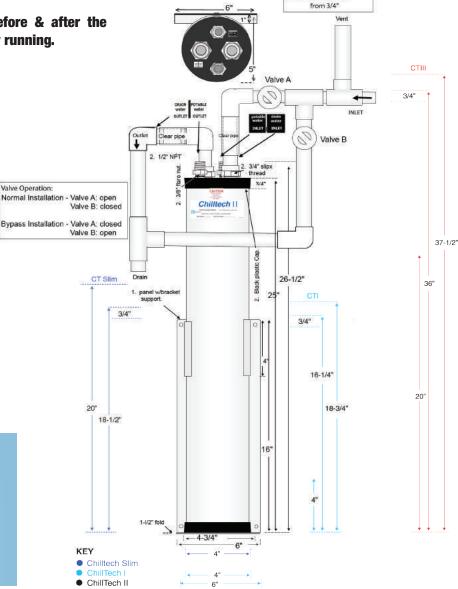
2 ea. - 1" x 8" clear pipe (included)

2 ea. - 3/4" PVC slip valve

#### **Note:**

All **ChillTech** models now come from the factory with 2 pieces of clear tubing and the mounting bracket.

Limited Warranty: Manufacturer warrants to the original purchaser that its product is free from defects in material and workmanship for a period of 2 years from the date of purchase, if the product is installed in accordance with the manufacturer's instructions. This warranty is limited to materials only. Installation and labor costs are excluded from the warranty. This warranty does not include damage caused by accident, abuse, misuse, neglect, freezing, alterations, misapplication or the use of anything other than potable water.





## **2020 CHILLTECH PRICING**

ChillTech III

MODEL	Description	LIST
<b>ChillTech Slim</b> <i>w/bracket</i>	Designed specifically for ALL Under Counter Ice Makers for horizontal install. (also up to 600lb/day Modular Ice Makers)	\$599.55
ChillTech I (CTI) w/bracket	Chill Tech II  Up to 1,200 lbs/day cuber  (all Hoshizaki^ models up to 600 lbs/day)	\$602.75
ChillTech II (CTII) w/bracket	Up to 2,400 lbs/day cuber (all Hoshizaki^ models up to 1,800 lbs/day)	\$1058.05
ChillTech III (CTIII) w/bracket	Over 2,400 lbs/day cuber (all Hoshizaki^ models 2,000 to 2,400 lbs/day)	\$1275.95

F.O.B. - West Bloomfield, NY or Chandler, AZ

#### **Add On Water Treatment Accessories:**

ScaleGone 1

Limescale inhibitor unit with Citryne™

\$270.35

**SHIPPING DIMENSIONS:** 

Dimensions and Weights are close approximations packages may be bigger or smaller once shipped

	MODEL	DIMENSIONS	WEIGHT
	ChillTech Slim	25x5x5	7 lbs.
	ChillTech I	22x6x6	10 lbs.
	ChillTech II	33x7x7	14 lbs.
	ChillTech III	43x7x7	17 lbs.
(1)	*ChillTech Bracket	16x9x9	2 lbs.

<sup>\*</sup> The ChillTech Bracket, if needed, is separate. It will be shipped in it's own individual box.



Limited Warranty: Manufacturer warrants to the original purchaser that it's product is free from defects in material and workmanship for a period of five years from the date of purchase, if the product is installed in accordance with the manufacturer's instructions. This warranty covers materials only. All labor costs are excluded from the warranty. This warranty excludes the costs of installation.

\*\*Please refer to the ChillTech Limited 5 Year Warranty certificate for all other terms and conditions



^ Hoshizaki is a Registered Trademark of Hoshizaki America, Inc.

# REGIONAL AVERAGES ICE MACHINE KWH EFFICIENCY



AVERAGE ICE MACHINE MODELS		400	600	800	1000	1200	1800	2400
ESTIMATED KWH PER 24 HOURS IE: 8.5 X 3.30 = 28.05		28.05	38.18	42.70	48.38	61.275	82.35	105
AVERAGE CYCLE DECREASE WITH CHILL TECH INSTALLED		20%	20%	20%	20%	20%	20%	20%
	AVG. KWH COST		Co	onnecticut, Maine, M	NEW ENGLAN assachusetts, New Han		, Vermont	
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1968	\$2,014.888	\$2,742.546	\$3,067.226	\$3,475.232	\$4,401.506	\$5,915.365	\$7,542.360
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$402.98	\$548.51	\$613.45	\$695.05	\$880.30	\$1183.07	\$1508.47
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.1530	\$1,566.452	\$2,132.162	\$2,384.582	\$2,701.781	\$3,421.902	\$4,598.836	\$5,863.725
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$313.29	\$426.43	\$476.92	\$540.36	\$684.38	\$919.77	\$1172.75
	AVG. KWH COST			Ne	MIDDLE ATLAN ew Jersey, New York, Pe			
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1543	\$1,579.762	\$2,150.279	\$2,404.843	\$2,724.737	\$3,450.977	\$4,637.911	\$5,913.548
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$315.952	\$430.056	\$480.969	\$544.947	\$690.195	\$927.582	\$1,182.710
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.1208	\$1,236.781	\$1,683.433	\$1,882.728	\$2,133.171	\$2,701.737	\$3,630.976	\$4,629.660
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$247.356	\$336.687	\$376.546	\$426.634	\$540.347	\$726.195	\$925.932
	AVG. KWH COST			Illinoi	EAST NORTH CEN s, Indiana, Michigan, Ol			
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1294	\$1,324.830	\$1,803.280	\$2,016.764	\$2,285.036	\$2,894.080	\$3,889.473	\$4,959.255
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$264.966	\$360.656	\$403.353	\$457.007	\$578.816	\$777.895	\$991.851
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.0973	\$996.182	\$1,355.944	\$1,516.469	\$1,718.192	\$2,176.151	\$2,924.619	\$3,729.023
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$199.236	\$271.189	\$303.294	\$343.638	\$435.230	\$584.924	\$745.805
	AVG. KWH COST				WEST NORTH CEI nnesota, Missouri, Nebr		akota	
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1116	\$1,142.589	\$1,555.224	\$1,739.342	\$1,970.711	\$2,495.976	\$3,354.445	\$4,277.070
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$228.518	\$311.045	\$347.868	\$394.142	\$499.195	\$670.889	\$855.414
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.0895	\$916.323	\$1,247.245	\$1,394.902	\$1,580.454	\$2,001.701	\$2,690.169	\$3,430.088
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$183.265	\$249.449	\$278.980	\$316.091	\$400.340	\$538.034	\$686.018
	AVG. KWH COST		SOUTH ATLANTIC  Deleware, D.C., Florida, Georgia, Maryland, N. Carolina, S. Carolina, Virginia, W. Virginia					
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1172	\$1,199.923	\$1,633.264	\$1,826.621	\$2,069.600	\$2,621.222	\$3,522.768	\$4,491.690
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$239.985	\$326.653	\$365.324	\$413.920	\$524.244	\$704.554	\$898.338
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.0926	\$948.062	\$1,290.446	\$1,443.217	\$1,635.196	\$2,071.034	\$2,783.348	\$3,548.895
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$189.612	\$258.089	\$288.643	\$327.039	\$414.207	\$556.670	\$709.779

L.A.S. Associates/FAIM Reps, LLC

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# REGIONAL AVERAGES ICE MACHINE KWH EFFICIENCY (CONT'D)



AVERAGE ICE MACHINE MODELS		400	600	800	1000	1200	1800	2400	
ATTIMOT IOT MACHINE MICHES	AVG. KWH COST	EAST SOUTH CENTRAL Alabama, Kentucky, Mississippi, Tennessee							
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1068	\$1,093.445	\$1,488.333	\$1,664.531	\$1,885.949	\$2,388.622	\$3,210.168	\$4,093.110	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$218.689	\$297.667	\$332.906	\$377.190	\$477.724	\$642.034	\$818.622	
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.1004	\$1,027.920	\$1,399.144	\$1,564.784	\$1,772.933	\$2,245.484	\$3,017.798	\$3,847.830	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$205.584	\$279.829	\$312.957	\$354.587	\$449.097	\$603.560	\$769.566	
	AVG. KWH COST			Arl	WEST SOUTH CE				
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1068	\$1,093.445	\$1,488.333	\$1,664.531	\$1,885.949	\$2,388.622	\$3,210.168	\$4,093.110	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$218.689	\$297.667	\$332.906	\$377.190	\$477.724	\$642.034	\$818.622	
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.0765	\$783.226	\$1,066.081	\$1,192.291	\$1,350.891	\$1,710.951	\$2,299.418	\$2,931.863	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$156.645	\$213.216	\$238.458	\$270.178	\$342.190	\$459.884	\$586.373	
	AVG. KWH COST			Arizona, Colorado, Id	MOUNTAIN daho, Montana, Nevada		yoming		
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1130	\$1,156.922	\$1,574.734	\$1,761.162	\$1,995.433	\$2,527.287	\$3,396.526	\$4,330.725	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$231.384	\$314.947	\$352.232	\$399.087	\$505.457	\$679.305	\$866.145	
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.0909	\$930.657	\$1,266.755	\$1,416.722	\$1,605.176	\$2,033.013	\$2,732.249	\$3,483.743	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$186.131	\$253.351	\$283.344	\$321.035	\$406.603	\$546.450	\$696.749	
	AVG. KWH COST		•	*	PACIFIC CONTIG California, Oregon, Wa				
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.1416	\$1,449.736	\$1,973.295	\$2,206.907	\$2,500.472	\$3,166.937	\$4,256.177	\$5,426.820	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$289.947	\$394.659	\$441.381	\$500.094	\$633.387	\$851.235	\$1,085.364	
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.1233	\$1,262.376	\$1,718.272	\$1,921.692	\$2,177.318	\$2,757.651	\$3,706.121	\$4,725.473	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$252.475	\$343.654	\$384.338	\$435.464	\$551.530	\$741.224	\$945.095	
	AVG. KWH COST	PACIFIC NON-CONTIGUOUS Alaska, Hawaii							
ESTIMATED ANNUAL USAGE [RESIDENTIAL]	\$0.2396	\$2,453.085	\$3,338.994	\$3,734.286	\$4,231.025	\$5,358.744	\$7,201.837	\$9,182.670	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [RESIDENTIAL]		\$490.617	\$667.799	\$746.857	\$846.205	\$1,071.749	\$1,440.367	\$1,836.534	
ESTIMATED ANNUAL USAGE [COMMERCIAL]	\$0.2089	\$2,138.770	\$2,911.168	\$3,255.811	\$3,688.902	\$4,672.127	\$6,279.064	\$8,006.093	
ESTIMATED ANNUAL KWH SAVINGS W/CHILLTECH [COMMERCIAL]		\$427.754	\$582.234	\$651.162	\$737.780	\$934.425	\$1,255.813	\$1,601.219	

Ice productions are "general manufacturers ranges". Please check the ranges for your specific machine. Field conditions, air and water determine actual production increases. Check each manufacturers KWH specs for actual numbers Divide 24 hour production by 100.

As incoming water temperature increases, efficiency and savings of the ChillTech is also increased thus providing the "return on investment" much faster.

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