

The gREENnMACHInE

**The First Thinking
Machine For Ice Rinks**

Call 1-(888)-543-0921

info@everything-ice.com



From years of ice rink knowledge combined with the latest in advanced refrigeration technologies, Everything Ice has launched our new chiller system built exclusively for the green world movement. Green means low cost of operations and low impact on the environment.

The **GreenMachine** will reduce both your costs and your carbon footprint.

Energy Efficiency: How It's Measured

Energy efficiency can be defined by the refrigeration system's ability to produce cooling effect (in tons) in relation to the electricity consumed (in kilowatts). Regardless of the application, the design goal is to produce the maximum amount of tons per kilowatt from the system. The KW/ton ratio produced by the **GreenMachine** is unbeatable by any other system.

High-Performance, Air-Cooled Condensers or Water-Cooled Condensers

Selection of an air-cooled system versus a water-cooled condenser system depends on many factors, such as location and seasonal length of operation. Your Everything Ice design consultant will help you with the selection process.

Air-cooled condensers feature very large coil areas for peak energy performance with multiple fans for reduced horsepower fan operation during low chilling loads or extremely cold outside weather.

Water-cooled condensers are sized for the lowest condensing temperature possible and feature dual speed, power-saving fan motors for reduced fan horsepower during normal ice-load conditions. The power-saving fan arrangement permits a 3 horsepower fan to do the same work as a 10 horsepower fan from other suppliers.



Manufacturing the
GreenMachine



Concept to Completion - Total Responsibility

Call 1-(888)-543-0921



Refrigeration Refrigeration Refrigeration Refrigeration Refrigeration

GREENMACHINE-717

Call 1-(888)-543-0921

info@everything-ice.com

See what our customers have to say....

"Thanks, John. You have been a huge help in the energy efficiency department. Because of the improvements in the rink refrigeration system and waste heat recovery, we will be saving almost 1 million kWh per year – for real. That is \$170,000/yr at the going rate of electricity. I have seen the spin that other contractors put on their energy hog systems, and your technology is worlds better.

Thanks for giving us refrigeration and waste heat recovery that has truly been engineered for efficiency!"

Anastasia (Sia) Karplus
Director of Research
Science Wares, Inc.
Falmouth Ice Arena Project

"We replaced our old chiller with an Everything Ice system. Not only did we get an energy rebate, we are saving 50% to 60% on our monthly utility costs and expect a 3 to 4 year payback."

Mike Martin
Wells Sports Complex
Escanaba, Michigan



Premium Energy Efficiency



Greater safety, performance, and reliability

If you prefer the operation of an ammonia chiller package, we have the perfect system for you. The **GreenMachine – 717** system. This system comes completely prefabricated on a skid, ready to operate.

We've designed the **GreenMachine – 717** with high quality, low RPM industrial compressors with water cooled heads, driven by high efficiency motors. Optional screw compressors are also available.

What makes our Ammonia System special...

- Manufactured to industrial standards: high quality, low RPM open drive compressors and components.
- Provides lowest KW/Ton of any system offered today for ice rinks.
- Designed for energy efficiency, from normal load conditions to the hottest weather.
- Includes the high performance features of our standard **GreenMachine** Chiller, including floating heat pressure, high efficiency/low pressure drop heat exchangers, and our Vari-Pump energy saving variable flow rate package.
- Dual circuit for stand-by capacity.
- Evaporative or water cooled condensers include dual speed energy saving fans and excessive surface area for low condensing temperature conditions.
- Microprocessor control interface allows for hands on control and interaction with the chiller.
- Manufactured for all voltages and rink floor types.

Concept to Completion - Total Responsibility

Call 1-(888)-543-0921

The gREENmACHInE

Premium Efficiency

Call 1-(888)-543-0921

info@everything-ice.com



Some of the Engineering Benefits of our Green Machine Chiller:

- Simple, easy-to-operate design, serviceable by most refrigeration technicians.
- Operates using up to 50% less energy than other ice systems.
- Multiple compressor arrangement provides added energy performance and 100% stand-by capacity design.
- Dual independent refrigerant circuits – like having two complete systems in one. Pump Variable Flow energy-savings system reduces circulation Pump HP.
- Floating head pressure design permits compressors to operate up to 55% more efficiently than other compressors.
- Heavy-duty industrial design available with reciprocating or screw-type compressors. High-efficiency heat exchangers with added heat transfer surface area and low working pressure drops, for maximum performance.
- Optional microprocessor with owner remote control and monitoring. Everything Ice remote service is available as well.
- Comes fully pre-manufactured in a compact, efficient, and easy-to-service skid design. All motor control centers are designed for easy serviceability with industrial contractors, control switches, indicator lights, and circuit breaker protection. No troublesome fuses are used in our Chiller or Pump unit.
- Manufactured for all voltages and rink floor fluids.

"We are extremely pleased with the equipment and workmanship of Everything Ice at both of our rinks. The performance of the chiller is top notch, as is its reliability"

George Haviland
Owner of Howell Ice World
and Middletown Ice World



The Cape Light Compact Energy Efficiency Program conducted a case study on the Falmouth Ice Arena, a twin rink project completed by Everything-Ice. Here's what they had to say:

"Cape Light Compact awarded \$243,410 in incentives to Falmouth Youth Hockey for above-code efficiency measures, lighting and controls and building performance.

Despite covering twice the area of the old arena (60,000 square feet vs. 30,000), the Falmouth Ice Arena's estimated annual electric savings is over 500,000 kWh. This arena is one of the most energy efficient ice arenas in the nation."

Concept to Completion - Total Responsibility

Call 1-(888)-543-0921



Refrigeration Refrigeration Refrigeration Refrigeration Refrigeration

PuMPSTAT

Call 1-(888)-543-0921

info@everything-ice.com

Low Energy, High Savings



PumpStat reduces secondary pump horsepower up to 95%. It is not uncommon for a rink utilizing *PumpStat* to operate with only a 2 HP or 5 HP pump. This creates significant savings versus competitive systems that use large 30 HP and 40 HP pumps.



Energy rebate qualified! *PumpStat* will qualify your facility for rebate incentives due to the increased efficiency versus competitive systems. Call us today to learn more!

PumpStat is a variable-flow rate pumping system that enables a rink to operate with as little as a 2 HP circulation pump, as opposed to the standard 20 HP to 30 HP pumps found in other systems. Twin rinks can operate continuously with no more than a 5 HP pump! It doesn't take an engineer to understand the energy saving benefits of *PumpStat*.

PumpStat incorporates a series of pumps in an automatically operated, factory built pump skid. This arrangement has proven more efficient and reliable than variable speed drives, which are costly and lose efficiency at low flow conditions. *PumpStat* provides enormous savings with a reduction in running horsepower by decreasing the fluid friction heat gain introduced into the fluid typical of large, unnecessary pumps.



PumpStat comes factory assembled, complete with its own industrial quality motor control center. All Everything Ice motors feature Hand-Off Auto switches for easy operation and are protected by industrial grade circuit breakers. No fuses are used, avoiding troublesome replacement problems during off hours.

Each pump is equipped with isolation and check valves, allowing for easy maintenance. Both the *PumpStat* skid and the **GreenMachine** high efficiency chiller offer complete redundancy for unparalleled reliability.



Concept to Completion - Total Responsibility

Call 1-(888)-543-0921

