

For more than a decade, XDX Innovative Refrigeration has been helping companies around the world meet environmental initiatives and save money by reducing energy usage by at least 15 percent in commercial refrigeration and air conditioning systems. XDX's patented technologies improve system performance, decrease defrost cycles, maintain consistent temperatures, reduce maintenance costs—and have a positive impact on the bottom line.

Changing the world of refrigeration

Believing that heat transfer is important—and that vapor has a beneficial role to play—XDX is changing the world of refrigeration with a valve that alters the flow of refrigerant to optimize efficiency throughout the entire evaporator coil. This altered flow—called liquid vapor annular flow—results in superior heat transfer that increases the capacity of existing equipment. And it dramatically reduces or eliminates frost build-up, which minimizes defrost cycles.

Energy Savings	System Performance
At least 15% reduction in energy usage	Significant improvement in pull-down rates
Equipment Life and Defrost	Product Quality and Safety
Average 50% reduction in defrost cycles	Longer food product life

This revolutionary technology is helping companies worldwide drive operational efficiencies, decrease energy consumption, keep perishable products safe, meet environmental initiatives and improve their bottom line. XDX's award-winning and scientifically proven products have been installed by a multitude of clients in dozens of industries.

XDX delivers substantial efficiency improvements and improves the performance of traditional refrigeration systems and air conditioning units. Benefits include:

- Energy savings of at least 15 percent through efficiency improvements
- More consistent temperatures
- Capacity increases of up to 10 percent
- Increased humidity removal in air-conditioning systems
- Improved moisture retention in refrigerated products
- Decreased defrost cycles
- Improved food product safety and longer shelf life
- Increased pull-down rates
- Lessened environmental impact
- Lower maintenance costs
- Longer equipment life
- Fast ROI—paying for itself in just 9 to 36 months

Examples of applications:

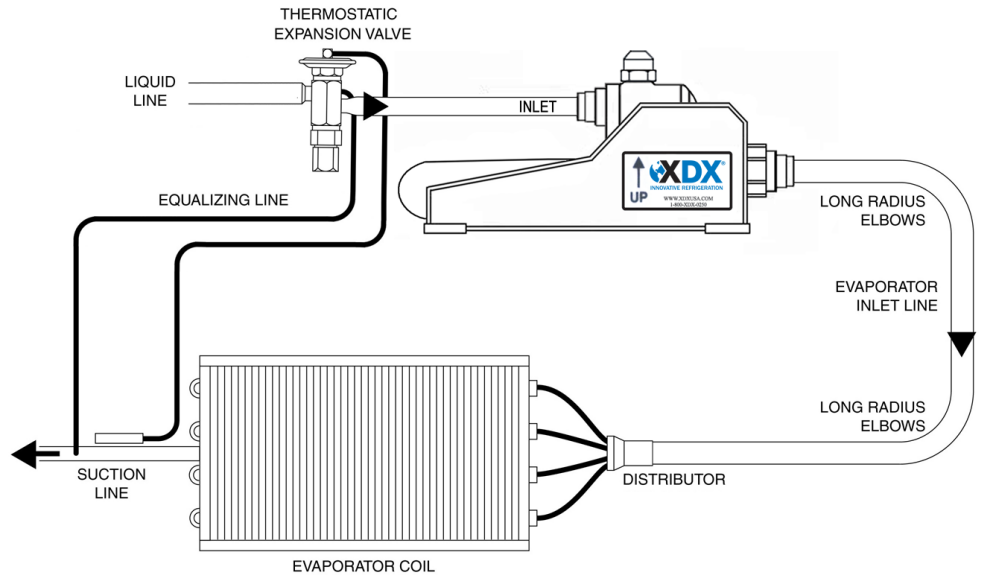
Food Processing
Food Handling
Food Service
Shipping
Logistics
Medical

HVAC applications
Facility Management
Healthcare Facilities
Universities & Schools
Industrial
Wineries

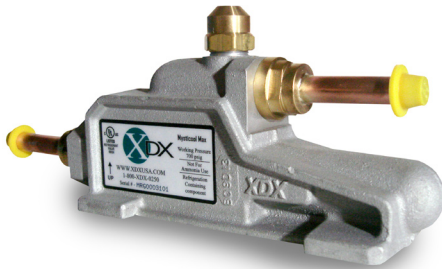
Our Products

Mysticool® MAX

XDX's core product is the Mysticool Max valve – an add-on component that improves a refrigeration or cooling system's performance and capacity. The valve changes the characteristics of the refrigerant flow pattern through the evaporator—leading to a more efficient system that uses less energy and saves money. The Mysticool Max can be installed without altering any of the other system components. It's located downstream of the metering device and works with all mechanical and most electronic thermal expansion valves, as well as capillary, automatic, and pressure flow control devices.



XDX Innovative Refrigeration technologies are designed to work for any DX system, low or high capacities. X-Stream and A.R.M.E.D. technologies are available for larger capacity, custom systems.



XSTREAM® Technology

X-Stream Technology is the main component of Mysticool Max. It was developed with the mindset that heat transfer is the most important aspect of cooling and that vapor has a role to play in the refrigeration system. The technology optimizes the refrigerant flow and the resulting heat transfer capability with the evaporator by using vapor refrigerant to force a film of liquid refrigerant around the circumference of the inner walls within the evaporator tubing. The result is unparalleled performance, superheat stability and more consistent evaporator surface temperatures, which minimizes frost build-up and expedites temperature pull-down capabilities.

A.R.M.E.D.® Technology

A.R.M.E.D. (Adjustable Refrigerant Metering Evaporator Device) helps improve the effectiveness of the Mysticool Max. It works in tandem with X-Stream Technology to improve the characteristics of refrigerant flow throughout the entire evaporator coil. A.R.M.E.D. helps fine-tune the system by allowing regulation of the refrigerant flow through pressure drop. It also permits the fine adjustment of liquid flow into the valve, which allows the correction of overfeeding and underfeeding. It is designed with multiple orifice settings and is installed directly after the expansion valve, replacing the distributor orifice.



RAPIDEFROST®

RapiDefrost is a same-direction, hot gas defrost method that can be used to replace all types of defrost systems, including reverse-flow, three-pipe, or the highly inefficient electric defrost. It applies hot vapor refrigerant directly to the inlet portion of the evaporator where it is needed most. This creates a defrost period that is thorough, short and efficient. Unlike reverse-flow defrost methods, the RapiDefrost valve encourages oil return, which enhances lubrication to extend compressor life and increases useable evaporator surface area to improve heat transfer. And the instability of typical three-pipe systems, which puts compressors at risk from refrigerant overfeed, is reduced through the use of X-stream technology in the RapiDefrost valve. RapiDefrost is typically installed at the condensing unit, which offers significant advantages for the servicing technician. Some modifications or additional components may be required.

Our Partners



BEVERAGE-AIR
Established 1954



KRAMER



XDX Innovative Refrigeration

3176 North Kennicott Avenue
 Arlington Heights, IL 60004
 T 847.398.0250 F 847-398.1365

©2009 XDX Innovative Refrigeration

www.xdxusa.com