Hillphoenix
A DOVER COMPANY

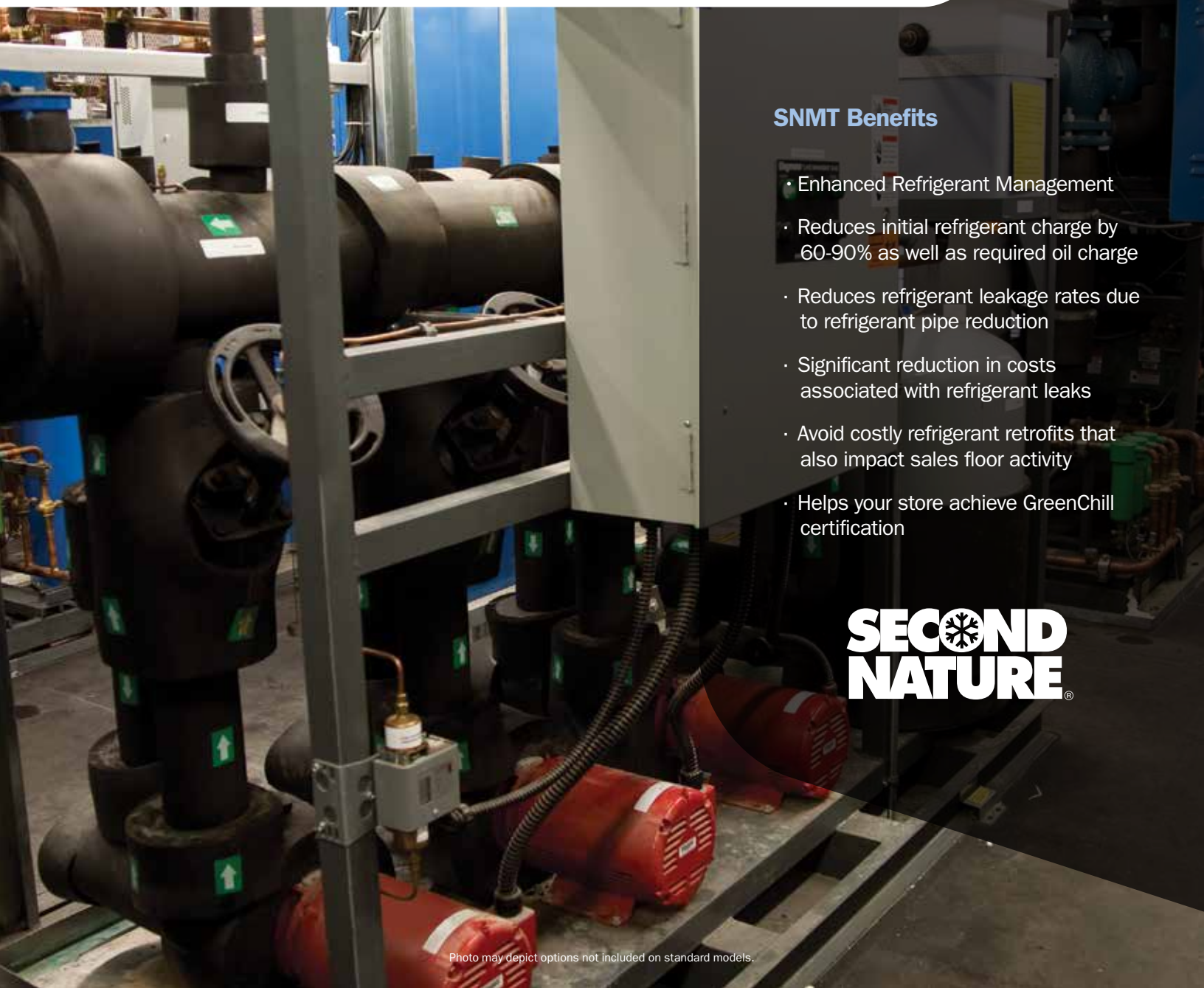
Fresh thinking.
Responsible solutions.

Refrigeration Systems

Second Nature Medium Temp

The most environmentally friendly medium temperature refrigeration system available in the industry today.

SNMT

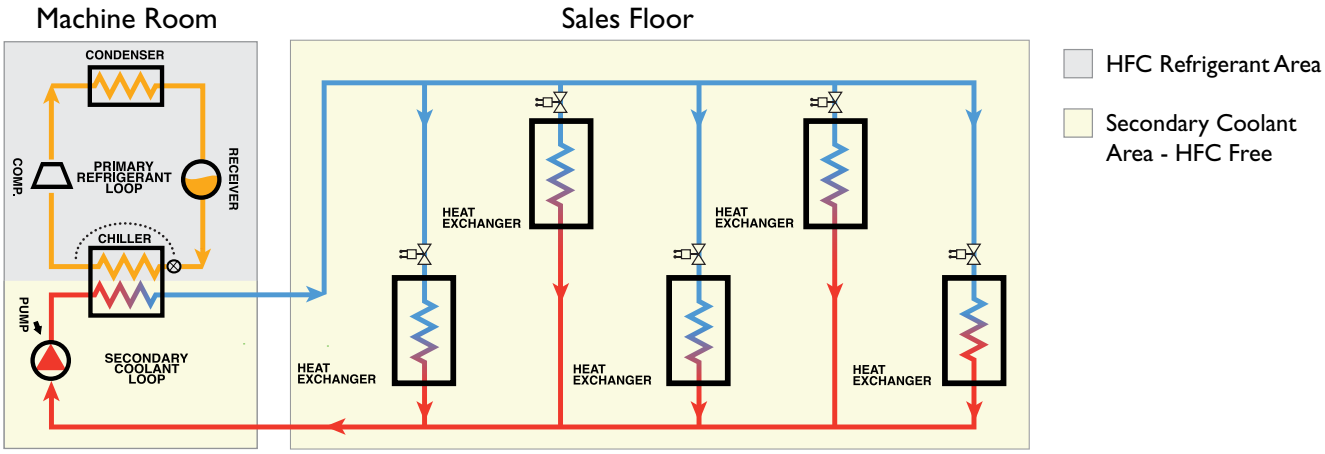


SNMT Benefits

- Enhanced Refrigerant Management
- Reduces initial refrigerant charge by 60-90% as well as required oil charge
- Reduces refrigerant leakage rates due to refrigerant pipe reduction
- Significant reduction in costs associated with refrigerant leaks
- Avoid costly refrigerant retrofits that also impact sales floor activity
- Helps your store achieve GreenChill certification

SECOND NATURE®

Photo may depict options not included on standard models.



Second Nature Medium Temperature (SNMT) is an advanced refrigeration technology pioneered by Hillphoenix® that offers significant sustainability benefits when compared to conventional refrigeration technologies. It is the most environmentally friendly medium temperature refrigeration system available in the industry today. Hillphoenix is the leader in sustainable, advanced refrigeration technologies with more than 600 installations since the mid-1990's.

SNMT systems utilize inhibited glycols as the heat transfer fluid. These glycol products have proven over time to have excellent material compatibility allowing the use of alternate piping materials, including Georg Fischer ABS pipe.

An energy-efficient system, SNMT forms the backbone of our Second Nature low charge, low leak rate refrigeration systems. And since HFC refrigerant is confined to the primary system located in the machine room, the total refrigerant charge and the potential for leaks are greatly reduced. SNMT systems allow for significant reductions in the amounts of copper and HFC refrigerants required, providing sustainability benefits that will pay dividends throughout the life of the system.

Heat is absorbed in the display cases through fully flooded coils specifically designed for SNMT system operation. The glycol is pumped from the cases and coolers through a low pressure piping network back to the machine room. This is the point where the heat is transferred through chiller heat exchangers from the secondary system to the primary HFC system.

If your company is pursuing innovative sustainability initiatives that lead to a smaller carbon footprint, Second Nature MT systems will suit your needs.

Simplified Installation and Maintenance

- Allows the use of alternative piping materials such as ABS, Victaulic and water-grade copper for installation savings
- Eliminates the use of thermal expansion valves and EPR valves
- No high pressure leak testing or evacuation required in secondary piping
- Eliminates oil return issues and costly refrigeration practices like traps and risers
- Eliminates need for leak detection in walk-ins as required by many building codes
- Extends compressor life by eliminating excessive liquid flood-back common with direct expansion systems
- Low pressure system (55 psi) is less prone to leaks, minimizing a major maintenance issue
- Simplified and centrally located primary system provides easier maintenance

Energy and Performance

- Can use a variety of primary refrigerants to optimize environmental and energy performance
- Evaporator close-coupled with compressor system eliminates refrigerant, suction line pressure drop and higher suction superheat typical in direct expansion systems
- Compressor unit operates with low return gas temperatures resulting in system efficiency improvement
- Eliminates inefficiencies associated with improper setting of thermostatic expansion valves
- Variable speed pumping reduces energy on pumps and compressor system during reduced load conditions
- Electronic expansion valves on chiller heat exchangers along with short liquid lines allow you to take full advantage of lower head pressures

Intertek Intertek

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