

LET THE ARCTIC IN

PERMAFrost

SOLUTIONS

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PermaFrost is specifically designed to enhance the overall performance of any air conditioning and refrigeration system without modifications or alterations to the system itself. This advanced proprietary molecular technology relies on highly activated thermo-conductive compounds.

Permafrost offers significant energy cost savings for all types of commercial, residential and vehicle cooling equipment. Installing the systems Increases HVAC equipment efficiency by 20-40% resulting in overall energy savings of 10-20%. PermaFrost is designed to enhance the overall performance of any A/C or refrigeration system without equipment down-time or modification.



ABOUT PERMAFROST SOLUTIONS LTD.

PermaFrost Solutions is dedicated to investing in environmentally sound opportunities worldwide. In 2009, PermaFrost Solutions introduced PermaFrost - a leading energy-efficient technology for the HVAC industry - to Ireland and the United Kingdom. PermaFrost Solutions firmly believes in promoting green and environmentally friendly development and actively seeks out investment in technologies and projects that meet this objective. PermaFrost Solutions currently has offices located Ireland, Scotland, Manchester and London.

We are bringing Permafrost to the market because it is uniquely placed to save you money while you also save the environment. A match many green products can not achieve.

Permafrost Solutions Ltd is bringing this product to Europe through our partnership with GreenWave capital LLC the company that has pioneered this technology to the Middle east and beyond. Greenwave have offices in Dubai and New York. The product is manufactured under patent by Powertron global Austin Texas.

The management team of, Terry Kelly, John Kelly, Ian Bonner (Scotland) and Ray Northern have over 40 yrs experience in the refrigeration and air conditioning business and over 20 yrs experience each at the highest levels of business management.

OUR PRODUCT

We offer 4 energy saving products. PermaFrost C formulated for chiller systems. PermaFrost™ DX for small DX units. PermaFrost™ DXL formulated for large DX units and PermaFrost™ for ice-makers.

- PermaFrost C formulated for chiller systems.
- PermaFrost DX formulated for small DX units.
- PermaFrost DXL formulated for large DX units.
- PermaFrost for ice-makers.

Our products are especially engineered to enhance the overall performance of any A/C or refrigeration system without modification or alterations.

Our Nucleo Molecular Regenerative (NMR) technology uses highly activated thermo-conductive compounds. Our products are designed to remove heat from the metal surfaces faster, accelerate refrigerant flow, increase thermo-conductivity and transfer heat more efficiently throughout the equipment. In addition PermaFrost™ also contains anti-humectants, acid scavengers and seal/bearing conditioners.



It's sophisticated molecular composition passivates and stabilizes all metal components throughout the system, allowing the refrigerant to absorb and dissipate heat at an accelerated rate.

PermaFrost™ allows the unit to achieve set temperatures faster while drawing less energy, allowing the compressor, condenser and evaporator to perform at their utmost design efficiency.

Installation does not require any down time of the HVAC equipment. Finally there is a green solution that is profitable and passive. Install it once and be green.

→ Finally there is a green solution that is profitable and passive.



OUR PRODUCT

Performance:

- Reduces HVAC related energy costs by 10 -20%
- Improves compressor performance
- Extends the life of your equipment
- Reduces greenhouse gas emissions
- Over 5,000 installations worldwide

Installation:

- Quick and easy installation
- Minimal equipment downtime
- No equipment modifications
- Immediate Results

Applications:

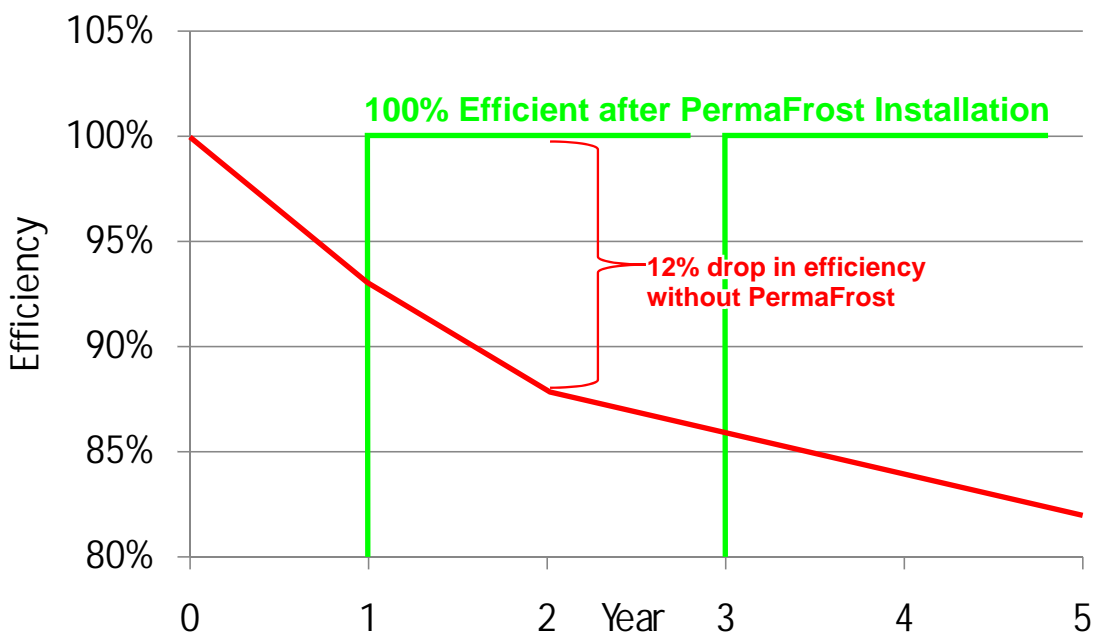
- | | |
|--------------------------|----------------|
| • Chillers | • Automobiles |
| • Split Systems | • Ice Machines |
| • Packaged Units | • Cold Storage |
| • Refrigerated Transport | • Freezers |
| • Wall / Window Units | • Cool Rooms |

Oil Fouling Reduction:

The graph below shows the effect of oil fouling on heat transfer without PermaFrost.

GREEN shows 100% efficiency after a PermaFrost installation
RED shows a decrease in efficiency without PermaFrost.

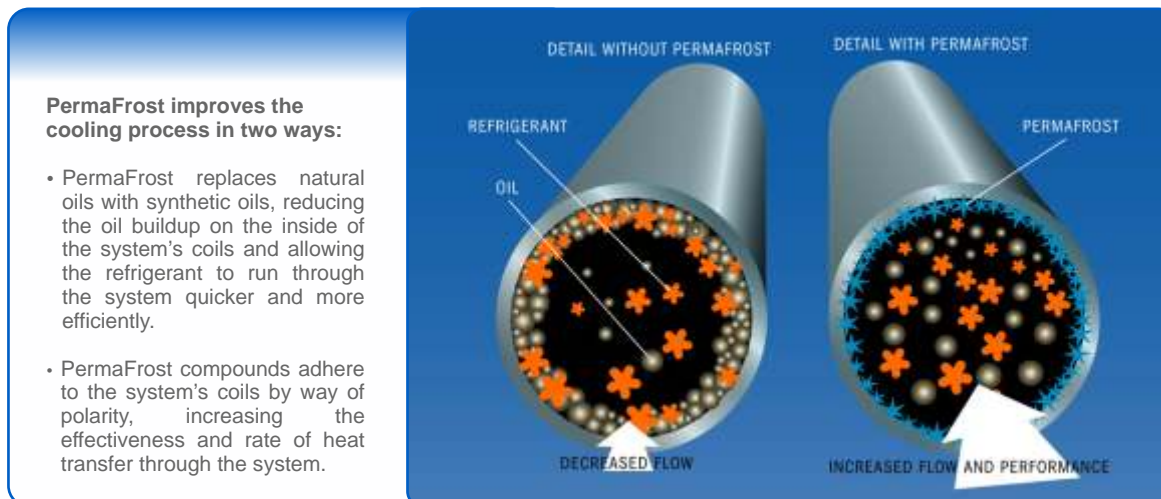
Graph showing the effect of oil fouling on heat transfer without PermaFrost:



Source: ASHRAE Winter Symposium

THE PERMAFROST SOLUTION

PermaFrost is an environmentally friendly and energy-efficient refrigerant additive for cooling systems that improves the heat transfer of the system - lowering the energy requirements and the costs of running the system. PermaFrost is an advanced proprietary molecular technology that relies on highly activated thermo-conductive compounds.



PermaFrost is designed to remove heat from metal surfaces, accelerate refrigerant flow, increase thermo-conductivity and transfer heat throughout the equipment. Its sophisticated molecular composition "passivates" and stabilizes all metal components throughout the system, allowing the refrigerant to absorb and dissipate heat at an accelerated rate.

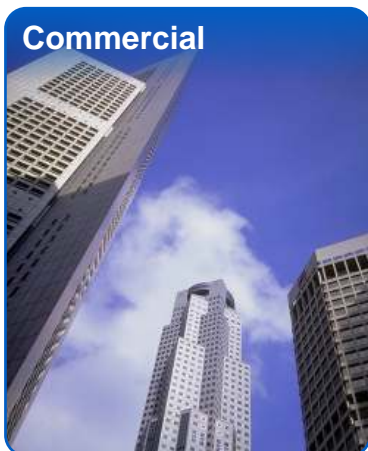
PermaFrost allows the unit to achieve set temperatures faster while drawing less energy, allowing the compressor, condenser and evaporator to perform at their utmost design efficiency. Energy reduction may vary from 10% to 40%, depending on the age and condition of the unit. In sealed systems, this one-time application lasts for the life of the compressor. Our proprietary application requires no down time of the equipment. Learn more about PermaFrost's Proven Results.

WHAT DOES PERMAFROST DO?

- Cuts energy use and reduces your cooling costs.
- Produces colder, crisper air.
- Helps the environment by reducing energy-based greenhouse gas emissions.
- Increases the overall comfort level in your office, home or car.
- Reducing excessive strain on the compressor will extend the equipment lifespan.

With the ever-increasing cost of energy in general, and HVAC in particular, the ability to control cooling costs will have a profound effect on the client's overall financial viability. PermaFrost will work in your office, home, car, or in any cooling system.

MARKETS



Commercial



Retail



Hotels

SAVINGS & COST

Dubai HVAC Energy Savings

- Dubai HVAC Energy Savings
- Al Maha Resort 18%
- Jumeirah Oasis Village 11%
- Al Safeer Century Mall 15.9%
- UTS Carrier 13.9%
- Better Homes 16.5%
- Deira City Centre 18%
- Grand Hyatt Hotel 12%
- RTA 11.4%
- Shangri-la Hotel 13.6%

Energy Costs

"Between 20% and 40% of your electricity bill can be directly related to you HVAC equipment. Permafrost offers you a fantastic way to save money both in your electric bill and in you long term maintenance costs of the equipment."

The Advantage

- Return on investment in 12 months
- Increases performance while reducing energy consumption
- Begin achieving savings immediately
- One-time treatment lasts the life of the system
- Be green while saving you money

Cost

- 1 Fluid Ounce is €65 (£60^{STG}) per ounce plus VAT and Installation
- Time to install is 1 hour



PERMAFROST EUROPE USE THE CLIMACHECK SYSTEM TO GIVE YOU A BEFORE AND AFTER ENERGY CONSUMPTION READING. CLIMACHECK HAS BEEN AWARDED REFRIGERATION PRODUCT OF THE YEAR FOR 2009 DUE TO ITS OUTSTANDING ACCURACY.

INTERNATIONAL CLIENTS

OUR CLIENTS



IN PROGRESS IN THE UAE

