

WHY CHOOSE ProaTEQ?

ProaTEQ is an advanced, disruptive, nanotechnology that operates using advanced principles in physical and organic chemistry and physics to address and resolve the oil-fouling problem in refrigeration systems:

1. ProaTEQ penetrates the oil boundary layer.
2. ProaTEQ chemically displaces all organic residues and boundary layers.
3. ProaTEQ tightly adheres to the metal surface of heat exchangers by virtue of powerful Van Der Waals forces.
4. The Van Der Waals forces overcome weaker chemical bonds and surface adhesion that holds oil boundary layers to metallic surfaces.
5. ProaTEQ tightly bonds to the metal surfaced in a one-molecule thick monolayer.
6. ProaTEQ forms a protective monolayer that permanently prevents oil boundary layers from ever forming again.
7. ProaTEQ is highly conductive, and its monolayer is on the order of ~1000 Angstroms (~0.01 microns) thick.
8. ProaTEQ displaces an oil boundary layer that is over 500 time thicker, at 4-5 microns.
9. The oil boundary layer is less than 1/1000th as conductive as Aluminum, less than 1/2000th as conductive as Copper. This layer insulates the metal surface and prohibits heat transfer; ProaTEQ displaces the oil boundary layer and restores heat transfer performance.
10. Gains of 20% to 30% capacity are regularly observed within hours to days after ProaTEQ treatment.
11. ProaTEQ's monolayer is polarized in a manner that oil molecules can no longer adhere to the metal surface. It forms a permanent, impenetrable coating that can only be removed by grinding, and prohibits any future oil boundary layer formation.
12. ProaTEQ comparably penetrates removes organic layers and coats, and protects other precision components, such as capillary tubes and expansion valves.
13. ProaTEQ also improves lubricity of compressor oil, reducing wear and extending life.

ProaTEQ is the most tested, trusted, and proven product on the market that is based on the PROA Principle. Consider the following:

1. ProaTEQ has been in the market since 1998. Continuously working to solve customers' problems.
2. ProaTEQ has NO harmful components:
 - a. No Chlorine.
 - b. No environmentally toxic materials.
 - c. No ozone-depleting components.
3. ProaTEQ is the ONLY Proa-based product EVER tested by the US Department of Commerce, National Institutes of Standards and Technology, with results such as:
 - a. Over a range of typical operating conditions, ProaTEQ provided heat transfer improvements averaging 73% – and recorded as high as 95% – relative to a control mixture without ProaTEQ, for a common refrigerant/oil mixture.
 - b. The disruptive, nanotechnology monolayer deposition at the heart of ProaTEQ's operational principle was demonstrated to be TRUE.
 - c. The formation of the monolayer was shown to be at the heart of the heat transfer improvement in performance.
4. ProaTEQ has been successfully used to treat over 200 chillers, DX units and refrigeration systems since it entered the market in 1998.
5. ProaTEQ has NEVER been shown to harm customers' equipment.
6. ProaTEQ consistently delivers 15-30% or better improvements in unit capacity and reduced kW/Ton.