



**INDUSTRIAL**  
**SEAL**  **PRO™**

[www.industrialsealpro.com](http://www.industrialsealpro.com)

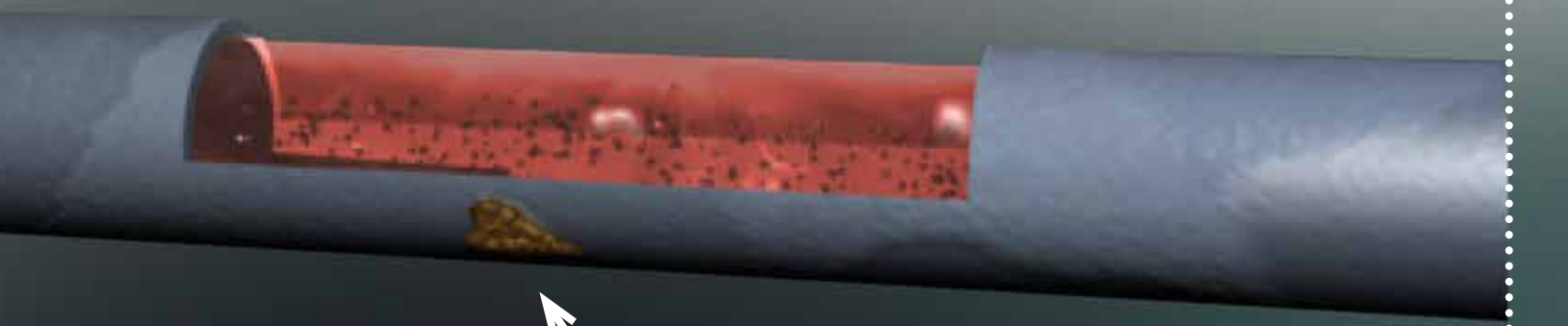
 **SHALER®**  
Since 1904

**855.974.2537**  
[support@shalerpro.com](mailto:support@shalerpro.com)

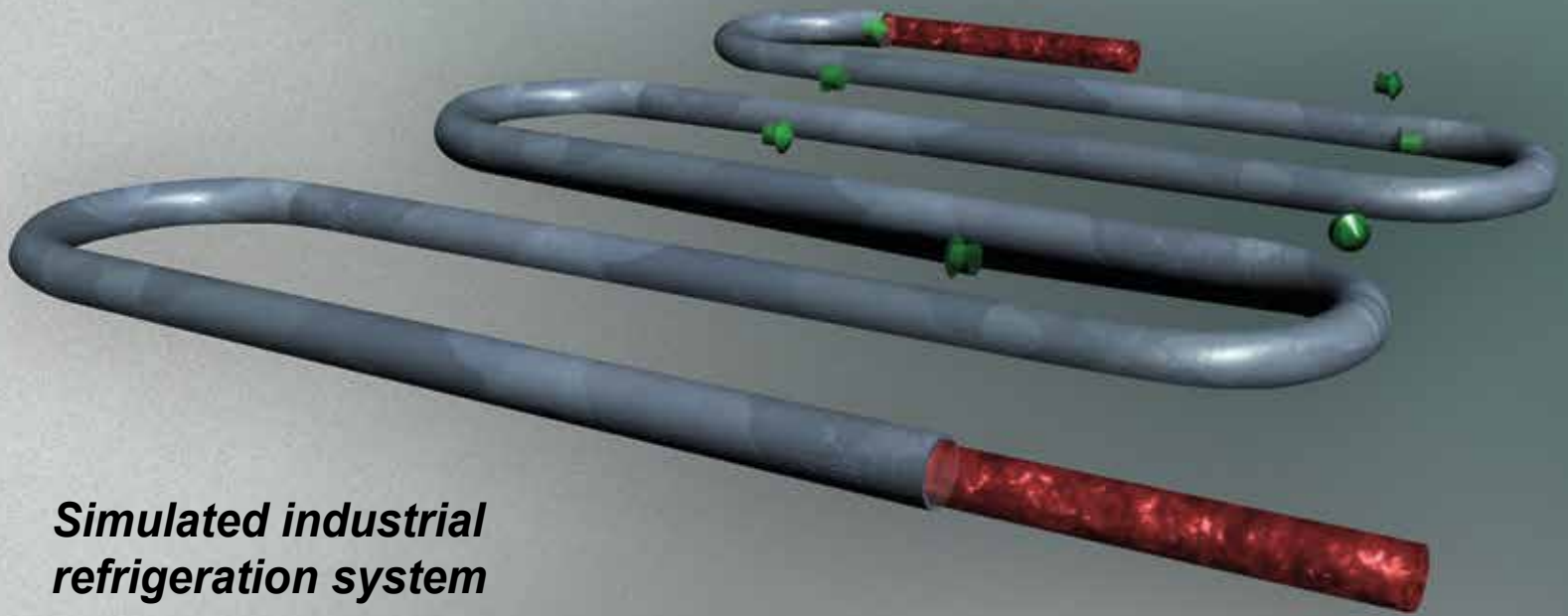


**INDUSTRIAL**  
**SEAL** **PRO**<sup>TM</sup>

# How It Works



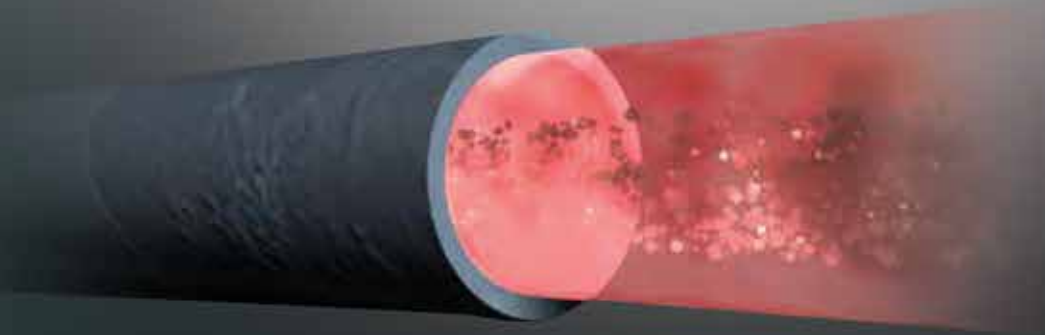
*Suspended particles form on the outside of leak, penetrate inward, forming a permanent seal!*



***Simulated industrial  
refrigeration system***



***Also scrubs and cleans away the rust, corrosion  
and scale build-up that forms on the inside of pipes...***



***...allowing your system to run more efficiently.***



# INDUSTRIAL SEAL PRO™

## Benefit from 110+ Years of Stop Leak Expertise



### Heating:

Industrial Seal Pro™ Heating Sealer is a professionally-engineered solution specifically designed to seal leaks in warm floor/subfloor systems with industrial-strength bonds. A leak in the warm floor system can be an unpredictable hard fix. Trying to find the leaks and then getting to them is nearly impossible. In cold floor systems with a heated subfloor this can be an even bigger challenge, presenting an open-ended cost to repair. The inoperative subfloor caused by leaking can create frost heaving and cause damage to your cold floor above. In order to fix the warm floor you must remove the cold floor first. This can easily cost upwards of hundreds of thousands of dollars, and can mean possible shutdowns in production. Industrial Seal Pro™ is simple to install, costs a fraction of a hard fix, and requires no downtime.



### Cooling:

Industrial Seal Pro™ Cooling Sealer is a professionally-engineered solution specifically designed to seal leaks in secondary refrigeration (cold floor) systems with industrial-strength bonds. Industrial Seal Pro™ is simple to install and a cost effective solution that requires no downtime. Compare this to the difficulty and cost of trying to find leaks, tearing up walls and floors, repairing the leak, rebuilding the infrastructure – not to mention the loss of revenue and downtime that can easily cost in the tens or even hundreds of thousands of dollars.



### Maintenance:

Industrial Seal Pro™  
Preventative Maintenance  
Solution

### Energy Saving

Industrial Seal Pro™ improves heat transfer, keeps your system clean, and contains particles in a wide array of sizes. Our custom Industrial Seal Pro™ Preventative Maintenance Solution increases the surface area of the coolant, which increases the ability of the coolant to transfer heat. Typical results show a minimum of 2.5% increase in efficiency in new and old systems.

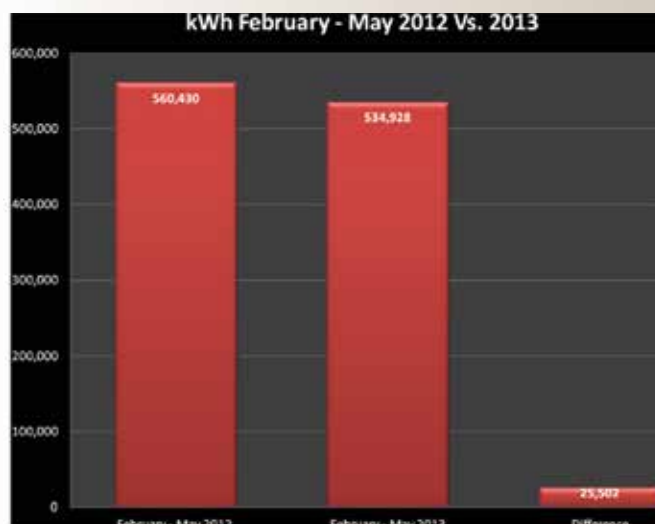
### Leak Prevention

Leaks are inevitable; at some point, environmental factors, normal usage, or expansion/contractions will cause your system to develop a leak. Industrial Seal Pro™

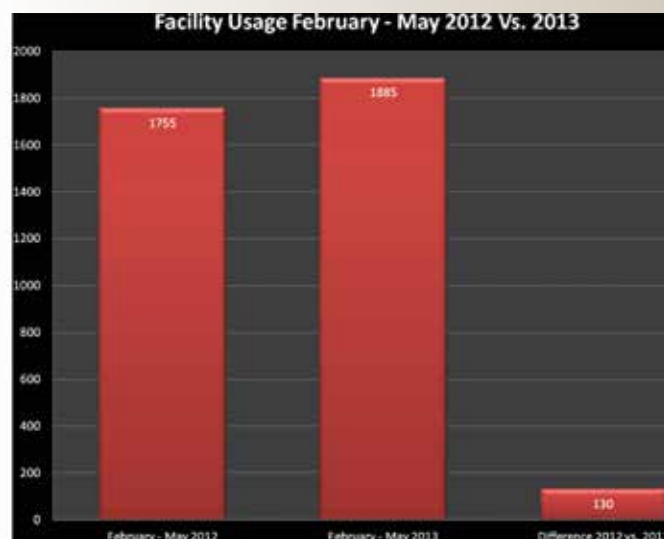
Preventative Maintenance Solution will protect your system to prevent potential leaks from becoming a problem. It will stop a leak before you ever lose coolant. Even if don't know you have a leak, a tiny fracture could be sucking air into your system, causing poor performance and eating away at your efficiency rates. Industrial Seal Pro™ Preventative Maintenance Solution stops leaks before they stop your business.

### System Performance

Industrial Seal Pro™ not only seals heating/cooling leaks, it also provides savings as it relates to energy usage. Industrial Seal Pro™ Preventative Maintenance Solution scrubs and buffs to help eliminate scale and rust build up in the coolant system, thereby improving system heat transfer.



Year-over year energy consumption comparison for the same four month period (2012 vs 2013). Note that this was even with facility usage of all three sheets increasing 6.9% in 2013 verses 2012.



Facility usage in hours 2012 vs 2013. Even with increased usage Facility saw energy cost savings after installing Industrial Seal Pro™. Facility usage in hours 2012 vs 2013.



Shaler Industrial Seal Pro™ is the solution for all of your industrial system leak needs, covering both the cold and hot segments. Seals leaks in polyethylene plastic, copper and steel piping. Compatible with ALL types and brands of coolants including ethylene glycol, propylene glycol and salt brine. Protects the entire cooling/heating system. Will not clog or damage the system and is non-toxic. Harmless to ALL plastic, metals, aluminum, hoses and connections.

#### Shaler® Industrial Seal Pro™ Features

- Seals leaks
- Inhibits formation of rust and scale
- Keeps system clean
- Neutralizes pH imbalance
- Controls electrolysis
- Lubricates water pumps
- Compatible with ALL types and brands of coolant
- Conditions and enhances refrigeration/heating system operation.

#### How It Works:

**Stop Leak (External Leak)** – The particles first adhere to the outside of the seepage and build inward. As the particles hit the outside air, they dry out and expand approximately 15% to form a smooth, putty-like seal.

**Water Pump Seal Lube** – This material helps in two ways: first, by keeping the seal facing clean, which prevents prevents leaks. Second, because of the wide range of particle sizes Shaler incorporates, some of the smallest particles actually work like graphite to penetrate between the shaft and seal to lubricate and prevent any howl and chatter.

**Water/Coolant Conditioner** – The particles condition the coolant to help prevent rust and scale build-up which causes dead or weak zones and a loss of system efficiency. Works chemically and mechanically. *Chemically:* Maintains the pH balance. Controlling pH fluctuations helps in preventing corrosion and electrolysis pitting. *Mechanically:* Buffs and scrubs to help eliminate scale and rust build-up in the system, improving heat transfer. Works similar to a sacrificial anode in the system to protect inner surfaces.

**Improves Heat Transfer** – Besides keeping the system clean which in itself aids in heat transfer, Industrial Seal Pro™ particles are present in a wide range of sizes, which increases the surface area of the coolant. Typical results show a 2.5% increase in efficiency in new and old systems.

#### ASTM D3147 LABORATORY TEST

Standard Test Method for Testing Stop-Leak Additives for Coolants

This test method covers screening procedures for the preliminary evaluation of leak-stopping materials intended for use in cooling systems.

Gum/Gel Before	No
Gum/Gel After	No
Particles Before	No
Particles After	No
Screen	0.51 mm (0.020 inch)
Final Round	0.64 mm (0.025 inch)
Final Slot	0.25 mm (0.010 inch)
Fluid Lost, mL	495

The results of this test show that a 0.64 mm (0.025 inch) round hole and a 0.25 mm (0.010 inch) wide slot (crack) can be successfully sealed with this product.

### **Who should consider Industrial Seal Pro™?**

Industrial Seal Pro™ products are designed for application in heating and/or cooling systems in industrial/commercial refrigeration units, power generating facilities, municipal infrastructures, processing plants, cold storage, fisheries, sports facilities and many other custom applications. Leaks and inefficient operating systems are something from the past. If the leak is visible on the surface or small and difficult to detect in the piping Shaler's Industrial Seal Pro™ has the solution.

### **How does Industrial Seal Pro™ work?**

Advanced microparticles first adhere to the outside of the leak fracture and then build inward. As these particles react with the outside air, they harden and expand 15% to form a smooth, putty-like seal. This establishes a permanent seal on the outside of the leak.

### **How long does it take for Industrial Seal Pro™ to work?**

Results are typically seen within two days, depending on the size of the leak. In most cases the leak will be sealed in one day. However, depending on the severity of the leak, an additional dosage may be required. Please contact one of our Shaler Technicians if you do not see results within one week.

### **What are the liability issues of leaks?**

Leaks have a significant impact on the environment, and can cause potential liability issues. They also can be a risk to product quality, employees' safety, and regulatory body compliance. Further there is significant financial impact due to systems operating inefficiently. Leaks can be hard to find and costly to mechanically fix.

### **What other factors cause leaks?**

Leaks can be caused by a number of factors: improper ratio of corrosion inhibitor, excessive pH levels, air infiltration, rust, scaling and mechanical failure just to name a few.

### **Can Industrial Seal Pro™ be installed in existing coolant?**

Yes, Industrial Seal Pro™ is specifically designed to be directly added to your system's coolant. It is compatible with ALL coolants including ethylene glycol, propylene glycol, and salt brine.

### **Can Industrial Seal Pro™ be used in Direct Refrigeration Systems (DFS)?**

No, standard Industrial Seal Pro™ cooling, heating, and maintenance products cannot be used with R-22 or any other type of refrigerants that are used in Direct Refrigeration Systems. However, we do have a specialized formula of Industrial Seal Pro™ specifically designed to be used in Direct Refrigeration Systems (DFS). Contact us for more information.

### **Will Industrial Seal Pro™ plug or damage the refrigeration system?**

No, Industrial Seal Pro's™ particles will easily pass through a 24-gauge mesh screen, which is about the same as a household screen door. However, it is recommended for peak performance that all filtration systems be bypassed for a minimum of 6 months. For questions or concerns contact a Shaler Technician.

### **Is Industrial Seal Pro™ difficult to install?**

No, all you have to do is mix with desired coolant and introduce it at a rate of one gallon per minute (1 gal/min). You can either add coolant if you're low or simply take coolant out of the system to mix. Once the product is mixed, add Industrial Seal Pro™ directly in the ground line or directly into circulation (not through the overflow or expansion tank). Every product container is clearly marked with installation instructions, along with an online video on our website. Installation assistance packages are available; please contact one of our Shaler Technicians for further information and pricing.



# G. A. Shaler Co.

AT YOUR  
Workbench



**SHALER**<sup>®</sup>  
Since 1904

## SHALER EARLY HISTORY

Since the foundation of the Shaler Company over 110 years ago, Shaler has created stop leak solutions and performance enhancing products for many applications. Shaler Vulcanizer, the original product introduced in 1904, was a revolutionary stop leak solution for tires and tubes. In fact, The Milwaukee Journal, on September 27, 1914 stated, "Double your mileage with Shaler Vulcanizer, it vulcanizes thoroughly and makes the repair the strongest part of the tire. It's impossible to overcure or undercure...anybody can operate it."

Since its inception, Shaler's stop leak products have provided successful solutions to millions of customers spanning multiple industries. Whether for nuclear submarines, locomotives, industrial equipment, or the automotive sector, Shaler's products have a proven track record for reducing cost and increasing efficiency.

After many years of assisting individual industrial clients with a stop leak solution, Shaler has created a formula specifically designed for industrial heating/cooling system leaks. Shaler's Industrial Seal Pro™ is a product

that not only serves as a stop leak solution for your cooling and heating loops, but also offers ongoing performance-enhancing preventative maintenance for your system.

Being an environmentally-conscious company is very important to Shaler, which is why it uses organic materials that are guaranteed to have as little environmental impact as possible.

Bottom line: when you choose Shaler, you're not just choosing a single product, you're choosing over 110 years in stop leak expertise.