

SURFACE MODIFICATION



INDUSTRIAL

# REACTIVE GAS TECHNOLOGY™ FOR SEALS & GASKETS

Transform basic elastomers into performance products

Inhance Technologies' Reactive Gas Technology™ eases manufacturing, assembly, and operation of seals and gaskets while providing the highest barrier performance to improve performance and service life

Gasket, seals, and O-rings are integral components for gas or liquid confinement in devices and equipment. They compensate for irregularities of mating surfaces which would leak without them. They are used in static and dynamic conditions and are often exposed to harsh environments of temperature, pressure, and chemicals.

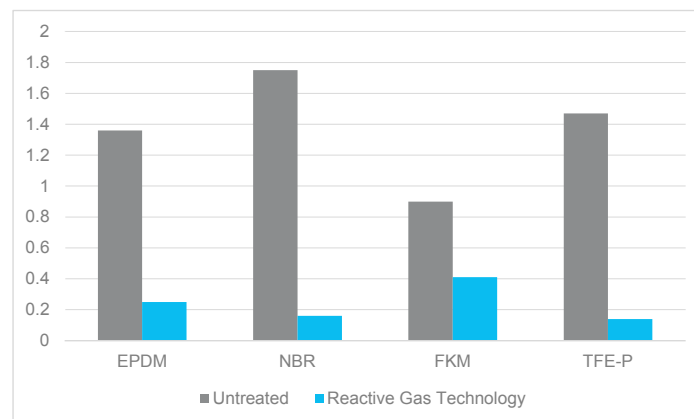
During manufacturing, assembly, and in use, material durability is impacted by mechanical wear and harsh environmental exposures. Inhance Technologies' Reactive Gas Technology™ modifies elastomer surfaces to increase durability. The process modifies the outer few molecular layers of the surface leading to a drop in the coefficient of friction. In addition, by creating a permanent barrier to chemicals, swelling, fouling, and degradation are greatly reduced, prolonging service life.

## BENEFITS

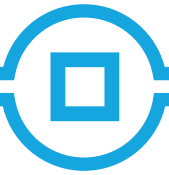
- Reduces friction coefficients leading to improved wear resistance
- Durable permeation barrier resists swelling, fouling, and degradation
- Sub-atmospheric gas treatment ensures uniform treatment on all exposed surfaces
- Permanent treatment will not flake off, delaminate, or leach – better alternative to short-lived internal and external lubricants that can lead to system contamination
- Clean and sustainable alternative to messy greases and other external lubricants
- Consistent performance – not sensitive to temperature or pressure
- Surface phenomenon vs. bulk treatment – does not affect bulk material properties



*Gasket, seals, and O-rings are integral components for gas or liquid confinement in devices and equipment. Inhance Technologies' Reactive Gas Technology™ modifies elastomer surfaces to increase durability*



*Static Friction Coefficient - Thermosetting Elastomers*



SURFACE MODIFICATION



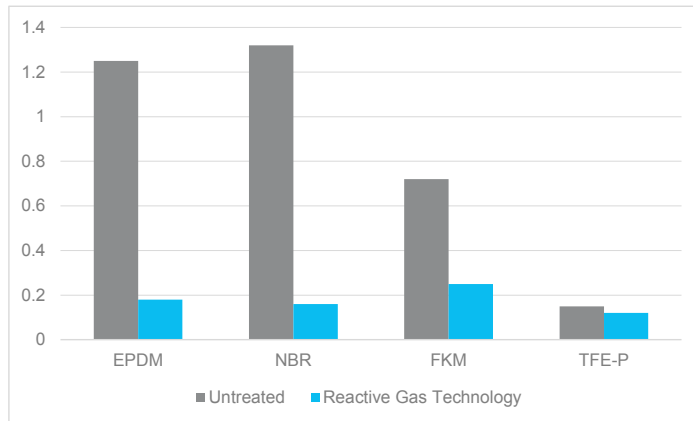
INDUSTRIAL

## APPLICATIONS

- Aerospace
- Agriculture
- Appliances
- Automotive
- Electronics
- Construction & Heavy Equipment
- Lawn and Garden Equipment
- Sporting and Recreational Equipment
- Fluid Pumps
- Heavy Duty Truck
- Industrial Products
- Oil and Gas
- Marine
- Outdoor Power
- Vehicle Engines



*Inhance Technologies' Reactive Gas Technology™ modifies elastomer surfaces to increase chemical resistance, decrease coefficient of friction and improve surface energy for various applications*



*Dynamic Friction Coefficient - Thermosetting Elastomers*



*Inhance Technologies solutions' can be applied in a number of industries to improve product performance and sustainability*