"Can You Seal This?"

...Episode 1 in a new series from Pelseal® Technologies

Acid Piping Technology, the worldwide supplier of MONDI™ pipe and fittings, recently tested the ability of Flange Pelseal® to seal gaps in MONDI™ flanges created by impact damage or corrosion. Gaps that could not be sealed by conventional gaskets alone.

Both tests yielded impressive results.

After the 4” MONDI™ spool piece was cleaned, Flange Pelseal® was applied with a standard 10-oz. caulking gun.

It was then spread and worked into the threads with a spatula and scraper.

The Flange Pelseal® then squeezed out of both sides of the flange, as intended.
APT used a pneumatic grinder with an abrasive wheel to simulate severe “impact damage” 0.100 inches in depth.

As the soap solution shows, the gasket was unable to seal the “damage” and prevent a leak.

A large dot of Flange Pelseal® was applied to the damaged area, spread over the spool’s face and allowed to cure for 2 hours and a new gasket was put in place.

The spool piece was pressurized to 100 psi for 8 hours and the connection stayed “bubble tight”.

The Flange Pelseal® filled the depth of the damage, which exceeded the deformation limits of the Step-Ring gasket, bonding well with both the MONDI™ and the gasket.
The next test was designed to simulate the damage caused by erosion and/or corrosion caused by a leak over an extended period of time.

The simulated damage was created by dimpling the face of the spool using a drill.

The damaged area was filled with Flange Pelseal® and a light coating was spread over the sealing area.

To ensure the best possible results, the product was applied to both sides of the gasket and allowed to cure for 2 hours.

50 psi of air pressure was applied for 8 hours with no leaks. Good bonding was noted overall, including with the slick gasket surface.

“\textit{When you need more than just a gasket.}”
Fluoroelastomer Caulks, Coatings, Sealants & Adhesives

Pelseal® Technologies, LLC manufactures the world’s broadest line of high performance liquid fluoroelastomer coatings, adhesives, sealants and caulks, many of which are formulated from Viton™, a fluorine-containing synthetic rubber.

These state-of-the-art products exhibit extraordinary performance characteristics in harsh environments, are able to withstand temperature extremes of -40 to +400 degrees Fahrenheit (-40 to +205 degrees Celsius) and resists attack from hundreds of corrosive chemicals and liquids.

Because of these unique properties, Pelseal’s fluoroelastomer products have been employed in numerous industrial applications where the challenge of severe service conditions exists.

Sample Chemical Resistance

Pelseal liquid fluoroelastomer coatings, adhesives, sealants and caulks provide good to excellent resistance to some of the following chemicals:

- **Acids:** Hydrochloric acid (muriatic acid) (HCl), hydrofluoric acid (HF), phosphoric acid (H3PO4), sulfuric acid (H2SO4)
- **Bases:** Black liquor, sodium hydroxide (caustic soda) (NaOH)
- **Solvents:** Benzene (C6H6), mineral spirits, toluene (C6H5-CH3), turpentine, xylene (C8H10)
- **Hydrocarbons:** Crude oil, diesel fuel, ethane (C2H6), gasoline, kerosene, methane (CH4), mineral oil, propane (C3H8)
- **Alcohols:** Ethyl Alcohol (ethanol) (C2H6O), methyl alcohol (methanol) (CH3OH), propyl alcohol (propanol) (C3H8O)
- **Chlorinated Solvents:** Tetrachloroethane (C2H2Cl4), tetrachloroethylene (perchloroethylene) (C2Cl4), tetrachloromethane (carbon tetrachloride) (CCl4), trichloromethane (chloroform) (CHCl3)

LET’S DISCUSS YOUR APPLICATION. Call us at +1-215-245-0581 or go to our website www.pelseal.com and enter the particulars of your application in our CONTACT form. We will respond promptly.

WANT TO KNOW MORE? Go to our website www.pelseal.com and download a complete listing of the chemicals that fluoroelastomers provide resistance to.

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Pelseal® Technologies, LLC
Phone: +1-215-245-0581
sales@pelseal.com • www.pelseal.com