

Flange Pel Seal®

Viton™ caulk for
acid leak protection

“Can You Seal This?”

...Episode 1 in a new series
from Pel Seal® Technologies

Acid Piping Technology, the worldwide supplier of MONDI™ pipe and fittings, recently tested the ability of **Flange Pel Seal®** 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 Pel Seal®** 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 Pel Seal®** 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.



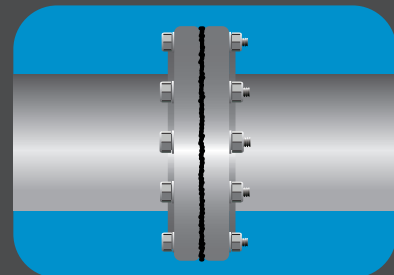
The damaged area was filled with **Flange Pelseal®** and a light coating was spread over the sealing area.



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.



**Flange
Pelseal®**

Viton™ caulk for
acid leak protection

***"When you need more than
just a gasket."***



Fluoroelastomer Caulks, Coatings, Sealants & Adhesives



Pel Seal® 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, Pel Seal's fluoroelastomer products have been employed in numerous industrial applications where the challenge of severe service conditions exists.

Sample Chemical Resistance

Pel Seal 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.pel Seal.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.pel Seal.com** and download a complete listing of the chemicals that fluoroelastomers provide resistance to.

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