

Case Study: GYLON EPIX® 3500 Chlorine Processor



INDUSTRY

Chemical

CUSTOMER

Manufacturer of chlorovinyl products

BACKGROUND

Expanded PTFE and 1/8" thick silica filled PTFE were formerly used to seal large diameter manway covers on FRP storage tanks and HCl absorber columns.

CHALLENGES FACED

The flanges have historically been difficult to seal. FRP flanges only allow low bolt torque, making it difficult to create an effective seal in the joint. The phenolic flange surfaces get crazed with small cracks which become leak paths. To seal the crazed surface RTV or doping agent is used on the surface prior to gasket installation. After gasket installation the joint and surface treatment are checked for tightness with a pneumatic air test.

OPERATING CONDITIONS

Temperature - 180°F (82°C)

Media - hydrochloric gas, organic vapors and brine service

SOLUTION AND BENEFITS

After inspection and treatment of the crazed flanges, Garlock recommended installation of GYLON EPIX® 3500 which is designed for use with strong acids and aggressive media. Additionally, the raised profile improves sealability in low load applications such as FRP flanges. GYLON EPIX® 3500 has been successfully in service for over 18 months with no signs of leakage.

For more information, please visit: http://www.garlock.com