

Case Study: STRESS SAVER® GYLON® Style 3504 - Chemical Processing



INDUSTRY

Chemical Processing

CUSTOMER

Large Chemical Processing Plant

BACKGROUND

This multi-national chemical company specializes in chlorine production, thus having to handle a variety of medias that are either required for the process, or that are biproducts of the process. Based on the aggressive nature of many of the materials, having reliable sealing solutions in all areas and for all applications is critical. This particular production facility had historically used a PTFE and EPDM low load gasket on many of the flange requirements.

CHALLENGES FACED

While fiberglass reinforced piping (FRP) has distinct advantages regarding chemical compatibility, the fragility and uniqueness of the various flange designs, create bolting challenges specific to lower load sealing requirements. FRP at this facility is predominate, so gasket installation and reliability are a challenge. While traditional STRESS SAVER® technologies had worked reasonably well in the past, there were consistent issues with leakage over time, often due to improper installation on raised sealing surfaces.

OPERATING CONDITIONS

Size: 10" ID and 12" ID, 150# Flanges

Temperature: <100°F (<37°C) Application: Flange - Non-metallic

Media: Hydrochloric Acid

Pressure: 125 psi

SOLUTION AND BENEFITS

Looking for a better sealing solution, this chemical facility began utilizing our STRESS SAVER® GYLON® Style 3504 with great success. The legacy GYLON® material properties incorporated with the raised sealing ribs of our STRESS SAVER® design accomplished multiple things that other low load sealing options could not offer; The STRESS SAVER® GYLON® Style 3504 not only has improved resistance to creep and cold flow, but can seal at even lower loads than the traditional STRESS SAVER® Style 370 and has the flexibility to accommodate both flat and raised face sealing surfaces.

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