

Case Study: GYLON® 3500 & GYLON EPIX® 3500 - Aviation Manufacturer



INDUSTRY

Aviation Aerospace

CUSTOMER

Aviation Manufacturer

BACKGROUND

The manufacturer was using Garlock STRESS SAVER® 3504 but needed a compressible material to act as a spacer so the FRP flanges would not bend and break.

CHALLENGES FACED

The liner on the valve's flange face creates a raised face which can vary from 2.5mm (0.098") to 4mm (0.157") high. This raised face will cause bending and probable breakage of the FRP flange. If extremely low bolt torque is used to minimize flange bending, the gasket being compressed will not seal. To minimize flange bending it is common to put a gasket spacer around the outside diameter of the valve's liner to affect a flat face and eliminate flange bending. The variation of the valve's liner height complicated making a surface that would seal since a standard 1.6mm (0.063") gasket spacer could be short and a 3.2mm (0.125") spacer would be too high.

OPERATING CONDITIONS

Temperature - Ambient Application - Class 150, GYLON® 3500 with GYLON EPIX® 3500 used as spacers in wafer type butterfly valves Media - Waste water, pH from 1 to 12.5 Pressure - 150 psig maximum Size - 1"to 8"

SOLUTION AND BENEFITS

GYLON® 3500 full face gaskets with GYLON EPIX® 3500 spacers were installed in August of 2018 and as of October 2019 have been preforming well. The 2.4mm (0.094") thickness of GYLON EPIX® 3500 and its ability to be easily compressed made it the perfect choice for the inconsistent raised faces encountered while still allowing enough compression for the primary gasket to seal.

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

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