

Case Study: GYLON® 3522 High Purity Pump Manufacturer



INDUSTRY

Semiconductor, Chemical & Aerospace

CUSTOMER

High Purity Pump Manufacturer

BACKGROUND

This original equipment manufacturer produces pumps and other in-line equipment for high purity markets such as semi-conductor manufacturing. Such equipment requires excellent chemical resistance and compliance to the most stringent industry standards relative to cleanliness. Clean room assembled, tested and packaged, the sub-components for such equipment are critical to functionality and final certification requirements.

CHALLENGES FACED

Positioned as an industry leader and supplier of premium grade products, our customer was looking to extend the service life of their high purity equipment. Air operated double diaphragm (AODD) pumps and in-line heaters were targeted and therefore required sub-components that could pass leachable testing and offer superior performance. Historically, competitor gaskets and components did not meet the desired purity levels or long term service life expectations.

OPERATING CONDITIONS

Temperature: ambient to 212°F (100°C) Media: nitrogen, clean dry air, strong acids

Pressure: up to 100 psi

SOLUTION AND BENEFITS

Leveraging our proprietary process for GYLON® manufacturing, Garlock recommended our unique style 3522 material. Produced from 100% modified PTFE, GYLON® style 3522 insures a high level of purity and services a wide range of applications. With extremely low permeation rates, minimal void content and a surface finish that is non-absorptive, GYLON® style 3522 made an ideal choice for both the static gasket applications as well as the dynamic diaphragm sealing requirements. GYLON® style 3522 is qualified and certified to various industry standards such as UPS Class VI, NSF-61, 3A, EC-1935, EC-10/2011 and is TSE and phthalate free, along with ROHS and REACH compliant.

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