

UHP Gate Valve Door



Ultra-High Purity (UHP) Bonded Door for Original Equipment and Aftermarket Replacement

Gate valve doors used in semiconductor manufacturing operations must be replaced frequently due to particle generation caused by mechanical wear, chemical attack and thermal cycling. Parker's UHP Gate Valve Door is designed to provide OEMs and chip fabricators with an original and/or replacement door option that reduces process contamination and increases wafer yield.

Advanced Bonding Technology

Parker employs advanced bonding technology in the manufacture of the UHP Gate Valve Door. The superior stability of the bond between door and sealing element provides improved abrasion resistance and seal integrity, resulting in extremely low particle generation and dramatically increased seal service life.

Clean — From Production to Installation

To guard against contamination and ensure product quality, the UHP Gate Valve Door is processed and packaged in an ultra-high purity manufacturing cell. All work in this cell is closely monitored through a batch traceable statistical process control program.

Features and Benefits

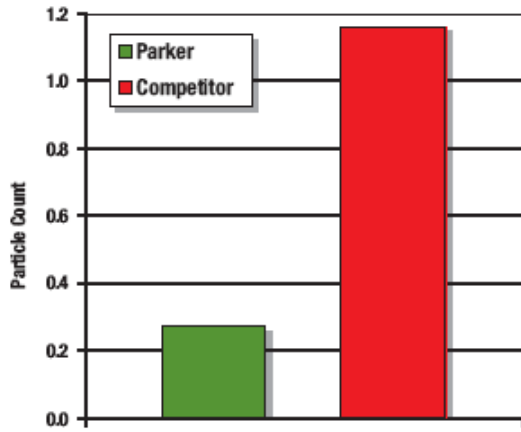
- Abrasion-resistant seal material reduces mechanical wear
- Advanced bonding technology dramatically reduces particle generation (up to 4X reduction)
- Ultra-high purity processing and packaging eliminates contamination
- Superior chemical and temperature resistance results in increased seal life

Parofluor Series Materials

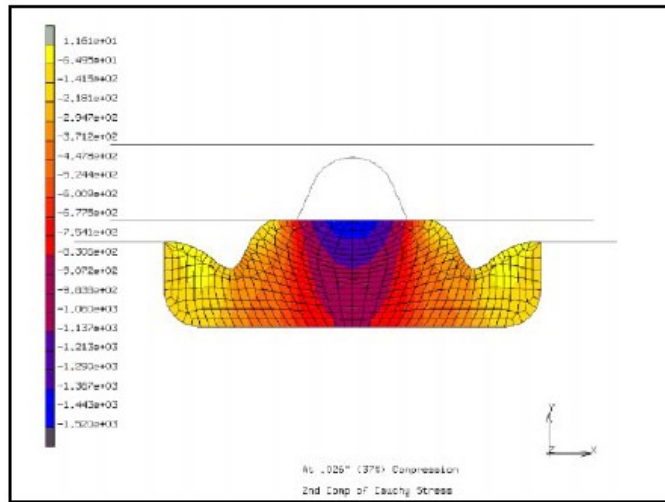
UHP Gate Valve Doors can be manufactured with a wide variety of fluorocarbon materials, as well as Parker's Parofluor Series Advanced Perfluorinated Elastomers. Parofluor materials offer a choice of performance levels for every application. Their broad chemical resistance, high temperature resistance (up to 320C/608F for Parofluor ULTRATM compounds) and ultra-high purity can help reduce downtime, increase productivity and improve safety.

Parker's Composite Sealing Systems (CSS) Division supports the semiconductor manufacturing industry with a wide range of engineered sealing products and systems, including:

- UHP Slit Valve Doors
- Chamber Lid Seals
- View Port Seals
- Thrust Plates/Contact Rings
- Flange Seals
- Resilient Metal Seals
- Metal Shapes



Parker's UHP Gate Valve Door bonding technology and advanced perfluoroelastomer materials reduce potential for contamination by up to 4X in a typical CVD process.



In addition to its quality products for semiconductor sealing, Parker offers finite element analysis (FEA)-assisted engineering and other time-saving tools.