

# **Bonded Slit Valve Door**

## Reduces Particulation and Eases Installation

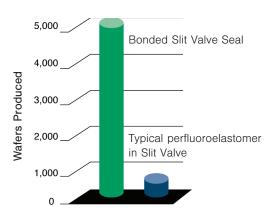
### **Engineered Components**

The Bonded Slit Valve Door (BSV) increases the life expectancy and performance of the door's seal during semiconductor processing. Made from Greene Tweed's proprietary perfluoroelastomer compound, Chemraz® (or other customer requested elastomers), the seal is bonded to an aluminum/stainless steel door.

In the past, when o-ring replacement was the only option, cleaning the gland and installing a new o-ring was difficult. Now installation requires only removing and replacing a few bolts when replacing the complete BSV door assembly.

Also, a bonded design minimizes abrasion, leading to less particulation in many processes compared to installation of a typical perfluoroelastomer o-ring. Therefore, a bonded-gate design can provide up to a 10-fold increase in seal life during wafer production.

#### Bonded Slit Valve Doors Increase Wafer Production in HDPCVD Processing





#### **Features and Benefits**

- · Designed to eliminate movement in gland for improved seal integrity and less wear
- Durable Chemraz<sup>®</sup> or other fluorocarbon withstands dynamic use to increase life expectancy of slit valve doors
- Limited particle generation for lower contamination
- Designed to fill gland for improved seal integrity and elimination of potential leaks
- · Optimal compression set for improved seal integrity and life
- · Seal bonded to aluminum/stainless steel door to decrease replacement downtime, simplify installation and ensure proper seal orientation without twisting
- · No traditional molded parting lines for improved seal integrity