# **Chamber Door Seals**



# Longer Lasting Seals for Lower Maintenance Cost:

Parker's TechSeal Division offers engineered solutions for a variety of chamber door seal applications including sterilizers, environmental test chambers, autoclaves, hyperbaric chambers, and cryogenic vessels.

TechSeal's combinations of custom designed seal geometry and advanced materials are unique. They provide customers with superior seal performance and durability while lowering overall costs by improving equipment operating efficiency.

Using Finite Element Analysis (FEA) and physical and functional testing, TechSeal's Application Engineers can optimize seal characteristics such as closure force, pressure resistance, installation and gland retention to ensure optimum seal performance.



## **Contact Information:**

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#### **Product Features:**

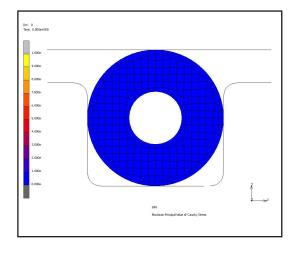
- High performance materials used exclusively including USP Class VI and/or FDA "white listed" materials
- Resistant to compression set, steam, high pressure, and extreme temperature
- Hot vulcanization creates high bond integrity
- Custom engineered to match current design and to increase durability
- Wide range of closure force options
- No tooling required for standard O.D./I.D. combinations and most available profiles

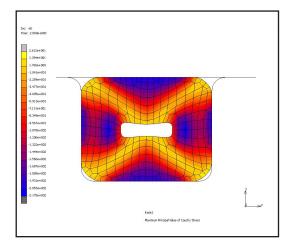


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### FEA for a Pressurized Chamber Door Seal

Shown below is an example of a cross-section from a common chamber door. Through FEA, Application Engineers can simulate specific sealing situations and predict seal effectiveness.



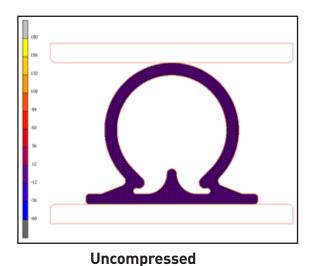


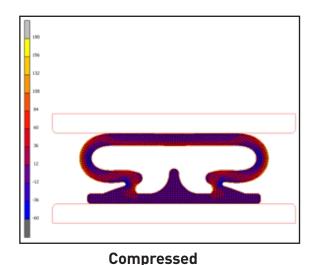
**Uncompressed** 

Compressed

#### FEA for an Environmental Chamber Door Seal

Some chamber doors do not include a groove for the seal. This seal design is a low closure-force Omega profile with a Pressure Sensitive Adhesive (PSA) backing. The result is a seal with a mechanical stop that can be easily compressed without over squeezing, can account for large tolerance ranges, and provides a wide sealing surface on the door.





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