



# MSE® SEALS

## Metal Spring Energized Seals Make Impossible Applications Possible

### SEALING SOLUTIONS

The MSE® Seal is a sealing device consisting of precision machined PTFE, filled PTFE or other polymeric components energized by a corrosion-resistant metal spring or an elastomeric O-ring.

When the seal is seated in a gland, the spring or the O-ring is under compression, applying force on the gland sealing surfaces, thereby creating a tight barrier to prevent gas or fluids from leaking. While spring force provides adequate force for sealing at low pressure, at high pressure, the system pressure augments the spring force to provide an even tighter seal. The spring also provides resiliency to compensate for seal wear, gland misalignment or eccentricity.

Greene, Tweed offers over 100 seal materials, a variety of standard spring materials, and three standard spring designs for a variety of options to develop the best axial or radial seal, for static or dynamic applications.

### FEATURES & BENEFITS

- Chemically inert for virtually unlimited chemical compatibility
- Low friction for smooth and consistent breakout and running friction, low power absorption & torque requirements, and can run dry or lubricated
- Wide temperature range for temperatures from -252°C to 315°C (-422°F to 600°F)
- Wide pressure range for vacuum systems or pressurized systems up to 60,000 psi



### APPLICATIONS

- CVD chambers
- Etch chambers
- Quartz windows
- Gas inlets
- Furnaces
- Wafer elevators
- Robotics
- Valves
- Cryogenic pumps

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*Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.*

*Prior to actual use it is recommended compatibility tests be run to determine suitability in a specific application. This is critical where failure could result in injury or damage. A regular program of inspection and replacement should be implemented. Greene, Tweed technical personnel are available to help with a recommendation.*