Greene Tweed’s MSE® seal consists of a sealing device made from a PTFE or other polymeric component, energized by a corrosion-resistant metal spring or an elastomeric o-ring. When the seal is seated in the gland, the spring is under compression, applying force on the gland sealing surfaces and, thereby, creating a tight barrier to prevent gas or fluid from leaking. The spring also offers resiliency to compensate for seal wear, gland misalignment, or eccentricity. 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.

MSE® seals are precision-machined from PTFE, filled PTFE, and other high-performance polymers.

Greene Tweed’s design experts partner with customers when choosing from more than 100 seal materials, a variety of spring materials, and three standard spring designs. Their expertise ensures that our customers select the best combination of materials and design to meet and exceed their application requirements.

**Features and Benefits**

- **Chemically inert**
  - Virtually unlimited chemical compatibility
- **Low friction**
  - Smooth and consistent breakout and running friction
  - Low power absorption and torque requirements
  - Ability to run dry or lubricated
- **Wide temperature and pressure range**
  - -422°F to 600°F (-252°C to 315°C), from cryogenic service to hot air or superheated steam
  - Vacuum to 60,000 psi (414 MPa), vacuum chambers to high-pressure water jet cutters