High-Performance, Low-Friction Seal

The MSE® (Metal Spring Energized) seal’s superior designed “dual-lip body” gives improved sealing performance. Because our expertise in custom design and fabrication leads innovative designs, special configurations of MSE® seals are limitless.

Anti-Blowout MSE® Seals

Greene Tweed has developed a specially configured MSE® seal for applications where the dynamic sealing surface is withdrawn past the seal interface while the seal remains under pressure. The seal and housing geometry allows the withdrawal/ removal of the dynamic sealing surface without the seal being “blown” from its gland.

The seal is manufactured from Greene Tweed’s proprietary grades of PTFE, creating extremely low-friction characteristics. Seals operate at pressures to 6,000 psi (414 bar); however, higher pressures can be achieved. The unique design of the seal gives secure sealing over repeated demanding applications.

Features and Benefits

Low Friction

- Low power absorption and torque requirements
- Friction can be adjusted and controlled
- Ability to run dry or lubricated giving a long service life

Chemically inert

- Virtually unlimited media service with one seal
- Low-cost alternative to expensive elastomers
- Sensitive media not contaminated

Wide temperature performance envelope

- Cryogenic to 600°F (316°C) with excellent performance at extreme temperatures

Pressure range from vacuum to 58,000 psi (4,000 bar) and above. Unlimited shelf life. Machinable for fitting existing O-ring grooves and sizes from 1/8 in. to 120 in. (3 mm to 304.8 mm).