

ULTRA-HIGH PRESSURE BACK-UP RINGS

Engineered for Extreme Oil & Gas Applications

PRODUCT OVERVIEW

Engineered for durability, these precision back-up rings prevent O-ring extrusion and maintain a reliable seal through extreme pressure and temperature shifts.

Advantages for Oil and Gas operators:

- Ensures sealing reliability under rapid pressure cycling.
- Reduces maintenance frequency and seal replacement costs.
- Enhances system safety by preventing extrusion-related failures.
- Proven performance in harsh environments (HPHT, subsea, and drilling systems).

ARTES Inc. designs and manufactures advanced sealing and polymer components for critical oil and gas, energy, and industrial applications. Our expertise in material science and engineered geometry allows us to provide custom sealing solutions optimized for performance, durability, and cost efficiency.

Features

- Positively activated design: expands under pressure to prevent extrusion.
- Optimized geometry accommodates cylinder breathing and deflection.
- High-pressure capability suitable for systems exceeding 20,000 psi.
- Material options include PTFE, filled PTFE, PEEK, and high-performance polymers.
- Temperature range: -60°C to +260°C (material dependent).
- Extended service life protects O-rings and reduces downtime.

Applications

- Hydraulic actuators and cylinders
- Downhole drilling tools
- Subsea and topside valve systems
- Pressure control equipment
- Blowout preventers (BOPs)
- Completion and production systems