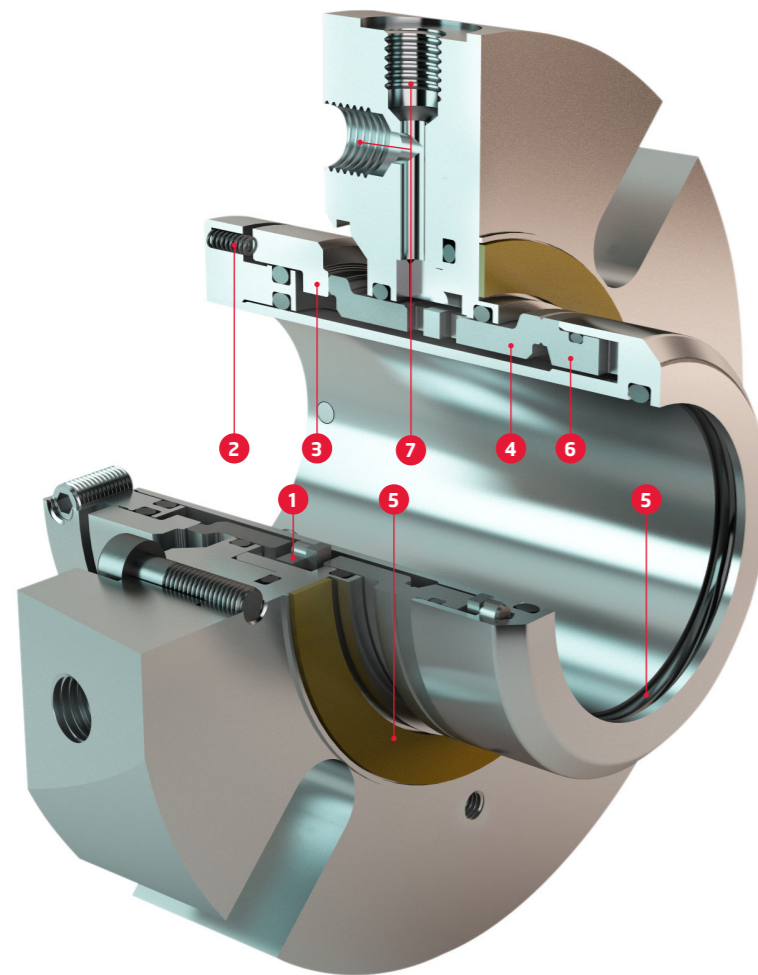
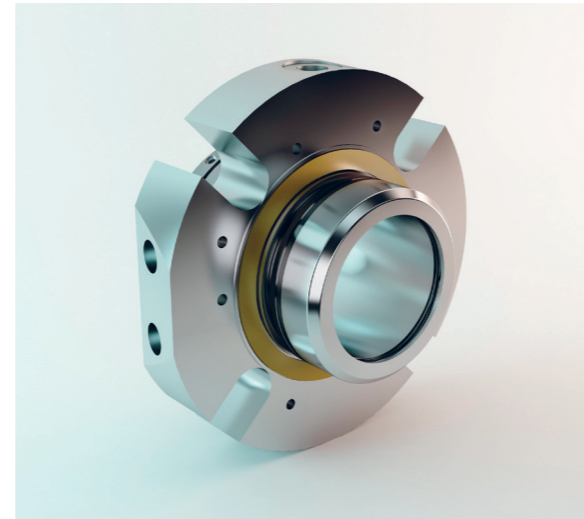


ED Double balaced cartridge seal

Huhnseal ED is a double balanced cartridge seal maintaining sealing performance even during sudden pressure drops on the product side and/or the secondary side. The design of the seal is robust and rigid but at the same time flexible, with excellent radial and axial movement capabilities. The springs are located outside both the product and the flush minimizing risk for clogging.



- 1 Excellent axial movement**
The seal can move $\pm 2,0$ mm independent of the compression of the springs. The seal follows the movement of the shaft without influencing the compression of the springs. This feature is essential when sealing equipment with flexible bearing units.
- 2 Patented protected spring package**
The springs are located outside both the product and the flush. Minimizing the risk for clogging, which is one of the most common causes for seal failure. Patent No: 900912-2
- 3 Safe drive of rotating surface at the atmospheric side**
The rotating face on the atmospheric side is driven by three big drive pins machined into the sealing face. The pins are not in contact with the quench liquid, eliminating the risk of them being blocked axially by residues from the quench.
- 4 Excellent radial movement capabilities**
Through a new design the seal is able to compensate for angular deviation without generating stresses over the seal faces, which may influence sealing performance. This feature minimizes the effects of excessive shaft bending during operation against closed valves.
- 5 Hygienic applications**
Smooth surfaces without cavities or closed spaces make the seal suitable for food and drug applications. If required, the gasket may be replaced with O-rings according to EHEDG in order to achieve a hygienic designed seal suitable for CIP (Cleaning in Place).
- 6 H4 design**
The rotating sealing face on the product side has the new "H4-design". This means that the seal face is O-ring mounted and the outer diameter of the seal face is the same as of the holder. This prevents the forming of turbulent flows, which cause heavy wear in abrasive liquids.
- 7 Axial cooling channels**
Allow for installation of a double seal in applications with very limited space.

Features

- Cartridge mounted for easy assembly
- Balanced (ES) and double balanced (ED) design for minimum heat generation
- Both ES and ED have excellent axial and radial movement capabilities
- Suitable for standardization
- Robust construction materials as standard:
Acid resistant stainless steel
Graphite loaded sintered silicon carbide
Peroxide cured FPM for ES
FFPM for ED
- Easy and time efficient to recondition on site when required
- Protected spring package to minimize risk for clogging
- The seals may be equipped with a separate flange for flushing

Applications

	ED	ES	ESF
Clean fluids*		●	
Fluids with poor lubrication capabilities	●		●
Crystallizing fluids	●		●
Fluids reacting with air	●		
Sedimentary fluids	●		●
High temperature fluids (> 100°C)	●		●
Fluids hazardous to health and environment	●		
Extra need of cooling / pressure balancing			●

*Clean fluids: Low content of solid and abrasive particled. For example, less than 3% fiber content in Pulp & Paper.

Materials

	Standard	On request
Rotating face product side	SSiC+C	TC
Stationary face product side	SSiC	TC
Rotating face atmospheric side	TC	-
Stationary face atmospheric side	Carbon	SSiC
Elastomer	EPDM / FPM / FFPM	-
Springs	HASTELLOY C™, EN 1.4401	-
Metal parts	EN 1.4404	Titanium / EN 1.4462