

Mitigating leakages

Upgrade to the latest seal design

Safety and
sustainability



Upgrade compressor components with proven Burckhardt Compression engineering to reduce leakage, enhance safety and extend equipment lifetime.

Cylinder design upgrade

Improved cylinder design

Our cylinder designs are developed in accordance with the latest technological standards. We offer reverse engineering services for cylinders of any type and brand of compressors, including all internal components such as valves, pistons and packings.

New valve covers with pressure bolts

To minimize leakage and ensure optimal performance, the size and quantity of pressure bolts are determined based on operating and stage conditions. Tightening torques are precisely calculated to support a reliable and efficient sealing concept.

Data collection

Component measurements can be performed directly at the customer's site using modern measurement tools, supported by reverse engineering techniques to guarantee compatibility with existing components.

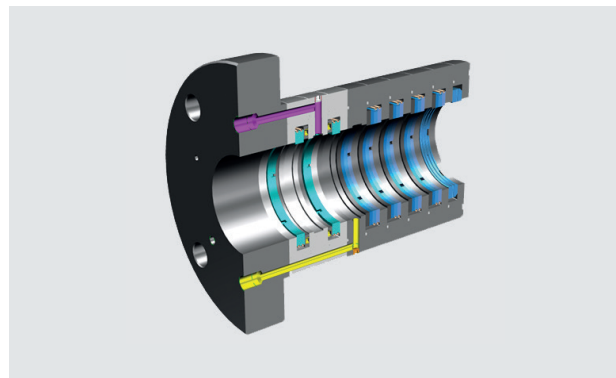
Refurbishment and repair

Old cylinders are refurbished and/or repaired to restore worn components to like-new condition, improving performance and enabling the reuse of existing parts.

Packing upgrade

Optimal type and number of elements

The packing design is engineered depending on the application and operating conditions.



New packing with purge and buffer

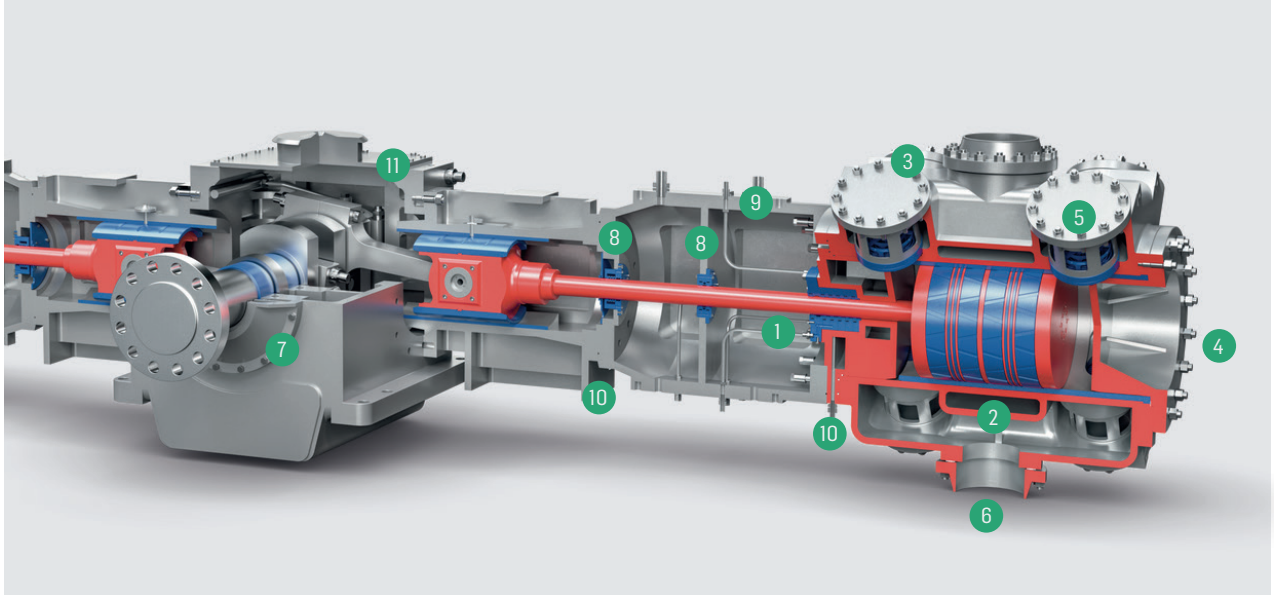
Buffer/purge gas

Upgrades to buffer and/or purge systems will be considered, if necessary. A temperature sensor can be added to the packing to monitor the packing condition.

No cylinder modification

The packing is designed to fit into the actual cylinder bore without any re-machining.

Potential emission and leakage sources



Cylinder emissions

1. Packing
2. Piston rings
3. Valve unloader
4. Cylinder cover
5. Valve cover
6. Gas connection

Crank gear and distance piece emissions

7. Shaft seal
8. Oil wiper and intermediate packing
9. Distance piece
10. Interfaces
11. Crank gear covers

Benefits for cylinder and packing upgrades

Leak gas reduction

Leakage through piston, packing, or cover sealing surfaces reduced

Safety

Purge/buffer system minimizes leakage to the distance piece and prevents gas from entering the crankcase

Efficiency

Replacing or refurbishing components have a positive impact on overall compressor efficiency

Lifetime

Lifetime of packing elements is extended by optimizing their type and quantity

Burckhardt Compression AG

aftersales@burckhardtcompression.com
www.burckhardtcompression.com

