

CONCEPT AND METHOD OF FUNCTIONING

Shaft sealing to seal against the ingress of foreign particles from the surroundings into the medium being pumped and also to seal against the exit of the pumped medium into the surroundings. They are used to seal the gap between a rotor or shaft which rotates relative to a stationary housing by means of seals located after each other in the axial direction of the rotor. The installation takes place in a split housing. In order to seal and isolate the pumped medium the use of a barrier gas is preferred. In certain cases barrier grease is used as an alternative or as an additional safeguard'.

In the cases of a pumped medium which is free of solid particles a return of the medium into the circulation cycle by means of a vacuum system is possible.

APPLICATIONS

Designed for application areas with high and low temperatures, chemical industry, food industry pharmaceutical applications and pumps etc. For sealing of shaft openings in radial and axial ventilators, mills, mixers, centrifuges, shaft seals to AD 200 are used both for rotating machines, e.g. turbo machines as well as for axial movement such as piston rods.

APPLICATION AREA

| Material: | A49 | A10K |
|---|-----------------|-----------------|
| Operating temperature: | max. 225° C | max. 500° C |
| Operating pressure: | -0,2 to 0,5 bar | -0,2 to 0,5 bar |
| max. 0,5 bar (max. 300° C) Over pressure when grease is used as a barrier | | |
| Circumferential velocity: | max. 40 m/s | max. 150 m/s |
| Shaft diameter: | 20...400 mm | 20...600 mm |
| Radial gap: | 2 mm | 2 mm |

(possible deflection between seal housing and shaft)

FEATURES

Thanks to the multiple part design an easy assembly of the seals is ensured. Because of the design concept of a minimal play on contact locations once the initial running in wear has taken place gap sealing with minimal leakage and by this means a highly effective sealing effect is achieved. In comparison to contact seals higher sliding velocities and higher pressures can be achieved. As the seals are arranged to have movement in a radial direction it is possible to compensate for radial displacement and fitting tolerances.

SCOPE OF DELIVERY

| | |
|--------------------------------------|--|
| Seal multiple-part design made from: | Impregnated carbon, PTFE, PEEK, Bronze |
| Spring: | Stainless Steel, Titanium, Hastelloy, Inconel etc. |
| Locking/Anti-rotation: | Stainless Steel, Titanium, Hastelloy, Inconel etc |
| Housing: | Stainless steel, Titan, Hastelloy, PTFE |

