

CONCEPT AND METHOD OF FUNCTIONING

The main components of a mechanical seal are two sliding elements which run on each other - the spring loaded sliding ring and a fixed ring. One of the two rings sits in a fixed position in the housing (stationary ring) while the other ring is fastened to the rotating shaft. As one ring is pressed axially against the other ring an automatic adjustment to make a tight seal with a very small sealing gap is achieved. Some leakage occurs in a radial direction via the sealing gap. The size of the gap is regulated by a relative movement of the sealing surfaces in an axial direction. For this reason the expression axial seal is also used for a mechanical seal. Thanks to the relatively low leakage mechanical seals are used in all technical areas. Compared to stuffing boxes mechanical seals have a much smaller sealing gap and less friction.

APPLICATION AREAS

Mechanical seals are used in particular for shaft openings where pressure differentials occur. They are used for process pumps in the chemical and petrochemical industries, machine tools, compressors, gear boxes, mixers and agitators are major users of mechanical seals. As a general rule the sealing of liquids which could potentially damage the environment is carried out on the product side by mechanical seals.



Wipperfürther Str. 24
51429 Bergisch Gladbach
Phone: 0 22 04 / 480 15-0
Fax: 0 22 04 / 480 15-55
www.abacus-seals.de
info@abacus-seals.de

