

**STASSKOL**



## **DYNAMICSEAL SDK 30**

### **SHAFT SEALS**

Standard and custom solutions  
Especially designed to suit the specific application

In order to meet the specific application conditions the split housing is available in various designs using various materials. Thereby the medium is sealed off from the atmosphere at a pressure range from vacuum up to 20 bar.

**STASSKOL**  
DYNAMICSEAL

# DYNAMICSEAL SDK 30

## TYPE OVERVIEW

3-part sealing rings, radial cut

Standard	Special Design	Comments
<b>SD30</b>	<b>SD30s</b>	made of PTFE compounds or carbon black



### Chamber design

Standard	Special Design	Connections
<b>SDK30-F</b>	<b>SDK30s-F</b>	grease barrier
<b>SDK30-S</b>	<b>SDK30s-S</b>	buffer gas
<b>SDK30-A</b>	<b>SDK30s-A</b>	suction drain
<b>SDK30-FS</b>	<b>SDK30s-FS</b>	grease barrier, buffer gas
<b>SDK30-AF</b>	<b>SDK30s-AF</b>	suction drain, grease barrier
<b>SDK30-O</b>	<b>SDK30s-O</b>	without connections

## APPLICATIONS AND MATERIALS

### Applications:

Fans  
Compressors  
Turbines  
Centrifuges  
Gear Manufacturing  
Dryers  
Mixers

### Industries:

Chemical/petrochemical  
Air separation equipment  
Power plants  
Refineries  
Building materials industry  
Textile industry  
Filter technology

### Material

Sealing rings made of **SK22**, **SK29**, **SK38** and **SK49**, PTFE compounds filled with glass fibres or carbon/graphite, as well as **SK10C**, **SK10K**, **SK32K** and **SK40** made of carbon and impregnated carbon for applications up to 600°C.

Housings made of GG25, St-37 galvanised, 1.4021, 1.4571, Inconel®, Hastelloy® or titanium.

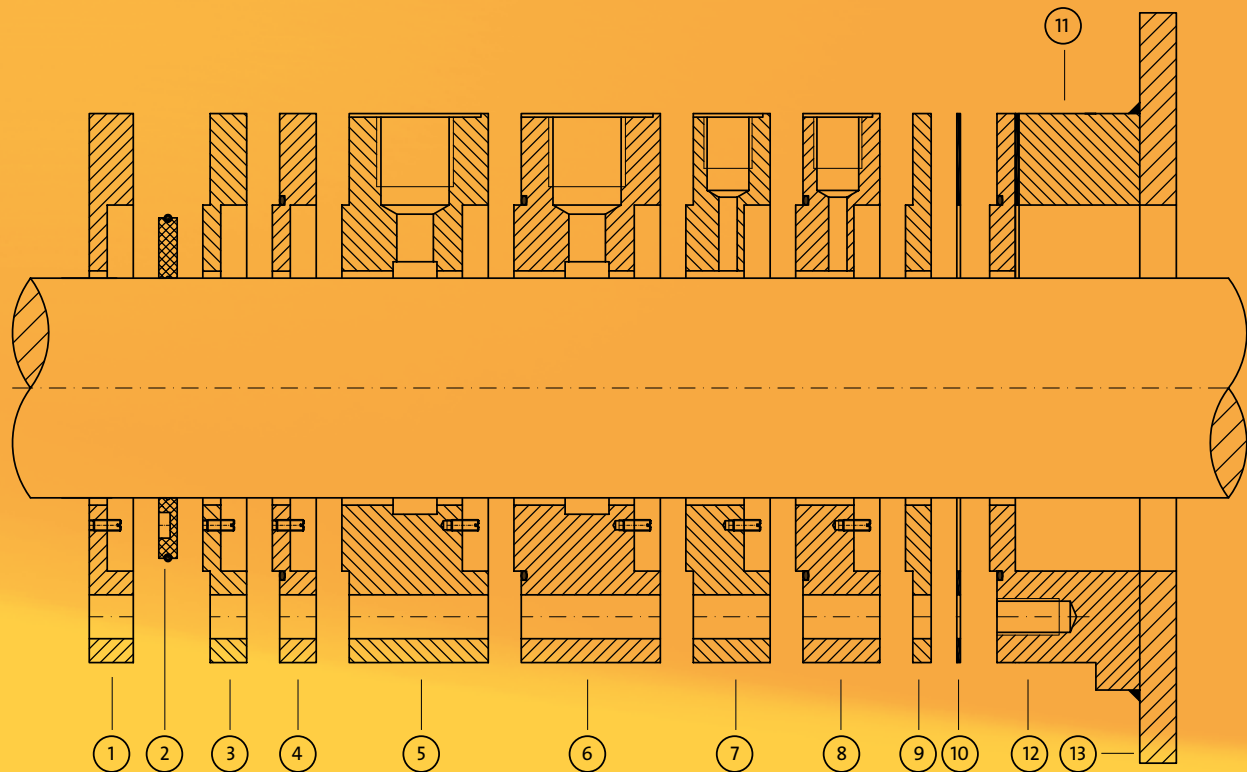
Springs and retainers made of 1.4571, Inconel®, Hastelloy® or Titan.

### Sealing design for vacuum up to approx. 20 bar

Allowed average pressure difference per effective sealing ring between 0.08 and 2.00 bar depending on shaft diameter and the sealing ring materials. Radial clearance between shaft and chamber of 2 mm.



## MODULAR DESIGN PRINCIPLE



- 1. Chamber
- 2. 3-part sealing ring
- 3. Intermediate chamber
- 4. Intermediate chamber with O-Ring

- 5. Buffer gas suction chamber
- 6. Buffer gas suction chamber with O-Ring
- 7. Grease chamber
- 8. Grease chamber with O-Ring

- 9. End ring
- 10. Flat seal
- 11. End ring type A
- 12. End ring type B
- 13. Housing



## ADDITIONAL DESIGNS

### **SDW 20**

**SDW20** shaft seals are shaft seals with a **split housing**. The sealing rings have a **3-part design** with radial cut and are embedded in such a way that they can move radially in the housing. The split housing facilitates the assembly and disassembly of the shaft seal considerably. The shaft seals can be offered with connections for grease barrier, buffer gas or suction drain.

### **SDW 50**

**SDW50** shaft seals are sliding seals with **split housings**. The 3-part sealing rings are made of PTFE compounds or special carbon materials. They are designed for readjustment, i.e. they are manufactured with an **overlapped mortised and gastight ring design**. The shaft seals are available in standard design with or without connection for suction drain or buffer gas.

### **SDK 80**

The **SDK80** series consists of a labyrinth packing with one-piece chambers and radially moveable sealing rings. The **one-piece sealing rings** are made out of a special carbon with a titanium shell for high temperature and pressure resistance. The **chamber design** is suitable for applications involving very high pressures.

### **SDK 40**

A chamber version with **3-piece radial cut** sealing rings made of special carbon has been developed for middle to high-pressure conditions and are especially suited for hypercritical running rotors. Contact-free sealing rings of the **SDK40** series are reducing the leakage values by up to 90%.



### **SDH 20**

The **STASSKOL DynamicSeal** shaft seals are demanding shafts with a very low run-out and a high wear resistance. This can be ensured by our **shaft sleeves**. By using various coating alternatives to suit the respective application the **SDH20** ensures a high service life.



STASSKOL GmbH  
Maybachstrasse 2  
39418 Stassfurt  
Germany

Phone: +49 (0) 39 25 / 288-100  
Fax: +49 (0) 39 25 / 288-105  
e-Mail: [info@stasskol.de](mailto:info@stasskol.de)  
Website: [www.stasskol.de](http://www.stasskol.de)