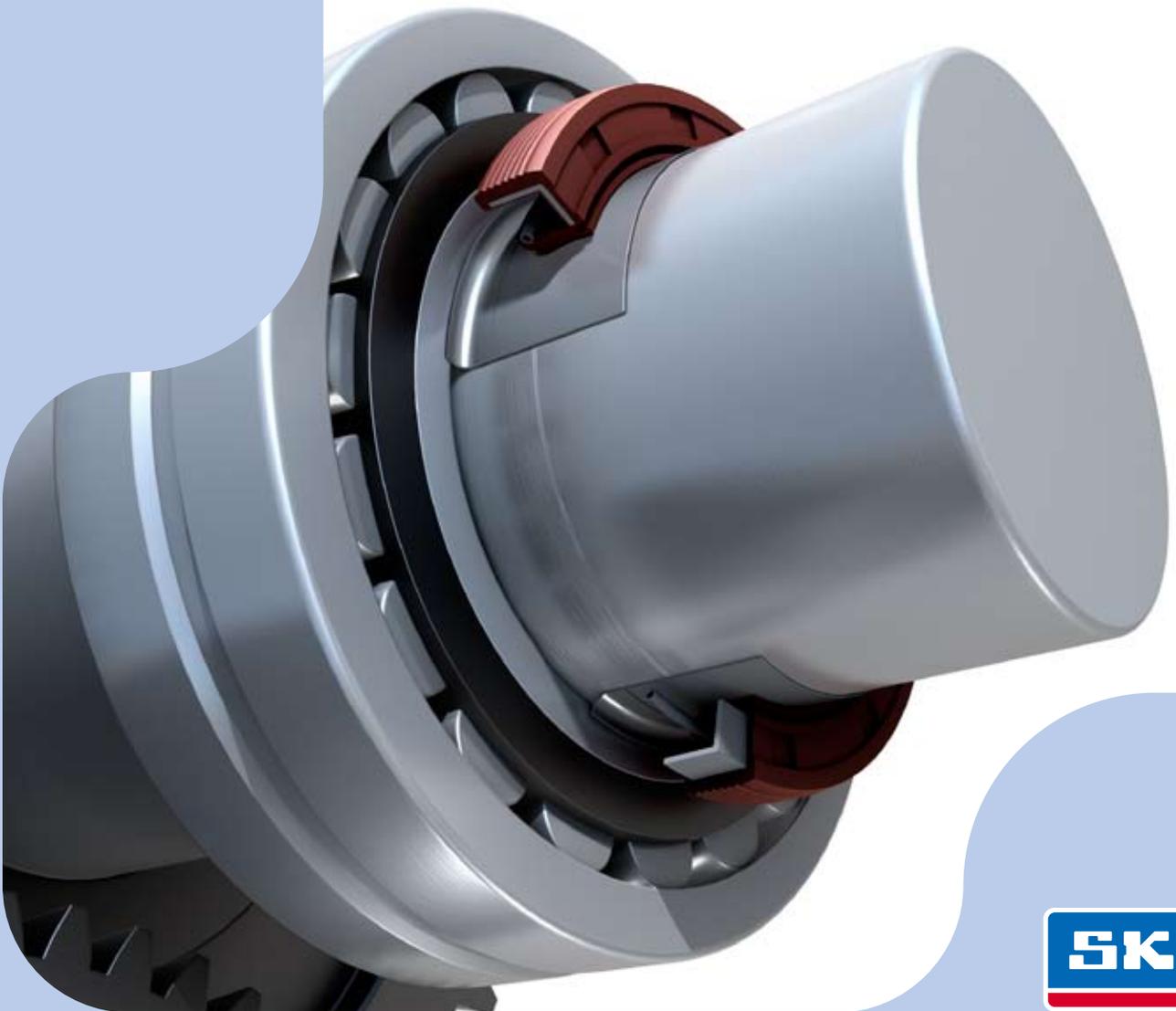


New generation SKF SPEEDI-SLEEVE





Enhanced performance

Optimal counterface for radial shaft seals

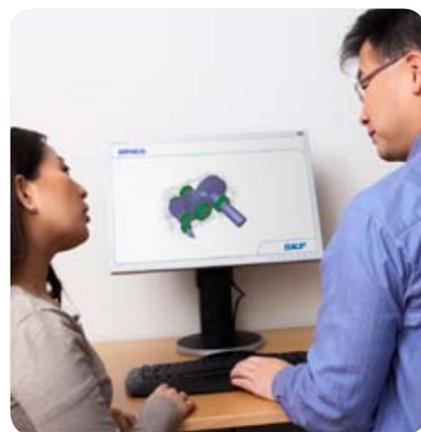
Radial shaft seals must run against a smooth, round counterface surface to retain the system lubricant. Most often, the counterface is a shaft that has been machined, which is typically a costly operation, to achieve the required surface properties. When in operation, the shaft will eventually wear out and require maintenance.

SKF SPEEDI-SLEEVE is a well-proven solution used to provide an excellent sealing surface for radial shaft seals, while reducing the need for costly shaft machining or maintenance. In fact, its surface properties result in a better counterface than can often be achieved on a shaft.

Now, SKF is introducing a patent pending new generation of SKF SPEEDI-SLEEVE, developed to further enhance the sealing system's performance by reducing the wear on both the sleeve and sealing lip. This increases the service life of the sealing system and, in turn, the service life of the machinery that it is meant to protect. An effective sealing function also prevents lubricant leakage, thus minimizing the environmental impact.

Whether it is used to reduce initial shaft machining or to replace costly downtime while repairing a worn shaft, the new generation of SKF SPEEDI-SLEEVE offers enhanced sealing system performance and benefits for both OEM and aftermarket customers, helping to achieve the following:

- higher productivity
- reduced warranty claims
- increased mean time between failures
- reduced maintenance and repair costs
- reduced environmental impact



SKF SPEEDI-SLEEVE

The concept

The new generation of SKF SPEEDI-SLEEVE combines a proprietary stainless steel material and manufacturing process, resulting in an optimized seal counterface that minimizes wear on both the sleeve and sealing lip. The proprietary material provides increased strength and excellent ductility properties of the sleeve. Imperceptible lubricant pockets enable the lubricant to reside on the sleeve and thereby prevent dry running of the sealing lip that otherwise can create excessive wear. The seal contact surface is wear resistant and manufactured to minimize directionality ($0^\circ \pm 0,05$) with a finish of Ra 0,25 to $0,5 \mu\text{m}$ (10 to 20 $\mu\text{in.}$).

The sleeves feature a removable flange that simplifies installation, and the thin-walled design [0,28 mm (0.011 in.)] allows the original size to be used for the replacement seal.

Wide application range

SKF SPEEDI-SLEEVE can be fitted virtually anywhere there is a radial shaft seal, offering considerable end-user benefits such as quick and easy maintenance and cost-effective equipment life cycle.

SKF SPEEDI-SLEEVE is already an established solution for industrial gearboxes, industrial electrical motors, construction and agriculture equipment and industrial pumps.

In industries such as mining, mineral processing and cement production, the use of SKF SPEEDI-SLEEVE has been established in crushers, conveyors, motors, reducers, fans, industrial gearboxes and pumps. Here, the gains result in improved productivity and profitability, thanks to a reduced need for extended maintenance and lower repair costs, combined with the ability to better comply with environmental standards and legislations. With an improved sealing system and the ability to plan maintenance with more accuracy, the leakage of lubricants into the environment is minimized.

Solution for worn shafts

Well-proven, quick and easy

Typically, a seal counterface becomes scored when a contaminant particle is caught under the sealing lip and abrades a track as the shaft rotates. A simple seal replacement will not be sufficient, and to repair the shaft, it is usually necessary to disassemble the machine to be able to grind down the counterface until it is again within specification.

Removing the shaft from the machine also involves the removal of other expensive components including bearings and gears, as well as lubricants. Once the shaft is removed and sent for repair, the machine can no longer be used in production, thus resulting in costly downtime.

SKF SPEEDI-SLEEVE has an established track record of providing significant advantages over maintenance approaches that require disassembly and machining of the shaft.

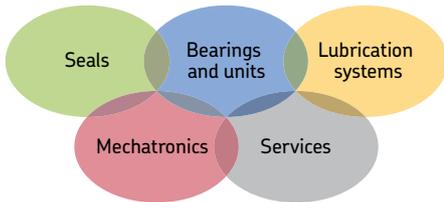
When using SKF SPEEDI-SLEEVE, no machining is involved at all. It is simply pushed into position over the worn shaft area, providing an excellent sealing surface within minutes. The machine is quickly returned to production and costly downtime is dramatically reduced.



The new generation of SKF SPEEDI-SLEEVE is available in two versions: the standard version for general purpose and SKF SPEEDI-SLEEVE Gold with a thin, metallic coating for use under highly abrasive conditions.



Size range
The standard size range covers sleeves for shaft diameters from 11,99 to 203,33 mm (0.472 to 8 in.). Each sleeve is designed to fit a specific shaft range to accommodate variations in the actual shaft diameter. If the right size is selected, the sleeve will have an adequate tight fit on the shaft and will not require any adhesive.



The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

www.skf.com/SPEEDI-SLEEVE



© SKF and SPEEDI-SLEEVE are registered trademarks of the SKF Group.

© SKF Group 2011

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB SE/S9 11340 EN · February 2011

Printed in Sweden on environmentally friendly paper.

Certain image(s) used under license from Shutterstock.com

