

# SAFD bearing housings

SKF SAFD housings combine the same robust design and machining accuracy as the SKF SAF grey cast-iron bearing housings with the rigid strength, high impact strength and fatigue resistance of spheroidal graphite cast (ductile) iron material, making them ideal for high loads or low-temperature environments. SAFD housings are made from ASTM A536 Grade 65-45-12 spheroidal graphite cast iron (ductile iron) as standard (65 000 psi tensile/45 000 psi yield/12% elongation). SAFD bearing housings are modularly designed and available for shaft diameters ranging from 1 7/16 to 10 7/16 inches.



## Product features

- Stiff and robust design made of spheroidal graphite cast iron
- Accommodates spherical roller bearings (including series 232), self-aligning ball bearings and CARB toroidal roller bearings, as either a locating or non-locating bearing
- Markings on the base indicate the center of the bearing seat and the axis of the housing bore
- Cast dimples indicate locations on the cap to drill and tap for condition monitoring devices or for additional seal lubrication, and on the base to drill for dowel pins, if required
- Grease guiding system (on most housings) delivers grease to the side of the bearing efficiently
- Grease level indicator on all housings

## User benefits

- Supports heavy loads, optimizes bearing performance and extends service life
- Better performance in shock load conditions and sub-zero (0 °C/32 °F) temperatures
- Low maintenance costs
- Higher load carrying capacity than grey cast-iron housings
- Same housing accommodates bearing as either locating or non-locating
- Good heat dissipation results in lower operating temperatures
- Easy to locate positions for attaching condition monitoring equipment or adding seal re-lubrication, if required
- Seal type available for virtually any application
- Easy and more efficient relubrication
- Avoids over-greasing the housing

## Common applications

- Fans
- Conveyors
- Mills
- Crushers
- Pulleys
- Repulpers
- Agitators

# SKF manufacturing standards

Our high quality manufacturing standards, when applied to our SAFD housings, provide the following advantages:

- Less risk of system looseness
- Less risk of bearing outer-ring rotation
- Less risk of bearing seat distortion
- Less risk of a pinched bearing
- Less risk of a trapped non-locating bearing

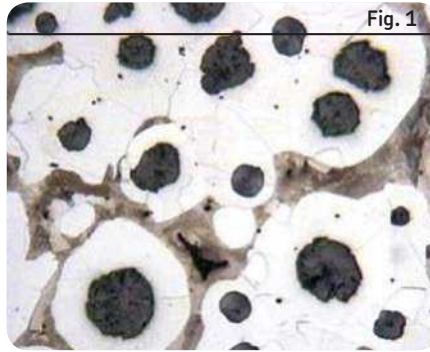
## Housing material

### Spheroidal graphite cast iron (ductile iron)

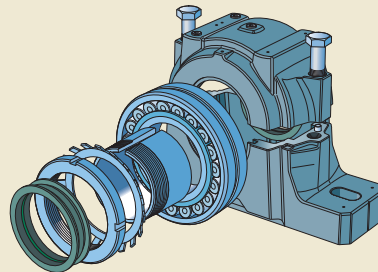
In spheroidal graphite cast iron, the graphite is in the form of nodules (→ **fig. 1**) in a matrix of free ferrite (light) and pearlite (dark), rather than flakes as it is in grey cast iron. The rounded shape of the nodules reduces stress concentrations within the material matrix, making it less prone to cracks and increasing ductility. The formation of nodules is achieved by the addition of small amounts of magnesium.

### Spheroidal graphite cast iron vs grey cast iron

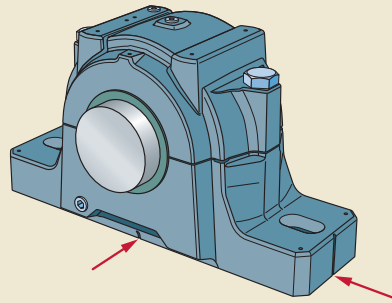
The main advantages of bearing housings made of spheroidal graphite cast iron are that they can withstand loads that are approximately 1.8 times heavier, and perform better in sub-zero temperatures.



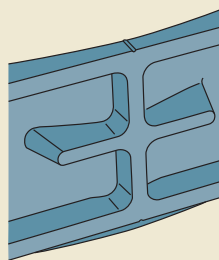
SAFD 23520 LOR



Simple and accurate mounting

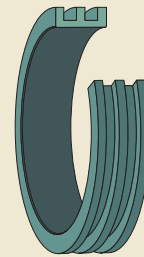


Excellent heat conduction

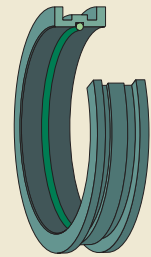


### A wide range of seals

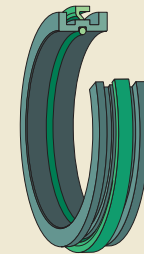
Range of different sealing arrangements available



Labyrinth seal LER ....



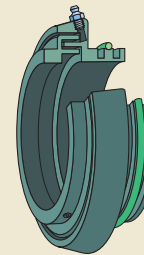
PosiTrack seal LOR ....



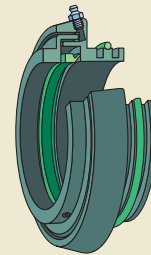
PosiTrack Plus seal LORC ....



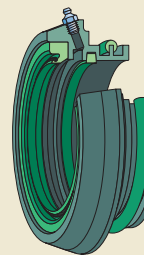
End plug ERP ....



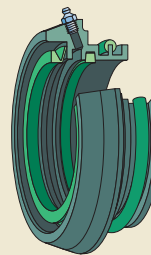
Taconite seal TER-C ....



Taconite seal TER-CV ....



Taconite seal TER ....



Taconite seal TER-V ....

skf.com

© SKF is a registered trademark of the SKF Group.

© SKF Group 2015

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 BU/S7 15497 EN · July 2015

**SKF**®