



## Statistics

- Over 106,061 registered users
- Over 992 visitors per day
- Over 782 articles, tutorials and interactive services.

### In this issue:

[Improved rich media content](#)

[A guide to Asset Efficiency Optimization](#)

[New series!](#)

[The Case of the Twice Dead Electric Motor](#)

## @ptitude Exchange Newsletter - Vol. 8, Ed. 9 Equip the world with SKF knowledge

Dear Daniela,

Welcome to the SKF @ptitude®Exchange Newsletter for September 2009. [SKF @ptitude Exchange](#) news is intended to inform you about new trends, articles, services, and behind the scenes information on SKF @ptitude Exchange. If you have any questions, or comments on what you would like to see in upcoming SKF @ptitude Exchange newsletters, [please let us know](#).

Have you only recently registered with SKF @ptitude Exchange? Did you know that you can download previous newsletters? Go [here](#)

## Improved rich media content:

Part three in the series of audio-visual presentations "understanding Asset efficiency Optimization" has been updated and given an improved user interface. User navigation is improved, a search function has been added, and it is now possible to view the audio narration in text form on the page. (Parts one and two were republished in updated form last month).

Use the following link to go to [Part III](#).

## A guide to Asset Efficiency Optimization

Achieving asset efficiency is a significant challenge. Optimizing the efficiency of equipment has a significant impact on profits - and shareholder value. It affects productivity and quality. In some cases, it may even determine a company's ability to compete, or survive. Corporations that focus on overall equipment efficiency find that they can add capacity without large capital investments. [Learn more.](#)



*This material was previously available in brochure form (SKF publication 5160, now obsolete). The material has been abridged and updated for publication here.*

---

## **NEW series!**

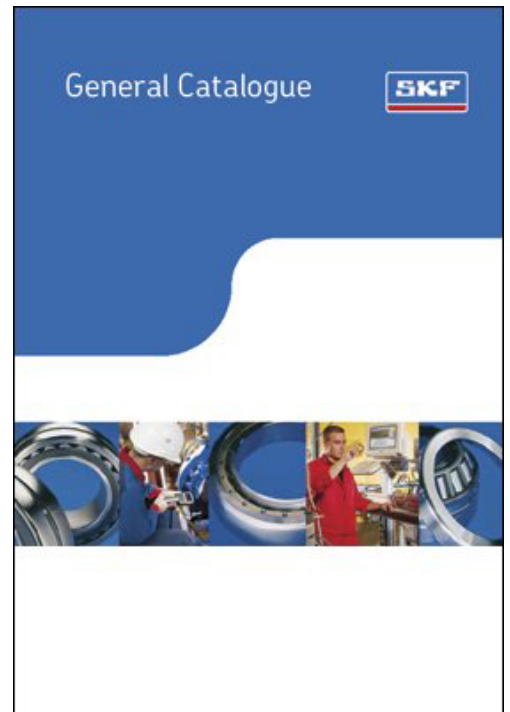
A first look at the SKF General Catalog can be daunting – over 1,100 pages, crammed full of technical data, equations and table after table of product data. How can you make sense of this huge amount of material?

This month we publish the first three of a series of articles by Joe Conyers, that are intended to provide a practical guide to using the SKF General Catalogue from beginning to end.

[Introduction to the SKF General Catalogue](#)

[Principles of bearing selection and application](#)

[Introduction to Principles of bearing selection and application: Bearing types](#)



---

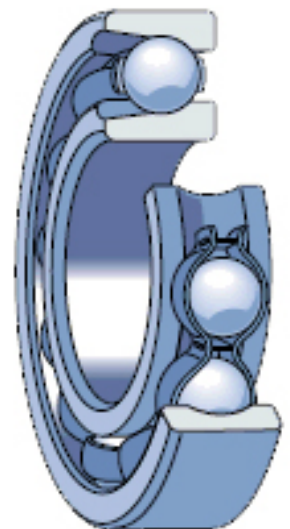
**What can go wrong with a simple bearing replacement? This should be easy, right?**

**Read on and learn about "The Case of the Twice Dead Electric Motor"**

Our old friend, the SKF Electric Motor Handbook, tells us to:

*"Use identical replacement bearings. Replacement bearings should be identical to the bearings they replace. Contact an SKF Authorized Distributor or SKF for interchange information."*

It's 11 A.M. The electric motor you're working on must be back in operation by 4 P.M. Lucky for you, it's a simple bearing replacement. You properly install the replacement bearing, and finish the repair job. The motor is installed and running as you finish work for the day. But, the next day when you return, the SAME motor is back in the shop. Your supervisor is asking for an explanation. Why are we losing precious production time AGAIN for a straightforward bearing replacement?



Here's what really happened to the **Twice Dead Electric Motor**: The bearing you removed from the motor had a "part number" of 206. You asked your storeroom clerk for another 206 bearing, and they handed you a 206 bearing - from SKF. This bearing

is **not** a match for the one you removed. The SKF 206 is a deep groove ball bearing with a filling slot, often called a "maximum capacity" bearing. SKF bores a circular slot in the side face of the rings of this bearing type, allowing additional balls to be added. This increases the **radial** load carrying capacity of the bearing. Unknown to you, this particular motor is oriented vertically during operation. The bearing must tolerate a fairly significant thrust load. During operation, the thrust load pushed the balls out of the normal raceway path. The balls ran over the sharp edge of the filling slot, chipping it out. This caused major damage to the bearing within hours. Now it's back in the shop for a repeat repair.

The proper interchange for this bearing would have been an SKF 6206: a single row, deep groove ball bearing, without a filling slot. The **key mistake** in this bearing replacement was failing to obtain two vital pieces of information: the COMPLETE bearing designation (prefix, basic designation, and any suffixes) AND the manufacturer. Proper identification of bearings is not easy - the latest independent interchange for rolling element bearings lists over 470,000 bearings from over 1,100 manufacturers.

When replacing bearings, get the complete bearing designation and manufacturer. Call your local SKF Authorized Distributor or SKF Applications Engineering Service for the proper bearing interchange. This way, the first bearing you replace will be the right one.

## Calling All Experts

Are we missing something? Are you the expert that can help us? Thanks to all of you who answered our call for new contributions. Without your continued help and support SKF @ptitude Exchange would not be the portal it is today – but we still need more high quality papers to publish. Please continue to send all articles for submission to [Mel Barratt](#). In doing so, we will be able to respond more quickly and process your submission in a much more efficient way.

## Feedback?

As always, SKF @ptitude Exchange depends upon your feedback on how to make our site even better. We look forward to hearing from you. [feedback@aptitudexchange.com](mailto:feedback@aptitudexchange.com)

***The @ptitude Exchange Team***