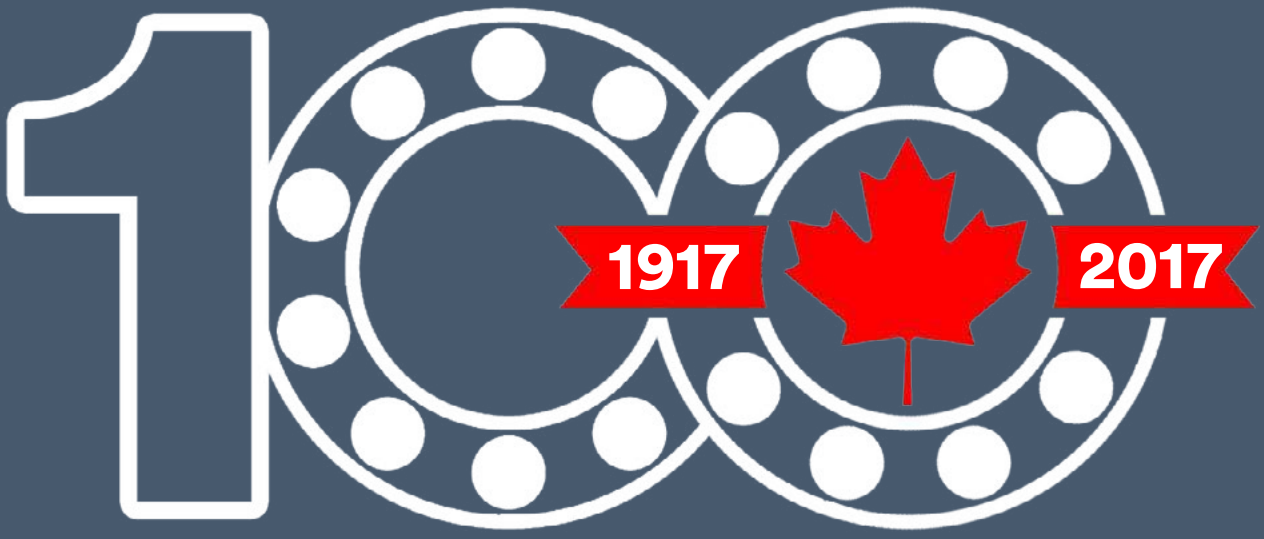
INNER RING MAGAZINE

News and Technology from
SKF Canada Ltd.

ISSUE #2 | 2017



YEARS IN CANADA

SKF®

SKF offers new electric cartridge pump

Learn more: goo.gl/qb5b7g

Advantages:

- **Cost effective**
- **Simple to operate**
- **Available with various lubricants**
- **Minimizes risk of using wrong or contaminated lubricant**
- **Increases reliability**
- **Reduces unplanned downtime**
- **Extends maintenance intervals**
- **Minimizes environmental impact via efficient use of lubricants**

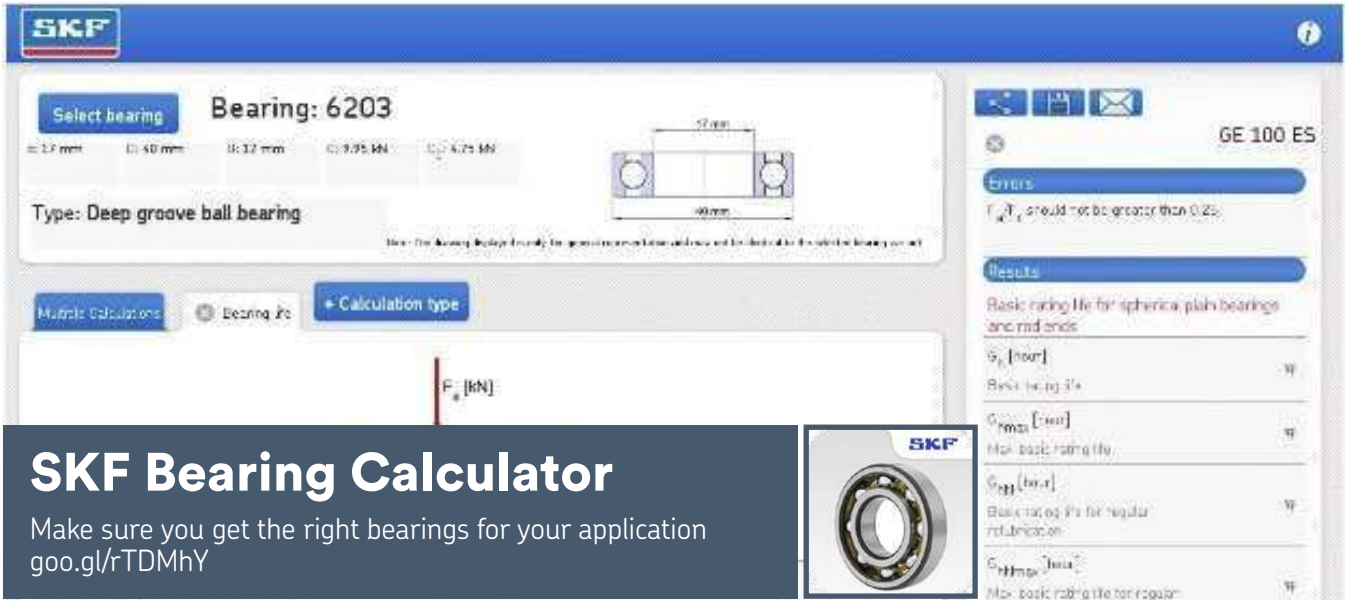
For reliable lubrication of small machines and automation systems using oil and fluid grease

The **Electric Cartridge Pump ECP** was developed to lubricate bearings and linear guides in small machines. It includes an integrated pressure-relief valve that enables its use in SKF MonoFlex single-line lubrication systems. This electrically driven piston pump uses 24 V DC and is controlled by an external programmable logic controller (PLC) for convenience. In addition, the pump is capable of manually activating a lubrication cycle and can be used with an optional, integrated level switch to monitor the fill level of the cartridge.

Utilizing easy-to-exchange cartridges, it is compatible with oil viscosities from 20 to 1 500 mm2/s and fluid grease grades of NLGI 00 and 000. The Electric Cartridge Pump ECP is a cost-effective, simple-to-operate lubrication solution, packaged in a modern, space saving design. The ECP works perfectly together with SKF single-line metering devices.

SKF ONLINE

Learn how SKF products and know-how can help you get the most out of your machines with educational videos, online tools and more, anytime on our knowledge centre at SKF.CA



SKF Bearing Calculator

Make sure you get the right bearings for your application
goo.gl/rTDMhY

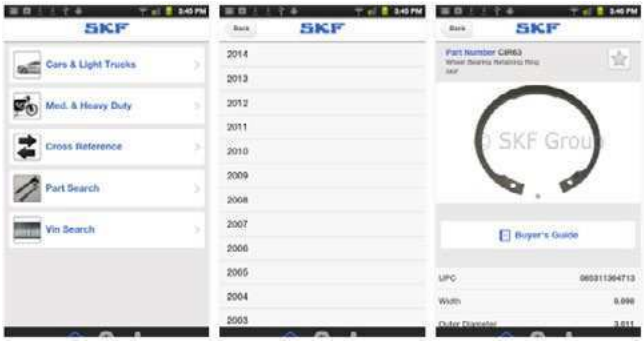
Maximize the life of your bearings!

Perform calculations and searches for SKF bearing products wherever you are.

The SKF Bearing Calculator makes it easy to perform complex bearing calculations. With this app you can calculate rated bearing and grease life or search for other information like bearing frequencies or shaft and housing fits.

The program,which delivers the information straight to your smart phone or tablet, is fast, simple and easy to use.

SKF Insight: goo.gl/jKyc2s
Use this app to remotely monitor bearing health with SKF Insight



SKF Parts Info: goo.gl/gBGaqB
Look up the correct parts for North American vehicles

Inner Ring will feature a different section of the SKF Knowledge Centre in every issue.

Find these and many more at SKF.CA

Eliminate machine downtime with the with Defect elimination program

What is the Defect elimination program?

Defect elimination (DE) is a systematic proactive approach to eliminating machine downtime and improves equipment reliability performance. DE is an important reliability and business improvement tool that seeks to proactively identify product and process defects, allocate them a priority, and then identify and eliminate root causes.

A defect can be defined as "anything that erodes value, reduces production, compromises health, safety, or the environment, or creates waste".

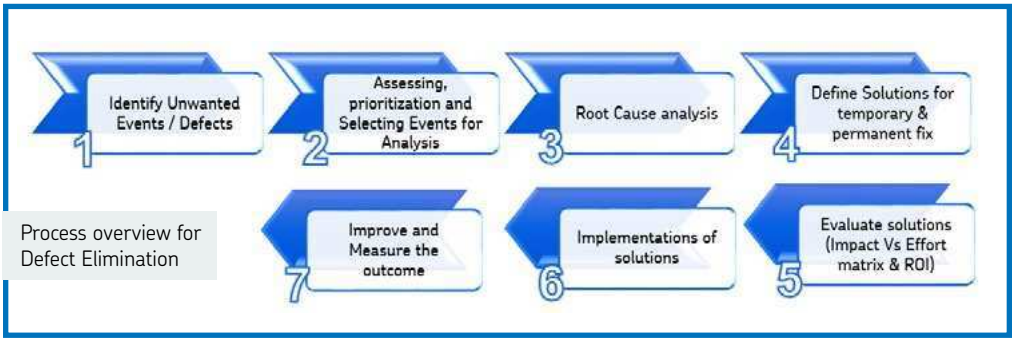
At the core of any Defect Elimination program, is a Root Cause Analysis process. A Root Cause Analysis process applies a problem solving methodology to identify and control the root causes of these "defects."

A good Root Cause Analysis (RCA) to identify any parameter leading to the defect for the following:

A. Equipment
B. Process
C. People
D. Environment
E. Materials

Since DE focus on the defects that are affecting the business the most, there is generally a substantial financial impact in terms of Return on Investment (ROI) generated when corrective actions are implemented.

Learn more about how Defect Elimination can help your company. Email: eric.leblanc@skf.com



Process overview for Defect Elimination

SKF

SPOTLIGHT

SKF is known for having some of the most knowledgeable people in the industry and we will introduce a few of them to you. We encourage you to reach out to Eric and draw on his experience!

Name: Eric Leblanc

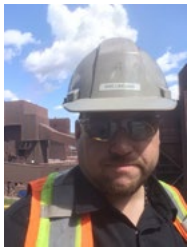
Position: Manager - Maintenance services

Background: 20 years of experience in different maintenance and engineering roles in heavy industries, such as pulp & paper, mining, metals and wind. Eric has worked on a Bad Actor management program (Defect elimination) which generated $45M in cost savings for the customer.

Trends: Traditionally, maintenance was viewed as the necessary challenge that needs to be controlled and shrunk down to an affordable size. Nowadays, it is seen as a critical component of a successful Asset management program. A component that is data-driven, supported by the latest technologies and sustainable.

Tips: Most of the customers are in a firefighting mode when it comes to maintenance. They can not find the resources internally with time and knowledge to implement best practices that would allow them to move toward a disciplined and organized maintenance program. SKF brings proven processes and solutions to implement a world class program generating substantial ROI with short payback time.

Contact: eric.leblanc@skf.com



SKF CANADA 1917 -

SKF entered the Canadian market in 1917 opening a sales office on King St in Toronto. Over the last 100 years, together, we have helped industrialize one of the greatest countries in the world.

SKF has been at the heart of machinery of every kind that operate in Canada with it's demanding climate, challenging problems and need for environmental sustainability.

SKF Canada 100 Years of...

1917 SKF opened its first location in Canada at 47 King St West in Toronto. This location served customers for the next 40 years.

1918 SKF opened its first office in Montreal, Quebec and to this day our local team services French Canadian customer needs.

1963 SKF implemented computerized inventory management system improving the availability of products for our customers.

2000 SKF acquired magnetic bearing technology. Magnetic bearings are found in semiconductor fabrication, pipeline compressors and other critical equipment.

2007 SKF expanded asset management services with Operator Driven Reliability and decision support system, creating significant value for customers and winning them Uptime Awards in Canada.

2014 SKF acquired the Industrial Service Centre in Cambridge to complement bearing remanufacturing with large gearbox services.

2017 SKF becomes one of just 50 industrial manufacturing companies in Canada to be more than a century old.

SKF

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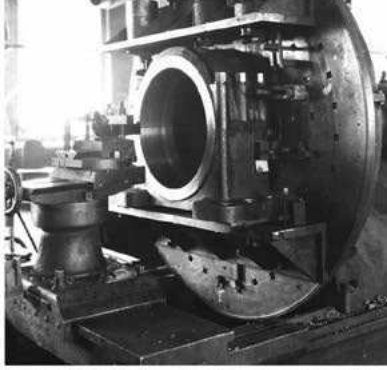

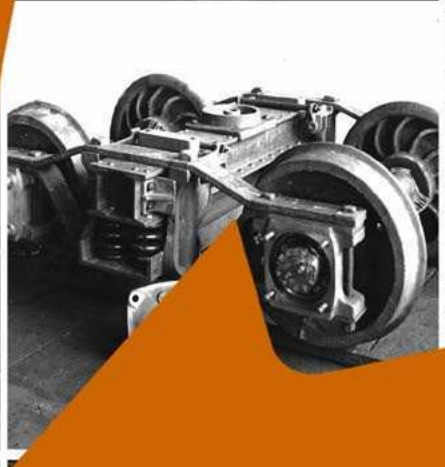

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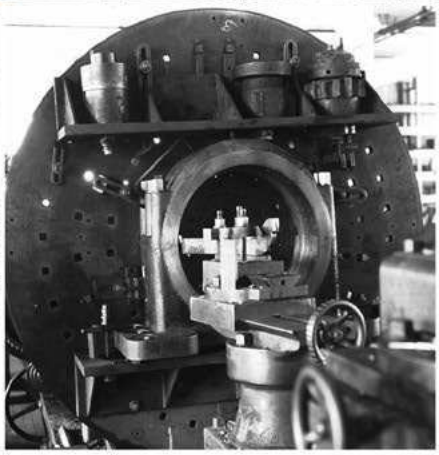

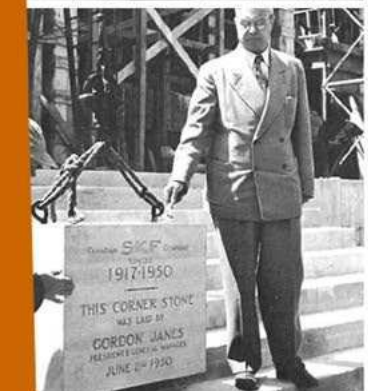
SKF
1917-1950
THIS CORNER STONE
GORDON JANES
JUNE 6TH 1950

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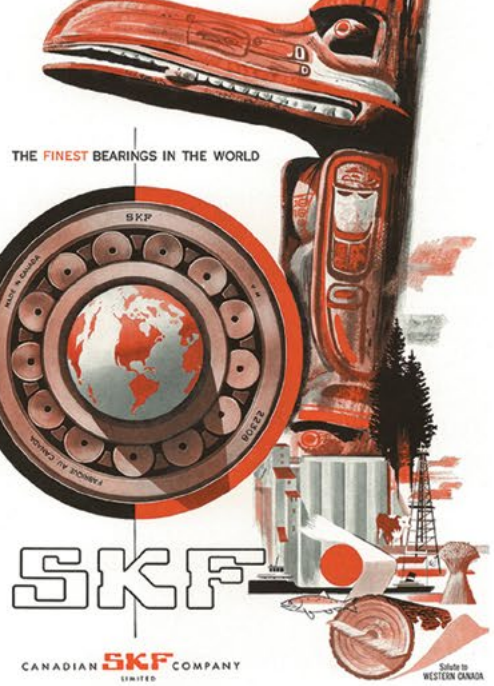


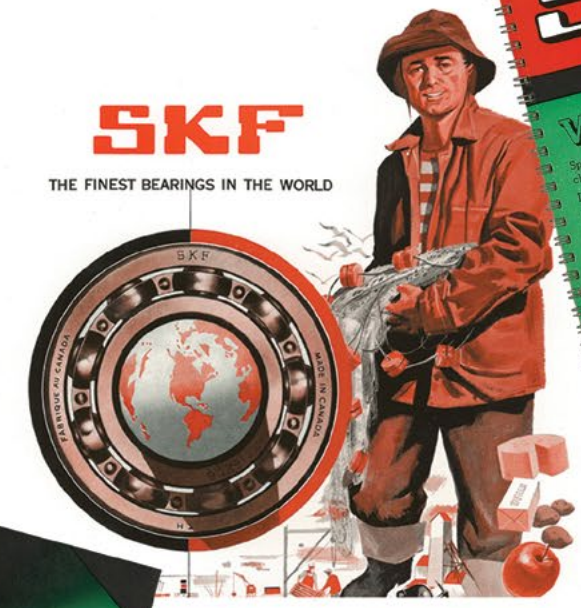
We evolved!

So why not automatic lubricators?

SKF SYSTEM 24

After 17 years in the market, we've got to know our customers. This new generation has been designed around the needs of real users. The unit is now easier to set up and recycle, while keeping their best feature inside:

The SKF high performance lubricants

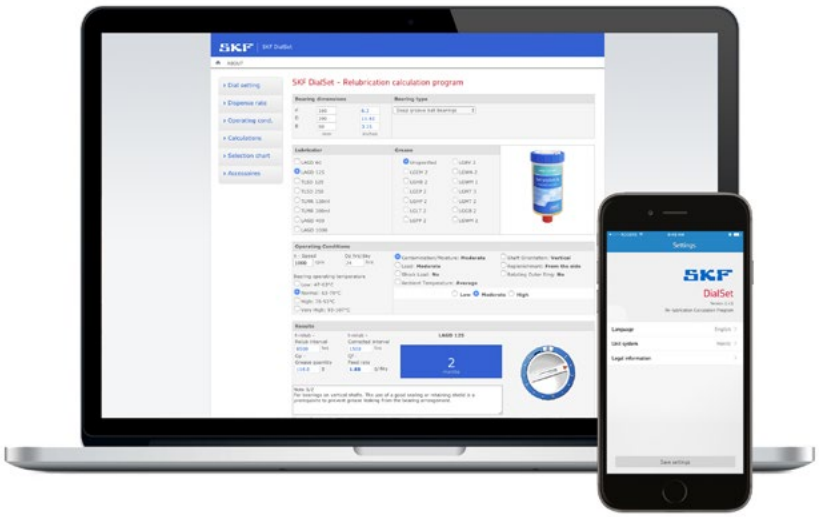


Offering what our customers need

Our aim is to provide a world of reliable rotation, in two ways. First, a product range that is competitive compared to any alternative, providing the right product for the customer application – on time and cost-effectively.

Second, being a partner in the performance of our customer's rotating equipment, utilizing our knowledge to lower customers total cost of equipment ownership. Our success will be measured by how well we contribute to theirs. Our customers have to see, time after time, that **SKF brings more value than anyone else.**

INNOVATION FOR TODAY



SKF Mobile Apps

MORE THAN 35 MOBILE APPS HELP YOU SOLVE YOUR PROBLEMS WHERE-EVER YOU ARE

SKF mobile apps provide employees, customers, and students with not only useful information, but they also allow you to make critical calculations, thus putting SKF Knowledge Engineering at your fingertips.

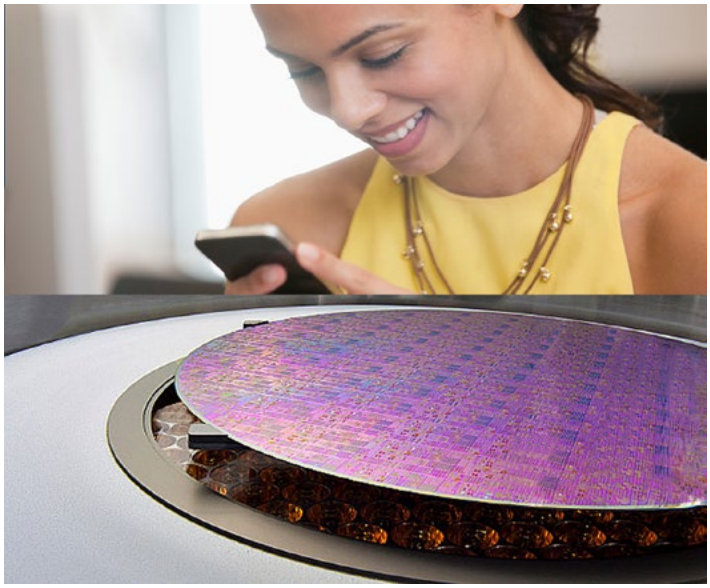
goo.gl/jkrUZ3

World Class Manufacturing

A NEW ERA FOR SKF HAS BEGUN - WORLD CLASS MANUFACTURING IS LIVE

The inauguration of World Class SRB, D-factory in Gothenburg April 5, marks the start of a new era for SKF. The production is now running with digital processes and advanced technology, demonstrating how SKF now has entered into the 4th industrial revolution for real.

goo.gl/pSU569



Magnetic Bearings

MEETING THE MOST CHALLENGING CUSTOMER NEEDS

SKF magnetic bearings are used to make the chips in your electronic devices, transport natural gas to your home and keep your workspace cool during the summer. Magnetic bearings meet customer needs with functionality beyond the limits of rolling bearings, like extreme process purity and vacuum operation, high speed, extreme precision and high reliability. They operate with no contact, eliminating bearing friction and wear using electromagnets to levitate the shaft.

goo.gl/RklyvW

AND TOMORROW.

SKF is commited to innovating and redesigning solutions not only for the problems you face today but also those you'll face in the future.

SKF Enlight

THE FUTURE OF ASSET MANAGEMENT

SKF Enlight is a mobile and cloud-based system that helps operators document and manage operation and maintenance tasks. With SKF Enlight, operators collect machine inspection data with any smart device, and then upload it to the SKF Cloud for 24/7 access and analysis. Leading to increased efficiency and reduced costs.

goo.gl/eEiW7u

A virtual presence

SKF OFFERS EXPERTISE WHERE AND WHEN YOU NEED IT

SKF is introducing a smart way of working using your mobile phone and current technology to support and interact with customers or colleagues without having to travel to meet them. It is very easy and fast to get started.

100 1917 2017 YEARS IN CANADA

SKF CANADA 2017 -

Dear Customers,

Our innovation, knowledge and hard work have helped create value and continuously improve the equipment that drives Canada's prosperity and the society we are fortunate to live in.

The world is changing rapidly and we intend to play a relevant role in contributing to its progress. It will take more hard work, commitment to teamwork and the strength of our partnerships. Our promise is to step up to your challenges, put customers at the centre of everything we do and bring an entrepreneurial approach to solving problems. We will bring the full strength of SKF to help you succeed.

I look forward to engage with you to ensure we continue our important contributions to Canada's place as a world leader today, tomorrow and in the decades to come.

- Shawn Gibson
President SKF Canada Limited

BEARING ISSUES?

The solution may be easier then you think

Having SKF bearings in your product is a great start, but ensuring that they are installed to operate correctly is vital.

PROBLEM

STEP 1

An Original Equipment Manufacturer (OEM) was experiencing untimely bearing failures by their end users.

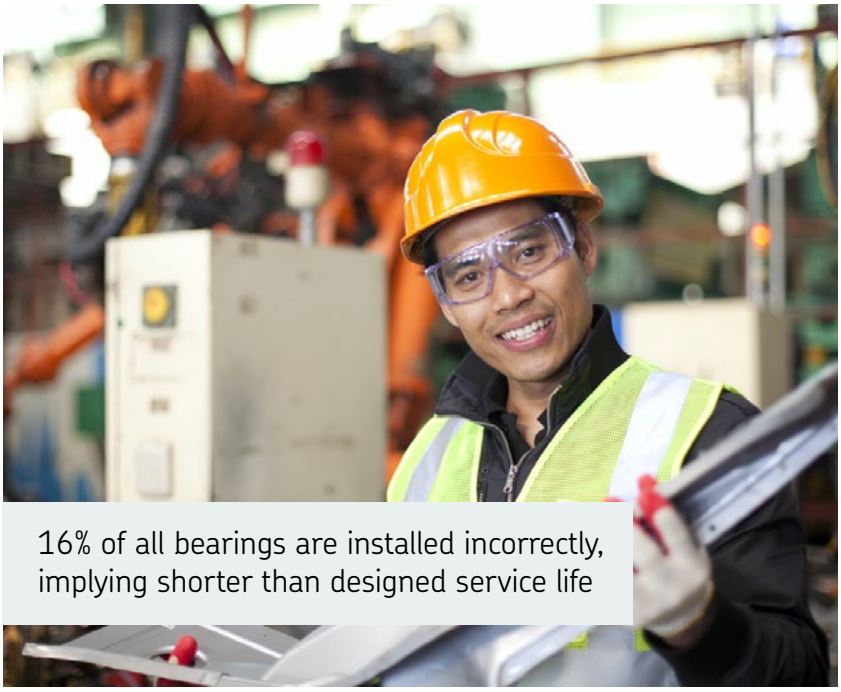
The SKF bearings installed in their new product line were only lasting a quarter of what was promised to the manufacturer; causing recurrent downtime, additional warranty costs, increased maintenance and service costs. This is in addition to the bad publicity received for the OEM's products and their company as a whole.

SKF CONTACTED

STEP 2

The OEM contacted SKF explaining that their bearings were failing in their new product lines. SKF experts were sent to investigate.

SKF provides online tools to help with installation & proper handling: www.skf.com/mount



16% of all bearings are installed incorrectly, implying shorter than designed service life

REVIEW INSTALLATION PRACTICES

STEP 3

SKF application engineering experts reviewed the OEM handling and installation practices for their affected product line. What they noticed was the installation process that the OEM was using was flawed.

While the OEM team was installing the bearing in to their product, the SKF staff observed that there was a gap between the bearing and the housing that was preventing the rotation and full ability of the bearing.

RE-EDUCATE

STEP 4

SKF staff educated the OEM installation team on the best practices of bearing installations.

SKF application engineers demonstrated how precise handling and installation of the bearings is vital for long service life.

RESULTS

STEP 5

The OEM staff rectified their installation operation for this product line with the help of SKF application engineers.

Subsequently, reported failures of SKF bearings in their product lines has stopped as the situation has now be rectified.

SKF also provides public or on-site training for best practice bearing handling, mounting & dismounting goo.gl/NaazMA

Featured products from SKF!

SKF has a unique understanding of rotating equipment and how machine components and industrial processes are interrelated. We provide a wide range of products and related technologies to OEM and aftermarket customers around the world, in every major industry, at each phase of the asset lifecycle.

Shaft alignment tool - TKSA 71

Designed for professional alignment in harsh industrial environments. TKSA 71 is very versatile with ultra-compact measuring units.

goo.gl/fZywAa

Electric cartridge pump (ECP)

Developed to lubricate bearings and linear guides in small machines. Cost effective, simple to operate and available with various lubricants.

goo.gl/qb5b7g

SKF Explorer deep groove ball bearing

Simple in design, non-separable, suitable for high and very high speeds and are robust in operation, requiring little maintenance.

goo.gl/ZAvqWW

Training Solutions

Learn from the leaders of the field

Training is essential to the success of any business. In today's competitive world, keeping up with and deploying best practices is a must.

WE201 - Bearing Maintenance & Technology

Jun 7-8, 2017 - Saint John, NB

Jul 10-11, 2017 - Sarina, ON

Sep 6-7, 2017 - Regina, MB

Sep 12-13, 2017 - Sept-Îles, QC*

WE204 - Root Cause Bearing Failure Analysis

Jun 13-14, 2017 - Timmins, ON

June 20-21, 2017 - Val D'Or, QC*

SKF Training Solutions:
Lubhani Sharma
T: 403-519-1655
E: training.canada@skf.com
*indicates a French language course

New for 2017!

Download the full 2017 Training Solutions catalogue. Link and QR code below.

goo.gl/ZBWhSz

View all issues of Inner Ring Online:
www.skf.com/ca/en/news-and-media/inner-ring/index.html

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