SKF SimPro Quick

Quick evaluation of the performance of your bearing arrangements

Design engineers gain competitive edge

Industrial manufacturers are facing new challenges every day when it comes to rapid design of more robust and more cost efficient machines.

To maintain a competitive edge in product performance through innovation, design engineers are increasing the use of computer software all the way through their design cycle; exploring new design alternatives, including more parameters, and reducing time to market.

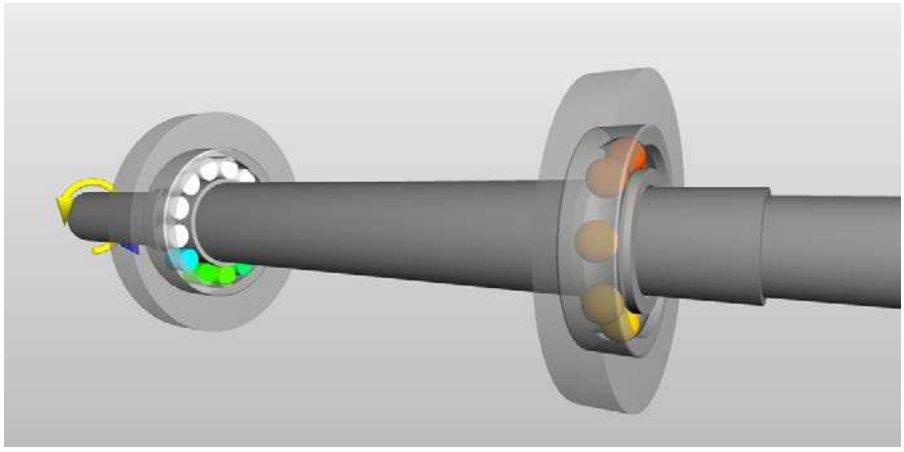
Bearing arrangements performance evaluation

As a design engineer, you know how critical bearing arrangements can be for machine performance, especially with the increasing variety of application conditions. You then need an effective evaluation of bearing performance without compromising on time and flexibility in order to choose the best possible arrangements for your machine design.

SKF has core expertise in bearings, seals and lubrication, and more than a century of experience with applying bearings in rotating machineries in a wide variety of industries. The software tool SKF SimPro Quick is created to empower design engineers with that SKF engineering knowledge.

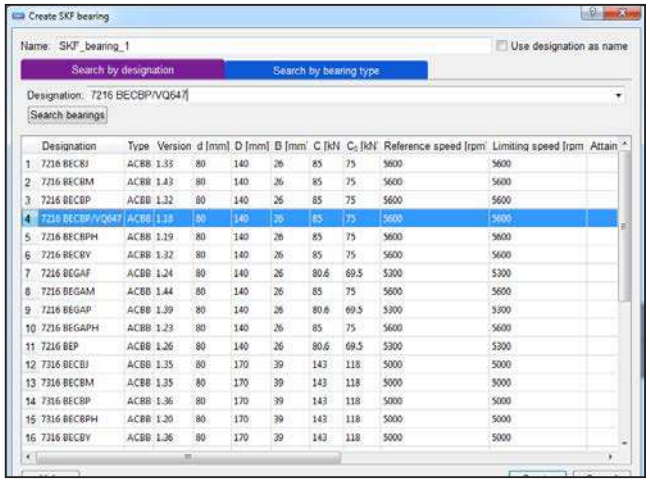
SKF SimPro Quick at a glance

SKF SimPro Quick is a single-shaft bearing simulation tool that is developed to quickly evaluate the design of bearing arrangements and their field performance based on relevant application requirements and conditions. This tool is aimed to provide you with more SKF engineering knowledge and autonomy in order to accelerate your design process and optimize your choice of bearings.



1. Application modelling

SKF SimPro Quick has an intuitive interface to model your application, with relevant components such as shafts, bearings, housings, gears, lubricants, spacers and springs. A bearing selection dialogue enables the selection of bearings from the SKF catalogue Rolling bearings database updated on a regular basis.



SKF SimPro Quick options for bearing selection

2. Adding operating conditions

Operating conditions such as speed, loads, lubrication and fits of shaft and housing are added to the application model. The load and speed conditions can be entered as a combined load cycle.

3. Running calculation

Once your model is built, you can choose to run a single load analysis or a full load cycle analysis, depending on your machine operating conditions. In addition, a bearing preload optimization analysis can be performed.

SKF SimPro Quick 2D Modelling

4. Viewing and reporting

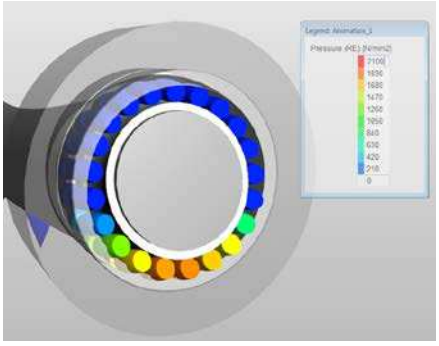
SKF SimPro Quick provides calculation results with a comprehensive range of useful performance output parameters such as bearing fatigue life, bearing load, loaded zone, contact stress, bearing displacement & misalignment, friction, bearing defect frequencies and shaft deflection. The output can be viewed in various graphical charts and in a 3D model. A report is created automatically, based on selected output results and is exportable in pdf, doc and html formats.

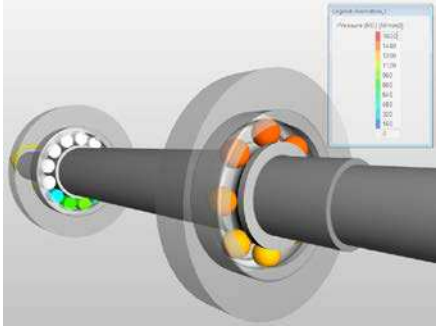
SKF SimPro Quick suitable for many industries

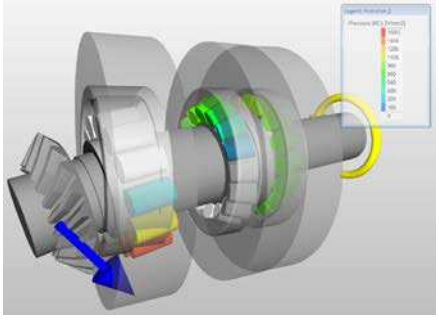
SKF SimPro Quick supports bearing selection and verification in various applications such as fans, pumps, compressors, electric motors, gearbox shafts, process industry machines, etc

SKF application engineers are here to help

To get started with SKF SimPro Quick, an SKF application engineer will provide you with an initial training and will be available to assist you in the selection of bearings to optimize field performance.

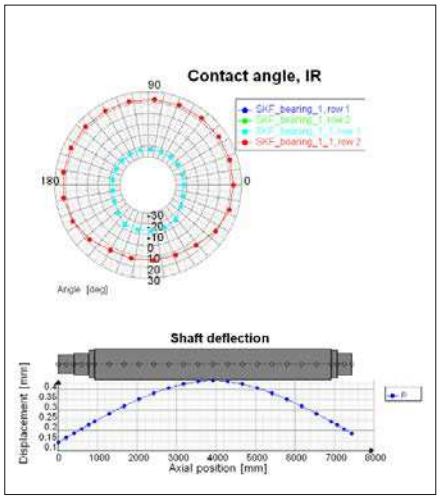




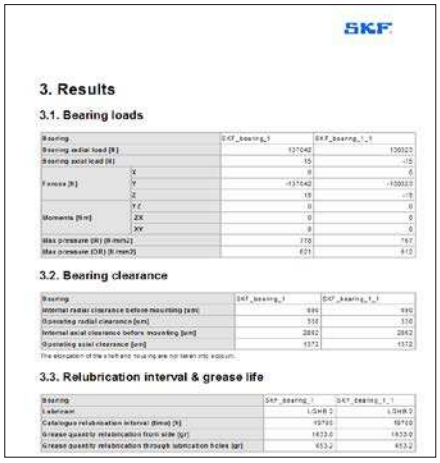


SKF SimPro Quick main features

- Intuitive stepwise graphical interface
- With guidance, warning system and 3D visualization
- Comprehensive modelling capabilities of components
- Bearings, shaft, housing, gears, lubricant, spacers, springs
- Bearing selection based on SKF selection criteria, using product data from the SKF catalogue Rolling bearings
- With detailed and updated geometry data
- Various analysis and output options for bearing arrangements performance evaluation
- Bearing load, loaded zone, contact stress, bearing life, friction, frequencies, shaft deflection, grease relubrication interval, grease life
- 3D animation
- Basic rating life, SKF rating life, as well as the Modified Reference Rating Life (according to ISO/TS 16281:2008)
- Global support



SKF SimPro Quick: Graphical results



SKF SimPro Quick: Report

More information / Registration link

To find out more and get registered, please contact your local SKF contact or follow the below link for online registration:

www.skf.com/skfsimpro

skf.com

PUB 91/P2 16461/1 EN · July 2017