



The Power of Knowledge Engineering







It all begins with your challenges

No two customers – whether original equipment manufacturers or industrial operations – are exactly the same. But they often share the same goals, from making equipment more robust to reducing environmental impact.

SKF Solution Factory brings together people and technical competencies to help troubleshoot application problems to optimize designs and operational procedures for optimum efficiency, productivity, product quality and, ultimately, profitability.

Improving machine performance throughout the asset life cycle

At SKF Solution Factory you can access our industry-leading expertise in bearings, seals, lubrication, mechatronics and a wide range of services. We can combine our unique expertise across all these technology areas with our broad industry and application knowledge and services to design, create and deliver custom solutions for your most difficult challenges.

We have knowledge and experience of collaborating with customers to create unique solutions that address every critical aspect of machinery throughout its life cycle. For original equipment manufacturers, the goal might be improving performance or reducing warranty issues. For end users, it could be solving recurring application problems or reducing energy consumption.

Offering everything from asset management consulting to hands-on mechanical and machining services, your local SKF Solution Factory can address the issues that impact performance and reliability throughout the machine life cycle, from design and development to maintenance and repair.



Bringing together the right people, experience and competencies, SKF Solution Factory can:

- · Assess and set up maintenance programs
- · Design and implement condition monitoring systems
- · Identify, diagnose and solve machinery problems
- Provide remote diagnostic services
- · Provide reliability and maintenance equipment and tools
- · Reconditioning of machinery and critical components
- Customize products based on SKF competencies
- Upgrade machine design
- · Provide training in maintenance and reliability



SKF Solution Factory combines SKF competencies to support SKF Life Cycle Management, a proven approach to improving machine reliability and operational efficiency to reduce total cost of ownership. Services range from engineering consultancy for original equipment manufacturers to bearing remanufacturing and cloud-based remote monitoring and diagnostics.

Welcome to a world of SKF knowledge sharing

Since the first SKF Solution Factory opened in Shanghai, over twenty more have opened around the world. SKF plans call for many more, creating a truly global footprint.

Though each SKF Solution Factory is unique – most are focused on the industries near them – they all have something in common: all work is performed according to SKF standardized organizational processes to ensure that best practices are replicated at every facility. Whether your point of access is Shanghai, China or Houston, Texas, the problem-solving process typically follows the same logical steps:

Identify the problem – A team of SKF engineers will discuss your application and challenges in detail, and then investigate this through a thorough Root Cause Analysis process.

Design a solution – Once we have agreed upon a clear understanding of your problem, SKF engineers and technical experts from different areas work together to find the best solution for your unique needs.

Produce and install the solution -

SKF Solution Factory service consultants, technology experts and service technicians work together to produce your solution,

using our service and manufacturing expertise and leveraging the global SKF network. We will provide you with one key point of contact while our project engineers and field service teams manage the delivery and installation of your solution.

Prove the solution – After the solution is implemented, SKF experts work with the customer to monitor the solution's performance and validate the results.



SKF Solution Factory facilities in a region are linked with facilities worldwide, providing customers with global access to the full SKF portfolio of services, competencies and technologies. Knowledge gained in one region is shared for the benefit of all customers.



A quick guide to better asset performance

SKF has a unique understanding of all the interelated factors that can impact machine performance. SKF Solution Factory combines SKF expertise in bearings, seals, lubrication and mechatronics to deliver solutions that improve your asset performance. Depending on your needs, your custom solution may include these and other SKF services:

Engineering

- · Project engineering
- Condition monitoring system engineering
- · Application engineering

Reliability consulting

- Asset management
- · Lubrication management
- Technical root cause analysis
- · Operator driven reliability

Condition based maintenance

- · Predictive maintenance
- Remote monitoring and diagnostics
- Proactive reliability maintenance
- Integrated maintenance solutions

Mechanical services

- Onsite geometrical and visual inspection
- Alignment
- Balancing
- · Mounting and dismounting
- · Mechanical machining
- · Machine and system installation

Remanufacturing and upgrade

- · Bearing and units remanufacturing
- · Housing remanufacturing
- · Machine tool spindle remanufacturing
- · Gearbox remanufacturing
- Caster rolls and SKF ConRo remanufacturing
- Hydrostatic shoe bearing remanufacturing
- · Hydraulic cylinders remanufacturing
- Machinery performance upgrade

Customized products

- · Bearing and units customization
- Custom machined seals
- Power transmission customization
- · Mechatronics customization
- Lubrication systems customization

Condition monitoring and maintenance product technical support

- Technical support for condition monitoring products and systems
- Condition monitoring calibration and repair
- Maintenance products calibration and repair

Training

- · Reliability maintenance training
- Customer-adapted training



More than simply a virtual resource, SKF Solution Factory is a community of real facilities, each staffed by experts in a wide range of disciplines, and supported by state-of-the-art workshops equipped to design, build and deliver real solutions. SKF has broad application experience across a wide range of industries including pulp and paper, railway, traditional and renewable energy, mining, metals, automotive, food and beverage, and marine. Whatever your industry or application, your local SKF Solution Factory can work with you to meet your most pressing challenges. Below are highlights of just a few ways we've helped customers.



An SKF Proactive Reliability Maintenance agreement with a major paper manufacturer improved machine availability, resulting in a significant production increase.



Reconditioning and upgrading of machine tool spindles enabled an automotive plant to achieve high productivity and optimum quality of final product.

SKF ConRo solution improved continuous caster roll line service life in a steel plant from 13 to 22 months, enabling increased production from 1,3 to 2,5 million tonnes without unplanned stops.



SKF remanufacturing of railway hub units improved cost efficiency for a rail freight line.





A windfarm was able to reduce maintenance costs and reduce product replacements with SKF's bearing remanufacturing services.



An integrated maintenance programme with remote diagnostics improved reliability for a marine shipping fleet.

A new design for a roller support unit in a cement plant reduced energy consumption by 10%.



A Maintenance Strategy Review for an energy producer led to improvements that increased machine availability from 95,4% to 97%.





An SKF Integrated Maintenance Solution (IMS) agreement for a multi-site milk producer increased mean time between failures in critical bearing applications by 300%.



Bring us your challenge

Whether you are designing, building or using industrial machinery, SKF Solution Factory provides a unique way of accessing the proven capabilities of SKF. Combining core technologies, application knowledge, and industry experience with the industry's broadest range of service, we can help you meet these and other goals:

- Optimize designs
- Troubleshoot application problems
- · Avoid unplanned downtime
- Reduce maintenance costs
- Reduce waste
- · Increase productivity
- · Ensure high product quality
- · Lower energy costs

- Improve safety
- Reduce CO₂ emissions
- · Develop internal competence
- Improve asset reliability
- Extend maintenance intervals
- · Increase machine availability
- · Reduce total cost of ownership

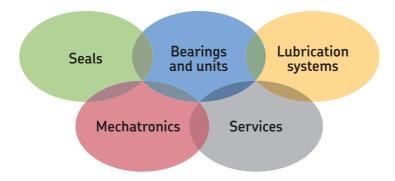


For more information about the SKF Solution Factory and how we can help you meet your goals, scan the QR code.



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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 services. A global presence provides SKF customers uniform quality standards and worldwide product availability.

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