

Directory Rolling Stock



Navigating the Industry's Ever-Changing Track with Confidence

Come and Meet SKF in Berlin



The railway industry has reached a junction in its journey to remain the most secure and sustainable mode of passenger and freight transportation.

To maintain its position, rail infrastructure must continually evolve, prioritising reliability, minimal maintenance and cost-efficiency. Here we reveal why engineering innovation, in particular, is crucial for enhancing the performance and durability of rail systems.

The global push for sustainability is reshaping industries worldwide, and railways are no exception. The UN Sustainable Development Goal 9 emphasises the importance of building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation. In the context of railways, this means updating outdated components to reduce environmental impact while increasing performance. SKF's commitment to these goals – and the wider industry – is evident in the solutions developed through close collaboration with industry partners.

Find us in Hall 22 | 650, where we will be putting a number of these under the spotlight

Bearing the Burden for Improvement

Recent statistics highlight a decline in train reliability, affecting both operators and passengers. According to Railway Technology, data from the Office of Rail and Road (ORR) showed that train reliability in the UK fell to



its lowest level in six years in the 12 months leading up to March 2023. When trains are delayed or cancelled, it's not only a logistical issue. It can disrupt people's lives and freight schedules. Passengers have to wait longer, make alternate plans, and deal with the frustration of unreliable service while freight operators face delays and increased costs. Enhancing train reliability is crucial for maintaining operational efficiency and passenger satisfaction. Solutions developed through close collaboration with customers are essential to address these challenges effectively.

Traditional bearing systems often require frequent maintenance, leading to operational downtime and increased costs. However, the introduction of advanced tapered roller bearings (TRBs) and cylindrical roller bearing units (CRUs) – to provide just two examples – is changing the landscape. These innovations are developed in response to customer feedback and the need for more efficient solutions.

For instance, the CRU for freight offers an extended maintenance interval of up to 12 million kilometres or 11–12 years. This significant improvement not only reduces maintenance frequency but also enhances the overall reliability of freight operations.

"Our partnership with freight operators has led to the development of bearing units that not only extend maintenance intervals but also significantly improve reliability. This has a direct impact on reducing downtime and operational costs."

Jochen Baum, EMEA Railway Engineering Manager

SKF range of tapered roller bearings are engineered to provide robustness and exceptional performance in rail applications. These bearings are highly customisable, allowing them to match specific speed, load, contamination, temperature or vibration conditions.

But it's not only outdated bearings that can prevent operators from achieving optimal fleet performance. Improper lubrication, as well as infrastructural issues like rails that need regrinding or replacing, can affect trains as they glide (or in some cases scrape) along the tracks.

Keeping the Noise Down

We've all heard an incoming tram or train before we've



even seen it, thanks to the piercing squeal that often accompanies it. Noise pollution remains a significant challenge for urban rail systems. Efforts to combat this issue are ongoing, with a leading operator claiming its "noise abatement infrastructure will grow by an average of 125 km a year, 25% more than in the past."

SKF's solutions portfolio for rail includes advanced noise monitoring and diagnostics that continuously track and manage noise levels, as well as onboard and wayside lubrication systems. These help operators to:

- Identify and manage potential issues before they escalate
- Reduce noise and vibration, improving the urban environment
- Support maintenance teams in planning and executing essential tasks, such as track regrinding

Together towards a Safer, More Sustainable Future

Joining forces with our customers, SKF is committed to leading a charge towards a greener rail industry and works with customers and stakeholders to stay at the forefront of this transformation. We are prepared to achieve net-zero scope 1 and 2 emissions by 2030 and aim for scope 3 upstream emissions by 2050. Green steel will play a key role in this journey, and we recognize the significant work ahead.

Join SKF at InnoTrans

For those interested in exploring these innovations further, SKF experts will be present at InnoTrans 2024, **Hall 22 | 650**, to discuss how these advanced solutions can enhance your railway operations. Click **here** to access a wealth of content created by industry experts.

For more information, contact skf@railways.com

Innovation thrives through collaboration

Discover advanced rail solutions at InnoTrans 2024

At SKF, our longstanding expertise in the railway industry empowers us to anticipate and address your needs with precision. Through customerdriven innovation and expert partnerships, we deliver solutions that are safe, sustainable, robust, and now – driven by data.

From our wide range of industryspecific bearings to advanced noise monitoring systems, SKF provides the reliability and performance that modern rail operations demand. All in the name of efficiency, reducing environmental impact, and enhancing the overall passenger experience.

Meet the team at InnoTrans to explore how pioneering solutions can transform your railway operations and propel your success even further.

Visit Stand 650 in Hall 22 to learn more. For additional information, scan the QR code.









