# Liebherr advances slewing bearings and slew drives for a sustainable future



Liebherr’s components product segment is making significant strides in the development of slewing bearings and slew drives, aligning with global industry trends that prioritise efficiency, sustainability, and safety. As industries worldwide face increasing pressures to minimise their environmental impact while enhancing operational effectiveness, Liebherr is positioning itself as a crucial player through innovation in these essential components.

Slewing bearings and slew drives serve as fundamental elements in various heavy machinery applications, including excavators, cranes, tunnel boring machines, offshore cranes, antennas, bridges, and wind turbines. Recognising the urgent demand for higher efficiency, Liebherr is focused on continuous advancement in these technologies. The current offerings include bearing clearance monitoring (BCM), electrically powered slew drives, and an innovative solid lubrication system known as Lifinity, each with distinct advantages for users.

The introduction of Bearing Clearance Monitoring (BCM) represents a significant step forward in maintaining the integrity of slewing bearings. This digital solution utilises built-in sensors to provide precise measurements of both axial and radial wear, eliminating the need for manual checks in challenging locations. The system can reduce downtime by up to 75%, allowing for quick wear measurement via a web app. Additionally, integration of BCM into existing systems requires no additional measuring devices or gateways, thus simplifying operations and facilitating data analysis for users.

Electric slew drives present an environmentally responsible alternative to traditional hydraulic systems. By utilising electric power, these drives lessen noise emissions and eliminate the risks associated with hydraulic oil leaks. Particularly advantageous in sensitive environments, electrically powered slew drives excel in precision tasks due to their efficient power control, which enables accurate movement capabilities. The design also allows for straightforward integration and installation, making them adaptable to various settings.

Another hallmark of Liebherr's ingenuity is the Lifinity solid lubrication system, which significantly decreases maintenance requirements by negating the need for regular relubrication. This process involves the introduction of a heated polymer-oil mixture into a heated bearing, forming a stable lubrication layer as it cools. The reduction in maintenance time and costs not only enhances productivity but also extends the lifespan of machinery. Furthermore, by minimising the risk of corrosion and eliminating the possibility of leakage common with traditional lubricants, Lifinity offers a safer, more environmentally friendly solution compliant with stringent NSF/H1 standards, making it suitable for food-related industries as well.

In summary, through the integration of digital measurement technologies, electrification, and advanced solid lubrication systems, Liebherr is at the forefront of manufacturing slewing bearings and slew drives tailored to meet the demands of modern industries. These innovations are designed to enhance operational efficiency and safety while adhering to environmental standards, placing Liebherr's offerings in a strong position as future-ready solutions across a diverse range of applications.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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