



Testing & Measuring Equipment

HEXAGON



Hexagon and Track Forward Put Wheel Predictive Maintenance on the Right Track

By integrating precise CALIPRI measurement data with AI-powered analytics, Hexagon and Track Forward are helping rail operators move from reactive inspections to forward-looking maintenance strategies.

Hexagon, developer of the optical measurement solution CALIPRI, and Track Forward, provider of AI-powered analytics platform WheelSense, are joining forces to deliver an end-to-end solution that takes rail operators from precise wheel measurement to predictive maintenance decisions.

At the core of this partnership is the combination of precise measurement data from the CALIPRI system with Track Forward's intelligent analytics platform WheelSense. By bringing these technologies together, an end-to-end solution has been created that provides highly accurate data capture through to automated evaluation and maintenance recommendations.



Turning Profiles into Predictions

Here's how it works. CALIPRI enables non-contact and rapid measurement of wheelsets directly in operation. The data obtained is then processed in WheelSense and analysed using advanced algorithms. Individual measurements are no longer merely documented, but placed within a temporal and operational context. Operators can see how wheel profiles develop, which vehicles or operating conditions are showing anomalies, and where targeted measures will have the greatest impact.

This enables early detection of wear development, forward-looking maintenance planning and optimal utilisation of component lifecycles.

"The combination of precise measurement technology and intelligent data analytics opens up entirely new possibilities for maintenance," says Peter Lehofer, Head of Product Management at Hexagon. "Our customers benefit from well-founded decisions based on valid data, making predictive maintenance a reality at last."

Track Forward also sees strong potential in the partnership:

"With CALIPRI we receive high-quality input data that takes our analytics to a new level," says Marc Schmerbach, Founder of Track Forward. "The key added value arises when precise measurement data isn't considered in isolation, but in the context of vehicle history, wear progression

and maintenance strategy. This is exactly where WheelSense, together with CALIPRI, comes in."

Addressing Key Challenges

The joint solution addresses key challenges in the industry: increasing cost pressure, higher availability requirements and the need for sustainable operational strategies. The result is maximum transparency regarding the condition of wheelsets and components, more accurate predictions and significantly more efficient maintenance processes.

Rail operators benefit from reduced downtime, optimised maintenance intervals and a sustainably extended service life of critical components.

With this collaboration, Hexagon and Track Forward are sending a clear signal for the future of the rail industry: data-driven decision-making, transparent wear patterns and proactively planned measures are becoming the new standard in maintenance.

See for Yourself at InnoTrans

Hexagon and Track Forward will be exhibiting together at **InnoTrans this September. Visitors can see the CALIPRI measurement systems and WheelSense analytics platform in action at Hall 23, Stand 530.** Come and meet the teams behind the joint solution that's making predictive wheelset maintenance a practical reality for rail operators.

calipri.net | trackforward.com