



Computers, Sensors, AI

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Transcore

From Asset Tracking to Enabling Rail Condition Monitoring

For decades, TransCore has been recognised for helping rail operators identify and track rolling stock through proven RFID technology. Today, that same expertise is enabling a new generation of rail condition monitoring applications that help operators gain greater insight into the health and performance of their assets.

"The future of rail is moving from asset tracking to condition monitoring," said Greg Blocker, Senior Vice President International Business Development with TransCore. "Our role is to provide the RFID identification that enables those systems to know exactly which railcar or wagon generated the event."

Modern railways increasingly rely on sophisticated trackside technologies to monitor equipment condition and identify maintenance

needs before they become operational issues. These systems may detect conditions such as:

- Hot bearing conditions
- Wheel flat spots
- Dragging equipment
- Weigh-in-motion measurements
- Acoustic wheel-condition monitoring



While these monitoring technologies collect the operational data, they depend on accurate asset identification to make that information actionable. That's where TransCore's RFID readers and tags provide value.

"We're not providing the condition monitoring system," Blocker explained. "We're providing the RFID component that's used by those systems. We're feeding information to another system that associates the detected condition with the correct asset."

By serving as the identification layer, TransCore RFID technology enables third-party monitoring platforms to connect inspection data with the specific railcar, wagon, axle or onboard asset being evaluated. That

information can then be incorporated into an operator's maintenance and operational processes.

This flexible approach supports a wide variety of passenger and freight applications around the world. Whether integrated with heat-signature monitoring, laser profiling, acoustic detection, weigh-in-motion systems or other trackside inspection technologies, TransCore's RFID solutions help ensure that the right information is connected to the right asset.

"As these applications continue to evolve, reliable identification remains the common denominator," Blocker said. "Our readers and tags provide that foundation, allowing technology partners to build smarter condition monitoring solutions for rail operators worldwide."

As rail networks continue adopting more advanced monitoring technologies, TransCore remains focused on delivering the reliable RFID identification solutions that help connect assets with the operational intelligence generated across today's modern railway.

