

RailSense's VoidSense® Receives Network Rail Approval: Advanced Track Safety Monitoring Solution for Rail Networks

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RailSense, a leading innovator in railway safety and maintenance technology, is proud to announce that its cutting-edge VoidSense® system has received Network Rail approval for use in the United Kingdom across all line types including high speed switches and crossings.

VoidSense® is a revolutionary rail track void meter (RTVMD) measuring absolute deflection and track temperature monitor, designed to enhance safety, efficiency, and reliability on rail networks by detecting under-track voids remotely and before the occurrence of failure.

The VoidSense® system is already in use on several UK, European and North American rail networks, where it has demonstrated its effectiveness in detecting and monitoring track movement and voiding, as well as providing real-time temperature monitoring. With real-time updates and continuous logging capabilities, the system allows rail operators to intelligently plan train speeds, prevent track voiding and buckling, and keep the railway running as reliably as possible with improved passenger safety.

Through the combination of temperature, weather, and solar radiation data, RailSense can build a comprehensive picture of the rail network's condition, providing valuable analytics to assist in the design and maintenance of the rail infrastructure. The continuous detection of void conditions offered by VoidSense® also results in cost savings during maintenance cycles, as voids can be identified long before a settlement or encroachment becomes an issue. The trending of displacement data enables predictive maintenance and the imposition of safe speed limits on relevant sections of the rail network.

One of the key benefits of VoidSense® is the improved worker safety it provides. The autonomous devices eliminate the need for staff to be on tracks to take and record readings, reducing costs, errors, and risk. The system alerts rail operators to potential issues via mobile devices and a dedicated dashboard, ensuring timely intervention and maintenance when required.

Designed for zero-maintenance and ultra-low power consumption, the VoidSense® devices are rechargeable, with solar charging capabilities to further enhance their efficiency and environmental friendliness. The long design life of the devices ensures a lasting investment in rail network safety and reliability.

In addition to monitoring track movement and voiding, VoidSense® includes a temperature monitor to measure both track and ambient temperature. This feature allows the system to operate on high-speed lines, with the ability to be used on high-speed switches and crossings, further expanding its applicability across various rail networks.

"The Network Rail approval of our VoidSense® system is a significant milestone for RailSense and a testament to the innovation and effectiveness of our technology in enhancing the safety and reliability of rail networks," said Andy Chick, managing director of RailSense. "We are committed to developing advanced solutions that address the evolving challenges faced by the rail industry, and we are excited to see the positive impact VoidSense® will have on rail operations across the UK and beyond."

Photo credit: RailSense