Flex Rail Flaw Inspection Services



Key Features

The Flex Rail Flaw Inspection Services includes the following key components:

- Rail flaw detection testing using the Flex inspection carriage, which includes the patented XL9-11 wheel probes, digital signal processing, and on-board Run-on-Run software
- Full crew services, including highly trained operators
- All necessary testing consumables, such as couplant
- Full testing data and reports

Complete rail inspection services, on your schedule, when you need them.



Flex - Vehicle-Mounted Inspection Carriage

Flexible to meet your scheduling needs

With the Nordco Flex rail flaw inspection services, you decide what date and time — even nights and weekends — works best for your track schedule. On that date, a Nordco team of skilled operators, the Flex inspection vehicle, and all other necessary equipment will arrive at your site — prepped and ready to perform testing. After the testing is complete, the team will give you the analyzed results and leave your track — allowing you to get back on schedule immediately.

Quality testing without vehicle commitment

The Nordco Flex rail flaw inspection services allow you to benefit from the latest flaw detection technology as well as highly skilled operators without the commitment of owning a rail inspection vehicle.

- Operators receive extensive classroom and hands-on training.
- Vehicles are inspected daily; vehicles also receive monthly preventive maintenance services.
- Supervisors inspect equipment quarterly to ensure calibration and test quality.
- Test data is randomly selected and reviewed monthly for each chief operator.

Small footprint, multiple gauge sizes

While the Flex system is normally configured for standard gauge track, it can be customized to handle any gauge size. Easily maneuverable due to its smaller footprint, the system is ideal for yard tracks, sidings, and turnouts, as well as accomodating clearance envelope contstraints.



Use your smartphone to scan this code for more information.

Wheel probe and tracer wheel technology

The Flex rail inspection system uses Nordco's exclusive, XL9-11 wheel probe technology designed specifically to perform ultrasound testing on rail, including eleven inspection transducers:

- One zero-degree crystal for both **web coverage** and **base detection**
- One 45-degree forward-facing crystal and one 45-degree rear-facing crystal for **full rail web coverage**
- Three 70-degree forward-facing crystals (field, center, and gage) and three 70-degree rear-facing crystals, (field, center, and gage) for **full head coverage**
- One side-looking field crystal and one side-looking gage crystal for **longitudinal cross-rail coverage**

Digital signal processing

The Flex system also features 32-channel digital signal processing, allowing real-time sequential data processing, improved signal-to-noise ratios, and higher testing speeds with fewer false positive test results.

Recordable test results

Test results are fully recordable, meaning you can store, evaluate, and compare results at a later time. Nordco can create reports for uptime, movement, defect details, and more.

Pattern recognition and defect analysis

The Flex system is fully automated and digital, incorporating the following key features:

- Pattern recognition defect classification incorporates artificial intelligence to recognize common rail conditions, as well as recognize and classify defects. It is an adaptive learning system that adds new defects to the library as they are analyzed, allowing the system to recognize new defects automatically.
- **On-board Run-on-Run** a comparative analytical tool that compares prior test results to current test results for the same portion of the rail. The system alerts the operator of a match to a prior indication and allows for real-time comparison and the opportunity to identify any changes in the rail's health.



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