# Flex Rail Flaw Inspection System

Portable On-Demand (POD) System

## Key Features

The Flex Portable On-Demand (POD) Rail Flaw Inspection System includes the following key features:

- Inspection carriage with two patented XL9-11 wheel probes, 32-channel digital signal processing, and on-board Run-on-Run software
- Couplant delivery system, including water tanks and supply hoses
- Computer with real-time data collection, including all necessary electronics and cables for operation
- Integrated storage/shipping skid system
- Electric winch for raising and lowering inspection carriage

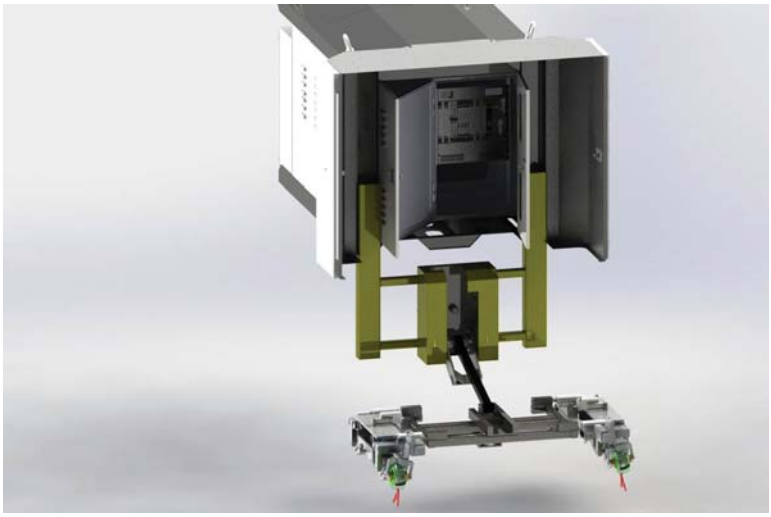
## Minimum Requirements

The Flex POD Rail Flaw Inspection System requires the following minimum capabilities for the hi-rail equipped host vehicle:

- Ford F350 Crew Cab Utility Body equivalent or better
- 2500-3000 lbs. payload
- Pickup bed
- 12-volt power port access

***Complete rail inspection system attaches quickly and easily.***

Use your smartphone to scan this code for more information.



## Easy to ship. Easy to set up.

With the Nordco Flex portable on-demand (POD) rail flaw inspection system, you now have a completely portable dual-rail inspection system. The system comes with all the components required to turn an existing hi-rail vehicle into an inspection vehicle in a matter of minutes. Everything — from carriage to electronics — fits securely into a dual-purpose storage/shipping container.

Simply place the container into the bed of your hi-rail vehicle, hook up the inspection carriage, run the electronics cables into the truck's cab, and begin testing. When you are finished, you can pack up the system and ship it easily to another location.

## Setup and usage training included

We will walk you through, step-by-step, the process for unpacking, setting up, and using the Nordco Flex POD rail flaw inspection system. We won't leave until you feel completely comfortable with the entire process.

## Own the system. Contract the services.

You may also decide that you would prefer to own the Nordco Flex POD system, but use Nordco technicians to perform the setup and testing. With this service, we will:

- Set up the system in the vehicle of your choice
- Perform the testing and provide the results
- Pack up the POD system

## 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 constraints.

## Wheel probe and tracer wheel technology

The Flex POD rail inspection system uses Nordco's exclusive, XL9-11 wheel probe technology designed specifically to perform ultrasound testing on rail, including the following 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**

The optional tracer wheel locates gage corner fractures that are not detectable by conventional methods, locating an average of 30% more defects.

## Digital signal processing

The Flex POD 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 POD 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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