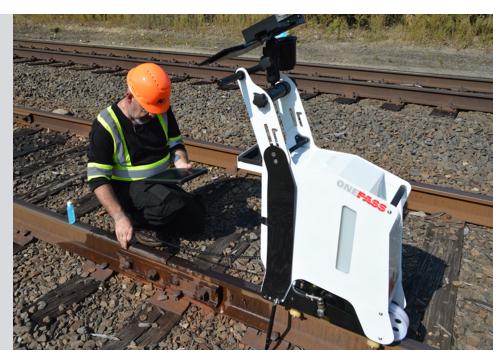# OnePass Ultrasonic Rail Inspection System

Key Features

- High-Definition, 12 channel, battery powered, digital ultrasonic flaw detector
- XL9-11 RSU with direct encoder & quick service mount
- SmartFlow couplant delivery
- On-board Hand Test kit with wireless Flaw Detector Software
- Getac F-110 Tough Tablet, running Win 7
- Common RailTruck software with A-Scan, B-Scan, Recognition Engine & full Audit Capability
- Smart Tracking of GPS locations
- Included Accessories and Transportation options

Hand Test Kit

XL 9-11 Wheel Probe
with Direct Encoder

Advanced, Portable Rail Flaw Detector

OnePass is a portable rail flaw detection system designed to inspect single tracks with only one pass over the rail. This innovative, portable solution for manual rail inspection is ideal for ultrasonic testing in railway yards, crossovers, plug rail and short run applications.

- Nordco has bundled the latest detection and processing technologies in a compact rail test unit to bring leading UT capabilities to hand testing applications. OnePass is designed with the same RSU and Digital Signal Processing Technology as is employed in full featured rail inspection vehicles.
- Ergonomically designed, the OnePass interrogates rail integrity with eleven transducers and represents software recognized defects in a B-Scan view. Defect verification is supported with an integrated hand test kit and on board flaw detection scope software.

XL9-11 Wheel Probe

The OnePass employs Nordco's exclusive XL9-11 wheel probe technology designed specifically to perform ultrasound testing on rail, featuring eleven inspection transducers and a maintenance free direct encoder for local distance measurement:

- One zero-degree crystal for both **web coverage** and **base detection**
- One 37.5-degree forward-facing crystal and one 37.5-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**

Optional Equipment

Category	Option Type	Description
Universal Configuration	Accessories Kit	Included
	On-board Hand Test Kit	Included, 2.2 lbs (1 kg)
	All-In-One Transport Case	Included, 190 lbs (86 kg) - fully loaded
Options	Service Vehicle Kit	Small Tool Case, Vehicle bracket, Cardboard Box Shipping
	Outrigger	Tripod mount, keeping the Onepass vertically aligned. Ideal for long range tests.
	Rain & Sun Shield	Canvas protection for tablet to keep tablet shaded and dry.

Product Specifications

Category	Specification	Value
Flaw Detection Technology	UT Signal Processor	High-Definition, 12 Channel Digital Distance Resolution: 1/48" (0.5mm)
	XL9-11 Wheel	9" Rolling Search Unit with light weight construction, featuring 11 independent transducers for full coverage of the rail head, web and loss of base. Field and gage side looking transducers for vertical split head detection.
	Rail Capture	Self-retracting, adaptive roller mechanism
	Computer	Getac F-110 Tough Tablet with GPS & WiFi Touch Screen, GPS, 8GB RAM, 128GB SSD, 4G LTE, WiFi
	Software	RailTruck V7.x Digitizer, A-Scan, B-Scan, audible test record SmartTrack V1.x Asset Tracking & GPS breadcrumbs GPS Defect Tagging
	Operating System	Windows 7
Capacities	System Battery	24V, 15Ah Li-Mn with up to 5 hours Capacity or 24V, 13Ah Ni-Mh with up to 4 hours Capacity (can be airshipped)
	Couplant Capacity	5 quarts with SmartFlow Technology
	Weight	OnePass: 60 lbs (27.2 kg) - empty tank Tablet & Holder: 6.6 lbs (3 kg)

Common Rail Test Software App

1. A-Scan & Digital Scope
2. B-Scan with Defect tagging
3. Recognition Engine & Context View
4. Project & Defect tracking
5. Pause Test feature
6. SmartFlow Couplant control
7. Audio feedback
8. Wireless communication
9. GPS tracking OnePass & Defects

No extra training needed!
Same software runs on OnePass and Nordco's Rail Trucks

Nordco, Inc.
125 Railroad Avenue
Beacon Falls, CT 06403
p. 203-438-9696

www.nordco.com