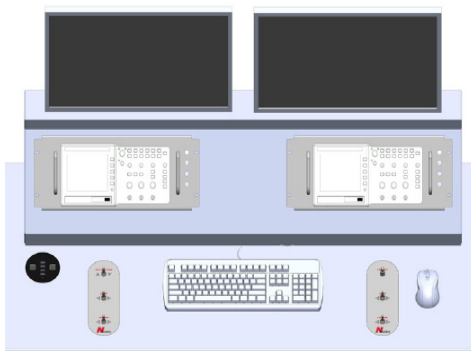
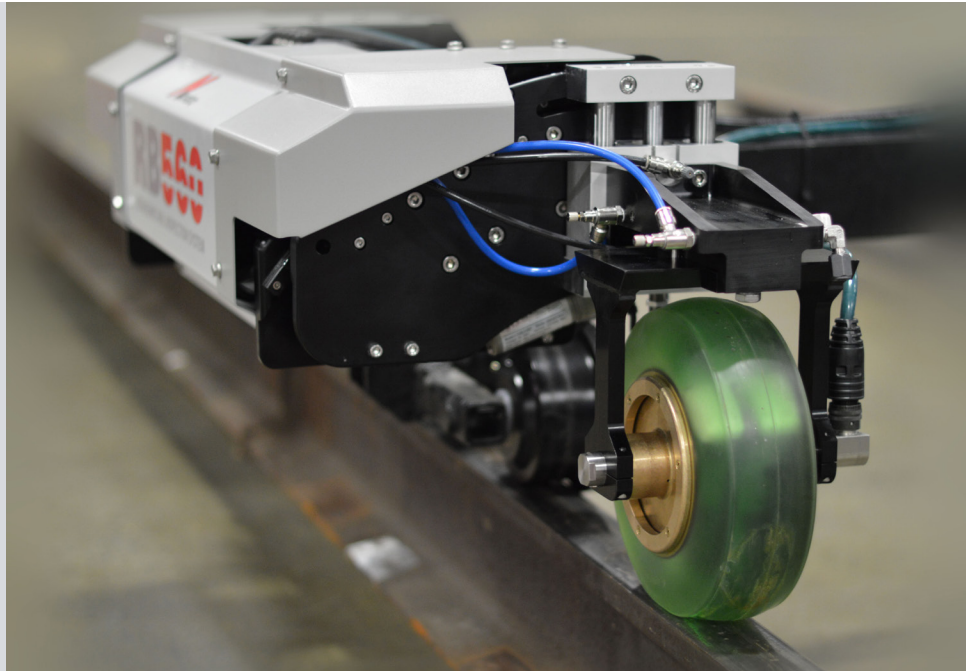


RB560 Ultrasonic Rail Flaw Detection System



Key Features

- Continuous, non-stop testing at speeds up to 45 mph (60 km/h) under optimal rail conditions
- Integration with other track inspection systems to provide maximum defect detection and management
- Patented enhanced pattern recognition and defect classification
- GPS tagging of car movement and defect location, to the thousandth of a mile



Integrated Advanced Ultrasonic Rail Flaw Detection

Minute, internal flaws in rail, invisible to the naked eye, can result in sudden, catastrophic failure. Nordco's RB560 ultrasonic rail flaw detection (RFD) system finds unseen defects using the most sophisticated technology available, giving railroads an opportunity to take corrective action before disaster strikes.

The Nordco RB560 testing carriage is designed to be mounted under a test-vehicle chassis to a telescopic hi-rail axle, which follows the rail gauge. With the ability to continuously inspect at speeds of up to 45 mph (60 km/h) the Nordco RB560 helps maximize test frequency while minimizing on-track time.

Expandable, high-speed, digital data system

Nordco's RB560 features 24 digital channels capable of expanding to 48-channels, allowing real-time sequential data processing, superior signal-to-noise ratios, and higher testing speeds with fewer false positive test results. The system is designed to allow for easy upgradeability as technology advances.

Pattern recognition and defect analysis

Nordco's RB560 Rail Flaw Detection Systems are fully automated and include the following key features:

- **Pattern recognition defect classification** - Incorporates artificial intelligence to recognize common rail conditions, as well as recognize and classify defects.
- **Off-Line Reviewing Software** - All test data is tagged by a precise encoder signal and further referenced to the onboard GPS system. This allows for off-line reviewing and developing comparison histograms over multiple tests.



Product Specifications

Category	Specification	Description
Flaw Detection Technology	Test Speed	Up to 45mph (60 km/h) (24kph speed limit though frogs and switches)
	Four (4) - XL9-6 RSU	9" Rolling Search Unit (RSU) featuring 24 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.
Optional Configuration	Two (2) - XL9-11 RSU Two (2) - Sweeper RSU	Four Rolling Search Units (RSU) with a total of 32 independent transducers allows for maximum defect detection. Sweeper RSU is optimized to detect transverse detail fractures beneath sub-surface shelling where field or gage surface conditions are inadequate for traditional detection.
General	Carrige Wing Weight	160 lbs (73kg) Each
	Carrige Wing Dimensions	52" L x 15.5" H x 16.5" D
	Carrige Wing Operating Conditions	-20°F to 110°F (-29°C to 43°C)
	Operator Station Kit	(2) LCD Monitors, (2) Digital Oscilloscopes, Carrige Wing Controls, Keyboard, Mouse
	Ultrasonic Junction Boxes (2 per system)	360mm Wide x 280mm High x 280mm Depth, with Mounting Bracket
Buyer Supplied Systems	Couplant (water)	Average Flow Rate - 1.3 gpm @ 20 psi (5.0 lpm @ 1.38 Bar) - operator dependent
	Power	110/220 VAC, 30/20 Amps, 60/50Hz - Pure Sine
	Pneumatics	120 PSI (8.25 Bar) with Axle; 80 PSI (5.5 Bar) for Wing Only System
	GPS	GPS Tagging
	Encoder	High Resolution
	Operator Station Area	A desk of at least 60"W x 30" D with Scope Mounting Area

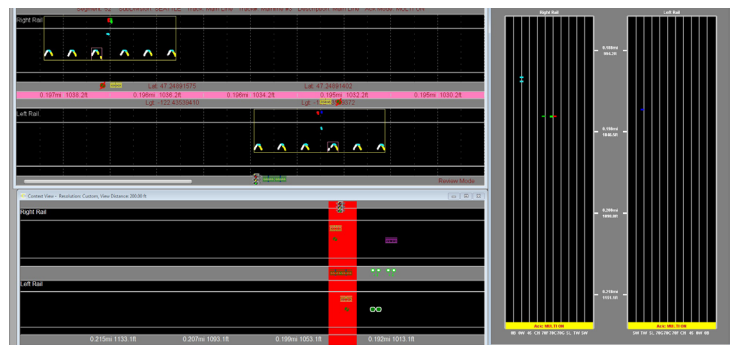
Options

Buyer can select from multiple wing configurations depending on type of rail to be inspected and what defects are of most concern. The Nordco RB560 can be supplied with an integrated lift mechanism or as wing-only components to be integrated with the customer's own lift system. The RB560 digital electronics package and operator controls come ready to be installed and integrated into the customer's test vehicle.



Advanced Software Capability

- Multiple System Views: Strip Chart, B-Scan
- Independent Channel Settings
- Automatic Gain Control
- Time Corrected Gain (TCG)
- Syntactic Pattern Recognition to identify & classify defects
- Adaptive Learning System for future defect additions
- Audible & Visual alarms
- Preloaded rail data (rail profile, system settings)



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