

# Railmetrics



# LRAIL

## AI-Based Railway Inspection System

### Multifunctional, 3D Laser and AI-Based Track Component Inventory and Inspection Solution

- Geometry and component inspection
- Run over run change detection capability
- Optional autonomous data acquisition and processing
- Operates at speeds up to 120 kmh (74 mph)
- 3.5m (11.5ft) wide scan gives a full view of track
- Installed on hi-rail or rail-bound vehicles



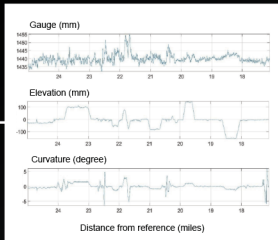
# Railmetrics



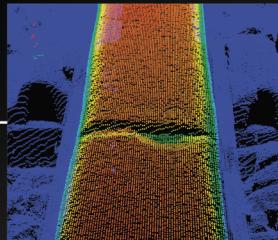
# LRAIL

## AI-Based Railway Inspection System

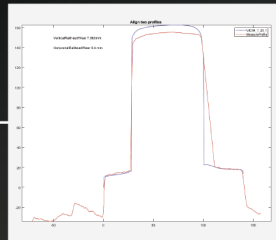
### Rail



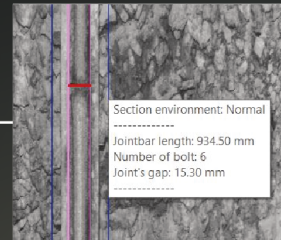
Track Geometry



Rail Surface Defect

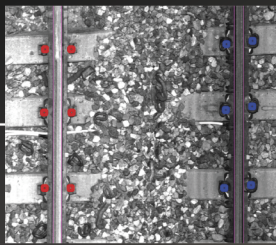


Rail Wear  
(Top/Side)

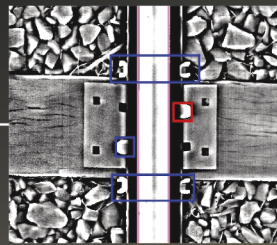


Joint Bar Inventory

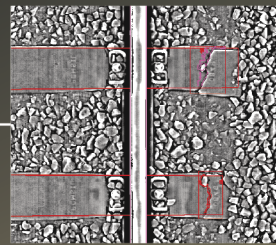
### Ties & Fasteners



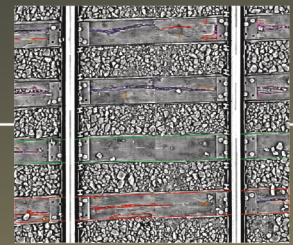
Elastic Fastener  
Inspection



Spike & Anchor  
Inspection

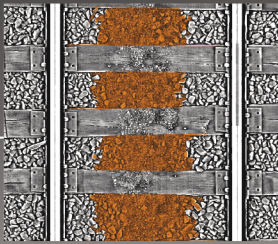


Concrete Tie  
Grading

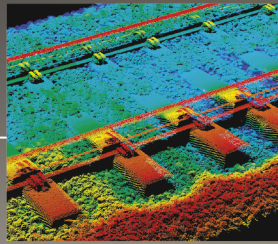


Wood Tie Grading

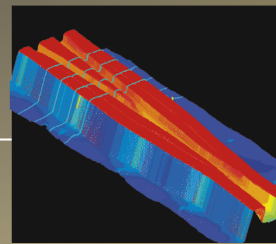
### Ballast



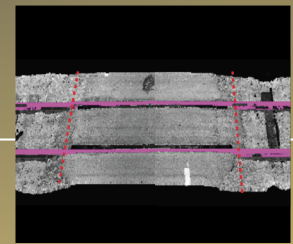
Surface Fouling



Profile & Deficiency



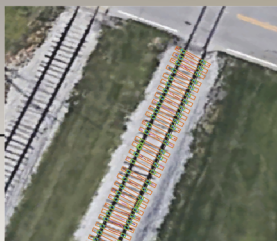
Turnout Inspection



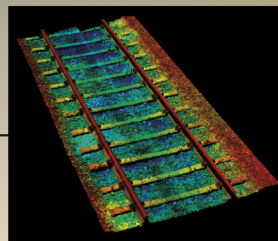
Road Crossing

### Fixed Assets

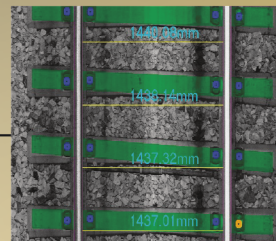
### Non-Proprietary Output Files



Geodatabase  
SHP Files



LAS Point Cloud



JPG Files

CSV Report

