

# ***Railmetrics***



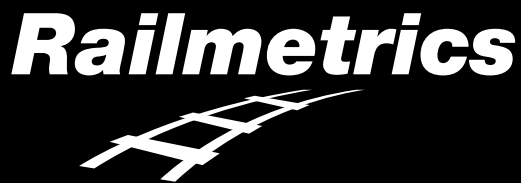
# **LRAIL**

## **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

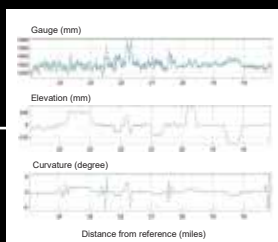




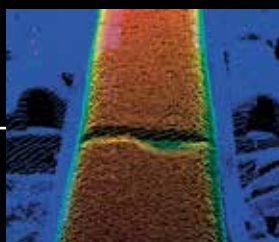
# LRAIL

## AI-Based Railway Inspection System

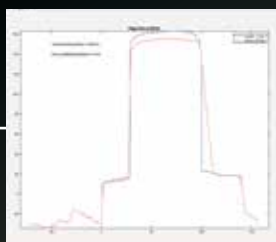
### Rail



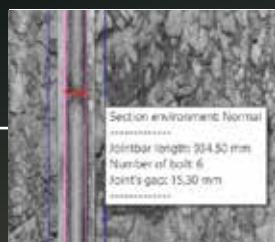
Track Geometry



Rail Surface Defect



Rail Wear  
(Top/Side)

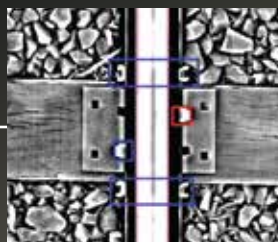


Joint Bar Inventory

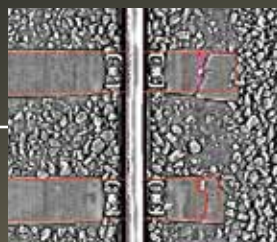
### Ties & Fasteners



Elastic Fastener  
Inspection



Spike & Anchor  
Inspection

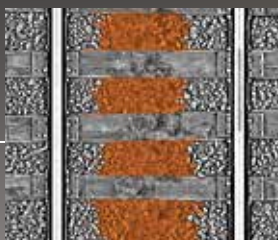


Concrete Tie  
Grading

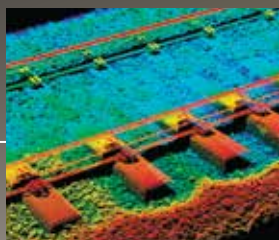


Wood Tie Grading

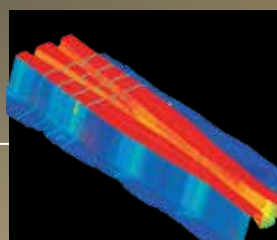
### Ballast



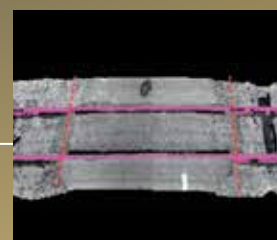
Surface Fouling



Profile & Deficiency



Turnout Inspection



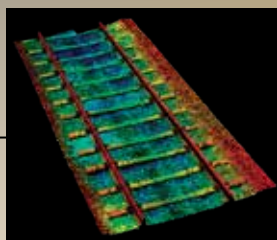
Road Crossing

### Fixed Assets

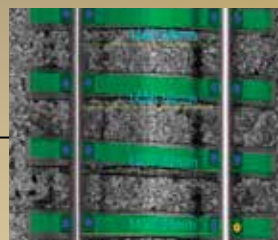
### Non-Proprietary Output Files



Geodatabase  
SHP Files



LAS Point Cloud



JPG Files

Distance (m)	Gauge (mm)	Elevation (mm)	Curvature (deg)	Surface Defect	Rail Wear	Joint Bar	Tie Grading	Ballast Fouling	Turnout	Road Crossing
100	1435	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200	1435	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
300	1435	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
400	1435	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500	1435	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CSV Report



PRODUCT  
LINE OF

