

AI-Based Railway Inspection System

LRAIL

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

- Geometry and component inspection

- Operates at speeds up to
120 kmh (74 mph)

- Run over run change detection
capability

- 3.5m (11.5ft) wide scan gives a full
view of track

- Optional autonomous data
acquisition and processing

- Installed on hi-rail or rail-bound
vehicles



**Eddyfi
Technologies**

Automated Vision Systems

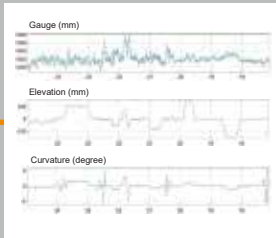
Railmetrics



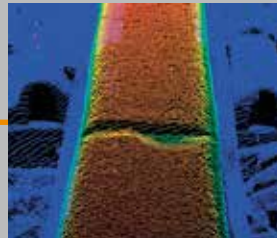
AI-Based Railway Inspection System

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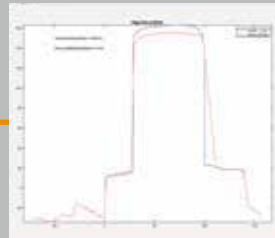
Rail



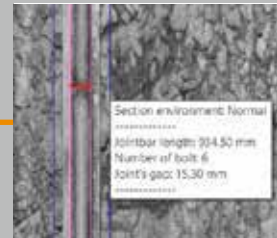
Track Geometry



Rail Surface Defect



Rail Wear (Top/Side)

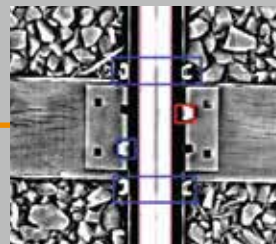


Joint Bar Inventory

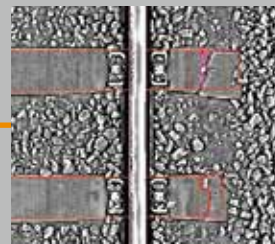
Ties & Fasteners



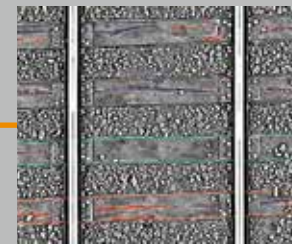
Elastic Fastener Inspection



Spike & Anchor Inspection

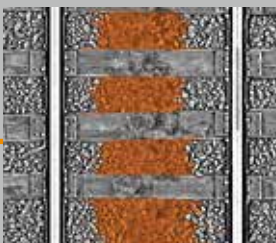


Concrete Tie Grading

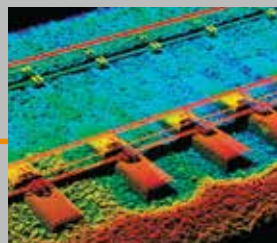


Wood Tie Grading

Ballast

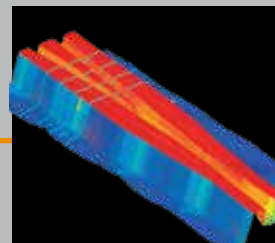


Surface Fouling

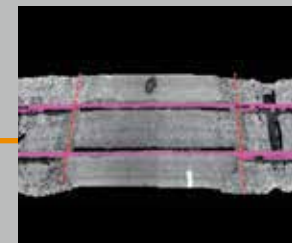


Profile and Deficiency

Fixed Assets



Turnout Inspection

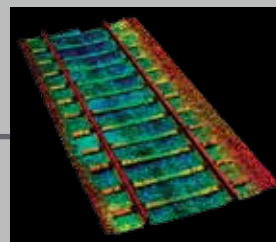


Road Crossing

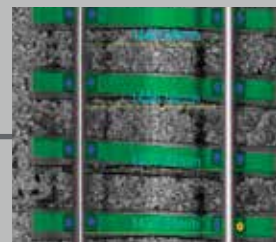
Non-Proprietary Output Files



Geodatabase SHP Files



LAS Point Cloud



JPG Files

CSV Report

CSV Report