



Strukton
Rail



Leonardo Inspection Train

Map tracks and their surroundings digitally

Efficient and effective performance-driven maintenance requires comprehensive knowledge of the condition of the tracks and their surroundings. Acquiring the relevant data can, however, be a time-consuming activity that entails many hours of travelling to and from sites and stringent safety measures. Strukton Rail has developed a smart solution that saves you time and effort: the Leonardo Inspection Train. It allows you to digitally check, measure and assess tracks and their surroundings, and then access the data whenever and wherever you need – simply, swiftly, and safely.

Today we make tomorrow



The Leonardo Inspection Train is equipped with an array of cameras, lasers and radar to digitally map the rail infrastructure and its direct surroundings. It can operate at a maximum speed of 90 km per hour, thus minimising the impact on scheduled services.

Systems

The Leonardo Inspection Train currently includes the following systems:

- 2D and 360-degree cameras, to zoom in on details but also look all around you
- Laser track-scanning equipment, to create a high-resolution point cloud of rail infrastructure. Combining this additional layer with 2D or 360-degree images enables you to pinpoint a location and perform measurements
- Lidar with Ladybug, to make a point cloud of the surroundings. This enables you to determine the distance of objects in relation to the tracks
- Ground-Penetrating Radar, for a 3D-visualisation of the substructure of the track up to 3m deep

More systems are set to be included in the near future, to enable the collection of even more data.

The data collected in this way is enriched with data from other sources, such as asset information, and made accessible for end-users in the Geoconda viewer. Geoconda is a 'Google Street View for Rail' and enables you to access and analyse footage of tracks, overhead lines, signalling systems, the verges and signage. Images are stored in an online viewer, for easy and simple access from the comfort of your workspace. To make it easier to find your way around, the Geoconda viewer combines footage, a GIS-map and asset information.

Strukton is a service provider leading in sustainable infrastructure, with a focus on green transport and electrification. It is with passion and energy that we integrate our century of craftsmanship with the latest technology and innovation. Today we make tomorrow.

Contact

Would you like to know how the Leonardo Inspection Train can help you save valuable time and effort? Contact Jacques Tiecken to find out more.

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