



RAILWAY MONITORING SOLUTION

S-scan

Near-surface imaging and monitoring solution to prevent deformation and collapse.

FEATURES & BENEFITS

Cloud computing and reporting, with fast 4D results available via online web viewer

 Easily accessible by cloud Secure Data Storage.



Sinkhole under railway tracks

Uses train's energy and surface waves it generates to measure Rayleigh wave velocities

 Continuous source free of excitation. Noise elimination by larger and high quantity waves.

Ease of installation

 Scan or long-term monitoring with quick installation.

Versatility

Can be used with any sensor type.

Predictive maintenance

Optimized operational costs.

Instability anticipation

 Provide safety for of rail passengers and freight.

Higher resolution than conventional methods

 Reduction of remedial maintenance costs by precise positioning of geotechnical borings.

HOW DOES IT WORK?



 Highly sensitive accelerometers with accuracy up to 30 meters/98'5" foot depth.



 Monitoring on InSite equipment: train detection, sensor status system alerts.



 On-board automatic passive seismic, and guided interferometry processings (daily results).



 Daily reporting on a dedicated 4D web viewer. Feeding experts geophysicists with interpretation ready data.

THE SENSOR SOLUTION



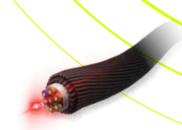
WiNG^{NT} Node

- For proof of concept or snapshot imaging.
- Post processed results within a few days.
- Accuracy of 30 cm/12 inch and up to 10 m/32 feet covered area.



Wired accelerometer

- · High-precision monitoring.
- Real-time monitoring & processing over several weeks or months.
- Accuracy of 1 m/3,3 feet and up to 100 m/328 feet covered area.



DAS fiber cable

- Long-term and long-range monitoring.
- Real-time monitoring & processing over several months or years.
- Accuracy of 5 m/16 feet and up to 80 km/50 miles covered area.

SOFTWARE SOLUTION

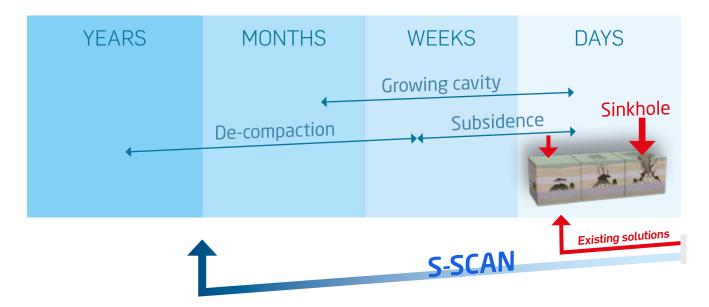
S-scan software

- · Continuous data haversting.
- · High-data capacity.
- High-resolution visualization and analysis of near-surface imaging.



EARLY INSTABILITY ANTICIPATION

Growing cavities & sinkholes



SERCEL - FRANCE

16 rue de Bel Air

B.P. 30439 - 44474 CARQUEFOU Cedex

Téléphone : (33) 2 40 30 11 81 E-mail : sales.nantes@sercel.com SAS au capital de 25 000 000 €

Siège Social : 16 rue de Bel Air - 44470 CARQUEFOU

378.040.497 R.C.S. Nantes Code APE 2651B

SERCEL INC. - U.S.A.

17200 Park Row

Houston, Texas 77084

Telephone: (1) 281 492 6688 E-mail: sales.houston@sercel.com

www.sercel.com

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