



S-scan

RAILWAY MONITORING SOLUTION

S-scan

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

FEATURES & BENEFITS



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.

Versatility

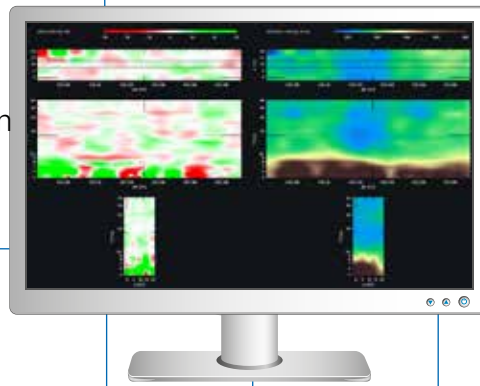
- Can be used with any sensor type.

Predictive maintenance

- Optimized operational costs.

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

- Easily accessible by cloud Secure Data Storage.



Ease of installation

- Scan or long-term monitoring with quick installation.

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?

→ EQUIPMENT

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

→ ACQUISITION & REMOTE CONTROL

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

→ DATA PROCESSING

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

→ INTERPRETATION & REPORTING

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

THE SENSOR SOLUTION



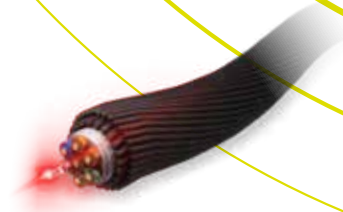
WiNG^{NT} Node

- 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

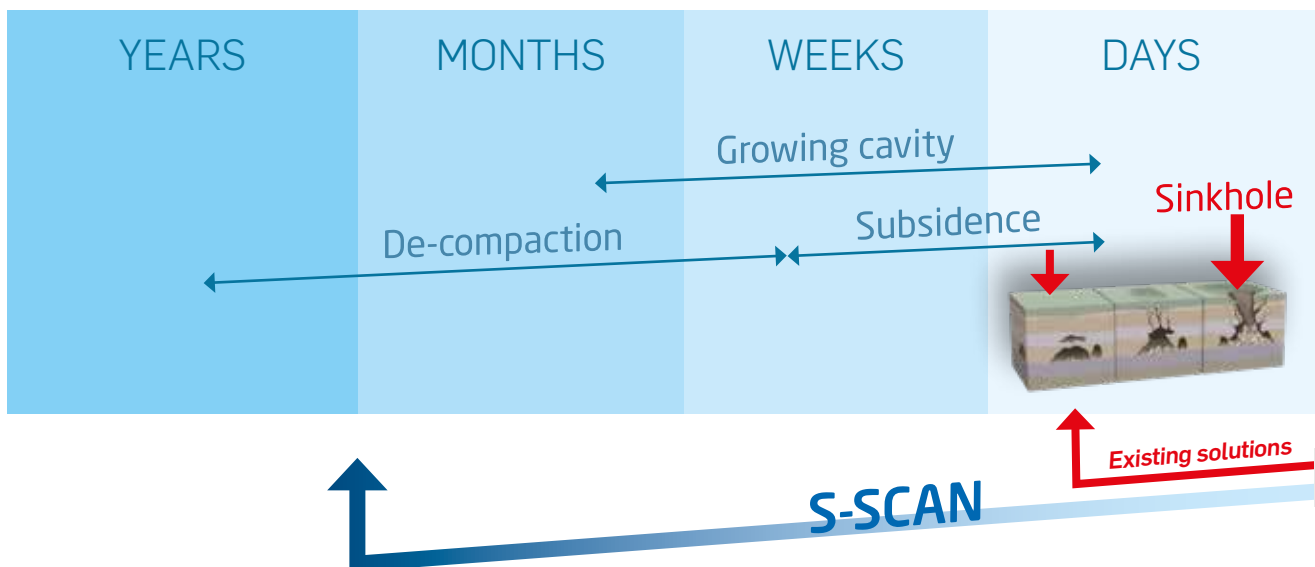
S-scan software

- Continuous data harvesting.
- 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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