RECENT PROJECTS

The deformation monitor

Safety above all
For all types of objects, the Deformation Monitor charts subsidence, rotations and damage - structural health monitoring. In doing so StabiAlert promotes the safety of people, buildings, engineering structures and the environment.
With the unique combination of a tiltmeter and an acceleratometer, the StabiAlert sensors also demonstrate any damage. As the system also warns of further damage, it provides the opportunity to intervene in time and prevents high repair costs.

Quick response
The StabiAlert system is suitable for long-term monitoring and records. StabiAlert developed the Rapid Response system for situations where safety may be jeopardised suddenly. Sensors can be positioned quickly and easily on call, without requiring drilling or hacking work. StabiAlert's Rapid Response team will be on site within a few hours to install the sensor system.

Asset Management

Managing objects efficiently
Any good management plan starts with adequate information about the condition of an object. The StabiAlert system provides authorities and companies with the information required for intelligent and efficient management of buildings, bridges, viaducts and other engineering structures.

Monitoring objects with StabiAlert sensors enables you to prepare targeted management plans, saving on manpower and costs.

Good insight
Monitoring with the StabiAlert system provides good insight into the condition of an object. This demonstrates whether preventive maintenance is required or whether maintenance can be postponed. Timely intervention prevents nuisance and high repair costs.

StabiAlert sensors are attached to an object without drilling or hacking work and serve for a long period of time without requiring recalibration.

HABOG

Safe storage
StabiAlert sensors are used for long-term monitoring of the HABOG building (High-level radioactive waste treatment and storage building) in Borsele where canisters of nuclear waste are stored. Next to the existing building a second building is built for storing low-level radioactive waste from hospitals for example.

The safety requirements for the storage are extremely high, and therefore the effects of the new-build activities on the existing building are tracked by 10 sensors over a 3-year period.

The StabiAlert measurements have demonstrated hat the HABOG building is extremely stable. The accuracy of the sensors' records is demonstrated by minimal daily deviations that are measured as result of heat expansion of thick walls caused by sunshine.

APPLICATIONS


BUILDINGS


DYKES


BRIDGES


TUNNELS

Beatrix lock

Safe working
For the construction of a new lock complex of the Beatrix lock in Vreeswijk, the old complex and the adjacent casemates were moved. StabiAlert monitored the safety during this large-scale hoisting job on a continuous basis.

The old lock and the three casemates form part of the new Hollandic Water line that was built before the Second World War. The complex has been nominated for Unesco World Heritage status.

Sensors were positioned on the historic, concrete casemates and on the lock complex. The purpose of the monitoring was to have an alarm for employees in the shortest possible time, as they were working below and near the objects.

RWS Tower

Wind sensitivity
At the Oosterschelde flood defences, StabiAlert measured the 115-metre tall concrete radar tower that was built on the work island Neeltje Jans by Rijkswaterstaat, the executive agency of the Ministry of Infrastructure and the Environment.

For the shipping radar that is built on top, Rijkswaterstaat wanted to have an accurate measurement of the movement sensitivity of the innovative concrete construction.

With sensors at the bottom, in the middle and at the top, StabiAlert was able to measure the effects of wind on the radar tower. To provide a clear picture, the StabiFrame 3D model visualised the movements.

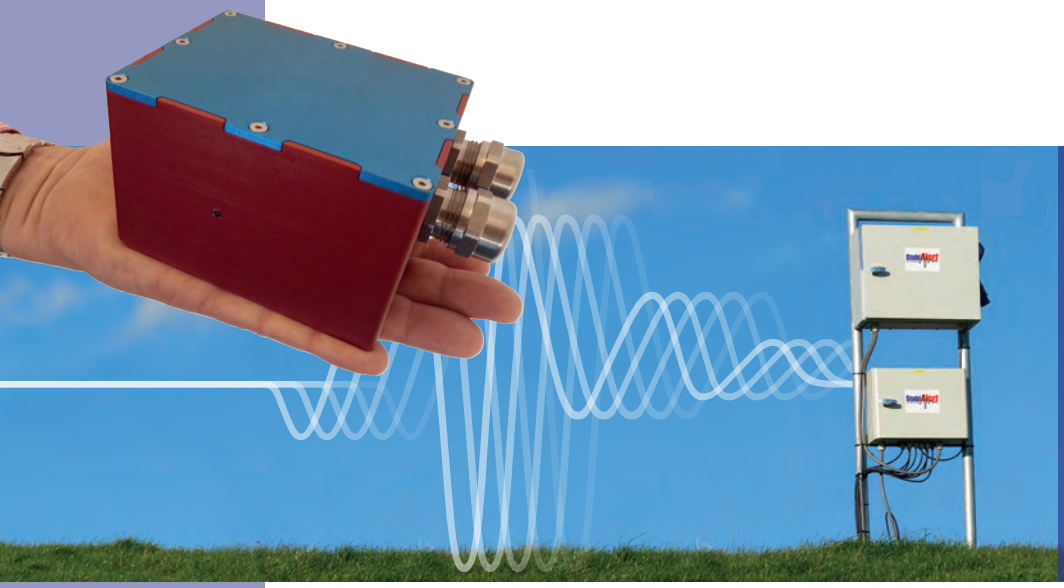
Visit our website for more projects.

Leendert de Boerspolder

Validated safe
In the Leendert de Boerspolder south of Haarlemmermeer, the StabiAlert equipment was used to test the strength of clay dykes.

In 2015, water board Hoogheemraadschap van Rijnland submerged the six-hectares polder to return it to nature. A controlled break of the clay quay offered a unique opportunity to test how dykes respond under extreme circumstances.

StabiAlert was able to demonstrate the effects of the load. By measuring the vibration and the tilt, the final break of the dyke could be predicted accurately. This field experiment provided an opportunity to test theories about the strength of dykes against reality. This produced valuable new knowledge of dyke loads.



Visiting address
Verbindingsweg 18
9781 DA Bedum
the Netherlands

P.O. box
Postbus 5058
9700 GB Groningen
the Netherlands

Tel +31(0)50 549 75 15
E-mail info@stabialert.nl

www.stabialert.nl

StabiAlert