



INNOVATIVE STRUCTURAL HEALTH MONITORING

NDT MEETS IOT: THE FUTURE OF NON-DESTRUCTIVE TESTING



Sudden and catastrophic failure of ageing industrial assets due to structural deficiencies threatens asset owners with potentially massive financial and operational consequences. Standard NDT inspection methods in the structural engineering, oil & gas and power industries are unable to provide continuous information on evolving defects. The true condition of degradation, cracking, corrosion and stress on your assets remains uncertain and cost effective maintenance planning is a challenge.

INTELLIGENT 24/7 MONITORING FROM SGS TO PROTECT YOUR CRITICAL ASSETS



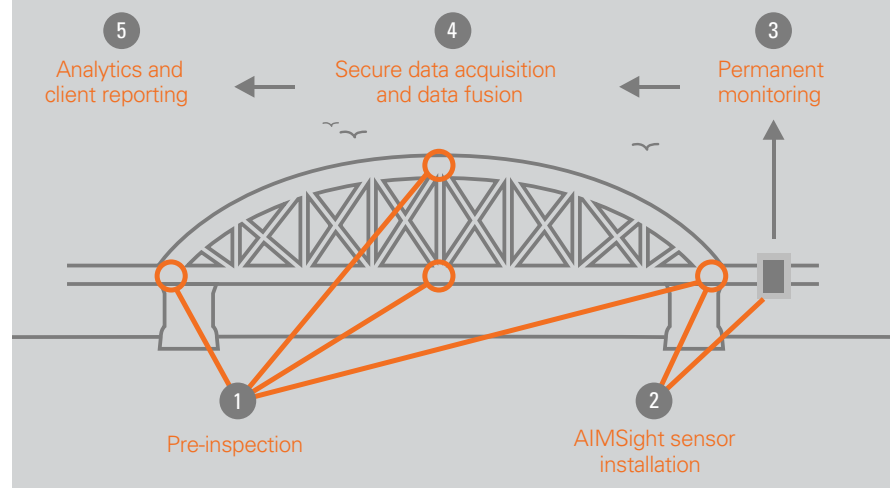
NDT MEETS IOT YOUR VIRTUAL NDT INSPECTOR FOR CONDITION MONITORING

SGS has partnered with AIMSight to provide permanent, real-time, sensor-based asset health monitoring solutions. SGS is in a unique position to partner with asset owners in the transition from conventional NDT to IoT asset health monitoring. AIMSight's ground breaking NDT defect monitoring sensors provide owners with actionable data that supports reliable operational and financial decision-making.

With AIMSight, SGS becomes a leading provider of permanent, real-time, sensor-based asset health monitoring solutions. The unique five-step approach identifies and monitors defects to dramatically improve the reliability of the NDT inspection process - inspections are performed more frequently and consistently through automated data acquisition using proven and standardized NDT techniques.

5-STEP PROCESS FOR STRUCTURAL HEALTH MONITORING

The simple five-step process combines results from inspection data and monitoring data which enables owners to better manage critical maintenance investment. Owners can be assured that the most worrying defects are under permanent surveillance.

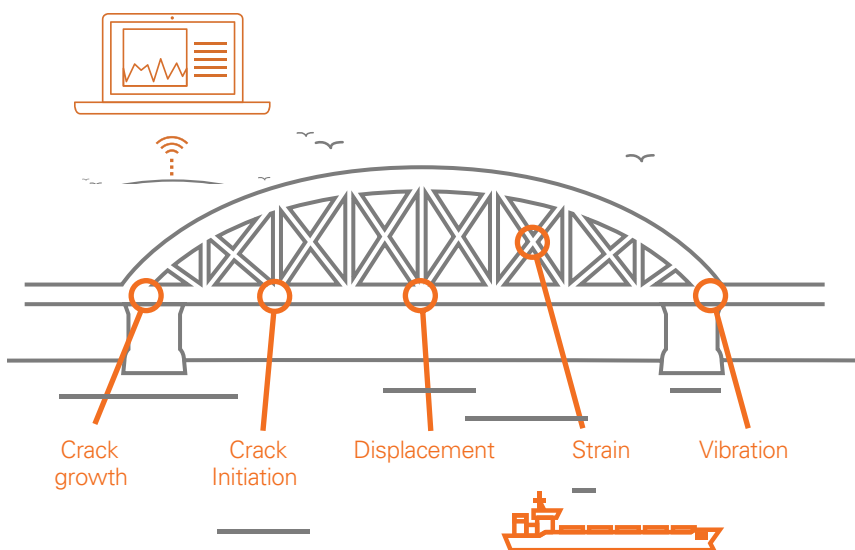


DRAMATICALLY REDUCE YOUR OPERATIONAL RISK

More than a snapshot of a defect, our permanent surveillance tracks the evolution of the most worrying defects (crack length and opening). It also records additional parameters simultaneously (temperature and local acceleration), which enables root-cause analysis of the defect's behavior. With such critical information in hand, the asset owner is in an unprecedented position to make difficult operational decisions with potentially life-saving consequences. The system is simple and cost-effective as it focuses on critical defects and does not require expensive models of the asset behavior.

SAFELY EXTEND THE LIFE OF YOUR ASSETS

Our solution not only helps mitigate the risk of catastrophic failure, it also allows you to effectively plan maintenance investments. The information provided enables asset owners to better manage asset life by accurately assessing the criticality of defects and their root-cause. Predictive maintenance minimises downtime and ensures costly repairs are avoided or carefully planned. We aim to partner with asset owners to provide a customised system which is scalable to meet individual asset requirements.



AIMSight

AIMSight is a spin-off of SENSIMA Inspection Ltd. Their mission is to develop and deploy Sensima's core technology in the field of permanent, real-time, sensor-based solutions for asset health monitoring and asset integrity management.

The AIMSight system is the result of radical miniaturization of well established NDT instruments and sensors, and the automation of the calibration procedures, to bring you IoT ready monitoring. The versatility of the chip based technology means it is compatible with most relevant AIM solutions to provide continuous and traceable tracking of defects. Advanced self check features inspired by NDT & certification procedures provide greater confidence of compliance.

THE FUTURE OF NDT PRACTICE

The underlying technology is the result of the radical miniaturization of well established NDT instruments and sensors. It brings you IoT-ready monitoring as a direct evolution of your current inspection best practices.

Installing a SGS monitoring solution is equivalent to hiring a team of certified NDT inspectors watching your asset 24/7 and feeding you with data and root-cause analysis at a frequency rate of your choosing – but at a fraction of the price.

The combination of SGS's global real world NDT experience and innovation from AIMSight provides asset owners with the first Asset Integrity Management compatible solution based on NDT standards to monitor critical defects. A unique mix of integrated circuit sensor know-how, big data processing and NDT expertise enables asset health monitoring and accurate condition assessment without the need for costly human intervention.

COMPLETE PLATFORM FOR YOUR MONITORING NEEDS

The SGS solutions permanently collect information on the defects, and also additional parameters such as local temperature and acceleration, which enables root-cause analysis of the defects' behavior. The monitoring system is versatile and is compatible with a variety of sensors and other types of environmental data. The data platform (powered by SAVI Technology) can handle and integrate all types of data, irrespective of the source, and generate high-value analytics to be integrated in the monitoring report.

WHY SGS?

SGS is the world's leading inspection, verification, testing and certification company. SGS is recognised as the global benchmark for quality and integrity. With more than 95,000 employees, SGS operates a network of over 2,400 offices and laboratories around the world.

FIND OUT MORE



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