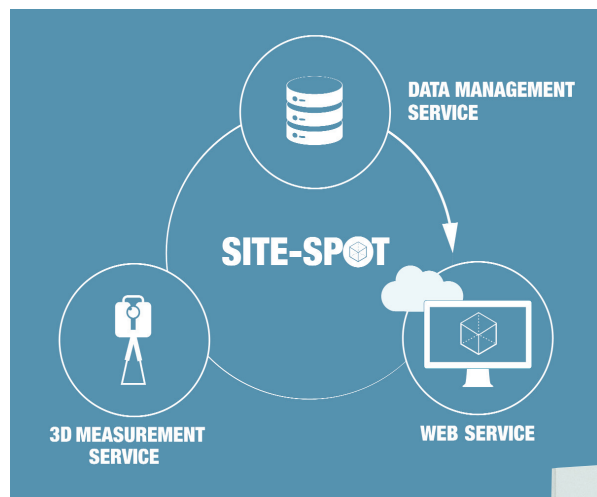


ANOTHER STEP CLOSER TO A 3D DIGITAL PLANT



ABOUT FUGRO

Fugro is the world's leading Geo-data specialist, collecting and analyzing comprehensive information about the Earth and the structures built upon it. Adopting an integrated approach that incorporates acquisition and analysis of Geo-data and related advice, Fugro provides solutions. With expertise in site characterisation and asset integrity, clients are supported in the safe, sustainable and efficient design, construction and operation of their assets throughout the full lifecycle.

Employing approximately 10,000 talented people in 65 countries, Fugro serves clients around the globe, predominantly in the energy and infrastructure industries, both offshore and onshore. The company is listed on Euronext Amsterdam.

Imagine having access to the status of your operational assets from the comfort of your office, whenever you want. This is essentially what you get from Fugro SITE-SPOT: up-to-date digital 3D asset information hosted on a web portal to enable smarter, safer and more productive operations.

Fugro is a global survey and asset data specialist founded in 1962 with headquarters in the Netherlands. The company supports customers in a wide range of sectors by providing integrated solutions in the fields of Geo-data and asset integrity. For network and plant managers, Fugro offers specialised digital solutions that give fast and efficient insights both above and below ground. These are based on innovative software and hardware, much of which is developed by a team of in-house experts.

In terms of asset management, Fugro supports EPCs (engineering procurement and construction companies) and various owners and operators in the oil & gas, energy and chemical industries, including a number of companies based at the Port of Rotterdam. The company offers integrated tools for visualisation, modelling and analytics to optimise both new-build projects and the upgrade or expansion of existing plants.

Crucial asset knowledge

Fugro's Manager Digital Plants Europe Erik Claassen explains: "We see more customers opting for integrated digital solutions, because up-to-date and accurate asset knowledge is crucial to safety, cost reduction and maximising asset life."

Since the digital twin provided by SITE-SPOT is built on a high-resolution, 3D laser scanned dataset, a wide range of asset related data and other administrative information can be added to the model. These include date of data capture, asset attributes and historic or planned modifications. Various spatial survey tools enable users to make geography-based selections from the central database and visualise the results. For example, it is possible to see the location and status of all the inspection points in a particular pipe rack. A benefit of this type of web-based solution is that no specialised engineering software is required to access and utilise the data.

In the case of a turnaround or regular site maintenance, work planners can easily determine precise asset location without leaving the office. Up-to-date insights can pinpoint locations where work is needed and help to ensure it is completed safely and efficiently, for example, by planning suitable

access arrangements. This shortens downtime and reduces management and maintenance costs. Once the situation has been captured digitally, any changes to the 3D model can be registered easily and reliably to avoid duplication of data.

Digital foundation

With information hosted in a central cloud-based database, the user benefits from a single point of truth (SPOT), ensuring that all stakeholders access the same, up-to-date information at any time, from any location. The same user-friendly interface is available to groups such as training and operations departments and approved external partners. Clients list a range of benefits including accelerated response times as well as reductions in site visits, equipment clashes and the need for costly re-engineering.

The digital foundation provided by SITE-SPOT puts crucial information and insight at the fingertips of those responsible for industrial plants and supports a smarter, safer and more productive way of working.

More information

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