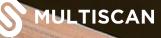
# S MULTISCAN Green Energy

## WHOM WE ADRESS TO?





#### WIND TURBINES

#### SOLAR FARMS





## HYDROELECTRIC POWERPLANTS

WHOM WE ADRESS TO?



#### WH D



#### **SCANSIONE 3D**

3D Scanning is one of the main services offered by Multiscan, our experience in the industrial sector gives the customer peace of mind and the guarantee of a result that exceeds expectations.

Multiscan offers a complete service from raw scanning with point cloud to all subsequent steps up to 3D modelling for a complete reverse engineering process.

Multiscan uses high quality laser scanners with accuracies down to 20 microns.

#### OTTIMIZZAZIONE

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A three-dimensional survey allows time and costs to be optimised. In fact, 3D scanning is much faster and more accurate than traditional systems today, guaranteeing the reassurance of a result that conforms to reality in a short time, thus allowing the optimisation of the time needed for plant modifications and limiting economically burdensome plant downtimes.



#### WHAT DO WE OFFER?



## QUALITY CONTROL

The very high precision of the instruments allows us to carry out analysis and verification of the quality and fidelity of manufacture throughout the product's production phase.

After surveying Multiscan will take over the reverse engineering phase and subsequent conformity analysis

## **MOLD ANALYSIS**

Moulds are subject to deformation after numerous inner workings, so it is important to check them periodically. Moulds for wind turbines in particular are subject to large deformations due to the large rolling surface. 3D scanning allows a quick and precise verification of any discrepancies and deformations with respect to the generating mathematics with which the mould was produced.



#### WHAT DO WE OFFER?

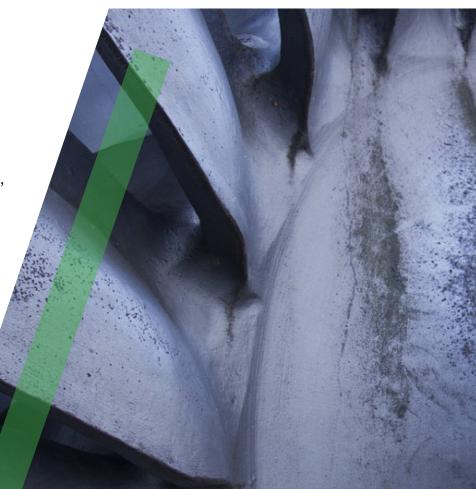


## DAMAGE ANALYSIS

Multiscan can also be at your side if damage analysis is required. Thanks to 3D scanning, it is possible to have a complete and precise survey of areas and components that have suffered breakage or deformation, which would otherwise be difficult to detect with traditional surveying technologies. Thanks to an accurate reverse engineering process, we can create a precise 3D model that the company can use for repairs or design modifications.

Even in the case of hydraulic turbines, 3D scanning proves to be a useful tool for monitoring the progress of corrosive phenomena due to particle rubbing or cavitation.

An accuracy of up to 20 microns allows a very precise analysis to determine whether replacement or repair work is required.



#### WHAT DO WE OFFER?



## ASSEMBLY ASSISTANCE

Multiscan is able to assist in the assembly of components and systems thanks to its specialised technicians. alignment When the between required, components whether is it is for the smallest tolerances for precision components or in the case of large structures, the aid of 3D scanning allows the correct assembly to be verified in order to be sure of optimum performance and according to expectations.

3D scanning is a particularly suitable tool for verification during construction and for periodic inspections of wind turbines, as it allows verification of alignment during construction of both the tower and the rotor.

It also allows during the life of the turbine to verify that alignment is maintained and that there is no deformation of any kind, which would result in risks to structural strength.







## PARTNERS IN THE GREEN TRANSITION

In this day and age, sustainability is an integral part of our lives, so it is also time for companies to begin a transition to greener and more sustainable management. Multiscan can help to do this, even and especially for older plants and facilities whose layouts are not up to date. At your side we can follow step by step the transition from traditional systems to modern and sustainable ones.

Most multinationals are investing huge resources in the green transition to comply with EU directives and to shift their production towards sustainable products. In the process of decarbonisation, hydrocarbon refineries are increasingly being converted to enable the production of biofuels, and the new frontier of hydrogen will increasingly take hold. Our team will take care of the space and plant survey, design, preparation of working drawings and implementation with BIM technology. Multiscan can be your partner in the start of the green transition, for a plant transformation in compliance with current regulations and the company's own economic and sustainability goals.



#### WHAT DO WE OFFER?





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