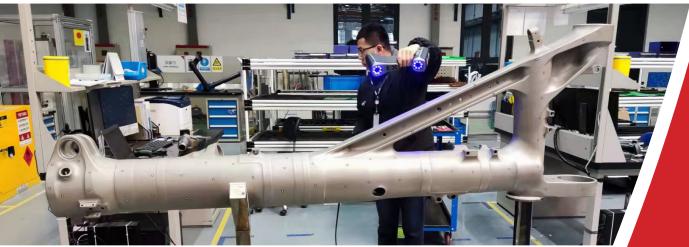






AIRCRAFT MANIFACTURERS



COMPONENTS MANIFACTURERS



SPACE & DRONES





3D SCANNING

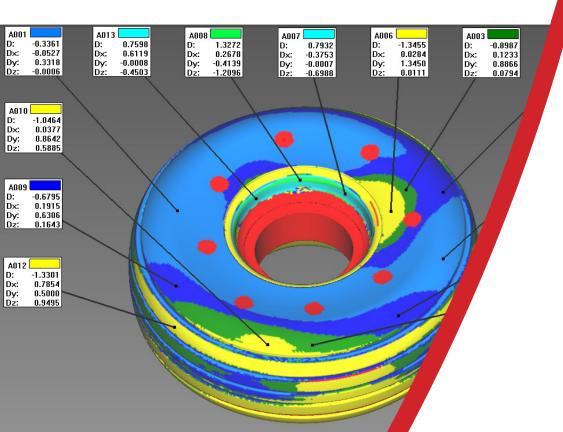
REVERSE ENGINEERING

DIMENSIONAL ANALYSIS

METROLOGY

Multiscan deals with dimensional survey and verification with the possibility of issuing a certification of compliance with design tolerances.

This activity also has great potential in the case of checking the deformations that a component under stress has undergone over time, giving the possibility of verifying whether damage and structural deficits are present that may compromise the functionality and integrity of the part.





QUALITY CONTROL

3D scanning also finds great application in all quality checks of component manufacture.

For example, let's take a look at a survey report of a tyre used in the aeronautical industry.

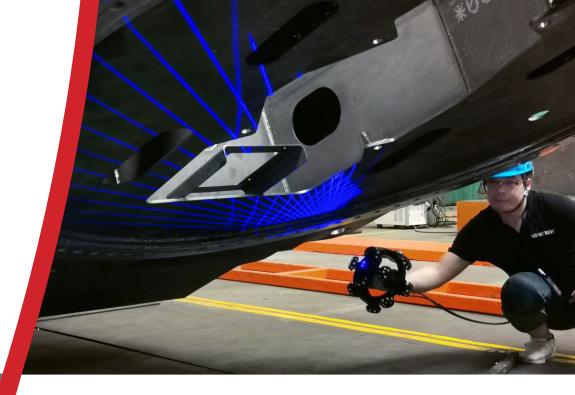
The survey was carried out with the Kscan scanner at a resolution of 0.1mm, compared to the native three-dimensional model we can therefore verify design-product discrepancies.



ASSEMBLY ASSISTANCE

Thanks to 3D scanning, companies in the aerospace supply chain can aim for a smart factory model, with digitised data management and advanced manufacturing and assembly, maintenance and control technologies.

Multiscan in partnership with companies can jointly develop innovation, increase competitiveness and ensure reliability and safety.





Using 3D scanning and tools with tolerances down to 2 hundredths of a millimetre, we are able to assist with the assembly of components and installations.

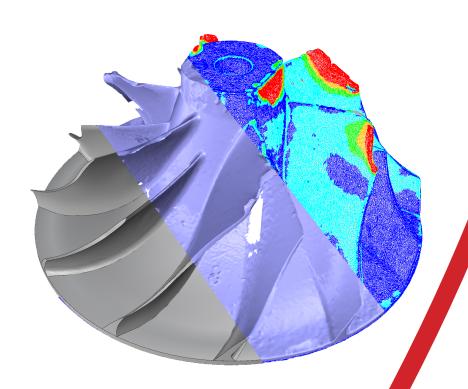
When alignment between components is required, whether it is for the smallest tolerances for precision components or in the case of large structures, the assistance of specialised technicians who can check the correct assembly allows us to be sure of optimum performance.

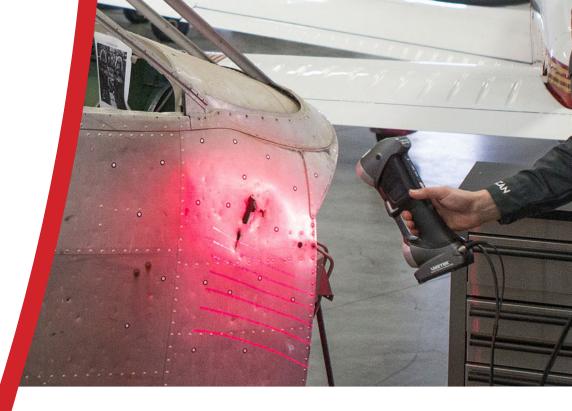


DAMAGE ANALYSIS

Multiscan can also be at your side if damage analysis is required. Thanks to 3D scanning, it is possible to obtain complete and precise information on 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.





For example, let's take a look at a survey carried out with the Kscan produced by Scantech at a resolution of 20 microns, it is a compressor of a gas turbine, which has undergone a deformation of the blades following an impact.

The mesh of the relief, superimposed on a theoretical 3D model, shows the deformation suffered.

Similarly, any component can be scanned and verified in order to compare deformations and variations due to use or external factors.



SURVEY OF HERITAGE

3D scanning, thanks to the incredible level of precision achieved and the versatility of use, is the most suitable tool for surveying even large objects such as entire aircraft.

Multiscan is aimed at museum facilities, associations, private owners and enthusiasts who want their flying heritage to be digitally preserved or exhibited, as well as used for the reproduction of parts that are no longer available.





Depending on the precision required, different technologies can be used: a survey can be carried out using a laser scanner that takes a precise 360-degree photograph for each individual scan, which is particularly suitable for heritage survey purposes and digital reproduction for museums, archives or other digital uses.

Or a much more precise survey can be carried out using our Scantech instrumentation, as can be seen side by side during the survey of a Mig-29 aircraft for the reproduction of wing tanks in need of replacement.



WE LISTEN TO YOUR NEEDS

Multiscan is always open to the requirements of the most demanding customer, thanks to 3D scanning we are able to make the company reach standards never reached before, optimising time and costs.

Three-dimensional scanning often proves to be the most suitable solution even for solving construction problems as, thanks to a high-precision survey, it is possible to work towards a solution quickly.





Multiscan also operates in other sectors such as: marine, industry, energy and automotive, so we can also be at your side along the supply chain and in the optimisation of a wide range of business sectors.

We are always open to discussion in order to find the most suitable solution, and it is also an incentive for us to always improve and optimise our service.



