



Corrosion / Erosion mapping using the 3D Laser technique

You discover corrosion or erosion and you want to quantify it? Can your installation continue to be operated?
You wish to monitor how the damage is developing over time and ensure it remains under control

Your tailor-made solution

In this surface inspection technique, use is made of a handheld 3D Laser scanner. The scanner is moved above the area to be inspected and it is then constantly acquiring the points of the surface. The scanner doesn't require any external reference system; it is possible to examine complex geometries as well as flat surfaces. After inspection, the data are processed and colored according wall thickness reduction. The high degree of reproducibility makes corrosion mapping an interesting tool to use when monitoring corrosion, to their visible and it allows, for example, the corrosion speed of the material to be calculated efficiently but also more complex calculations such as RLA (remaining life assessment) and any other integrity assessment method.

Higher scan speed at fixed accuracy thanks to 3D Laser

Fast standard resolution scanning is applied to the whole surface while high definition resolution is only applied to affected zones. In this way scanning rates as high as several m²/hour can be achieved after proper calibration and preparation without compromising the accuracy that remains constant during the whole scan.

Available scanners

Handheld 3D scanner

Your result

Accuracy and repeatability: each indication is measured, mapped and recorded with the highest degree of accuracy using standard integrity evaluation techniques without compromises.

Contact-free technique: the inspection may be carried out in operating conditions in most cases

Please note

An access clearance of approximately 600 mm around the scanned surface should be granted to be able to scan the whole surface in the best conditions.

In some cases (shiny objects, high ambient brightness) the surface might need to be prepared with a contrast product prior to inspection.

In which situation?

This service is suitable in the next sectors:

- Industry
- Power
- Oil & Gas
- Pharma
- ...