



## Automated Corrosion Mapping

The fully automatic scanning by our Accuscan ensures quick and accurate testing.

- Do you want to record the wall thickness of entire tank walls or pipelines?
- Do you want to detect a specific critical wall thickness on a large surface where manual point measurements are not an option?
- Are the zones to be explored not accessible without costly scaffolding or work platforms?
- Are the contact temperatures too high to carry out manual measurements?

### Your tailor-made solution

Vinçotte offers a fully automated system to map and measure internal corrosion, general wall degradation, pitting and other material degradations or geometries.

Apart from conventional wall thickness measurements, the use of ultrasonic probes for specific purposes such as phased array, TOFD or angle probes is also possible. External corrosion can even be measured with a laser unit. The result in each case is a cartography of the scanned zone that permits detection and possible evaluation of a specific degradation phenomenon.

For cartography, we use high scan resolutions up to 1x1 mm with an automated scanner. Thanks to the use of a colour pallet, we can localise and quickly measure variations in wall thicknesses. All measurements are recorded so that it is possible to conduct analyses at a later time as well, for example, at the end of the shift, or even many years later in order to compare new measurements.

Automatic corrosion mapping is the ideal technique to periodically monitor material degradation. Apart from accuracy and high scanning speed, the remote operation of the Accuscan offers major advantages. The scanner works entirely autonomously with its own battery. Thanks to magnetic wheels, this scanner also manoeuvres vertically and upside down.

### Your result

#### Practical

- This technique can only be used on magnetic materials since the scanner uses magnetic wheels.
- For ultrasonic techniques, a continuous supply of contact media (water) is provided. It is important to keep this in mind in connection with production lines located at lower levels, interventions, materials or the situations in which this may be disruptive or dangerous.
- In ultrasonic techniques, the material to be tested must allow ultrasonic waves to pass through.

#### Please note

#### Legislation

Compliance with various regulations can be ensured in collaboration with the pressure department.

#### In which situation?

#### Mapping the inner surface area of:

- Storage tanks
- Pipelines

- Reactors
- Other magnetic materials that allow the passage of ultrasonic waves

### **Mapping of:**

- General internal material degradation through erosion/corrosion
- Pitting corrosion
- Pitting
- Lamination
- Adhesion of cladding
- Internal geometries
- Internal crack formation in the base material
- External wall degradation or corrosion (laser application)

### **Applicable in various sectors:**

- (Petro-) chemical sites
- Nuclear sites
- Storage tank parks
- Transport pipelines
- Pharmaceutical and Biomedical sites
- Other sectors