



## Floorscan – Semi-automatic tank bottom inspection

Do you manage aboveground storage tanks made of carbon steel? Do the regulations require periodic inspections? In that case, the floor scan technique is excellently suited for detecting and assessing corrosion on bottom plates! Depending on your requirements, specialists from Vinçotte can map the entire tank bottom along with the corrosion detected.

### Your tailor-made solution

The Floor Scan is used to detect corrosion and to measure the remaining thickness of these tank bottom plates. Depending on the customer requirements, the system can map the entire tank bottom along with the corrosion detected, or, if so desired, it can also be used in the manual mode for faster assessment of the condition of the tank bottom.

The greatest advantages of the Floor scan include the speed of scanning, the possibility of investigating coated tank bottoms, and the non-contact skills/characteristics that most electromagnetic techniques have. This system is constructed with strong permanent magnets. This offers you the possibility of inspecting plates of up to 20 mm thickness. Combined with the related touch screen computer, it is possible to map the entire bottom of the tank.

The aim of this study is to find heavily corroded zones for possible repairs, and to provide this data to the RBI (Risk Based Inspection) specialists for the calculation of the remaining life of the tanks in question.

### Limitations of this service:

- The bottom plates to be investigated must be made of carbon steel;
- The lowest possible nominal plate thickness for inspection: 6 mm;
- For plate thicknesses of: 6 to 12 mm. > Minimum detected: 20% material reduction;
- For plate thicknesses of: 12 to 20 mm. > Minimum detected: +/- 50% material reduction; (only in manual mode)
- Maximum permissible coating layer: 6 mm;
- The entrance to the tank must have a diameter of at least 20" (500 mm);
- The material should not be prone to explosion. Cannot be used in explosive zones;
- Minimum tank diameter: 5 m;
- Unscanned zones: > UT (Ultrasonic Testing) measurements.

### This service offers you:

- Preventive maintenance plan (this prevents tank leakage and soil contamination);
- The use of products is unnecessary (no (ultrasonic) couplant, no detection agent, etc.);
- No contact between sensors, magnets and plates;
- High scanning speed;
- Recordings for an accurate mapping of the indications and computerised handling
- Data storage and archiving for the tank history and comparison (in mapping mode);
- Inspection of coated bottoms

### Your result

### Please note

The floor scan test delivers reliable results and even exceeds the requirements laid down by EEMUA159 or API653.

### In which situation?

This service can be used in the following sectors:

- Petrochemical sector
- Aerospace– and aeronautical sector
- Energy producing sector
- Other sectors in which storage tanks are used