

# Magnetic Flux Leakage (MFL)

Magnetic flux leakage methods provide asset owners with the information required to assess tank-life suitability. Applus+ employs various scanners to accomplish the integrity assessment, which is generally performed on, yet not limited to, tank floors. Magnetic flux leakage methods work by inducing a strong magnetic field, near saturation, within ferrous materials. When an area affected by corrosion or metallurgical change is traversed by the sensor head, a change in flux density is measured and depicted on a digital computer screen, alerting the operator in real time while also being recorded for post-analysis.



## THE Applus+ SOLUTION

Applus+ has developed a systematic approach to magnetic flux leakage, ensuring inspections are conducted using state-of-the-art technologies and reporting the findings with the requisite level of detail to be able to assess a tank's suitability for continued operation.

With the breadth of equipment and reporting software available to Applus+ personnel, clients benefit from having readings obtained by the system in a real-time C-Scan presentation. Through methodical threshold placement, Applus+ can help its clients to focus on the worst-affected areas instead of applying a blanket prove-up approach, thereby reducing overall downtime.

Taking magnetic flux leakage opportunities and coupling the efforts with a well-designed API 653 programme, clients may be able to assess tanks in their entirety, satisfying jurisdiction requirements and minimising potential production upsets.

## Target customers



This technique can be used in all environments and industries that have storage tanks within their scope of operation.

## Key customer benefits

Benefits of this technology include:

- Efficient means for tank bottom/roof assessments
- Either semi-automated or automated
- Ability to be applied over coatings
- Ability to discern top- and bottom-side corrosion cells
- Reliable and repeatable results