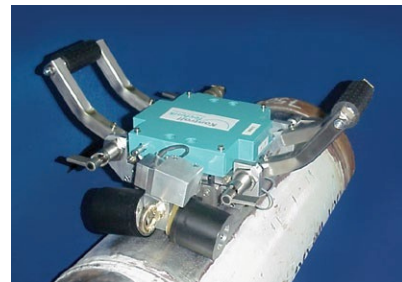
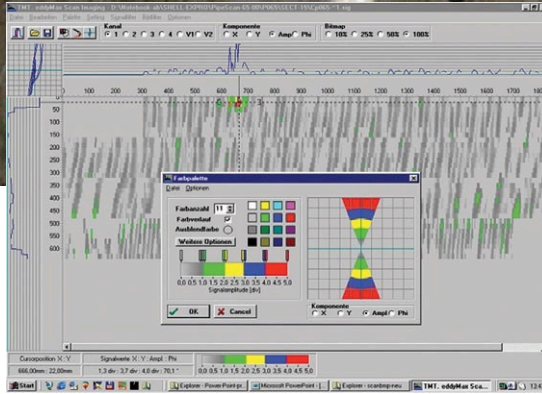


Saturation Low Frequency Eddy Current inspection technique for tank floors, pipes and vessels



Key Features of the System

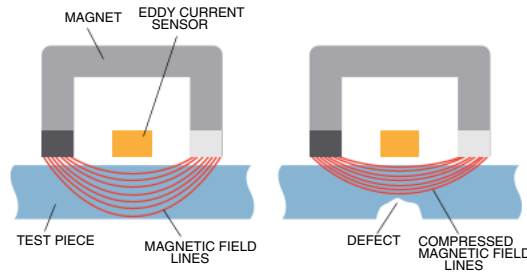
- ⊕ Fast screening method for local metal loss
- ⊕ Inspection of thick wall components up to 35 mm
- ⊕ Inspection through thick coating up to 10 mm
- ⊕ Inspection speeds up to 25 m/min
- ⊕ Higher defect detection sensitivity than MFL
- ⊕ Distinction between topside and bottom defects
- ⊕ Minimal object preparation prior to the inspection
- ⊕ Coloured condition mapping
- ⊕ Further applications with adapted scanners include tubular tanks, loading lines, boiler pipes, large cooling/water pipes and pressure vessels.

The SLOFEC™ (Saturation Low Frequency Eddy Current) corrosion inspection technology has been developed as a new and superior alternative for the inspection of storage tank floors, pipes and vessels.

Due to its unique properties it can inspect through coatings up to 10 mm thickness, wall thicknesses of up to 35 mm and distinguish top from bottom corrosion. Pitting on the top side does not prevent the detection of corrosion on the bottom side. In addition to being a superior alternative to MFL inspection tools, the system is capable of complete mapping of the tank floor, pipe or vessel condition.

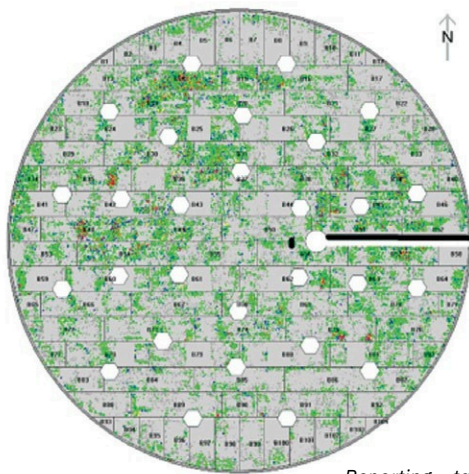
Plates with non-magnetic and non-electric coatings (e.g. GRP, rubber, paint or others), with thicknesses up to 10 mm can be inspected. Direct coupling is not necessary.

Schematic structure of the SLOFEC™ sensor head and the functional principle.



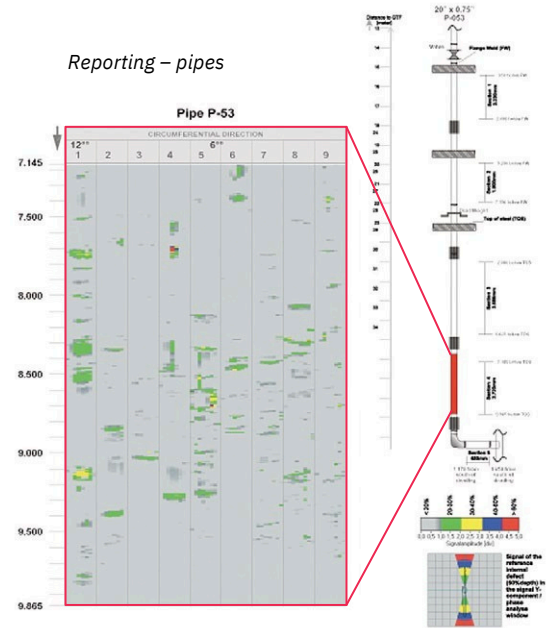
A typical SLOFEC™ technology application is storage tank floor inspection. Developed Floor Scanners with 400mm scanning width allow inspection of tank floors with wall thickness up to 35 mm and coatings up to 10mm in much shorter times than other methods.

Floor Scanners are designed to scan the annular plates up to the shell to detect typical corrosion which is often to the end of the annular plates.



Reporting – tanks

Pipe Scanners are designed for different wall thickness ranges and diameters. Pipe Scanners are used for external drive along the pipes.



Applus+ provides the following services as individual packages or combined to provide a total Asset Integrity Management programme.

- ⊕ **Advanced (non-intrusive) Inspection**
- ⊕ **Services Sub-sea Inspection Services**
- ⊕ **Engineering Design Solutions**
- ⊕ **Risk Based Inspection Planning**
- ⊕ **Inspection Management Services**
- ⊕ **In Service Inspection**
- ⊕ **Plant Life Management**
- ⊕ **Metallurgical Services.**

Importantly, Applus+ can also call upon extensive in-house expertise and resources for advanced inspection and conventional NDT, providing a total capability for management of through life plant integrity.

Applus+, in collaboration with our local and international partners, has extensive experience in the application of these services to a wide range of industries including:

- ⊕ **Oil & Gas**
- ⊕ **Petrochemical**
- ⊕ **Refining**
- ⊕ **Ore Processing and**
- ⊕ **Handling Power**
- ⊕ **Generation.**