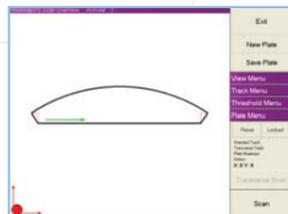
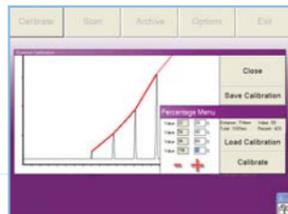


Advanced MFL tank inspection



The FloormapVS2i is latest version of the best selling MFL floor scanner and now comes with up-graded magnets to improve defect detectability and sizing on thicker materials, faster data capture with a custom designed micro controller and all new software. The VS2i contains significant improvements in terms of defect positioning, electronic data processing and software manipulation.

A new High Specification encoder system has been developed which is electronically calibrated to each individual scanner eliminating errors caused by component tolerances. The new encoder now gives accuracy to within 3 mm on an 8 metre track length and providing it is calibrated on an annual basis will not be effected by normal wear and tear.

The ruggedised on-board computer uses touch screen technology for ease of use within the hostile storage tank environment. The custom designed data acquisition software not only captures all the MFL signals but analyses and displays the location and severity of the corrosion in real time.

Technical and Performance Specification - Patent No 5,619,136

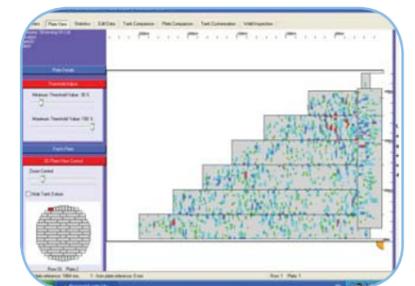
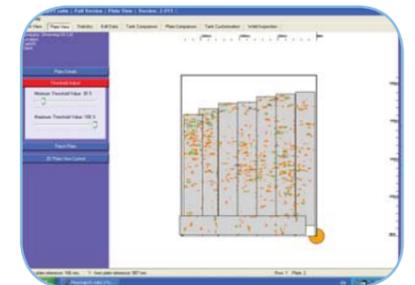
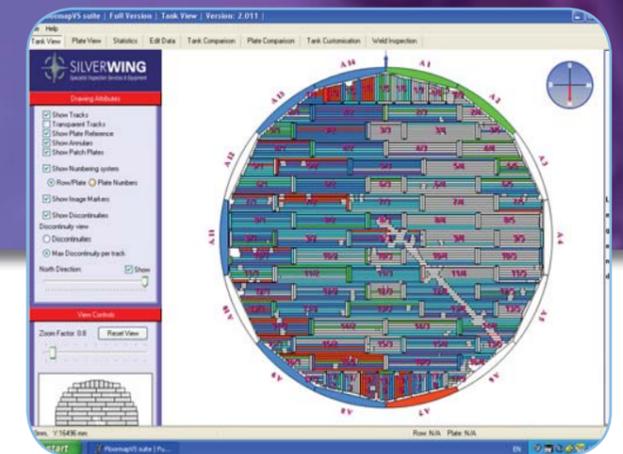
Principle of operation	Magnetic Flux Leakage
Detection	32 off Hall Effect sensors
Scan width	250mm
Maximum single scan length	15 metres
Method of propulsion	DC motor
Speed	0.5m/ sec
Thickness range	Maximum 10mm (automated sizing mode) Maximum 20mm (detection mode only)
Test through coatings	Yes if non magnetic
Maximum coating thickness	6mm
Sensitivity	adjustable
Max sensitivity	20% underfloor corrosion
Autostop	Yes
Data storage	Yes
Real time analysis	Yes
Power requirements	12v battery operation - 2 x 28 AHr batteries and 1 intelligent charger allow continuous working
Transit case	Meets IATA requirements for transporting magnetizable material
Operating weight	54 kg

- **Automatic CAD drawing**
- **Patch plate design feature**
- **Ruggedised touch screen computer**
- **Real time data acquisition and analysis**
- **Hard copy and electronic report functions**
- **Combined defect profiling and amplitude analysis**
- **Add data from Visual, UT, Vac box and MPI Inspection**

The off-line reporting software automatically produces a CAD drawing of the tank floor with the defects being positioned to within 30mm accuracy. All captured data, over 20% loss of the nominal plate thickness, is re-analysed to identify the defect profile and separate the corrosion into 1 of 3 classes. Different sizing algorithms are applied to each class of corrosion ensuring enhanced defect sizing even on badly corroded floors where small diameter deep pits may otherwise have been undersized.

Additional data from visual, ultrasonic, vacuum box and magnetic particle inspection can be added to the report generating a full fingerprint of the tank floor including the annular plates. An innovative feature of the software allows subsequent inspection data to be overlaid and corrosion growth identified.

These features coupled together with a patch plate design function and full statistics package give the tankage engineer a powerful, cost effective tool with which to carry out trending and asset life projections.



FloormapVS2i Analysis Suite System Requirements

- Reporting Software System Requirements
- Windows XP
 - PC PIII 2GHz or better processor
 - 512MB RAM or better
 - 40GB Hard drive with space for installation
 - CD Rom
 - SVGA 800 x 600 minimum resolution display
 - Mouse & Keyboard
 - Microsoft .Net Framework v1.1 (supplied)
 - Microsoft DirectX v9 (supplied)