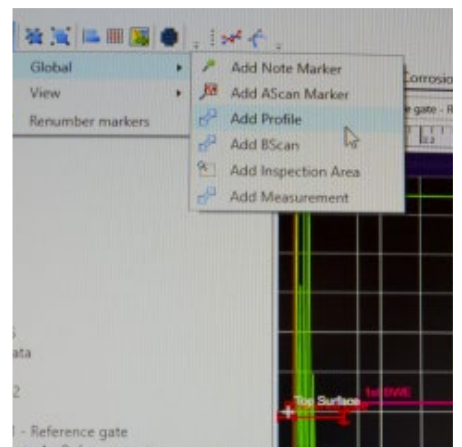
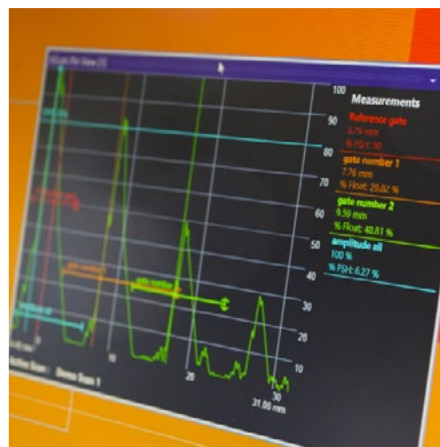
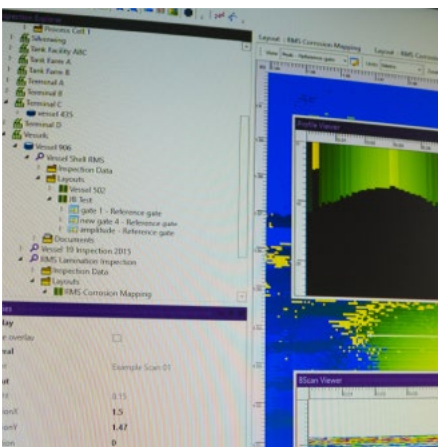
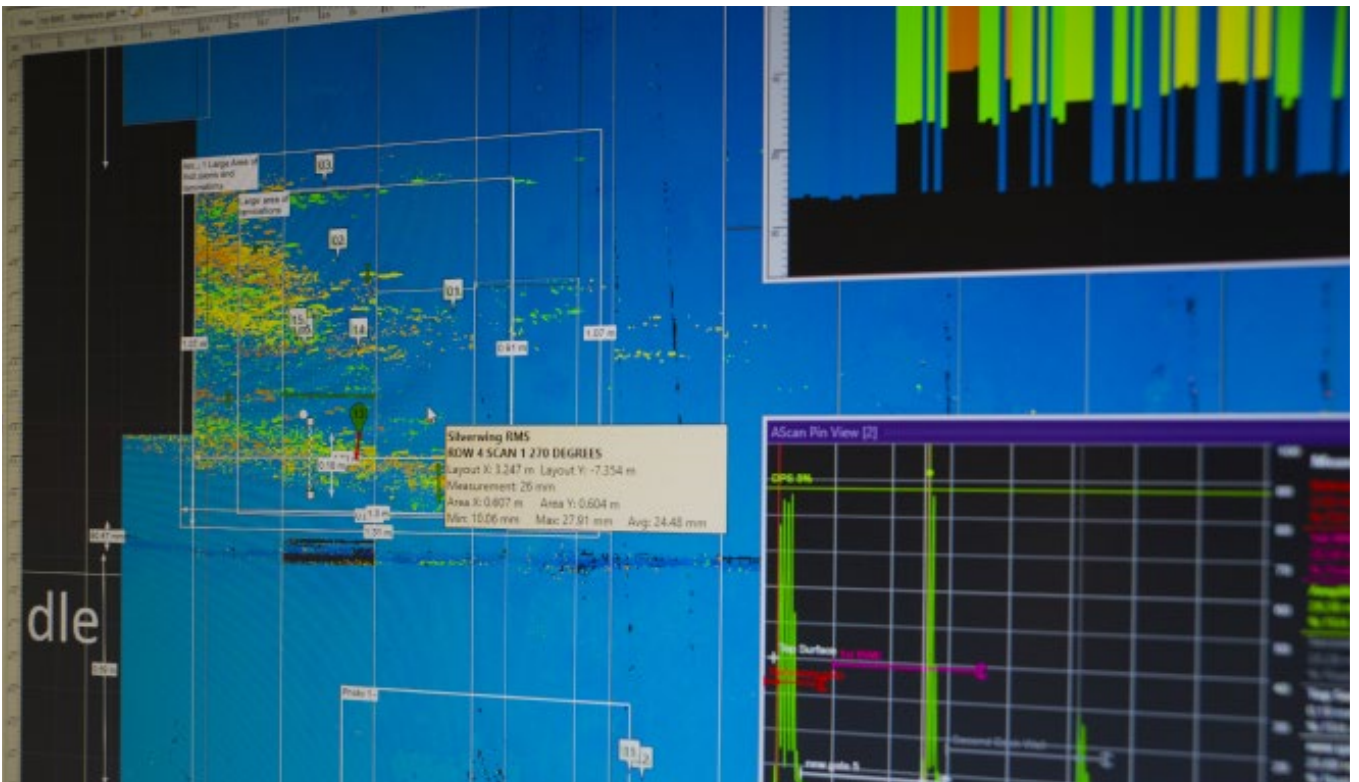


CMAP

INSPECTION MANAGEMENT SUITE

Data Stitching, Analysis and Reporting



TANKS

PIPES

VESSELS

- > INSPECTION DATA MANAGEMENT
- > AUTOMATIC POSITIONING OF SCANS
- > FAST LAYOUT AND ANALYSIS
- > IMPORT CAD DRAWINGS



INSPECTION MANAGEMENT SUITE DATA STITCHING, ANALYSIS AND REPORTING

Silverwing's CMAP software is an innovative solution to managing today's complex inspection data. CMAP has the potential to save many hours on an average inspection with the ability to import, analyse and report inspection data collected by multiple vendors and multiple inspection techniques.

CMAP allows analysis of various inspection datasets on one screen creating a complete view of an assets condition with full traceability back to raw inspection data.

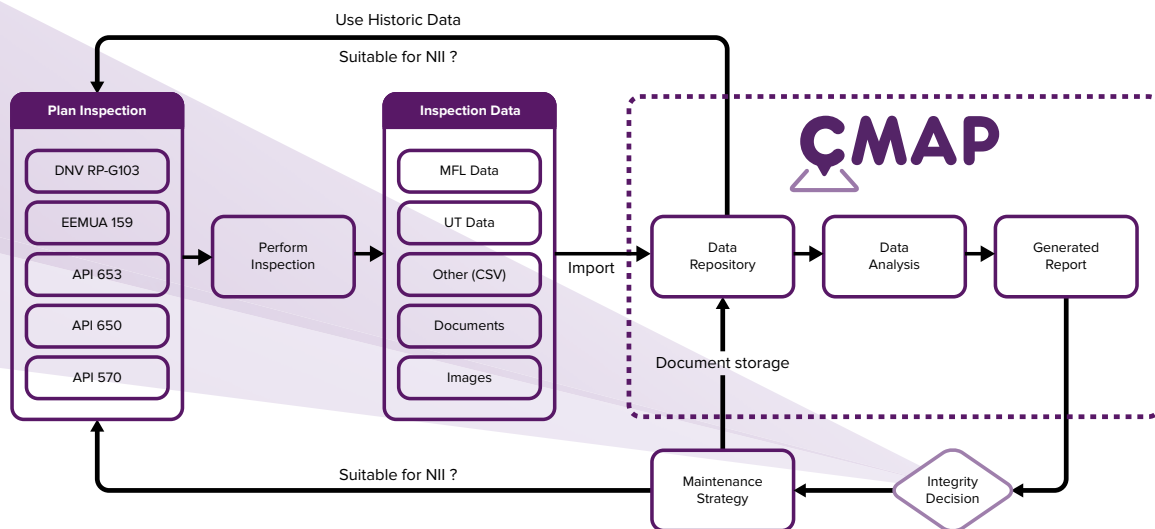
CUSTOMER TESTIMONIAL

"The reporting process saved approximately 10 days of "cut and paste" and other non-value added time, this allowed me more time to focus on the more important analysis work."

Paul McLean, TRAC Oil

KEY FEATURES

- > Fast, simple layout and analysis of inspection data
- > Automatic positioning of Scans based on X/Y data entered during acquisition
- > Import device data and images
- > Import CAD drawings in DXF/DWG format
- > Annotate inspection layouts with Areas, Markers & Measurements
- > Load and view historical inspections side by side for comparison
- > Automatic report generation
- > Measurement tools for sizing areas of corrosion
- > Real-time filtering and manipulation of data
- > Zoom into data to view fine details



STORAGE TANK INSPECTIONS

API653 and EEMUA 159 recommends that a tank inspection include the tank floor, shell and roof. The data sets created from these inspections are often a combination of MFL and various UT data collected from a range of systems.

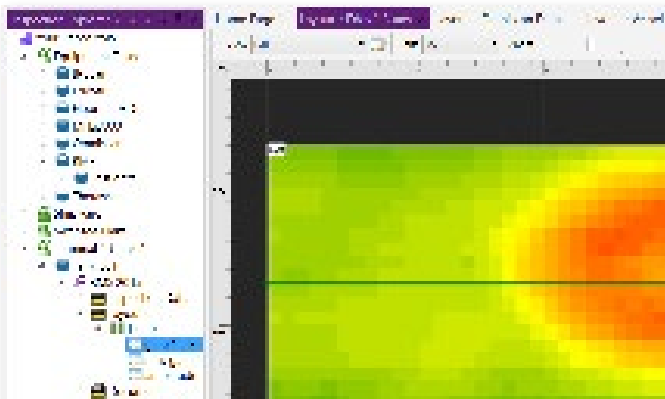
CMAP can combine MFL and UT data to generate a complete overview of the tank condition assisting in asset integrity maintenance planning. When using CMAP, data can easily be stitched together and by utilising its intuitive analysis and reporting tools many hours can be saved, thus potentially reducing the asset downtime.



CENTRAL LOCATION OF INSPECTION RESULTS

CMAP's powerful inspection database is user configurable to reflect the asset structure within an organisation, or the client base for an inspection company.

Users can create multiple sites each with their own assets such as tanks, pipes and vessels. Inspection data is imported specifically to an asset with the associated corrosion inspection results, CAD drawings, images and work flow documents such as inspection procedures, technician qualifications and asset related information.



MULTI-LEVEL TREE FOR EASY NAVIGATION

Simple layout of Sites, Assets, Inspection Data & Documentation

Once an asset such as a tank is created in the database, all associated inspection documents and measurement data can be imported creating a central data archive.

Each subsequent inspection of the asset can be added to the database making historical analysis easy and ensuring valuable information is not lost.

VESSEL INSPECTIONS

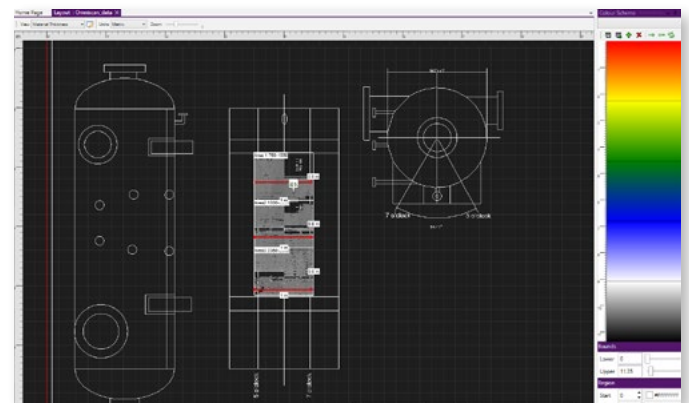
A trend in the industry is that inspections are moving from intrusive visual inspections (IVI) to non-intrusive inspections (NII). Data gathered from NII's can be used to plan the work scope for future inspections, therefore the estimate of the turnaround of an asset will be more precise.

CMAP provides the tools to accomplish these requirements. It has the ability to import and manage data from different sources keeping an historical record.

EASY DATA STITCHING AND PLACEMENT

CMAP can import data from Silverwing's range of inspection systems, Olympus Hydroform and CSV files.

During import CMAP can automatically position scans within a layout based on co-ordinates entered into software during acquisition. This significantly reduces time when creating reports and analysing inspection data. CMAP also utilises intuitive and user configurable scan overlap mechanics so when two or more scans overlap the minimum value is displayed and used in any calculations.



IMPORT CAD DRAWING

Overlay inspection result on CAD drawings

A CAD drawing of an asset can be imported into a layout which can aid manual positioning and stitching of inspection data to provide an accurate overall representation of an inspected asset.

Images can also be imported to add further details to the inspection which can be tied into different inspection views within a layout.





ANNOTATION OF DEFECT AREAS

Users can define areas of interest in a layout view for highlighting in the final report report, including comments from the inspection engineer.

These inspection areas can then be tagged for inclusion in the report generator. Other tools such a measurement bars and dropped pins can also be added to provide further information and highlight areas for investigation.

MEASUREMENT TOOLS

CMAP contains dimensional tools to annotate defect areas.

These tools overlap scans and be used for defect area sizing or adding positional information from a reference point.

When an Inspection Area is drawn the active cursor shows minimum, maximum and average material thickness values within the defined area along with actual thickness at the cursor point. Any measurement tools added will appear in generated reports, but can also be hidden via the layer control for clear data view.

ADVANCED PALETTE TOOL

CMAP has a flexible and user configurable palette tool with real time updating across entire layouts. A colour palette can be uniquely assigned to a particular data view e.g. material thickness, surface or amplitude.

This feature is used to highlight different depths which can be used to reveal clear images of back wall pitting or set simple acceptance thresholds to highlight areas outside of desired specification.

PIPELINE INSPECTIONS

Many innovative inspection companies are working with the RMS2-ARC corrosion mapping system and have experienced efficient and high quality inspections.

Many hours of reporting time can be saved by using CMAP's advanced tools for data stitching and processing. With the ability to create your own customized report layouts. The inspection is not only completed efficiently but also improves quality and consistency of reporting.

AUTOMATED REPORT

CMAP automatically creates inspection reports using a powerful configurator to place highlighted scans, CAD drawings and layouts into a word document that can be further modified.

This saves significant time when creating inspection reports compared to the manual "cut and paste" method commonly used. When using the inspection area tool, identified defect areas are printed in high resolution and individual scans can be selected with thumbnails on each page identifying the scan location on the asset.



INSPECTION REPORT

Customised inspection report function

Reports are created using a wizard which guides the user through a simple process of selecting layouts, scans, inspection areas and layers such as peak, surface and amplitude reference gates, or MFLi and STARS images.

Once the report is complete it can be logged in the database for future reference.



CMAP SUPPORTED DATASETS

RMS2 HIGH SPEED MAPPING SYSTEM

CMAP is the obvious choice for storing, stitching, analysing and reporting your RMS2 inspection data. It's now faster than ever to import and layout C-scan mapping data with automatic scan positioning.

The intuitive colour scaling of C-scan data make it possible to quickly identify anomalies. The report is automatically assembled in the background as inspection areas, A-scan markers and B-scan profiles are added to the inspection data.



FLOORMAP AND MFLI3000

Floormap users are already familiar with our SIMS software and its reporting capabilities. With CMAP your reporting has just become a little easier and more comprehensive.

CMAP is capable of importing, stitching and reporting all Silverwing MFL data. The same tools that work for the UT mapping data also work for the MFL data including the data colour coding, inspection areas, filtering and much more.



HYDROFORM

RMS2 and Hydroform users now have the option of mounting their Hydroform phased array probe to their RMS2 scanner. This enables ultra-fast scanning of larger areas with high resolution and excellent reliability.

CMAP supports the import, analysis and reporting of Omniscan Hydroform data making it easy to layout and stitch your inspection data. The same intuitive analysis tool which are used for RMS2 data can now be used on your Hydroform data.



CSV

To further support the multimodal NDT data concept, CMAP supports the import of CSV data imports.

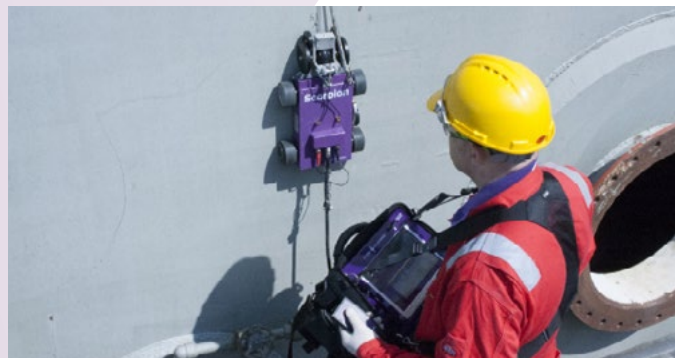
This allows the import of Eddyfi's Lyft pulsed eddy current data collected for CUI applications. Techniques used in NDT are growing and the industry is using CMAP to store and report laser mapping, guided wave and thermographic inspection data.



UT LITE - SCORPION, RSCAN & THETASCAN

CMAP can import all inspection data collected by the UT Lite acquisition unit. Inspection data from the Scorpion, R-scan and Thetascan can be shown side-by-side within the same view.

No longer is it required to copy UT thickness data into a report or even from paper into an excel sheet, just simply import the inspection data from the device directly into CMAP.



CMAP SOFTWARE FEATURES

Database	Unlimited Site, Asset, Inspection elements
	Simple creation of new elements
	Multi-level tree for easy navigation
Equipment Data Interfaces	RMS, Scorpion B-scan, R-scan, Thetascan, MFLi3000, Floormap, Onmiscan
	Image (Jpeg, gif, png, bmp)
	CSV
Scan Positioning	Absolute positioning based on global co-ordinates (RMS)
	Automatic grid based on file date or name
	Manual drag and drop scans into position
Scan Presentation	Overwrite mode to place high resolution scans onto low resolution
	Minimum/ Maximum thickness processing to ensure defects are visible on overlapped scans
	Show scans from different data sources on a single layout
	Layer selection to show different gate measurements in a C-scan or MFL/MFLi modes
CAD Overlay	DXF or DWG import with scaling adjustment to match data acquisition
Defect Identification Tools	Inspection Area marker with notes, minimum, maximum, average thickness display
	Dropped pin, selectable colours and notes
	Dimension lines, metric or inches
Palette	Colour selection, 24 pre-defined palettes
	User adjustable start, end and boundaries
	Design tools for custom palette creation
Reporting	Auto generation with selectable scan pages, inspection areas, scan layers
	Microsoft® Word® format for user modification
	Include client information and company logo
Document Import	Import any document format into the database. User requires suitable third party reader installed.
Data Export	Export scan region to clip board, paste to Microsoft® Excel®, etc
	Export thickness to comma delimited file
	Copy scan images to clip board
Other	Database export to transfer inspection files between users

LICENSING

CMAP is available as an Annual licence;

Per seat

Per 5 seats

Corporate volume licensing

PACKAGES

CMAP and RMS Systems

CMAP and Hydroform adaptor for existing RMS users

CMAP, RMS System and Hydroform adaptor

Centres of Excellence

Canada: + 1 418 780 1565

UK: + 44 (0) 1792 798711

Sales Offices

South Africa: + 27 21 557 5740

Abu Dhabi: + 971 2 505 6622

Dubai: + 971 4 360 6751

France: + 33 4 28 36 0100

USA: + 1 281 542 3292



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