Technical Specifications

# SILVERWING HANDSCAN

Mini Manual MFL Corrosion Detection System





### LOW COST & RAPID MFL SCREENING SYSTEM

The Silverwing Handscan MFL corrosion detection mini scanner is designed to complement the Silverwing Floormap. Even in such a small configuration the latest generation of permanent magnets enable localized magnetic saturation of the floor area under test.

#### **Threshold Control**

Signals from corrosion, above the operator controllable threshold, are displayed as both a visual and audible alarm. It's low profile and extendable handle allow scanning in otherwise inaccessible areas of storage tanks such as the shell to annular area and under pipe work or heater coils.

#### MFL Control Module

The easy to use Silverwing Handscan system consists of a scanning head and a rechargeable battery powered portable MFL control module which provides up to 8 hours of operation.

The same control module can be utilised with the Silverwing Pipescan MFL pipe scanner The control module features visual alarms to alert the operator to the presence of corrosion during a scan.

The alarm sensitivity is adjustable, allowing the operator to calibrate the Silverwing Handscan to detect corrosion above the defined reporting level, but ignore low level, non-relevant corrosion signals.

#### Features

- High PoD of corrosion issues
- Easy to use by semi skilled operator
- Alternative heads available for internal scanning of small vessels and pipes
- Ideal solution for small diameter tanks below 15 m with petal design
- Low profile with extendable handle
- Separate battery operated lightweight control module
- Proven MFL technology
- Cost effective inspection tool
- Field proven durability & reliability



### COMPACT, EASY-TO-USE MINI MFL SCANNER

Designed to complement the Silverwing Floormap range of tank bottom scanners.

#### How it Works

The operator first connects the sensor cable between the scanning head and control module. Switch on the control module, set the required plate thickness and adjust the alarm sensitivity using a reference plate with known artificial defects. Then simply position the scanning head on the tank floor to be inspected, push or pull the scanning head and monitor the control module for the audible and visual alarm.

Any areas identified by the Silverwing Handscan system can then be marked on the floor for further analysis by a secondary inspection technique, normally ultrasonic.

Inspection results can then be added to the Silverwing SIMS reporting software to be included within the final inspection report.

#### Silverwing Floormap-R

Basic model with free-scan and auto-stop modes is designed for rapid screening of tank bottoms.

#### Silverwing Floormap3Di-R

Intermediate model includes mapping mode. Unlike the basic model the scanner captures, saves and produces a corrosion map of the tank bottom.

#### Silverwing Floormap3DiM-R

Advanced model combines the benefits of the basic and intermediate scanners into one fully featured system giving maximum flexibility.





www.silverwingndt.com/products/handscan-tank-corrosion-screening/

## SPECIFICATIONS

INSTRUMENT	
Principle of operation	Magnetic Flux Leakage
Detection	16 off Hall Effect sensors
Scan width	150 mm (6 in)
Method of propulsion	Hand push pull
Speed	0.5 m/sec
Handle	Extendable
Profile	Clearance under pipework required 120 mm
Thickness range	Maximum 15 mm
Test through coatings	Yes if non magnetic
Maximum coating thickness	6 mm
Max sensitivity	10% underfloor on un-coated 6 mm plate
	20% underfloor on coated 6 mm plate
Connecting cable	5 metre standard length
Power requirements	12v battery operation
Transit case	Meets IATA requirements for transporting magnetizable material Operating weight
Operating weight	18 Kg - combined weight of scanning head and electronics module

