

Floormap3Di-R

High speed magnetic flux leakage (MFL) floor scanner



Oceanengineering offers advanced non-destructive tank inspection using the Silverwing Floormap3Di-R. The system is currently the fastest tank bottom inspection solution offered by Silverwing and provides scanning speeds up to 1 m/s—twice the speed of the previous model. The Floormap3Di-R increases inspection efficiency while improving accuracy and data quality.

The system combines two distinct technologies, MFL and surface topology air-gap reluctance sensors (STARS). The introduction of STARS enables the scanner to determine whether there is corrosion top side, bottom side, or below the surface coating.

FEATURES

Full tank floor data recording and mapping

High resolution 64 channel sensor arrays to maximize detection capability

Through coating inspection up to 6 mm including FRP, GRP and SS

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The high resolution sensor heads provide excellent probability of detection including indications that measure as small as 2mm in diameter. This accuracy, combined with advanced signal processing and defect classification tools, significantly improves corrosion detection and sizing capability when compared with previous generation systems.

The Silverwing Inspection Mapping Software (SIMS) reporting suite further complements the Floormap3Di-R by providing the most powerful and efficient means to create high quality reports on tank condition and archives inspection results for traceability and ease of access.

SIMS imports data from the Floormap3Di-R system and automatically positions each of the separate plate files to produce a CAD drawing of the entire tank floor. The comprehensive drawing details the location and severity of all corrosion over 20% loss or of a specified value with 10% color banding.

Applications

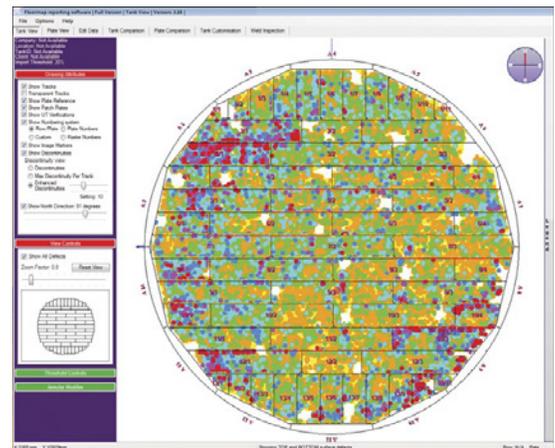
- » Tank floors
- » Supported plate types: rectangle, annular, and sketch

Additional features

- » 256 individual sensors for 4.6 x 2 mm scanning resolution
- » Battery powered, no external cables required
- » Floormap3DiM-R, a system equipped with additional manual controls, adds free scan and stop on defect mode with adjustable threshold

Considerations

- » Minimum defect detection sensitivity: 0.08 in (2 mm) diameter pipe type 50% deep
- » Maximum coating thickness: ¼ in (6 mm) coating on ¼ in (6 mm) plate
- » Accurate sizing: 3/16 in (5 mm) coating on 5/16 in (8 mm) plate: 3/32 in (3 mm) coating on .4 in (10 mm) plate: 3/64 in (1 mm) coating on 15/32 in (12 mm) plate
- » Minimum manway size: 19.9 in (50 cm)
- » Un-scanned area: in (10 mm.4) from plate weld, 6.3 x 6.3 in (160 x 160 mm) corner dead zone



Silverwing is part of Eddify Technologies.