

Full Corrosion Assessment

The ability to see through thick coatings

ase,

X

PEC corrosion mapping

"Our innovative technology

allows us to see through

composite/anti-slip deck

waterline; seeing through

non-conductive cladding,

Senior Inspection Engineer

Arron Jackaman,

conforms to ISO 20669 and

coverings to scan the vessel's

deck structure below. We can

scan hulls above or below the

finished coatings and antifouling"

Brookes Bell's state of the art PEC (Pulsed Eddy Current) array scanners can rapidly test substrates with a sweeping probe width of 450mm, penetrating up to 300mm. The innovative technology enables our in-house NDT specialists to scan large volumes of deck plating and other structural hull surfaces. With our unique proprietary software, we are able to recreate precise models of a ship's structural condition using high resolution imaging, all within a short time frame, allowing for timely decision making prior to going into a refit.

Corrosion mapping applications for Vessels:

- C U I Corrosion Under Insulation.
- Composite decks.
- Scab corrosion under antifouling.
- Tanks water/fuel/ballast.
- Hull and other exterior painted surfaces.
- Seawater and exhaust pipework.
- Drencher system pipework.
- Flooring in bathrooms/showers/galleys, including through tiled flooring.

PEC – the 'Go To' technology for:

- Determining remaining plate thickness.
- Plate renewal estimation. Composite covered areas requiring
- replacement. · Coating areas to be repaired.

Benefits of Brookes Bell's **PEC System**

- Scanners are portable so scans can be undertaken anywhere in the world.
- Scans can be carried out months prior to project commencement ensuring minimal disruption.
- Scans can be carried out above or below the waterline with no need for the removal of surface material or use of sprays, gels, and dyes.
- Speed of data acquisition and generation of report.

PEC Scanner Areas of Use



Structure below a floor covering

Vessel's operations.



Decks through composite or other materials

Hulls through paint and antifoul



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Substantial corrosion below a composite deck which was detected by PEC



3D image illustrating corrosion of underlying substrate



Contact



Benefit to the Vessel - How can a PEC corrosion assessment help?

The benefit of a Brookes Bell survey is that the resultant report allows for an accurate quote for steel renewal and repair works, prior to or, during a refit or overhaul with minimum disruption to a

- Management Company/Shipyards understand the scope of work and can prepare and align schedules, budgets, and interface of subcontractors well in advance.
- All parties have a clear view of the project and can see the full scope of the underlying issues prior to the commencement of work.
- The inspection can be carried out months in advance of a yard period to suit the Vessel's schedule.





Seawater mains and pipes



Exhausts and elbows

For detailed information on scanning more exotic alloy structures please contact us.

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