

PEC corrosion mapping Brookes Bell's state of the art PEC (Pulsed Eddy Current) array scanners, in the hands of our in-house NDT specialists, can rapidly test substrates with a sweeping probe width of 450mm, penetrating up to 300mm. The innovative technology enables for large volumes of deck plating and other structural hull surfaces to be scanned with high resolution imaging, within a short time frame, allowing for timely decision making going into a Superyacht refit.

"Our innovative technology allows us to see through teak cladding to scan the superyacht deck structure below. We can scan hulls above or below the waterline; seeing through non-conductive cladding, finished coatings and antifouling"

Arron Jackaman. Senior Inspection Engineer

# Corrosion mapping applications for Supervachts:

- C U I Corrosion Under Insulation
- Teak Decks
- Scab Corrosion under antifouling
- Tanks
- Hull and other exterior painted surfaces
- Swimming pools and surrounding areas
- Flooring in bathrooms/showers/galleys including through marble
- Tender garages/lazarette/ beach club doors
- Transom platforms
- Saunas/steam rooms

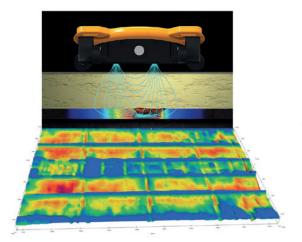
#### PEC - the 'Go To' technology for:

- Determining remaining plate thickness
- Plate renewal estimation
- Teak areas requiring replacement
- Coating areas to be repaired

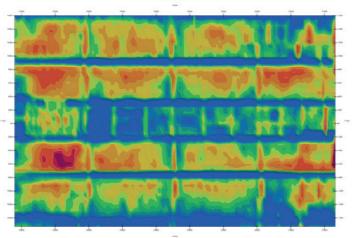
# Benefits of Brookes Bell's PEC System

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





3D image illustrating corrosion of underlying substrate



Substantial corrosion below a teak deck which was detected by PEC

# Benefit to the Superyacht - 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 works prior to or during a refit or rebuild, with minimum disruption to a Superyacht's operations.

- Management Company/Shipyards understand scope of work and can prepare and align schedules, budgets and interface of subcontractor well in
- All parties have a clear view of work
- Owners/Captains can see full scope of the underlying issues prior to commencement of work
- The inspection can be carried out some months in advance of a yard period to suit the vessel movements.

### **PEC Scanner Areas of Use**



Decks through teak or other materials



Structure below a floor covering



Seawater mains and pipes



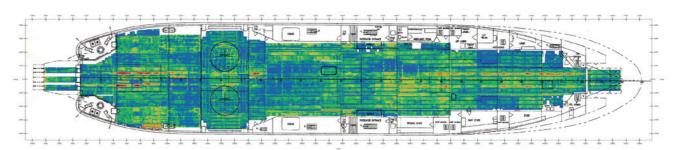
Exhausts and elbows



Swimming pool structure



Hulls through paint and antifoul



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

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