CASE STUDY

PROTECTING RESOURCES

BROOKES BELL

THE CHALLENGE

Brookes Bell is a technical and scientific consulting group specializing in the maritime and energy sectors. Clients of Brookes Bell are often operators of large ships such as those used by the Canadian Navy which require periodic inspections to assess their integrity safety. On these ships the steel deck plates are typically covered by vinyl and ceramic tiles coated with chemicals to ensure durability. Traditional inspection methods require the removal of the flooring to access the steel plates below. The removal process often results in significant damages and requires that the vinyl and tiles are replaced entirely.

SASB & GRI METRICS ALIGNMENT

PROFIT

- ✓ DECREASED REPLACEMENT COSTS
- ✓ COST-EFFECTIVE INSPECTIONS
- ✓ REDUCED DOWN-TIME AND WASTE

PLANET

- ✓ RESOURCE CONSERVATION
- ✓ EXTEND USEFUL LIFE OF FLOORING
- ✓ REDUCED EMISSIONS

PEOPLE

- ✓ REDUCED EXPOSURE TO HEALTH RISKS
- ✓ TOTAL RECORDABLE INJURY RATE
- ✓ INCREASED INSPECTION QUALITY

THE SOLUTION

Brookes Bell recognized that a more efficient and sustainable inspection method was needed and turned to Previan to leverage its expertise as a leader in electromagnetic inspection solutions. Brookes Bell worked with us to adapt an innovative technology that wasn't commonly used in the maritime industry. The electromagnetic

inspection solution enabled the inspection of 339 compartments on the Halifax-Class Frigates navy ships without surface preparation as well as the expensive and environmentally-taxing process of stripping and replacing coating and flooring materials.

COST
Savings for overall ship inspection

BIODIVERSITY
Preservation through limiting unnecessary wood replacement

INNOVATION
Advancements through recognition of new market needs

QUALITY
Improvements in inspection through precise technology

THE RESULTS

Previan's technology also led to a higher quality inspection process. Prior inspection methods only allowed for a few thickness measurements per plate, while our technology allowed for thousands of measurements per plate without the stripping process. The successful application of electromagnetic inspection solutions to ship decks led to a better understanding of the maritime industry's needs and the development of a new sensor designed for ship hulls. We have been able to support the Canadian Navy through this new technology saving them time, resources and costs.

Additionally, we have been able to save expensive teak wood floorings on cruise ships and yachts by utilising this same innovation inspection method.

UN SUSTAINABILITY DEVELOPMENT GOALS (SDGs)

The SDGs provide an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. The goals listed here indicate the SDGs addressed in this case study.