



## ODIN® Diverless UWILD

USA Patent No: US 10,011,145 B2  
For further patent information please refer to [www.emialliance.com](http://www.emialliance.com)

### The Challenge

Underwater inspection of Floating Offshore Installations (Production and Drilling) using divers and work class ROVs is costly, uses significant POB, creates unnecessary safety risks, delivers poor quality information and disrupts normal operations.

### The Solution

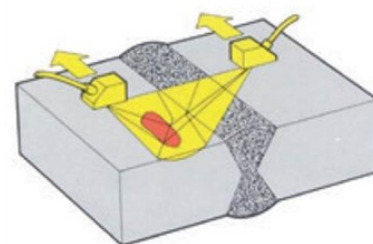
EM&I has developed and proven an alternative approach which is Class approved and have completed fourteen ODIN projects to date with the earliest project now well over two years old.

ODIN uses advanced methods to plan and carry out the required structural, isolation valves and other required inspections from inside the hull and by specialised ROVs that can perform gauging surveys without tank entry. Diverless mooring chain surveys are carried out using the LORIS system to class requirements.

Sea chests and isolation valves are inspected using CCTV systems inserted via special inspection ports that can be fitted on new or operating assets, safely.

ODIN can be aligned with the Hull Continuous Survey programme which means that the UWILD costs are spread over a 5 year period and only one entry per tank is required, leading to minimum costs and operational disruption.

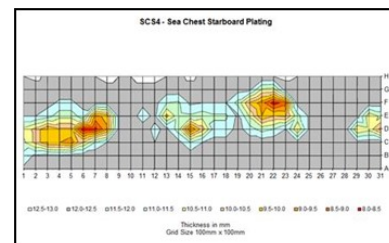
ODIN is also capable of diverless piping and valve repairs and corrosion protection of piping and sea chests by remote insertion of cathodic protection anodes via ODIN ports.



### The Benefits

ODIN delivers the following benefits compared to conventional diver / ROV methods:

- Reduced HSE risk
- Reduced cost
- Reduced POB to (only 3-4 required)
- Improved information quality
- Minimal weather dependency and operational disruption
- Extended time on station for Production and Drilling assets



### The Innovations

EM&I's policy of continuous investment in innovative solutions to achieve the objective of 'No Drydock....Safely' is helping our industry improve safety, reduce cost and improve the integrity of floating production and drilling assets.

The HITS JIP led by EM&I, is bringing all sectors of the industry together to improve focus on challenges and innovative solutions to key issues we face now and in the future.

### Track Record

EM&I measures our performance through systems like FPAL and unsolicited testimonials. Our proven track record of satisfied Clients is available on our Website.

Further information is available from your nearest EM&I office which will be pleased to discuss your particular needs.

Case Histories and References, demonstrating our capabilities and Client satisfaction, are available on our Website.

### Credentials

Health & Safety – EM&I has an outstanding HSE record and has been granted the RoSPA President's Award in recognition of being awarded eleven consecutive RoSPA Occupational Health & Safety Gold Awards including five Gold Medals and numerous other international awards.

Other safety awards include IFAP Safe Way Safety Achievement Awards and the Leith Offshore Safety Award.

Quality – EM&I assures quality through accredited ISO 9001 and ISO 17020/17025 management systems and seek continuous improvement by measuring Client satisfaction through FPAL and regular Stewardship Reviews.

Compliance – EM&I's methods are approved by Classification Societies and accepted by regulators worldwide.

Rope Access – EM&I have been a Full Member of IRATA since its inception in the 1980s.

HITS JIP – EM&I have a leadership role in the Hull Inspection Techniques and Strategy (HITS) JIP whose members include Oil Majors, Classification Societies, Regulators, Lease Operators and service companies.

## ODIN<sup>®</sup> Diverless UWILD



### Integrated Services

EM&I's proven technical and project management experience means we can successfully deliver complete projects thus letting you focus on your core business.

Our in-house service capability includes Asset Integrity Systems, Inspection, NDE, Maintenance & Repair, Corrosion Management, Cathodic Protection, Safety, Environmental and Engineering services.



Visit our Website:- [www.emialliance.com](http://www.emialliance.com)

