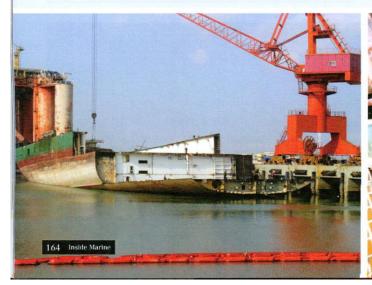


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Ship demolition is a core activity in the marine sector and often one of the most dangerous. The green pioneers and specialists at Sea2Cradle are at the forefront in bringing hazard-free and environmentally responsible dismantling and recycling to an industry with an oftentroubled reputation. Colin Chinery reports.







welders died late last year when a dismantled oil tanker exploded in a Gadani ship demolition yard in Pakistan. The worst such incident in the history of shipbreaking, it was followed three months later in January 2017, by the deaths of a further five in a fire at the same location.

Such incidents are seen to encapsulate the sector's record and reputation in a region where up to 90% of the world's demolitions are carried out; typically with rudimentary safety standards and across tidal beaches and primitive yards.

"Had the IMO guidelines from 2003 been followed, with a proper Inventory of Hazardous Materials (IHM), tank positions marked and so on, such accidents should never have happened," said Tom Peter Blankestijn, Managing Director of global green ship recycling expert, Sea2Cradle.

Hassle-free

Founded in 2011, and a member of the International Ship Recycling Association (ISRA), Sea2Cradle provides a hassle-free way for shipowners to handle the recycling of their vessels efficiently, responsibly, and without hazard or pollution.

It works closely with Lloyd's Register, collaborating together on assessing the quality of waste-disposal facilities.

"We are a small, very flexible company assisting shipowners in making worthwhile their ambitions in environmental issues, and specifically in ship and offshore platform recycling," said Mr Blankestijn. "This means not dumping vessels on a beach in Pakistan or Bangladesh, but preparing and doing things thoroughly, as would be planned for a new build, but in this case for proper disposal."

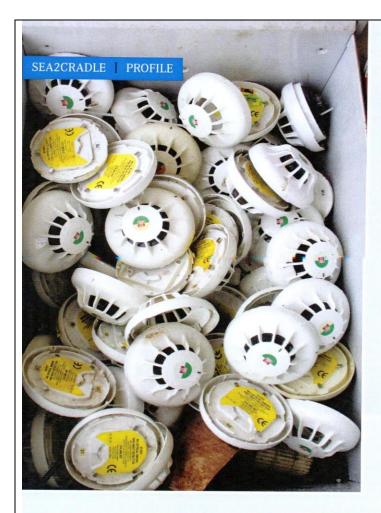
From creating a ship recycling plan and finding a buyer, to supervising the dismantling and recycling at an approved demolition yard, the Rotterdam-based specialist ensures that the entire process meets the highest standards of HSE.

Demolition yards combining a safe working environment with high environmental performance, and recycling more than 95% of all material – and with the aim of 100% – are among the standards Sea2Cradle is upholding in every project.

"Our mission is to set new standards for the ship recycling industry, and to help as many shipowners as possible to recycle their ship, rig, platform or FPSO responsibly. Zero pollution, zero incidents, zero accidents."









2017 enforcement

Addressing concerns over safety, health, and environmental damage in recycling by regulating the whole lifecycle of the vessel, the IMO document is unlikely to be enacted before 2020. In the meantime, the EU Ship Recycling Regulation, based on the Hong Kong Convention, is due to come into force at the end of this year.

"The maritime sector is one of the most conservative I know, and recycling is exactly the same," noted Mr Blankestijn. "It adores the IMO because of its global aspect, but on the other hand, the IMO is a compromise between more than 160 countries and slow in timing.

"So it is never the most stringent solution for an environmental issue like ship recycling. It is the best solution from a global perspective because everyone signs on, but from the perspective of the future of this planet it does not mean it is the best choice."

Mr Blankestijn and fellow co-founder and Operations Director, Wouter Rozenveld, each have more than 25 years of experience in the shipping industry. Their green alternative was fashioned and developed in the early 2000s while working with the then newly-merged P&O Nedlloyd container giant.

With a large number of ships to phase out, and disinclined to take them to the beaches of the Indian sub-continent, the management investigated how it could carry out responsible dismantling.

Global project team

As part of the P&O Nedlloyd project team, Tom Peter Blankestijn and Wouter Rozenveld visited yards across the world.

"With a large number of ships we needed to run some production, so we were looking for those that could handle multiple vessels," said Mr Blankestijn.

"In China, we found yards that could be developed within a partnership – recycling in a different way rather than selling a ship where it is, as is normal in the industry."

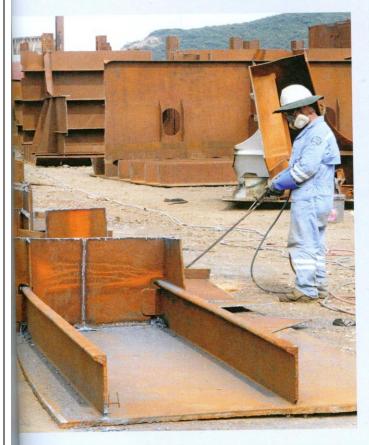
Central to this new approach was the cruciality of making an inventory of the materials to look for within a facility that could handle them.

"The second point was to make a specific plan for that ship's dismantling process, and last but not least, the need to supervise the plan and ensure it was followed successfully and put into action on a day-to-day recycling process.

"This structure was developed by us in China and is now in the IMO Ship Recycling Convention, the 2009 Hong Kong Convention, and the EU recycling regulations."









With the keywords of quality, confidentiality, flexibility and speed, Sea2Cradle operates a multinational team of highly skilled and experienced professionals globally 24/7.

"The biggest thing is the planning and discipline of following up," explained the managing director. "You need to know what is in the vessel and where the hazards are. And it is not only the hazards of the materials coming out of the structure, but also those involved in the dismantling of the structure itself which should be dealt with in a safe way.

"If for example you have a LNG carrier and you start cutting holes, you need to make sure you can deal with the extreme height of the tanks and ensure that nobody falls in. Hazards may suddenly emerge from the destabilisation of the structure and you must be alert to sudden hazards at any time."

Socio-political quandaries

Many ships are sold to the highest bidder, ending up on Asian beaches where they are scrapped for as little money as possible. Tragically, harrowingly, these unsafe and unhealthy working conditions still involve untrained and unexperienced young workers and regularly cause severe accidents and cost lives.

But there is a local socio-political dimension that has thwarted progress: the demolition industry has become vital to the economies of Pakistan, Bangladesh and India.

At present it employs more than 130,000 workers in the region, with many more involved in associated industries. In areas where poverty and joblessness are rife, ship recycling provides opportunities for workers who might otherwise face unemployment.

"The big challenge is to increase responsible recycling on a global scale," said Mr Blankestijn. "And in my opinion, this has nothing to do with the available experience but more with the politics which we are facing.

"One of the compromises in IMO is that poor workers should not be put out of a job. But on the other hand, is it OK for workers who might otherwise live for 15 years longer? Is it OK for a person to cut steel coated with paint that contains tributyltin (TBT), and inhale the fumes?

"Local politics are holding it back and I understand that, but the Indian subcontinent needs the same safety standards found in Europe and Australia."

Dedication absolute

As the global leader in its sphere, Sea2Cradle's defining feature is the dedication, seriousness and thoroughness with which it makes Inventories of Hazardous Materials.

"We do not go on board and say 'Okay, it looks like nil so we do not have to test it.' We go very much into detail in order to have a good mapping of the structure in hand. This way you are not coming into surprises. Our preparation is on a far higher level than is described in some guidelines and IMO wordings."

Looking forward, Mr Blankestijn said he envisages Sea2Cradle accelerating its business in the creation of IHMs on the basis of the EU regulations, not only for recycling but also for a ship undergoing repairs.

"I like to think we will continue to be recognised as the number one in green recycling."