

DECOMMISSIONING

ENDING THE JOURNEY to rest

Rotterdam-based Sea2Cradle aims to achieve a recycling rate of 100 per cent when a rig is decommissioned. Its managing director, Tom Peter Blankestijn, explains why the Maersk Endurer's 150-metre legs were a major source of concern during the decommissioning process.

By Nicolai Ostergaard

Maersk Drilling has hired the Dutch consultant Sea2Cradle as the company's eyes and ears at the ship recycling yard in Zhoushan, China, the Zhoushan Changhong International Ship Recycling Co.

A large number of Chinese shipyard workers are currently employed on recycling the Maersk Endurer. The process is scheduled to last until the beginning of 2016.

In a segment of the shipping industry that is renowned for its lack of standards and its unhealthy and unsafe working conditions, Sea2Cradle offers its customers a different solution, namely demolition yards which feature accident-free working conditions, proper disposal of hazardous materials without exposing workers, and care for the environment.

According to Sea2Cradle's managing director, Tom Peter Blankestijn, it is now possible to recycle more than 95 per cent of a merchant ship or a rig. But in the future, the company aims to achieve a recycling rate of 100 per cent.

Is dismantling a jack-up rig like Endurer a normal task for your company?

"Yes, for the greater part this is routine business for us. A traditional merchant ship and a jack-up rig have a lot in common: in both cases, there's a large amount of steel and some hazardous materials that need to be recycled. But there are, of course, some significant differences. The 150-metre legs caused us concern, and we had to discuss and agree in detail a special plan with the recycling yard for dismantling them safely."

What was the solution?

"The concern was their height. We did not want the workers to climb up high and start cutting. We also wanted to avoid any use of the uncontrolled gravity method. Our planned

An obvious decision?

Head of Global Sales Morten Pilnov was a key person in making the decision regarding whether to stack, decommission or sell Maersk Endurer.



Was it an obvious decision to decommission Maersk Endurer?

"Well, with hindsight it was an obvious decision. However, back then we were not so sure. We investigated several options. Stacking was one realistic solution. And of course we screened the market in order to find a potential buyer for Endurer."

What made you decide to rule out stacking as a viable solution?

"As you know, Endurer was a relatively old jack-up rig, and with the way the market was going we couldn't expect to earn back the required investment within the rig's expected lifetime. Meanwhile, a number of younger rigs were coming open in West Africa, and there was not a lot of demand among our customers for an old rig that had been idle for a significant period."

Was it really impossible to find a buyer?

"We didn't want to sell for just a nominal amount. Selling too cheap could have meant that the new owner would decide to transport the rig to a beach in Asia for decommissioning. Obviously, we did not want that to happen. Therefore, we fixed a certain threshold price below which we were unwilling to sell. But despite our efforts, we were unable to find a buyer."



Photo: Sea2Cradle



Sea2Cradle expects that 98 % of Maersk Endurer can be recycled. Dismantling a jack-up rig is more or less a routine job for the company.

solution is to place the structure in a dry dock on blocks, then to lower the legs two metres at a time and cut them off in stages. Then this will be repeated and repeated and repeated until the height is no longer a problem, and at that point a gantry crane will be able to reach and lift a longer section of each leg and bring all of them onshore."

Have you encountered other challenges so far?

"We had some worries about asbestos. When we were drilling the concrete flooring, we needed to make sure that no layer of asbestos had been used in the past to prevent fire from spreading quickly. Luckily no additional problems came to light, but it's better to be safe than sorry."

What does the concept of recycling mean when it's applied to a rig? What are the main components, and how will they be recycled?

"Some parts will be reused, like some generators and life rafts, if their certificates are still valid. Steel and aluminum are remelted and used for new products. So is the copper from the cables on board."

Looking at the history books, how did the drilling companies traditionally decommission their oil rigs?

"Not many rigs were dismantled in the past. Most of the

oil companies and the operators were pushing to get the maximum lifetime out of their units. If they actually decided to dispose of a rig, they followed the same traditional method of recycling, and that mainly meant either doing it locally or on the beach if this was operationally possible. No structural planning or procedures were followed to guarantee anything resembling the HSEQ standards we are after today."

Does it still happen that oil rigs get towed onto beaches in Bangladesh for "traditional" decommissioning?

"Maybe. We are not involved in such practices, as we do not believe that aiming for zero pollution, zero accidents and zero incidents is at all possible in those circumstances."

What do you think will happen in the future?

"With the oil prices as low as they are and these units being quite old, we expect many, many more to follow. Not only will a growing number of jack-up rigs go for demolition, but the floating drilling units are also soon going to be phased out in greater numbers."

How large a percentage of the Endurer can be recycled?

"We expect it to be close to 98 per cent." ■