

Report of the study tour by Delft university of Technology at Sea2Cradle/ Zhoushan Changhong International Shipyard

After a good night of sleep in the luxurious hotel Sheraton Zhoushan, arranged by Sea2Cradle, a group of 34 students and a professor of the Delft university of Technology went to Zhoushan Changhong International Shipyard.

This visit was part of a three week study tour to China, South Korea and Japan, organised by study association S.G. "William Froude". Everybody was excited to see the shipyard with large facilities for newbuilding and ship recycling. The construction yard has almost two kilometres of outfitting quay, several dry-docks of which one is floating and two berths for construction and the recycling facility was even bigger.

In a presentation the process of ship recycling and scrapping was explained. The used method is different from the method which is used in countries like Bangladesh, India and Pakistan. Instead of beaching on the shore ships are carefully scrapped by first removing the hazardous materials followed by the equipment and finally the steel. Oil that still might come off during scrapping will not go into the soil and damage the environment. A drainage system is installed underneath the yard in which the polluted water will be collected and treated in a special waste treatment plant. During a tour around the yard all the facilities were shown and a drone was used to take pictures from the sky.

After lunch we challenged ourselves during a case study which was about the same topic as a joint research program between a Chinese university, Zhoushan Changhong International Shipyard, Sea2Cradle and TU Delft:

- I. How can you design a ship without using hazardous materials?
- II. Where can you find hazardous materials in a ship?
- III. How can you design a ship in such way that it is easier to scrap then conventional ships?

Small groups were made and everybody started working enthusiastic on their case which resulted in some interesting solutions.

We would like to thank Sea2Cradle very much for organising one of the highlights of the study tour!

Study tour 2015 'The Asian Way' by S.G. "William Froude"