



Image of one of the concepts

To boldly go where no cruise ship has gone before

When a market grows, it often creates room for a niche. That is true for the cruise industry. For those who have cruised seas and rivers and want something new, there is another kind of cruise voyage in the offing. It gives an exclusive experience by travelling to harsh and remote environments. It is called the expedition cruise.

Expedition cruises visit places normal cruise ships won't sail, like the Arctic and Antarctic regions. To make that possible vessels need special modifications, like a hull that can withstand icebergs. Until now, expedition cruises are made with converted vessels, like Russian expedition ships. But if it is up to Shipyard De Hoop from Lobith, this is going to change. They have made

a complete concept of a cruise ship, designed to go on expeditions.

In the last decade, Shipyard De Hoop made various drafts on how an expedition cruise ship should look. From all those ideas three concepts of cruise ships were made that are ready for the

market. "We are talking about these kind of ships for a long time. Now that we see a real demand from that particular segment of the cruise market, Shipyard De Hoop is ready to deliver", says Patrick Janssens, managing director of Shipyard De Hoop.

Extreme voyages

De Hoop has a good position to make these kind of new cruise ships. The shipyard already delivers smaller river- and seagoing cruise ships, but also specializes in the more complicated offshore vessels. "Because we can combine this in-house experience of those different fields, we took the challenge of designing a cruise ship that is never been built before", says Janssens.

Making a ship that is able to go on extreme voyages, requires a special design. "These are not standard vessels. We had to figure out what worked and what not." Especially the need for a strengthened hull in a shape that can withstand ice in combination with the ship's motions, proved to be a challenge. "To make a hull prepared for arctic conditions that gives enough stability in rough seas, was a puzzle." But the team of De Hoop came up with a design that was satisfactory in both conditions. "We have

tested various hull shapes and will run more tests in the future, to ensure that this hull will respond like we want it to."

Another hurdle to take was climate control. The ships sail in regions where it is very cold. "Take in consideration that the client wants as much glass processed in the ship to give the passengers the best views possible, and we had ourselves another challenge." To top it off, there is also a demand that the ship can be cooled when passing tropic seas cruising from the Arctic to Antarctic regions or the other way around. "To make that happen, we relied on our experience from offshore vessels with a very high comfort class as well as the luxury river cruise vessels."

Need for sustainability

This experience also was useful when it came to noise reduction of the ship's engine. Because of the extra power needed to sail icy seas, the design team copes with extra vibrations from the engine. "We designed floating floors, acoustic walls and anti-vibration plates around the engine room to reduce the sound of the engine."

Because vulnerable nature reserves are part of the destination, there are environmental issues to take in consideration. "There are a lot of regulations in those areas, so our ships have to be sustainable." Janssens cannot go into specifics, but he thinks diesel-electric propulsion would be a good option for expedition cruise ships. "Also there will be zero discharge from the ships and the ballast water will get treatment so it will not harm the environment." Janssens notes that with investments like this, owners want to be sure that their ships will meet every environmental requirement. "What is the use of an expedition cruise ship if you are prohibited to sail the waters it was made for?"

Shipyard De Hoop believes that one of their concepts will be built. There are a lot of shipyards now that are toying with the idea to develop expedition cruise ships. "We started ten years ago with thinking serious about these kind of vessels. If you start now, you are too late." Janssens says this because he believes it is going to be a small market in the cruise industry. "There is only room for a couple of ships." But if De Hoop is going to build them, Janssens thinks other companies will profit too. De Hoop works closely with their suppliers and subcontractors. "If it gets built, it will be an accomplishment of maritime sector."

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