



DESIGN SERVICES: CRUISE VESSEL

Cruises to the edge of the World

Vessels need to be designed to cope with several factors, including ice conditions, temperatures and other environmental issues.

Based on this, the vessel ice class, icebreaking performance and major technical solutions are selected as a design basis when starting to design new vessel for the Polar regions.

Railo Technology has participated in more than 180 ice expeditions and full-scale ice trials throughout its history and holds an extensive database from various sea areas around the Arctic and Antarctic.

Safety and Quality

Quality designs ensure safe and optimized vessel operations. Railotech has designed more than 60% of the world's icebreaking fleet. Using our long knowledge from the Arctic we can design the vessel to meet the environmental conditions on the planned operation area.

By selecting the right ice-class combined our expertise in hull and structural design we can guarantee to vessel operator that the vessel can be safely operate in ice without any damage caused by ice.



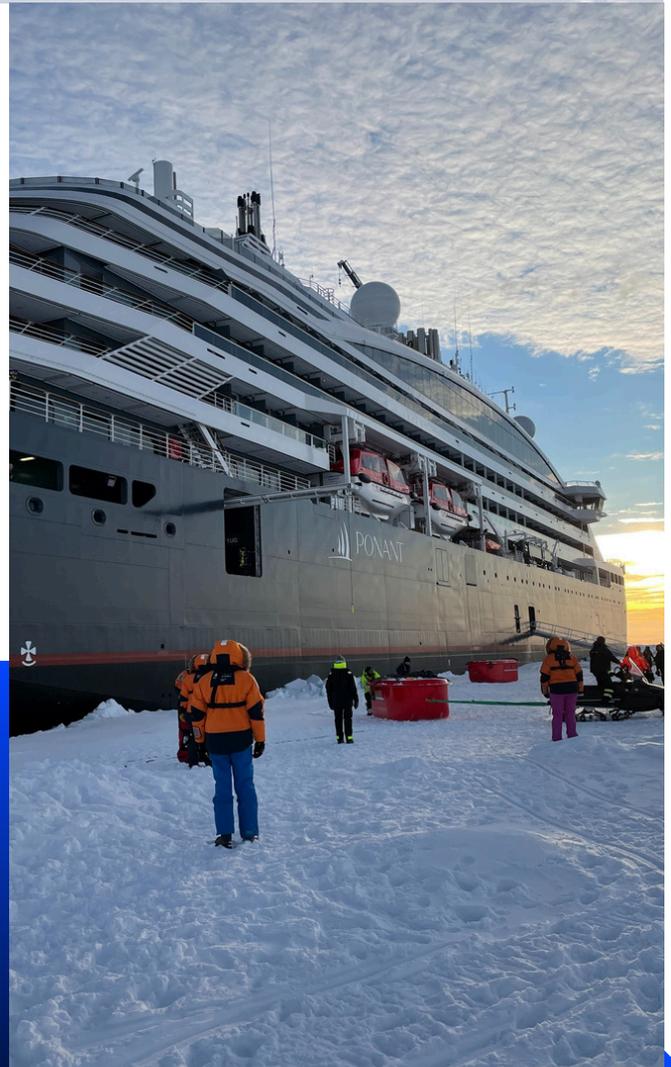


Environmental and green values

Polar areas are fragile and sensitive ecosystems, therefore sustainable tourism is something what you have to look in the early design phase and when selecting the ship systems. Railotech has already designed two icebreaking vessels with dual-fuel systems that use LNG and marine gas oil. Fuel consumption can also be optimized by efficient hull form design which is optimized for the planned operation profile in open water and in icebreaking. Our latest reference PC2 class cruise ship *Le Commandant Charcot* has shown that LNG is feasible solution for icebreaking cruise vessels.

MAIN DIMENSIONS

| | |
|------------------------|--|
| Length | 150.0 m |
| Beam | 28.3 m |
| Draft | 10.0 m |
| Propulsion | 2 x 17 MW ABB Azipod |
| Icebreaking capability | 2 knots in 2.4 m multi-year level ice |
| Ice class | Polar Class 2 |



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