

Allure of the Seas

Ship type	Cruise ship
Shipowner	Royal Caribbean International (RCI)
Shipyard	STX Finland Oy - Turku Shipyard



Main Dimensions

Dwt	19,750 t
GT	225,282
Capacity	225,282 GT
LOA	362.00 m
Beam	47.00 m
Draught	9.20 m

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Project type	Ship status	Design scope	Delivery year
Newbuild	Delivered	Concept, Basic, Detail	2010

Scope of Work for the Shipowner

- During the Pre-Shipbuilding Contract Phase, Deltamarin participated in the project development team, with responsibilities including weight calculations, maneuvering studies, specification development with special items and safety design guidelines, stability checks, platform optimization and subdivision, General Arrangement development for the lower part of the vessel, exploration of alternative hull forms and propulsion and powering studies
- During the Shipbuilding Phase, in collaboration with Safety at Sea, Deltamarin's duties included third-party studies and reviews of weight, hull form, model tests, subdivision and stability; development of maneuvering and vessel handling performance with extensive simulations; survivability analysis and model testing; participation in the alternative design team for prototype high-capacity lifeboats; fire safety assessment; wind and micro-climate studies using CFD; open deck passenger comfort analysis; safety level studies; redundancy verification of power production, propulsion and selected comfort systems; and membership on the Safety Advisory Board, led by Prof. Dracos Vassalos of Safety at Sea

Scope of Work for the Shipyard

- Basic design including hull, machinery, HVAC, outfitting and electrical systems for the middle sections (MFZ 3, 4, 5) and part of the interior design, including windows scheme, insulation plan, fire integrity and any further possible revisions for the entire ship

- Basic design including 3D modeling of the navigation bridge, covering rules compliance, functionality and ergonomics studies
- Hull detail design for the fore part, using Tribon modeling system for hull production documentation
- For the suppliers: detail design including HVAC and interior design for the promenade area, main stairs and observation lounge, as well as electrical design for the main stairs and observation lounge. HVAC design was completed using 3D Cadmatic software.

Project Features

- Largest passenger vessel in the world at the time of the delivery
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Additional Information

IMO number	9383948
Classification society	DNV
Technologies	Scrubber, DP2
Sister vessels	Oasis of the Seas