



# Lorenzo Mortola

## Designing cruise ships of the future

Cruise ships are evolving fast and in every direction, from size and technology to passenger expectations. In addition, interior design trends are constantly transforming the way we think and feel about space. Combining these two evolving worlds is our challenge as an architectural firm specialised in cruise ship design and production management.

Staying at the leading edge of cruise ship design is not simply about using up-to-date materials and following the latest colour and design trends. There's a tension between preserving a cruise line's identity and introducing elements of innovation that enhance the passenger experience. You can't do that with a production-line mentality. Each ship has to be tailor made for the owner and, in the end, for the guests who will experience the ship.

Cruise ships are getting both larger and smaller. The huge ships of contemporary and premium brands are growing ever bigger, in an effort to improve operational cost effectiveness and drive higher returns. We were coordinating architects for Princess Cruises' "Royal Princess" and "Regal Princess", 142,700 GT vessels launched in 2013 and 2014. At that time, they were the largest cruise ships ever built in Italy. The market is now seeing more and more new builds that surpass that, up to more than 220,000 GT.

The wow factor is really important here, particularly for new market players such as China. Passengers on premium and contemporary cruises expect facilities at least as sophisticated as they can find ashore - and often more. Materials should be of the finest quality. Products should be high-end and by renowned brands.

On the other side of the scale, we are seeing fast growth in demand for small luxury expedition vessels from both existing and new market players. One example from

## BIOGRAPHY

*Lorenzo Mortola is an Italian naval architect and chartered engineer. As Project Manager at GEM - Design for Cruise Ships, he has been in charge of numerous cruise ship hotel refurbishment projects and dry-dock surveys between 2012 and 2017. At GEM, Lorenzo has been involved since 2014 in the design of the 40,200 GT Silver Muse, and as newbuilding superintendent, he is currently supervising its construction and outfitting at Fincantieri shipyard in Genoa.*

*He has also been involved in the coordination of the preliminary design phases of the first of three 110,000 GT cruise ships new builds for Virgin Cruises*

*Prior to his career in cruise ship design, Lorenzo gained experience in land-based hotel design at Studio Marco Piva in Milan. He has also consulted on several yacht design projects.*

*Lorenzo achieved a first class honours Master of Engineering (MEng) in Naval Architecture at the University of Southampton in the UK. This was followed by a Master of Interior Design at the Politecnico di Milano.*



Courtesy of GEM Design for Cruise Ships

our portfolio is Silversea's 6,130 GT "Silver Explorer". The focus in these smaller expedition vessels is on comfort combined with understated luxury or opulence, depending on the approach.

Architecture is not so much about spaces and materials as about people. We strive to understand the guests and the experiences they expect to enjoy. Why have they chosen this product and this cruise line instead of another? This helps us to anticipate passenger expectations, and to consider where they want to go and what they want to do on board.

We combine our insights into the passengers with our profound knowledge of cruise ship production technologies. Simple solutions are usually best, whether it's about fundamental construction works or specific architectural details. It is also important to select materials carefully based on their functions and positions in the vessel. Sustainability and cost efficiency are the keywords throughout the process, without compromising on aesthetics or quality.

One trend in the cruise ship world that is gaining strength is to convert, upgrade and revitalise existing vessels. Although our core design activities revolve around new building projects, we see growing demand for our turnkey design and consulting services around cruise ship renovation. We are undertaking refurbishment projects for newcomers such as Chinese cruise line Skysea, as well as longstanding operators including Silversea.

Major projects such as converting a second-hand vessel to a cruise ship are highly complex. The first step in any such project is an initial feasibility study by a classification society such as RINA. We use this as a basis for collaboration with consulting engineering firms, logistics specialists and other experts. We are also thankful to be able to draw on our strong network of partner companies. Developed over the past 30 years, this pool of expertise allows us to cope with the diverse needs and know-how required to give new life to a vessel.

One example of a complex conversion project involving RINA is

Silversea's "Silver Cloud". The 16,800 GT ship will be transformed into an ice class expedition vessel carrying a maximum of 260 passengers. The work includes refurbishment of accommodation areas, plus the addition of a forward superstructure. We have also collaborated closely with RINA during the new building of Silversea's 40,700 GT "Silver Muse" in the Fincantieri shipyard in Genoa. This has been particularly important in the past eight months during testing and inspection activities.

We can expect many more evolutions in both the cruise market and interior design. The challenge is draw on solid experience and work with strong partners to anticipate these evolutions and steer them smoothly in the right direction.

