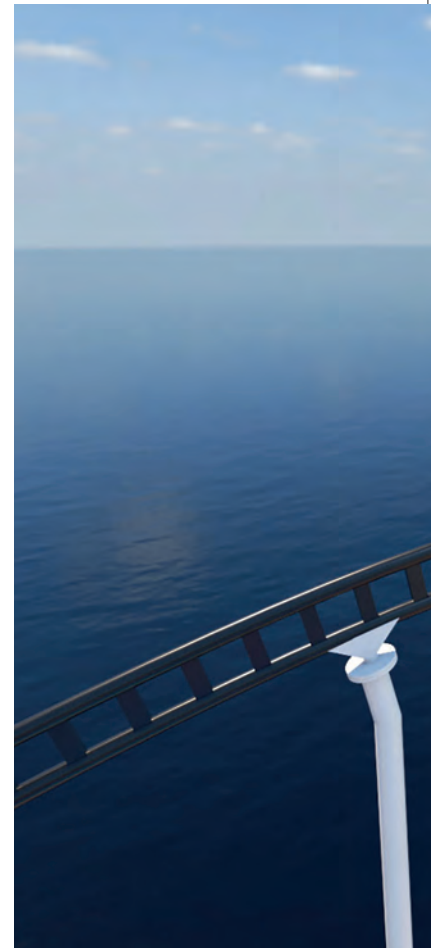


Costa Smeralda is leading the LNG revolution in cruise ships.



Costa Smeralda delivered from Meyer Turku shipyard

Costa Smeralda is one of the most innovative, and some would claim, the most beautiful ships ever built at Turku shipyard.

PHOTO MEYER TURKU

"Mardi Gras is floating smart city," says Ben Clement, Carnival's senior vice president of newbuilds.

“Costa Smeralda will be a further boost to the use of LNG in cruise ships, a technology we were the first to believe in, setting a new course in the cruise sector. Our Costa Group has invested in the construction of five new LNG ships as part of our leadership in sustainable tourism. It is an innovation in the cruise and overall shipping industries, destined to mark a step change as it guarantees a significant reduction in our environmental impact without compromising the safety aspects that are an essential priority for us,” said **Neil Palomba**, President of Costa Cruises.

“Costa Smeralda is a significant product innovation as well, with Italian hospitality remaining a fundamental and distinctive element of our brand, able to enchant and excite not only new cruise passengers but also more experienced ones.”



Costa Smeralda is leading the LNG revolution in cruise ships, being part of the first LNG-powered cruise ship class in the world. The usage of LNG as fuel will cut down all small-particles and sulfur oxide emissions and significantly reduce nitrogen oxide and CO2 emissions of the ship.

Costa Smeralda is a breakthrough project featuring creative Italian design and innovative spaces for the guests to enjoy.

"We have used all our knowledge, skills and imagination to design and build this ship. I would especially like to mention the Colosseo, a three-deck open area in the middle of the ship with state-of-the-art audio-visual technology inside which required a specific design and building capabilities. We are looking forward to the passengers enjoying some exceptional shows and performances there," CEO of Meyer Turku, **Jan Meyer**, states.

"We trust that the passengers will very much appreciate the design, quality and features of the ship during their coming holidays. The exceptional upper deck areas and the Spanish stairs in the aft of the ship will be a treat in warm Mediterranean weathers," Jan Meyer envisions.

Costa Smeralda is truly a traveling "smart city". Apart from the major innovation of liquefied natural gas, the ship incorporates a series of

cutting-edge technological innovations designed to further reduce environmental impact. The daily water requirement is achieved directly from the sea thanks to the ship's desalination systems. Energy consumption is reduced to a minimum by using LED lights, recovering the heat generated by the engines, the particular shape of the hull designed to significantly reduce drag in the water, and new-generation elevators that recover energy by re-introducing it into the electricity system.

Carnival Mardi Gras floated out at Meyer Turku shipyard

Carnival Cruise line 'Mardi Gras' will be the largest one in the Carnival fleet after delivery later in 2020.

"We can't wait for our guests to experience Mardi Gras, a one-of-a-kind ship that is true game changer and continues the evolution of the Carnival vacation experience," says **Ben Clement**, Carnival's senior vice president of newbuilds.

"I believe Mardi Gras will be a truly special ship. She will be the first to use our now proven LNG cruise ship propulsion system in North American markets and feature many other sophisticated technologies – including BOLT, the first roller coaster onboard a ship," CEO of Meyer Turku Jan Meyer states.

With the float-out Mardi Gras' six themed zones are also beginning to take shape with the interior build out of spaces like Emeril's Bistro 1396 created by famed chef **Emeril Lagasse** and a groundbreaking new atrium concept with spectacular three-deck-high floor-to-ceiling windows and moveable LED screens.

A custom designed floating smart city

A cruise ship is always a result of cooperation by many parties. The ship yard's own design office works with the ship owner architects to create a custom designed ship for the signature style of the Carnival brand – a totally new architectural design. Next almost 1000 specialized companies are engaged in providing materials and complex services to create the cruise ship at Turku Shipyard.

CEO Jan Meyer reminds that the ships are truly smart floating cities:

"We are building all the facilities a smart modern city would have: hospitals, IT-networks, restaurants and sophisticated environmental technologies, on a ship sailing the seas. It is a very difficult undertaking but also the end result is really spectacular."

Mardi Gras will be delivered in late October and Carnival has announced she will enter revenue service on Nov. 14, 2020 from Port Canaveral, Florida. ➤

Meyer Turku Shipyard is under construction on Costa Smeralda's sister ship Costa Toscana

"Costa Toscana marks a further step forward in the use of LNG in the cruise sector. We were the first in the world to believe in this innovation five years ago, when we ordered these new ships, starting a transformation process toward make tourism increasingly sustainable," said Neil Palomba, President of Costa Cruises.

"LNG is currently the solution that allows the best and most immediate results to be achieved in terms of reducing the environmental impact of ships."

Costa Toscana will be delivered in late 2021.

Toscana is a sister ship to Costa Smeralda, now sailing in the Mediterranean. Even with good feedback from the cruise passengers Meyer Turku CEO Jan Meyer reminds that every ship is an evolution from the previous one.

"We are always building on the learnings of previous ships, but Costa Toscana will also have totally new designs in many features to inspire her passengers. Today is the day when this all starts to become visible in the form of one beautiful ship," Jan Meyer comments.

The passengers have described Costa Smeralda as a very beautiful and entertaining ship. The crew onboard have already learned to trust her capabilities at sea.

” Costa Smeralda truly became an icon of Italy’s finest designs and our passengers very much appreciate this style.

"Costa Smeralda truly became an icon of Italy's finest designs and our passengers very much appreciate this style. For Costa Toscana we will build on the innovative and now proven LNG-propulsion ship technology from Costa Smeralda," Neil Palomba comments.

At Meyer Turku shipyard today, the lucky coins were placed on the keel blocks by senior management from Meyer Turku and Costa Cruises along with VIP guests. The mayor of Turku, Ms. Minna Arve was a guest of honor and acted as the god-mother of the ceremony.

"I'm very proud of Costa Cruises' brave vision and the world-class know-how of Meyer Turku and also of the cooperation that will once again create a jewel of a cruise ship built in Turku,"

Minna Arve says.

When finished, Costa Toscana will be one of the most environmentally safe cruise ships in the world. By using LNG as fuel Costa Toscana will have virtually no sulfur dioxide emissions (zero emissions) and particulate matter (95-100% reduction). LNG also significantly reduces emissions of nitrogen oxides (85% direct reduction) and CO2 (reduction of up to 20%). ✕

Meyer Turku and Aalto University to expand collaboration in marine technology research and education

On 19 December 2019, Aalto University and Meyer Turku Oy signed an agreement that will strengthen and develop multidisciplinary research and education collaboration as well as give a boost to expert co-operation.

"We want Finland to be the leading country in maritime technology and science development in the world. At the

same time, we want to be present at Aalto campus and in the academic lives of the students. The agreement is a very natural extension to the already good cooperation with Aalto University," Meyer Turku CEO **Jan Meyer** says.

"The combination of different fields and close multidisciplinary collaboration of Aalto University are an excellent founda-

tion for innovation, generating new kinds of expertise for the maritime industry. This agreement forms another link in a long chain of co-operation between the Turku shipyard and our university, which brings together cutting-edge research, high-quality education and stakeholders from the marine technology sector," says President **Ilkka Niemelä** of Aalto University.