Industry Update:

The cruise wave is cresting

Not only the big ships, but also smaller expedition vessels are in demand.

The cruise industry is currently going the opposite direction of many other marine segments - right through the roof. Every cruise shipyard in Europe is fully booked, leading among other things to Chinese interests purchasing three yards in Germany to secure slots for their own newbuild projects.

And the growing Asian cruise market, forecasted to be the second largest after the USA by 2020, is prompting some Chinese yards themselves to enter the fray. China State Shipbuilding Corporation (CSSC) and the Italian shipbuilder Fincantieri have announced plans to invest some USD 3.7 billion in the building of five cruise ships in China. Construction on the first of the five, designed for up to 5,000 passengers, is scheduled to commence in 2017, with delivery scheduled for 2021.

Not only traditional cruise is riding high, but the expedition or explorer class of vessels is also experiencing a

surge. A recent order in Germany from Crystal Cruises for the largest ice class passenger vessels ever built signals that cruise companies have faith in growing volumes in polar cruising, and they are willing to invest at the highest level:

"When delivered, Crystal's 'Exclusive Class' ships will not only be the largest and most luxurious polar cruise ships, but also the most powerful, safest and most technically advanced in their class," said Fleet Captain Gustaf Gronberg, Senior Vice President of Marine Operations & Newbuilding for GHK, owners of Crystal Cruises.

Access, and the environment

With polar sailing heightening concerns for passenger safety and comfort, Crystal turned to a supplier who could deliver on all counts, choosing ABB's Azipod propulsion system for their pioneering ships: "ABB's long

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ABB to power Crystal Cruises new 'Exclusive Class' ships

experience in podded propulsion and power generation for both cruise ships and ice breaking vessels makes them the ideal and most reliable partner for these projects," Gronberg confirmed.

Marcus Högblom, vice president in charge of sales for passenger vessels in ABB knows they can back up that claim: "An order like this brings together two of the core competencies in ABB's marine business, cruise and ice going vessels. We have been supplying power and propulsion to icebreakers since the 1930's, and efficient electrical propulsion to the cruise industry for nearly three decades. Polar cruise is right in the middle of our sweet spot."

Concern for the environment is also paramount when sailing in sensitive areas. In order to keep emissions to a minimum, the Crystal ships will also feature ABB's flagship 800xA automation system, complete with EMMA Energy Management System and fleet management suite. The system helps the ship's operators to run it in the most energy efficient way possible by analyzing historical data and comparing it to current conditions, and then advising on improvements, in addition to allowing benchmarking across the whole fleet.

Another operator in the discovery cruise niche has also given ABB the nod for Azipod technology. The new

Azipod D will power the luxurious 10deck discovery cruiser Scenic Eclipse to some of the world's most remote destinations. Built to Polar Class 6. the vessel will have the ability to navigate the summer waters of Polar Regions.

The biggest come back for more

When it comes to building the bigger ships, few can match the team of Fincantieri and Carnival, a team with a long history of working with ABB. The first electrical propulsion system was delivered by ABB and installed on a Carnival cruise ship at Fincantieri in 1990.

In all 14 ships have been outfitted with Azipod propulsion at Fincantieri,

and Carnival now counts 24 of its ships driven by Azipod propulsion. In November of 2015. Carnival signed up for another set of power and propulsion deliveries from ABB:

"These beautiful new ships on order from Fincantieri signify our ongoing commitment to provide the best possible guest experience across our industry-leading brands," said Arnold Donald, president and CEO of Carnival Corporation, "New ships with the latest features, accommodations and innovations really bring the modern cruise experience to life and will help us continue to grow new demand for cruising."

Also Royal Caribbean Cruises puts its faith in the cruise propulsion leader. Upon her delivery in 2016, the RCCL Harmony of the Seas became the largest cruise ship on the water, propelled by the tried and true ABB Azipod XO thrusters.

More complex, yet still safer

Proving their penchant for raising efficiency through technology, the cruise industry has been an early mover on the concept of Integrated Operations as provided by ABB, just as they were the first segment to embrace Azipod propulsion.

"With cruise ships carrying more passengers and becoming increasingly complex, taking a proactive approach to monitoring mission critical systems is more important than ever," said Marcus Martelin, VP Services for the passenger and cargo segment at ABB. "From the Integrated Operations Center we can identify on board issues before the crew even know about it, and make many interventions

The Integrated Operations Center facility in Helsinki serves the passenger and ice going vessel segments, and follows in the wake of the successful launch of the first such facility in Billingstad, Norway. The Helsinki center is able to connect to any passenger ship and monitor the performance of ABB technology on board, including the vessels' Azipod units.

The Integrated Operations Center also connects to the shipowner's

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onshore operational centers to support their operations department in troubleshooting, maintenance planning, and fleet benchmarking.

Strong market, tough competition

Though the cruise market may be booming, competition for passengers is increasingly intense. Owners and operators will have to keep coming up with new concepts like polar cruising, and that requires enabling technologies like Integrated Operations and Azipod propulsion.

Managing director Juha Koskela of ABB's marine and ports business is happy to take a leading role in helping cruise companies meet demands for innovative offerings: "There is growing interest in the Polar Regions from the passenger segment, and recent orders have shown that shipowners trust our solutions in these areas," he concludes.



ABB's Azipod D will power the Scenic Eclipse