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The front page picture is sponsored by Volvo Penta

Hurtigruten special:

Back on course



→ After some tough years, Hurtigruten is now steering towards a brighter future. New passengers from all over the world come to seek out the lights of the north.

Who's afraid of the big bad whistleblower?

New Shipgaz columnist Bob Coultie gives his views on the touchy topic of blowing the whistle.

"Shouldn't have gone ashore"

Retiring head of icebreaking in Finland Atso Uusiaho confesses that he never stopped longing to go back to the sea.





PHOTO: GIBDOCK

Hydroblasting robot at work. The system cleans using the energy of water striking the hull's surface, operating at pressures as high as 55,000 psi.

Blasting robot cut yard schedule

MAINTENANCE First use of an advanced blasting technology has enabled shipyard Gibdock to redeliver three Danish-owned containerhips that required full hull blasting and coating ahead of schedule.

The Gibraltar yard undertook blasting and painting for all three ships within the owner's time requirements of 29 days. However, the use of a robotic system on the third ship made a discernible difference to work-rates.

Widely used for high profile cruise ships, oil tankers and above ground storage tanks, the Envirobot developed by Chariot Robotics is equally appropriate across a range of vessels. Operated by one individual, the robot uses patented magnetic air gap technology that allows it to sweep or full blast, back and forth across the hull's flat bottom, vertical sides, bow and stern shapes equally.

THE ULTRA HIGH PRESSURE (UHP) Envirobot was used to blast 2,000 square metres of hull underwater in the ship's mid-section, with wetblasting used on the curved bow and stern sections.

"The UHP standard is perfect and there is no flash rust due to the combination of vacuum and warming of the steel during the process, which causes the residual wa-

ter to evaporate quickly", said Joe Corvelli, Gibdock Chief Executive. "What impressed us was the reliability of the Chariot Robotics equipment. This has been an issue with some UHP systems in the past."

THE SYSTEM CLEANS using the energy of water striking the hull's surface, operating at pressures as high as 55,000 psi (pounds per square inch). As no abrasives are used in the process, dust pollution does not occur and the need to dispose of spent abrasives is eliminated.

Gibdock Production Director, John Taylor, said that redelivery of the third ship had been achieved in fewer hours than her predecessors.

"The technique was quicker overall, and we were able to avoid the need to dispose of grit with this ship. While the wetblasting approach limits dust, the robotic UHP is even more environmentally friendly as there is no grit in its process at all", said Mr Taylor.

"What we have done is to recover all of the effluent (water, paint and corrosion) using a straightforward water treatment, which allows us to deliver a surface that is ready for coating immediately after blasting", said Bruno Vasconcelos Bruxelas, General Manager at Chariot Robotics.



PHOTO: INSPIRO FIEBAK-KREMER

The Celebrity Solstice.

First vessels with new Azipods

PROPULSION The first units of Azipod XO, launched by ABB Marine earlier this year, have been specified by Japanese owners covering installation on board two high-speed ferries. And in a separate order, the fifth vessel in the Solstice class of ships to be delivered to Celebrity Cruises by Meyer Werft, will feature Azipod XO units, where previous newbuildings have featured 'classical' Azipod technology. The order covering Solstice 5 includes propulsion drives and two Azipod units, generators, switchboards, thruster motors and transformers.

COMPARED TO THE FIRST Solstice class vessels, the Azipod has been changed from the Azipod VO to Azipod XO2100, and simultaneously the power has been reduced from 20 MW to 17.5 MW, as a consequence of the owner specifying that operational ship speed could be reduced moderately.

In the case of the Japanese ro-ro ferry, ABB Marine equipment including CRP Azipod equipment will be installed on high speed ro-ro passenger ferries in order to achieve operational speeds of 27.5 knots. The vessels will feature one 12.9 MW Azipod XC2100 unit apiece behind the mechanically driven shaft-line propeller. This configuration ensures improvement in ship hydrodynamical efficiency and about 20 per cent reduced fuel consumption has been recorded in earlier similar installations. The scope of supply also includes generators, main switchboard, thruster motors and transformers.

IN DEVELOPING THE XO RANGE, the new product has been modified significantly in line with customer requirements to feature a revised bearing and sealing arrangement, involving the complete separation of the oil and water seals, and a void space factored into the hull design to accommodate possible seal leakages or ingress from the sea.