

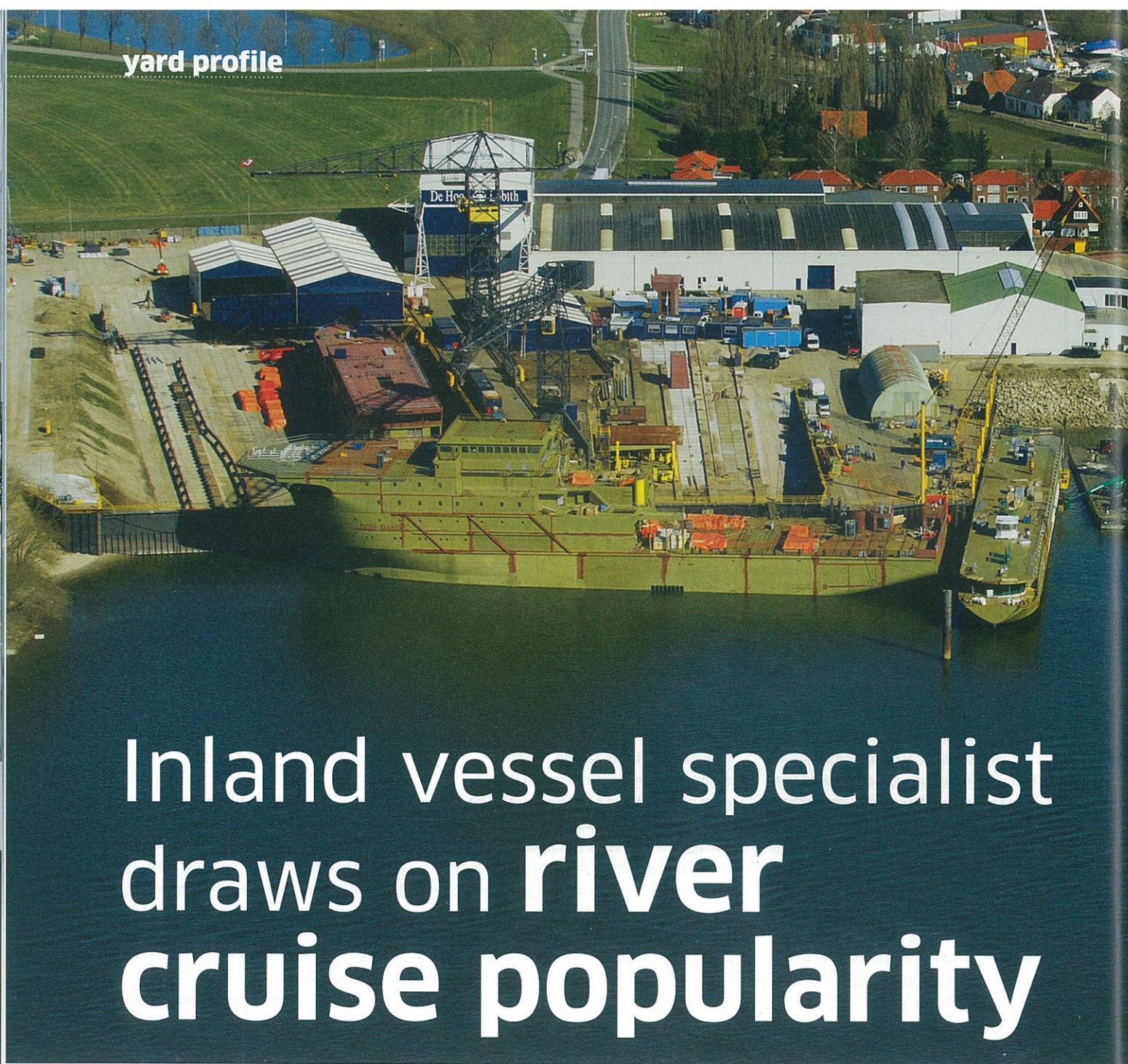
Passenger Ship technology



Celebrity Reflection's flawless delivery and *Royal Princess* takes shape in Italy

Ferry newbuilding orders move away from Europe

Incat builds first LNG-diesel gas turbine fast ferry for Buquebus



Inland vessel specialist draws on river cruise popularity

Four river cruise ships and an offshore vessel being built simultaneously at the Lobith yard

Dutch yard group, Shipyard De Hoop, is creating innovative solutions to meet the dimensional restrictions of river cruise vessels

TAKING advantage of the growing river cruise ship market has been a long-term strategy for Dutch group, Shipyard De Hoop. With its main yard, Lobith, on the Rhine, and its Foxhol yard situated on the Winschoterdiep Canal in the north of the Netherlands, it is perfectly located to serve the inland vessel market.

However, this specialisation has not always been the backbone of the company. When the Lobith yard was founded in 1889, it also built seagoing vessels. Patrick Janssens, chief executive officer, commented, "At that time the shipbuilding infrastructure – the availability of steel and equipment – with Germany was the key reason to be in this location. Because of our experience in building high-tech seagoing vessels we are able to build high quality smaller cruise and offshore vessels."

When the river cruise market started to develop in the late 1970s, Shipyard De Hoop turned its attention to these vessels. "Until that point there were not many vessels on the Rhine doing river cruising, and those that were there were converted from inland barges or tugboats with few rooms

on board," said Mr Janssens. "So we started to construct dedicated river cruise ships. The market grew slowly at first but over the last 10 years development has been very rapid."

The Dutch group has used its experience to tailor make designs to cater for the shallow draughts dictated by river cruising. "We were the first yard to create many innovations that are standard in today's vessels," Mr Janssens explained. "We developed hullforms suitable for propelling large vessels in shallow water whereby in the aft of the vessel, the propellers sit in funnels with the tips being above the water level.

"Traditionally river vessels had propellers and a shaft for propulsion, but we were the first yard to install thruster units, which saved space that could be used to accommodate more passengers and reduced noise and vibration." When designs have called for restaurants to be built directly over enginerooms, the yard has ensured low noise and vibration levels by mounting the structure on rubber shock absorbers. Another innovation introduced by the yard group was pre-fabricated modular wet units which could be installed

complete on a ship.

Due to some low bridges over the Rhine and other inland waterways, the air draughts of river cruise ships are limited. "We have many inventions to compensate for that," Mr Janssens commented. "We have built vessels where everything above a certain height is hydraulically removable or folds into the vessel, including retractable wheelhouses, restaurants, bars and railings." Last year the yard built the latest of three vessels with a folding aluminium bow section for Lüftner Cruises, as they would be entering locks shorter than the vessels' overall length of 110m.

The maximum length for river cruise vessels is 135m. However some safety and damage stability regulations apply for vessels up to 110m, so many are constructed at that length. "You have to be very inventive to fit so many people into a relatively small area, while giving them the feeling of being in a very spacious ship," reported Mr Janssens.

The Lobith yard has the biggest slipway in the Netherlands, at 200m long and 60m wide, meaning

yard profile

that two or three river cruise vessels can be constructed simultaneously. Furthermore, a second slipway is 80m long and 30m wide, so smaller cruise vessels or offshore vessels can be accommodated there. A fitting-out harbour has the facility to serve two river cruise vessels simultaneously. Vessels of up to 135m can be built at the Foxhol yard.

The yard group has developed specialised machinery for constructing river cruise vessels. "Many yards have steel cutting machines that can only cut through the steel at an angle of 90 degrees, but we have a steel cutting machine with automated arms that can cut various angles and shapes," said Mr Janssens. "We have facilities to build round shapes or even aluminium pieces of superstructures."

Passenger vessels have accounted for around 30 to 40 per cent of the yard's activities, including some ferries, at an average of four to five vessels a year. The yard can boast no late deliveries over the past 10 years and very short delivery times.

Currently, the Lobth yard is constructing a 110m vessel, *River Venture*, and a 135m vessel, *River Splendor*, for US owner Vantage Travel. *River Splendor* is the second in a series of three ships which began with *River Discovery II*, delivered in March this year. This design can accommodate 176 passengers and 45 crew, and has a cruising speed of 12 knots. *River Discovery II* is powered by two Caterpillar C32 diesel engines. Propulsion is provided by two Veth rudderpropellers, each rated at 745kW.

The pioneering three-deck design creates more room for passenger facilities. Unique hull lines permit a minimum draught of 1.45m for shallow water operation. The ship is fitted with more than 2,500 light-emitting diode lights, which consume just 3W of power. The new vessels will operate on the Yangtze, Mekong and Amazon rivers.

The third vessel on the present orderbook, *Amadeus Silver*, is under construction at the Foxhol yard, the 10th in a series for Lüftner Cruises but the first to be 135m long. All these vessels will be delivered in spring next year and Mr Janssens reported that the yard has already signed a subsequent ferry contract. "The outlook for the yard is very good," he said. "There are many sound projects around but lack of access to finance can act as a brake on the development of this industry."

The yard group permanently employs just over 200



Amadeus Silver under construction at the Foxhol yard

people, but this increases to 300-400 depending on the skills required for a particular construction. "We have a big, flexible workforce around our yard that has been here for many years," said Mr Janssens. "These people are hand-picked and we invest in them. We do a lot of training as we have our own shipbuilding school. Because we build customised vessels, our workers have to learn those additional skills."

Mr Janssens wants to ensure that the yard group continues to develop concepts that will keep it ahead of competitors. "There will be diversification, as European rivers are reaching capacity. We are already working on projects for rivers that are further afield. We will also look to other sectors like the growing small ship cruising market," he said. "There may also be a market for combination river and seagoing vessels, but this will mean we would have to meet more requirements for construction, safety, engines and navigation than apply to solely inland vessels."

The group inaugurated De Hoop Shiprepair last year. "Our customers pass our yard all the time when they are sailing on the Rhine, so it is convenient for them to use us to perform a five-yearly interior upgrade or renew the engines, for example," said Mr Janssens. "We are a one-stop-shop for river cruise ship owners."

The shiprepair division can accommodate 14 vessels simultaneously. There are crane facilities and storage spaces for interior furniture to be kept in the off season. "We can do carpentry and insulation - everything needed for a full service package," Mr Janssens commented. **PST**



The three-deck *River Discovery II* was delivered in March (credit: Jonkman Fotografie)

YOUR GUIDING LIGHT NO MATTER WHAT THE EMERGENCY

sm electrics
services & more



BNWAS le guardian 2025
100% acc. MSC.128/75 (IEC 62616)



µP based dynamic acoustics control - dac-
avoid unnecessary noise on board

www.sm-electrics.de

Manitowoc

Convotherm

Explore a broader range of possibilities.

Seatrade med
CRUISE & SUPPLYSHIP CONTRACTORS

Seatrade Meditearan
Marseille, 27th-29th Nov
Stand 202

www.convotherm.com
www.manitowocice.com

Manitowoc

Warsash Maritime Academy

Maritime Safety Training

With unrivalled facilities, Warsash Maritime Academy provides the best maritime safety training for professional seafarers.

Warsash Maritime Academy has pioneered maritime education for nearly 70 years. We offer a wide range of maritime safety training courses to help you get ahead.

First Aid

- Automated External Defibrillation (AED)
- Elementary First Aid (STCW 95 A-VI/1-3)
- First Aid at Work (HSE) and Requalification (HSE)
- Proficiency in Medical First Aid (STCW 95 A-VI/4-1) - including AED
- Proficiency in Medical Care (STCW 95 A-VI/4-2)
- Proficiency in Medical Care - Refresher (STCW 95 A-VI/4-2)

Safety and Security

- Ship Security Officer (STCW 95 A-VI/5)
- Company Security Officer (MCA)
- Shipboard Safety Officer (MCA)
- Basic Safety Training Week
- Fast Rescue Boat (MCA)
- Proficiency in Survival Craft & Rescue Boats (STCW 95 A-VI/2)

Engine Room and Bridge Simulation

- Bridge/Engine Room Resource Management
- Steam Propulsion Plant Operations
- Plant Operators Course
- Electrical and Control Engineering for Marine Surveyors and Superintendents
- High Voltage
- Electro-technical Officer
- Bespoke Engineering Officer Pre-employment or Pre-promotion Assessments

Fire

- One Day Fire Fighting
- Fire Prevention and Fire Fighting (STCW 95 A-VI/1-2)
- Training in Advanced Fire Fighting (STCW 95 A-VI/3)
- Entry into Enclosed Spaces

T. +44 (0)1489 576161
www.warsashacademy.co.uk

Southampton
SOLENT
University