



In 2004, Köln-Düsseldorfer Rederei expanded its fleet of sight-seeing and river liner ships with a unique vessel. The company, named K-D in short, took delivery of the *RheinEnergie*, a twin-hulled event ship with a maximum capacity of 1650 guests from De Hoop Shipyards. Over the years, the event ship proved so successful that the owners often wished they had more than one event ship. On May 6th, 2011, this wish became reality with the inauguration of *RheinFantasie*.



From left to right: Mr. Norbert Schmitz (CEO KD Rederei), Fré Drenth (Technical Manager Shipyard De Hoop), Patrick Janssens (Owner Shipyard De Hoop)

Instead of building an identical sister ship, K-D decided to build a slightly smaller - and monohull - vessel. This allows the company to cater also for smaller parties but with a maximum capacity of 1000 passengers, the *RheinFantasie* can be called anything but a small party boat. The monohull's shallower draught makes the *RheinFantasie* less liable to the Rhine's ever changing water levels. Being lighter and more manoeuvrable she will also be an excellent river bus, which demands frequent moorings and departures.

Pope

While the event ships of K-D are also used for the regular liner services along the River Rhine, their core business is the charter market for special events, such as corporate gatherings, weddings and parties. The *RheinEnergie* even

figured as the stage for pope Benedikt XVI to greet thousands of pilgrims on the river banks on the occasion of the World Youth Day in Cologne in 2005. For *RheinFantasie*, the owners used all the experience gained in the past years and contracted Schiffstechnik Buchloh (Germany) to compile the tender documents and carry out the supervision on the owner's behalf.

Panoramic windows

The view to the outside is unparalleled with floor-to-ceiling windows surrounding all of the public spaces. The windows are glued-in and form an integral part of the structure, which is stiff enough to have very minimal bending. However, the attention is often focussed to the stage on the main deck inside and even there, visibility was optimised.

RHEINFANTASIE

1000-PAX EVENTSHIP FOR THE RHINE DELIVERED BY SHIPYARD DE HOOP

Builder
Shipyard De Hoop, Lobith, the Netherlands

Owner
Höln-Düsseldorfer Deutsche Rheinschiffahrt AG, Cologne, Germany

Principal particulars

Length o.a.	85.14 m
Beam o.a.	14.00 m
Beam moulded	13.50 m
Depth	3.15 m
Draught	1.20 m
Airdraught	10.20 m
Speed	21 km/h

Passengers

Total number of passengers	1000
Number of seats	770
Crew cabins	18
Total number of crew	31

Tank capacities

Diesel	31.4 cu.m
Fresh water	31.6 cu.m
Black & grey water	35 cu.m

Power

Main engines	2 x 650 kW
Azimuthing thrusters	2 x 650 kW
Jet bowthruster	275 kW
Generators	3 x 196 kW



The visibility of the stage is as important as the view outside

The main dining room is spread over two floors, with the upper level forming a balcony from which to view the action. Instead of handrails, frameless layered glass panels combine safety with unobstructed visibility. A permanent stainless railing provides an ideal support for party-specific decorations. The seating near the centreline on both decks is on bar stools, allowing these passengers to look outside above the heads of the passengers seated at the window tables. A raised portion of the upper deck floods the spacious hall with natural light from the centre.

Two panoramic lounges in the forward part of the vessel feature some of the best views on board, with the lower one providing access to the terrace on the foredeck. The captain benefits from 360-degree views from the hydraulically

lowerable wheelhouse, which allows the airdraught to be reduced to 10.2 metres.

Time schedule

Perhaps the most astonishing fact of the build of the *RheinFantasie* is the strict time schedule. Between the keel laying and the delivery on May 5th, 2011, only four months passed. In the final stretch, it was all-hands-on-deck in Lobith with sometimes up to 200 persons at work simultaneously on board. But the workforce pulled off the impressive feat and the christening took place, as planned, in Cologne on May 5th. On May 7th, the *RheinFantasie* was already sailing the stretch of 26 kilometres of fireworks-lit Rhine upstream from Bonn during the 'Rhein in Flammen' festival. Next booking in the calendar was an event for the Eurovision Songcontest.

Shallow draught

Propulsion is, as on most recent river cruise vessels, with twin rudder propellers driven by diesel engines. The counter-rotating rudder propellers from Veth Propulsion give a lot of thrust in a very compact installation, both in the water and on the inside of the boat.

The engine room, which houses the propulsion engines, three generators and various auxiliaries, takes up no more than eight metres of the aft ship. In a water depth of five metres, the *RheinFantasie* can achieve a speed of 21 km/h, which is enough to cope with the sometimes strong downstream current on the River Rhine.

The *RheinFantasie* draws only 120 centimetres of water, allowing her to keep sailing even when the water levels on the Rhine get very low. To



The RheinFantasie was built in a record time

achieve this, the rudderpropellers are mounted in deep hull recesses, that even extend above the static waterline, but that are filled in less than ten seconds when the propellers are engaged.

"Her shallow draught makes the RheinFantasie less liable to the Rhine's ever changing water levels"

The bowthruster is a diesel-driven jet-thruster from Veth Propulsion which can provide trust in

The interior has a nautical theme with white, blue and wood



athwartships channels or towards the aft allowing it to be used as a back-up propulsion system.

Dynamic appearance

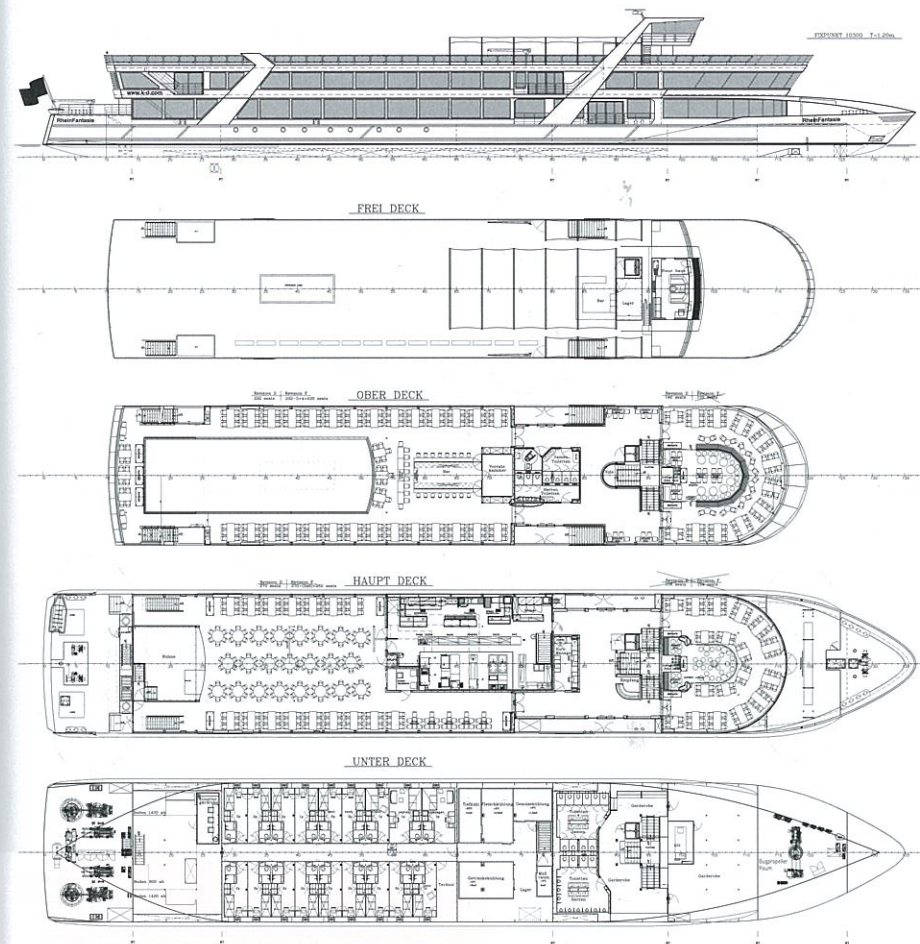
The forward-slanted stern gives the ship a dynamic appearance, along with the white accents in the superstructure, which cleverly conceal the exterior staircases. Interior designer Brunhilde Böttrich gave the interior a subdued nautical styling of white with navy blue accents, faux-teak PVC floors and wooden carpentry. Pleasing to the eye, while leaving centre stage to the event on hand and the surrounding landscape. An impressive sound and light installation is permanently on board. The space below the stage is used for the storage of

scenographic attributes, and tables and chairs. The space also features a make-up room for artists. A staircase leads up directly to the back of the stage. A portion of the stage has to be converted from restaurant to party hall. All of the guest areas are wheelchair-accessible. An elevator in the lobby connects the lower deck, main deck, upper deck and sun deck.

Beach chairs

For passengers wishing to enjoy the outside air, there is the expansive upper deck, where a playground is provided for the smallest guests. Baltic-style beach chairs on the part forward of the wheelchair provide cosy getaways and shelter for the sun and wind. The fore- and aftdeck at maindeck level are mainly used for the storage of gangways and passengers' bicycles and for the mooring gear.

Both the ship's nautical crew of seven and her 24-strong hospitality personnel remain permanently on board in 18 crew cabins that are located on the lower deck. Each of the cabins features a private bathroom with toilet and shower. The forward part of the lower deck is occupied with ample food storage space, public toilets, a spacious wardrobe and the bowthruster room which also houses the emergency diesel generator. Fresh water is tanked in 30 cubic meters freshwater tanks. Used water is collected in 30 cubic meters of grey- and blackwater tanks. Everything is pumped from the shore and given back to shore, with no discharge in the river whatsoever. There are no ballast tanks.



Water levels

In the production process at Shipyard De Hoop, there is one very important factor which is not under control. It is the water level in the River Rhine. With the building slope perpendicular

to the river and the ships growing ever larger, it is often difficult to find a suitable launch date. Hence, the expected water levels in the Rhine are under continuous scrutiny at the yard in order not to miss a suitable time slot. While

Subcontractors and suppliers of equipment fitted on board the RheinFantasie - YN 442

Aesy Liften, Zevenaar	: elevator
Alphatron Marine, Rotterdam	: navigation and communication equipment comprising
	: davits
Beerens, Werkendam	: Urimat eco urinoir
Bio Compact, Rotterdam	
Bow Scheeps- en Projectinrichting, Tubbergen	: curtains, chairs
Deba Marine, Utrecht	: MOB boat & motor
Dijvler Materiaal, Hardinxveld-Giessendam	: anchor winches
Droste Elektro, Tolkamer	: complete electrical installation
Econosto Nederland, Rotterdam	: valves
KD, Germany	: Electrolux galley equipment
Haan, Gebr. De, Hoogezand	: sprinkler system
Hatenboer-Water, Rotterdam	: water Softener; fresh water hydrophore unit
Heinen & Hopman Engineering, Spakenburg	: heating, ventilation & airconditioning system
Hoffmann, Zeist	: safety equipment
Impas, Hoogezand	: accommodation and engine room piping
Metaglas, Tiel	: windows
NRF, Nederlandse Radiatoren Fabrik, Mill	: coolers
Pon Power, Papendrecht	: Caterpillar main engine; generator sets
Reikon, Spijkenisse	: Azcue pumps
Rubber Design, Heerjansdam	: flexible hanging
MX Brandbeveiliging, Almere	: MX 200 system
Smits Neuchâtel Marine Department, Utrecht	: floating floors
Technisch Bureau Uittenbogaart, Rotterdam	: Wine/ WT sliding doors; tank vent check valves
Theunissen Technical Trading, Malden	: Elitek fire detection
Trinox, Hardinxveld-Giessendam	: flame arresters
VDI Isolatie, Ridderkerk	: insulation
Veld cold & safe, Groenlo	: provision cooling;
Veth Propulsion, Papendrecht	: Veth Z-Drive; Veth-Jet
Vianen Kitchen Ventilation, United Kingdom	: cooker hood
Wessels, Germany	: wheelhouse
Wet Cab Gdansk, Poland	: Wet units
Wimel, Assen	: WT sliding doors; tank vent check valves
Wingerden & Zonen, H.K. van, Gorinchem	: sliding doors
Wortelboer, Rotterdam	: anchors & chaincables

K-D Rederei tendered at several shipyards for this project, they chose Shipyard De Hoop for its combination of cost-effectiveness and the positive experience with the RheinEnergie. ●

