

High Horsepower Natural Gas

Wärtsilä for LNG Inland Waterway Vessels

Finland's Wärtsilä has announced that twin six-cylinder 20DF engines, running as much as 99% on LNG, will power a trio of 135-meter/443-foot dry cargo inland waterway vessels for Europe.

The ships will ply the Rhine between Rotterdam and Basel, fueling at Rotterdam on LNG brought by truck from Belgium, says Bram Kruyt, inland waterways director at the Wärtsilä Services unit of Wärtsilä Netherlands B.V.

Wärtsilä is to supply a complete power system, including two Wärtsilä 20DF dual-fuel medium-speed engines, as well as two fixed-pitch propellers in a nozzle, the coldbox, and the vessel's liquefied natural gas fuel tanks.

'A Strong Endorsement of Gas'

The first of the three vessels is being built for Combi International, a Dutch ship development, design and construction company located in Raamsdonksveer, Wärtsilä says. The order has been placed by Koedood Diesel Service.

"This order extends the benefits of gas-fueled operation to an inland waterway vessel, and represents a strong endorsement of gas as a marine fuel," Wärtsilä said.

"This will be the first-ever medium-speed, dual-fuel, mechanically driven inland waterway vessel capable of operating for 95-99% of the time on LNG" – with a minimum of pilot marine gas oil for ignition. The engines will be able to operate fully on MGO too.

The new transport is part of the ECO2 Inland Vessel project, itself part of a larger initiative known as MariTIM (Maritime Technologies and Innovations Model region

MARAD Wants Clean Marine Partners

The U.S. DoT's Maritime Administration is looking for partners to help reduce pollution from ports and marine vessels "through repowering, re-engining or installation of other pollution reduction technologies, or the use of alternative fuel/energy."

"MARAD is seeking to provide cost-share funding through cooperative agreements for U.S.-flagged vessels that operate on inland or coastal waterways," states a summary for funding opportunity number **DTMA-91-R-2012-0019**. "Projects that will be funded under the RFP include engine repowers, retrofits, the use of alternative fuels, or the use of alternative technologies such as hybrid engines and other emissions reduction technologies."

The agency has \$1.5 million available, expects to make three awards, and will not fund more than 75% of the total cost of a given project.

The deadline for proposals is **July 9**.

U.S. DoT/MARAD, Delores Bryant, 202-366-2660; delores.bryant@dot.gov; www.marad.dot.gov



Combi International's Excelsior, a 135-meter/443-foot dry cargo ship powered by twin 1,260-horsepower Mitsubishi S12R-C2MPTK engines, was built in 2008.

Germany-The Netherlands), sponsored by the EU.

"This ECO2 Inland Vessel project is helping the inland shipping industry to become more sustainable, whilst at the same time increasing fuel efficiency and reducing costs," Kruyt said in the Wärtsilä Services announcement. "All three pilot vessels will be monitored for up to three years..."

"The Wärtsilä dual-fuel engines have proven their reliability throughout five million running hours," Kruyt adds, "which clearly indicates our leading position in this field."

A New Market for Wärtsilä Dual Fuel

"Wärtsilä's dual-fuel engine technology, which is well established in ocean going applications, can now be applied to small scale LNG-fueled vessel applications."

Kruyt told *F&F* that increasing interest in LNG is evidenced by the participation of companies including Shell – which formerly confined itself to upstream operations – and Ballast Nedam, which has established a subsidiary called LNG24 (*F&F*, April 9) for road and marine markets.

The LNG terminal at Zeebrugge, Belgium is operated by Fluxys Belgium. It includes a facility for truck loading with capacity for 4,000 vehicle loads per year.

LNG fuel is initially to be delivered by truck by GasCom-Equipment, of Troisdorf (Cologne), Germany. Other project partners identified by Wärtsilä include Reederei Deymann, TNO, DST and Hochschule Emden-Leer.

Wärtsilä said May 31 that its 50DF dual-fuel engines have been contracted for 100 LNG carrier vessels, "approximately one quarter of the current global fleet."

Wärtsilä Services, Mr. Bram Kruyt (Holland),
+31-6-537-977-03; bram.kruyt@wartsila.com

Wärtsilä (merchant ship power sales director, Switzerland),
Alexandre Eykerman, +41-79-6946404;
alexandre.eykerman@wartsila.com

Wärtsilä media, Ms. Mirja-Maija Santala (Finland),
+358-400-793-827; mirja-maija.santala@wartsila.com;
www.wartsila.com

Combi International, Simon Provoost,
+31-162-570300; sprovoost@combi-international.nl
or info@combi-international.nl; combi-international.nl

Fluxys Belgium, Pieterjan Renier,
+32-2-282-6207; mobile +32-475-692761;
pieterjan.renier@fluxys.com; www.fluxys.com

GasCom-Equipment, Alexander Scholz, +49 2241 99527-0;
a.scholz@gascom.info; www.gascom.info