



## NEWS FROM FORUM OKRĘTOWE MEMBER COMPANIES

### NEWBUILDINGS

#### **Samsø - the first LNG fuelled ferry operated on a domestic route within EU**



Double-ended LNG fuelled ferry *Samsø* enters the port of Sælvig.  
Photo: Samsø Rederi



LNG powered engines.

On February 11, 2015, in the evening, a new ship was greeted by representatives of the local community in the port of Sælvig and its approaches, near Danish island Samsø. A day before, before noon, the ship departed from Polish yard Remontowa Shipbuilding, member of Remontowa Holding, where the new ferry, named after the island itself, was built.

Wider representation of its potential users had a chance to familiarize with the ship a few days later, during and „open day” on a ferry, proudly being shown off by the Owners - the Samsø municipality. The ferry is operated by Samsø Rederi, owned by Samsø Kommune.

The ship started carrying passengers and cargo on February 24, according to temporary schedule, while the 1st of March marked commencing operations in regular timetable.



Bridge.



Hoistable car decks.

*Samsø* is the first LNG double ended ferry with dual fuel engines to be build at Remontowa Shipbuilding SA. She will operate between main land (Jutland) Hou and island Samsø with service speed of 14 knots. The vessel has four propulsion azimuthing thrusters and specially design bottom hull form at ends for better manoeuvrability in the shallow water.

Owner of the vessel, Samsø Kommune, has chosen Remontowa Shipbuilding because of its rich experience with design and construction of the LNG fuelled vessels.

The vessel was designed by Remontowa Marine Design, member of Remontowa Holding. The company prepared basic, detail and as built / documentation, class drawings and production drawings.

The vessel is able to carry 160 personal cars, or 16 lorries and 600 passengers. Cars are stowed on main deck and two hoistable decks above. On the ends of the main deck there are hazardous zone areas arranged. Ventilation for the hold is provided by natural air flow through 10 percent side openings. Embarkation to the vessel is arrange through bow and aft visor doors and embarkation door directly to staircase. At that time vessel will be connected to shore ramp. To reduce time of operation in the harbours the ship is equipped with automatic mooring system. Time of operation in the harbour is to be below 15 min. Ample CCTV cameras system around the vessel and two central bridges allow for excellent visibility and safe manoeuvrability for the captain.

Vessel is DNV GL classed and operates under the DMA administration.

The ship (RMDC 2872 Passenger Car Ferry 160 PCU design) is designed and built according to the highest European standards and to minimize its environment impact for waters around Denmark. Main propulsion system using LNG fuel with pilot amount of diesel ensure the lowest harmful emission and high fuel efficiency. The main gas engines in normal operation are able to deliver power for all thrusters and give required electric auxiliary power for the hotel with maximum speed just below 16 knots.

In order to ensure high voyage comfort for the passengers there are spacious passenger lounges, kiosk area and cafeteria arranged onboard. Interiors are designed in close cooperation with the Owner, according to high Danish standard, to ensure high comfort of travellers, For all passengers there are available two main passenger lounges, which are arranged on Deck 4. From there it is possible to access external sun deck aft and forward, fitted with benches for sun bathing. The ferry is also designed with special emphasis on handicapped, the wheelchairs users and people with sight/hearing deficiencies. The vessel has separate helicopter pick up area ready to be used any time in case of emergency. Vessel is designed in close cooperation with Owner and fire brigade on Samsø island to ensure the highest emergency response effectiveness.

Use LNG as main fuel reflects the ideas of Samsø Kommune promoting the tourist attractiveness of the Samsø Island.

*Photo: Dariusz Krawczyk*

To see a video clip, follow this link: [http://bit.ly/samsoe\\_ferry\\_presvid](http://bit.ly/samsoe_ferry_presvid)

## Arctic supply vessel for Greenland launched at Remontowa Shipbuilding



Side - launching of the 36 TEU arctic supply vessel at Remontowa Shipbuilding.

Photo: P. Stareńczak/SeaMedia



Computer rendering / artist's impression of the ship that was launched on Feb 20, 2015.

Fig.: RMDC

On Friday, February 20, 2015, Remontowa Shipbuilding, member of the Remontowa Holding capital group, saw the spectacular sideways launching of the arctic supply vessel. The newbuilding, designated B202/1 is the first of the two smallest vessels from the contract covering five ships for Danish (Greenland) owners Royal Arctic Line (RAL). The launch of the *Ivalo Arctica*, being the first launching in 2015 and the 993rd such event in the yard's history, marked the opening of the 70th Anniversary year for the shipyard.

Let us recall October 2013, when the contract was sealed for the construction of five ice-classed container and supply ships in three various sizes and designs, destined for Greenland's Royal Arctic Line (RAL). According to the contract, Remontowa Shipbuilding SA is to build one 606 TEU vessel for RAL's international services, as well as two approximately 108 TEU ships and two 30/36 TEU ships for the carrier's Greenland coastal routes.

The ship will be deployed in Atlantic route, as a feeder ship for Greenland (connecting mainly Aalborg and Greenland's Nuuk in regular service), and - similarly to its predecessor *Arina* and sister *Mary* - will be used for special tasks such as East Coast, US Thule Air Base and Antarctica research bases supply.

Two medium-size ships within RAL - Remontowa contract scope will feature 108 TEU capacity each. The ships will replace *Pajuttaat* and an annually chartered vessel and will mainly engage in the supply of North Greenland.

The two smallest ships, featuring 36 TEU capacity each and some passenger capacity, are destined to replace the old „village vessels” and will be busy in the settlements supply year round. The first of these smallest ships was the one launched on February 20, 2015.

In fact all the five ships are kind of a crossover between supply ships, geared containerships and icebreakers. They will have to meet the demands of harsh climate conditions including temperatures falling to as low as minus 40 degrees C.

The new arctic supply container-ships (of RMDC 2880 ACV 36 TEU design) have been designed at Remontowa Marine Design, member of Remontowa Holding and are DNV GL classed.

## Production of the first of two ferries for Port of Tallin commenced at Remontowa Shipbuilding

Remontowa Shipbuilding has recently commenced execution of the contract for the construction of two modern double-ended car and passenger ferries on order from Estonian owner Port of Tallinn. To mark this, on February 20, the first cutting of steel plates for the construction of the first of the two mentioned ships took place at Remontowa Shipbuilding, member of Remontowa Holding.

The official ceremony was attended by representatives of the management and newbuilding supervision team of the Owners, Remontowa Shipbuilding and Remontowa Holding and signaled by the presence of Urve Palo, Minister of Economic Affairs and Infrastructure of the Republic of Estonia. It was an active presence,



Piotr Soyka, president of Remontowa Holding, minister Urve Palo and Andrzej Wojtkiewicz, CEO of Remontowa Shipbuilding  
**Photo: P. Stareńczak / SeaMedia**



Ferries construction commenced...  
**Photo: P. Stareńczak / SeaMedia**

as Ms. Urve Palo has started the plasma cutting machine herself for its first job with steel plates for the new ferry.

The contract was won by Remontowa Shipbuilding in fierce competition from several renowned shipyards taking part in tendering process. The most decisive factor behind choosing Remontowa was its vast experience in passenger ships construction and its renown among European and US owners. Remontowa Shipbuilding has built some 50 car and passenger ferries of various sizes, propulsion types and fuels so far.

The two new ferry boats for Port Tallinn are being constructed under supervision of the DNV GL classification society. The ferries are to be 114 meters in length and to accommodate 150 cars or ten road trains. The ferries will have 600 passenger seats and will be equipped with life-saving devices for the same number of persons.

The diesel engine ferries have been designed so that the main engines of the vessels can in the future be replaced by engines running on liquefied natural gas (LNG) provided that the necessary infrastructure is in place.

## SHIPREPAIRS AND CONVERSIONS

### French research vessel under repairs at Remontowa SA? - Why not?...



French research vessel entering the Gdansk Port channel.  
**Photo: P. Stareńczak / SeaMedia**

Notable French research vessel arrived in February to Remontowa Shiprepair Yard SA, member of Remontowa Holding. The ship is famed not only because of its intriguing name. The ship has undergone the extensive range of repairs during its stay at Remontowa in Gdansk.

*Pourquoi Pas?* (English: Why Not?) is a research vessel, 107 m long, 20 m wide and drawing 6.9 m, built by Chantiers de l'Atlantique in Saint-Nazaire, France (Alstom Marine, now STX France) for Ifremer and the French Navy (Marine Nationale). She is currently primarily used by Navy's SHOM (Service hydrographique et océanographique de la Marine). She was ordered in December 2002 and completed in July 2005. The 66 million euro cost was financed by Ifremer (55%) and the French Navy (45%). She is

named after explorer Jean-Baptiste Charcot's famous ship.

The 6600 tonnes displacement *Pourquoi Pas?* is used 150 days per year by the French Navy and 180 days per year by Ifremer. She was designed for hydrography, geoscience, and physical, chemical and biological

oceanography, as well as to launch small submarines such as the manned submersible Nautila and the ROV Victor 6000.

She is a multi-purpose ship, equipped for working whilst moving and optimised for on-site work.

Notably, *Pourquoi Pas?* was used for the 2007 deployment and connection operations for the Antares neutrino telescope. In 2008, *Pourquoi Pas?* was used for the initial testing and operations of the Periscop, a pressurized deep sea fish recovery device. But the ship has been probably most publicized because of its involvement and assistance, in June 2009, with the search and recovery of Air France Flight 447 plane lost in the ocean with loss of all passengers and crew.

## Recent vessels serviced at Naval Shipyard SA in Gdynia



*Fri Star* at Naval Shipyard in Gdynia.

Photo: SMW

On the 23rd of February, the survey of cargo ship *Marne* commenced at Naval Shipyard in Gdynia. The overhaul included mainly: mechanical works while docking as well as seal replacement on the shaft, the coolers cleaning in the bottom valves, replacement anodes on the hull and fittings review. Apart from that small steel works will be done and protective coating works on the hull and inside of the hold. The service was expected to be completed at the end of the first week of March.

Earlier, on the 12th of February, the cargo vessel *Fri Star* of Norwegian ship owner Kopervik entered the Shipyard. The class overhaul of the ship included: hull conservation with anodes replacement, overhaul and measurements of shaft line as well as sealing replacement. Apart from this the ship propeller was

dismantled for overhaul and reassembled. The overhaul and checking the steering gear has been carried out as well as testing of main engine air cooling system. Another overhauls covered the main engine oil cooler, the oil cooler of transmission, outboard valves and anchor windlasses. The scope of works involved also dismantling, washing, overhaul and measurements of the anchor chain, preservation of anchor chamber, washing, preservation of the hold and repair of the covers wherever needed. There has also been steel works carried out on the hull and in the tanks.

Earlier this year also Swedish operated *Listervik*, German controlled *Aller* and *Chopin*, Polish chemical tanker *Amaranth* and *Fri Skien*, that arrived for class renewal repairs. As of second half of February, Polish Navy submarine ORP Orzeł could be seen in the yard's floating dock.

## MISCELLANEOUS

### Co-operation of Gdansk Shipyard and Remontowa Holding SA

Gdansk Shipyard Group Sp. z o.o. (GSG) expects further advantages of co-operation with Remontowa Holding SA (RHSA) capital group, commenced in 2013.

Recently Gdansk Shipyard Group and member companies of Remontowa Holding have agreed on the scope of works in projects on stream and shares in ship and steel structures construction. Within the agreed cooperation GSG will be involved in prefabrication and steel construction, while Remontowa Holding SA will be focused on final assembly and outfitting.

Gdansk Shipyard, owing to its unique capabilities in automated and partly robotised welding and production of flat sections and so called micro-panels, will be supplying ship steel sections.

So far GSG has been manufacturing steel sections for such ships under construction and such projects at Remontowa Holding member companies as arctic container vessel, arctic AHTS, PSV newbuildings and modification of offshore production semi-submersible platform, as well as steelwork for some of the ships under repairs at Remontowa SA.

Among the most recent signs of the two industrial groups co-operation there was a notable sale-purchase agreement regarding the just four years old gantry crane that was built for Gdansk Shipyard, but will now serve at Remontowa Shipbuilding.

## Giant rubber wheeled 300 t SWL gantry crane acquired by to Remontowa Shipbuilding



The new rubber wheeled gantry crane during rolling from a floating barge onto the shipyard's quay.

Photo: G. Landowski



The operation was completed in the evening.

Photo: G. Landowski

Remontowa Shipbuilding has acquired a significant piece of equipment enhancing its production capabilities and efficiency.

The recently purchased rubber wheeled 300 t SWL gantry crane has been transferred by means of transport on a heavy lift barge-pontoon *Maritim Shipyard I* and skidding off/on the quay from its first area of deployment and former owners (Gdansk Shipyard) to the hull assembly area adjacent to the quay at Remontowa Shipbuilding.

The complex skidding process was performed by specialist heavy lift company Trend Projekt of Pruszcz Gdański.

The Remontowa's newly acquired giant rubber tired gantry crane (Mobilift TE/300 type) was custom-built and supplied by Michielotto Group of Cittadella-Padova to Gdansk Shipyard in 2011. It's a single beam gantry crane conceived for handling full hulls and sections within a shipyard. It is built with two hook trolleys boasting 150 tons capacity each (300 tons in tandem), hydraulically driven, except the two hook trolleys' electrical drive, which can either operate in pairs or individually. Main beam is 30 x 25 x 40.2 m, inner breadth is 34.2 m, gauge is 35.4 m, thread between the two wheels is 16 m and height under beam is 32.4 m. The gantry crane has 4 groups with 8 wheels each (32 in total), 16 of which are driving wheels and located on the front side, allowing +/- 20 degrees rotation of the vehicle.

A hydraulic shock absorption system stabilizes the crane even on unsmoothed ground. Materials and components were chosen considering a temperature ranging from -20°C + 40 °C, while painting included sand-blasting and 4 layers of paint (250 µm thickness) so as to prevent marine corrosion.

## Poland's chance to become the lead nation in the „Protection of Harbours and Ports” programme

At the end of last year, a seminar was organized in NATO headquarters in Brussels to honor the 10th anniversary of the appointment of the „Defence Against Terrorism Programme of Work” (DAT POW) program. The goal of this programme is to support war against terrorism and asymmetric threats. At the seminar, Poland was represented by OBR CTM S.A from Gdynia, which is part of Polish Armaments Group plc (PGZ). OBR CTM S.A. has been engaged in DAT POW since 2011 in the field of harbour and anchorage safety („Protection of Harbours and Ports”).

During the seminar, previous OBR CTM S.A. achievements, covering multisite systems to detect and keep track of underwater objects, as well as the counteraction systems based on effectors to deter, were presented. The results of the work, experience and technologies being developed within „Protection of Harbours and Ports” may be used during the realization of an operational requirement, „the integrated system of protection of marine forces at harbours, roadsteads and at the anchorages under the cryptonym „Ostryga”. Being aware



Representatives of NNAG and OBR CTM SA during presentation of the system in 2013.  
**Photo: CTM**

of the fact that OBR CTM S.A. is involved with the DAT POW programme, having Poland to be accepted as the „lead nation” in the „protection of Harbours and Ports” programme is taken under consideration.

As early as the years of 2000-2003 OBR CTM S.A. elaborated and deployed multisite protection system of the Polish Navy port in Gdynia under the cryptonym „KRYL”. It does not only cover typical threats of armed divers, but also detects and keeps track of small submarines that operate near the harbour. Applications included in the reports, elaborated by NATO Industrial Advisory Group (NIAG) together with CTM: „SG 86 Harbour Protection”, „SG 110 Force Protection”, „SG 126 Intelligence Sensors for underwater surveillance” as well as the results of the demonstrator’s system technology tests done during „Workshops”, organized by NATO and the European Union had a significant impact on the further development of detection systems as well as the marine counteraction of the terrorist threats.

In 2011, OBR CTM S.A. joined DAT POW programme and accomplished three complementary projects. As a result, integrated technology demonstrator of the detection system and counteraction of terrorist threat has been created. The threat detection system is based on acoustic modules or sonars to detect the divers, which create an acoustic barrier as well as a chain of magnetic sensors that make up a magnetic barrier. The portable magnetic barrier can be used as the protection of the harbours as force protection, as a complementary system to reinforce the detection force and classification of underwater terrorist threats. The integrated counteraction system with the detection system is based on non-lethal (air gun AG) and semi lethal effectors, lethal (pyrotechnic effectors of different mass).

In 2013, integrated demonstrator technology detection system and counteraction of underwater threats from the divers test and their „live presentation” for NATO Naval Armaments Group (NNAG) were presented. These efforts proved the operating system effectiveness. The system can be used stationary – for port protection, or portable – to protect forces.

OBR CTM S.A. belongs to Polish Armaments Group plc (PGZ), the biggest defence company in this part of Europe – industrial leader in the process of the modernization of the Polish Army. It is composed of several dozen companies (armaments, shipbuilding and offshore industries and new technology) with annual earnings as high as 5 billion PLN and over 19 thousand employees. PGZ plays the major role in the transfer of research results and the innovation of the whole economy while cooperating with the best research centers.

## **220th anniversary of the Conradinum technical college.**

### **„Training for maritime industries - a challenge for the 21st century” conference**

On February 25th, the Gdansk Science and Technology Park hosted special conference on the occasion of Szkoły Okrętowe i Ogólnokształce Conradinum (General and Shipbuilding Colleges - SOiO) in Gdańsk.

The conference, titled „Training for maritime industries - a challenge for the 21st century”, organized by Związek Pracodawców Forum Okrętowe (Association of Polish Maritime Industries), SOiO Conradinum and Pomeranian district Superintendent of Education, has been focused on fast changing global maritime industries and resulting demands on educational and training system.

The history and present state of General and Shipbuilding Colleges Conradinum has been discussed by ms. Anna Wasilewska, principal of SOiO.



Acting Pomeranian Education Superintendent Elżbieta Wasilenko during speech.

Photo: G. Landowski

Acting Pomeranian Education Superintendent, Elżbieta Wasilenko, described the current trade school training and maritime school training model, with special focus on recent changes and developments in this area.

Educational offers have been presented by professor Janusz Kozak of Gdansk University of Technology faculty of Shipbuilding Technology and Offshore Engineering and dr. eng Ireneusz Mosoń of the Faculty of Electrotechnics and Automation at Gdansk University of Technology, being also deputy dean for education at GUT, while the two students of Mechanical and Electrical department at Gdynia Naval Academy, under supervision of prof Agata Załęska-Fornal, have given the presentation of their university.

The seminar was also devoted to discussing innovative jobs available within shipbuilding industry. Here, presentations have been given by Andrzej Syldatk, president of An-Elec, Zdzisław Bahyrycz of Crist shipyard, Sławomir Gieroń, president of Damen Marine Components Gdańsk, Jarosław Łapkowski, managing director and Mariusz Dampc, marine service department manager of HG Solutions, Anna Toczek and Rafał Cieślak of Muehlhan, Michał Moniuszko, HR manager Remontowa Holding SA, Jakub Nowak, HR manager Remontowa Shipbuilding S.A. and Tomasz Sinkiewicz, project sales manager of Vistal Gdynia.

The conference has been moderated by Jerzy Czuczman, manager of the Forum Okrętowego office.

The seminar was held under honorary sponsorship of Gdynia Naval Academy rector, Gdansk University of Technology rector, Pomeranian district marshal, city mayors of Gdask, Gdynia and Sopot, Pomeranian district Superintendent of Education and Remontowa Holding S.A. Media partnership was provided by Radio Gdańsk, „Dziennik Bałtycki” and PortalMorski.pl

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