MEMBER OF REMONTOWA HOLDING S.A.

Customer Magazine ISSUE 2 (22) 2016

Peace and Good Will To You at Christmas Time and throughout the 2017 Year.

May the New Year be full of success!

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Ready to assist our Clients in facing new challenges

According to experts opinions, the shipping industry in 2017 will face such challenges as over-tonnaging, excessive competition, a paucity of finance, rising fuel costs, as well as burgeoning regulation and legislation.

In September 2017 the Ballast Water Management (BWM) convention is coming into force. Before the entry, the owners will have to put their vessels into drydock to ready them for the new legislation.

Remontowa SA has invested a lot to be well prepared to assist our present and future Clients in this respect. One of these investments, among others, refers to the prefabrication of pipeline segments of composite materials with the use of glass fiber, epoxy and vinyl ester resins.

Due to low weight and corrosion resistance, such piping systems have been becoming more popular on ever wider

scale also as retrofitted installations. Repair yards usually outsource the prefabrication of such installations to specialized third party manufacturers. Remontowa SA has invested in the development of such technology in-house, so as to be able to offer rendering such services and products by the yard itself.

The investments made by Remontowa SA consisted of building an infrastructure, providing necessary tools and production equipment as well as of training high class shipyard specialists. Now we can control the whole process (from design through fabrication to final installation) within one company. Pipe systems prefabricated in-house at Remontowa's new workshop are suitable for a wide range of applications including BWT systems.

In this issue we are also presenting other investments that meet the market expectations and will be beneficial to our Clients.

> Grzegorz Landowski Editor-in-Chief

The management board members, the directors, the managers of commercial offices and the Remontowa Ship Repair Yard staff thank you for the trust that you have placed in us throughout the past year.

We send you good wishes, serenity and success in the professional sphere for Christmas.

May the New Year of 2017 bring you much success

in all spheres of life.

of the SA 8000 standard

Remontowa Repair & Conversion is a quarterly customer magazine of Remontowa Shiprepair Yard, member of Remontowa Holding SA

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Newest technological investments

The most important factors that enable Remontowa SA to have a rapid development and acquire a competitive advantage over others include investments in modern technology, streamlined manufacturing processes and high standards of services offered by experts and experienced employees and managerial staff.



We have highly skilled staff in the field of splicing and laminating pipe installations made with the use of glass fiber and resins.

facilities

The company has satisfied the expectations of the market in 2016 by halfway through its vigorous efforts to raise quality standards. Some of the critical investments that increase the technical and manufacturing capacities of the shipyard are fully or partially completed.



A new room with workstations for the prefabrication of pipe-line segments made of Stainless and Duplex steels

The shipyard has one workstation at its disposal for the prefabrication of parts made of the steels. This had made it possible to fulfill individual orders: however, the company had to outsource in the case of a larger project or a bigger number of orders. The shipyard management board decided to make investments that will allow processing and welding of Duplex steels and stainless elements by the highest standards and the expectations of the most demanding customers.

The identified room was completely modernized within a period of five months. The room was fitted with specialized types of equipment such as a gantry crane, prototyping tables, and exhaust ventilation. The technical requirements for stainless or duplex steels are much more rigorous than in the case of ordinary ship steels because it requires complex preparation and welding processes. Duplex steels are not only difficult to prefabricate but also expensive to purchase, however, they can only be repaired once.

The room serves its role very well because it can accommodate both larger projects and smaller tasks without the

need to outsource. Most of the recent Remontowa SA steel prefabrication orders are associated the Martin Linge project implementation and vessel Mary A where installations made of stainless steel were fitted.

The investments in Remontowa SA are not only about establishing new infrastructure but also consist of training the shipyard's specialists. Remontowa SA has collaborated with the chief welding engineer to conduct a training program for master teams within the general scope of the prefabrication of elements made of stainless and duplex steels.

New work stations for the prefabrication of pipeline segments made of composite materials

Our welders have all necessary authorizations and certifications required to be allowed weld stainless and duplex steels. The initiative is of high degree in the welding process because metal structures may not be converted from non-magnetic into the magnetic (and corroding more rapidly) ones due to limited linear energy.

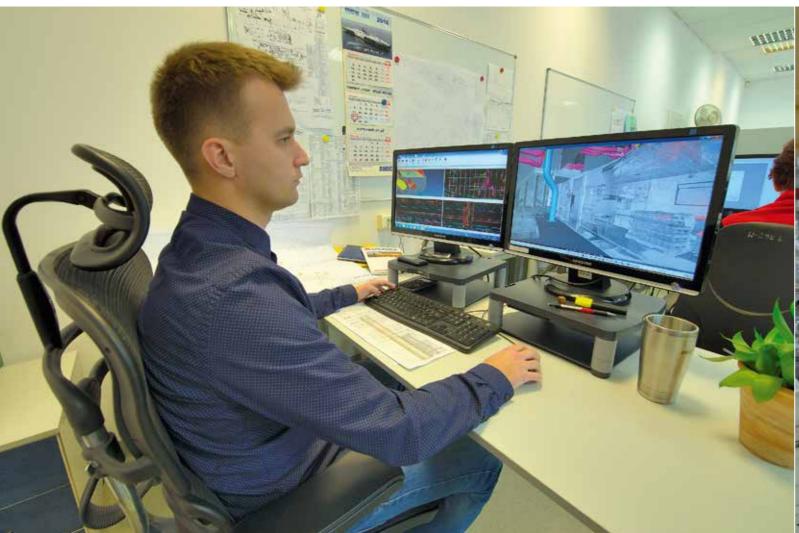
Remontowa SA has also implemented another investment apart from the above-mentioned. The new investment was building a room with workstations designed for the prefabrication of pipeline segments of composite materials with the use of glass fiber, epoxy and vinyl ester resins - GRE (also known as GRVE and GRP).

We have a prepared room with a new wiring system after a thorough overhaul. We are preparing a resin warehouse and resin mixing plant in two special-purpose rooms. The firebreak doors and explosion-proof wiring sys-

tem have already been fitted. Currently, we are installing exhaust ventilation.

In the last few months, we have been conducting intensive courses for the shipyard's specialists in the field of splicing and laminating pipe installations made with the use of glass fiber and resins.

The training has enabled us to obtain appropriate authorizations and certifications relevant to processing and joining those materials. The approval and certifications are issued by the two leading European producers of pipes with composite materials. The empow-





Complete 3D data as-built ship for retrofit design projects translates into better design and enables to avoid any collision of new systems with existing ones.

We offer 3D Laser Scanning in BWT systems and scrubber retrofits.

We have fixed scrubber systems with the components prefabricated at Remontowa and made of GRE pipes on some vessels, this year.

erment has enabled the employees of Remontowa SA to perform work within the required scope without having to outsource.

The shipyard has begun close collaboration with one of the global leaders in manufacturing GRE pipes and has significantly benefited from the technological support and quick delivery of materials. The collaboration has enabled us to secure a golden opportunity to jointly work on the main contracts jointly.

The installations of GRE pipes is a crucial part of exhaust fumes desulfurization systems (scrubber)

Remontowa SA installed it on the ships in the recent period as a standard solution. Most of the installations on chemical tankers used for transportation of cargo are also made of composite GRE pipes. However, these pipes are also used for the construction of bilge systems, the Ballast Water Treatment, and anti-fire ones.

The owners of the ship are willing to use GRE pipes in the case of various modifications the fact that they do not require frequent maintenance and they are light weight and hence, do not add any significant weight.

In this year alone, Remontowa SA has already received some queries concerning the modifications of the BWT systems with the use of GRE pipes. The company continues to factor the concerns in the design, and most of the queries will have been implemented before the end of the next year.

The employees of the shipyard have been able to fit one of the systems supporting BWT onto Maersk Beaufort and also two other vessels of the same ship-owner (Maersk). The skilled staff has also repaired the BWT system. The specialists of the shipyard have fixed BWT systems and tank flushing systems of the vessels: BRO Distributor and BRO Developer, which were made of GRE pipes as well. It was necessary to involve the companies specializing in this kind of work (and so was it in the case of stainless steels) to perform such tasks as in the few months. However, the shipyard is currently holding all the aces and is well prepared for any repair work on the vessels without within a shorter time.

Capabilities of new Remontowa SA workshop...

...include gluing of pipe elements joints and laminating pipe joints of various diameters, enabling prefabrication of GRE/GRP/GRV piping systems

Pipe systems prefabricated in-house at Remontowa's new workshop are suitable for a wide range of applications as example:

- seawater cooling lines
- seawater bilge and ballast water systems (including BWT systems)
- fire fighting lines
- condensate lines
- sounding and ventilation lines
- black and grey water lines
- potable water lines
- rank deaning lines
- iet-water lines
- crude oil washing lines
- make heeling lines
- scrubber lines
- pool drainage lines
- cargo lines
- inert gas
- sewage
- sanitary drains and auxiliary lines

Another investment under way

The third significant investment being implemented is increasing our potential within the scope of pipe work. Remontowa SA is constructing a specialist workstation to handle major repair of PV valves and safety valves fitted on boilers and also perform the hydraulic tests of those valves. We have been providing such services; however, a decision has been made to dedicate a special room with specialist work stations for this task. It will improve the or-

ganization of the work, reduce the time for processing orders and improve the quality of work.

The investments discussed above generates several advantages such as shorter order processing time, acquire full control of work progress, and the possibility to perform radiological non-destructive testing in situ. It will also facilitate broadening knowledge, acquisition of new qualifications, authorizations and capabilities of the Shipyard's employees which will consequently result in the provision of better customer service.







For better support of ships propulsions...

More power in Marine Power Plant

draulic cylinders or actuators serve in blocking and cleating devices for cargo access doors and ramps, for boosting brakes of mooring winches and windlasses, as well as in many other smaller mechanisms.

Two new stations to be used for repairs of hydraulic motors and actuators or controllers are in the final phase of preparation as well. Nearby three workstations for repairing tunnel thrusters,

azimuthing thrusters and main propulsion thrusters / propulsors are being created. They are designed in such way as to allow simultaneous works on all three mentioned devices.

In the refurbished production hall, a station allowing to conduct repairs of rudder plates in vertical position, is being formed as well. It will allow to accomplish works in workshop that so far were only possible with the rudder plate being suspended under the stern of the ship. Owing to new solution, complex repairs of steering systems, especially the ones fitted with articulated flap drives, will be possible with the steering gear and rudder plate natural (vertical) working position, which will help a lot especially in dismantling and assembly activities.

Stations dedicated for overhauls of shaft lines with fixed or controllable



The Minerva Alice crude oil tanker has been one of the vessels benefited from our new facilities.

Photo: Remontowa SA

Specialist workstations for repairs of large hydraulic cylinders in vertical and horizontal position are being arranged in the hall. The latter will allow for simultaneous repairs of two smaller hydraulic cylinders or one larger unit - over 10 m in length and diameter up to 550 mm.

The workstation is also equipped with dedicated hydraulic power pack, to enable testing and trials of hydraulic power cylinders after repairs. The hydraulic cylinder, connected to the power pack, may simulate the same operations as executed onboard, installed in a piece of a ship's equipment.

The station for repairs and testing of the smallest hydraulic cylinders is being prepared as well. Such small hyIts propeller shaft line underwent an overhaul in the modernized hall of the Marine Power Plant Department.

Photo: Remontowa SA

pitch propellers are being modified, too. Now it will be possible to freely axially rotate them.

In the new hall, largest marine engines cylinder liner honing capabilities have been also extended and improved, owing to a new workstation, supplementing the two existing ones.

All supporting and auxiliary infrastructure will be new, too, including 12 specially designed examination and verification tables for very heavy ob-

New investment has been planned and designed with conforming to requirements related to ergonomics, health and safety at work, as well as environmental protection in mind, while ensuring the most possible wide universality and flexibility of solutions.

custome i magazine



Remontowa SA has completed one of the most complex offshore projects in Europe

FPF-1 reactivated!

On August 19, the FPF-1 platform, after conversion at Remontowa Shiprepair Yard in Gdansk, reached



Conversion



Towage of the platform to its destination followed the required inclining test previously carried out at our yard and final marine system trials performed in a deep water location offshore Gdańsk. Upon completion of those trials, the FPF-1 commenced the tow to the Stella field. Further updates were provided once towing operations had commenced.

Ithaca said the platform had been materially upgraded to the requirements of the GSA hub.

- We are delighted with the quality and completeness of the vessel, having achieved our key objective of completing the onshore scope in the yard and avoided costly carry over of unfinished work offshore - commented Les Thomas. Chief Executive Officer of Ithaca. - Our existing production business is performing well, with volumes running ahead of guidance and continued deleveraging being delivered ahead of Stella start-up.
- It has been particularly pleasing to announce the recent sail-away of the FPF-1, the quality and completeness of which means we move forward into the operational phase of the Stella development with confidence - the CEO of Ithaca added later. - We remain focused on getting to first production safely and efficiently, whilst ensuring we secure the long term value of the hub through our on-going investment activities.

Additionally, access has been secured to a major oil export pipeline for future Greater Stella Area production, allowing a switch from tanker loading during 2017. The move to pipeline exports significantly enhances the long term value of the GSA production hub, reducing fixed operating costs, enhancing operational uptime and improving reserves recovery.

According to Ithaca's announcement released on October 6, the FPF-1 was safely towed to the field, moored on location and the dynamic risers and umbilical connecting the subsea infrastructure to the vessel installed. The subsea commissioning programme was also completed by Technip, with all the infield flowlines flushed and ready for the start-up of production. Connection and operational trials for the "Single Anchor Loading" system have also been completed for the fleet of shuttle tankers



remontowa

that are available for oil exports from

The FPF-1 offshore commissioning programme was on-going, involving preparation of the topsides processing and utility systems for the introduction of hydrocarbons. This work was well advanced, with the operations team focused on completing the required inspections and associated readiness activities required to enable a safe and efficient start-up of the wells.

The FPF-1 floating production semi-submersible platform operated by Petrofac has been converted by Remontowa Shiprepair Yard SA. The 82 m long, 75 m wide and some 30 m high platform, with a displacement of 26 639 tons and lightweight of some 14 000 tons, was a significant task for Remontowa SA, which had been entrusted by the Owner with the modification and modernization of the unit.

The platform was built practically from the scratch (receiving all new topsides) at Remontowa SA during 2012-2015. It arrived at Remontowa without existing equipment. Of the "old" structure only the floaters, transverse pontoons, bracings, columns, main deck, steel structures of accommodation (superstructure) block and flare have remained, however, some of them, significantly modified by the yard.

At the shipyard the facility was entirely modified and upgraded. Transverse pontoons have had sponsons attached for increased displacement. Columns and pontoons have also been modified by adding buoyancy structures improving stability. Main deck and superstructure / living quarters block have been modified and strengthened with requirements of the new processing modules and new accommodation needs on mind.

All equipment of the platform besides pump rooms in floaters, especially the produced oil processing plant, have been installed or built from the scratch. The platform has the brand new mooring system installed with four winches. a dozen of chain stoppers and twelve anchor chains with pile anchors.

Entirely new is the outfitting of the superstructure / living quarters block providing accommodation for 74 persons and technical compartments as well. New equipment, facilities and systems installed also include power distribution system, full set of electrical, radio-navigation, communications, remote control, monitoring and safety (electronic automation) systems.

All installations and outfitting on the semi-sub are new. This also relates to lifeboats, safety systems, helideck with appropriate installations and two offshore deck cranes.

The platform has a minimum of 15 vears of projected life on field and will be moored on the North Sea, serving Stella, Harrier and Hurricane oilfields.

Over 26 000 employees in total have worked on the platform. There have been as many as 60 km of pipelines and 600 km of cables laid as well as new devices weighing of 1500 tons in-

The Remontowa's employees and subcontractors have already been working without accident for over 1300 days, which translates into more than ten million manhours without an inci-

These efforts for maintaining a high level of health, safety and culture of work have been recognized and appreciated within the industry.

In the fifth UK Oil and Gas Industry Safety Awards edition, jointly organised by Oil & Gas UK and Step Change in Safety organizations, Petrofac and Remontowa SA have become one of the Highly Commended in the "Workforce Engagement" category.

On November 25, 2016 Ithaca released an update on the status of the on-going Stella field commissioning programme and the expected schedule for start-up of production.

According to that statement, activities on the offshore commissioning programme for the FPF-1 floating production facility were well advanced and preparation for start-up of the Stella field was on-going. However, some further necessary repairs of electrical junction boxes on the vessel's processing facilities were underway while all other preparations were on plan. Start-up has been anticipated in early January 2017, upon completion of this additional work.



The Ithaca operated Greater Stella Area, located in the heart of the Central Graben area of the Central North Sea, on the UK Continental Shelf.



The Pourquoi Pas? research vessel in Remontowa SA in 2015. Now the shipyard can apply for the full-scope repair contracts of such vessels,

Photo: Remontowa SA

Remontowa SA has been providing the service of warships for a dozen or so years now. It has been conducting typical running or dock repairs until recently when the rules of protecting classified information were no longer relevant. The limitation has ceased to apply since August this year because the shipyard obtained a Security Clearance issued by the Internal Security Agency.

Remontowa SA had to fulfill some conditions before it could obtain the clearance. The company had to select and train appropriate personnel so that its members are granted the right to access confidential information in agreement with the domestic regulations concerning the protection of such information.

With the help of the dedicated teleinformatic system, the shipvard was able to set up a Secret International Registry thus complying with not only domestic regulations within the scope of the secrecy protection but also with those of NATO and EU. The location of the Registry is demarcated by a special security zone where access is restricted. It is controlled and monitored by reliable alarm, access control, and visual supervision systems. The individuals working within this area are also responsible for the protection of classified information, and they possess an appropriate Personal Security Clearance. They have also undergone specialized training.

Remontowa SA has a highly competitive Security Clearance protocols which are classified as SECRET. This means that they have the highest degree of protection thus making it possible to process confidential information with the help of its teleinformatic systems. Also, the shipyard has obtained the foreign clearances which include NATO SECRET and SECRET EU/EU SECRET.

The foreign clearance confirms that Remontowa SA is permitted to perform tasks with the increasing scope for defense capacity of Poland which is a territory of NATO and European Union. The clearances as mentioned above are issued for the period of seven years. The company can currently apply for the full-scope contracts such as major warships repairs and complex military projects like developing sophisticated communications systems found

However, there is one more important benefit of possessing a Security Clearance. The partners and contractors of Remontowa SA who wish to be guaranteed that the devices or information to be protected will also enjoy full protection from the shipvard: therefore, they can now rest assured that their information is kept safe.

It is worth mentioning, that Remontowa SA was issued with the AQAP-2110 (Allied Quality Assurance Publication) Certificate which is the civil counterpart of which is ISO 9001.

Conducting the implementation process of the SA 8000 standard

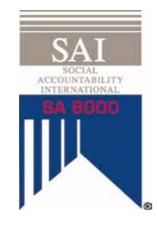
Shipyard is about people

Piotr Soyka coined the motto: "Shipyard is about people" about ten years ago when he was serving as the Chairman of Remontowa Shiprepair Yard in Gdańsk. He is currently serving as the President of the Remontowa Holding capital group. His words, however, have been applied extensively in practice and continue to be creatively applied to various planes.

The achievement is attributed to employees who displayed a high level of professionalism by upgrading their qualifications and introducing new global manufacturing standards and technology. Remontowa SA performs the most complex repairs and conversions of vessels, offshore rigs and other floating objects.

The company has already implemented the global standards such as ISO 9001, ISO 14000 and OHSAS 18001. It has also developed and implemented its own Code of Ethics which is supervised by the Ethics Officer. The shipyard has recently started to implement SA 8000 standard known as Office of Integrated Management System. The standard has been collaboratively developed by several organizations that devoted a lengthy period in drawing up the social accountability standards in companies. Those standards were established in the year 1998 in the form of the consolidated text bearing the title "SA 8000 (Social Accountability 8000)" based on the conventions of the International Labour Organization, the Universal Declaration of Human Rights, and the Rights of the Child Convention.

In order for a company to be certified for the SA 8000 standard, there



are eight preconditions must be ful-

- Prohibiting child labour
- Prohibiting forced labour
- recommendations relevant to safety in the working environment
- Real Ensuring the freedom of association and right to collective bargain-
- Prohibiting discrimination
- Prohibiting the physical or psychological coercion of employees
- Following legal regulations relevant to the permissible number of working hours
- Ensuring that remuneration is not lower than it is required by law.

In Poland, the application of the SA 8000 standard is a novelty. It is difficult to get more than ten companies

or corporations which are making attempts to implement it. However, the case of Remontowa SA is a response to the suggestions of its European clients who are interested in the results of social and ethical activity in the milieus of economy and business.The implementation of the SA 8000 standard does not only concern the shipyard itself but also the companies which are collaborating with it. It is a strategy of social responsibility which must be entirely convergent with the one applied in Remontowa SA.

The process of preparing the company to obtain the SA 8000 certificate of compliance categorizes all its achievements in this field in the recent years. It also makes it possible to introduce procedures that ensure highest achievements in the field of business ethics and streamline social dialogue. Also, it allows a better understanding of the expectation of all the interested parties to ensure good image in the eyes of the ship owners by being trading partners of Remontowa SA.







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