Ballast Water Management?
Yes, we can!

Ready for Navy

Polish ship from USA

“Green” ferry launched
EDITORIAL

3 Yes, we can!

NEW SERVICES

4 A “must have” solution.
Remontowa is creating a dedicated multi-specialists team capable of providing complex solutions in the area of installing different types of Ballast Water Management systems onboard both existing ships and new ones.

6 A reason to choose our team.
We asked a representative of Remontowa Marine Design & Consulting about his opinion about an actual schedule of WBM Convention, signed in London 2004, implementation.

7 Ballast Water Treatment system case study.
Specification of KBAL installation onboard shuttle tanker Gijon Knutsen at Remontowa S.A.

8 Classification societies’ contribution.
Zbigniew Andruszkiewicz, member of the Board of Remontowa SA, has interviewed Andre Duettchen from the Department of Maritime Systems and Components, System Engineering of Germanischer Lloyd, asking him for a view of a classification society.

SHIP REPAIR

10 Ready for naval orders.
Remontowa S.A. has been awarded with AQAP-2110 certificate. This results in Remontowa shiprepair conforming to NATO requirements in regard of execution of navy ships repair contracts.

12 National Glory from US market.
US operated vessels are not the most common visitors to the Baltic, and thus - to Baltic yards. However, the fourth week of November saw arrival of another American owned and operated vessel to Gdansk – based yard.

14 Best bidder with competitive offer.
An interview with Crowley Technical Management’s superintendent, Will Schramer.

15 A flexible shipyard.
We talked to Janis Jarmakovics, fleet superintendent at V.Ships U.K. after he had finished dealing with Sichem Mumbai - another chemical tanker serviced by Remontowa.

SHIPBUILDING

17 The start of a new era...
On November 2, 2011, the LNG-fuelled ferry Landegode, to operate on the Bodo - Lofoten Islands service, touched the water for the first time. Spectacular sideways launching, marked the start of a new era in Norwegian shipowner’s history.

19 Board and Commercial Offices.
What do we think, when we hear this motto? Of course it recalls Barack Obama’s popular slogan used many times during his presidential campaign. It is so... American. Personally I like it. Short and powerful, it has a positive sound and means that imagination is the only limit for us. I think that this is a good message for all times, also when the crisis is still all around.

For many business entities crisis means the end of their business activity, for others the same crisis means a lot of opportunities, new chances to take advantage of, and new areas to explore. The latter usually relates to those companies which constantly seek new opportunities, regardless the crisis. Sometimes however, the harsh economic circumstances may become the additional fuel for development of new innovative services. Both ship-owners and shipyards have to deal with this paradox.

Despite the crisis, last year for Remontowa was busy as usual and extremely good. The shipyard serviced hundreds of ships and offshore units for regular clients as well as for new ones. The shipyard enjoys good and mutually beneficial partnerships, since customer confidence has always been on top of the agenda in Remontowa. We are aware that, especially nowadays, with harsh market conditions, shipping companies are more careful when selecting shipyards for their projects. They need to find a reliable partner which is capable to solve every problem which they could be dealing with. That is why we carefully read market signals trying to perceive our customer needs in advance so as to offer them solutions.

And we did so in last year. We have found that one of the most important market signals for shipowners is the enforcement of the International Convention for the Control and Management of Ship’s Ballast Water and Sediments. It will result in the necessity of Water Ballast Management system installation onboard ships. We have found that in coming years it will seem to be one of the most demanding challenges for our customers.

But that is not an easy task. There is a whole diversity of technical, technological and economical solutions to the problem available. Which would be the best suited to our customers’ ships and requirements?

For shipowners there are many factors that should be taken into account, analysed and correctly recognized in order to make an optimum decision. In this process Remontowa is a company you can really rely upon, since we have already installed Water Ballast Management systems onboard ships, we have been studying the problem and developing new services in this area for some time. We are well prepared to meet new demands; we present sound knowledge, service quality, vast expertise and experience to help our clients in making right decisions.

In this issue of the magazine we are trying to say why we are worthy of your trust. We are presenting different angles of view, case studies, steps to be taken and potential hoops to be jumped through. Enjoy reading and we hope you will find the information helpful. Anyway, if you still wonder about our ability to provide the best solutions in the Ballast Water Management area, the title above is the answer!
New services

Remontowa well prepared for installation of Ballast Water Management systems

A “must have” solution...

- We are creating a dedicated multi-specialists team capable of providing complex solutions in the area of installing different types of Ballast Water Management systems onboard both existing ships and new ones - said Piotr Soyka, the President of the Supervisory Board of Remontowa SA.

The earliest form of ballast were stones, sand and similar, while today sophisticated tank systems are used to utilize the very water in which the ship operates. When the cargo hold is almost empty, a high volume (and weight) of water is pumped into the ballast tanks to compensate for the loss of cargo weight, to be released in the next port when new cargo is loaded.

This loading and releasing of seawater has recently been subject to much discussion, as it turns out that water moved from one end of the world to another has brought organisms which are not usually found in the target area. The introduction of such non-indigenous organisms have in certain cases upset local ecosystems, with potentially disastrous results.

To prevent the above situation, the International Maritime Organisation (IMO)
The Knutsen developed KBAL™ ballast water treatment system was installed onboard shuttle tanker Gijon Knutsen in 2011.
adopted the Global Ballast Water Convention in 2004, which clearly states how ballast water should be treated before release into the sea. Vessels built prior to 2009 should comply with the convention latest 2014 or 2016, depending on the ballast water capacity of the vessel, while vessels built during or after 2009 have to comply immediately. The Convention is at the moment ratified by 27 states. The convention will enter into force 12 months after ratification by 30 States, representing 35 per cent of world merchant shipping tonnage.

In order to support this demand, various companies have developed their own Ballast Water Treatment systems. There are several solutions available on the market. Remontowa S.A. has proven its vast capabilities in applying new technologies onboard repaired, converted or upgraded ships on many occasions. Remontowa is ready to assist ship operators in choosing and installation of the best solution suiting their ships and requirements.

Remontowa News (RN) asked a representative of Remontowa Marine Design & Consulting (RMDC) about his opinion about an actual schedule of WBM Convention, signed in London 2004, implementation.

Witold Żylicz, member of the board at RMDC: - All experts say that the International Convention for the Control and Management of Ships’ Ballast Water and Sediments (in short WBM Convention) will enter into force in 2012. Some are even of the opinion that it will happen at the beginning of the year.

RN: - What does it mean for shipowners?
WŻ: - If this happens practically all water ballasted ships flying flag and calling ports of signatory countries will have to be provided within 12 months with a certified Ballast Water Management Plan and with Ballast Water Management Plan. Furthermore all ships the keels of which have been laid after 2009 will be obliged to obtain permanent WBT systems. Only older ships will have a transitory period allowing for water ballast exchange in deep water till 2015 -2017 depending on capacity of ballast tanks. The peak will be a little flattened as one can also imagine for a certain time ships flying flags and calling ports of non signatory countries.

RN: - What about US regulations?
WŻ: - US signaled the will to introduce even more stringent requirements. This created some confusion and slowed down the IMO convention enforcement. However it seems that it will not stop IMO convention from implementation. The technology is there, there are type approved suppliers, testing methods have been agreed. On the other hand enforcement of US owns regulations will have a big impact and sooner or later will increase the expected peak. On the other hand most of the WBT suppliers are already today observing the development in US and trying to anticipate the future requirements.

RN: - Many ship-owners are applying a sort of wait and see policy...
WŻ: - Yes, this is what many are doing. Some think about selling vessels, scrapping them, even about decreasing their ballast capacity. Other still hope that the convention will never enter into force and that uncertainty with US regulations will further slow down implementation of IMO Convention. Nevertheless if IMO convention enters into force there will be abt. 57 000 existing vessels in the world.
Specification of KBAL installation onboard shuttle tanker Gijon Knutsen at Remontowa S.A.

Ballast Water Treatment system case study

The deck house including strainer, reactor and UV lamps, control systems and power supply for the UV lamps prefabricated and delivered to shipyard prior to installation.

The installation of the KBAL system consists of the following items:

- Insert of T-section and a new DN 350 hydraulic operated valve on the existing ballast system. The T-section will be inserted on the level above the ballast pumps, see sketch of pump room arrangement.
- New DN 350 piping from pump room to main deck approx 25 m with three deck penetrations.
- Staging for new piping from pump room to main deck.
- Insert of one hydraulic driven booster pump on the new piping from pump room to main deck. The pump will be located on the first level above existing ballast pumps.
- Insert of one DN 350 hydraulic operated valves in front of the booster pump and one DN 200 check valve for bypass of booster pump.
- Piping from penetration main deck via prefabricated strainer to deckhouse located at fame 48 and 49.
- Installation of prefabricated deckhouse approx 5,1 m above main deck, framework under deck house is part of yards scope.
- Installation of prefabricated platform on the deck house.
- Insert of new DN 350 pipe from deck house to the pump room. The pipe will end approx 11,5 m above the bottom of the vessel.
- Staging for new piping.
- Installation of a DN 350 T-section and two DN 350 hydraulic operated positioning valves at the end of the pipe in the pump room routing the water either to BWT 8 P or over board through a penetration in the hull.
- Piping connecting BWT 8 P to the bottom distribution lines including two DN 350 hydraulic operated valves for the bottom distribution lines.
- One hydraulic driven inline distribution pump and one DN 350 check valve to distribute the water via new piping from BWT 8 P via bottom distribution lines to the ballast tanks. The distribution pump will be located in the pump room.
- Power supply to deck house 440 V.

which will have to be provided with WBT systems. It is estimated that total related market until 2020 will be worth USD 30 billion in total. Most probably the value does not include the cost of installation and conversions. The boom will last till about 2020. The highest peak is expected to be in 2017 when as much as 17 000 vessels would be affected by regulations. The wait and see policy will obviously aggravate the future congestion both with regard to repair shipyards and WBT systems. Just to illustrate where we are one should say that in November 2011 there were already 30 countries which accepted the convention and their fleet represented just under 30 % of the world’s fleet tonnage. This means that to make the break even it would be enough if only one country with large fleet would join. Rumours are that Panama and Denmark will do it in the nearest future.

RN: - How is Remontowa Group preparing itself for this situation?
WŻ: - Remontowa Group has been already preparing itself for the development for some time. It is one of Europe’s largest and most experienced shiprepair yards with a lot of resources and capabilities. To meet the challenge the company created a dedicated multi-specialist team of engineers who discussed the issue with major WBT suppliers and prepared necessary documentation. From the practical side the yard has a track record in installing different types of WBT systems on board existing and newbuild vessels. It also has many years of experience in large conversions so this type of job is not anything new for REMONTOWA Group from both technical as well as organization and project management point of view.

RN: - Could you provide more details about the offer of Remontowa Group in the area of WBT systems, please?
WŻ: - After an internal discussion it was accepted that the best way of acting would be to offer full range of services at all stages of decision making and let the ship-owners decide what is most suitable for them. We see three different development scenarios:

- Some ship-owners are preparing themselves very carefully, make their precise choice and come to shipyard with a ready solution and purchased WBT system elements. For them Remontowa Shiprepair Yard can offer preparation of workshop drawings and installation of WBT systems in its premises during classification repairs or conversions.
- Some owners would for sure like to economise on derouting their vessels
Classification societies’ contribution

Zbigniew Andrusztkiewicz, member of the Board of Remontowa SA, has interviewed Andre Duettchern from the Department of Maritime Systems and Components, System Engineering of Germanischer Lloyd, asking him for a view of a classification society.

Z.A.: - When the International Convention for the Control and Management of Ship’s Ballast Water and Sediments can enter into force?

A.D.: - The entry into force of the International Convention for the Control and Management of Ship’s Ballast Water and Sediments (BWM Convention) comes ever closer. Thirty countries have now signed up and only the minimum tonnage requirement of 35% needs to be met - tonnage currently stands at 28%. If the convention does not enter into force in 2011, the schedule for the application of the Convention for some newbuildings could potentially be amended by the IMO. Vessels already in service are not affected by this, as the installation deadline depends on the class period of each vessel. However, owners who are well prepared for the entry into force might do well to consider shifting class periods to earlier dates. This will allow them to finish the intermediate class renewal survey before the BWM Convention comes into force.

Z.A.: - What can classification societies contribute to the process of retrofitting Ballast Water Management Systems?

A.D.: - The installation and retrofitting of BWMS is an area where the processes are under constant development. Not only shipyards, but Class and the manufacturers of BWMS gain new experience with every project brought to completion. The BWM Convention and the various national standards for BWM will have a wide ranging effect on the maritime industry. It is hoped that in sharing the experience that GL has developed from the approval process, in particular in the review of the documents associated with retrofitting, that ship owners can benefit from a smoother approval process.

GL has updated its “Instructions to Surveyors” and the list of survey items for BWMS has been finalised. While GL has not yet issued its own rules on BWMS systems, GL published a model booklet on effective ballast water management this year. Presently GL reviews BWT documents based on its existing rules and, of course, following the BWM Convention as amended.

Z.A.: - What does the Approval Process look like?

A.D.: - Every ballast water treatment system must be type approved by the Flag State Administration. Systems not using active substances only require Flag state approval after land based testing and ship board trials. Systems with active substances also require IMO approval of the environmental impact of the discharged ballast water.

Germanischer Lloyd (GL) has already approved several BWMS from various manufacturers for use in both retrofits and or do the job between necessary dockings. In this case Remontowa Marine Service (RMS) intends to install simpler WBT systems during sea journey using its experienced flying squads or by their oversees departments like the one recently created in Namibia. WBT elements as well as piping spools, foundations, the latter two designed and prefabricated in Poland, could be sent to chosen ports for installation. Moreover RMS is now negotiating with some WBT suppliers to be their authorized representative.

Other owners would probably like to study the issue before decision taking or may not have enough technical department to do it. Such owners may seek technical advice with specialists. For them RMDC can offer consulting services at the pre-contract phase.

RN: - Do you really think that a shiprepair yard can be a valuable consultant to ship-owners in this respect? Is the advice of WBT system suppliers or classification society not enough?

WŻ: - There are maybe some 20 WBT system suppliers on the market with IMO type approvals. Further 30 or 40 new ones will come in the nearest future as their systems are in different approval stages. The variety of systems offered is extraordinary. All WBT suppliers are obviously marketing their products. Nevertheless believe me that there are no universal systems good for all types, sizes, navigation waters and routes of ships. The principles of applied filtering and disinfection methods are different. These are usually different combinations of mechanical filtering with physical or chemical disinfection.

RN: - Could you be more explicit? What would be the by-costs for shipowner?

WŻ: - Let me give you an example. The most common disinfection systems are using UV lamps. It fits well to vessels that have enough electric power. In case the vessels which do not have spare electric power installation of UV disinfection may cost a lot because additional generating set would be needed. Someone has to check power balance, head of ballast pumps as well as space available for installation. Some ship operators may decide to use a chemical disinfection system - very cheap in installation but more expensive in operation or other system which does not require a lot of extra electric energy. This example shows how important it is, from the ship-owner’s point of view, to choose the optimum type of WBT system. The advice of an experienced multi-specialist ship design and conversion office like RMDC could therefore be really worth trying.

Remontowa is well prepared to meet the new demands discussed above. Combination of products of leading companies providing Ballast Water Treatment technology solutions and service quality as well as vast expertise and experience of the Gdansk based yard are the answer to today’s demands of regulations and the environment protection and just another reason to choose Remontowa S.A. shiprepair yard...
newbuilt vessels for different ship types. However, for most systems the final inspection (commissioning) is still pending, or has not been carried out because as this is not yet mandatory.

As the IMO test specifications do not include several tests which are required by GL for classification, GL must often request confirmation of conformity with class requirements. This can be fulfilled by submitting the corresponding test reports, for example those issued by another recognised organisation. Thus, it is recommended that manufacturers of BWTS apply for general GL approval as soon as possible to speed up the review of ship specific documents later on. However, general approval by other IACS classes will be considered during our review, if these are available.

Z.A.: - How can you help ship owners to save their time and money when implementing BWTM?

A.D: - In undertaking the review of documents for a number of BWTM retrofitting projects GL has noted a number of areas where time and expense can be saved. These are common road-blocks which can be easily avoided, when all parties are aware of the issues before the classification process is underway.

- In several projects the party responsible for coordination between all of the project partners (the owner, ship yard, design office, system supplier, etc.) has not been specified. This can lead to circular communication, delays and waste, when the correct contact for a question cannot be found.
- The isometrics of retrofit pipes are submitted with incomplete documentation. For example an IMO approved operation manual, or the calculation of max pump capacity considering the NSPH (Net Positive Suction Head) (available) value, by draught or wing tanks, to meet the TRC (treatment rated capacity) of the BWMS.
- The implementation in the ship’s environment is not documented, or the information is not sufficient when considered in the terms of the requirements for the installation location, e.g. explosion protection, ventilation, gas detection, storage of chemicals onboard, the effects on electrical load balance and engine room arrangement plan, interface to the alarm and monitoring system as already fitted, etc.
- Scaling models are missing for a BWMS which is IMO approved for a specific TRC, when in the case of a retrofit with this BWMS three times the capacity is required.

In all of these cases requesting further documents and following-up on these requests can be very time consuming. In the future, more widespread IACS class approvals of BWMS systems by more manufacturers and greater general availability of approved scaling models should help to eliminate many of these problems. In the meantime however being forewarned is forearmed and better preparation and communication can help to smooth the process.

To consult on your Ballast Water Treatment systems requirements contact the expert: Dariusz Dziedziul Dariusz.Dziedziul@remontowa.com.pl Mobile: (+48) 500 052 888

Remontowa contact

Over 100 yard experienced naval architects, marine engineers and electricians. Highest design standard for conversions, newbuildings and offshore. First class consultancy in naval architecture and marine engineering. Expertise in environment friendly solutions for existing ships:

- Ballast water treatment systems,
- Exhaust gas emission control systems,
- ER conversions from conventional fuel to LNG/DF.

We provide you with full technical solution: from preparing concept design, class and workshop documentations to overseeing during conversion.

For inquire please contact us on:

Tel: +48 58 307 13 50, Fax: +48 58 307 11 58
E-mail: Rmdc@remontowa.com.pl
Na Ostrowiu 1, 80-958 Gdansk, Poland
Thus, Remontowa, after receiving appropriate state concessions, is ready to acquire naval sector orders.

- Certification audit consisted of two stages - reports Radziśław Kilianowski, quality management system specialist. - The first one took place on May 20, 2011. At that time documentation of the Quality Assurance System (so-called „Quality Assurance Book”), procedures, etc. were verified. To achieve positive verification, some 30 procedures and instructions of the Quality Assurance System had been updated and new procedure developed for execution of naval contracts (QP-9.0.01).

Quality Assurance System conforming to requirements of AQAP-2110 may be described as a kind of amendment of existing QA system - in line with ISO 9001 requirements - working for years at the company. Where NATO requirements arise or add up, AQAP provides additional requirements on top of those of ISO 9001.

After several months of extensive preparations, Remontowa S.A. has been awarded with AQAP-2110 certificate. This results in Remontowa shiprepair conforming to NATO requirements in regard of execution of navy ships repair contracts.

Ready for naval orders

Polish warships during naval and air parade of Polish Navy Day, on 6th June 2011.
Obviously, the mentioned final audit was preceded by internal audits in six areas, including risk management at the stage of design and execution of contracts, quality management, etc.

The second stage of the certification audit was the review of the whole Quality Assurance System in Remontowa S.A. The audit has been carried out by four auditors from ZSJiZ. The audit has covered most of organization areas or departments at the yard, including commercial offices, production technology office, chief welder dept., chief of repairs coordination, chief of infrastructure, the manager for cooperation and supplies, administrators of IT systems, chief naval architects and marine engineers dept., etc.

The final stage of certification audit resulted in awarding Remontowa S.A. with a certificate of AQAP 2110 compliant Quality Assurance System in July 2011. Among strong points in Remontowa’s Quality Assurance System, such virtues have been quoted as strong commitment of the managers, surveying of the customer satisfaction, production supervision and supervision of service providing.

Now, Remontowa is able to compete for and sign naval contracts and to execute them after receiving a concession from the Ministry of Internal Affairs.

About AQAP

AQAP - Allied Quality Assurance Publication. NATO's standardization documents specify the requirements regarding the supply quality system, set forth by at least half of the NATO countries (the STANAG agreement). These are documents, which specify the requirements for military supplies’ contract. They do not specify the requirements for a good or process. The legal basis of AQAP requirements are NATO’s standardization documents - STANAG 4107.

Possession of an AQAP certificate (Allied Quality Assurance Publication) is required in enterprises, which manufacture goods or render services within the frames of the Government Quality Assurance process (GQA). However, according to MON’s (Ministry of Defense) policy, an AQAP certificate may be demanded from suppliers rendering their services or producing for the Military. This is why it is worth implementing the AQAP system, if the company is interested in producing for and supplying the Military, in the case of willingness to acquire new contracts, or to maintain the previous deliveries for the Military. The AQAP standard will be demanded from all companies cooperating with the military more and more often.

Since the establishment of the North Atlantic Treaty Organisation, NATO countries have been supervising the quality of delivered products. It also involves systems functioning in supplying organizations. Such requirements were included in standardization documents of particular countries and were attached to signed contracts (for example: American standards - MIL-STD Military Standard, British Standard - BS or NATO publications - AQAP - Allied Quality Assurance Publication).

In 1987, when ISO 9000 standards were published, NATO countries decided to adapt these standards as a basis for NATO publications concerning quality management systems for suppliers. Basing on ISO standards’ structure and requirements, new editions of AQAP were published. The 2003 amendment of AQAP is based on a model of ISO 9001:2000 standard. Since AQAP publications are mainly used as contract documents, the requirements haven’t been replaced by a single document. According to the old philosophy of ISO 9000 standards of 1994, the scope of applications remains divided. All the other characteristics of a new approach to quality management according to ISO 9001:2000 have been fully applied.

In 2005, a new AQAP 2105 concerning regulations for developing quality plans was developed. In 2006 and 2009 were made another AQAP amendments.

For monitoring quality assurance systems for suppliers, NATO countries have to comply with: STANAG 4107, edition 7 - which defines monitoring regulations for a delivery quality management system called GQA - Government Quality Assurance and introduces AQAP publications.

The main NATO objective in quality management of supplies is to implement such a system where particular countries would be able to produce and supply a safe, reliable and economical product for military purposes. In order to achieve this objective, the following quality policy has been developed which assumes that:

- all parties involved are responsible for the product quality. It refers to User, Purchaser, Supplier and GQA Supervising Staff throughout the life cycle of a product.
- the risk connected with the realization of the contract, which is the basis for a decision on conducting the process of Government Quality Assurance (GQA), is estimated and monitored. Supplier has the main role in the system. The Supplier's quality management system should be implemented in compliance with a proper contract-type AQAP.

The certificate was awarded by ZSJiZ (Polish Bureau for Military Standardization Service - the Department of Management and Quality Systems).
Built at Gdynia Shipyard in 1998...

Container ship *National Glory*, proudly carrying US national colors on a funnel stack (livery of National Shipping of America of San Francisco - the owner of the ship), after a thorough renewal at Remontowa, left the yard around mid December 2011. The ship flies the American flag, and is homeported in Wilmington. The ship, technically oper-

US operated vessels are not the most common visitors to the Baltic, and thus - to Baltic yards. However, the fourth week of November saw arrival of another American owned and operated vessel to Remontowa.

*National Glory* from US market
One of the project leaders Robert Hoefta (on the left) and Andrzej Szadziński - the American market office manager.

National Glory moored at the Remontowa’s quay.

Crowley Technical Management, is 149.1 meters long, 22 m wide and drawing 9 m, with a capacity of 570 TEUs.

Crowley Technical Management is part of one of the largest and best known American maritime companies. Crowley Maritime Corporation is a US-owned and operated marine solutions, transportation and logistics company providing services in domestic and international markets through six operating lines of business: Puerto Rico/Caribbean liner services, Latin America liner services, logistics, marine contract solutions, ship salvage, deep sea petroleum transportation, and petroleum transportation, distribution and sales in Alaska. The company’s more than USD 1.5 billion in annual revenues is achieved with a team of approximately 5000 employees. Crowley Maritime Corporation maintains a fleet of some 200 vessels, consisting of ro-ro and lo-lo vessels, tankers, tugs and barges.
Extensive range of works carried out on the ship brought to Remontowa by Crowley Technical Management included class renewal repairs as well as maintenance of the hull (with replacement of 30 tons of ship’s steel structure, cleaning and painting the hull), dismantling, repairs and painting of the hatch covers, repairs of main propulsion engine and bow thruster. Furthermore, the cargo carrying capacity was upgraded by installation of new reefer plugs (increase of the number of electric sockets for refrigerated containers).

Perhaps the most complex part was a four-blade propeller repair, supervised by inspectors of the U.S. classification society American Bureau of Shipping. After disassembling it was transported to the workshop, where the two wings had tips reconstructed and small cracks and corrosion defects were removed by weld filling. After pitch measurements and balance tests, the propeller was installed back on its place.

- We have seen this ship operating on the Baltic as a feeder recently...
- The ship was chartered to APL and run on the Hamburg, Bremerhaven, Kiel and Klaipeda loop.
- I understand this is your first time at Polish yard. What was the decisive factor behind choosing just this yard - Remontowa?...
- There were several reasons. The primary factor was that Remontowa was the best bidder with competitive offer. Also the ship was built in Poland. The added bonus to coming here. Some plans and documentation was available in Polish only, or with Polish language handwritten remarks.

- The ship was converted before and has quite an interesting history?...
- Yes, she was originally a break-bulk (or a multipurpose cargo vessel). During 2007-2009 she was converted in Chinese shipyard. After conversion she became a container ship.

The ship, built at Gdynia Shipyard in 1998, was bought out of a drug auction (she was seized and put in auction by the U.S. authorities, because the ship was used to carry drugs under one of the previous owners), so that was a bargain purchase. After all she has been in several shipyards meanwhile. After purchase at auction she was taken for minor repairs in USA, to make her seaworthy, then she was in Mexico, to end up in Chinese shipyard for conversion for some year and a half. Here, as we uncover various things - we experience a lot of surprises. Apparently there was a lot work done in China, that was not done to a very good standard.

- So you hope to fix a lot of these things here, in Poland, I understand...
- Our primary focus is to have all the work that’s being done here, done to a highest standards. The company that I work for has many other ships that have to go to yards for overhauls to meet regulatory requirements and we now have to take a closer look at this shipyard. This yard has the proper price and facilities. We did not know much about it, but we pleasantly surprised by seeing the facilities Remontowa has.

- Tell me please, a few words about your company and the fleet.
- We are Crowley Technical Management. We are located in Jacksonville, Florida. We manage ships for other companies. Basically we take care of crewing, maintenance and operation. We have several different companies as our Clients with varying amount of ships, but right now we manage some 16-18 vessels. I think we got another one recently, so it is a growing division of Crowley.

- So we may have hope to see more ships managed by your company coming to Remontowa in future?...
- Remontowa has been very responsive in a bidding process as well as during the stay of the ship at the yard. We are happy with daily working contacts with project managers Dawid Piaskowski and Robert Hoefta, as well as other people from the yard we deal with, especially the American market office manager Andrzej Szadziński.

- Thank you for conversation.
We met and talked to Janis Jarmakovics, fleet superintendent at V. Ships U.K., just after he had finished dealing with Sichem Mumbai - another chemical tanker serviced by Remontowa and before departing from the yard to take the only chance to enjoy a walk through a Fortunately sunny, as for this part of the year, Sopot - a lovely seaside resort located near to Gdansk. Within a few hours after conversation Mr. Jarmakovics was on his way home, but from what he was saying, we may assume we will be pleased to have an opportunity to see him again at Remontowa soon.

- What was the scope of works onboard Sichem Mumbai?
- We have ordered quite a wide scope of jobs to be done onboard this vessel. Main target was the renewal of tank epoxy coat-

About V.Ships

Formed in 1984, V.Ships is the leading supplier of independent ship management and related marine services to the global shipping industry. Currently, it supplies services to a fleet of over 1000 vessels and manages a crew roster of 24,000 staff.

V.Ships Ship Management is the world’s largest supplier of ship management services to a fleet of over 1000 vessels. The managed fleet comprises a broad range of vessel types including the three main asset classes, tankers, bulk carriers and containerships plus many specialized vessels including offshore vessels.
ing. Depending on wear of individual tanks’ coatings we have decided for a varying scope of tanks maintenance. In some tanks this was complete coating application, while in other tanks, there were spot and selected areas repairs applied only.

Another part of the project with Sichem Mumbai at Remontowa is 5-years class renewal overhaul and repairs. The yard has taken care of tailshaft, hull, some steel replacement jobs, machinery overhauls and repairs, etc. All in all this made the ship to stay at the yard for around 20 days and we are satisfied with timing of works - the yard was keeping the schedule.

- Is this the first ship for V.Ships at Remontowa?

- No, V.Ships UK takes care of the management of nearly 100 vessels and we already know Remontowa. However, when it comes to ships managed to this particular owner, Eitzen Chemical, this is the first ship at this Gdansk-based yard. They haven’t had experience with Remontowa and they have decided to try and bring vessel here.

- What are your experiences and impressions from co-operation with Remontowa?

- The prices are reasonable and the quality is satisfactory. From our side - we are satisfied with repair jobs done and quality offered by Remontowa. We are pleased with the way the people working with owner’s or ship manager’s representative are managed. We get full flexibility from the yard and 24-hours mobile phone availability for discussing current issues. Every question or request is dealt with and not left unsolved. As for the prices - Remontowa seems to understand the position of shipping companies and is able to show some... flexibility in this respect.

- So may we expect another chemical tanker managed by your company soon at Remontowa?

- Yes, our recommendation for the owner will be definitely to bring another vessel to Remontowa.

### About Eitzen

Eitzen Group, headquartered in Oslo, Norway, is the marketing name of a wide range of shipping and non-shipping activities represented by a number of companies, subsidiaries and affiliated entities world-wide.

One of the major divisions of the Group is Eitzen Chemical - one of the a leading marine chemical transportation companies with a total sailing fleet of more than eighty vessels, transporting a wide variety of cargoes such as organic chemicals, non-organic chemicals, clean and dirty petroleum products, vegetable oils and lube oils. The fleet consists of coated and stainless steel vessels ranging from 3,500 to 48,000 dwt, primarily designed for the transport of IMO II classified chemical cargoes.
On November 2, 2011, the LNG-fuelled ferry Landegode, to operate on the Bodo - Lofoten Islands service, touched the water for the first time. Spectacular sideways launching of a 96 m long hull weighing almost 2000 tons, marked the start of a new era in Norwegian shipowner’s history and ensures that the

The first “green” ferry for Norwegian owners touched the water.

In August 2010 Torghatten Nord won the contract from State Administration to operate ferry services lines in Vestfjorden region. The contract runs for ten years from 2013. To fulfill its commitment, one of the leading Norwegian ferry operators turned to REMONTOWA Group to build a series of state-of-the-art “green” ferries. The four ships will operate with LNG fuelled main propulsion plants.

About Torghatten Nord AS

Torghatten Nord AS is a company in Torghatten Group, 100% owned by Torghatten ASA. The company operates sea-going public transport routes with fast boats and ferries in Nordland and Troms. On 9 August 2010 the company signed the single largest contract in Norway, for ferry traffic across the Vestfjorden for 10 years from 2013. Vestfjorden is a vast fjord (bay) between Norway’s mainland and Lofoten Islands which are very popular among tourists.

The contract requires the construction of four new gas ferries (which have been ordered at REMONTOWA Shipbuilding SA) as well as the rebuilding of three existing vessels. The 10 year concession won covers two routes, where the new Gdansk built LNG ferries will be operated - namely Bodø-Moskenes and Bognes-Lådingen.

Besides the larger LNG fuelled ferries described here, the company is currently building four small ferries with a capacity of 16 and 21 cars respectively at “Remontowa” for delivery in 2011 and destined for operation in four routes in the Troms and Møre og Romsdal counties.

Photo: REMONTOWA Group
The company will soon offer a radically cleaner travel for passengers going to and from Lofoten according to Bjørn Laksforsmo - CEO, Torghatten Nord AS. *This is a technological leap forward for us and the region* - added Laksforsmo.

The ferry, after outfitting and finishing touches, is scheduled for delivery by mid 2012. All the four Vestfjord ferries will be operational in 2013.

Norwegian team supervising the construction in Gdansk includes future chief engineer of the Remontowa built LNG fuelled ferry Steinar Lekanger and project leader / manager Jan Egil Sletteng. *There has been an interesting time. And very nice. Poles are friendly and the country emerges not as a country with poor economy* - said Mr. Sletteng interviewed by Norwegian Radio.

The new ferries will be employed in high traffic density Norwegian waters. They will each take 80 up to 120 personal cars onboard and 390 passengers. The service speeds in two variations of the design (with main engines of varied power installed) will be 12 up to 19 knots.

### Principal characteristics of LNG fuelled ferries for Torghatten Nord AS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>length over all</td>
<td>93.00 m</td>
</tr>
<tr>
<td>beam</td>
<td>16.80 m</td>
</tr>
<tr>
<td>draught (approx.)</td>
<td>3.70 m</td>
</tr>
<tr>
<td>deadweight (approx.)</td>
<td>650 t</td>
</tr>
<tr>
<td>GT</td>
<td>4286</td>
</tr>
<tr>
<td>NT</td>
<td>1286</td>
</tr>
<tr>
<td>personal cars capacity</td>
<td>120 units</td>
</tr>
<tr>
<td>trailers / trucks</td>
<td>12 units</td>
</tr>
<tr>
<td>combination</td>
<td>12 trailers/trucks and 46 personal cars</td>
</tr>
<tr>
<td>lower car deck free height</td>
<td>2.50 m</td>
</tr>
<tr>
<td>upper car deck free height</td>
<td>4.50 m</td>
</tr>
<tr>
<td>bow ramp width</td>
<td>5.50 m</td>
</tr>
<tr>
<td>stern ramp width</td>
<td>11.50 m</td>
</tr>
<tr>
<td>internal ramp width</td>
<td>3.00 m</td>
</tr>
</tbody>
</table>

Read the full story of LNG powered vessels built at Remontowa Grup in RemontowaNews, issue no. 1/2011.
Who is who

Chairman of the Supervisory Board
Mr. Piotr Soyka

Chairman of the Board
Mr. Jarosław Flont

Member of the Board (Commercial Affairs)
Mr. Zbigniew Andruszkiewicz

Member of the Board (Production Affairs)
Mr. Adam Ruszkowski

Company Address:
Gdańsk Shiprepair Yard "Remontowa" S.A.
80-958 Gdańsk
ul. Na Ostrowiu 1, Poland

Contact:
Commercial affairs
phone (+48 58) 307 16 00
fax (+48 58) 301 25 32
e-mail: zbigniew.andruszkiewicz@remontowa.com.pl

More details:
www.remontowa.com.pl

Commercial Offices

American Market Office:
United States of America, Canada, South America.
Manager: Andrzej Szadziński
tel. (+48 58) 307 26 26
mobile (+48) 506 441 802
cell USA: (+1) 670 390 8339
e-mail: Andrzej.Szadzinski@remontowa.com.pl

British Market Office:
United Kingdom, Irish Republic.
Manager: Dawid Paskowski
tel. (+48 58) 307 24 30
fax (+48 58) 301 12 81
mobile (+48) 516 007 230
e-mail: Dawid.Paskowski@remontowa.com.pl

German Market Office:
Germany, France, the Netherlands, Belgium, Switzerland.
Manager: Piotr Kubicz
tel. (+48 58) 307 19 64
fax (+48 58) 307 16 10
mobile (+48) 606 093 002
e-mail: Piotr.Kubicz@remontowa.com.pl

Mediterranean Market Office:
Greece, Cyprus, Turkey, Portugal, Spain, countries of the former Yugoslavia, Italy, Monaco, Algeria, Morocco.
Manager: Marcin Seroka
phone (+48 58) 307 23 66
fax (+48 58) 301 12 81
mobile (+48) 501 032 890
e-mail: Marcin.Seroka@remontowa.com.pl

Polish Market Office:
Poland, the Czech Republic, Slovakia.
Manager: Hubert Weher
tel. (+48 58) 307 16 23
fax (+48 58) 307 11 50
e-mail: Hubert.Weher@remontowa.com.pl

Russian Market Office:
Russia, Ukraine, Lithuania, Latvia, Estonia.
Manager: Zygmunr Czapiewski
tel. (+48 58) 307 26 53
fax (+48 58) 307 28 53
mobile (+48) 502 150 322
e-mail: Zygmunr.Czapiewski@remontowa.com.pl

Scandinavian Market Office:
Norway, Denmark, Sweden, Finland, Iceland, Singapore.
Manager: Marcin Madrallat
tel. (+48 58) 307 23 61
fax (+48 58) 307 19 10
mobile (+48) 515 179 047
e-mail: Marcin.Madralla@remontowa.com.pl

Conversion, Upgrades, Modification Office:
Manager: Marek Sokolowski
tel. (+48 58) 307 11 67
fax (+48 58) 307 28 67
mobile: (+48) 606 041 919
e-mail: Marek.Sokolowski@remontowa.com.pl

Navy Units Office:
Manager: Arkadiusz Kieda
tel. (+48 58) 307 14 26
fax (+48 58) 307 11 30
mobile: (+48) 509 255 429
e-mail: Arkadiusz.Kieda@remontowa.com.pl
All Types of Vessels and Offshore Units

REPAIRS
CONVERSIONS
MODIFICATIONS
UPGRADES
DRYDOCKINGS
MAINTENANCES

Gdańsk Shiprepair Yard „Remontowa” S.A.
Poland, 80-958 Gdańsk, Na Ostrowiu 1
tel. +4858 307 16 00
fax +4858 301 25 32
e-mail: remontowa@remontowa.com.pl
www.remontowa.com.pl