



## Famous icebreaking carrier

Ecosystem-friendly  
ships

Subsequent installations  
of ballast water treatment systems

Page 3

Berlin in Gdansk

First visit of the world's  
largest hybrid ferry

Page 7

Norwegian  
shuttle tankers

Giants in a specially  
prepared dock

Page 12



# Green retrofitting

According to a „Guide to Scrubbers & Ballast Water Treatment Systems” (BWT) developed by IHS Markit as of June 2019, there were as many as 54 such systems available in the market worldwide.

These solutions are based on various technologies of separation microorganisms from ballast water and further disinfection - mechanical (filtration, hydrocyclones), physical (ultrasounds, UV radiations, heat, cavitation, deoxygenation and coagulation) and chemical (chlorination, electro-chlorination, ozonation, chlorine dioxide, advanced oxidation).

Each solution has its pros and cons for each particular type of a ship. The cost of installation of a single BWT system is estimated roughly from USD500k to USD3 millions, depending on a ship type and is rising in line with the ship's size. Retrofitting the fleet of several dozen ships translates into dozens of USD millions.

When it comes to the amount of ships fitted (or retrofitted) with BWT systems in the global fleet, container ships (41%), followed by gas tankers (40%) and bulk carriers (36%) are the vessel types that have stepped onto the podium - according to data of IHS Markit. Other types of ships (e.g. tankers - 29%, ro-ro/car-carriers - 15%, cruise-ships - 9% or ferries - 1%) are at the back of the pack. However, the vessel's age plays a vital role in understanding the BWTS market.

As IHS Markit experts point out, except of ferries and ro-ro/car carriers, the younger the vessel is, the more likely it is to have been equipped with a BWT system. Among the vessels five years old, 82% of gas tankers, 74% of bulkers, 72% of tankers and 71% of boxships have been already fitted with BWT systems.

In the group of the vessels five to ten years old, 68% of container ships, 38% of gas tankers, 37% of bulk carriers and 33% of tankers have been equipped with BWT systems. For older tonnage (10-20 years old), the percentage is much lower. The vessels 25 years old require heavy costs to be spent on replacing large areas of steel and installing new machinery to make them seaworthy. That's why they have been hardly fitted with this technology so far.

However, there is still great number of ships that must be (retro)fitted with BWT systems to make them the IMO's BWM Convention compliant. Shipowners still need reliant equipment vendors and the shipyards with engineering expertise and vast experience in green retrofitting of existing ships.

Remontowa SA has been installing various BWT systems for over a decade. The number of such projects has been constantly increasing. In the 2nd quarter of 2019 we have retrofitted four ships and the further ones are waiting in line.

**Grzegorz Landowski**  
Editor-in-Chief



## 3 Ecosystem-friendly ships

Repairs and subsequent installations of ballast water treatment systems

## 7 Berlin in Gdansk

The world's largest hybrid ferry for the first time at Remontowa Shiprepair Yard SA

## 8 Dry-docking of the famous icebreaking carrier

From the Arctic to the largest repair yard in the Baltic

## 10 Second class survey of Nike

We welcome new Italian shipowner

## 12 Giants in a specially prepared dock

Norwegian shuttle tankers

## 14 Chemical tankers under class surveys

Ships of the Norwegian shipowner Utkilen Shipping AS

## 16 Vehicle carriers

City of Rome from the Nissan fleet and Malacca Highway of the Japanese shipowner

## 18 Restore power to engines...

Russian reefer ships supporting the fishing fleet

Remontowa Ship Repair News is a customer magazine of Remontowa Shiprepair Yard, member of Remontowa Holding SA

Publisher: PORTALMORSKI.PL Ltd., Na Ostrowiu 1, 80-958 Gdańsk, Poland.

Editor-in-Chief: Grzegorz Landowski. Phone: +48 58 307 17 90, e-mail: grzegorz.landowski@portalmorski.pl

The content of the magazine (with the exception of photos) may be reproduced provided the source.

**REMONTOWA**  
HOLDING



Searanger has been retrofitted with the SunRui BalClor® Ballast Water Management System at Remontowa SA.  
Photo: Sławomir Lewandowski



Repairs and subsequent installations  
of ballast water treatment systems

# Ecosystem-friendly ships

**The Remontowa Shiprepair Yard retrofits more and more ships with ballast water treatment systems to meet the new standards of cleanliness recommended by the International Maritime Organization (IMO). In the second quarter of 2019, such projects were carried out on another four ships of different types.**

The shipyard has extensive experience in the installation of ballast water treatment systems. The first one was installed as early as 2007. These systems are usually based on filtration and chemical (chlorine, chlorine dioxide, ozone) or physical (UV radiation, ultrasounds, cavitation) disinfection of the ballast water.

Due to the very large amount of ballast water and a relatively short time, in

which this water has to be retrieved or returned to the sea, these systems must be efficient and effective. Their operation consists in filtration of water retrieved into tanks to eliminate organisms larger than 50 micrometres, and then disinfection of water, which is to eliminate the remaining, smaller organisms. During the de-ballasting, only disinfection is required so that the water discharged out-



*Nestos* shortly before her departure from Remontowa SA.  
Photo: Marcin Koszałka



*Nestos* in the dock (in the foreground).  
In addition to the installation of the BWT system, a large scope of repair works was carried out on this ship.  
Photo: Marcin Koszałka

side the ship meets the IMO convention standards.

The *Searanger* crude oil tanker called at the Remontowa SA shipyard for the fourth time in a row. Previously, she was here in 2012 and 2016 for intermediate repairs and in 2014 - for class renewal. The vessel's shipowner is the Canadian company Valles Steamship from Vancouver, with which the shipyard has been maintaining very good business relations for years.

This time, *Searanger* came for the second special survey and the installation of the Ballast Water Treatment system.

The shipowner decided to use a very complex system on this ship. The installation required many modifications to the tanker's previous configuration, in order to adapt it to the installation of new devices, which were also plugged into the existing power supply system. Timely execution of the works required very good planning and prior prefabrication of many elements.







The shipyard installed the SunRui Bal-Clor® Ballast Water Management System on the ship. The solution consists of three sections. In the first one, a special filtering module stops microorganisms and particles larger than 50 micrometres. In the second one, electrochlorination takes place, treating the ballast water. The third section - water neutralisation - is triggered when the concentration of residual chlorine exceeds the permissible one set by the IMO standards.

Works on the installation of this system on the Canadian ship included assembly and welding the foundations for new devices, and then assembly of these devices, i.e. filters, pumps, modules for gathering and dispensing the disinfectant and devices for separation and discharge of the hydrogen, which arises as a result of the chemical reaction.

Additional works consisted, among others, in modifications of the pipeline system as well as laying the cables and making electrical connections of the BWT system equipment.

Apart from the installation of the BWT system, machinery overhauls, repairs and replacements were also carried out due to the class survey. The ship's hull was grit blasted, and painted.

The next ship on which the BWT system was installed was the Greek *Nestos* tanker.

It's one of the three sister vessels of the Pleiades Shipping shipowner from Athens (the other two are *Nedas* and *Xanthos*), which in recent years have been repaired at the Remontowa SA shipyard. Two years ago, the main issue on all three tankers was a modification of the bow mooring system. This time, the installation of the BWT system was the most important task on the *Nestos*.

First, it was necessary to prepare a place for components that were the "heart" of the entire system, i.e. the filter - located at the lowest level of the pump room - and the electric cell. It required the adaptation of parts of the engine room and pump room, among others by removing unnecessary elements or burning transport openings through the plating.

In addition to the "heart", the system also consists of new feed pumps with an entire piping system. Many works were related to the electrical and automation connection. The whole new system consists of about 20 new devices, including large filters, for which special utility holes were made.

In addition to the installation of the BWT system, a large scope of repair works was carried out on the *Nestos*. Steel was replaced on the plating and in ballast tanks along with the replacement of parts of the structure. The ship's tanks were modified,

*Navigator Scorpio* has been equipped at Remontowa SA with the BWT system manufactured by Alfa Laval.

Photo: Marcin Koszałka



The *Star Trust* reefer followed her sister-ship - *Star Stratos* in the installation of BWTS executed at Remontowa SA.  
Photo: Marcin Koszałka

including afterpeak, which was divided into three smaller tanks and a fuel tank on the starboard side, where a new bulkhead was inserted. It required alteration of the heating and fuel pipes and installation of new probes and alarms.

Over 300 metres of welds in the ship's plating were also repaired, a lot of steel replacements were also carried out in chain lockers.

During the ship's stay in the dock, the side valves were inspected and replaced, and the inspection and measurements on the propeller and rudder blade were carried out. Maintenance of the entire hull was also carried out, to which a new paint coating was applied - a total of about 14 thousand metres. In addition, the turbine, ballast pumps and valves were inspected, and the repair of the main engine was carried out.

The installation of the BWT system and renewal of the class were the main tasks on the *Navigator Scorpio* gas tanker, which came to the Remontowa SA shipyard for the second time. In 2014, it underwent her first class survey here.

The shipowner is Navigator Gas, which previously commissioned repairs of its ships here, such as: *Navigator Leo*, *Navigator Libra*, *Navigator Capricorn*, *Naviga-*

*tor Gusto*, *Navigator Genesis*. On the latter two, the shipyard workers also installed a BWT system in 2016 (manufacturer - Trojan Marinex, the system based on filtration and disinfection with UV radiation).

The *Navigator Scorpio* was equipped at the shipyard with the Alfa Laval manufacturer's system, the operation of which is also based on filtration and disinfection with UV radiation. The installation required preparing a suitable place in the engine room, where the devices and system components were assembled.

In addition to the retrofitting of the BWTS, also many other important repair works were carried out. The propeller shaft seals were replaced - classic oil ones were replaced with pneumatic ones, which involved the disassembly of the propeller shaft and the assembly of a new liner and new pipelines. In addition, a measuring system was installed to regulate the pressure in the expansion tank depending on the vessel's draft.

During the ship's stay in the dock, the main shaft and the intermediate shaft as well as the propeller were dismantled, and new bolts connecting the tail shaft with the intermediate one were installed.

A complete new fuel tanks heating system was built, including laying the insula-

tion); a large number of fuel tanks were cleaned; many modifications were made to the fuel system in the engine room and the existing fresh water cooling system; the main engine system was repaired and the bunker lines of the lubrication oil were modified; the hydraulic passages on the main deck were also replaced; a wide scope of steel work repairs as well as maintenance and painting works were also carried out.

The installation of the BWT system was also carried out on the *Star Stratos* reefer and its sister-ship *Star Trust*. On both ships the entire system was delivered by the shipowner in parts. The shipyard assembled and integrated all the components into one, made electrical connections and transported it to the ships.

On the *Star Stratos*, additional steel replacements in fuel tanks were carried out as well as the installation of new handles in the ship's holds to increase the load-fixing capacity. When the ship was in the dock, maintenance works and painting of the hull were carried out, also the tunnel thruster was replaced with a new one, provided by the shipowner.



## The world's largest hybrid ferry for the first time at the Remontowa Shiprepair Yard SA

# Berlin in Gdansk

**Berlin**, belonging to the shipowner Scandlines, is next to the **Copenhagen**, one of the world's two largest hybrid ferries, which combine the traditional diesel engine with battery power supply.

Both ships were first classed in 2016. At Remontowa SA the *Berlin* passed a docking survey, which involved carrying out the necessary renovations and repairs required for its further operation, which at the same time improved the comfort of passenger travel and the convenience of the crew's work.

An overhaul of box coolers in sea chests along with partial modification of their elements was carried out in the shipyard, and additional access hatches in four scrubbers as well as nozzle replacement structure were made. While the ship was

staying in the dock, the azimuth thruster was replaced, the bow thruster was overhauled, seals were placed on the propeller shaft and the damaged bulbous bow of the ferry was also repaired.

Seals were replaced on the bow and stern ramps, additional fenders were also mounted on the latter. Maintenance works were carried out on deck and in passenger spaces. The modifications concerned among others the stairs leading to the helideck in order to facilitate the transport of the wounded to the helicopter if necessary.

Numerous works on the scrubber system were also carried out, such as maintenance and cleaning of tanks, installation of a new automatic filter, replacement of a fan. The tanks for fresh (potable) and technical water, used in the scrubber, were also cleaned.

The *Berlin* like her sister-ship *Copenhagen* sail on the Rostock-Gedser route. These modern car-passenger ferries can take 96 heavy goods vehicles or 460 passenger cars on board. Scandlines offers 1300 seats for passengers during each cruise.

The *Berlin* hybrid ferry moored at the quay of Remontowa SA.  
Photo: Marcin Koszałka





From the Arctic to the largest  
repair yard in the Baltic...

# Dry-docking of the famous icebreaking carrier

***Nunavik* is a combined multipurpose vessel which can carry dry bulk, liquid fuel and containers. The ship has reinforced hull and is capable of navigating in severe Arctic conditions.**

Docking of the *Nunavik* with the assistance  
of tugs in Remontowa SA.  
**Photo: Sławomir Lewandowski**

She can crush ice up to 2 metres thick in the case of a solid ice cap and up to 12 metres of firm ice (the so-called ice-grain). This is enabled by the main propulsion power of 29,600 hp (which is 3 times higher than in the case of similar conventional bulk carriers) as well as a powerful rudder stock and an ice knife.

The ship was designed and built primarily to service liquid fuel for the mine and transport of ore concentrates from the Canadian mining company Nunavik Nickel Mine from the Deception Bay in the north part of Quebec. However, she also sails on the slightly warmer waters of Northern Europe. Most recently, the ship came



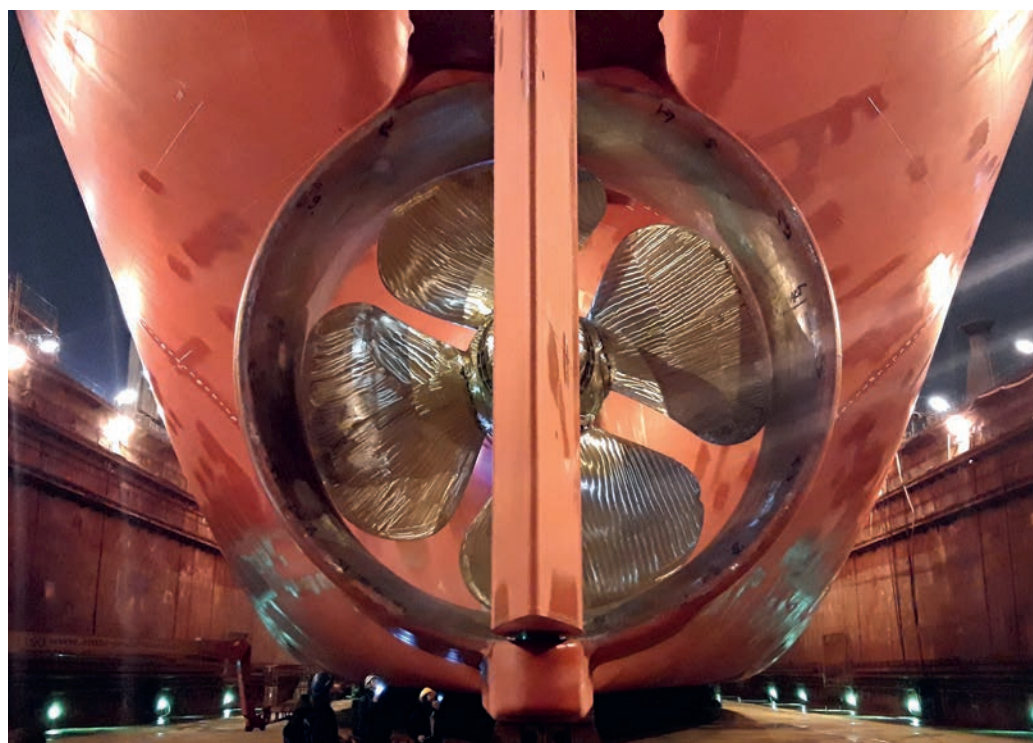


to the Remontowa SA shipyard for repairs that lasted one month.

The *Nunavik* arrived at the shipyard a week and a half before the planned docking. During the stay at the wharf, hull works that didn't require it to stay in the dock were carried out.

A large scope of works constituted repairs and modifications in ballast tanks, fixing cracks and reinforcing the structure. The next step was the repair of cracks in cargo oil hold. Although the ship is a bulk carrier, one of the holds is adequately equipped and adapted to transport cargo oil, just like on a tanker. Performing these repairs was a big challenge. Builders, hullers, scaffolding specialists and painters were needed at the location.

Another work that was done at the shipyard before docking the ship was repairing the damaged stern transom, since the ship was after a collision. In addition, the brackets and longitudinals were damaged in the afterpeak in the bottom and side sections. In the meantime, there were also smaller pipeline works carried out, as well as mod-



The huge propeller of the *Nunavik*.  
Photo: Krzysztof Dusiński

ifications of various systems, installation of steam heaters and a standard inspection and repair of chains.

The main reason of the bulk carrier coming to the Remontowa SA shipyard was the replacement of seals on the propeller blades. This stage of works began when the ship was already in the dock. According to the shipowner's wishes, the renovation had to take place without disassembly of the propeller and the propeller shaft, which was dictated primarily by technical requirements.

Therefore, a special structure was designed and built at the shipyard, which enabled the replacement of seals without taking the propeller outside the ship. The works were done by moving the propeller blades to the needed distance. It was very difficult because one of the propeller blades of this ship weighs about 7 tons and is almost 2 metres high. It was probably the largest and heaviest ship propeller repaired in the history of Remontowa SA shipyard, just as the huge rudder blade and the neighbouring nozzle.

After docking the bulk carrier, the shipyard specialists also repaired the cathodic and anodic protection strip and the rudder blade. A special Glass Flake coating, resistant to cold and impact of ice, was applied to the hull. The rudder blade section was in turn coated with Eco-Speed paint with a thickness of 1500 microns.

The *Nunavik* is the first ever cargo ship that alone, without the help of icebreakers, travelled in 2014 through the so-called Northwest Passage, sailing along the northern coasts and islands of Canada (the first two travels of cargo ships through the Northwest Passage took place in 2012 and 2013 with the assistance of icebreakers).

Built in Japan, belonging to the Canadian shipowner FedNav, the ship sailed that historical cruise with a cargo of 23 thousand tons of nickel ore, sailing from the Deception Bay in Canada to Bayuquan in China.

The Northern Sea Route is also known as the Northeast Passage. It's a route leading along the northern coast of Russia, from the Kara Gates to the Bering Strait. It's the shortest sea route connecting Europe and the Far East. The actual Northern Sea Route is about 3 thousand nautical miles long and compared to the route leading through the Suez Canal, it shortens the distance between Europe and the Far East by one-third.

The travel through the Northern Route is 40 percent shorter than the one leading through the Suez Canal. According to the shipowner, thanks to the shortening the shipping distance, the fuel consumption was reduced, which decreased the emission of greenhouse gases by 1300 tons.





We welcome new  
Italian shipowner to our yard

---

# Second class survey of *Nike*

The chemical tanker *Nike*, 122 metres long and 17 metres wide, repaired by the shipyard workers in June 2019, belongs to the Italian shipowner K-Ships S.r.l. from Genoa, which for the first time used the services of our shipyard.



The *Nike* chemical tanker owned by K-Ships from Genoa paid her first visit to Remontowa SA.  
Photo: Sławomir Lewandowski





The ship's crew and our team with the *Nike* behind.  
Photo: Sławomir Lewandowski

The scope of the repair included works related to the second special survey, including maintenance of the hull, which was sandblasted and coated with a Glass Flake paint. The key subject of the repair project were mechanical works on the main shaft, including disassembly of the propeller shaft, rudder blade, propeller hub and blades, as well as replacement of seals and numerous machining works of individual systems.

The shipyard also repaired the bow thruster, carried out a certain scope of steel replacements on the deck tunnel, as well as the scope of works on pipelines and P/V valves.

Another task was a comprehensive overhaul of the main engine, shaft generator, turbocharger and heat exchangers.

The scope of repair of the main engine included overhauls of cylinder covers, pistons, cylinder liners, the main and bottom end bearings.

Additionally, after consultation with the shipowner's representative, low-profile elements (SKF Vibracon) were installed between the alternator's foundation and bedplate. They are much more practical than the previously used chemically hardening screed (resin chock), which had to be restored during every inspection or repair. In the case of the solution used at the Remontowa SA shipyard, it will no longer be necessary.



## Norwegian shuttle tankers

# Giants in a specially prepared dock

**Teekay Shipping Norway AS is a well-known Norwegian operator of tankers, whose ships are often present at the Remontowa Shiprepair Yard SA. Among the vessels of this client that underwent repairs in the shipyard in the 2nd quarter of this year, there were two large shuttle tankers.**

In May, the shuttle tanker *Stena Natalita* arrived at the shipyard for a standard dry-docking and maintenance repair combined with a class survey.

It was the fourth intermediate survey of this ship since 2001. It's worth reminding that in 2016 the ship underwent at Remontowa SA her third special survey. The scope of the repairs carried out on the tanker at that time included, among others, overhauls of pumps, coolers, condensers and the main engine. Four tunnel thrusters (two bow and two stern ones) were disassembled then, which were inspected in the shipyard workshop.

An inspection of cargo tanks and cleaning of the tanks in the engine room was

also carried out. The scope of works also included the replacement of seals on controllable pitch propeller blades and repairs of steering gears, which were previously disassembled for this purpose.

This year, the tanker underwent the intermediate survey with a CAP (Condition Assessment Program) inspection. Its results entailed some steel works in cargo and ballast tanks. The shipyard workers also performed a large scope of pipeline works in various systems of the vessel, including works on the VOC (Volatile Organic Compounds) system along with the maintenance of the tank of this system. The propeller blades were also repaired on the vessel, which also underwent a traditional dry-docking and maintenance repair.

The *Peary Spirit* shuttle tanker departing from Remontowa SA.  
Photo: Marcin Koszałka







The works also covered the ship's engine room. Overhauls of the main and auxiliary engines, pumps and steam turbine were carried out, the vacuum condenser and coolers were also repaired.

Another shuttle tanker that underwent repairs at the Remontowa SA shipyard in the 2nd quarter of this year was *Peary Spirit*, flying the flag of the Bahamas. This is the sister vessel of the *Amundsen Spirit* and *Nansen Spirit* ships that were in this shipyard last year.

The shuttle tanker, built in 2011 in South Korea, arrived at the Remontowa SA shipyard for the so-called 2.5-years intermediate survey. In the case of this ship, conducting the repairs required special preparation of the dock.

Steel works in ballast and cargo tanks, works on pipelines, and an overhaul of electric motors were carried out on the tanker. The shipyard workers also performed an inspection of the BLS (Bow Loading System) – a system for loading crude oil from the oil field.

A large scope of works concerned the repair of three azimuth thrusters. To this end, the ship was dry-docked by placing it on specially prepared, elevated keel blocks. Such a special foundation allowed to obtain a greater clearance beneath the entire ship, necessary to carry out the repair of azimuth thrusters (under the supervision of the service).

After *Peary Spirit*, the shipyard also repaired another Explorer class tanker, belonging to the same shipowner - *Scott Spirit*.

In turn, at the end of June, the *Navion Oceania* shuttle tanker entered Remontowa SA. The repair project included e.g. overhauls of the main engines and electric motors, surveys of the tunnel thrusters, main shafts and propeller hubs, replacement of seals under the blades, hull maintenance, steel works in the cargo and ballast tanks and some piping works in the pump room and on the deck.

Newly painted *Navion Oceania* in the dock of Remontowa SA.  
Photo: Marcin Koszałka

*Stena Natalita* called at Remontowa SA for a standard dry-docking and maintenance repair combined with a class survey.  
Photo: Marcin Koszałka





Ships of the Norwegian shipowner  
Utkilen Shipping AS

# Chemical tankers under class surveys

***Susana S, Finnstraum and Kilstraum*** are the vessels of the Norwegian shipowner Utkilen Shipping AS repaired in recent years at Remontowa Shiprepair Yard SA. Earlier there were, among others: *Finnstraum, Fjellstraum, Fjordstraum, Solstraum, Lистраum, Sundstraum, Havstraum*.

*Susana S and Finnstraum*  
docked side by side in Remontowa SA.  
Photo: Marcin Koszałka

The three chemical/oil products tankers mentioned at the beginning have also been at Remontowa SA many times before. This year, these ships underwent class surveys in May and June. For a few days, *Susana S* and *Finnstraum* even stayed side by side in the docks. There was no shortage of tasks to be done on both ships, which were car-

ried out by the employees of shipyard departments.

The *Susana S* repairs included among others repairing the Becker type rudder blade, full inspection of the propeller hub along with machining of its components, as well as the complete overhaul of the tunnel thruster. In addition, the shipyard







*Kilstraum* moored at the front quay of Remontowa SA.  
Photo: Marcin Koszałka

repaired bow mooring rollers, two mooring winches, as well as hydraulic cylinders of davits for free fall lifeboat and a deck crane. Most of the works were carried out in workshops in the shipyard halls, after the prior dismantling of these devices from the ship.

One of the most important tasks was the complete overhaul of the main engine. Cleaning and inspection of heaters were also carried out, as well as repairs of generators and alternators. The latter were repaired at their locations, because their size made disassembly and transport to the workshop impossible. The scope of works in the engine room also included an inspection of fans and checking on the operation of GTR main circuit breakers. The wiring of all navigation lamps, including the connection boxes, was replaced.

The repairs of bottom and side fittings, boilers inspection, replacement of the fire protection system in the pipeline were also carried out, as well as draining, purging and rinsing of the thermal oil system. On the ship's deck, a part of the steam

system pipeline was replaced, along with insulating and sealing it with hot-applied polyurethane.

The modification of platforms on fore and aft masts, repairs in cargo and ballast tanks, replacement of watertight doors in the cargo control room and preparation of access openings to the ballast tanks that underwent maintenance - these are examples of other performed tasks.

The gangways and ladders were also repaired, the insulation in the fuel pipes was replaced, and load tests of the davits for the free fall lifeboat, the davit for provisions and the crane for operating the loading hose were carried out. The ship's hull and ballast tanks underwent maintenance and painting.

The *Finnstraum* tanker visited the Remontowa SA shipyard for a class renewal survey as well. Here, the most important item on the schedule was a very wide range of repairs of the main engine, in which several systems were replaced.

Inspection and renovation of windlass lifts for cranes and davits, repair of the

tunnel thruster, shaft sealing and replacement of the actuators on the cargo crane were also carried out. Cracks in the tanks were also repaired, including cargo and ballast ones. In addition, an inspection of the bottom and outboard fittings as well as work on pipelines in the afterpeak and on the cooling system were carried out. The ship's hull has been preserved and painted.

The *Kilstraum* tanker also underwent its class renewal survey in June 2019. The scope of the survey was extended i.a. to a comprehensive overhaul of the tunnel thruster. The hull of the ship was also cleaned and painted.

In June 2019, the *Doris* - another Utikilen-owned chemical tanker called at Remontowa SA for a repair project. The most important tasks executed on this ship were complete overhauls of the main engine and the tunnel thruster as well as works on the hub of the ship's controllable pitch propeller.





The vehicle carrier *City of Rome* departing from Remontowa SA.  
Photo: Marcin Koszałka

*City of Rome* from the Nissan fleet  
and *Malacca Highway* of the Japanese shipowner

# Vehicle carriers

***City of Rome* flies the colours of the Euro Marine Carrier B.V. (EMC) operator, whose ships are often in Gdansk with a car load. This vehicle carrier belongs to the Nissan sea fleet and is used in short-sea shipping to transport cars from the British factory to more than a dozen European cities.**

In recent years, several other ships of this shipowner have been repaired at the Remontowa Shiprepair Yard SA, each of which praises a certain European city, having the name "City of ...". Japanese shipyards specialise in the construction of

these vehicle carriers, among others Shin Kurushima shipyard from Tokyo, in which the *City of Rome* was built in 1994.

It's 100 metres long and 20 metres wide, which is the same as *City of Paris*, *City of Barcelona* and *City of Sunderland*



carriers repaired Remontowa SA this and last year.

It's also worth reminding that in 2018, two slightly larger units of the same shipowner were also repaired here: *City of Rotterdam* and *City of St. Petersburg*, which due to the unusual, rounded shape of the fore section of the hull always arouse great interest. The streamlined, semi-spherical bow of the ship – according to the constructors from Japan – reduces the ship's resistance – in comparison to conventionally built units, even by 50 percent. As a result, the annual fuel consumption leads to saving several hundred tons.

The vehicle carrier *City of Rome* is the second vessel of the British shipowner at the Remontowa SA shipyard this year (in January we repaired *City of Amsterdam*). The works included overhauls of electric motors, fans, coolers and auxiliary generators. The shipyard workers replaced the coolers on the main engine.

While the ship was in a dock, an inspection of the tail shaft along with the replacement of seals, as well as overhaul of the tunnel thruster and side valves were also carried out. There were also several inserts made in the plating, and maintenance of the ramps between car decks and the hull was carried out. The ship left the shipyard in April this year.

In turn, work on the vehicle carrier *Malacca Highway*, built in the Japanese shipyard Usaki Shipyard Co. Ltd., belonging to K-Line, included steel replacements on ramps and an overhaul of the main engine. Hull works on the side and stern ramp included steel repairs and replacement of pins and hinges.

The exhaust gas receiver was repaired, hydraulic pipes on the open deck were replaced, the boiler was cleaned, the valves on the boiler were inspected and the bottom and side fittings were repaired. The repair of the ship's anchors, which had significantly worn out holes in the anchor shanks, was carried out by welding up and machining.

A lot of work concerned the main engine. Overhauls of bearings, piston systems, air coolers and speed controller of the generator, as well as replacement of liners were just some of items on the schedule.

The repair also included a section of the carrier's superstructure, mainly the residential part. Works on the bridge, repairs of shower compartments and crew cabins, laying new floors, putting up new walls in bathrooms and a new ceiling in the kitchen - these are examples of such works. The repaired *Malacca Highway* left the shipyard in May this year.

*Malacca Highway* in the dock no. 4 of the Remontowa SA shipyard.  
Photo: Sławomir Lewandowski





## Russian reefer ships supporting the fishing fleet

# Restore power to engines...

**The fishing fleet service vessels belonging to the Russian shipowners regularly dock at the Remontowa Shiprepair Yard SA. Due to the purpose, construction and age of these units, their repairs require extreme carefulness and great precision.**

*Frio Murmansk* is a typical reefer ship with holds adapted to transporting both fish and bananas. Interestingly, this ship doesn't have typical ballast tanks - it uses fuel for ballasting. Even forepeak is a tank of drinking water. This vessel provides fuel for fishing ships working in fisheries and collects fish from them. Therefore, it's very important that the cargo space is as large as possible.

*Frio Murmansk* is the second refrigerated vessel that came to the shipyard in recent months. A large scope of works performed on this vessel concerned the main engine repair. This scope included the replacement of all cylinder liners as well as rebuilding the main engine's pistons and frames.



*Frio Vladivostok* with the newly painted hull in the Remontowa SA shipyard.  
Photo: Sławomir Lewandowski



In addition, the alternators of all emergency generators were repaired. These are quite old devices for which it is even difficult to bring in spare parts. In addition to the main engine repair, the hydraulic cylinders, anchor windlass and the electric motors were also repaired at the shipyard.

A similar scope of works was also carried out on the *Frio Vladivostok* reefer. In addition to the renovation of the main engine, the scope of hull works carried out was larger than on the above-mentioned *Frio Murmansk* ship. Hydraulic cylinders and two winches, including mooring and anchoring one on the bow, were repaired.

*Frio Murmansk* moored at the quay of Remontowa during the repair works.  
Photo: Sławomir Lewandowski



# **REMONTOWA**

**SHIPREPAIR YARD**



[www.remontowa.com.pl](http://www.remontowa.com.pl)



***YOUR SHIPYARD  
for GREEN TECHNOLOGIES***

***LNG FUEL SYSTEMS  
METHANOL FUEL SYSTEMS  
SCRUBBERS RETROFITS  
BALLAST WATER TREATMENT***

**MEMBER OF  
REMONTOWA  
HOLDING S.A.**





# REMONTOWA HOLDING

**REMONTOWA** | MEMBER OF  
SHIPREPAIR YARD REMONTOWA  
HOLDING S.A.

80-958 Gdansk  
ul. Na Ostrowiu 1  
Poland

[biuro@remontowaholding.pl](mailto:biuro@remontowaholding.pl)

[www.remontowaholding.pl](http://www.remontowaholding.pl)

## Board

Chief Executive Officer  
**Michał Habina**

Chief Commercial Officer  
**Marcin Seroka**

Chief Commercial Officer  
**Marek Sokołowski**

Chief Production Officer  
**Sławomir Ostrowski**

## Commercial Offices

### SCANDINAVIA SINGAPORE

Denmark, Finland,  
Norway, Sweden,  
Singapore  
Director: Marcin Madrala  
phone: (+48 58) 307 23 01  
fax: (+48 58) 307 19 10  
mobile: (+48) 515 178 047  
e-mail:  
[Marcin.Madrala@remontowa.com.pl](mailto:Marcin.Madrala@remontowa.com.pl)

### SHIP CONVERSIONS OFFSHORE PROJECTS

Director: Krzysztof Madrala  
tel. (48 58) 307 25 46  
fax (48 58) 307 25 29  
mobile: (+48) 502 160 176  
e-mail:  
[Krzysztof.Madrala@remontowa.com.pl](mailto:Krzysztof.Madrala@remontowa.com.pl)

### UNITED KINGDOM IRISH REPUBLIC FAR EAST

UNITED STATES  
CANADA  
SOUTH AMERICA  
Director: Dawid Piaskowski  
phone: (+48 58) 307 24 32  
fax: (+48 58) 301 12 81  
mobile: (+48) 515 087 260  
e-mail:  
[Dawid.Piaskowski@remontowa.com.pl](mailto:Dawid.Piaskowski@remontowa.com.pl)

### GERMANY

Manager: Karol Buczkowski  
phone: (+48 58) 307 23 66  
mobile: (+48) 503 681 887  
e-mail:  
[Karol.Buczkowski@remontowa.com.pl](mailto:Karol.Buczkowski@remontowa.com.pl)

### WESTERN EUROPE

France, the Netherlands,  
Belgium, Switzerland, Luxembourg  
Director: Piotr Kubicz  
phone: (+48 58) 307 19 64  
fax: (+48 58) 307 19 10  
mobile: (+48) 603 069 802  
e-mail:  
[Piotr.Kubicz@remontowa.com.pl](mailto:Piotr.Kubicz@remontowa.com.pl)

### ITALY, CROATIA, MONACO

Manager: Kamil Tamborowski  
phone: (+48 58) 307 17 69  
mobile: (+48) 511 859 197  
e-mail:  
[Kamil.Tamborowski@remontowa.com.pl](mailto:Kamil.Tamborowski@remontowa.com.pl)

### GREECE, CYPRUS, TURKEY

Greece, Cyprus, Turkey, Portugal,  
Spain, Montenegro, Algeria, Morocco  
Manager: Aleksander Walewski  
phone: (+48 58) 307 26 85  
fax: (+48 58) 301 12 81  
mobile: (+48) 508 394 732  
e-mail:  
[Aleksander.Walewski@remontowa.com.pl](mailto:Aleksander.Walewski@remontowa.com.pl)

### POLAND CZECH REPUBLIC SLOVAKIA

Manager: Piotr Radtke  
phone: (+48 58) 307 16 23  
fax: (+48 58) 307 19 10  
mobile: (+48) 515 170 837  
e-mail:  
[Piotr.Radtke@remontowa.com.pl](mailto:Piotr.Radtke@remontowa.com.pl)

### EASTERN EUROPE

Russia, Ukraine, Lithuania, Latvia, Estonia  
Manager: Zygmunt Czapiewski  
phone: (+48 58) 307 26 53  
fax: (+48 58) 307 28 53  
mobile: (+48) 502 160 322  
e-mail:  
[Zygmunt.Czapiewski@remontowa.com.pl](mailto:Zygmunt.Czapiewski@remontowa.com.pl)

### NAVY UNITS STEEL STRUCTURES

Manager: Arkadiusz Kieda  
phone: (48 58) 307 14 26  
fax: (48 58) 307 11 39  
mobile: (+48) 509 905 429  
e-mail:  
[Arkadiusz.Kieda@remontowa.com.pl](mailto:Arkadiusz.Kieda@remontowa.com.pl)

[www.remontowa.com.pl](http://www.remontowa.com.pl)