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Maritime Export Catalogue 2018/19

























































































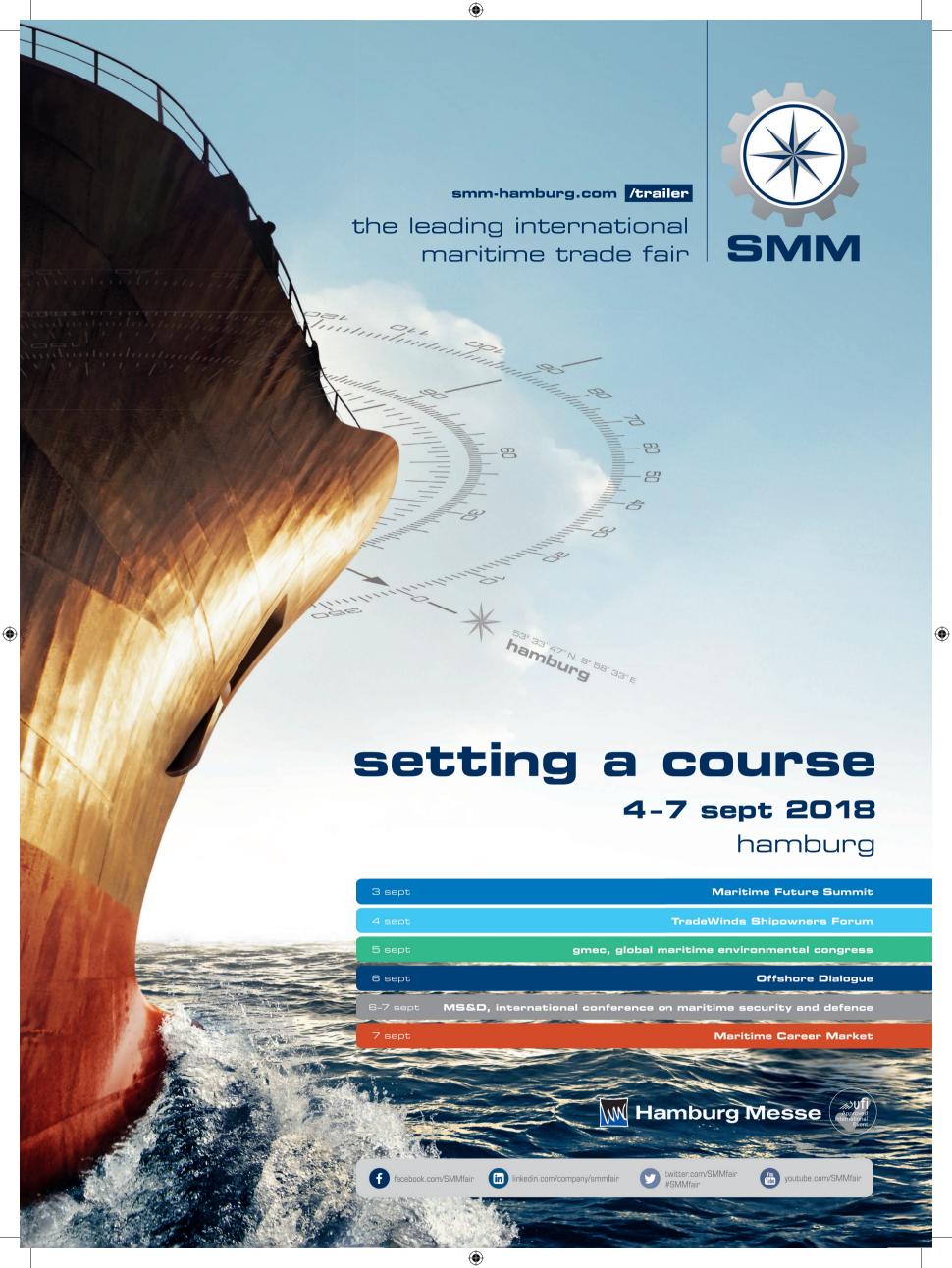


















For the current government, the maritime industry is one of the key branches of the national economy. The appointment of the Ministry of Maritime and Inland Navigation was one of the first decisions taken after the elections were won in 2015. Since its inception, a process of construction and reconstruction, and the creation of a new policy began related to the entire maritime sector. The concept of development and reconstruction was spread over many years, based on five main areas: shipbuilding, shipping, ports, fisheries, and maritime education.

The priority of the current government and the Ministry of Maritime and Inland Navigation is to create foundations for the development of the Polish maritime economy. This is equivalent to the recovery of shipbuilding and inland waterways, and to stabilizing the situation of fisheries, especially protecting coastal fisheries. One of the priorities of the Ministry is to build a shipping channel through the Vistula Spit. This project involves both an improvement in the safety of eastern areas of the country and the European Union, as well as economic development and tourism through the opening of the Vistula Lagoon and the ports of the Bay of Gdansk, and more broadly by entering the Via Carpatia transport corridor.

The Ministry has created a framework to facilitate entrepreneurial activity, and in such a way, it is designed to impact the maritime area. It naturally supports all initiatives that influence development, promote entrepreneurship, encourage activity, facilitate business contacts, and build the right business image.

Congratulations to the creators of the MarinePoland.com directory for the idea. I hope that the project fulfills the expectations of the initiators to effectively promote Poland and Polish companies on international markets.

Marek Gróbarczyk

Minister of Maritime and Inland Navigation









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The city of Gdańsk is over one thousand years old. This is where the mightiness of First Polish Republic was born. It was here that trade and cultural exchange has taken place when East met West and North met South. In this place one of the goriest wars in human history starter and the era of communism ended. Here, where the Motława River joins the Vistula River, a port was founded, which made the city the crown jewel of the Commonwealth of Poland. Today, the Port of Gdansk is the biggest port in Poland and one of the biggest ports in Europe.

Currently, the Port of Gdansk comprises of almost 680 hectares of land and over 400 hectares of water. The port water does not freeze during winter so the facility can operate all year long. Its geographic location in the heart of Europe and the universality of its terminals make it the Baltic window to the world. The Port of Gdansk is the only Polish port facility that can service the largest container ships in the world. The mighty vessels belonging to OOCL company call at DCT Gdańsk, the biggest container terminal in the Baltic Sea, twice a week.

Not only are our location and geographic conditions to our advantage, but also the awareness of importance and needs of our partners. Given that the Port of Gdansk is one of the few ports in Europe which still holds area that can be put to business use, we can venture to say that we are on an ambitious road to become the most significant port in the Baltic Sea and in Europe. That is why we are launching the biggest bespoke investment programme in our history that will perfectly match the needs of our contractors. We closed 2017 with over 40m tons of handled goods. Due to modernisation of the already-existing infrastructure and the development of new one we are hoping to achieve 100m tons within the next few years. The development of Central Port will contribute to it largely, since we are planning to turn about 500 hectares of the sea into land for the purposes of particular operators. It will be up to the market to decide what terminals are going to be developed in the port.

The Port of Gdansk is a strategic company for the Polish economy. About 18bn zlotys is paid into the government budget in the form of taxes, duties and excise tax annually. Using our potential, we put constant growth and international cooperation in the first place. Opening ourselves to the market we open ourselves to the needs of our contractors and the business and we look forward to cooperation with you.

Łukasz Greinke President of the Board of the Port of Gdansk









Last year we celebrated the 95th anniversary of founding the Port of Gdynia. It was also another record year regarding the volume of handled cargo which surpassed 21 million tonnes. Technological and economic challenges of the market encourage the Port of Gdynia to achieve even better business results and set further goals for development of the port. The implementation of development plans for the Port of Gdynia formulated in the company's strategy will enable the company maintain the versatile nature of the port and allow its handling of the largest ships calling at the Baltic Sea.

The year of 2018 is going to bring the Port of Gdynia numerous significant investments. The crucial ones involve continuation of building of a new public ferry terminal located at the port's Polish Quay which began at the end of last year and construction of a new port turning basin along with preparing port's infrastructure for calls of large oceanic vessels. Potential investors were also invited to participate in the Port of Gdynia's essential future investment - the Outer Port. As the project received approval from central authorities our company may undertake this ambitious task. Due to the fact that the Port of Gdynia is an important link on Corridor VI of the Trans-European Transport Network (TEN-T) increasing the accessibility of the port to improve its competitiveness is approached with great care. Efficient port accessibility is a great asset which effects may be noticeable in an increase in the volume of handled cargo and attracting capital investments. However, one cannot overestimate the significance of external operators' support in the process of the implementation of this extremely important, from the point of view of market objectives, task.

Thanks to the planned investments of the Port of Gdynia Authority S.A. for the years of 2018 - 2020 which amount to approx. PLN 1 billion, Port of Gdynia will be modernised. Coordinated development of port infrastructure will ensure its development as an intermodal logistics hub. This will allow Gdynia to remain among the most modern Baltic ports and maintain its strong port position in key cargo segments.

> Adam Meller President of the Managing Board / CEO Port of Gdynia Authority S.A.









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The maritime industry is by nature the most important sector of Gdynia's economy. It is owing to the development of port that the city was established and Gdynia bears that in mind. Our city has always been and will be facing the sea. Today we are talking about maritime industries, very different from the traditional perception of the sector just several decades ago. Innovations and ongoing development determine the strength of this economic sphere.

We are proud of the fact that Gdynia is a seat of many companies representing innovative sectors. They have access to the largest in Poland science and technology park. It is where students, graduates, scientists and experienced entrepreneurs put their ideas into practice.

Constructors' Park has opened at the premises of the former Gdynia Shipyard, where companies make use of the possibility of prototype testing and conducting implementation activities.

Every year we organize the Maritime Economy Forum which consolidates the entire maritime industry and facilitates business cooperation. The port in Gdynia is achieving the best results in its history, which inspires optimism and is a record to be proud of. We will keep on supporting the port in striving for the best possible accessibility and transhipment efficiency. Gdynia is sailing the right course!

Wojciech Szczurek
Mayor of Gdynia



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EDITOR MarinePoland.com

powered by top polish maritime website: www.GospodarkaMorska.pl office@marinepoland.com, www.marinepoland.com Wirtualne Firmy, Rajska 2, 80-850 Gdańsk (Poland)

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Polish shipyards

Polish shipyards are increasingly competing for customers, not only by price and quality, but also by high technology.

Despite the global crisis, Polish shipyards are improving. High quality of services, skill in finding a niche on the market, and various specializations have become a recipe for success. Polish shipyards have a great advantage over other shipyards due to qualified shipyard staff and infrastructure following shipbuilding success of the past. In addition, access to new technologies and excellent design facilities are also often an advantage. The combination of many years of shipbuilding traditions and experience with a focus on innovation, ecology and high specialization means that Poland is reentering the game on the European shipbuilding market. This is evidenced by the projects implemented in 2017, the most interesting of which are presented here.



Marco Polo from CRIST Shipyard

Marco Polo - an innovative dock from Gdynia will help in the expansion of the Principality of Monaco

In 2017, CRIST Shipyard completed the innovative floating dock Marco Polo, which will increase the area of the Principality of Monaco by 6 ha. The dock will be used for setting reinforced concrete caissons on the sea bed, which will then be used to build a modern housing estate. The unit with the shipyard construction number NB56 is 56.4 m long, 49.3 m wide and 25.5 m high to the upper deck, and its net weight is over 3000 t. The dock is equipped with two CATERPILLAR C32 Acert aggregates. Each of them has a V 874 kW 12-cylinder engine, with 1,500 rpm and a capacity of 32 l. These devices power the dock.

A construction equipped with its own drive can move in such a way to ensure that each element is attached under the water with the greatest precision. The innovative ballast and measurement system provides, among other benefits, continuous leveling of the unit, safety during work and protection against wind, waves and currents. Thanks to this, neither the dock nor the prefabricated foundations of modern apartment buildings will be damaged. Additionally, masts for feeding concrete, and optional cranes will be installed on the unit. CRIST Shipyard was responsible for developing the design of the unit, for its construction and for testing its operation.

A unique sailing ship for Algeria

Remontowa Shipbuilding Shipyard handed over an exceptional sailing ship to the Navy of Algeria. El Mellah is 110 m long, 14.5 m wide, and its surface is 3 000 m2. The speed of this sailing frigate with a wind gust strength of 6 degrees on the Beaufort scale is about 17 knots. Its tallest steel mast is 54 meters high. The third mast is also the chimney of the sailing ship. This way, the designers of Choreń Design & Consulting avoided the burdensome discharge of flue gas through the side exhausts located at deck level.

Thanks to the use of thrusters at the front and rear of the frigate, maneuvering is easy, in contrast to setting sail. With this operation, the Algerian cadets must rely on the strength of their own muscle.

"The Algerian" holds a crew of 222. The ship was ordered through a military company, Cenzin, specializing in the trade of military equipment and weapons. It will join the fleet of the Algerian Navy in order to strengthen the training system and crew practices.

Along with the commission of the frigate, the Algerian Navy also benefitted from the offer of comprehensive training for the crew by the commander of the Dar Mlodziezy and vice-rector of the Maritime University of Gdynia, Cpt. Henryk Sniegocki. Special training was provided for about 80 Algerian apprentices - officers, NCOs and seafarers. It consisted of a two-month theoretical course, two months of training on the Polish training frigate - Dar Mlodziezy, and then two months of training on the Algerian frigate.



El Mellah from Remontowa Shipbuilding Shipyard

"Kormoran" Naval Project

After many years, the first warship, ORP KORMORAN, was built and fully equipped in a Polish shipyard and was delivered to the Polish Navy. ORP "Kormoran" is the first in a series of three modern mine destroyers.





It was built by a consortium whose core consists of the Remontowa Shipbuilding Shipyard S.A. (leader) and Gdynia Research and Development Center of the Maritime Technology Center S.A.

The modern unit is 58.5 m long, 10.3 m wide, with a draft of 2.7 m and 850 t displacement. The hull is made of austenitic stainless steel, which reduces the detectability of the physical fields of the ship. It is equipped with sonars: undercut SHL-101 / TM and self-propelled, with a variable depth of draft SHL-300 on a Saab Double Eagle Mark III submarine. In addition, it has an autonomous submarine unit - Kongsberg Hugin, and a Polish remote-controlled underwater vehicle, Morswin, used to identify mine-like objects and destroy sea mines using remotely-activated explosive devices such as Toczek. Kormoran also has at its disposal a Polish remotecontrolled underwater vehicle, Gluptak, for single or multiple use.



Mine destroyers Kormoran

The ship's weaponry includes a 23-caliber ship cannon, Wróbel II, and three large-caliber 12.7 mm WKM-Bm machine guns, and two Grom anti-aircraft missile launchers. Its main tasks will include: combating and searching for sea mines, recognizing water tracks, escorting units through dangerous mine areas, laying mines, remotely controlling self-propelled anti-mine platforms, and carrying out rescue operations. The Kormoran is to operate in the Baltic, the North Sea and other waters during allied missions. By ensuring the optimal and effective implementation of the main tasks using subsystems and combat means, as well as communication, navigation and technical observation and passive defense subsystems, this will secure the Polish Command and Control System.

Innovative ferries - a Polish specialty



Flectra from Crist shipvard

Electra from CRIST

In May 2017, CRIST Shipyard handed Finferries the first ferry made in Poland with a hybrid drive. The innovative Electra unit is 96 m long and 15 m wide. 372 passengers and 90 cars will fit on board. The modern ferry will be handled by only a 3-person crew.

The novelty is the use of a hybrid diesel-electric drive. The unit has been equipped with three main diesel engines, two azimuth thrusters and a set of batteries. They are adapted to adverse climatic conditions - the system is based on Siemens components with a longevity of 10 years, able to cope with low northern temperatures and heavy snowfalls. The ferry batteries will be charged during unloading and loading. All it takes is a mere 7 minutes. Ultimately, the unit will be powered by battery energy, and if necessary, a diesel engine.

Eco ferries from Remontowa Shipbuilding

3 ferries with dual fuel drive were delivered by Remontowa Shipbuilding Shipyard to the shipowner of BC Ferries. The sister units Salish Orca, Salish Eagle and Salish Raven can be powered with LNG gas or alternatively with low sulfur fuel. They are 107.2 m long and 24 m wide. These double-sided ferries can take on board 600 people and 150 passenger cars. The contract value of each of the ferries is over 50 million USD. The ferries were created on the basis of the Remontowa Marine Design & Consulting project. The innovative drive was provided by Wärtsilä, and Prad Engineering was responsible for the lighting. The units in this series will be the first ferries in BC Ferries' 36-unit fleet to use dual fuel engines.



"Salish Raven" ferry form Remontowa Shipbuilding

Another 2 modern ferries built by Remontowa Shipbuilding Shipyard were handed over to TS Laevad OÜ shipowner. The sister units "Piret" and "Toll" are approx. 114 m long, approx. 20 m wide with a maximum draft of 4 m. These double-sided passengercar ferries can take on board 700 passengers and 150 cars. The advantage of these units is the low operating cost. Less fuel consumption and limited emissions of environmentally harmful substances are ensured by the appropriate hull shape adapted to work in icy conditions. In addition, the high level of automation used on the Piret enables it to operate with the crew reduced to a minimum.

The ferries are operated in the operator's colors and under the trade name Praamid (praamid.ee).



An innovative E-ferry - Ellen from Szczecin

An electric unit, innovative in Europe, has been built and partially equipped on the area of the Szczecin Shipyard. The ferry was commissioned by a Danish contractor and will serve the island of Ærø.

The ferry is 59 meters long. It will take 31 passenger cars and 150-200 passengers on board. It will serve connections between Søby (on the Danish island of Ærø) and Fynshav and Faaborg.

Thanks to the electric drive, the ferry is 100 percent emission-free. The E-ferry project is subsidized by the European Union. It is to contribute to the emergence of "green" emission-free, fully electric units. The ships built in Szczecin will be so-called demonstration units that are to check how the used technology works in practice.

About 10 entities participated in the construction of the Danish ferry in the Szczecin Shipyard. The project leaders were Spawrem (construction) and Ridson (design). The contractor of the ferry is the Danish shipyard Søby Vaerft, in which the unit passes the last stages of being equipped. In the near future, however, there is a chance that fully equipped ships will be built on the site of the former Szczecin Shipyard.



The hull of E-ferry Ellen built in Szczecin Shipyard

Research vessels and fishing vessels from Nauta

In 2017 Nauta handed over to the University of Gdańsk - a fully-equipped research unit.

The prototype catamaran, Oceanograf, has been equipped with specialized devices for interdisciplinary research of the environment and the nature of the Baltic Sea. In addition to the laboratories inside the ship, there are also observatories and a seminar room for students. Thanks to the extensive equipment, Oceanograf is one of the most modern vessels under the Polish flag.

Due to the wide range of tests that will be conducted from the unit (seabed surveys, bathymetric tests, chemical research, geological research), it will combine the functions of various types of units. The ship uses a double-hull structure that minimizes the angle of heel, which is especially important when conducting surveys at sea, because any unintentional movement of the ship may disrupt measurements.

The modern catamaran has a total length of 49.5 m, a width of 14 m, a lateral height of 3.80 m and upper deck height of 6.55 m. The ship has a very low draft of only 2 meters. The economical speed of the new unit will be 10 nodes and the maximum will be 2 nodes higher.

A research vessel for the University of Gothenburg is also being built at Nauta Shipyard. The Skagerak unit is 44.5 m long, 11 m wide and weighs approx. 800 t. A crew of five will be on board together with 20 scientists and students.

In 2017, Nauta also built 6 large fishing vessels for customers from Scotland, Denmark and Norway.



Oceanograf research vessel from Nauta

Among the launched vessels was the partly equipped fishing trawler M/V VOYAGER - one of the world's strongest vessels in this class. The ship will be used in the North Atlantic. VOYAGER is 86.4 m long and 17.8 m wide. It is equipped with tanks for transporting fish with a capacity of 3,200 m³. Due to the difficult weather conditions in which the trawler will operate, a high-powered engine was installed on it. The bollard pull will be over 120 tons. In addition, the ship will be very quiet, which will significantly increase its fishing possibilities.

In 2017, Nauta completed a fully equipped ship for the first time. The unit - Ocean Star, was built in SR Nauta for the Scottish shipowner Mewstead. It is 87 m long and 18 m wide. It has been equipped with a 7,000 kW engine, which, in cooperation with two thrusters, will ensure its very good maneuverability when casting and collecting nets. In addition, the most modern devices have been installed for catching, storing and transferring fish to recipients. The ship also received specialized equipment to locate fisheries and estimate their type and size. Ocean Star, built according to the design of Wärtsilä Design, is the most effective unit in the world in its class.



Double launching in Nauta shipyard





- The construction of modern fishing vessels is a significant part of the procurement for the New Construction Plant in Gdańsk. What is particularly important is that we launched this year's first unit of this type which is fully equipped. Thanks to the experience gained, we can compete on the market with an even better offer - says Reza Sohrabian, head of marketing at Zakład Budowy Nowych Budów.

Live fish carrier from Marine Project Ltd.

The partly equipped "Ro Fortune" unit of the live fish carrier type was commissioned by the Larsnes Mek Shipyard - Verksted AS for the shipowner Rostein AS. The ship will be used to transport live fish, mainly salmon, from Norwegian fish farms to processing plants.

The vessel, 82.1 meters long, 15.5 meters wide, and 5,500 tons, can transport 900 tons of live fish at once. The unit is completely self-sufficient. It has great maneuverability thanks to the bow and stern thrusters and does not need the assistance of tug boats to perform its tasks. It also loads and unloads unaided. The ultramodern hold with the capacity of 3500 m³ is equipped with giant pumps that constantly replace water, thus cleaning the live load. During circulation, the water in the hold is also cooled, thanks to which the transported fish are less active. The hold is also equipped with movable bulkheads, an advanced life meter with accuracy up to 1%, cameras, and UV lamps that clean the fish of marine parasites.



"Ro Fortune" - live fish carrier vessel from Marine Project. Fot. Maciej Starkowski

- **99** It is a very unusual and technically advanced project. *The diesel-electric unit is equipped with 4 generating sets* with a total power of 5,000 kW. Modern aggregates from YANMAR, each weighing 21 tons, supply 2 electric motors of the main drive as well as all devices on board. Thanks to the central energy system, the unit is very economical and ecological - says Jan Baraniak, the manager of this project.
- **99** The ship also provides very comfortable conditions for a 12-14-person crew. The ship owner attaches great importance to high standards and facilities for the staff adds Adam Śmigielski, project manager in the shipyard.
- This is the f ifth sister unit made for Larsnes Mek Verksted AS Shipyard. We have already signed a letter of intent for the next two. Good cooperation has also resulted in orders for other purse seiner trawler vessels commissioned by the same contractor - inform the representatives of the shipyard.

Innovative tugs and purse seiners from Safe Co Ltd

In 2017, Safe Shipyard handed over a fully equipped, hybrid Rotor Tug Art 80-32. The tugboat, SD Tempest, was built in half a year. The unit is 32.9 m long, 13.2 m wide and 4.8 m deep. Its bollard pull is 84 T, the main propulsion power - 5,295 kW, and the maximum speed - 13,7 knots. The project, developed by the Canadian design and consulting office Robert Allan, was provided by the Damen group, and all technical documentation was made by the construction office of Safe Shipyard. The unit was created under the supervision of Lloyds Register classification society.

In the construction of the tug, three azimuth thrusters were used two under the hull in the forebody and one in the rear part of the ship. Each of them drives a separate engine. SD Tempest is a tug with a diesel and electric drive.

In 2017, Safe also produced 2 modern, partly equipped tugboats built for Damen Hardinxveld Shipyards for the Dutch shipowner Baggerbedrijf De Boer B.V.

Both tugs will work for at least 10 years at the Grand Port Maritime de Guyane in the ports of Cayenne and Kourou in French Guiana. In addition to the basic functions, such as assisting ships in ports and assistance in dangerous situations, the units have also been adapted to transport loads of up to one standard container, and for assistance in dredging operations in sewers and port basins.

In 2017 Safe Shipyard also built a partially equipped "Gunnar K" seiner for Norwegians.

A modern purse seiner was created at the request of Larsnes Mekaniske Verksted AS Shipyard. The vessel with construction number 60 is 38.65 m long, 9.25 m wide with a draft of 5.05 m. Below the deck there are six tanks for cooled sea water (RSW), five of which can be used to carry live fish. The total capacity of these tanks is approx. 420 m3. There will also be four single and three double cabins for 10 crew members.

Gunnar K was designed by the Naval Consult consulting office from Måløy. Sunnmøre companies will be the subcontractors and suppliers. The vessel's owner is Kristoffersen Fiskebåt AS. The ship is one of the most modern of its kind.



The tugboat, SD Tempest from Safe shipyard



A new opening of Szczecin Shipyard

A dozen or so years ago, **Szczecin Shipyard** was the fifth largest shipyard in the world. Global trends, crises, and erroneous policies caused the shipyard to decline and disappear from the market for more than a decade. Today, it is rising from the ashes, and returning in a new formula, and ships are starting to be built in Szczecin again.

Currently, there are 70 companies operating in the yard, in which about 2,000 people work. Within a year, employment almost doubled. Companies in the yard are achieving revenue and generating profit. This is driven by the economic effect. Over the last two years, over 80 vessels have been built in the Szczecin Shipyard. These were mainly small, partly equipped units, but in the future Szczecin plans to build large ships once again.

- As the Shipyard's management, we intend to employ a maximum of 300 people. Our task is to build a structure to manage and handle the existing infrastructure and its ongoing reconstruction and further development. It is worth noting the scale of the infrastructure here. In an area of 45 hectares, we have, for example, a lifting capacity of 4600 tons with the largest 450-ton crane above the Wulkan ramp. informs Andrzej Strzeboński, President of the Szczecin Shipyard.
- 99 One of our first decisions after taking over the Board was to reject the model of renting space and cubage for technology. At the moment, the technological process is the main value in the shipyard. As a leader, we are also responsible for management in the field of project acquisition and management, that is, for the construction of a sales team that will acquire new projects and for creating the team of the main designer for the organization of all project processes. The Park Management Board also provides quality control, legal services and, what is very important, the supply chain says President Strzeboński.





Due to the multiplicity of orders, as a Park we can negotiate low prices, which directly influences the economic effect. Thanks to this, the companies that operate here are able to consolidate and create a conglomerate of a coexisting organism consistent with global competition. Companies specializing in specific technical and technological activities can perform specific tasks within a larger organism. This is how the largest shipyards in the world are organized. This model is already bringing results. Without external support, since April last year, in each subsequent month, we have generated a profit in the shipyard which can be invested in the reconstruction of infrastructure implementation of new projects - adds President Strzeboński.

This year, the Management Board of the Shipyard plans to sign the first contract for the construction of a ship as Szczecin Shipyard. At the end of last year, the company signed a letter of intent to build six bulk carriers for two European shipowners. These units are currently being designed. The first one will be ready 12 months after signing the contract.

In June 2017, at the Szczecin Shipyard, the keel of a new ferry for the Polish ferry operator Polferries was layed. The RoPax ferry is being built by the Sea Repair Shipyard Gryfia. There are also plans to build a whole series of such units for the shipowner Unity Line.

99 Our perspective for the next 3 years is the shipyard's entry into the global customer market. The shipbuilding industry is characterized by a certain sinusoid. We have been in a rut but we already feel the forthcoming rebound and we want to be prepared for this moment. We are glad that at the moment the project of Polish ferries has kicked off and entered the executive phase. At the same time, we hope to construct fully equipped vessels for the European market - concludes President Andrzej Strzeboński.



Three transshipment records.

The largest Polish ports are still on top.

Sea of containers in Gdansk

Last year, the Port of Gdansk could be proud of a very high increase in transshipments, amounting to as much as 9 percent. In total, a new record of approximately 40.6 million tons of cargo were transshipped in what is the largest Polish port.

Łukasz Greinke, President of the Board of the Port of Gdansk, emphasizes that this historic result strengthened Gdańsk's position as the 6th largest port on the Baltic Sea. At the same time, 2018 holds a real chance for promotion to the top five.

According to forecasts by ZMPG, 2017 was to end with a total of 38.9 million tons of overloaded goods. However, the result turned out to be 4.3 percent higher. The largest reloaded amount during this period consisted of break bulk goods, which accounted for 44.5% of total transshipments. The next group was fuels - 32.4 percent, and the next - coal (12.5 percent of total transshipments).

Break bulk totalled 18 million t, which is 24 percent more than in 2016. This effect resulted in both a larger volume of containerized bulk and a larger number of ro-ro cargoes. In the DCT container terminal, the total amount reloaded was 1 580 505 TEU (16 413 971 t), which is 22 percent more than in 2016. Regarding ro-ro loads, the increase in transshipments of passenger cars is significant. Last year, 73 207 cars were transported through the Gdansk port, which is 412 percent more than 2 years ago. A 2.7 percent increase compared to the previous year was also recorded in liquid fuels. 13 157 582 tons were reloaded. Coal trans- shipments also increased. Last year, 5 083 349 tons of this resource were handled at the Port of Gdansk (an increase of 0.05 percent).

2017 proved to be record-breaking for the Gdansk port also in terms of the calls of cruise ships. A total of 64 passenger ships entered the Gdansk terminals, more than twice as many as in previous years. 2018 will be a year of further increase in cargo handling and investment for the Port of Gdansk. The largest are those co-financed (in 85 percent) by the European Union under the CEF instrument ("Connecting Europe Facility").

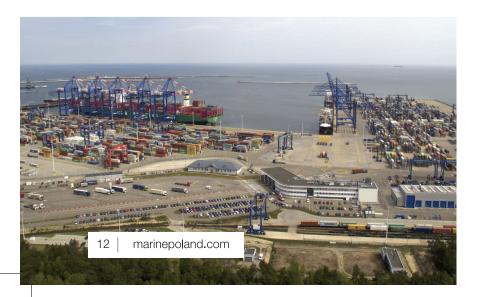
Thanks to EU funds, huge changes await, among other areas, in the Inner Port. The fairway will be deepened and the following berths will be expanded: Obrońców Poczta Polskiej and Mew, Nabrzeże Oliwskie, Zbożowe, Wisłoujście and Dworzec Drzewny. The estimated value of the project is approximately 120 million EUR. In the Outer Port ZMPG will expand and modernize the road and rail network for approx. 45 million EUR. All CEF projects will be completed by 2020.

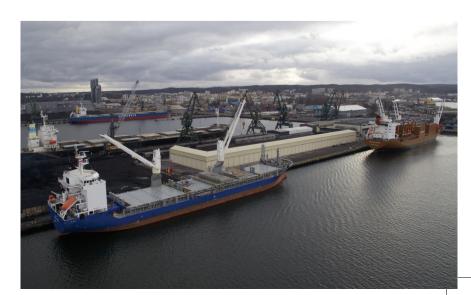
Under the EU subsidies, a new North Quay will also be built, thanks to which the Port of Gdansk will gain, among other improvements, a Ro-Ro cargo terminal. The total amount of EU funds for ZMPG is about 150 million EUR. We are happy that we can implement the largest investment program in the history of the Port of Gdansk. Thanks to this, on the one hand, the attractiveness of the Port for contractors will increase dramatically, and on the other, we will acquire additional competences that will allow us to build a flagship investment, namely, the Central Port. Contrary to some opinions, the Management Board's plans are not an expression of megalomania, but an obvious answer to the development plans of other world ports - says Marcin Osowski, vice-president of the ZMPG on Infrastructure.

An increase in transshipments and great prospects in the Port of Gdynia

The Port of Gdynia had a record-breaking year-end, with 21 225 million tons of reloaded cargo, which is almost 9 percent more than in 2016. In terms of cargo growth dynamics, in the period from January to December 2017, the Port of Gdynia was one of the leaders among Polish ports of the Baltic Sea region.

This was accompanied by excellent financial results of the Maritime Port of Gdynia S.A. in the form of a net profit exceeding 18 million EUR, as much as 28% more than in 2016.





Among cargo volumes handled in the Gdynia port, it is worth mentioning that there was 40 percent more coal and coke, as well as almost 40 percent more oil and petroleum products compared to 2016. In 2017, also more containers (710 698 TEU), ore, wood

and general cargo were transshipped at the port.

2017 was also marked by a greater number of ship calls (3540 in 2017 against 3501 in 2016), of which the largest increase concerned ferries and container ships. The average tonnage of bulk carriers calling at the port in Gdynia also increased. The calling of great cruise ships has been a showcase of the Port of Gdynia for many years. From May to September 2017, 41 vessels with almost 90,000 passengers on board moored at the French Quay. The great event of last year's passenger service season in Gdynia was the June visit of one of the world's largest cruise ships - m / v "Norwegian Getaway", 325 m long (GT 145655), which arrived with almost four thousand passengers.

- The excellent handling results that we achieved in 2017 are the best proof of the excellent condition of the Port of Gdynia. The achieved transshipment record is the result of providing a good service to ships calling at Gdynia port terminals, rational actions of managers and efficient work of Gdynia dockers. I hope that 2018 will be equally successful stresses Adam Meller, President of the Port of Gdynia S.A.
- By 2020, the Port of Gdynia will spend around 250 million EUR on investments, out of which more than 80 million EUR still this year. We have started the construction of a new port turntable that will facilitate the admission of large oceanic vessels. Another investment that will contribute to an even better position of the Port of Gdynia among Polish seaports is the construction of a new public ferry terminal, which is already underway informs President Adam Meller.

Among investments implemented in Gdynia, there will also be an extension of the internal entrance to the port from 100 to 140 m, reconstruction of quays, modernization of the liquid fuel handling station, construction of an intermodal terminal and deepening of the inner waters up to 16 m. Works on these projects are to be completed by the end of 2020. Investments will certainly contribute to even further meeting customers' expectations, and as a result, will strengthen the competitive position of the Port of Gdynia among the ports of the Baltic Sea Region. At the same time, the continuous growth of cargo handling allows us to look with more optimism at plans to expand the Gdynia port with the so-called Outer Port.

Continuous development in Szczecin and Świnoujście

The ports in Szczecin and Świnoujście can also boast a record of reloading, which in 2017 reached 25.4 million tons of goods, over 5 percent more than in 2016.

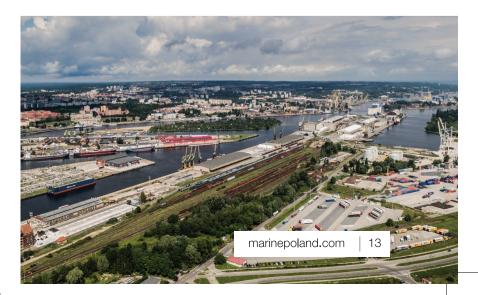
- This is a historic, record-breaking result that was never before achieved in the ports of Szczecin nor Świnoujście said the President of Szczecin and Świnoujście Seaports Authority, Dariusz Słaboszewski. - We are a universal port. Most commodity groups recorded an increase in transshipment - added Słaboszewski.

In particular, ore and fuel transshipments as well as general cargo handling increased. In the case of ore, the increase was over 59%. This is the result of the growing demand for this resource of Polish, Slovak and Czech steel mills. In 2017, nearly 3.4 million tons of fuels were also transshipped. This is an increase of almost 47 percent compared to last year. Reloading of general cargo at the end of 2017 reached the level of nearly 12.9 million tons, which means that since 2016 they have increased by over 4%. The port also recorded an increase in container reloading by 3%.

Commodity groups in which a lower result was recorded are coal and grain. Coal transshipment decreased by 27%, while grain transshipment was almost 29% less. In the coming years, both West Pomeranian ports are waiting for many investments. This includes the construction of new quays, a container terminal, better connections with inland waterways or the next stage of a key investment for the Szczecin port, that is, deepening the approach track to 12.5 meters. At present, ships with a maximum length of about 200 m can enter Szczecin. After deepening, it will be 220 m for bulk carriers, 240 m for container ships and 260 m for cruise ships. The value of this investment is approx. EUR 330 million. 85 percent of the money is to come from EU funds, and 15 percent from the state budget. The investment is to end by 2022.

- The strength of each port is determined by its availability, hence we are constantly working to improve it with regard to the sea, inland, land and rail roads. The 12.5 m depth, which we will gain in several years in Szczecin, and the deep-water quays will already indicate that we are a seaport. An opportunity for the development of the port is also its location and the possibility of connecting it with inland roads, which can be achieved thanks to the fourth class navigability of rivers - says Dariusz Słaboszewski, the President of the ZMPSiŚ.

According to forecasts of the Szczecin and Świnoujście Seaports Authority, the increase is expected to continue in 2018 and reach 26 million tons of goods handled.





Port projects of the future at your fingertips

The increase in transshipments and long-term forecasts are forcing the boards of the largest Polish ports to seek opportunities for further development. Bold expansion plans move in one direction only - out to sea. Below are thrzee concepts of port development, which not so long ago seemed to be projects of a distant future. Today, they are becoming more and more real and it seems that current port management boards will take every step to implement them.

Central Port in Gdańsk

A gigantic project worth 2-2.5 billion euros is going to be implemented by the Port of Gdansk's Maritime Authority. The Central Port is a new investment to be created between the mouth of the port channel and Naftoport. It concerns the allocation of several hundred hectares of the area of the Gulf of Gdansk to new, universal terminals in connection with the development of the port. It is anticipated that transshipments in the Port of Gdansk may increase to 100 million tons per year, where today they are 40.6 million tons.

- Port very seriously. At the moment we are working on a detailed concept based on hydro technical solutions, in parallel with the Maritime Office and the Maritime Museum, and we are working on a plan to extract wrecks that lie within the investment area. In addition, we maintain a constant dialogue with potential investors who will want to participate in this project says Łukasz Greinke, President of the Board of Port of Gdańsk.
- A project of such a large scale means that it will be created in stages. We will probably use the formula of a Public-Private Partnership, because the skillful involvement of private funds will help optimize the shape and equipment of individual terminals in the Central Port the President explains.

- I am convinced that the completely new infrastructure will be adapted to the current market trends, which show the increased importance of ships, and the pressure of ship owners for even faster reloading means that deep-water infrastructure located in open waters is the most attractive in this respect. What's more, the Central Port will create excellent opportunities to develop tomorrow's technologies, such as ships powered solely by electric engines or LNG, or support for autonomous vessels that are intended to navigate waters with no crew on board. That is why the Central Port is a great tool for keeping the Port of Gdansk in the club of the most modern ports in the world - says Łukasz Greinke.

Outer Port in Gdynia

There is a great challenge ahead of the Port of Gdynia. Throughout the years, the intensive development of both the Port and the city of Gdynia has caused a shortage of land for further development of the port. The panacea for this challenge is the concept of building an Outer Port.

The key investment project of the Port of Gdynia assumes the creation of a deep-water Outer Port extending above the current protective breakwater on artificial land, based on the existing quays: Śląskie and Szwedzkie. The concept of the construction of the Outer Port was recognized as a project worthy of implementation by Marek Gróbarczyk, Minister of Maritime Economy and Inland Navigation.

The project of building a structure going out to sea has gained a great opportunity not only for the dynamic development of the port, but also for maintaining its competitive ability and high position on the market of port services in the Baltic Sea Region.

Central Port in Gdańsk



- We received a "green light" from the ministry and preparations for the construction of the Outer Port as part of the Port of Gdynia 2030 program have gained momentum stresses Adam Meller, President of the Port of Gdynia Authority SA.
- The Outer Port defined universally will be a typical container terminal, with equipment for handling and storage and access to modern land infrastructure. The new quays will also be able to accept passenger ships adds Marek Gróbarczyk.

As for now, it is a stage of local research in the Port of Gdynia with the support of external consultants. Pre-investment environmental research will be carried out, along with a natural inventory and research on the cleanliness of sea-bed sediments in the area of the future Outer Port. Analyses of wavelets and the impact of the planned investment will be carried out on neighboring bank sections. An initial feasibility study and a multi-variant concept study will be prepared, taking into account the various functions of the planned Outer Port. After conducting the aforementioned tests, the Port of Gdynia Authority SA will make a decision regarding the formula and scope of the construction of the Outer Port.

99 - We take the subject of building the Outer Port very seriously. We are currently working on a detailed concept of hydro technical solutions and we are talking to potential investors who show an interest in the implementation of the project. We are aware of the fact that going into the sea is a historic moment in the life of the port and a chance to raise its competitiveness. - emphasizes A. Meller

A new turntable, the deepening of the port basins and the approach to 16.5 meters, as well as the construction of the Outer Port is the nearest future of the Port of Gdynia, which, due to the lack of free land, must literally and figuratively go out to sea.

99 - Annual transshipment records mean that we must do everything possible to ensure further dynamic development of the port in Gdynia. The Outer Port will be our key to success. - adds A. Meller. -



Container hub in Świnoujście

Container hub in Świnoujście

The Port of Szczecin and Świnoujście SA Authority, with a view to ensuring further dynamic development of the seaports in Szczecin and Świnoujście, has made efforts to initiate the development of the port infrastructure for a deep-water container terminal in Świnoujście. This initiative is the result of global and regional changes in the maritime and transport industries. The terminal is to be located in a new outer port, which is to be located east of the LNG terminal.

It is planned to build a pier, which should be separated from the sea by a breakwater. The infrastructure and superstructure of the terminal is to enable the handling of 1.5 million TEU per year (handling capacity of about 2.0 million TEU). At the same time, the terminal concept assumes the simultaneous operation of 2 units with a length of up to 400 m and 1 unit with a length of up to 200 m.

Thanks to such parameters, the largest oceanic container carriers with a length of 400 meters and a width of 60 meters will be able to be handled in the terminal.

It is anticipated that around 150 of the largest container ships in the world and around 300 smaller feeder vessels may annually enter the new terminal. The concept also assumes a place for container barges. According to preliminary estimates of the Ministry of Maritime Economy and Inland Navigation, the construction of the terminal would cost about EUR 500 million.

Outer Port in Gdynia





Investments on an unprecedented scale, ambitious development plans including the construction of the Central Port, and record-breaking cargo handling.

An interview with Łukasz Greinke, President of the Board, Port of Gdansk Authority S.A.

The year 2017 turned out to be record-breaking for the Port of Gdansk.

Yes, we achieved excellent results. No Polish port has ever handled such a large quantity of goods. Last year, we handled over 40.6 million tons of cargo. This is almost 9% more than in 2016. The result was influenced mostly by higher transshipments in the last quarter of 2017, during which the port handled over 12 million tons. The record we achieved shows the constant development of the Port of Gdansk. In 2017, we achieved a record in the transshipment of general cargo - 18 million tons, 24% more than in 2016. The volume of containers at the Port of Gdansk was also record-high, reaching over 16 million tons, which is 22% more than the year before. This is thanks to our terminal operators, who build our success. We are here to make their job easier, to invest every zloty in infrastructure and to convince new potential investors that the Port of Gdansk is the best place for them in this part of Europe.

Due to these excellent results, we were among the 100 largest container ports in the world bringing us closer and closer to St. Petersburg. With such dynamics, achieving 1st place in the ranking of the largest container ports in the Baltic Sea is within our reach.

The year 2018 promises to be record-breaking not only in terms of cargo handling, but also in terms of yinvestment.

2017 was a year of planning, contracting, and calling tenders. Now the works are finally under way. Investments on an unprecedented scale will begin at the Inner Port.

Thanks to funds from the CEF (Connecting Europe Facility) program, we are beginning works related to deepening the access channel and the reconstruction of nearly 5 kilometers of guays. The scope of these investments is enormous. As a result, the internal channel from the entrance to the Port to the turntable at the Remontowa shipyard will be 12 meters deep (with quays of an average length of 11.2 m), while the Kashubian Canal will reach a depth of 10.8 meters. The investments in the quays will cover the areas of: Oliwskie Quay, Dworzec Drzewny Quays, the Polish Post Office Obroncow Quay and the Zboz Quay, along with a fragment of the guay at the Wisłoujście Fortress. The estimated value of the project is over 110 million euros. We will modernize the entire Vistula Embankment with our own resources, In total, for the next two years, investments in the Port of Gdansk will cost about 1 billion PLN.

Of course, you will also invest in the Outer Port.

The Outer Port, due to a large cargo turnover and good perspectives, is of key importance to us. We plan to expand and modernize the road and rail network there, also with the help of the CEF program, investing over 40 million euros. We will be expanding connections from the Gdańsk Port Północny PKP train station to the gates of individual terminals. For example, we will build an additional track to the DCT container terminal. We will also build two storage tracks, each one with a length of nearly 1 kilometer. In addition, we will implement investments that will ensure collision-free access to the DCT terminal. Thanks to these investments, communication in this most-congested area of the Port will improve radically.



We also managed to obtain 20 million euros in funding for the project to build the Northern Quay. This is the result of the work and commitment of our employees. We have obtained a building permit, so there is nothing to prevent us from starting the construction works which we are determined to start as soon as possible. The new quay will be intended for the ro-ro terminal and will enable the handling of a rapidly growing quantity of new cars arriving at the port.

During the previous year, the turnover of cars increased from 14 thousand to over 70 thousand. Such dynamic growth shows the necessity of investing in new infrastructure.

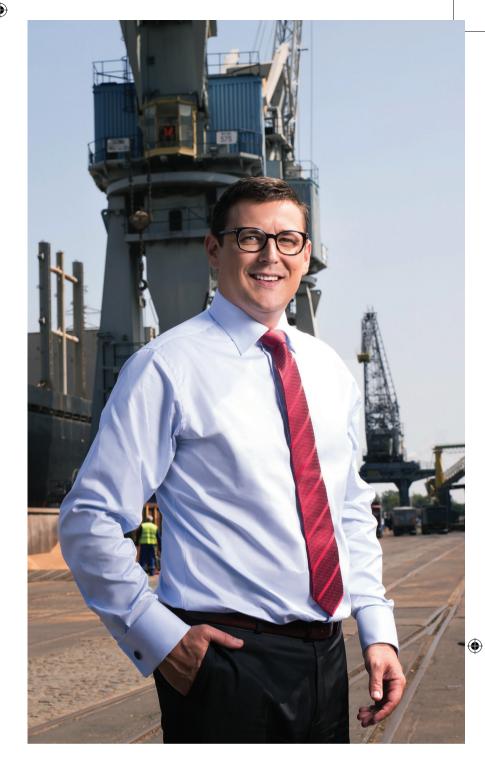
At one time, the decision to build a container terminal at the Outer Port in Gdansk was met with great disbelief. Today, DCT's success goes beyond its wildest expectations, and the Gdansk Port has become a container hub on the Baltic Sea. Do you predict a similar future for the Central Port?

The Central Port is our flagship investment. Ultimately, in this area we will build several terminals for various purposes, including: bulk, general cargo, passenger, and a ro-ro terminal. The investment is to be completed in the Public-Private Partnership formula. It is assumed that subsequent terminals will be built depending on the needs of private operators.

At the moment, we are working on a detailed concept based on hydrotechnical solutions. We are in the process of selecting the contractor as part of the announced tender. The bidder we choose will have 10 months to prepare the complete concept of the Central Port. In addition, we are continuing talks with potential investors who will want to participate in this project.

For example, Piotr Soyka, the President of the largest Polish shipbuilding group, Remontowa Holding, has already declared his participation in this project as the future operator of one of the new guays at the Central Port. The support of such a significant representative of private business is a clear signal that the direction we have chosen is right.

The completely new infrastructure will be adapted to current market trends: ships are getting bigger and shipowners expect faster loading and unloading of their cargo. Deep-water infrastructure, located in open waters, is the most attractive in this respect.



What role does the port of Gdansk currently play in the Baltic region?

Certainly this role is getting bigger and bigger. We are the largest Polish port and we have enormous potential and development opportunities. Our ambitions are also enormous. We want our port to serve not only the Polish market, but also the neighboring markets of the Czech Republic, Slovakia, Hungary, northern Ukraine and Belarus. We are part of a large logistics chain, which requires investments such as the Central Port and the development of new roads and railways. We have the knowledge, potential and resources and we will not hesitate to use them. The best proof of this is the implementation of the Northern Quay project adjacent to the planned Central Port. We need to constantly develop the Port, and when planning investments, remember the huge role it plays for Poland and this part of Europe.





Naftoport and the PERN Oil Terminal in Gdańsk – Poland's window on oil.

Gdańsk Naftoport is the largest sea terminal for handling liquid fuels

in Poland. Along with the newly established PERN Oil Terminal it is the first facility in the country to operate as a sea fuel hub.

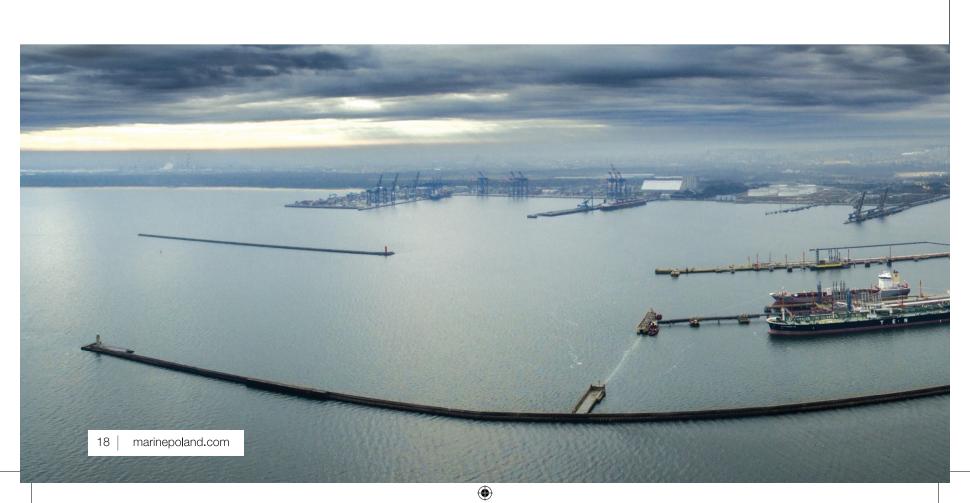
The importance of Naftoport in recent years has clearly increased in connection with the policy of the diversification of oil purchases, aimed at making Poland independent from Russian oil supplies, which are mainly imported through the pipeline system.

Naftoport ended 2017 with a total of 12.5 million tons. This is the fourth largest amount in the entire history of the terminal. A number of investments made in recent years have resulted in a much higher transshipment potential in the port.

At present, Naftoport has five modern stations for handling liquid fuels, which enable the efficient trans- shipment of over 44 million tons of fuels per year. The terminal can also handle the largest tankers with a draft of up to 17 meters and a length of about 350 meters.

99 In the recent years, oil has reached Naftoport mainly from Russia and the North Sea, later also from the Middle East, i.e. Saudi Arabia and Iraq, and since 2016, which is from the moment the US and UN loosened their sanctions, - Iran. In 2017, the first deliveries of oil from the USA and Canada also appeared. It is worth noting that Russian oil comes to Poland not only by pipeline - there are also regular deliveries of REBCO oil from Russia by sea - explains Andrzej Brzózka, the President of Naftoport.

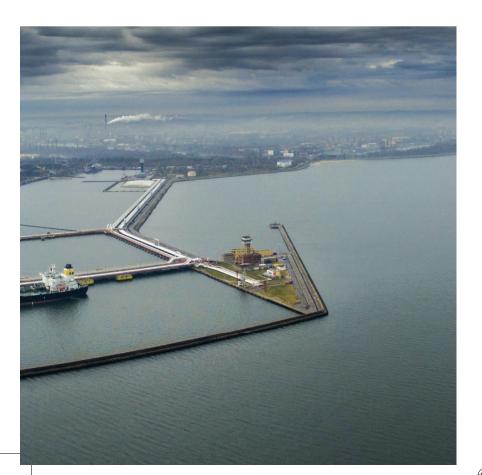
In 2016, in the immediate vicinity of Naftoport, the PERN Oil Terminal was opened, which owns tanks with a capacity of 375 thousand tons. In the next two years, it is planned to build more tanks and double this number. The Oil Terminal plays a large role in the energy security of Poland and the region. It has been included in the list of Projects of Common Interest of the European Union. Not far away, there is also the PERN warehouse base in Gdańsk, which can hold another 900 thousand tons of liquid fuels in 18 tanks.





The construction of an additional 2 tanks has also begun here, which will increase the storage capacity of the base by 200 thousand tons to 1.1 million tons.

An important impulse for the development of infrastructure for transshipment and storage were the enormous investments at the nearby refinery in Gdańsk belonging to the Lotos Group. Thanks to the state-of-the-art installations built in 2007-2010 under the 10+ Program, it processes 10.5 million tons of oil per year. This program was the largest industrial investment of the last decade in Poland, worth nearly EUR 1.43 billion.



Global suppliers of the latest technologies for the oil industry - Shell, ABB, CB & I, KBR, Technip and Lurgi were involved in its implementation. The use of the latest technologies has made it a "green refinery", friendly and safe for the environment.

¶¶ In 2017, 80 percent of transshipments at Naftoport were based on all kinds of crude oil and 20 percent on fuel transshipments. Oil reloading is mostly for domestic imports, but there are also transshipments imported for German refiners. Russia exports through pipelines, but on a completely different scale than it used to and there are also some small transshipments which do not enter the pipeline system heading Germany - adds President Andrzej Brzózka

Poland is in 8th position as a consumer, processor and importer of crude oil in the European Union. In 2016, crude oil consumption amounted to 536.7 thousand barrels per day, the production of refined fuels amounted to 568.2 thousand b/d and imports amounted to 532.3 thousand b/d. At the same time, own oil extraction amounted to just 18.6 thousand b/d. Thus, the figures clearly indicate that Naftoport, together with the PERN Oil Terminal in Gdańsk, create the necessary facilities for further growth in the turnover of liquid fuels by sea and guarantee the possibility of the diversification of crude oil supplies to Poland. Moreover, the developed reloading and storage infrastructure creates new opportunities for traders on the oil and fuel market.



Trends and challenges for the global container market in 2018

Global container trade, after an annual growth of 6.1% is estimated at 138.5 million of 20-foot equivalent units (TEUs) for 2017. Asia, and China especially, are major containerizedshipping drivers whose share accounted for 64% of the world's container throughput in 2017. Of significant importance was internal Asian trade with a volume of 35.1 million TEU. Considering the spatial distribution of intercontinental traffic, Trans-Pacific trade (34.9 million TEU) and Trans-Atlantic trade (18.9 million TEU) hold a key position.

Turning eyes to the future growth of container traffic, the selection of opinions is comprehensive. BIMCO has projected that total growth in demand is expected to be lower than in 2017, but still high enough to improve the fundamental market balance, with demand expected to grow by 4%-4.5% in 2018. Alphaliner has presented a slightly higher percentage of traffic development with a prediction of global container trade accounting for 4.8% in 2018. Hapag-Lloyd, the world's fifth-largest ocean container company, stated that the global container-shipping volume from 2018 through to 2021 is projected to increase between 4.8% and 5.1%. Against this background, DHL presents a much more restrained mid-term forecast with an average growth rate (CAGR 2018-2021) of only 2.3%. The highest growth rate in trade flow is expected in the trade routes of Inter Asia (3.1%) as well as in Europe-South America (3.0%), Far East-Latin America (2.8%) and Far East-Europe (1.6%).

Investigating the primary drives for the further growth of container trade, both the macro-economic situation as well as the efficiency improvement of the sector can be presented. The predicted rise in turnover stems from the economies of the US, Europe and China. An extremely important factor is that economic growth in advanced economies is generally good for container shipping demand, in particular for the flow of imports to North America.

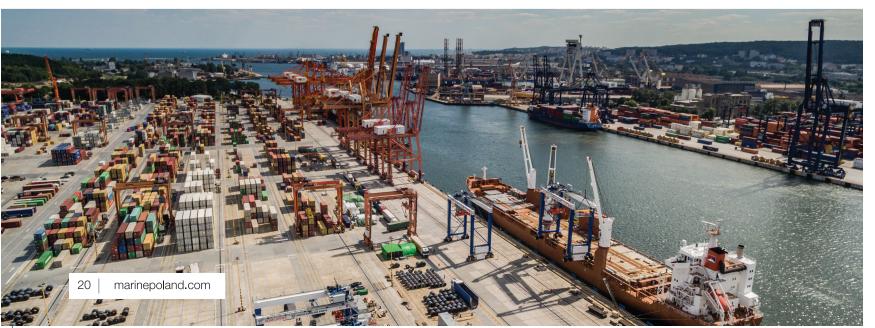
The United Nations Conference on Trade and Development pointed to CETA (Comprehensive Economic and Trade Agreement - EU & Canada) and the economic partnership agreement concluded between Japan and the EU in July '17 as being positive developments for global trade and shipping.

Considering the changes in the sector, further concentration is expected. Industry consolidation will support higher margins and greater profitability as larger carriers take advantage of stronger negotiating positions with customers, terminals and vendors. Two examples of this trend can be noted. NYK, MOL and K Line have announced in a joint statement that their new joint venture 'Ocean Network Express' (ONE), has received all the necessary merger approvals. The new company is expected to start its operations from April '18, as initially planned.

A significantly interesting example of cooperation is the initiative of Maersk and IBM. They have announced their intentions to form a Blockchain-based JV. The aim of the new company will be to offer a jointly developed global trade digitization platform built on open standards and ambitiously designed for use by the entire global shipping industry, addressing the need for more transparency and simplicity in the movement of goods across borders and trading zones. The development of the blockchain structure will strongly support the growth of intercontinental e-commerce, thus could also drive long-term container-shipping demand. This strengthening of the position of the main players on the market will also be supported by freight rates. According to an estimation by Drewry, rates will continue to rise in 2018, but at a slower pace than was seen in 2017, with high single-digit increases anticipated.

The observation of mega-trends in the container sector allows the indication of long-term drivers that should positively affect demand.







DCT Gdańsk container terminal

McKinsey expects further implementation of fully automated processes of container transfer at ports like the TraPac terminal in Los Angeles or the ship-to-shore crane operations of APM Terminals at Rotterdam. Subsequent changes at the port hinterlands are also foreseen. The system will be completed by fully automated inland terminals and self-driving trucks being digitally pre-cleared by customs. Moreover, extending autonomous systems to the ships themselves would reduce labour and fuel costs per container while increasing the capacity per ship.

On the contrary, the IT revolution could also be treated as a challenge for the container sector. It is expected that disruptive technology will continue to complicate the market. For example, McKinsey noted that advances in robotics and 3D printing using metals, ceramics and other materials could shrink supply chains by localizing manufacturing and eliminating labour cost gaps in other parts of the world. Miniaturization, it added, could also reduce container-shipping demand.

An important challenge facing the sector is also oversupply. The global containership fleet is expected to grow by 5.6% this year, after taking into account projected vessel deliveries, deferrals and scrapping, to reach 22.28 million TEU by the end of 2018. Total new containership capacity is estimated at 1.5 million TEU, and more than 50% of this is expected to be made up of ULCS. There are 53 ships larger than 13,500 TEU scheduled for delivery. Considering the top industry orders (vessels of 22,000 TEU), 11 new buildings were contracted by the Mediterranean Shipping Company (MSC) and nine by CMA CGM (the first will be completed in 2019). COSCO Shipping also has 11 vessels under construction at Chinese yards, set for delivery by 2019. It is expected that by the end of 2020, 88% of the ships on the Asia-Europe route will be in excess of 14,000 TEU and the number of vessels of more than 18,000 TEU will double. Looking into the future, even bigger vessels may be introduced into service within the next 10-20 years. Significant increases in fuel costs, which can affect the efficiency advantages enjoyed by ever-larger container ships, may encourage the shipping line to commission 30,000 TEU ships.

However, the globally observed trend of extending the capacity of container vessels is not fully understood by industry. Drewry agreed that the economies-of-scale argument for wanting ultra-large container ships is misleading, as savings at sea are offset by higher costs at port. Despite the fact that some 20,000 TEU ships are required in respective trades, they are not a universal type of product that can just clip into trade lanes. Until the industry resolves both port productivity and intermodal and trucking connections, the implementation of such vessels will only put pressure back on the land side and not give such a technically good service to shippers.

All in all, the situation on the global container market, presented above, seems positive with moderate growth in traffic in 2018 and subsequent years. Optimistic expectations regarding the macro-economic situation, especially in advanced economies, and a further increase in ship owner efficiency (mergers & alliances) supported by gradual growth in freight rates should allow a positive rate of change to be maintained. However, the challenge may be a growing oversupply. Alphaliner argues that demand would need to grow by more than 8% for the surplus of supply to be cleared in 2018, while an annual growth rate of less than 5% each year will see this overhang extend into 2020.

> Prof. Maciej Matczak Gdynia Maritime University Modal Concept

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Gdynia - Polish smart city

Ideal climate for investment, modern business and living

Gdynia was the first city in Poland and in this part of Europe to receive the ISO 37120 certification and be registered in the international Open City Data Portal www.dataforcities.org, where you can check city's position in comparison with global leaders like London, Amsterdam or Dubai.

A certificate of **sustainable development** is an important starting point for negotiations with investors. It proves that Gdynia has high economic and social potential and is globally competitive.

As one of the most important ports in Poland, Gdynia is primarily focused on promoting various areas of maritime economy as well as the TSL industry. There are 200 companies specialised in this field in Gdynia. In addition, the booming industry currently includes 18 shipyards and manufacturers of ship and port equipment. The largest shipyards operating in Gdynia compete in terms of quality, experience and expertise rather than price. Interestingly, 50% of all companies in the region that are active in the logistics and shipping sector, are located in Gdynia. Therefore, it is the most convenient location for organising specialist conferences like the Maritime Economy Forum that has been hosted by Gdynia for many years now and attended by key persons and companies in the maritime industry.

Clearly the maritime industry dominates other business sectors, but the city is not limited to the sea only. Gdynia and the remaining cities of the Tri-City agglomeration (Gdańsk and Sopot) have already become the greatest BPO/SSC zone in Poland. The economic potential of Gdynia is enhanced by the presence of service centres of large entities offering multiple job positions for educated staff such as Thomson Reuters, Sony Pictures Entertainment, DNV GL, WNS Holdings Ltd, Geoban and Misys.

Gdynia and the Tri-City is a strong academic centre (23 higher education institutions) with almost 100,000 students at the following universities: Gdańsk University of Technology, University of Gdańsk, Polish Naval Academy in Gdynia, WSB University (School of Banking), University of Business and Administration in Gdynia, Higher School of Social Communication in Gdynia and Gdynia Maritime University – the biggest state school of higher maritime education in Poland and one of the biggest in Europe.

The University has been training students for officers on board merchant marine vessels as well as for managerial positions in land-based institutions and companies in the maritime industry around the world.

Investors who wish to provide good working conditions to their employees and consequently keep them satisfied with life and work, will be happy to know that Gdynia offers a very high standard of living and the cleanest air in Poland. Half of the city area is covered by forests, which makes it an ideal place for walking, cycling and other outdoor activities. Every year Gdynia hosts popular events such as the Open'er Festival, Polish Film Festival, Red Bull Air Race shows, Gdynia Sailing Days, Ladies' Jazz Festival and Poland's biggest triathlon race - Ironmen 70.3. Gdynia, ranked among the fastest growing mid-sized cities by fDi Magazine in 2017, is proud of its well-educated, creative and ambitious workforce. Moreover, 87% of residents are satisfied with living in Gdynia, which is an outstanding number in Poland.

Companies consider various aspects before they decide where to locate their business, i.e. human resources, quality of life or office space potential. In the coming years Gdynia is going to carry out investments expanding highest standard office space. Another flag project that is planned in the near future is the development of Sea City as an independent investment in the Waterfront area. These projects will provide nearly 500,000 m2 of modern office and commercial use space in top location – at the meeting point of land and sea, right in the centre of the city.





Marine design in Poland

Poland is becoming an increasingly large center in the field of maritime design. Well-trained staff, an excellent location with direct access to dynamically developing ports and shipyards, and newly created technology parks and office centers mean more and more Polish design offices are able to spread their wings and perform their services both on the domestic and export markets.

The potential of the Polish market has also been noticed by global companies, such as ABB, Wartsila, Rolls Royce Marine, DNVGL, Lloyd's Register, Bureau Veritas, the American Bureau of Shipping and many others, which gives Poland much wider access to state-of-the-art technologies and industry standards. Below are some of the design offices whose dynamic development has recently drawn the attention of the industry.

Havyard Design & Engineering Poland

Havyard Design & Engineering Poland offers basic design, detail design and complete engineering packages for the construction of vessels for transport, fishing, aquaculture, offshore wind power production, offshore oil production and other types of specialized vessels.

Havyard Design & Engineering Poland (previously named Naven) during its 11 years of existence, has delivered design services to several shipyards and fleet owners worldwide. Being a part of international maritime technology company Havyard Group ASA, Havyard Design & Engineering Poland has successfully completed dozens of basic design projects for class approval and detail engineering documentation packages.

One of latest design from offshore sector is AHTS Havyard 843 delivered to Grupo CBO, biggest shipyard and offshore shipping company in Brazil. Due to the large ocean depths off the coast of Brazil, the vessel requires more equipment, buoys, anchors on deck than is usual in the North Sea. The company has proven high level of expertise and vessel has been already put into operation.

In recent years Havyard Design & Engineering Poland developed design of windfarm service vessels e.g. Havyard 831 SOV built last year by Cemre Shipyard. Naming ceremony has placed in Ostend, Belgium. The vessel is now ready for operation as the first of two sister vessels for ESVAGT. Havyard 831 SOV has all the qualities required to service offshore windfarms in an efficient and secure manner, with the least possible impact on the environment.

Currently Havyard Design & Engineering Poland is working on innovative and technically advanced projects such as live fish carriers and whole-electric ferries.

The company is involved in design of world largest vessel for live fish transport. The vessel to be built by Havyard Group for wellboat operator Sølvtrans and will be 116 meters long, with a breadth of 23 meters and a fish tank capacity of 7,450 cubic meters of water. Among others, one of recent ferry projects is 111 meter long ship taking 120 cars and nearly 400 passengers, designed to operate in Norway. All the equipment on the ferry is set up to run on battery, at the same time it is full backup with diesel operation at longer flow rates.



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MARS Design and Solutions

MARS Design & Solutions (MDS) was established in December 2011 as EPG Deign.

After two years - in 2013 - the company became a part of the MARS Shipyard & Offshore Group, and changed its name to MARS Design & Solutions in 2014. MDS is located in Gdynia at Czechoslowacka 3 Street in the Baltic Port of New Technologies in the neighborhood of Shipyards.

The main activities of the company cover designing works of:

- navy ships,
- merchant ships,
- offshore structures.

Regarding offshore structures, MARS Design & Solutions made documentation for steel construction of ELDFISK, TROLL, GRIEG and LOTOS-PETROBALTIC platforms. The company also prepared documentation for some production modules and offshore winches.

MDS developed class and workshop documentation, and was responsible for the supervision of research vessels for the Polish and foreign owners. Among others, the company prepared documentation for the conversion of a stone dumping into a cable layer vessel. In 2018 MARS Design & Solutions, in consortium with two other Polish design offices, was chosen to design a full package of documentation for the Ro-pax ferry.

The company has a concession to design warships. In 2018 MDS was also granted a certificate to use restricted documentation within NATO, UE, ESA. MDS is involved in many projects for the Polish Navy, including basic and workshop documentation for the modernization of minesweeper, landing & minelayer and rescue warship. MDS participated in the development of the concept and contractual design of a few different types of warships.





NED-Project

Ned Project is an industry recognized multi discipline design office with significant experience in design of high ice class tugs, workboats, fishing vessels and cruise ships.

Ned-Project is defined by a unique mix of experience, tradition and novel approach to design process. Extensively applied BIM tools from the early projects stages allow for exceptional tailoring of the designs to the clients expectations. The use of latest VR technology creates an unique platform for discussion about technical solutions with the ship-owner and the crew intended to man the vessel.

Furthermore, this allows for constant evaluation of the deck equipment and auxiliary systems throughout the design process, maximizing its potential and practicality in effect making the ship most ergonomic upon delivery.

Our team of naval architects adjusts to the every clients expec- tations, providing an innovative solution from our extensive portfolio of concept designs or basing on currently in-service vessels. Additionally, we work in cooperation with research centers and towing tank teams to maximize the efficiency of our designs.

Ned-Project also provides services in planning, forecasting project cash flow and document management through the use of our in house project management software.

Many years of experience with unpredictable markets motivated us to developed and support a new solution to manage projects and processes more effectively. The effort resulted in our Wayman project management software.

NED-Project is also involved in conversion and installation projects of WBTS and Scrubber systems on existing ships in accordance to the newest IMO Ballast Water Management convention.

The company's team of mechanical engineers works in close cooperation with the shipyard's staff, utilizing 3D scanning techniques to provide detailed documentation. This in turn allows for streamlining the installation process and quick project turnaround in yards specialized in such conversions.

Newest Ned-Project projects include a currently in construction B860 tug for the polish Navy, a series of multi-purpose icebreakers for the polish National Water Management Authority.

For a complete portfolio of projects, concept designs and newbuilds we invite you visit our website www.ned-project.eu as well as our linkedin page.

Pałasz Marine Projekt

PAŁASZ MARINE PROJEKT is an independent design office, operating on the shipbuilding market since 2002. Company specializes in designing ship hulls.

types of units: container ships, bulk carriers, tankers, ferries, passenger ships, offshore units and live fish carriers. Our company cooperates with polish and foreign shipyards and design offices" - says Arkadiusz Pałasz - owner of the PAŁASZ MARINE PROJEKT company.

PAŁASZ MARINE PROJEKT has extensive experience as well as family traditions cultivated for three generations associated with Gdynia and the maritime industry. The owner, Arkadiusz Pałasz graduated from the Faculty of Ocean Engineering and Ship Technology at Gdańsk University of Technology. His grandfather, Augustyn Pałasz, became employed in the port of Gdynia in 1928 and worked there for more than forty years. Similarly, Wacław Pałasz, his father, has over forty years of work experience in Gdynia Shipyard.

Company prepares designs in their own office in Gdynia or provides assistance to companies whose staff needs temporary support.

Our company is able to send one or more of our employees to any shipyard in the country

or abroad and create there workplace. We know how important is the personal contact and quick response to customer's needs. We are happy to share the expertise of our experienced and highly-qualified project team. While respecting all the required shipyard norms and standards, we place special emphasis on the quality of the services we provide" - says Arkadiusz Pałasz

Company mainly uses NUPAS and Aveva Marine (TRIBON) software. PAŁASZ MARINE PROJEKT office is equipped with AutoCAD, Rhinoceros and Aster software.

Marine (former TRIBON). We are one of the few companies in Poland that have experience working in this software. Furthermore, our employees also have wide experience in NUPAS and Foran software, as well as Auto-CAD, Rhinoceros and Aster"
- says Arkadiusz Pałasz.

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PAŁASZ MARINE PROJEKT combines quality, professionalism and reliability. As a group of experienced engineers with many years of practice in shipbuilding, we are open to innovative solutions and modern technologies.





PROJMORS

"PROJMORS" Designing Office for Maritime Structures Co. Ltd. is the oldest design practice in the field of hydraulic engineering and one of the oldest design practices in Poland. PROJMOS was established in November 1948 as a departamental design and engineering practice for maritime and hydraulic engineering construction of the Maritime Economy Office and a year later the second branch was opened in Szczecin due to enormous demand for design services.

At the beginning of the 1990's, the design practice went private and was converted into a limited liability company. Since 2015, it has been a member of the ASE Corporate Group.

As one of the few design practices, Projmors has practically all design engineering studios. Owing to that, depending on the kind of contract and nature of the structures, tasks can be done on a comprehensive basis, from a feasibility study, concepts and designs to supervision as well as the turn-key construction of whole facilities and infrastructure. Projmors is involved in a wide range of tasks related to hydraulic engineering, maritime and off-shore infrastructure projects, as well as specialised civil structures and special designs in the field of defence.

During its operations, Projmors developed designs for both Polish and foreign customers in Europe, Africa, and the Middle and Far East. Long years of work and experience resulted in thousands of designs prepared by this design practice.

Among the biggest projects, the North Port in Gdańsk can be mentioned. That was one of the most important projects in Poland, which had powerful influence on the development of the region and country. A completely new deep water port for dry and liquid bulk cargo handling was designed comprising breakwaters, quays, reloading jetties with a turning basin, an approach fairway and full handling infrastructure.

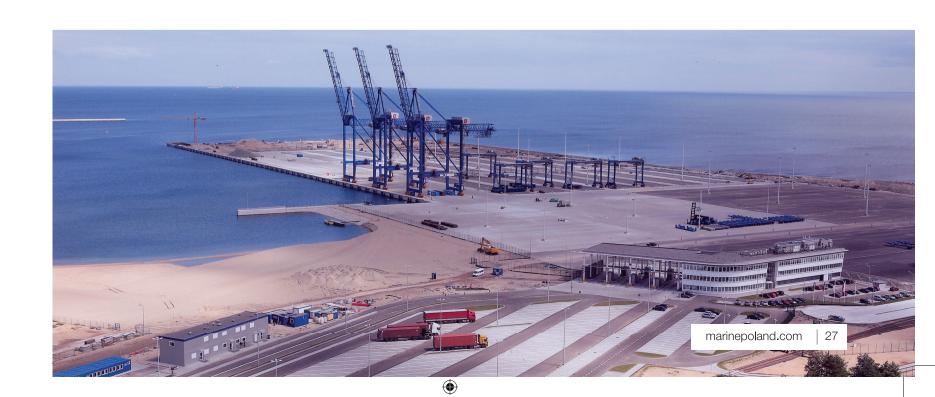
The next important design by Projmors is the LNG Port in Świnoujście. That is a completely new outer port and LNG terminal for vessels up to 215,000 DWT with a 3,000 m breakwater, approach fairway of the technical depth of 14.5 m and a turning basin.

The Deepsea Container Terminal in Gdańsk is Poland's largest container terminal with 1,000,000 TEU handling capacity achieved at the first stage of the project. Currently, following terminal extension, the handling capacity has increased to 3,000,000 TEU. The design of the terminal comprised, among other structures, two berths 13.5 and 16.5 m deep, a 650 m container quay for Postpanamax vessels of the total length of 320 m and i cargo deadweight up to 7,100 TEU, a Ro-Ro ramp, 30 hectares of stacking and manoeuvring yards and a service building.

Designs related to national defence include an aircraft service air shed in Powidz, which is the largest air shed in Poland. The cubic capacity of the shed is 140,000 m³ and it features full service and engineering back-up facilities for military aircraft service.

Among foreign projects, the Nigerdock II Shipyard in Lagos deserves attention. That is the most modern shipyard with a 3000 T floating dock for building ships and off-shore structures at the western coast of Africa. Large workshops, a modern production line, an off-shore quay 150 m long and 6 m deep, as well as an 18,000 m² paved yard were also designed.

Projmors owes its position and years of operation to flexibility and openness to challenges, owing to which the company continues to develop, offering new opportunities and a wider range of services at the Polish and foreign markets.





Marine simulators from Poland

UNITEST Marine Simulators Ltd. is a world-known supplier of sophisticated engine room simulators with high-quality 3D visualization.

The most realistic simulator in the UNITEST portfolio is a full hardware and full mission engine room simulator which consists of several actual hardware control consoles and a full-size electrical switchboard with real gauges, lamps, switches and buttons. Additionally, the engine room machinery space is visualized in 3D graphics on two big touchscreens. This engine room simulator can operate with two models of a propulsion plant: a medium speed (one four-stroke type main engine with a reduction gear and a controllable pitch propeller) and a low speed (one two-stroke type main engine with a fixed pitch propeller).

Recently, UNITEST has delivered a significant number of full mission simulators together with touchscreens with full 3D visualization of both engine room consoles, switchboards and machinery spaces. This new feature reduces the main disadvantage of a full mission engine room simulator in hardware version with realistic consoles and panels that were unable to adapt to various modern solutions applied in engine rooms unless expensive hardware changes were implemented. As a result of the introduction of a touchscreen monitor technique, the simulators are much more flexible which leads to their quicker and cheaper adaptation to the fast-changing reality of engine rooms.

As part of the cooperation with Winterthur Gas&Diesel and Alfa Laval, a modern marine engine simulator W-X92 has been developed.

The simulator is based on the design of a modern container ship equipped with one of the largest low-speed marine engines from Win G&D W-X92.

W-X92 engine technical specification:

Cylinder bore: 920 mm

Piston stroke: 3468 mm

Number of cylinder: 10

Rated speed: 70-80 rpm

Stroke/bore: 3.77 Rated

Power: R1 - 64 500, R2 - 46 500 kW (80 rpm)

Mean effective pressure: 21.0

The simulator uses a new 3D visualization technology with prerendered textures, which makes the simulator's operation even more realistic than before.





Moreover, W-X92 simulator uses a detailed thermodynamic model to calculate the combustion process in real time. It is also possible to observe the influence of many engine regulation parameters and offsets (exhaust valve, injection process) in form of indicator curves. The control and setting of engine control parameters are performed in the same way as in real engine by the FlexView interface, which is a copy of the original Winterthur Gas&Diesel engine control software.

The W-X92 simulator has also several unique futures like a graphic visualization of the dynamic engine working point within the engine limit curves and a compressor map characteristic, on which surging margin is presented. In combination with the possibility of turbocharging system faults' simulation it is an extremely valuable teaching tool.

One of the new solutions is the Alfa Laval 'PureBallast' water treatment system required by the new Convention for the Control and Management of Ships' Ballast Water and Sediments, commonly referred to as the BWM. The Convention requires ballast water to be treated to specific standards prior to discharge, and permits national, regional and local authorities to apply their own regulatory framework in their respective territorial waters. The system includes the implementation of all procedures such as ballasting, deballasting, stripping and clean in place.

The W-X92 simulator also includes two steam boilers from Alfa Laval: oil-fired Aalborg OS-TCi and exhaust gas economizer Aalborg XS. The Aalborg OS-TCi is a high-efficiency boiler with a user-friendly, integrated pressure atomizing burner controlled and monitored with Aalborg Laval Touch Control system. The Aalborg OS-TCi comes with the Aalborg KBM burner. The XS type economizer is a vertical smoke tube type designed for utilization of thermal energy coming from exhaust gases from diesel engines in ships to produce steam.







Polish legal background for foreign investors

Poland is a country that is still growing rapidly and creates many business and investment opportunities, which encourages many foreign investors, looking for new markets, to set up companies in Poland.

Despite numerous problems on the shipbuilding market and shipping industry crisis, from year to year Polish seaports report record quantities of cargo handling while shipyards carry out demanding projects.

Recently, more attention has been paid to the needs of the maritime sector which hopefully in the near future shall involve the introduction of legal regulations to make operation of maritime sector companies in Poland more attractive.

It is worth noting that over the last several months there have been introduced many changes in the Polish law, which were supposed to tighten the tax system in Poland and modernize certain legal structures that have been operating in a not very effective way for years.

The number of changes and the speed of their introduction have led to a situation in which every foreign entity intending to start a business in Poland must take into account many formal requirements set by the Polish authorities for the prospective company, including registration in the VAT register.

Also, business transactions in Poland require adequate accounting and legal support, because many reporting obligations have appeared in the Polish legal system, including implementation of JPK files (Uniform Control File), which are a set of information about economic operations of the entrepreneur for a given period. They are sent to tax authorities only in an electronic version, and the data are collected directly from the company's financial and accounting systems.

Currently, the aim is to modernize Polish regulations while ensuring the interest of the Treasury, which often involves many difficulties for entrepreneurs, to include inspections in respect of VAT refund.

In view of the above, every businessman who starts business in Poland should consider establishing a permanent cooperation with a law firm, which will prepare an appropriate course of action in contact with Polish institutions, tax authorities and courts, bearing in mind frequent changes in law.

At the beginning of 2018, the Seim adopted a package of five laws, referred to as the "Business Constitution", whose aim is to facilitate business and improve the relationship between the entrepreneur and public administration.

The "Business Constitution" refers to such areas of the entrepreneur's activity as, inter alia, the entrepreneur's relations with offices and dealing with official matters, setting up a company, suspension of business, principles of creating business law, and obligations related to running a business.

The most important law included in the "Business Constitution" will be the Entrepreneurs' Law, which will determine the most important rights of the entrepreneur and the principles of running a business.

At this stage, it is difficult to assess to what extent the introduction of the abovementioned laws will actually facilitate business in Poland.

In turn, the Ministry of Development has announced the completion of the ongoing work on a new law on special economic zones by the end of 2018, which is to change the territorial scope of the investments so far supported by the Polish state. The factors being the condition precedent for the decision to start a given investment in a special economic zone will also change.



Until now, the issues related to the creation of new jobs and the amount of expenditure incurred by investors have been of decisive importance. In principle, the new law is to create legal foundations for entrepreneurs to establish, in the first place, high standards and quality as an aim of their investments.

The Ministry of Development also intends to extend investment incentives that until now have only been in force in special economic zones across Poland.

In turn, tax relief connected with implemented investments, which will become a part of the new regulations, is to be dependent on three factors: location, nature of investment and quality of new jobs.

As it appears from the above, the new rules for investing in Poland will also have a great significance for foreign entrepreneurs.

Mateusz Romowicz

Legal Adviser mateusz.romowicz@kancelaria-gdynia.eu tel. +48 (58) 350 59 93







"AHB" Service LTD.

AHB Service overhauls and repairs of ships are our family business

Overhauls, repairs and replacements of main and auxiliary diesel engines are the main business area of AHB Service, a Gdańsk-based family company renowned for its quality, reliable performance and mobility. The company also deals with engine room equipment and ensures the delivery of spare parts.

- For 27 years we have specialized in the repair of various types of diesel engines, engine rooms and deck equipment - explains Hanna Borejszo, President of AHB Service. - We only hire the best engineers and technologists, so we are well recognized by domestic specialists in shipbuilding and ship repairs. For many of them we have become a strategic partner through the years.

AHB Service was established in 1989 with workers previously employed in a state-owned company, ZUT Zgoda Świętochłowice, which was a licensed producer of Sulzer engines. Since then, its strategy has focused on continuous development and the upskilling of employees, which has helped to build a robust and harmonious team.

- Our secret is flexibility in adapting to market conditions and constant innovation - reveals Hanna Borejszo.

As mobility became one of the most sought-after factors on the repairs market, the company started to spread globally to provide repairs of engines worldwide at sea and in port, including the complete replacement of main and auxiliary engines during mooring in ports or shipyards all over the world and repairing engines at sea.

- Our employees can be found on ships berthed in ports and shipyards around the world and on the decks of cruising ships – says Hanna Borejszo. - We can already name 26 countries in which our specialists have helped to overhaul, repair or replace main or auxiliary diesel engines. Our work also includes the renovation of approximately 30 ships per year.

Nowadays, AHB Service provides repairs and overhauls of such engines as WÄRTSILÄ - SULZER (Z40, ZA 40S, A25, A20), WÄRTSILÄ, M.A.N., M.A.N. B&W, PIELSTICK, MaK, SKL, YANMAR, DAIHATSU and BERGEN. The company also offers the grinding of crankshafts, the honing of cylinder liners and the regeneration of spare parts.

- The services we provide are recognized by the Russian Maritime Register of Ships (RMRS), which attests the repair and regeneration technologies that we apply. Our work such as the regeneration of parts has received Lloyd's Register certification. We are also honored to be a member of the Polish-Norwegian Chamber of Commerce, and the Employers of Pomerania, and to support the Polish Ship Managers Association - lists Hanna Borejszo. - Moreover, we are present at leading international maritime trade fairs, such as SMM in Hamburg.

AHB Service provides favorable conditions for cooperation, and additional services, having also expanded into diesel locomotive engines. Similarly, in this sector it provides overhauls & repairs and crankshaft grinding.

The location of AHB Service in Gdańsk has allowed the company to establish contacts with shipowners arriving at the largest port in Poland. Through the years, the company has become well-known among shipowners as a reliable contractor for repair

www.ahbservice.com.pl

AHB SERVICE Sp. z o.o.

80-046 Gdańsk, Cienista 14A, Poland

phone: +48 58 303 48 44, +48 58 322 50 14, +48 58 322 50 15

e-mail: ahbservice@ahbservice.com.pl









Alkor Sp. zo.o.

Alkor Sp. z o.o. was established in 1989. With its location close to the centre of Gdansk city, the company is in excellent position to serve shipowners operating in Northern Europe and Baltic Sea.

ALKOR is able to carry out any repair work, both routine and class renewal repairs as well as ships conversions and lengthening. ALKOR's clients are offered the high-quality work within the scheduled time and at reasonably low prices.

ALKOR is one of a few repair shipyards in Poland having available its own floating dock. The dock is 150 m long and 24.7 m wide between the side walls, and its lifting capacity is 6,000 t.

Since the beginning of its existence the company has carried out repairs and conversions of nearly 800 ships of different types and flags including ships of the Polish, Icelandic, Norwegian, British, Dutch, German, Greek and other Owners.

ALKOR offers all kinds of repair services and maintenance such as steel works, cleaning and painting, electrical works, engine and machine works, piping, hydraulic, refrigeration equipment and accommodation.

The best proof for ALKOR are the customers themselves – who are satisfied and, with no sign of hesitation, give orders for repair of their subsequent vessels.

With our own floating dock, mooring berth and dock cranes we offer the full scope of ship repair, class survey, conversion & lengthening work on various types of vessels

www.alkor.pl

Alkor Sp. z o.o. 80-863 Gdańsk, Doki 1, Poland

phone: +48 58 769 19 19 e-mail: alkor@alkor.pl









BALTEX Group the Polish family company, is the first company in the history of Polish sea mining in the extraction of marine aggregate.

At present the BALTEX Group successively extends the sea mining activities, and for a few years has been successfully developing of the offshore wind project as one of the first companies in Poland.

The BALTEX Group employs 34 people. The Group has two open cargo vessels with a capacity of 2000 tons each for aggregate transportation. One of these ships is additionally equipped with devices for inspections of the marine environment.

The BALTEX Group was also the first company, which successfully conducted the transboundary procedure between Poland and Sweden, concerning planned exploration of the marine deposits located in the northtern part of the Polish exclusive economic zone of the Baltic Sea. Thanks to this unique experience the BALTEX Group became a pioneer in the legal procedures concerning new activities in the Polish marine areas.

The BALTEX Group is one of the most active developers in the firld of the offshore wind farm projects in Poland. Out of 75 applications submitted to the Polish Minister of Maritime Economy, so far only 12 projests obtained positive location decisions, including 2 projects developed by the BALTEX Group with a total capacity of approximately 1500 MW.

"Baltex-Power", the first offshore wind farm project prepared by the BALTEX Group in 2010 was acquired by Polenergia company - one of the offshore wind farm developer in Poland. The project, carried out under the name "Baltic-North" got the positive and final Location Decision.

Within the activites in the field of sea mining and offshore wind energy, the BALTEXGroup cooperates with partners from the research and develoment sector as well as involved in the international projects. In the field of R&D projects the BALTEX Group cooperates with many partners, among with the most important are: Ship Design and Research Center, Polish Academy of Science, Technical University of Gdańsk and Maritime Institute in Gdańsk.

In January 2016 the BALTEX Group completed the scientificresearch project "AQUILO" dedicated to optimization of the support structures of the offshore wind turbines in the Polish marine areas. The project got EU funding for 80% of the total value of 1,2 milion Euro.

At present the BALTEX Group preparing applications for another two R&D projects, concerning floating support structures for the offshore wind farms and recovery of heavy minerals, quartz and amber from the extracted natural aggregate.

On the basis of the mining concessions, the BALTEX Group is entitled to exploit the natural marine aggregate from the deposits estimated at over 80 million tons (perspective). The extracted natural marine aggregate is of the highest quality (contains 75% of granite). It is used in majority of infrastructural projects carried out last years in Northern Poland where technology of special concrete mass is applied. Obtaining of the first marine mining concessions in Poland was preceded by many administrative procedures, including environmental impact assessments and obtaining the positive Environmental Decisions.

www.baltexenergia.pl

BALTEX Group

81-379 Gdynia, Adama Mickiewicza 5, Poland phone: +48 58 699 48 10, fax: +48 58 699 48 15

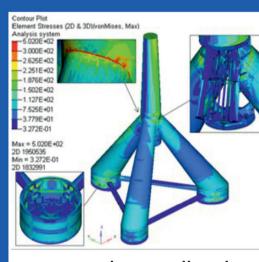
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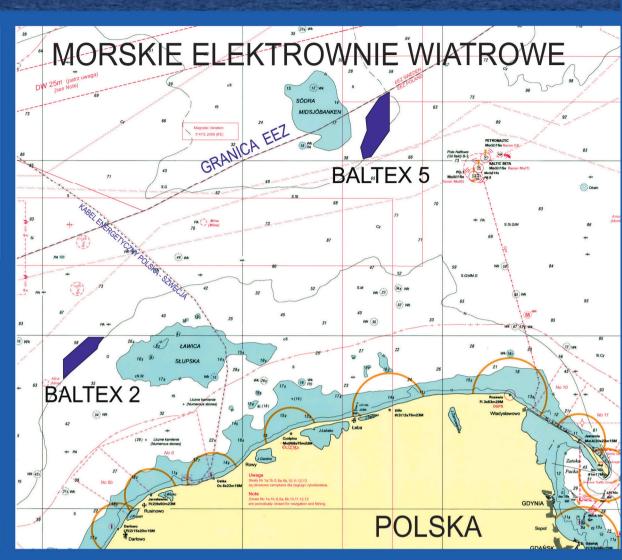




baltex.eu

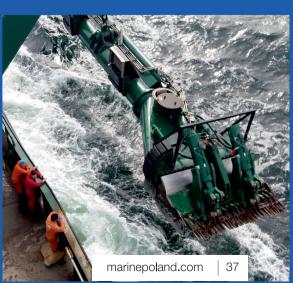
















Baltic Control Poland Ltd Sp. zo.o.

Baltic Control Poland Ltd Sp. z o.o. as a member of Danish Baltic Control Group is an internationally recognized provider of marine and cargo inspection and certification services.

The Company Baltic Control was established at the Baltic Sea port of Aarhus, Denmark in 1980 - hence the name Baltic Control. The company quickly expanded to other regions and activities to what it is today - a truly global and recognized company in the industry. Baltic Control Poland was established in 2006.

Many companies and institutions all over the world have been entrusting Baltic Control with the task of protecting their interests by inspecting the imports and exports of products, commodities and foodstuffs as per national and international standards.

Regarding third party inspections, industrial and technical inspection, we have numerous qualified inspectors and engineers in Poland and all over the world. We have been involved in many big turn key projects, especially to the oil and gas industry where deliveries are to be inspected and certified.

We strive to offer to our customers truly independent service wherever it may be required, with emphasis on quick response, attention to detail and competent execution adding value to customer needs and maintaining a good and long lasting business relationship.

Testing and analysis are done in our accredited laboratories in Poland, Kazakhstan, Russia, Ukraine, Turkey and Brazil. Whenever deemed practical and time saving, we subcontract analysis to internationally accredited and recognized laboratories all over the world.

This is of course just a brief sample of the main inspection activities of Baltic Control and we are of course also well established within many international trading companies, who are benefiting from our global network and accumulated experience from many years in the business. Our customer database includes more than 10.000 individual names.

Baltic Control is ISO 9001 certified and a member and represented on the board of International Federation of Inspection Companies (IFIA) and we have adopted their code of ethics

www.balticcontrol.com

Baltic Control Poland Ltd. Sp z o.o. Janka Wisniewskiego 13, 81-335 Gdynia

phone: + 48 58 627 4633 e-mail: baltic@balticcontrol.com







Baltic Tank Polska

Baltic Tank Polska

Baltic Tank Polska sp. z o.o. has the same ownership background as the finnish Baltic Tank Oy, which is the biggest independent terminal company handling chemicals in Finland and also expanded its business e.g. to Estonia.

Scope of Baltic Tank Polska z.o.o. (BTP) activities includes port terminal operations, storing and handling of all kinds of liquid cargoes as well as industrial transport. The company also has a long experience in direct cargo transfers e.g. from railway wagons and trucks to a ship.

Baltic Tank with its closely related other companies is operating now in fourteen ports around the Baltic Sea, in Finland, Estonia, Sweden and Poland.

Baltic Tank Polska sp. z o.o. was founded to offer these highly specialized services in Poland on the basis of long-time experience gained in Finland with scandinavian precision and standard.

BTP in order to strenghten its position on Polish market and meet growing requirement in the field of transportation, storage and export and import of liquid products has decided to expand its activity. The company at present is engaged in a new project of building storage and loading/discharging terminal at Weglowe berth at Port of Gdansk on the area of 65,000 m². The terminal is communicated with network of railway and ring roads including highways connecting the port with unlimited destinations.

The investment is planed to build up storage tanks of about 80,000 cbm capacity for different products together with technical infrastructure to handle both sea-tankers, other ship or barges, rail cysterns, liquid containers and road trucks. The tanks will have heating facilities, will be insulated and giving opportunity to blend different product grades. The depth of berths will enable to handle tonnage with abt 10 m draft. This program should be completed by end of year 2019. Further plans depend on the demand for our services and we are able to provide additional capacity of 20/40,000 cbm.

We are open for discussions with our future customers on their expectations and needs for storage capacity and services we shall provide to meet highest standards and satisfacion for all parties.

For any queries and further information pls contact either Baltic Tank Polska

e-mail: baltictank@baltictank.pl

or Okmarit Ltd

e-mail: okmarit@okmarit.com.pl or s.olszewski@okmarit.com.pl

www.baltictank.pl

Baltic Tank Polska Sp. z o.o. 80-340 Gdańsk, Gdyńska 7 B 7, Poland

phone: +48 507 196 115 e-mail: baltictank@baltictank.pl











Baltic Tank Polska









Bulk Cargo – Port Szczecin Sp. z o.o.

Bulk Cargo - Port Szczecin: universal seaport with great prospects.

Bulk Cargo - Port Szczecin established in 1991 is the biggest, multipurpose stevedoring company within the ports of Szczecin and Świnoujście. Our core business is handling and storage of bulk commodities: coal, coke, ore, scrap, grain and fertilizers and general cargoes: steel products, forest products, break-bulk in big bags. Bulk Cargo - Port Szczecin has evolved from a reloading and storing company specializing mainly in handling bulk cargoes into organization which handle a broad spectrum of cargoes coming through the ports ad the Odra River mouth.

We offer:

- deepest berths in the port of Szczecin
- 11 berths with a total length of 3 364 m and draft up to 9.15 m
- The largest areas of storage yards and 50000 sqm in warehouses

As the most universal stevedoring company, with its annual turnover of 4-6 million tonnes and over 300 skilled workers, we can offer efficient, high quality cargo handling. We have the deepest in the port of Szczecin berths and the largest storage and warehousing areas. Our attractiveness is further enhanced by a very convenient location at the crossroads of transport routes and comprehensive reloading and storing offer covering wide variety of cargoes.

We provide complementary services for the cargo, such as:

- sorting, crushing and packaging of bulk goods, stuffing and stripping of containers
- unitizing (palletizing, bagging, shaping, foiling)
- marking, repair packs, etc.

In order to provide our customers with a comprehensive and convenient service, we operate as forwarding agent as well.

The scope of our activities includes:

- international and domestic forwarding, logistics supply chain
- organization of cargo handling, storage, custom's clearance
- organization of the inland waterways transport and sea carriage.

www.bulkcargo.com.pl

Bulk Cargo - Port Szczecin sp. z o.o. 70-661 Szczecin, Gdańska 21, Poland

phone: +48 91 430 73 73, 430 71 12 fax: +48 91 462 35 29

e-mail: bwalczak@bcps.pl, ppysiak@bcps.pl









CRIST S.A.

Our activity started in 1990 - initially as a business partnership of two natural persons and since 2010 as a resiliently growing joint stock company.

Shipbuilding, offshore constructions, steel structures, sea engineering, civil engineering - these are the fields we specialize in. We steadily develop and adjust our offer to changing market demands. We are the only shipyard in Europe which has already constructed 4 units of Jack-up Vessels. Three of them are nominate for installation and servicing of sea wind farms.

CRIST belongs to the group of companies distinguishing themselves through innovativeness, niche products and the organization of the supply chain. The company cooperates with Clients from Poland, Germany, Norway, Denmark, Finland, Iceland, France, Belgium, The Netherlands and Scotland.

Our priority is to secure services and products which not only meet the acceptance but also exceed Clients expectations and demands. In our performance we focus on reliability. We care about the highest quality which is always controlled and certified by international technical organizations and classification societies.

CRIST has always been active in the field of shipbuilding, steel constructions and ship-repairs. Economic changes and growth of renewable technologies - such as wind and hydroelectric energy - created possibilities of activity on new markets.

For that reason we are presently participating in the implementation of projects of specialized coastal structures, sea transport and units for exploration of marine resources.

For many years we have been supporting eco-conscious initiatives what has initiated the execution of demanding and exciting projects: offshore constructions, barges and ships destined for installation of wind turbines

Producing for the offshore business we successfully take advantage of our market niche. The construction of sophisticated units for installation and servicing of sea wind farms ranks us within the group of European leaders in this branch.

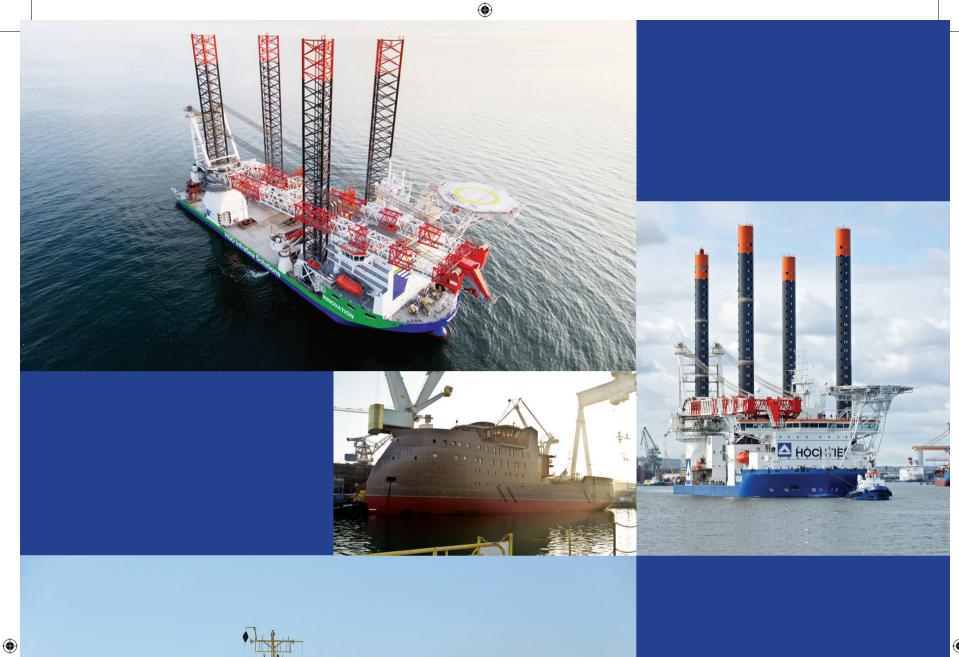
www.crist.com.pl

CIRST S.A.

Czechosłowacka 3, 81-336 Gdynia, Poland phone: +48 58 769 33 00, fax: +48 58 769 33 01

e-mail: biuro@crist.com.pl















ISO: 9001:2008

Eko-Laser

Eko-Laser delivers advanced services for the treatment of metals.

We want to expand our range of services to meet the increasing needs of our customers. This goal will be achieved through the continuing modernization of machinery and staff self-development.

We produce complete parts of machinery for the tire industry, agriculture. We can boast of producing the finished chassis of complicated agricultural machines, which go directly to the assembly lines. Another customers who trusted us belong to the companies of the food industry. Our furniture made of stainless steel can be found in restaurants around the world. Also, a number of assembly lines for the production of food have components produced by our company.

EKO-LASER's experienced in the field of laser treatment staff will help you resolve problems with the delivery 'on time' of the precisely cut and/or bent subassemblies and smaller components. We cooperate with about 100 contractors, who are convinced to use modern (and in fact cheaper) technology.

The cost of processing elements is calculated on the basis of such factors as: time, tools, technology operations, consumption of materials. Thanks to modern technology, we are able to offer very favorable price at the short time of implementation, accuracy and quality of execution. Waste materials are returned to the client or settled up. After an initial order, the cost calculation is made on the basis of the spreadsheet and forwarded to the client by fax or e-mail.

The quality is treated in our company as a top priority. The cutting-edge technologies ensure the highest accuracy of performance and give an opportunity to meet customers' expectations. We give certificates for our materials.

Services:

- Laser cutting Laser is the most versatile and accurate device for sheet metal work. Available cutting tolerances are of +/- 0,1 mm in wide range of materials like: stainless steel, carbon steel, aluminium. EKO-LASER has got four BYSTRONIC LASERS installed with a power of 3000 W and 4000 W.
- CNC press brake We have press brakes: Press brake ECOPRESS 225 (made by EHT), Press brake APHS 4112 x 300 (made by Baykal).
- Wet painting We have a painting chamber of size 6900 cm x 3900 cm x 2700 cm (Length x Width x Height) which has high heating temperature, the possibility of drying and temperature limiting device.
- Welding Stainless Steel, Aluminum We have a modern welding, which is located in two separate halls. One hall is equipped with semi-automatic welding workstations, where one can perform the welding of carbon steel.
- Stainless steel surface finishing We offer glass bit finishing (for sheet metal, constructions and machinery made from acid-proof steel). Our employees care about the quality of service and do not sand carbon steel to provide high quality services at acid-proof steels.
- Transport We provide transport services for own and our customers' needs . We offer services in the field of national and international transport of goods.

www.eko-laser.com.pl

EKO-LASER Andrzej Kostecki

Bożepole Małe, Polna 1, 84-214 Bożepole Wielkie, Poland

phone: +48 58 678 85 00 e-mail: biuro@ekolaser.pl









Elektro-Plus

Elektro-Plus is a ship service company in marine industry: including offshore, oil and gas, wind support ships.

The spectrum of our activities includes working on fishing boats, military vessels, tankers and others. In our business history we have encountered many different challenges in the field of removing electrical equipment failures, modernization or renewal ship electrical subsystems.

We build, overhaul, or refit ships.

Thanks to our work experience in ship repairs and maintenance we had the required specialists to enter the area of shipbuilding. Most of projects included rebuild of ship from another class to an multipurpose offshore vessel, which now serve on North Sea. Sometimes the task was bigger, we have build completely new units

We work not only for ships.

Our customers are not only from marine industry. Sometimes we cooperate with other companies at shore. Together with Aggreko we worked at G7 summit in Germany, we aid them in installation of windfarms in the Pomeranian district. Poland.

Our new workshop is equipped with highly specialised diagnostic stations for: inspection, repair and recertification of electrical machinery and equipment. Work is always performed with accordance to the requirements of classification society.

We also have design office – our constructors can design electrical subsystems for ships, including main switchboards, distribution boards, automation, control and monitoring systems. We also carry out all the required calculations for vessels – power demand, energy balances, etc.

Our Scope of Services:

- Developing a variety of PLC-based systems,
 Fixing and adjusting already installed ship equipment,
- Designing, installing and starting new electrical installations,
- Repairing ship automation and electrical systems onboard or in our workshop,
- Diagnostic inspections, troubleshooting electrical systems,
- Technical evaluations with detailed descriptions of proposed repairs,
- Designing new installations,
- Repairs incl. delivery of replacement parts,

and more...



www.elektroplus.biz

Elektro-Plus

Bolesława Krzywoustego 4 str., 81-035 Gdynia, Poland phone: +48 58 688 84 00 e-mail: office@elektroplus.biz, zwara@elektroplus.biz

















ELPO Firma Usługowa

Service company ELPO operates since 1991. ELPO specializes in moving heavy loads of large-scale cargo using hydraulics.

"We perform our services in the shipyards, seaports, production halls, power substations, power plants, bridges, viaducts etc.

Our company has various sets of hydraulic eqiupment, depending on the weight and size, which can be combined in any system for lifting, spreading and relocating. Thanks to many years of experience we also built a hydraulic skidding system (type HWS-280) designed to improve the movement by sliding. The system provides constant pressure distribution on the ground and transported cargo. We can build a system of 24 hydraulic skid shoes HWS-280 with a nominal capacity of 150 tonnes for each unit and lifting height of 200 mm.

Our offer also includes a HSP-140 (4) and HSP-250 (8) hydraulic climbing system which enables lifting of heavy contruction in safe manner

We are also providing services of weighing heavy construction elements (up to 1600 tonnes) by using electronic strain gauge systems with the printout of the weight and the designation of the center of gravity (CoG). We also provide weighing service by means of hydraulic method with simultaneous registration of weighing up to 2500 tonnes or more. Our weighing systems have certificates from Calibration Office of Weights and Measures in Gdańsk.

On our client order we perform stress tests od structural elements with simultaneous registration of process and with the development of the documentation of the stress test report. Our load tests recording systems have Certificate of Calibration Office of Weights and Measures in Gdańsk.

We offer wide range of the other services associated with the use of hydraulics: unloading, reloading, and relocation of heavy machinery in production halls among others. In addition, we offer unloading of transformers, turbines, generators, which later we can move on the foundations of the substations, power plants and other destinations.

www.elpo.pl

ELPO Firma Usługowa

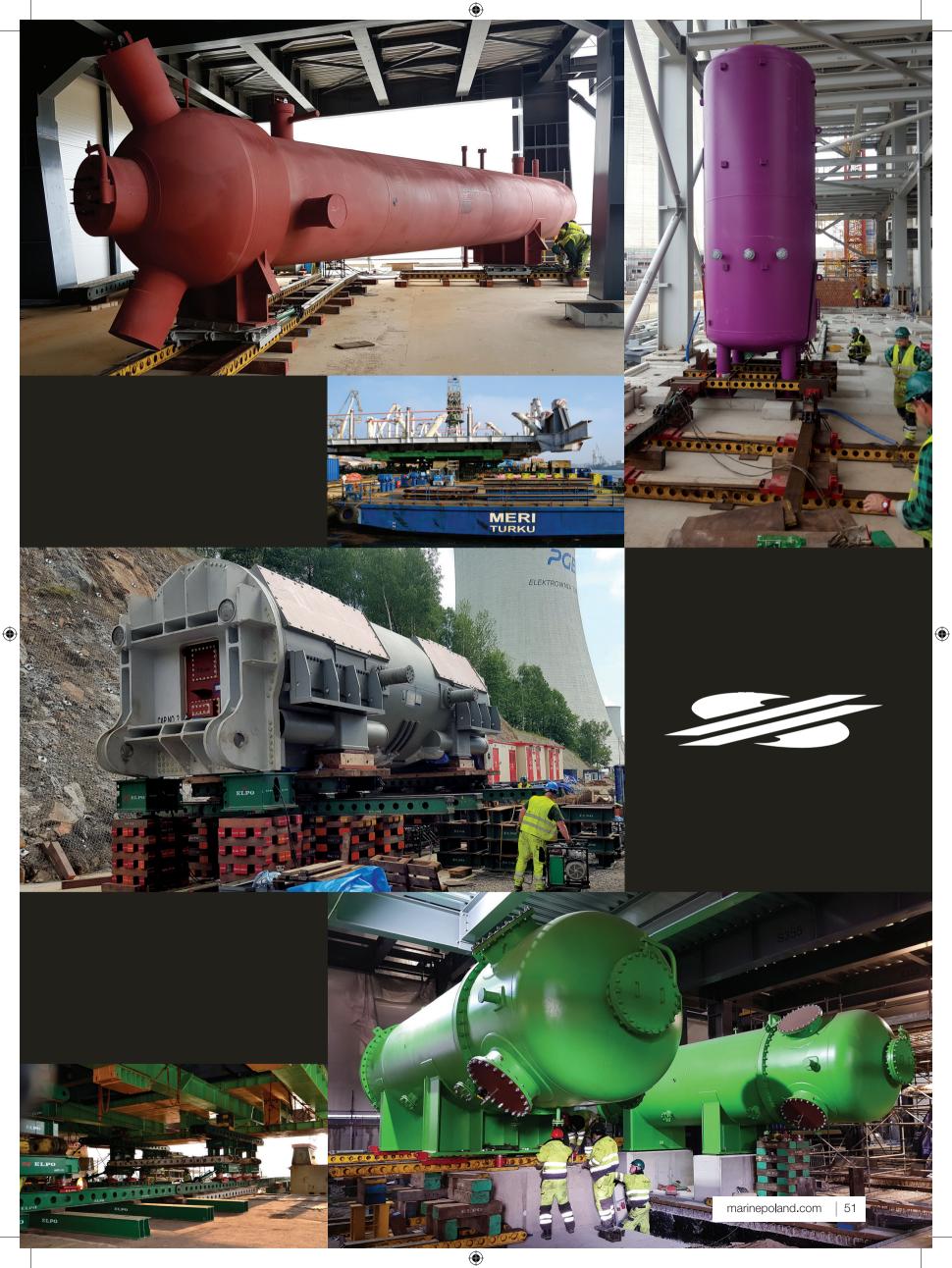
80-299 Gdańsk, Gnieźnieńska 16, Poland

phone: +48 58 625 92 43, fax: +48 58 625 92 43

e-mail: elpo@elpo.pl

Project Manager: +48 506 034 136, adam.tusk.elpo@gmail.com









Energomontaż-Północ Gdynia S.A.

Energomontaż-Północ Gdynia is an internationally recognized Polish provider of large scale complex multidisciplinary structures for Offshore Industry ranging from Deck Equipment, Subsea Terminals to complete Processing Modules and Floating Units.

Energomontaż has been involved in erection of several Power Plants including construction services for the first Polish Nuclear Power Plant in Zarnowiec as well as other projects related to Power Industry including prefabrication of steel reactor cover for Nuclear Power Plant in Olkiluoto (Finland). Company's experience in Power Industry is underpinned by the long term power and heat generation plant maintenance service agreement for Michelin Tyre Factory in Olsztyn.

For the last 15 years EPG has been supplying structures for Renewable Industry providing substation platform topsides, elements of subsea foundations, transition piece and external platforms for number of Offshore Wind Farms: Walney, Rødsand, Baltic 2, Butendiek, Arkona, Gwynt y Môr, London Array, Nordsee Ost.

The Company also offers machining of large scale elements - up to 120 tons - and plate rolling of up to 200 mm thick.

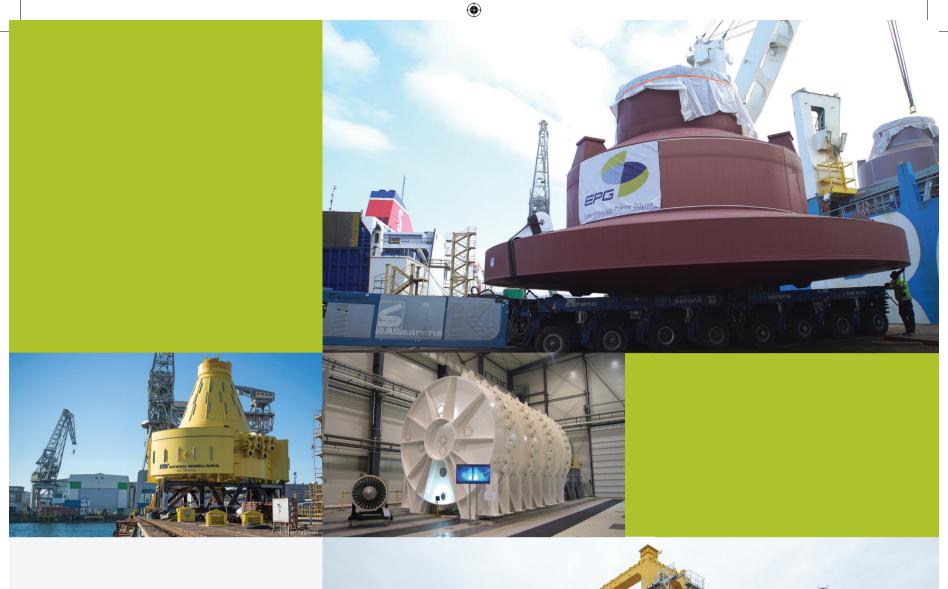
Majority of EPG contracts originate from Western and Northern Europe although assets delivered by EPG are often bound to final destinations in Africa and both Americas.

www.epgsa.com

Energomontaż-Północ Gdynia S.A. 81-061 Gdynia, Handlowa 19, Poland

phone: +48 58 770 25 21 e-mail: epg@epgsa.com















Escort Sp. zo.o.

Escort - specializing in the field of marine electronics, and underwater measurements, monitoring and exploration.

Escort has been present on the Polish market for 25 years. Working initially only as a service company in the field of marine electronic equipment, it expanded its scope of services also in other areas of inland waters. In addition to traditional activities in the area of services and in the design of installations of marine electronic systems, the company also specializes in the field of underwater monitoring, underwater exploration hydrographic measurements. To be self-sufficient in this area the company makes use of high quality equipment to perform all kinds of tasks underwater. Among other things, the company has an underwater ROV Falcon vehicle, single beam and multi beam hydrographic echo sounders, devices cooperating with echo sounders, such as a motion sensor, SVP probe or navigation system and hydrographic software, towed sonar, high-resolution MS1000 scanning sonar, and an ARIS acoustic camera used for exploration and for monitoring objects in conditions where there is a complete lack of visibility in the water. The company also carries out comprehensive studies of the structure of concrete bridge piers underwater and around the base of these pillars, presented in 3D.

The staff of Escort consists of young but experienced engineers and service technicians, programmers and designers of electronic systems and A class hydrographers. The company also conducts training in the fields of hydrography and the exploration of underwater objects.

Although monitoring, exploration and underwater measurements based on its existing equipment is possible, the company has developed and put into production a number of hydro acoustic systems to support such research, including the following systems:

- **HSMD** hydro acoustic system for monitoring the water bed and underwater infrastructure. The device allows remote observation online, via the Internet, of changes in the bed formation in the area of the installed acoustic head ridge or wharf of the port basin. By comparing the registered echograms, it allows understanding of how quickly and to what extent the erosion of the bed progresses.
- **HSMR** hydro acoustic system to monitor fish in fishways and rivers. The device allows remote observation online, via the Internet, of the migration of fish through fishways. It allows the speed and direction of movement and fish size to be measured and the generation of reports of their migration. Synchronization with optical cameras allows fish species to be assessed at the same time.
- HSPP hydro acoustic positioning system for underwater (underwater GPS). The system consists of three telemetry buoys equipped with hydrophones, GPS receivers and radio modems, allowing the continuous presentation on a monitor of the Pinger position, installed on an underwater vehicle, for example, or on scuba diving equipment. The system does not require any pre-calibration. It allows the determination of the geographical position of the Pinger with one-meter accuracy on waters of approximately 1 km².

www.escort-technology.com

Escort Sp. z o.o.

70-103 Szczecin, gen Dezyderego Chłapowskiego 8, Poland

phone: +48 914310400, fax: +48 91 48 24 777

e-mail: escort@escort.com.pl









Famor - innovative solutions

FAMOR is a provider of complete solutions in the field of lighting and electrical equipment.

FAMOR Product Portfolio:

- Marine switchboards:
 - main:
 - emergency;
 - auxiliary switchboards (starters, lighting & heating panels, distribution boxes, etc.)
- Control consoles:
 - bridge;
 - ECR;
 - cargo & ballast systems
- Control columns for deck equipment
- Marine and industry lighting equipment (fluorescent, incandescent, LED, explosion-proof)
- Lighting equipment for trains vehicles
- Searchlight and floodlight (halogen, sodium, metal-halide, xenon, LED)
- Signaling devices:
 - bells, hooters and sirens;
 - signaling columns;
 - signal-position lanterns;
 - signal lights (flashing light and continuously light)
- Evacuation signs and lights

FAMOR S.A. is well known Polish manufacturer of complete range of low voltage distribution and lighting equipment to home and foreign markets for over 60 years. We offer reliable, modern and energy-saving products.

Obviously, our manufacture has been constantly changing adjusted to increasingly customer demand. At present the Company is focused on the shipbuilding industry and train vehicles building industry, where are very high demands of quality and durability of products is essential, the same quality requirements we apply to remaining our product groups as mining, industry, streets and hospital lighting.

We obtained several quality management certifi- cates including ISO9001, ISO14001, AQAP2110, ISO3834-2, ISO13485 also NATO supplier certificate. We have research development department. Many products are designed and manufactured according to individual clients requirements. We also offer services related to metal machining, welding and powder painting.

www.famor.pl

Famor S.A. 85-048 Bydgoszcz, Kaszubska 25, Poland

phone: +48 (52) 366-82-02, fax: +48 (52) 366-82-03

e-mail: sekretariat@famor.pl









FAST SA

We have been providing professional services and carrying out specialised projects in the area of surface protection, insulation, interiors and furniture for 30 years. We participate in works concerning new vessels, ship repairs, reconstructions and offshore structures.



Cleaning and painting services in the area of surface protection are the main activities of FAST. Due to many years of experience, qualified staff, as well as full technical infrastructure we can realise a great variety of projects. We offer comprehensive range of services: from an in-depth technical analysis, through preparatory works to the application of optimal method of cleaning and adequate painting, metalizing systems, as well as passive fire protection (PFP) applications. Surface protection works (cleaning and painting) are carried out in our own painting lines or in the place designated by the Customer where we also provide a complete facility protection against adverse weather conditions. We meet all the requirements and norm recommendations which come from the world leading manufacturers and classifiers.



Our company provides extensive insulation services for sea constructions, offshore and industrial applications. We insulate flat surfaces, pipelines and flues, in the area of thermal, fire and acoustic preservation together with metalworking and foaming, always according to the needs of the project. In order to meet the most stringent requirements, we offer energy efficient, safe and sustainable solutions for fire protection. We directly cooperate with global leading providers of insulation systems.



We are specialists in equipping vessels. We offer complete finishing and ship interiors furnishing in turnkey project. Thanks to many years of experience we carry out implementations in various standards and always according to Clients' requirements. We design, supply materials and produce furniture and equipment which is dedicated to particular unit and installed on board.

One of the distinguishing elements of FAST is high quality of realised projects. We have implemented, continuously develop, and improve the Integrated Management System including ISO 9001, ISO 14001, PN-N-18001 and AQAP which builds in our Customers confidence and guarantees service with constant quality. Our dedicated Project Managers work in according to IPMA standards.











www.fast.pl

FAST SA

Czechosłowacka 3, 81-963 Gdynia, Poland phone: +48 58 554 33 61, fax: +48 58 554 33 62

e-mail: info@fast.pl























Gdynia Maritime School Ltd.

The Gdynia Maritime School Ltd. was founded in 1988.

The company manages:

- non public post secondary maritime school educating in officer navigator and engine officer job.
- non public training centre educating mariners, officers, maritime administration employees, wind energy employees, drone operators and sailors.
- publishing activities in the preparation and issuance of scripts and books thematically related to ongoing training.

The Gdynia Maritime School is a founding member of the National Chamber of Maritime Commerce and a member of the National Forum of Non-Public Education and the Polish Maritime Industries Forum. The school has been active in the Polish Maritime Cluster, being in the authorities.

In July 1998, the School obtained the inter- national certificate of quality according to the standards ISO 9001: 2000 for the organization and training of maritime studies, awarded by Lloyd's Register Quality Assurance.

Our teaching staff consists of 130 best in your field educators and practitioners with many years of professional experience in working on ships offshore, including instrumental Higher Maritime School in Gdynia, currently the Maritime Academy, shipping companies and the Maritime Administration and the management of institu- tions in this OTC (Officer Training Centre of Gdynia Maritime University LTD.).

www.morska.edu.pl/en

Szkoła Morska w Gdyni Ltd 81-339 Gdynia, Polska 13A, Poland

phone: +48 58 621 75 41, +48 58 661 26 55

e-mail: szkola@morska.edu.pl









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HACO Ltd.

HACO Ltd. was established in 1989 and is carrying its activities at Pruszcz Gdański from 10 years. We are the fabricator of wide range of ship's fittings and constructions.

Well equipped machinery lets us to make wide range machining of produced elements - milling, planing, drilling, threading, grinding, turning etc. All constructions can be delivered equipped with hydraulic and electric installations. We also make the surface finishing with galvanizing, blasting and painting with primer and top coat paints.

HACO also fabricates parts and constructions used in the extractive industry. From a few years we are fabricating parts of drilling systems for oil rigs, service baskets for deep extraction systems, parts of on-shore and off-shore servicing units. The final product is a complete device, equipped with all installations, tested and delivered directly to the end customer.

Our recipients are companies from all continents and many countries, carrying business of sea and inland freight as also those extracting fossil fuels.

We also offer services of laser and gas cutting. Highest quality of our services is proven by classification societies certificates and ISO9001 system.

www.haco.com.pl

HACO Ltd.

Obrońców Westerplatte 5A, 83-000 Pruszcz Gdański, Poland

phone: +48 58 773 77 70 e-mail: office@haco.com.pl















Haward Design & Engineering Poland Sp. zo.o.

Havyard Design & Engineering Poland provides design services and competitive engineering solutions within shipbuilding sector, being a part of international maritime technology company.

Havyard Design & Engineering Poland is technology focused company providing design and engineering solutions for new vessels, yachts, ship conversions and repairs. The company is a part of international maritime technology company Havyard Group ASA, that provides products and services within transport, energy and seafood.

Havyard Design & Engineering Poland (previously named Naven) was found in 2006 in combine to Norwegian partner, providing design services in both main shipbuilding areas, hull and machinery. Since beginning of the activity the company is delivering basic, classification and detail engineering technical documentation combined with project management and supervision on production site.

The company located in Poland, Sopot, hires 25 skilled Naval Architects and Mechanical Engineers with shipbuilding and offshore industry background. Havyard Design & Engineering Poland is knowledge-based company. The building of special-purpose, technology advanced vessels demands expertise in a number of areas. Designers have first-hand experience and feedback both from the building process and the operating of the vessels.

Havyard Design & Engineering Poland is reliable design and engineering services supplier to shipyards, ship owners and fleet managements.

Scope of design and engineering services:

- Hull structure
- Outfitting
- Ship machinery
- Ship systems
- Piping and HVAC
- Deck equipment
- Interior
- 3D visuals
- Project management
- Supervision

www.havyard.com

Havyard Design and Engineering Poland sp. z o.o. 3 maja 67-69, 81-850 Sopot, Poland

phone: +48 58 600 81 62 e-mail: hde.poland@havvard.com











Havyard Design & Engineering Poland





- machinery
- structure
- systems
- outfitting
- interior













Havyard Production Sp. zo.o.

HPR HAVYARD PRODUCTION Sp. z o.o. was founded in 2011, based in Poland. Odarok Our company can offer support to its

based in Poland, Gdańsk. Our company can offer support to its demanding Customers, by it's wide and still growing qualification range.

The company has been an integral part of Havyard Group ASA as a supplier of both complete packages and support functions within production of electric installations, piping and steel construction with related engineering and project management. Havyard Production Sp. z o.o. provides a various range of activities worldwide, including vessels new builds and refurbishments, warranty and post-warranty service on shipbuilding market and land installation.

Our main products and offered services

Electro installation production & service

- New build Cruise, Merchant and Navy vessels turn-key electrical systems,
- Retrofit electrical installation,
- Engineering of all electrical installations.
- Execution of electrical installation up to 50 kV.
- Switchboard Engineering,
- Fire alarm systems for shipping,
- Internal control systems,
- Supervision,
- Commissioning.

Switchboard Production & Commissioning / Production hall of 750 m²

- Main and Emergency Switchboards, Control Panels and Wheelhouse Consoles,
- Motor Starters up to 1000kW,
- Automation Cabinets,
- Distribution Boards,
- Shore Connection Boards,
- Testing/Validation and Certification of the product (IEC 60439/61439, DNV, BV, PRS, etc.).

Mechanical Production Department / Production hall of 2200 m²

- Steel constructions and system installations from the project to assembly.
- Carbon steel,
- Stainless steel,
- Copper,
- PEHD, PE, PB, PVC,
- Production and installation of thick walled ducting including AC rooms,
- Installation and ship machinery systems.

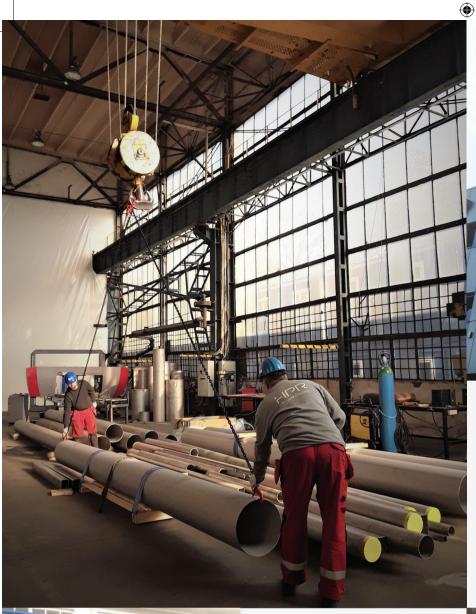


www.havprod.com

Havyard Production Sp. z o.o. Wenus 73 St., 80-299 Gdańsk, Poland

phone: +58 728 47 70 e-mail: hpr.pl@havprod.com























HYDRO-NAVAL Spółka z o.o.

HYDRO-NAVAL is an engineering company specializing in the production of complete advanced machinery and equipment, tanks, transportation systems, steel structures, as well as hydraulic, electrical and PLC installations and systems.

For almost 40 years we have been providing services as a main contractor or as a subcontractor under projects which require full project management from planning, designing, engineering, fabrication, assembly or modernization and repair of equipment for nearly any industry:

- offshore
- petrochemical
- energy
- shipbuilding
- food industry and various branches of light industry
- production of special equipment for the military and civil vessels
- specialized equipment from nonmagnetic stainless steel.

HYDRO-NAVAL's imperative is customer satisfaction by providing competent and professional service and by timely delivery of a high quality product.

We apply integral quality control measures at all stages of our production: from planning, designing, to manufacturing and post-delivery service. Our partners benefit from the application of highly qualified staff, international standards and norms:

- ISO 9001:2008
- ISO 3834-2:2005
- EN 1090-1
- AQAP 2120:2009
- AEO certificate
- NATO Commercial and Government Entity.

Through the implementation, maintenance and continuous improvement of our Quality Management System, HYDRO-NAVAL strives to provide the highest quality product and services, as well as to meet various requirements of our customers. By delivering high quality services we desire to preserve our reputation of a valuable, solid and reliable business partner.















www.hydro-naval.com

HYDRO-NAVAL Spółka z o.o. 76-200 Słupsk, Braci Staniuków 16, Poland

phone: +48 59 844 50 00, fax: +48 59 844 50 20

e-mail: office@hydro-naval.com









Kancelaria Radcy Prawnego

The Law Office Legal Consulting - Mateusz Romowicz,

with its seat in Gdynia, was established in 2006 by Mateusz Romowicz.

The Law Office provides services to clients from different branches and sectors of the economy in Poland and abroad. These include companies from the shipbuilding, maritime, shipping, and construction industries, and companies involved in international trade or transport.

The Law Office provides a wide range of legal services for commercial companies and individuals running a business. The form and scope of the legal services offered by the Consultancy take into account the legal requirements imposed on entrepreneurs, the pace of business, and the specifics of international trade relations.

We collaborate with our clients based on an understanding of the nature of their business, and tailoring our offer to the needs and objectives of their operations. The specialists working with us guarantee the highest level of ethics and competence of the services provided.

The Law Office provides legal services in Polish, English, and German.

The Consultancy consistently ensures that all orders are carried out in a timely manner and at the highest professional level.



www.kancelaria-gdynia.eu www.prawo-korporacyjne.pl Kancelaria Legal Consulting - Mateusz Romowicz Śląska 35/37 Str., V floor (Twin Office building) phone: +48 58 350 59 93, fax: +48 58 746 33 95 e-mail: mateusz.romowicz@kancelaria-gdynia.eu

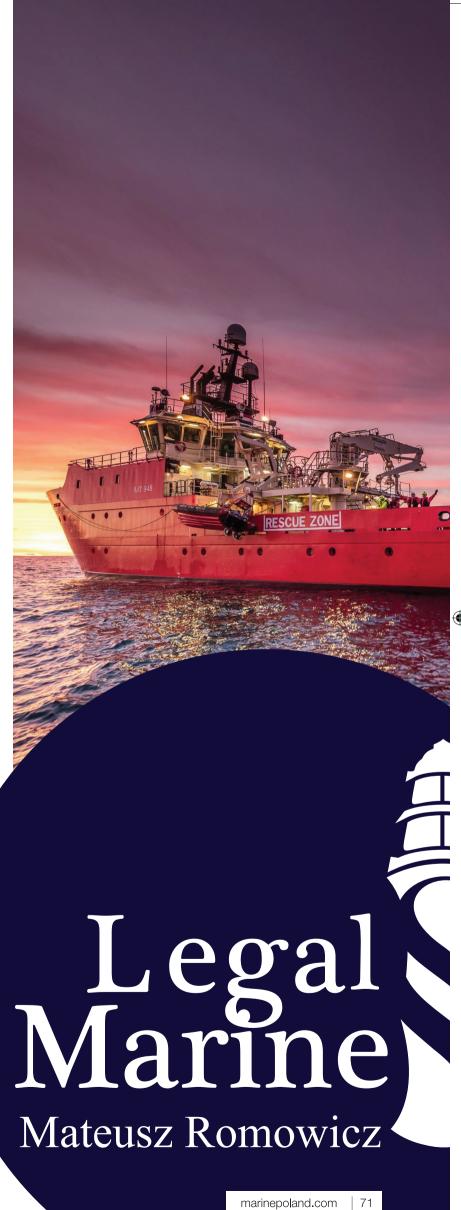


An important aspect of the services we provide is our response speed, and the aware-ness that we may not - at any stage - block business decisions in an unjustified manner.

We strive to recommend to corporate clients solutions that optimise economic and tax risks.

To ensure efficient communication with the Consultancy, each client is assigned a lawyer who is responsible for getting to know the specifics of the client's business operations and for ensuring efficient communication between the Consultancy and the client.

The Law Office's team delivers timely, comprehensive and professional legal services to its Clients. In addition to their wealth of knowledge, what distinguishes our people is their experience in maintaining long-term, day-to-day services alongside legal consulting for physical persons and for economic entities of a variety of legal-organisational forms.







We are one of the oldest companies in the sectors of transport and logistics operating in the Polish market.

Our company guarantees delivery of cargoes to any place in the world - by sea and on land. Thanks to our long experience and creativity of our staff, Morska Agencja Gdynia is a brand which cooperates with exporters and importers from all over the world, shipowners, shipping lines, freight forwarders, ports, maritime offices, customs and immigration, banks and financial institutions as well as insurance companies.

We organize road and sea transport of several thousand containers a year, freight vessels, arrange road and rail transport, deal with heavy and over-size goods, dry and liquid loads as well as with general cargo. Our company ensures storage and distribution of our customers' goods in modern warehouses and also provide bonded storage. The company's offer also includes offices to let.

For years we have been a correspondent of protection and indemnity clubs. We work as an emergency agent for the benefit of foreign insurance associations, supporting them during settlement of claims in road, rail and sea transport.

Polish Seafarers are offered attractive and safe work. Each year our company arranges about 1500 contracts for officers and ratings to the vessels of reputable shipowners from Germany, Great Britain, Denmark, Ireland, Greece and the USA.

Our professional team may challenge any task related to logistics of international trade.

www.mag.pl

Morska Agencja Gdynia Sp. z o.o. ul. Tadeusza Wendy 15, 81-341 Gdynia

phone: +48 (58) 785 37 85 fax: +48 (58) 785 37 86 e-mail: mag@mag.pl









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Marine Projects Ltd.

MARINE PROJECTS Ltd. Sp. z o.o. is a private owned shipyard

operating actively on the shipbuilding market.

During the past 29 years of its history Marine Projects Ltd. established in 1989 had accumulated an extensive experience and knowledge enabling us to respond quickly and efficiently to our Customer's needs and requirements. For many years our Shipyard closely cooperates with our traditional partners and Customers from Germany, Netherlands and Norway.

Marine Projects Ltd. Sp. z o.o. is very conveniently located in Gdańsk at Vistula River bank. This arrangement makes possible an easy road transport connection to the Yard and gives a good access to the open sea and inland waterways.

Production activities scope:

- complete, fully outfitted vessels up to 100 m length;
- complete, fully outfitted harbour tugs and workboats;
- various sailing vessels;
- fully outfitted superstructures (deckhouses) of block weight up to 1 000 t;
- partly outfitted hulls up to 100 m length or longer in parts;
- pontoons and platforms;
- fabrication of steel structures for the shipbuilding industry, like large outfitted hull blocks and sections and structures for shore industrial plants;
- conversions of ships and yachts;
- wide scope of outfitting, pipefitting, electrical works and rigging as well as all kinds of painting works.

Marine Projects Ltd. shipyard is staffed by a highly motivated workforce of a few hundred employees well qualified to conduct various kinds of demanding jobs required for the execution of wide scope of newbuildings aided by own professional technical office.

Production facilities and technical infrastructure:

- production site of over total 52 000 m², including 6 600 m² of covered halls and workshops;
- building ways for hulls up to 100 length;
- one 600 m long outfitting quay;
- self-propelled floating derrick 'Conrad Consul' with 400 t lifting capacity (largest floating crane in Poland);
- self-propelled floating derrick 'Conrad Goliath' with 100 t lifting capacity;
- one large seagoing 3 500 t self-ballasting transport pontoon 'Conrad 2' (60 x 20 x 4.5 m);
- one handy 480 t transport pontoon 'Conrad' (40 x 10 x 2,0 m);
- two numerically controlled water-plasma cutting machines and hydraulic frame bending machine for profiles;
- automatic, semi automatic and manual welding with approval and under supervision of classification societies such as ABS, DNV-GL, PRS, BV and LR;
- computer aided design (CAD) capability: AutoCAD, ShipConstructor, Maxsurf, Hydromax, HullSpeed, Rhino 3D, Orca, NavisWorks, Aster, SolidWorks and Nupas Cadmatic.
- quality control (NDT tests, Leica tachymetric 3D measurement system, etc.).
- ISO 9001 quality management system.

www.marineprojects.pl

MARINE PROJECTS Ltd. Sp. z o.o. Sienna 45, 80-605 Gdańsk, Poland

phone: +48 58 52 03 150, fax: +48 58 52 03 151

e-mail: marineprojects@parpro.pl









MSR Gryfia

MSR Gryfia has been 65 years in the business, offering complex solutions in a range of ship repairs, conversions, new building and offshore construction. Our brand epitomises top-notch expertise, experience and care, as certified with world-renowned quality certifications.

Morska Stocznia Remontowa Gryfia is a member of MARS Shipyards & Offshore which is comprised of the most renowned Polish shipyards.

Our team is dedicated to provide our customers with effective and modern technical solutions. Thorough experience, commitment and care are key values in our corporate model, which has been proved by multiple quality certificates such as ISO 9001:2008, OHSAS 18001:2007 and AQAP 2110.

Our rich technical facilities enable us to perform extensive repairs, conversions, new buildings and offshore constructions.

We are equipped with:

- 9 floating docks (largest 216 m x 35 m)
- 2672 m of equipped quays
- 20 cranes with lifting capacity of 50 tones
- 26.574 sqm of covered workshop area

MSR Gryfia's unique asset is its location at the heart of Europe, 30 km off the German border, close to international highways and shipping routes, which makes us able to cooperate quickly and with flexibility.

www.msrgryfia.pl

Morska Stocznia Remontowa Gryfia S.A. Ludowa 13, 71-700 Szczecin, Poland

phone: +48 91 42 42 850, fax: +48 91 42 42 733

e-mail: info@msrgryfia.pl



















Muehlhan Polska Sp. z o.o.

Muehlhan Polska Sp. z o.o. is a member of the Muehlhan Group - one of the leaders in the international maricne market in the field of

anticorrosion protection.

Located in the Gdańsk Division of the company, the Anticorrosion Plant offers comprehensive maintenance & painting services for repair and building shipyards, the gas and petroleum industry, the land industry and the wind energy industry, including: blast cleaning and mechanical cleaning of steel surfaces, high-pressure washing above 1,700 bars and with the use of the μ-jet technology patented by the Muehlhan Group, and applications of all kinds of protective coatings. The important part of the company's activity is also carried out by the Scaffold Department engaged in technical consultancy, design, lease, assembly and disassembly of scaffold systems, canvas cover systems, industrial tents and special structures.

The company employs over 500 highly qualified and expoerienced emplyees, whose rich experience professionalism allow us to offer a high quality of services and products to our customers.

Muehlhan Polska Sp. z o.o. has quality certificates based on integrated management system: Germanischer Lloyd: ISO 9001, ISO 14001, BS OHSAS 18001; Office of Technical Inspection ISO 9001; Military Centre for Normalisation, Quality and Codification: 1710H.

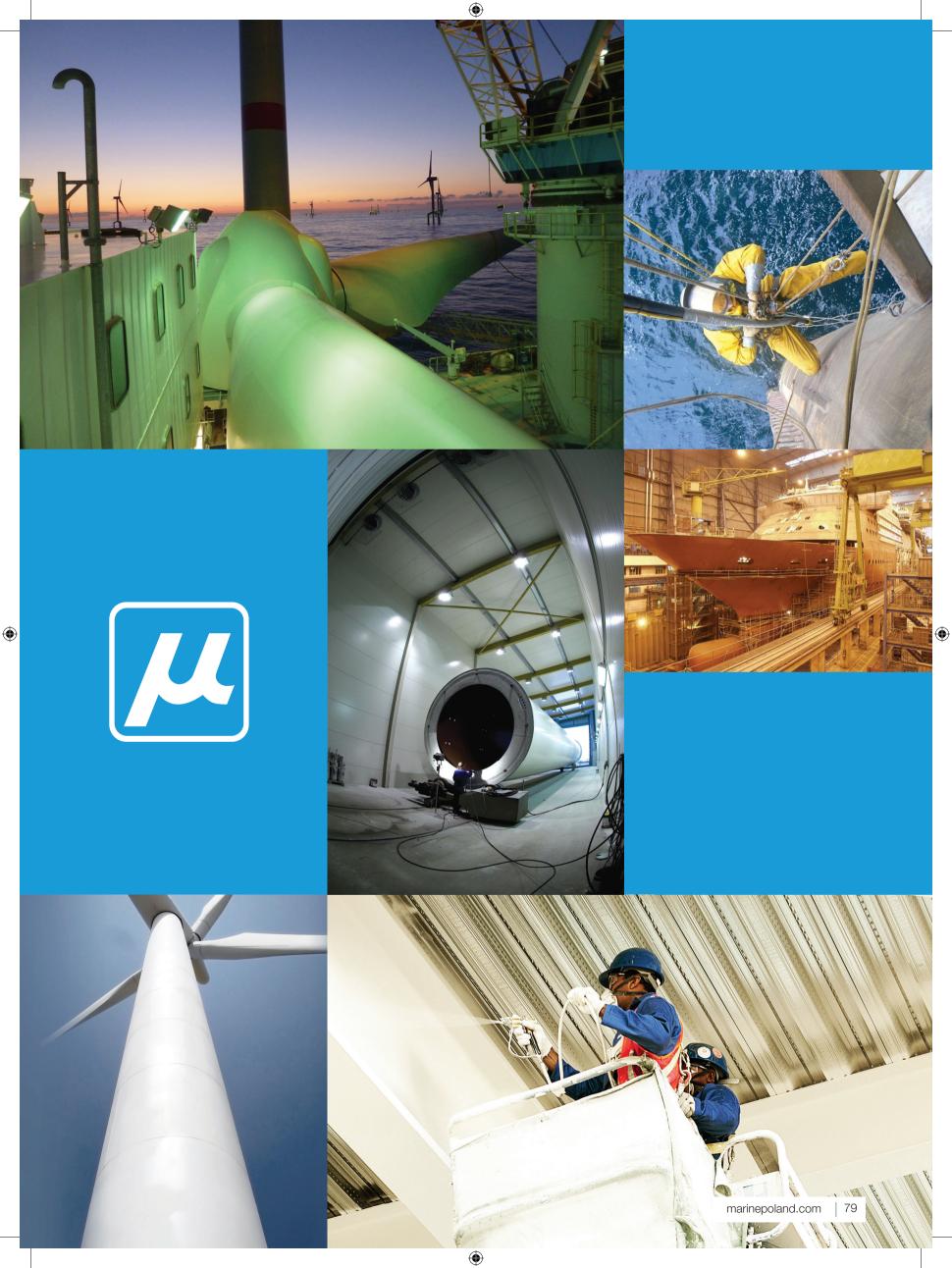
The head office of the company is based in Szczecin, which is the seat of the Steel Plant specialising in the construction of steel structures for the shipping industry, including ship and yacht hulls, sections, blocks of superstructures, ship crane columns, coamings, offshore and other structures, including tanks, halls, masts, (rail and column) structures for the "roller-coaster" system etc.

www.muehlhan.com

Muehlhan Polska Sp. z o.o. 71-012 Szczecin, Bronowicka 27, Poland phone: +48 (0) 91 814 09 00

fax: +48 (0) 91 482 41 07









NAFTOPORT Sp. z o.o.

Naftoport - based in Gdańsk Northern Port - is the only crude oil transhipment terminal in Poland and the biggest Polish transhipment terminal of refined oil products.

It provides the alternative, to land one, oil transport via pipelines. No other maritime terminal may supply crude oil and petroleum products to Polish rafineries. The company also provides possibilities of crude oil transit from Russia and storage at PERN facilities in Gdańsk and is an element of the petroleum supply logistics for two eastern German rafineries.

The Company handles transshipment for: crude oil, diesel oil, fuel oil, gasoline, jet fuel, condensates. Transhipments of oil products are carried out for Grupa LOTOS, connected with Naftoport by pipeline network.

Naftoport is environmentally-friendly, it fully respects and implements the occupational health and safety rules, and operates modern, specialised control and measurement equipment.

The Company is an owner of five cargo handling berths, shielded with breakwaters and secured against oil spills with the permanent, foldable and pneumatic dams. The cargo handling facitlities ensure the possibility of hydrocarbon vapors reception. The fire-fighting system is performed from both the land and the water. The jetties are equipped with permanent water and foamfire-fighting installations. The installations are supported by fire-fighting cars and vessels.

The Naftoport Oil Terminal is suitable for oil tankers with the length up to 340m, width - 60m and the maximum draught of

Over the period 1992-2017 Naftoport provided services for 6,3 ths tankers, transshipped 233 mln tons of crude oil and liquid fuel.

www.naftoport.pl

NAFTOPORT Sp. z o.o.

Kpt. ż. w. W. Poinca 1, 80-561 Gdańsk, Poland

phone: +48 58 343 74 25, +48 58 737 74 25, fax: +48 58 343 76 06

e-mail: naftoport@naftoport.pl





Naftoport







NAUTA

Shiprepair Yard "NAUTA" S.A.

Nauta Shiprepair Yard is a key player in the MARS Shipyards & Offshore group which is the largest Shipyard potential in the southern Baltic area.

Over 90 years of its activity, Nauta has performed numerous extensive repairs on various types of ships. It has also designed and built nearly 500 fishing and special purpose vessels. Apart from the civilian production, Nauta also provides services in the area of repairs and building of the naval vessels for the Polish and foreign navies.

At the end of 2012 Nauta transferred most of its production facilities to the area which previously belonged to Gdynia Shipyard. The acquisition of new land and water area has created enormous growth opportunities for Nauta Shipyard.

Nauta:

- Ideal place for newbuilding activity and repairs of the largest vessels operating in the Baltic region;
- Access to the 379m x 70m and 240m x 40m graving dry docks:
- 4 floating docks including the one with a 12,000 tones capacity, capable of handling 210 - meter long vessels;
- 2 slipways at Gdansk facility;
- Facilities fully equipped to carry out most advanced ship repairs, conversions and constructions to the ship owners requirements and demands.

www.nauta.pl

Shiprepair Yard "NAUTA" S.A. Waszyngtona 1, 81-342 Gdynia, Poland phone: +48 58 621 25 00, +48 58 621 63 51

e-mail: poczta@nauta.pl





NAUTA















CREATIVE ENGINEERING

HVAC Systems	Piping Systems	Steel Structures	Navy Systems
Consulting Design	Delivery Installation	Commisionning Crew tr	aining Service and repair

Navy-San started its activity on marine market in 1999. Steady and effective growth lead to becoming a limited liability company in 2014. In 2016, company structure is made of more than 50 skilled marine technicians and a strong engineering and design support. Experienced managers ensure the highest quality of services and level of customer satisfaction. Operating from headquarters in Gdynia, POLAND, the company provide services worldwide, focusing on Baltic Region and Northern Europe.

The company's mission is to ensure safety and work comfort of vessel crews by means of professional and ecology-conscious services. The main objective of quality management is to achieve customer satisfaction through professional and safe services.

The company specializes in providing complex design, delivery, installation, commissioning and repair of HVAC, piping systems, steel structures, specialized naval equipment and general shiprepair projects.

Our services are tailored for new shipbuilding projects as well as repair, conversion, or modernization projects.

Navy-San provides professional and complex services for the Navy, various ship-owners, shipyards, and other companies from marine sector.

In 2014 - 2016 period, company took part in major marine projects in Poland, including the modernization of FPF-1 oil rig, complex renewal of Polish Navy warships and new shipbuilding projects - i.e. "Zourite" - a specialized jack-up barge.

In response to changing market demand, the company adapts and grows along with every new project.

Navy-San is currently in process of implementing Quality Management System. The goal is to implement and certify the QMS in DNV-GL in 2017. The currently implemented Quality Management System includes process management, relevant suppliers and subcontractors, which effectively allows maintaining the highest level of quality and subcontracting servi-ces.

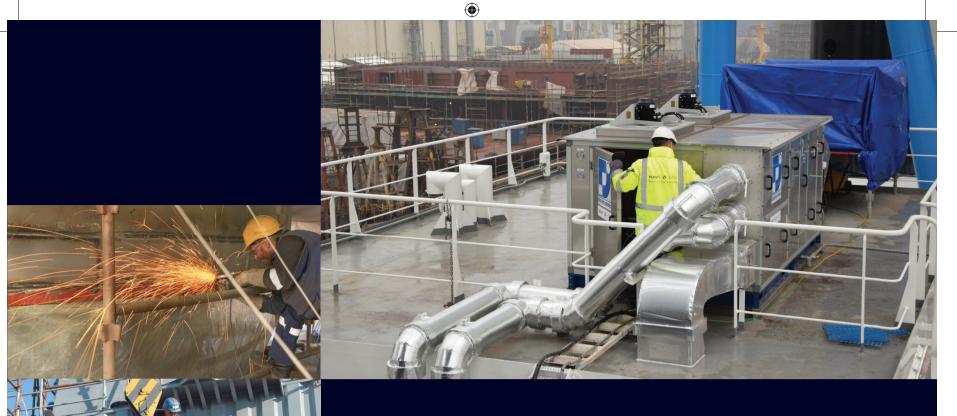
Providing the highest standards of safety at work and environmental protection during the execution of projects is a crucial and strictly observed quality objective.

www.navy-san.pl

Navy-San LLC 81-061 Gdynia, Hutnicza 34, Poland

fax: +48 (58) 727 97 24 e-mail: office@navy-san.pl







CREATIVE ENGINEERING





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OKMARIT LTD.

Okmarit has over 25 years experience with ship agency, brokerage, logistics and forwarding activity. For all that time we provide service to our clients at highest level. Our goal is everyday's profesional approach to our customers who can alwas feel safe in good hands.

The agency and husbandry service was always a priority and we attand vessels in all Polish ports with full range of agency matters. We serve all types of vessels like dry cargo, crude and chemical tankers, barges, also ships calling Polish shipyards for repairs.

We are on standby for 24 hrs 7 days a week. Our office is located in the town of Sopot with easy access to Gdansk and Gdynia. We also cover Szczecin with our sub agents there.

Please rush for our competitive PDA.

Forwarding and logistics has been an integral part of OKmarit's activities from its inception. We aim to offer a highly professional service tailored to the needs of individual clients. Our trained and highly motivated staff is fully conversant with today's ever-changing transportation scene and is able to offer advice on the best method of moving all types of cargo.

Whatever your requirements are, our approach ensurs your projects receive the personal attention they deserve.

Chartering is also an important segment of our activity. We are especially experienced in the handling and carriage of project /out of gauge/ heavy lift cargoes and military equipments from Poland to ports of Far/Middle East also break bulk cargoes. We represent both charterers and shipowners. We fix on single basis, time charters, long terms contracts or bareboats charters.

You can rely on our follow up and post fixture service which completes the deal.

We wish to inform that Okmarit represents on exclusive basis the company Baltic Tank Polska sp. z o.o. located in Gdansk the sister company of Baltic Tank Oy, the biggest independent terminal operator handling chemicals in Finland.

Baltic Tank Polska at present is engaged in a new project of building storage and loading/discharging terminal at Weglowe berth at Port of Gdansk. The investment is planed to build up storage tanks of about 80,000 cbm capacity for different products together with technical infrastructure to handle both rail cysterns and trucks. This program should be completed by end of year 2019.

Okmarit on behalf of Baltic Tank Polska invites parties who show interest in the project to contact us in order to discuss on their expectations and needs for storage capacity and services Baltic Tank shall provide.

Contacts details:

okmarit@okmarit.com.pl s.olszewski@okmarit.com.pl

www.okmarit.com.pl

Okmarit sp. z o.o. 81-868 Sopot, Al. Niepodległości 758/1, Poland phone: +48 58 782 67 00, fax: +48 58 781 92 39

e-mail: okmarit@okmarit.com.pl







SHIPBROKING & LOGISTICS CO.



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PARTNER-SHIP

The main area of the PARTNER-SHIP activity is metalworking and plastics processing.

Due to the large potential of machinery and indispensable skills of their employees, they are able to regenerate and produce a wide variety of equipment and spare parts. The company offers works to its customers, such as; lathing works, milling works, cutting the teeth of wheels, threading, cutting the worm and warm wheels, chiselling grooves, splined milling, drilling works, borer works, grinding works and many other metalworking services.

Thanks to highly developed cooperation, PARTNER-SHIP is able to have products finished by e.g. hardening, tempering, carburizing, Corr-I-Durr, galvanizing, chroming and painting.

For harbour industry they make a lot of new elements and regenerate used ones such as: transport baskets, traverse, carriage for forklift trucks, rolltrailers, cable drums, conveyors, cylinders, grippers, bale grippers for bulk cargo, grapples for scrap buckets for excavators and other elements of metal and plastic.

Typical works done by PARTNER-SHIP for shipbuilding industry are new elements production and used elements regeneration such as: cleats, rollers, handles, hinges, roller fairleads, wedge closings, screw closings, hatches, rope drums, anchor winches and mooring winches, gears, worm gears, shafts, pistons, connecting rods, cylinder heads, manifolds, pneumatic and hydraulic actuators, and other elements of metal and plastic.

They also realize orders for energy industry, construction industry, petroleum industry, military industry, mining industry, railway industry, and the rest of the machining industry. In every industrial sector there are cranes, overhead cranes, hoists, trolleys, stacker cranes, etc. apart from them there are still a lot of other machines and devices appearing in all industries.

An important part of PARTNER-SHIP business area is repairing, recovery, and also production of unusual tools, devices and replacement parts. The company is able to design, prepare complete technical documentation, and then make an unusual machine or device part.

www.partner-ship.pl

PARTNER-SHIP

Ludowa 16, 71-700 Szczecin, Poland

phone: +48 914 625 200, fax: +48 914 625 201

e-mail: biuro@partner-ship.pl





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Pałasz Marine Projekt.

Pałasz Marine Projekt: Ship hulls is what we specialize in! We prepare designs in our own office or provide assistance to companies whose staff need temporary support. We are happy to share the expertise of our experienced and highly-qualified project team.

In recent years we have developed our skills by cooperating with various design offices. In our design work, we mainly use NUPAS and Aveva Marine (TRIBON) software. Our office is equipped with AutoCAD and Aster software.

We are prepared to make documentation and calculations from the general part of the project. The scope of work also includes the process of approval at the Owner and in the Classification Society. For calculations we use Napa or Maxsurf software, depending on the client's preferences. While respecting all the required shipyard norms and standards, we place special emphasis on the quality of the services we provide.

We are a member of Polish-Norwegian Chamber of Commerce (PNCC).



PAŁASZ MARINE PROJEKT business scope covers the following areas:

General:

- visualizations
- fairing of body lines
- general arrangement plan
- tank arrangements
- intact and damage stability (napa, maxsurf)
- loading manual
- ballast water management plan and others

Hull:

- classification drawings
- strength analysis
- fem calculations
- 3d modelling (aveva, cadmatic, rhinoceros)
- workshop drawings
- part and material lists
- lofting documentation

www.palasz-marine.pl

PAŁASZ MARINE PROJEKT - DESIGN OFFICE

81-572 Gdynia, Górnicza 43, Poland

phone: +48 502 392 148

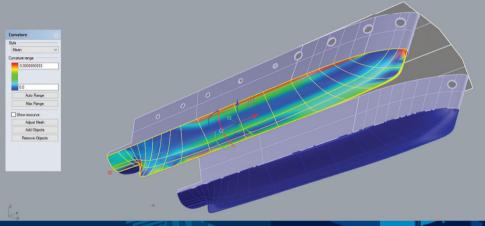
e-mail: kpiszczako@palasz-marine.pl











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SHIP HUL IS WHAT WE SPECIALIZE

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Polska Żegluga Morska

Polska Żegluga Morska based in Szczecin is the largest Polish shipowner and one of the largest in Europe. The basic sector of the company's activity is the carriage of bulk cargoes in irregular shipping on a global scale. Through its Unity Line company, the company also operates the ferries on the Baltic Sea.

Polska Żegluga Morska is a state-owned enterprise. At the same time, it creates a group of subsidiaries. The domestic companies of the PZM Group are dominated by entities related to maritime transport (Żegluga Polska SA, Polsteam Frachtowanie, Polsteam Shipping Agency, Unity Line), but there are also entities providing IT services (MediaLand), tourist (Polsteam Zegluga Szczecińska) and medical (Marine Medical Services). It also includes Pazim, which manages the most attractive office and commercial complex in Szczecin.

PZM owns and operates 56 vessels with a total tonnage of 2.1 million DWT, including 51 bulk carriers, one sulphure carrier (management) and four ferries, operated by its own joint venture Unity Line.

The shipowner employs approximately 2,100 seafarers in ships crews and about 200 employees on land. As for the Polish maritime economy, PZM is by far the largest shipowner, and the PZM fleet is about three-quarters of all ships owned by Polish shipping companies.

The transport structure of PZM is dominated by grains (24% in the total volume of transport), cargo requiring ships of the highest standard. These standards are confirmed by the Port State Control, which carry out inspections in European and American ports. In the statistics of this institution, the PZM vessels have for many years much better results of inpections than the world average.

The PZM fleet is constantly modernized and adapted to the new conventions coming into force. At present, for example, the shipowner has begun the installation of ballast water treatment systems on all of his ships. The cost of one device with assembly is about one million dollars.

Due to the drastic deterioration of the company's financial condition under the previous management of the firm (730 million PLN loss for 2016), from February 2017, Polska Żegluga Morska is covered by the government administration. Thanks to the renovation program, implemented by the administrator Paweł Brzezicki, the Group's results were improved by ca. PLN 800m during the one year of the administration. (54 million PLN profit for 2017).

At the same time, the trend of decrease the fleet of the shipowner, which has been performed for a decade, has been halted last year. Since February 2017, ie since the introduction of the government administration, none of the PZM vessels were sold, while two new bulk carriers from the contract abandoned by the previous management at Yangfan shipyard, entered into operation (m/v "Szare Szeregi" and m/v "Tczew"). A further four ships are to be taken from the Chinese shipyard in the first half of this year.

In addition to expanding the bulk carrier fleet, the PZM Group also wants to invest in its ferry sector. The plans include the construction of both, a new unit and the purchase of a used one on the secondary market.

By the decision of the Ministry of Finance and the Ministry of Maritime Economy and Inland Navigation, in February this year, the government administration in PZM was extended by another year and the duty of administrator for this period was entrusted again to Paweł Brzezicki.

www.polsteam.com.pl

Polska Żegluga Morska 70-419 Szczecin, Pl. Rodła 8, Poland

phone: +48 913 594 333 fax: +48 913 594 288



















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Port of Gdansk Authority S.A.

Investments at the Port of Gdansk as the driving force behind the economy.

The Port of Gdansk is currently one of the most rapidly developing transport hubs in the Baltic Sea region. Thanks to numerous investments, in the future, the Port of Gdansk has a chance to become the largest and most important port in the Baltic Sea. The Port is also of great significance in the context of trade between the European Union and the countries of the Far East. Transport is one of the most promising areas of cooperation between Central and Eastern Europe and China, and the Port of Gdansk is becoming an increasingly interesting alternative to the deepwater ports of Western Europe.

The Port of Gdansk Authority is currently piloting a number of investments, the task of which will be the development of the Port's infrastructure and increasing its throughput capacity several times. As part of the programme of the Port's expansion, dredging of the fairways, construction and modernisation of the quays, expansion of the road and railway network, and expansion of car parks and storage space is planned. A considerable part of these investments will be carried out with the use of the resources of the European Union's Connecting Europe Facility. The Port's projects co-financed from EU funds have to be accounted for by the end of 2020. The coming years will therefore be a period of dynamic growth for the Port.

The flagship investment of the Port of Gdansk will be the construction of the Central Port, i.e. the new outer port located within the 500 ha area of artificial piers. As part of this investment, the Port of Gdansk will gain new ro-ro terminals, a passenger terminal, a bulk cargo terminal, a general cargo terminal, and a shipbuilding industry zone. The annual volume of goods at the Port of Gdansk - currently at a level of over 40 million tonnes - will increase to 100 million tonnes thanks to the Central Port.

This huge investment has already received official support from the Polish government. The Polish authorities also confirmed plans for the development of transport infrastructure in Poland which will ensure a logistics base for the Port of Gdansk after its considerable expansion. Currently, extensive modernisation of the Polish railways is underway, which will make it possible to increase the average speed of freight trains to 35 km/h by 2020.

Yet another project - important from the point of view of the construction of the Central Port - will involve the development of the network of inland navigation routes. The implementation of this ambitious plan is supervised by the Port of Gdansk Authority, which is responsible for the preparation of the feasibility study for ensuring navigability of a part of the longest Polish river - the Wisla. In accordance with the guidelines from the White Paper, by 2030, 30% of the road transport of goods over distances larger than 300 km should be transferred to other means of transport, e.g. rail or water transport. By 2050, this value should increase to over a half of all transported goods.

Currently, several hundred thousand trucks and railway cars a year run between the Port of Gdansk and other destinations. They use modern access infrastructure, yet even that infrastructure has limited traffic capacity. The rapid increase in the volume of goods passing through the port's quays forecast by the PGA may reach a level of as much as 100 million tonnes by 2030. Within the coming 10 years, considerable activation of inland transport will therefore be necessary.

Thanks to numerous investments combining sea transport with road and rail transport and inland navigation, within a few years, Poland may become one of the most important communication hubs connecting Europe with China.

www.portgdansk.pl/en

Port of Gdansk Authority S.A. Zamknieta 18, 80-955 Gdansk, Poland

phone: +48 58 737 91 00 e-mail: info@portgdansk.pl









PORT GDAŃSK











Port of Gdansk Cargo Logistics S.A.

Comprehensive port services

Handling and storage General cargo and bulk cargo Import and export

Over 25 years of market activity. Services are performerd on 6 quays located along both sides of the Martwa Wisla river. Flexible and individual approach to the Customer. Optimization of cargo handling and component operations.

Certificate:

- ISO 9001:2000 execution of cargo handling and storage services
- GMP+B3 collection and storage of feeds

Maximum handling capacity of 6 milion tons per year.

We have storage space: customs warehouse, customs square, halls, warehouses and squares.

We offer transhipments: bulk, groupage, oversized, container

- Steel products as profiles, sheet piles, bars, reils, wire rods, billets, blooms, slabs, rolled oils, rolled sheets and strips, tubes, welded maches
- Scrap (feedstock scrap-metal)
- Constructions, oversize sections, project cargo, vehicles, building and road construction machineries and modular houses
- Containers and Ro-Ro
- General cargo unitized cargo in big bags, pallets and crates
- Dry bulk cargo as clinker brick, expanded clay aggregate, dolomite, feldspar and bentonite

We care to apply all procedures providing high quality proffesional services.

www.pge.pl

Port Gdański EKSPLOATACJA S.A. Roberta de Plelo 6, 80-548 Gdańsk, Poland

phone: +48 58 737 63 00, fax: +48 58 737 67 69

e-mail: marketing@pge.pl









Port of Gdynia Authority S.A.

The Port of Gdynia is a universal modern port and also one of the leaders in cargo handling in the Baltic Sea. It specializes in handling general cargo, mainly unitized cargo transported in containers and ro-ro system, based on a well-developed network of multimodal connections including those with its hinterland. Port of Gdynia also handles ferry connections.

The location of the facility, on the southern coast of the Baltic Sea, makes the Port of Gdynia a very important link on Corridor VI of the Trans-European Transport Network (TEN-T), which forms a trade route between Central Europe, Eastern Europe and Scandinavia. Regular shipping lines connect the Port of Gdynia with the largest European ports, such as Rotterdam, Antwerp, Hamburg and Bremerhaven.

The port has very modern handling and storage equipment, dedicated to various types of cargo. The total amount of cargo handled is about 21,2 million tonnes per year, and in 2017 the Port of Gdynia also served 750 th. passengers in a year when the port welcomed 41 cruise ships.

Handling of containerized cargo at the Port of Gdynia (710 698 TEU in 2017) is the domain of two modern container terminals, namely:

- Baltic Container Terminal Ltd. (owned by ICTSI),
- Hutchison Ports Gdynia S.A. (Hutchison Port Holdings Limited)

There are other terminals situated in the Port of Gdynia which are dedicated to bulk cargo, including:

- Baltic Grain Terminal Ltd.,
- Maritime Bulk Terminal Gdynia Ltd.,
- OT Port Gdynia Terminal Ltd.,
- Baltic Bulk Terminal Ltd.,
- Koole Tankstorage Gdynia Ltd.,
- Onico Gas Terminal,
- Aalborg Portland Poland Ltd.,
- Speed Bulk Materials Terminal Ltd.

www.port.gdynia.pl

Port of Gdynia Authority S.A. Rotterdamska 9, 81-337 Gdynia, Poland

phone: +48 58 627 40 02, fax: +48 58 620 31 91

e-mail: marketing@port.gdynia.pl









PZT - Portowy Zakład Techniczny

Port Technical Company (PZT) operates within Port of Gdynia environment for 20 years now. After restructuration and ownership changes in 2010 PZT acts as fully private, independent service Company.

PZT services are focused on three different directions: assembly, installation works on large steel constructions of cranes and other machines carried out on our sites in Poland or all over the World, overhauls and repairs of the stevedoring equipment, and heavy elements transportation.

Detailed portfolio of concluded projects may be seen on our webpage: www.pzt.com.pl, but in total figures for last 16 years of assembly business looks as follow:

- Over 750 RTG' erected and tested in Poland or abroad
- Over 120 RMG', or ASC's assembled in Poland or abroad
- More than 25 STS cranes all over the World
- Over 300 SC's or SHC's assembled and shipped from our
- More than 15 different machines like: ship unloaders, grabs, stacker-reclimers, special cranes etc.

Company location at the port pier is a big advantage. PZT has an access to a heavy load pier area. There is more than 25,000 sgm of heavy load erection space next to the Danish Quay in Port of Gdynia.

Our highly qualified staff of engineers, mechanics, approved welders and crane installation electricians are able to accept and complete every order relying on the comprehensive final assembly of large-size constructions.

For heavy elements transportation we use a Self-Propelled Modular Transporter (SPMT) made by Scheuerle. The transporter set consists of ten different trailers having altogether 46 wheel axles and four different drive units, and can be used for moving large-size cargo with the total weight of up to 1.600 tonnes. Each pair of wheels has its own suspension and turns independently, making it possible to move in any direction and to rotate the cargo around any defined point. The SPMT facilitates the transportation of goods even in the most logistically demanding locations. Remote control allows the operator to reach the destination safely and with great precision.

www.pzt.com.pl

Port Technical Company SA 81-341 Gdynia, Warsztatowa 4, Poland

phone: +48 58 627 44 60, fax: +48 58 627 45 04

e-mail: pzt@pzt.com.pl









PROJMORS

"PROJMORS" Designing Office for Maritime Structures Co. Ltd. was established in 1948.

As a leading design and consulting practice, PROJMORS renders services to domestic and foreign clients, by offering:

- investment studies and specifications, adjudications and expert opinions
- comprehensive design and cost documentation as well as detailed engineering and structural documentation
- design supervision, owner representation services and acceptance inspections of works.

Our experience, comprising 70 years of engineering activity resulting in thousands of of designs, focusses on the following specialised areas:

Sea ports and terminals:

- comprehensive port solutions covering hydraulic engineering, engineering and civil structures as well auxiliary facilities with all technical infrastructure
- special bulk and general cargo handling depots or stands based on state-of-the art engineering solutions

Shipyards:

- comprehensive solutions for repair and production shipyards for building and repairing commercial and fishing vessels, with hydraulic engineering and production facilities as well as technical infrastructure
- separate commercial and fishing vessel repair bases
- comprehensive ship repair process lines based on various lifting devices such as dry and floating docks, lifts or slipways
- independent production shipyard facilities and systems such as hull construction halls, workshops and storage facilities

Main contractor's services:

- project management company (the Engineer under FIDIC)
- owner representation services at hydraulic and civil engineering construction sites
- settlements of projects financed by the World Bank and the Bank for Reconstruction and Development

"PROJMORS" holds the 1st degree "NATO SECRET" and "SECRET" Computer Security Certificate. Our office has a secret registry and employs a Classified Information Security Officer, and the whole staff are trained in access to classified information and hold security certificates.

www.projmors.pl

"PROJMORS" Designing Office for Maritime Structures Co. Ltd. 80-288 Gdansk, 2 Kruczkowskiego St., Poland

phone: +48 58 520 33 03 e-mail: projmors@projmors.pl



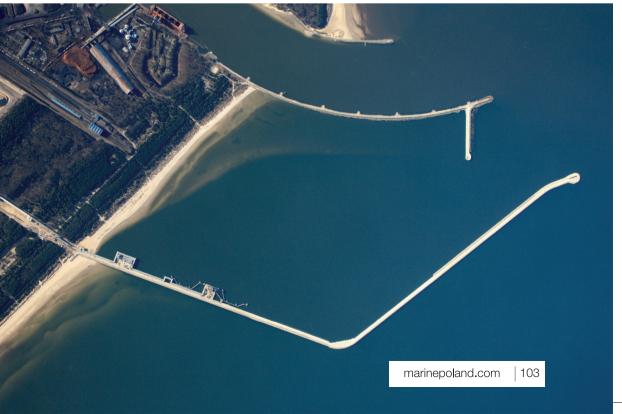
















PROMAP Ltd.

PROMAP a limited liability company with its headquarters in Bydgoszcz, Ludwikowo 2a, Poland was founded in 1995 and is a member of van Wingerden Group, with trade name, wigo head office Vuren - Holland.

The aim of the company "PROMAP" is to raise the profile of its products along with taking care of self-development.

The potential customers are given technical backup at their disposal and we are able to offer an optimal solution and fulfill our customers' needs.

All the products of our company meet all the definite requirements and standards in this area (such as ISO, MED) and also requirements of classification societies.

The company has many years experience and expertise in producing custom build ship windows for cruise liners, yachts, ferries also. Hence, we are prepared to be receptive to all innovations and technical new developments. We supply a large range of products as well as materials (mainly profiles) used in production.

The principal business activity embraces:

- 1. Primarily, the production of all kinds of ship windows and portholes
- 2. Yacht windows and portholes
- 3. Some types are:
- cabin windows with and without deadlight;
- wheelhouse windows with different geometric shapes;
- A60, A30 and A0 class windows without or with electroheating glass;
- windows with electro-heating glasses;
- windows with anti-reflective and bulletproof glasses;
- horizontal sliding windows;
- vertical sliding windows with balance spring/damper;
- all other ship window fitments according to customer's requirements and specifications;

This also applies to fixed sidelight portholes.

www.promap.eu

PROMAP Ltd.

Ludwikowo 2a, St., 85-502 Bydgoszcz, Poland phone: +48 52 321 61 31, fax: +48 52 376 47 26

e-mail: office@promap.eu





















marinepoland.com | 105





Riva Terminal Gdańsk

We offer a wide range of services within a modern and fully equipped trans-shipment terminal, dedicated to the transhipment of bulk goods - in particular products and resources for agriculture.

As the only company in Poland (and one of the few companies in Europe) we provide a confectioning service under the ship (up to 4500 tons per day) and confectioning in the customer's warehouse (mobile service).

Packaging of fertilizers in BIG-BAG bags - from 100 to 1200 kg, with the possibility of packaging under the SHIP to 4500 tons per day - ONLY OFFER IN POLAND and one of the few in Europe.

Additionally, we can pack a small 25-50kg bag as the only one in the Tri-City.

In the first line, we have 10,000 m² of paved storage area with a 3000 m³ container. In the second line, we have nearly 20,000 sq m of hardened permeable storage space with storage boxes.

In the immediate vicinity of the terminal, there are railway sidings for handling train sets and parking lots for trucks.

Roofed storage BOX on the quay - 6000 m² / capacity 25,000 m³



24h monitoring



fertilizer packing



9m max dipping



10000 DWT



confectioning in the customer's warehouse



unloading up to 6,000 tons per day



storage box and covered worehouses over 10 000 m²



300m length of the wharf

www.rivaterminal.pl

Riva Terminal Gdańsk

80-702 Gdańsk, Przetoczna 7, Poland

phone: +48 664 767 122 e-mail: office@rivaterminal.pl























SAFE Co. Ltd Sp. zo.o.

SAFE Co. Ltd. sp. z o.o. is a fully private company, actively and expansively operating on ship industry and offshore market from more than twenty years.

The company is located close to the center of Gdansk city and has convenient sea, land and air connections. It makes possible the effective organization of the deliveries in the domestic relations as well as the foreign relations and also enables quick personal contacts, necessary in business relations.

Depending on the client's requirements, our products may be manufactured according to the rules and with approvals of the all major control institutions and Classification Societies.

Anticorrosive Department:

- Performing anticorrosive works according to NORSOK
- M-501 standard.
- Performing fireproofing protection: Chartek, Interchar, Jotachar, Firetex certified.
- Performing floor systems eg. Hummervoll.
- Performing works according to IMO MSC resolution.
- Performing protection of waste gas desulfurization installations
- Performing thermally sprayed aluminum and zinc
- Well experienced management, foreman and quality control with FROSIO level III certificates.

Shipbuilding / Steel Construction Department and Ship Repair:

- Building of the vessels or another floating units with length up to 90 meters
- Building sections and blocks of the vessels' hulls.
- Building of the hull outfitting including aluminum superstructures and wheelhouses.
- Building of the rudder blades, Kort nozzles, machining of the propulsion lines.
- Building of the steel constructions for offshore industry and constructions of bridges or viaducts
- Transport and loading of the heavy and large-sized cargos or construction up to 330 tons with the floating crane, larger with the operation of pushing to transport pontoon.
- Floating docks with the following parameters: length -155 m, inner width – 24m, lifting capacity – 6000Tons.

www.safe.gdynia.pl

SAFE Co. Ltd Sp. z o.o. 80-873 Gdańsk, Na Ostrowiu 15/20, Poland

phone/fax: +48 58 350 64 78 e-mail: office@safe.gdynia.pl





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Sealab Sp. zo.o.

Sealab Sp. z o. o. with headquarters in Gdynia exists since 1990. We deal with the assembly, design and servicing of automation systems in civil engineering and shipbuilding.

We work closely with companies such as Autronica, E2S and Kidde, producing the highest quality fire alarm and gas monitoring systems.

We design, build and implement our systems using such technologies as:

Integrated Fire and Gas detection - AutroSafe IFG is the leading interactive-addressable system for integrated fire and gas detection, developed in close collaboration with the petrochemical, oil and gas industry.

Omicron Gas Alarm System - OGS 2.1 is a micro controller based gas alarm system, built for detection of potential toxic or explosive gases in pump room or other locations. The most common gases to detect are hydrocarbon gases in LEL concentration, oxygen, and hydrogen-sulphide.

Omicron Gas Sampling System - OGS 3.1 is the latest revision of the 3rd generation, fully computerised sampling system for gas detection developed by the company.

Dry Chemical Powder - Autronica Dry Chemical Powder System is a fire extinguishing system especially designed for LNG bunkering stations. The system is able to break the chemical reactions during the combustion process.

3M Novec 1230 - Novec™ 1230 instantly vaporizes upon discharge, totally flooding protected spaces and absorbing heat better than water. The Novec™ 1230 system suppresses a fire before it can start by detecting it at invisible levels. And once the danger has passed, Novec™ 1230 quickly evaporates without harming any valuable assets.

Deluge Fire Suppression System - Deluge system, is a system employing open nozzles attached to a piping system connected to a water supply through a valve that is opened by manual operation. When this valve is opened, water flows into the piping system and discharges from all nozzles attached thereto.

E2S sounders and beacons - E2S offers intrinsically safe, explosion and flameproof and non-sparking alarm horn sounders, PA/GA and mass notification systems and manual call points for use in both gas and dust atmospheres.







www.sealab.pl

Sealab Sp. z o. o. 81-589 Gdynia, Koperkowa 57, Poland

phone: +48 (58) 669 20 40, fax: +48 (58) 669 20 49 e-mail: m.barski@sealab.com.pl, k.filipowicz@sealab.com.pl









Foundation for Safety of Navigation and Environment Protection Ship Handling Research and Training Centre - Itawa, Poland

The Ship Handling Research and Training Centre at Ilawa is owned by the Foundation for Safety of Navigation and Environment Protection, which is a joint venture between the Gdynia Maritime University, the Technical University of Gdansk and the City of Ilawa.

Two main fields of activity of the Foundation are:

- Training in ship handling. Since 1980 more than 3500 ship masters and pilotsfrom 40 countries were trained at I³awa Centre. The Foundation for Safety of Navigation and Environment Protection, being non-profitorganisation is reinvesting all spare funds in new facilities and each yearto the existing facilities new models and new training areas were added, Existing training models each year are also modernised, that's why at presentthe Centre represents a modern facility perfectly capable to perform training on ship handling of shipmasters, pilots and tug masters.
- Research on ship's manoeuvrability. Many experimental and theoretical researchprogrammes covering different problems of manoeuvrability (including humaneffect, harbour and waterway design) are successfully realised at the Centre.

The Foundation possesses ISO 9001 certificate.

The Foundation for Safety of Navigation and Environment Protection offers consulting and assistance in the design of ships.

The offer includes:

- prediction of manoeuvring characteristics in the early design stage using computer simulation based on own mathematical model:
- verification of manoeuvring characteristics according to IMO requirements for which free running model tests are usually applied.

Research facilities of the llawa Centre are particularly suitable to realisation of the process of design and optimisation of waterway and harbour layouts. Mock-ups of tested areas and free running manned models are very effective in solving problems of safe manoeuvring on restricted waters. Desktop simulator technique, when needed, is also applied.

www.ilawashiphandling.com.pl

Ship Handling Research and Training Centre at Ilawa 80-278 Gdańsk, Chrzanowskiego 36, Poland

phone / fax: +48 58 341 59 19 e-mail: office@ilawashiphandling.com.pl









SHIP HANDLING RESEARCH AND TRAINING CENTRE



IŁAWA - POLAND









SIARK-PORT Sp. z o.o.

Effective in cargo handling.

SIARK-PORT Cargo Handling Company was established in 1991 as a result of a privatization of the National Commercial Sea Port of Gdańsk. Last year, Siark-Port had the annual turnover of 1.5 million tonnes and handled cargo from more than 200 ships.

Our offer

Siark-Port offers services in handling of dry and liquid bulk cargo, as well as break bulk cargo. The company operates on the berth with a length of 275 m and draft of 10.20 m. In addition, it has 65 000 sq m of storage yards.

In 2016, Siark-Port extended offer by providing innovating, fast and effective way for loading, weighting and packing fertilizers into big-bags directly next to ship.

"We believe that effective cargo handling is shaped by a combination of timing, skilled employees and application of appropriate technical and operational solutions. As a company, we put emphasis on the training and compliance with safety rules by our staff. We highly value feedback from our customers, as it helps us to improve our service, both technology and quality wise."

Future developments

Siark-Port intends to continue developing. The company is preparing a 50 000 cubic m warehouse with a lower chute for dry bulk cargoes, combined with a series of conveyor belts and a ship loader. Siark-Port would like to get a handling capacity of 800 tons per hour. In the second investment stage, the company plans to build warehouses with an area of 6500 sq m for the storage of loads sensitive to weather conditions. Siark-Port's plan is to start servicing ships with a capacity of up to 45000 dwt.

"We are open to cooperation with importers or exporters planning to ship bulk by sea, other companies dealing with similar activities and with logistics companies interested in our services. We offer a cooperative partnership in cargo handling within the supply chain."

www.siark-port.pl

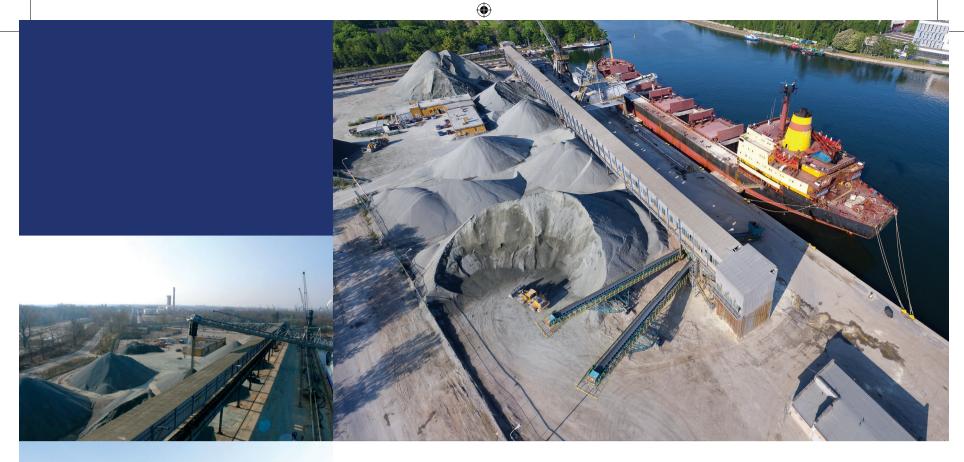
Siark-Port Przedsiębiorstwo Przeładunkowo-Usługowe

80-561 Gdańsk. Pokładowa 7. Poland

phone: +48 58 737 65 88 e-mail: biuro@siark-port.pl

Trade Specialist: +48 737 376 195, a.groth@siark-port.pl

















ST³ Offshore

ST3 Offshore - a leading European manufacturer of steel foundations for offshore windfarms.

The company, located in Szczecin (Poland), close to the Baltic Sea, runs a state-of-the-art facility designed specifically for the automated production of transition pieces as well as jackets, foundation components and monopile foundations for offshore wind farms.

With the highest in Europe's gantry crane (120 meters height and 1'400 tons of lifting capacity) ST3 Offshore can carry out the final assembly and loading of structures of a maximum height of 90 meters. This can be done directly onto a barge, through the facility's perfect island-location on the Odra river, which enables an easy access to the Baltic and North Sea.

With a modern equipment, unique welding technologies of nodes and jacket structures, highly qualified specialists and own engineering and design department, ST3 Offshore is definitely one of the most innovative steel structures' suppliers in the offshore market. Our extensive competences and putting an extreme focus on safety, quality and environment makes us a reliable partner.

ST³ Offshore is a joint-venture of 2 companies: Mars FIZ and ST³ Holding GmbH.

MARS Closed-End Investment Fund

MARS Closed-End Investment Fund is a fund managed by MS TFI (MS Mutual Funds Society) and is the majority shareholder of ST³ Offshore (80%).

A key objective of the Fund is to increase the value of its assets through, amongst others, the implementation of restructuring and investment projects in portfolio companies. The Fund manages the portfolio of majority stakes in 15 private companies. They comprise companies from the shipbuilding sector as well as ship repair and offshore steel structure building, a manufacturer of power generating boilers, as well as real estate companies.

ST³ Holding GmbH

ST³ Holding GmbH, a subsidiary of Munich based VTC Group, owing 20% of shares of ST3 Offshore.

VTC Group is a fast growing and independent industrial holding company with two of its companies strongly connected with the energy production sector

www.st3-offshore.com

ST³ Offshore sp. z o.o. 71-700 Szczecin, Brdowska 5, Poland phone: +48 91 813 64 64, fax: +48 91 813 64 65

e-mail: info@st3-offshore.com

















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Szczecin Shipyard

The Szczecin Shipyard was established in 1948, however, it became an independent entity only in 1950. In the beginning, steamboats were produced, afterwards, ships with combustion engine.

At the shipyard we build:

- cargo ship,
- chemical tanker ship,
- oil tankers ships,
- research vessels,
- offshore vessels,
- passenger ships,
- technical floating vessels,
- buld carriers ships,
- cargo carrier.

In 1993 Germanischer Lloyd admitted ISO 9001 certificate to Szczecin Shipyard - it was one of the first that kind certificate in the shipbuilding industry in Europe.

Tradition and high quality characterizes us. The Sczecin Shipyard has always been characterized by high standards of construction solutions and technology.

45 hectares

65 tenants

2000 permanent Take advantage of our experience and be sure that everything is performed in a professional manner.

We aim:

- to maintain the modernity of ship designing,
- to maintain high quality production,
- fast time to complete projects,
- successful cooperation with ship owners

Our infrastructure:

- Europe's only Center of Cleaning and Painting Section, 1 ha of indoor building technological area,
- lines for cleaning, painting, cutting and bending metal sheet,
- center of completion and prefabrication,
- fully lifting appliances fabrication halls.

The Szczecin Shipyard is adjusted for shipbuilding through out the infrastructure, organized under stream - center technological chains with prefabrication halls, with incline cranes and wharfs terminal equipment.

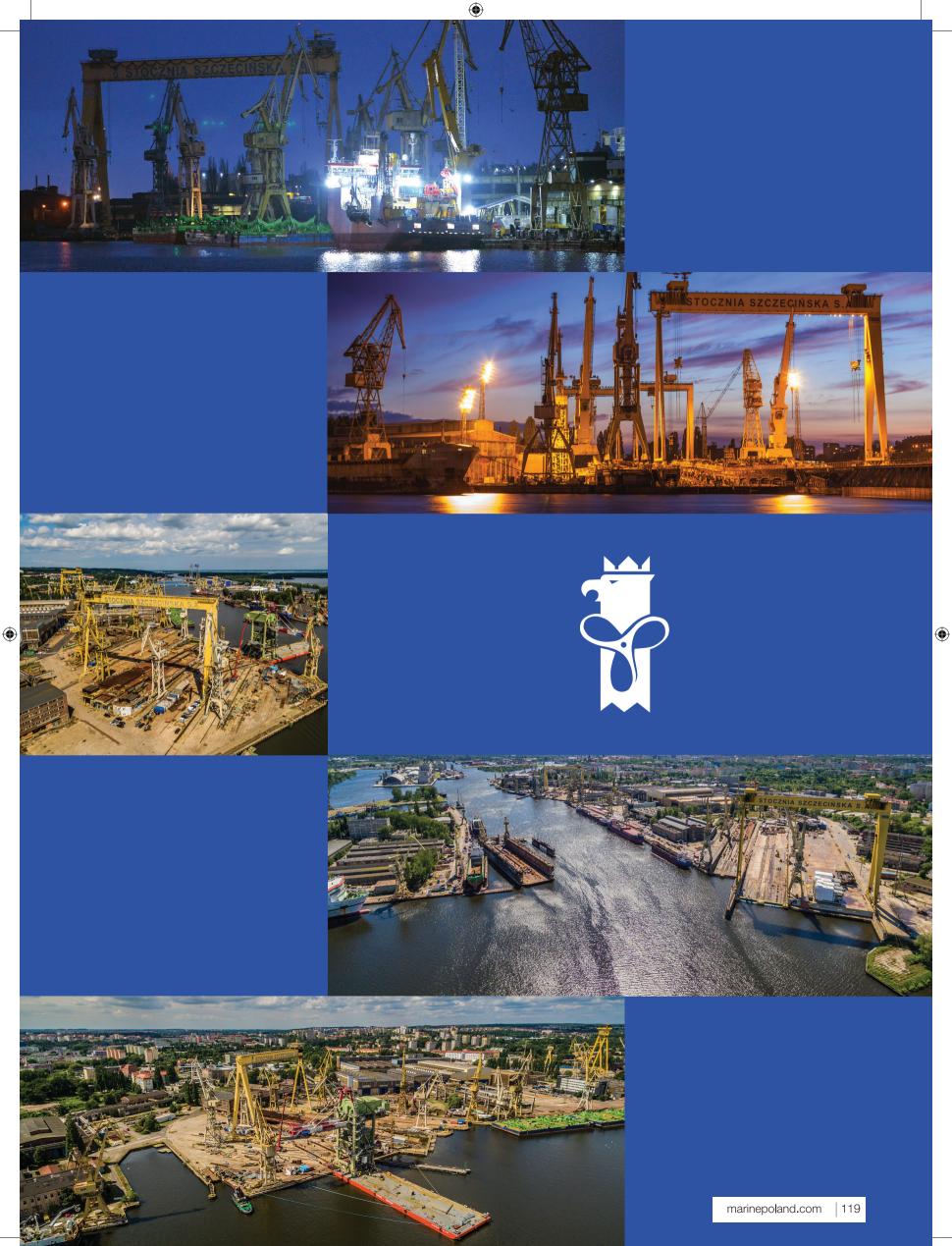
www.stocznia-szczecinska.pl

Stocznia Szczecińska Sp. z o.o. Antosiewicza 1, 71-642 Szczecin, Poland

phone: +48 91 810 29 00, fax: +48 91 813 63 09

e-mail: kontakt@szczecinpark.pl









Przedsiębiorstwo Handlowo Techniczne SUPON S.A.

PHT SUPON S.A. engineering fire protection's systems & services was founded in 1959.

"Fire prevention, is our passion. Prevent fire hazards, by employing our proven solutions" Chairman of the board Jerzy Hurkallo

Fire fighting and safety equipment suppliers for the marine and shipping industry.

SUPON S.A. company is the reliable partner for ship safety services. Our certificate approvals:

















SUPON S.A. provides inspection, service and repair work for all types of existing fire protection systems including fire sprinklers and extinguishers. Each year, our highly skilled teams examine thousands of new and existing fire suppression systems to assure optimal system operation, response times and operation of automatic sprinkler alarm systems.

Our company provides:

- Provision of complex services within the scope of servicing fire fighting equipment in land-based and marine objects
- Design, construction and service to fire detection and signalling systems
- Design, construction and service to fixed fireextinguishing equipment
- Inspections, maintenance and repairs to fire extinguishers, hydrant systems and respiratory protective equipment
- Hydraulic tests, tightnes tests and filling of fireextinguishing cylinders, including these for liferafts; verification of portable pressure vessels
- Equipping objetcs with fire extinguishing equipment, information and evacuation signs
- Trade within the scope of fire fighting and personal protection equipment.

Trustworthy from 50 years

Today, some of the largest and most successful companies in the world trust SUPON S.A. to service and maintain their fire systems. Those same companies protect their most valuable assets and mission critical processes. SUPON S.A.'s service team has and continues to provide unmatched performance when it comes to Testing, Inspecting and Maintenance of your fire systems.

Firefighting equipment:

- CO2 systems, Hallon systems, dry powder system, foam system, NOVEC system, FM200 system, fixed gas detectors systems, AC/OX systems
- Fire fighting equipment
- Fire extinguishers inspection, hydrotest, recharge
- Smoke detection systems
- UTI calibration, gas detectors inspections

Lifeboat. life rafts and davit:

- Life Rafts inspection
- Rescue Boats Inspections
- Lifeboats, davits and cranes load testing

Live-saving equipment:

- BA inspection, EEBD inspection,
- Immersion suits, Chemical suits,
- Lifejackets inspection, Inflatable lifejackets inspection, Fireman outfit inspection.
- Design, construction and service to fire detection and signalling systems,
- Design, construction and service to fixed fireextinguishing equipment,
- Instalation new and rebuilding old ones CO2 and Hi-Fog systems.

Specially trained to quickly identify automatic sprinkler system issues, our service experts are equipped with the knowledge and expertise to rapidly respond with the best solution based on the specific project and facility. In fact, a member of each of our local service teams is available 24 hours a day, 365 days a year.

Company that trust us:











www.supon.gda.pl

PHT SUPON S.A. 83-010 Straszyn, ul. Spacerowa 1, Poland e-mail: biuro@supon.gda.pl

Marine Departament PHT SUPON S.A.:

Service Adam LELEK

phone: +48 502 538 427 e-mail: adam.lelek@supon.gda.pl Construction Piotr NADOLNY

phone: +48 600 951 120 e-mail: piotr.nadolny@supon.gda.pl











SZKUNER Sp. z o.o.

SZKUNER repairs and rebuilds tugs, navy ships, icebreakers, hydrographic ships, river barges and many others. On our area are built catamarans and yachts.

SHIPYARD was set up in 1955 as a fishing repair department in SZKUNER. Over the years we became an independent division of the company.

In our history we rebuilt and repair over 4000 ships.

We are open not only on the inside and external fishing market from Holland, Germany, Denmark, Norway or Island but also a completely different segment.

The company is situated in Władysławowo (the North of Poland) and our yard is next on out of the open Baltic Sea.

Also hotel facilities are available in the close vicinity of our company because Władysławowo it is one of the most popular and beautiful resorts on the Baltic Sea.

The key objective of SZKUNER SHIPYARD activity is to satisfy our customers by providing high-quality work within the scheduled time and at reasonably low prices.

High quality of our work is certified with Quality System ISO 9001:2008, approved by DNV - GL

www.szkuner.pl

SZKUNER Sp. z o.o.

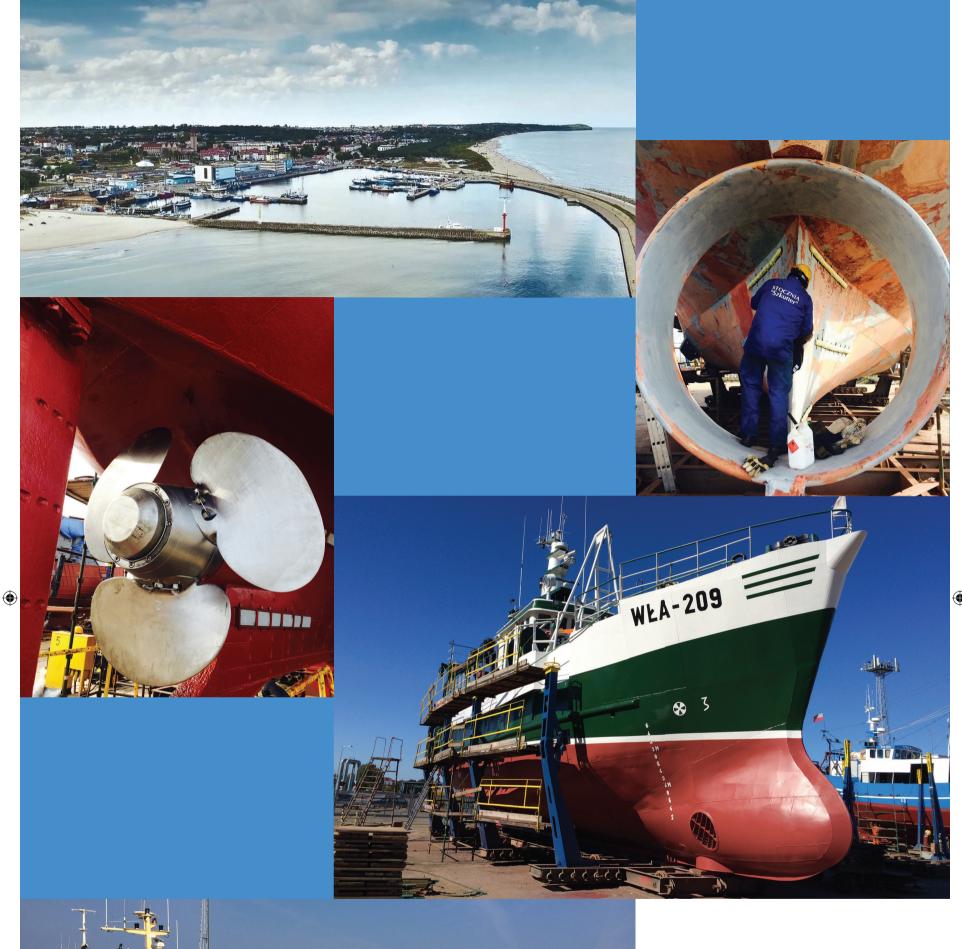
84-120 Władysławowo, Portowa 22, Poland

phone: +48 58 677 74 01, fax: +48 58 677 74 01

e-mail: stocznia@szkuner.pl

















TechWind MarineLifts

ESCALATORS SOLUTIONS FOR PASSENGER LIFTS **CARGO LIFTS DISABLED PEOPLE TRAVELATORS** Delivery Assembly Service and maintenance Design

Techwind Jan Rutkowski is a Polish lift company that was established in March of 1987. Since early 1990 we started our cooperation with shipyard industry to provide wide range of elevator solutions for marine units. Since then we have installed more that 100 different lifts on board many types of vessels and platforms.

Techwind also offers many types of special cargo lifts as well as platforms, escalators and moving walks.

Unique conditions and challenges that comes with offshore installations requires finding the right solutions for each installation, starting with the design phase. Techwind do not just install transport equipment. We strive to find equipment that is capable to last for the entire life-cycle of an unit.

Control systems provided by Techwind are based on the best components supplied only by renowned producers, that allow our products to perform functions programmed for individual needs.

Techwind designs every lift to the special requirement of the customer and provides full range of services, including:

- design during designing phase instead of forcing standard (typical) solutions we are matching customers needs and requirements,
- delivery Techwind cooperates with leaders in lift equipment production to Deliver reliable and durable final product,
- assembly our experienced Assembly specialists crew guarantees many years of operation for Your lifts. Commissioning with classification society is easy when lifts are properly installed,
- service and maintenance standard (12 months) or extended guarantee for installed devices. Our lift service and maintenance crew understands that efficiency is crucial in naval conditions. That is why they are ready to react 24/7.

www.marinelifts.eu www.techwind.pl TechWind MarineLifts - Jan Rutkowski Dabrowa 6, 80-297 Banino, Poland

phone: +48 (58) 684 86 19, fax: +48 58 684 86 17

e-mail: office@marinelifts.eu



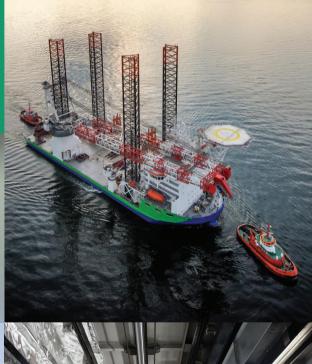




















TELEYARD Sp. zo.o.

Manufacturer of Steel Structures for Offshore, Maritime, Heavy Lifting and Port Industry.

TELEYARD is a subsidiary of TELEMOND HOLDING and manufactures welded steel structures and components for the offshore sector and container handling systems, as well as special projects with over-sized dimensions and weight. **TELEYARD** specializes in the processing of high-strength fine-grained structural steels. TELEYARD operates in a newly built production facility in Szczecin (Skolwin).

The modern facilities offer the following possibilities for the manufacturing of welded steel structures and components:

- Capability to lift parts more than 100t unit weight
- Direct access to waterways (own docks in planning)
- High quality standards and quality control
- Quality monitoring by 3rd party classification societies
- Experienced in purchasing and manufacturing of steel with offshore requirements and standards
- Project orientated capacities for welding and assembly of steel components
- Qualified and expierienced staff working under modern and safe conditions (HSE)
- Temperature-controlled production facilities for processing extra and ultra high-strength steels

PRODUCTION AND KNOW-HOW

BLASTING - Steel plates and pipes as well as components can be blasted before welding and as preparation for painting.

CUTTING - All common cutting techniques for plates, pipes, and profiles can be performed in-house.

BENDING - Bending options for steel sheets and heavy plates. Combination of in-house production and outsourcing.

WELDING - Specialized in processing of high-strength fine-grain structural steels. More than 200 modern welding stations from Merkle, Fronius, Cloos and Lincoln. The stations will be connected in the future via a network to carry out and control the welding processes even more closely.

MACHINING - From small to large mechanics all components up to 40 tons total weight can be machined stationary. In addition, mobile machining is possible.

PAINTING - All painting of small parts as well as large welded assemblies up to 20 m length are performed in professional, enclosed spray cabins (dry, wet paint).

ASSEMBLING - Entire value chain through to final assembly can be offered. Parts are commissioned fit for transport or final assembly on site if necessary. Hydraulical and electrical assembly is also possible.

QUALITY CONTROL

- Certified for Non-Destructive Testing (VT, UT, MT, X), 100% Traceability,
- ISO 9001:2008, ISO 18.800-7.
- EN 1090-1&-2, DIN EN ISO 3834-2,
- DNVGL-CP-0352,
- Achilles JQS,
- HSE: ISO 14001:2004, PN-N-18001:2004, ISO 18001:2004

www.telemond-holding.com

TELEYARD Sp. z o.o.

Nad Odrą 2, 71-833 Szczecin, Poland

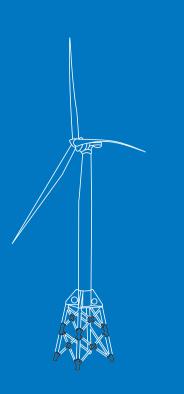
Janusz Kocimski

phone: +48 730 992504

e-mail: ianusz.kocimski@telemond-holding.com

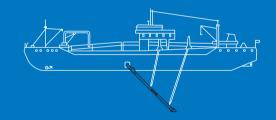






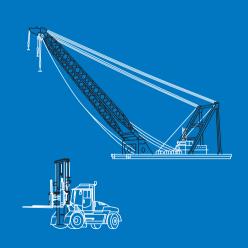














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UNITEST Marine Simulators Ltd.

Unitest was founded in 1990 as a private-owned enterprise and 26 years later the company converted to Unitest Marine Simulators Ltd.

The company staff includes prominent experts from Gdynia Maritime University (Poland), young, dynamic programmers and creative graphic designers. Dr Leonard Tomczak, President of the Board, is also the founder and managing director of the original UNITEST enterprise.

In the beginning, the company's activities concentrated on the design and production of diagnostic and measurement instruments for ship engine rooms. Gradually, the company broadened its scope of activities and in 1994, UNITEST started to develop the Computer Based Training (CBT) interactive programs for marine engineering students and maritime engineers. Currently, the CBT package includes 33 independent programs and new modules are being developed continuously.

In 1995, UNITEST began to produce engine room simulators and the first low speed diesel engine room simulator was created two years later, followed by medium speed diesel and steam turbine engine room simulators. UNITEST has become a supplier of the customized dual-fuel engine simulators for "BC Ferries" ships built in Remontowa Shipyard, Gdansk (Poland).

UNITEST is a world leader in creation of maritime training software and fully interactive engine room simulators with realistic 3D visualization of the machinery space. Additionally, UNITEST's simulators use state of the art, proprietary, integrated checklists and fully automated assessment of the trainee competencies.

UNITEST also creates interactive programs adapted to the needs of different marine equipment manufacturers. By using 3D technology, these programs usually extend the operator's manuals and allow for a better understanding of the equipment's construction and functioning. UNITEST constantly cooperates with ALFA LAVAL (Sweden), Kistler (Switzerland) and other maritime manufacturers. Recently, UNITEST has become the exclusive supplier of customized simulators for all new, electronically controlled low speed diesel engines produced by Winterthur Gas and Diesel (Switzerland) - formerly part of the Wärtsilä corporation.

In order to expand the offer, UNITEST has started to develop 3D mobile applications which support the engine room maintenance works.

www.unitest.pl

UNITEST Marine Simulators Ltd.

Pomeranian Science and Technology Park 81-451 Gdynia, Al. Zwycięstwa 96/98 loc. E311-316, Poland

phone: +48 58 698 20 87 e-mail: office@unitest.pl









VERG ON-SITE MACHINING SOLUTIONS

Any unplanned failure is always a big challenge in even best organized Shipyard. In order to quickly and effectively neutralize the risks of unexpected shutdowns, VERG has prepared a number of solutions that will allow getting rid of many problems and restoring operation of the entire plant.

In-Situ Service - Rental of Portable Machine Tools - Sales of OSM Equipment - Special Machinery. Our company has gathered the most outstanding specialists in the field service industry, which converts to a large extent into the timely implementation of projects and, even most important, performing tasks according to our customers' specifications. Our own design office and measuring department equipped with the latest laser equipment allow our company taking part in the most demanding projects in Europe.

Flange Machining

VERG has a large fleet of flange facers and orbital mills. The machines are mounted on both inner and outer diameters of a flange and, in certain cases, directly to the face or heat exchanger bottom. Pneumatic, hydraulic or electric drives permit the use of our equipment for many tasks. Machines with automatic radial and axial feeds allow complete remachining of the flanges. Work range from 0 to 8500mm.

Milling

Machining of large flat surfaces is possible through the use of mobile gantry and 3-axis milling machines. These machines, like the other machines in our offer, have drives of various types, which increases their versatility. On our stock, we have both lightweight aluminum machine tools, designed for tasks performed at heights and in confined areas, as well as heavy duty equipment, allowing increasing productivity and maintaining tolerances similar to those that can be obtained when machining with stationary machines.

Boring and Drilling

Over a dozen mobile boring machines – both compact and high performance - and a wide range of magnetic drills allow us making holes from a few millimeters to more than four meters in diameter. Our mobile service teams are equipped with many special attachments for mobile boring machines, which is why such a work as facing, grooving, boring of tapered holes and honing is not a problem. Automatic welding systems complete the range of our machines.

CNC Threading

Broken pins, damaged threads and poorly made holes pose a huge problem for each installation. For the biggest thread diameters, our company uses a special CNC machine. Damaged threads are no longer a problem with the use of advanced technology. We are able to rework or make new thread, even if the size is M210, directly on site, also in positions difficult to access. We also have special technology to remove pins that cannot be removed in a traditional way.

3D Measurement and alignment

Since the implementation of each project according to specifications obtained is a priority for us, our specialists are equipped with advanced, state of the art measuring equipment. We have several laser tracker devices and measuring arms. The equipment is mainly used for the geometric measurements and precise setup of mobile machines. The measurement is also offered as a separate service. A comprehensive report with visualizations and diagrams follows each measurement project

Rentals and Special Solutions

This year, in order to meet the expectations of our customers, we launched the rental of mobile machines. We have more than twenty different machines of leading manufacturers in our fleet. In addition, using the experience of our technicians and in collaboration with our design office, we are able to adapt a standard device for each task or create a completely new solution, including CNC machines.

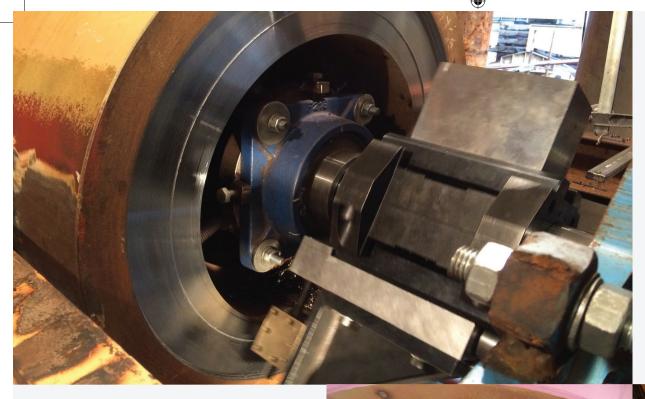
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www.ned-project.eu

NED-PROJECT Sp. z o.o.

80-280 Gdańsk, Szymanowskiego 2, Poland

phone: +48 695 420 886 e-mail: office@ned-project.eu





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MIĘDZYNARODOWE
TARGI GDAŃSKIE SA
PROJECT DIRECTOR: MAREK BUCZKOWSKI
TEL. 58 554 92 13, 693 448 814, FAX 58 554 93 13
MILITARY@MTGSA.COM.PL