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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



”

The maritime industry in Poland is thriving. We are in a phase of dynamic development, which, among other things, includes huge investments in ports, changes in the national infrastructure and new areas of cooperation.

The Port of Gdansk Authority ended 2018 with a historic record: almost 50 million tonnes passed through the quays and terminals of Gdańsk. That is 9 million tonnes more than in the previous year. We achieved this thanks to the hard work of our contractors.

Last year also saw the opening of a new business office of the Port of Gdansk in Shanghai. This is the first such office representing a Polish port on another continent. In the near future, we plan to open two more: in the Czech Republic and in Belarus.

All this to bring an even greater volume of cargo to Gdansk, which will support our natural backup - Eastern and South-Eastern Europe.

Our goal is the intensive development of the maritime and inland economy, which is why we operate in two ways. In parallel to the work on the Central Port, that is, the construction of a terminal complex at sea, we are working on a project to open up the Vistula River. World trade takes place in the seas and oceans. However, it is time to move to inland waters and transfer some of the cargo to the rivers.

Last year, the Port of Gdansk finally moved from 6th to 4th position in the ranking of the largest ports on the Baltic Coast. I believe that thanks to the trade and marketing strategy that we are implementing, we will finish 2019 on the podium, and the entire Polish maritime economy will become even more competitive, not only in the Baltic Sea region, but also across the whole continent.

Łukasz Greinke

President of the Board of the Port of Gdansk



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Port of Gdynia is the youngest Polish sea port with a convenient location in the area of the Gdansk Bay. Called the “Polish window to the world”, from its very beginning, it was a synonym of modernity. This is where the first Polish container terminal was built in the 1970s. The Port of Gdynia is a key port of the Trans-European Transport Network and a substantial node of the Baltic-Adriatic Corridor.

As a partner with a strong brand, known for high quality of services rendered, the Port of Gdynia faces further challenges related to technology and market development. The introduction of new generation of ocean-going vessels into service, determines our activities to adapt the port infrastructure adequately.

We meet the expectations of stakeholders of terminals operating in the port area through the implementation of investment plans, determined for the coming years. Thanks to the availability of external financing and a great interest of industry investors in the port, the long-term program of modernization and development of the Port of Gdynia has a great chance to succeed. The concept of the future phased construction of the External Port also has solid foundations. As the Port Authority, we are ready to perform any project aimed at the implementation of innovative and environmentally friendly technologies, thus creating good conditions for business development.

Adam Meller

*President of the Managing Board
Port of Gdynia Authority S.A.*



”

The Seaports of Szczecin and Świnoujście have witnessed record high cargo handling levels. In 2018, the two ports handled 12.5 percent more cargo than in the previous year.

The figures are very encouraging to continue the development of the ports of Szczecin and Świnoujście. It is the effect of creating the best possible conditions for business in the ports and implementing a robust and far reaching plan focused on the development of port infrastructure.

Szczecin and Świnoujście are a universal port complex that can handle virtually any kind of cargo. The high quality of services provided has been appreciated by shipowners who listed the two ports as the best ones in handling dry bulk in the 2018 BIMCO Report. The ports enjoy excellent geographic location with access to environmentally friendly modes of transport, including sea, inland and rail. We have good road transportation links to the hinterland, whereas the Świnoujście ferry terminal is the leader in the South Baltic Sea regarding services to Sweden. Almost every hour, a ferry leaves Świnoujście heading to ports of Ystad or Trelleborg. Additionally, Świnoujście also operates an LNG terminal.

The Board of the Ports Authority supports stevedoring companies that operate in the ports and new investors who develop their businesses here. We create ideal conditions for both small and large companies. A number of domestic and foreign companies decided to establish their operations here and for a number of year they have been successfully growing with our support. Summarising, the ports of Szczecin and Świnoujście provide an ideal location for your business. So, we are looking forward to cooperating with you.

Dariusz Ślaboszewski

*President
Board of Szczecin and Świnoujście Seaports Authority*



”

The maritime sector is an integral part of the activity of the Pomeranian Special Economic Zone (PSEZ), which is why we are engaged in the revitalisation of Ostrów Island. We plan to bring it back to its former glory and restore it for shipbuilding.

Ostrów Island is an extremely attractive place on the investment map of Poland. Our aim is to increase the potential of this area for modern shipbuilding and to support production. On top of direct access to water, there are additional benefits of this location, like its proximity to the Port of Gdańsk, specialized equipment, and a large area which is adapted to this type of activity. The Port of Gdańsk, based next to Ostrów Island, will invest in modern technologies related to offshore and offshore production. Another of the advantages for companies located in this area will be the possibility to benefit from these latest technologies. We are conducting discussions with potential investors concerning how to prepare this area to meet their requirements. We plan to invite companies that base their activities on investing in cooperation. We strongly believe that they will generate effective synergy between them, both increasing their efficiency and benefiting the entire shipbuilding industry.

Przemysław Sztandera

*President of the Management Board
at the Pomeranian Special Economic Zone*



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The market is always right. The Baltic ferry transport market is one of the leading markets of its kind in the world, supporting almost 30% of road sets.

Improvements in road and port infrastructure, GDP growth and more dynamic development of Northern Europe has caused more and more of a market shift from west to east. Consequently, we still have a boom of about 5 years in the ferry market, and stable maintenance (about 10% annually). The modernization and extension of the road network, e.g. the essential A1 motorway, the S3 expressway and railway lines, provide easier access to Polish ferry terminals, which are also becoming attractive as transit points. Another huge advantage is the location of Polish ferry terminals in the Baltic-Adriatic corridor or the TEN-T network. Poland is the main trading partner of Scandinavia, compared with other Central and Southern European countries. Moreover, an increase in the volume of trade results in an increasing demand for transport services on the Continent-Scandinavia route. Ferry transport, unlike low-cost airlines, does not impose weight limits for transporting cargo and luggage. The market is growing and in order to be utilized, additional, modern tonnage is needed.

At the moment, ferries running from Świnoujście to Sweden are mainly 30-year-old vessels with a low load line. We have to remember that shipowners are trying to renew their fleets and increase the load line. Today's standards are ferries with a load line of 4000 m and over. Ports and ferry terminals have started to prepare for such units. Plans for the coming years assume, for example, the expansion of the port in Ystad by two additional waterfronts, the modernization of the ferry terminal in Świnoujście and the construction of a new ferry terminal in Gdynia. We can also observe the reaction of Polish shipowners to these tendencies, referring, for example, to the "Batory" program or the construction of new ferries in Polish shipyards. I strongly believe that we will be able to offer our passengers and cargo customers an even better service on new units soon.

Piotr Redmerski

*President of the Management Board
at Polish Baltic Shipping*



CITY OF GDYNIA



Gdynia is a proud maritime city. Its beginnings are connected with the construction of the port which brought the city its great success and the title of Poland's maritime capital. Today we are still open to the sea. Along the seafront Gdynia's Sea City is taking shape with new office and residential developments. During the MIPIM Trade Fair in Cannes, Gdynia received the honourable title of the Polish City of the Future awarded by the FDI Magazine of the Financial Times group, its third consecutive time to win in this prestigious ranking. The regular success comes as a confirmation of the strategic economic decisions and stresses a continued commitment to the development of Gdynia.

Nowadays maritime economy is an extremely buoyant industry that successfully uses state-of-the-art technologies of the innovative sector. Contemporary times require close relations between smart technologies and good management. Located in a former shipyard and supported by Gdynia's Pomeranian Science and Technology Park, Constructors' Park is home to companies which can test their prototype technological solutions there. It shortens the process of implementation of bold ideas into life and contributes to the development of the maritime industry. At the same time the importance of Gdynia's universities is growing: Gdynia Maritime University and Polish Naval Academy continue to complete and expand their educational offer by adapting it to market realities and the needs of the maritime sector.

Organised annually, the Maritime Economy Forum facilitates cooperation between companies, provides expertise and business experience. The port of Gdynia has recorded the best results in its history, which brings optimism and makes us proud. A new ferry terminal is under construction and several big companies operate in what used to be a shipyard. Maritime industry in Gdynia is sailing the right course !

Wojciech Szczurek

Mayor of Gdynia



Gdynia Maritime University is a unique place on the academic map of Tricity, combining nearly 100 years of experience with a modern approach towards maritime education. On September 1st, 2018 we gained the university status – a symbol of fulfilling high educational standards and implementing projects featuring the global maritime industry. Today, more than ever, we need to reinforce scientific research with business strategies to build the future of Polish maritime economy. Our University plays a vital role in this process.

Gdynia Maritime University constantly improves the quality of education by developing innovative courses of study, as well as providing scientific advice for the maritime sector. On the eve of the centenary of maritime education in Poland, we are ready to develop new projects that will boost the potential of the sea industry and strengthen our University's position as a leading international research and development center.

Prof. Janusz Zarębski

Rector of Gdynia Maritime University



Contents

6	Historic record at Polish seaports
10	Our objective for this year is to be ranked third among the Baltic Sea ports - an interview with Łukasz Greinke, President of the Port of Gdansk Authority
12	Record set at the Port of Gdynia. Cargo turnover exceeded 23.5 million tonnes in 2018 - an interview with Adam Meller, President of the Port of Gdynia Authority
14	Maritime Ports and Global Container Shipping in 2018
16	Overview of the Polish shipbuilding export market
20	Crist on the right track! - We talk with the founders of the biggest Polish manufacturing shipyard
24	Good prospects for the first offshore wind farms on the Polish side of the Baltic Sea
27	Marine design in Poland
32	Discover Gdansk, for your business!
34	Gdynia - Polish City Of The Future
36	Polish legal background for foreign investors
38-151	Maritime company presentations
152	Index of company presentations

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Historic record at Polish seaports.

For the first time their transshipments exceeded 100 million tonnes

Last year's transshipments in Polish seaports exceeded the **100 million-tonne barrier**, amounting to 101.19 million tonnes. It was the first time in history that this level was achieved - said the Minister of Maritime Economy and Inland Waterway Transport, Marek Gróbarczyk on Wednesday. 87 million tonnes of cargo were handled in Polish ports in 2017.

” *This is a huge historic success, which shows the dynamic development of Polish seaports. We are making every effort to keep up with the rapid pace of transshipments, which is why we are implementing a wide investment program in order to improve these results even more - said Gróbarczyk.*

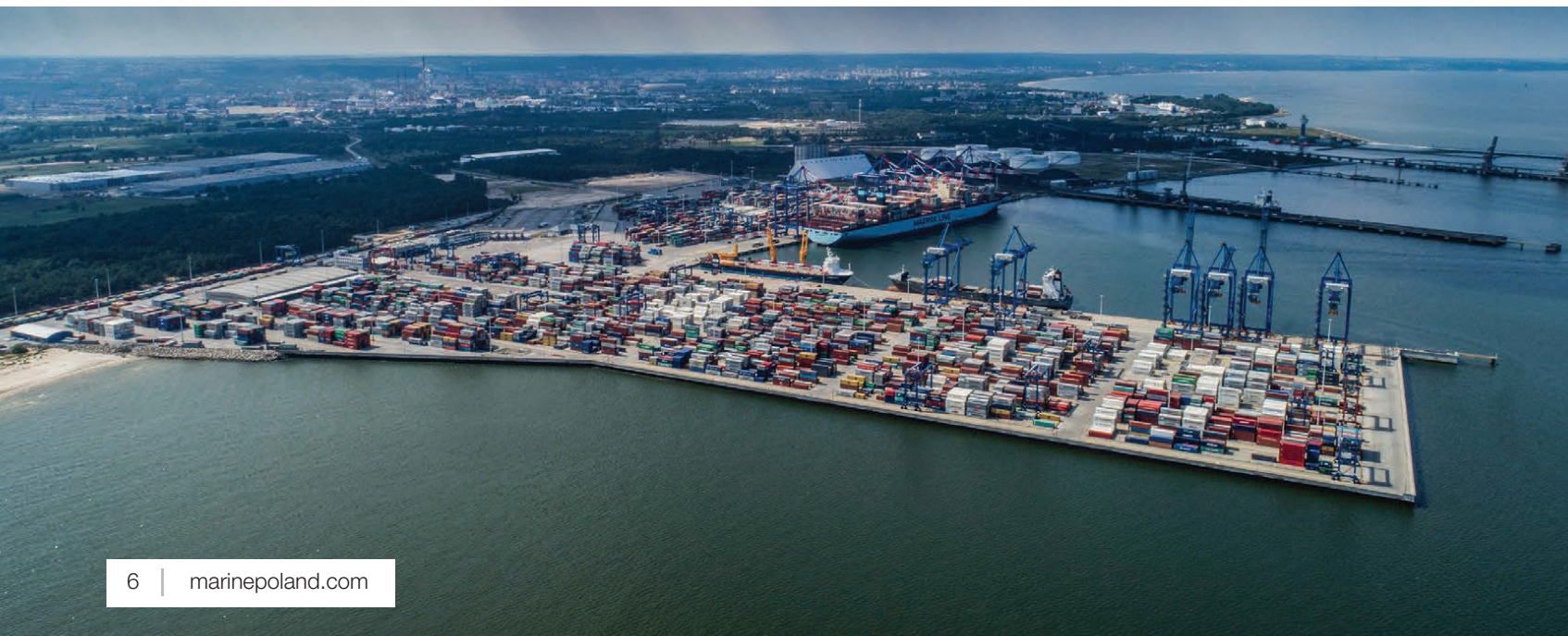
The historic barrier of 100 million tonnes of transshipments in Polish ports was exceeded thanks to the three largest seaports in Poland, each of which also broke their annual record of cargo handling and put billions of PLN into investments. It was a truly incredible year for the Polish maritime industry.

Closer to the podium of the largest Baltic ports

In 2018, the Port of Gdansk transshipped almost half of the goods transported through all Polish ports. Thanks to this, it is getting closer and closer to the podium of the largest Baltic ports.

The Port of Gdansk Authority ended 2017 with a historic record: 40.6 million tonnes of goods were transshipped - previously, no Polish port had exceeded this barrier. Also in 2018, Gdańsk broke its own record: more than 49 million tonnes passed through Gdańsk quays and terminals. This increase of 20.7 per cent shows the highest growth dynamics on the Polish coast.

” *Last year, our contractors transshipped 9 million more tonnes of goods than in 2017. They did so not only using old infrastructure, but also during ongoing construction work on the whole Port territory. That's a huge amount of complicated work, so congratulations are due first and foremost to our operators - says Lukasz Greinke, President of the Port of Gdansk Authority. The final total of transshipments in the Port of Gdańsk is almost 17 percent higher than planned.*





The Port recorded a particularly high growth in coal. 7.2 million tonnes of coal were transshipped, 41 percent more than the previous year. The total for general cargo increased by more than 18 percent - to 21.5 million tonnes.

” *As for containers alone, almost 20 million tonnes were transshipped in the Port of Gdansk, which corresponds to an annual growth of 21%. Last year, we transshipped approximately 87 thousand new commercial vehicles, 13 percent more than in 2017. Not only have transshipments been growing, but also the number of merchant ships entering the Port. In 2018 we had 357 more arrivals than the year before - explains Adam Klos, Sales Director at the Port of Gdansk Authority.*

The Port of Gdansk recorded a further increase in transshipments in the fuels area, with 18% more fuels transshipped last year - 15.5 million tonnes. The bulk cargo group closed the year with a total of 3.9 million tonnes, which was almost 14% better than in 2017.

As a result of such good dynamics and the high amount of transshipped goods, the Port of Gdansk finally moved from 6th to 4th position in the ranking of the largest ports in the Baltic Sea, ahead of the Port of Klaipeda.

Billions worth of investments

The Port of Gdynia closed 2018 with a historic record – 23,492 million tonnes of handled cargo. This means a 10% increase compared to 2017. And it does not end there. The Port of Gdynia Authority (PGA) announced major investments in the coming years, including the construction of a public ferry terminal and the deepening of the port basin, thanks to which the results of the Gdynia port will be even better in the future.

” *We managed to achieve another transshipment record, and we managed to earn a good amount of money, so I consider the past year at the port of Gdynia as very successful. We handled a lot of bulk goods, and we achieved a record in wood transshipment - an increase of over 400% compared to the previous years. I'm also happy with the container handling results - says Adam Meller, President of the Port of Gdynia Authority*

General cargo was the main cargo group handled at the Port of Gdynia, responsible for a 59% share in the total turnover structure. Last year, in this cargo group, 1.36 million tonnes of goods were transshipped, which is mainly related to the number of containers handled. An increase was also recorded in the transshipment of general cargo handled by ro-ro vessels.

Grain takes the second place in transshipment – 2,944 million tonnes, and the third, coal and coke. The increase in transshipments in this group is related to significantly better coal imports, with a total of 979 thousand tonnes. The share of this cargo group in the port turnover structure in 2018 was about 11%. The transshipment of other bulk cargoes also increased, by over 20%. In other cargo groups, there were slight decreases in cargo handling compared to 2017.

Among the key investments at the Port of Gdynia, is the construction of the new public ferry terminal, the Outer Port and the Logistic Valley. Adam Meller also stressed that there are very good chances for the construction of the Red Road. This investment, with a length of about 7 km, is necessary for the development of the Port of Gdynia. The design of its construction is divided into two stages. The first covers about 3.5 km from the Gdynia Północ junction in the area of Pucka Street to the Baltic Container Terminal.



The second stage is to be an extension of this section for another 3.5 km to the Karlskrona roundabout in the vicinity of which the new ferry terminal is planned. The Red Road will join the two-lane Via Maris road, which will start at the end of the Gdynia-Chylonia beltway and run to the border with Rumia.

Meller added that the Port of Gdynia will also enter the ship bunkering market. The first bunkering operations, in cooperation with PGNiG, will be performed next month. Ultimately, an LNG terminal with a gas power plant will be built at the end of the Outer Port. The project also includes the construction of a barge designed for bunkering LNG to other vessels.

The Port of Gdynia also achieved very good financial results. Profit on the basis of operations increased in 2018, compared to the year of creation, by 2.6 million PLN (7.8%), thanks to growing basic duties on port fees (12.5%) and, to a lesser extent, from the increase in rental sources (1.7%). Due to the current situation on the global financial

market, and investment expenditures, the results of financial activity fell to 28%, a decrease similar to other operating activities (down 19%). As a result, the Port of Gdynia's net profit for 2018 was 10.8% lower than the year before, and amounted to 67 million PLN.

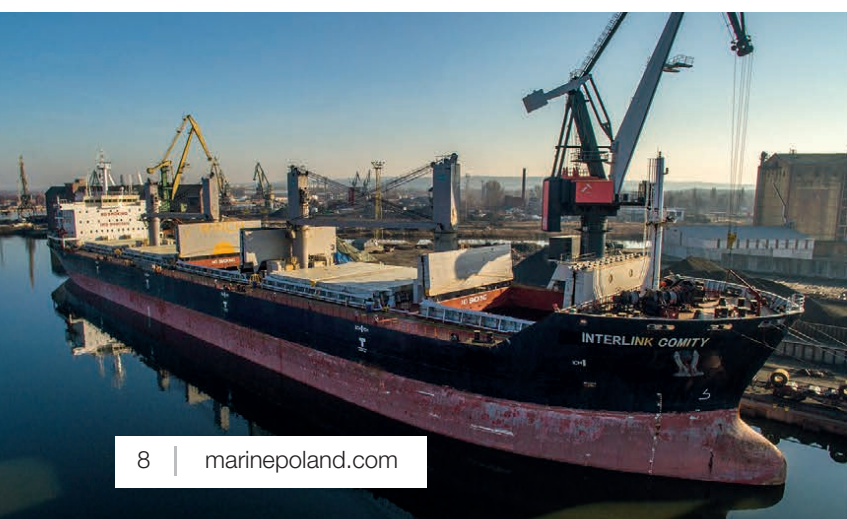
Great increases in bulk cargo transshipment

The Szczecin-Świnoujście Port Complex noted unprecedented cargo handling volumes in 2018. Cargo handled in the two ports that year exceeded 28.6 m tonnes, which makes an increase of 12.5% compared to 2017.

Coal is the leader, with a double digit increase (+61%), followed by ore (+30%) and fuel (+18%). The results in these cargo groups were possible due to excellent economic growth in the country. The rapid economic growth triggered a higher demand for energy resources and raw materials for the production of steel.

Last year, other bulk achieved very good results (+10%) due to the increased handling of fertilizers, aggregate, methanol and sulfuric acid. Further growth was noted in break bulk (+4.4%), including break bulk transported by ferries (+3%).

Unfortunately, grain handling remained poor (-25.1%), and the double digit in container handling (-13%) came as a big surprise.



In total, the two ports handled 3,190.6 thousand tonnes more, i.e. from 25,423.6 thousand t in 2017 to 28,614.2 thousand t in 2018. This means an increase by 12.5%. An interesting fact is that by the middle of November 2018, the ports had already reached the level of the whole year of 2017 (25.4 m tonnes).

” *The results attained by our ports were the effect of synergy between actions taken by the Seaports Authority on the one hand, focusing on the development of port infrastructure and creating possibly the best conditions for business in the ports, and the operation of port-based companies on the other. Moreover, the Polish economy was rapidly growing, as reflected by some imposing port cargo handling statistics. The results have motivated us to continue promoting further growth in the ports of Szczecin and Świnoujście – says Dariusz Ślaboszewski, CEO at Szczecin-Świnoujście Seaports Authority.*

The Seaports Authority expects the upswing trend to continue in 2019 to reach cargo handling of about 30 m tonnes at the end of the year. We should remember, however, that the situation on the market fluctuates and certain factors may remain beyond the control of the Seaports Authority and handling companies, the impact of which may be felt on cargo volumes.

At the moment, Szczecin and Świnoujście are two ports of a universal port complex where general cargo accounts for



47%, solid bulk 39%, and liquid bulk 14%. It is worth adding that the Świnoujście ferry terminal is the leader in ferry services in the South Baltic Sea Region, providing services to the Swedish ports of Trelleborg and Ystad with 11-13 ferries.

According to statistics, the previous largest ever cargo handling in the ports of Szczecin and Świnoujście was in 1979, when the ports handled 26,697 thousand tonnes.



„Our objective for this year is to be ranked third among the Baltic Sea ports”.

An interview with Łukasz Greinke, *President of the Port of Gdansk Authority.*

The recent years have been a time of prosperity at the Port of Gdansk. Record transshipments, record investments and specific plans for further development; chances of being ranked in the list of the ten largest ports in Europe and the three largest Baltic ports, and investments that have not yet been seen – we discussed all these topics with Łukasz Greinke, President of the Port of Gdansk Authority.

How do you assess the results of the Port of Gdansk in 2018?

In 2018 we achieved an absolute transshipment record in the history of the port. I must admit that the increase in volume of nearly 21 percent and the total of goods transshipped exceeding 49 million tonnes were a surprise even for us. We recorded the largest increases in transshipments of coal, fuels and general cargo. In case of fuels, of which we handled 15 million tonnes, the effects of our supply diversification policy are visible. We hope that this trend will continue, because our infrastructure is ready for it. We are very pleased with further increases in container reloading, which once again surprised us, with the total reaching almost 2 million TEUs. It is also important that in 2018 we served over 400 vessels more than the previous year, which only emphasizes how busy this time was at the port. We also achieved an excellent result in the transshipment of cars, with a total of 85,000 units handled, compared to only 14 thousand in 2016.

Record transshipments were seen both in the deep-sea terminals located in the Outer Port and in most terminals at the Inner Port.

In order to achieve good results, apart from the appropriate economic situation on the market, it is necessary to invest in infrastructure. What has the investment process in the port been like over the past months?

I can safely say that, in the recent history of our port, there have never been such investments as those implemented last year. Last year, we spent more than 100 million PLN on investments. Our absolute priority until 2020 are projects co-financed with the CEF (Connecting Europe Facility) and we have been able to sign all the contracts for these projects. With EU funds, we are rebuilding the road and rail system at the back of the Outer Port. This investment will improve the access to the largest Gdansk terminals, including DCT Gdansk.



We are also conducting activities in the area of Sucharskiego Street, in cooperation with InvestGDA, from whom we purchased a 10-hectare plot of land. We will build a parking lot and a petrol station there.

As part of the CEF, we are also carrying out a number of investments in the Inner Port. We are deepening the fairway to 12 meters and rebuilding a total of 5 kilometers of quays: Nabrzeże Oliwskie, Nabrzeże OPP, Nabrzeże Wiślane, Nabrzeże Dworzec Drzewny, Nabrzeże BON and Nabrzeże Zbożowe. We have also connected the area of Nabrzeże Szczecińskie with Handlowa Street. We built a buffer parking lot and new fences in the area of Śnieżna and Handlowa Streets, and large, previously unused areas have been paved. We will also install new truck scales throughout the port. At the PGE terminal, we are clearing excess waste and hardening storage yards. Lately, the port has been changing at an unprecedented pace.



What is the current situation of Port of Gdansk Cargo Logistics SA?

We are still in a legal dispute related to the unsuccessful attempt by a Maltese investor at purchasing PGE, but we are not waiting for the final decision. We decided to restructure this company, just as we restructured the Port Authority. I think that you can already see the first effects - after a difficult 2017, PGE reloaded over 3.6 million tonnes of cargo in 2018. At the moment, I can assure you that the company is in a good situation and we are doing everything to maximize its efficiency.

What about your activity on foreign markets?

First of all, we want to make an impact on the world market. We are showing that we are the northern gate to Europe for goods transported from China. We have access to a large market - nearly 100 million consumers - so Gdańsk has the right to demand cargo handling from and to Poland, the



Czech Republic and Slovakia, which is why last year we decided to open our own port office in Shanghai. The office has two basic functions. On the one hand, we are talking about our activity and making our product known, that is, areas, quays, etc. On the other hand, the office serves the contractors who are already with us, by giving them new opportunities to operate in Asian markets. We participate in the largest trade fairs in China, organize business meetings and visit Chinese companies. When it comes to the European market, we are planning to open trade offices in the Czech Republic and Slovakia. We also know how much there is to be done at our eastern border. Chinese warehouse centers have been established in Belarus, from where we have to start a direct rail connection to our port. We also actively participate in the largest European trade fairs and conferences.

What are your most important goals and tasks for the nearest future?

Our main goal for this year is to be ranked third among the Baltic ports and to join the group of the 10 largest European ports. Our main tasks for the coming years are the continuation of all CEF investment programs, and the development of the concepts of the Central Port and the "Wisła" program.

Record set at the Port of Gdynia.

Cargo turnover exceeded 23.5 million tonnes in 2018.

Interview with Adam Meller, President of the Port of Gdynia Authority.

"We achieved another record, but to achieve the rank of oceanic port, we will need to continue our ongoing investments". We talk with Adam Meller, the President of the Port of Gdynia Authority, about record-breaking cargo turnover, current investments and bold development plans.

Let's summarize last year's transshipment results.

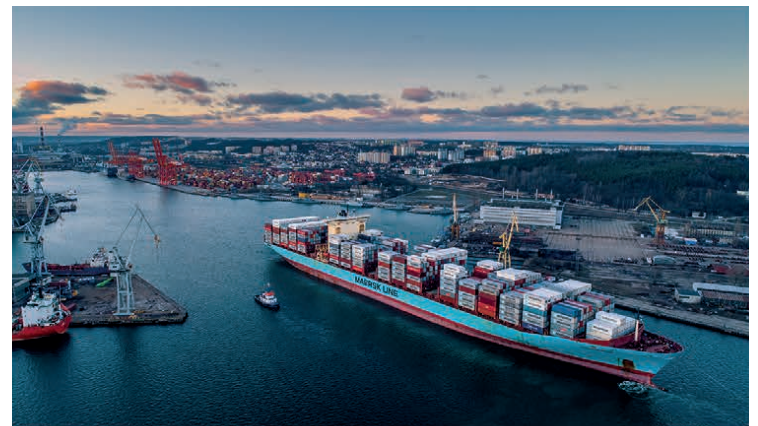
2018 was a great success. Once again, we broke the historic cargo handling record at the Port of Gdynia. We surpassed the high bar we set last year when, for the first time, we exceeded the magic barrier of 20 million tons, reaching a total of 21.2 million tons. In 2018 our cargo turnover increased over 10 percent year to year – and reached 23.5 million tons.

What do these results look like in particular cargo groups?

Each year brings a certain seasonal prosperity. In 2018, this was definitely the turnover of wood, which increased by over 500 percent. We also recorded increases in general cargo and containers as well as in bulk cargoes. On the other hand, we saw a slight decrease in the transshipment of fuels.

What conclusions can you draw from last year's results? What course of action will you take to continue success in the coming years?

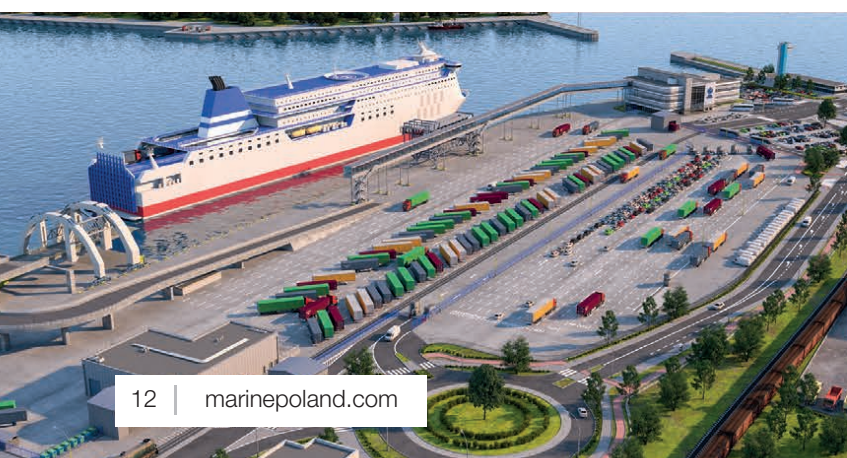
Certainly, once again, we can conclude that our results could be much better. Our infra- and superstructure is used practically to its full potential, therefore, what is most



important for us are investments to maximize the efficiency of owned space. Acquiring and creating new space for further development is also important. This is one of the challenges we want to meet. A lot of companies are interested in operating in our space.

Which ongoing investments will increase efficiency at the Port of Gdynia?

2019 will certainly be a year of investments for us. One of the most important, for both the port and the city itself, is the construction of the new Publiczny Terminal Promowy (Public Ferry Terminal). We hope that, in accordance with the contract, we will be able to start using it in 2021. At the end of April and beginning of May, PKP PLK will start rebuilding the track system of the Port of Gdynia. We are also commencing a number of investments related to the modernization of quays along the main seaport. These investments are necessary due to the upcoming completion of the deepening of the port. Thanks to this investment, which is co-financed by the EU, all quays at the Port of Gdynia will be deepened to 16 meters and thus the Port of Gdynia will become a deep-water port. Another significant investment, which is the result of a contract that



we concluded at the end of last year with the Defense Ministry, is to expand the internal entrance to the port from 100 to 140 meters. Moreover, at Logistyczna Street, located behind Estakada Kwiatkowskiego, we are building a new, high storage warehouse. We will also be conducting activities in the construction of a new inter-modal terminal with storage yards.

At what stage of progress are the current works related to the widening of the turntable?

Actually, the whole turntable basin is ready. Arrangements are still underway to find a new location for a floating dock belonging to the Naval Shipyard. Currently, this dock conflicts with the widening works. Today, we have a basin with a diameter of 440 meters, so we are able to receive ships with a length of 366 meters and a draft of 12.7 meters. Ultimately, the turntable will be 480 meters long and allow vessels of 400 meters to enter the Port of Gdynia.

Although the Gdynia port is surrounded by a city, you managed to acquire new space last year.

We acquired very important areas of the Nauta shipyard, located at Waszyngtona 1 street. We plan to conduct port operations on this 1.9 thousand-square-meter area. We are aware, however, that we must create a buffer between the industrial and residential zones of Gdynia. Another area we acquired in 2018 is a plot from Vistal, located at the Węgierskie wharf. This area of 35,966 sq m with a quay length of 440 m will also ultimately be adapted for port operations.



How is the project of the Port Zewnętrzny (Outer Port) developing?

We are already making concrete steps towards the construction of the Outer Port. In 2018 we prepared a detailed investment concept. We are preparing an environmental audit specifying the influence of the container terminal on flora and fauna. We are also preparing elements of the technical documentation and



conducting activities related to the search for potential investors, and obtaining information about know-how. We have taken active steps in conducting visits and undertaking cooperation with large port operators in Europe and in the world. As for the construction of the Outer Port, we want to draw inspiration from the best. We visited several ports where we could observe developed container reloading technologies that we would like to implement at the Port of Gdynia. During a visit in Shanghai, we started talks about the possibility of cooperation with large terminals such as the terminal in Singapore or Hong Kong – the proposal was met with great interest and resulted in invitations to the largest Chinese ports.

What else does the Port of Gdynia Maritime Port Authority do in the field of ecology and innovation?

When it comes to ecology, we use the yetiSense system in the port, which monitors the air quality at the Port of Gdynia. There are six of these monitoring points. Together with a bulk cargo terminal, we will also install devices that will significantly reduce the possibility of dusting during reloading. These will be closed systems. We are also implementing a project to safeguard against drones - Antydron, because as a port we are struggling with a large number of drones, for example, illegally filming cruisers, which unfortunately poses a real threat. As the Port of Gdynia, we also want to be the first Polish port with LNG bunkering facilities for ships. The Port of Gdynia is the first port in Europe with a system for the precise positioning of ships, with an accuracy of a few cm (RTK GBAS). The system, in addition to the highest level of technology and a safety guarantee, will optimize loading and unloading processes through the possibility of automating these activities. Thanks to this, work in the port will be even more efficient and the personnel will be less burdened. Building surveyors will also be able to use the technology implemented at the Port of Gdynia. After reporting the position to the General Land Surveyor, the signal can also be made available for land measurements.

Maritime Ports and Global Container Shipping in 2018

The growth of global container turnover in 2018 was estimated at 4.6% (yoy)¹, thus seaborne container traffic reached the level of about 154.8 million 20-foot equivalent units (TEUs)². The internal Asian (41.6 m TEU), Trans-Pacific (18.7 million TEU) and Trans-Atlantic (12.8 million TEU) trade routes should be considered as the main areas of container traffic activity worldwide³. The growth of the container trade, facilitated by maritime shipping, improved the turnover of ports by up to about 790 million TEUs (+4.7%) in 2018⁴. Regarding future demand, BIMCO expects a softening of the growth rate down to 4% in 2019. So, the level of 800 million TEU⁵ will be achieved next year; however, this projection is very uncertain due to US-China tariff wars, Brexit and other relevant factors⁶.

The mid-term forecast prepared by Drewry shows the average global growth of container traffic to be just under 6% per annum, so container port throughput in a five-year period will grow by almost 240 million TEU. Thus, around 45 million of additional TEU capacity needs to be created each year. An investigation of development plans on a terminal-by-terminal basis presents a more conservative picture, with an increase of around 125 million TEU by 2022 (a growth rate of just over 2% per annum). The results of research completed by Brickstone Investment Managers Limited or CRISIL Research experts present outcomes which are slightly more coherent. In the first case, stronger global economic growth will demand the growth of the global container market at a rate of five per cent in 2019 and the next couple of years⁷. CRISIL estimated a compound annual growth rate (CAGR) of 3-5 % in the five years through 2022⁸.

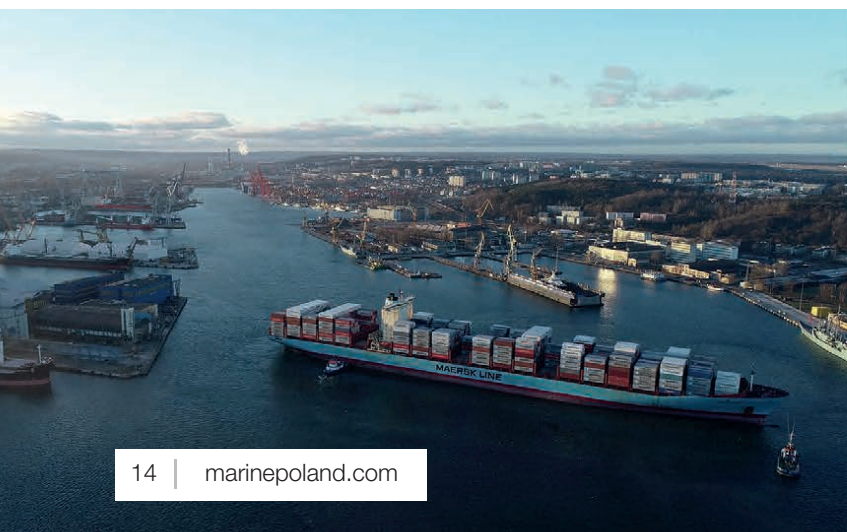
Focusing attention on container terminal operators, the further concentration of their capacities is visible. Considering the top global terminal operators, the Chinese are clearly the leaders. China Merchant Port Holdings⁹ (109.1 million TEU in 2018), COSCO Shipping Ports (98.0 million TEU), Hutchison Ports (84.6 million TEU) and PSA International (81,0 million TEU¹⁰) rule the global market. Similarly, DP World (71.4 million TEU¹¹) and APM

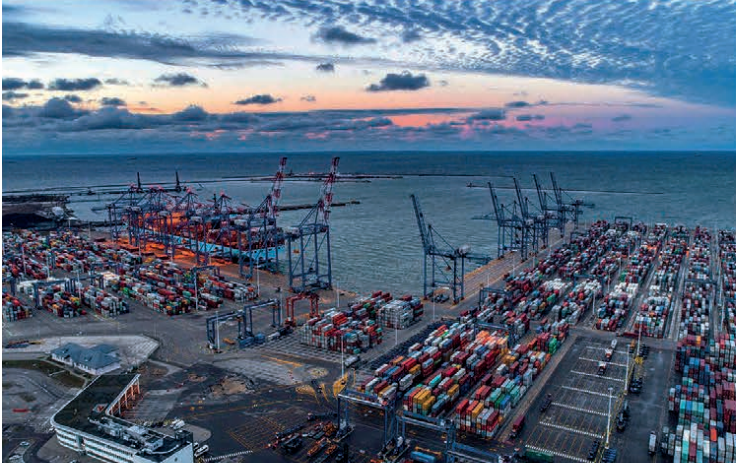
Terminals (43,4 m TEU¹²)¹³ can be considered as key market players. A lower level of turnover was noticed by other operators, like ICTSI (9.7 million TEU) or Yilport Holdings¹⁴ (6.41 million TEU¹⁵). Further consolidation and cooperation between terminals and/or /and TCOs is foreseen/predicted. The implementation of a joint operating agreement called the Hong Kong Seaport Alliance is an initiative of cooperation between Hong Kong International Terminals (HIT), Modern Terminals (MTL), COSCO-HIT Terminals (CHT) and Asia Container Terminals (ACT), aimed at combating the decline in container volumes.

Considering the global container fleet of container vessels, the a growth of in capacity by 5.7% up to 22.3 million TEU was reached at the end of 2018. At the same time, the idle fleet (ships of over 500 TEU) swelled to 628,000 TEU, compared to only 416,000 TEU a year ago. The worldwide supply of container vessels would be estimated at 155 ships with a total transport capacity of ca. 1.25 million TEU in 2018, with more than 87% of new constructions boasting capacities in excess of 8,000 TEU. On the other hand, 65 container ships at with a total capacity of around 106,000 TEU of total capacity were scrapped in the same period. In 2019, the fleet capacity is expected to grow by 3.5%. The Mediterranean Shipping Company has the largest new building portfolio, with 20 orders of with a total capacity of 334.6 thou. TEU planned to be launched in 2019. The list includes eight megamax (23,000 TEU) vessels. In addition to substantial new ship orders, the company is going to launch a 'vessel jumboisation program' this year. The A fleet of 12 vessels (6 of them over 19,200 TEU) has also been also ordered by COSCO Shipping (total capacity of 180.1 thou. TEU). The third position on the order list occupies Evergreen is in third place on the order list, with 10 vessels, including 6 G-class 20,388 TEU units¹⁶.

Considering In view of the main factors being of influenced on the global and European container market in the next years, two issues should be pointed/highlighted. The implementation of global IMO low-sulphur regulations (from 2020) may change the market structure. Initially, the regulation can may cause chaos in the supply chain and increase the risk of higher rates. The utilisation of low-sulphur fuel or the implementation of scrubber techniques (e.g. MSC) increase the cost of maritime transport. The key market players have published schemes of bunker surcharges. As per the APL & CMA-CGM calculation, the additional cost to an annual fuel bill can reach USD 160 per TEU. Thus, the further extension of a slow steaming strategy would be expected. Subsequently, the laws could accelerate container line consolidation (mergers and acquisitions), thus the market competitiveness will be further limited. This trend relates,

BCT and GCT container terminals in Gdynia





DCT Gdańsk container terminal

however, mainly to minor shipping operators (incl. the short sea shipping sector). The consolidation strategy refers also to vertical integration. As, an example of which, could be the acquisition of Unifeeder by DP World could be noted¹⁷.

Turning the eyes to Looking at the European market, the Brexit should be regarded as an important factor of container market development. According to PRB Associates, 'the total annualised inbound and outbound market capacity in the UK stands at 17.1 million units in 2018, comprising the ro-ro (11.6 million units), lo-lo (3.1 million units) and Channel Tunnel (2.3 million units) modes. It was also noticed that lo-lo capacity showed the most dynamic development, increasing by 23%, while ro-ro and Channel Tunnel capacity both increased by 1% in last year. This significant increase in lo-lo capacity has had a similarly positive impact on the mode's share of market capacity¹⁸. The implementation of the Brexit strategy would potentially result in medium-term shocks that may cause a shift in the volume from ferry and tunnel connections to short sea container services. At the same time, British ports will become less attractive as hubs for Europe.

Technological development and implementation is a the main factor regarded as the driver for the long-term trends driver. It is expected, that 5G technology will be applied more directly to day-to-day operations at major ports and terminals in 2019. For example, the Port of Hamburg has tested 5G technology in supporting engineers on site to monitor and optimize construction planning. The further development of sensor technology would be the next solution implemented in ports and terminals. Thanks to this, port equipment is able to transmit data for more independent, automated and efficient operations. MOL has tested a container tracking management system which employs optical sensors to detect changes in condition, including whether the container is opened by an unauthorized party. The Internet of Vehicles (IoV) is another technology being tested in container ports. The Port of Valencia and MSC are working together to integrate a new truck solution from Traxens. The development of the Port Centric Logistics is a trend not directly related to the technology, however, it requires the relevant ICT solutions. In this respect, ports are investing in their wider processes and providing a conducive environment for the sorting of goods, before they even enter the wider chain¹⁹. The

rise in importance of Port Centric Logistics in importance is chiefly down to the end-to-end demands of the modern day supply chain, where a one-day delivery strategy has become a standard expectation of customers.

Summarizing the above analysis, it can point to moderate increases in the global container market in the coming years, as well as high uncertainty about regarding the changes resulting from upcoming events, including the implementation of the IMO low-sulphur regulation and Brexit. Undoubtedly, terminal operators and shipping lines will continue to look for savings and efficiency, both in the horizontal and vertical scope, where the use of economies of scale and scope, as well as cooperation have become an attractive solution. Technological innovations that enable the optimization of processes both on a global and regional scale will also be an important support for terminals and shipping operators.

Prof. Maciej Matczak
Gdynia Maritime University
Modal Concept

Sources:

1. <http://ernst-russ.de/en/news/schifffahrts-markt/berichte/ernst-russ-shipping-market-report-q4-2018.html>
2. Calculation based on: Review of Maritime Transport 2018, UNCTAD 2018.
3. Ocean Freight Market Update, February 2019, DHL Global Freight Forwarding, 20.01.2019.
4. Calculation based on: <https://data.worldbank.org/indicator/is.shp.good.tu>
5. Drewry: Good News and Bad News for Container Ports in 2019, <https://worldmaritimeneews.com/archives/268050/drewry-good-news-and-bad-news-for-container-ports-in-2019/>
6. <https://safety4sea.com/bimco-container-terminal-industry-will-remain-profitable-in-2019/>
7. Global Container Market Predicted to Expand 5% in 2019, <https://www.hellenicshippingnews.com/global-container-market-predicted-to-expand-5-in-2019/>
8. Containers to drive port traffic growth in the next 5 years, <https://www.crisil.com/en/home/newsroom/press-releases/2018/02/containers-to-drive-port-traffic-growth-in-the-next-5-years.html>
9. Incl. Shanghai International Port Group
10. <https://www.globalpsa.com/psa-group-achieves-81-million-teus-in-2018-2/>
11. Terminal operator sees container volume growth despite trade, uncertainty, <http://www.ftwonline.co.za/article/189007/Terminal-operator-sees-container-volume-growth-despite-trade-uncertainty>
12. Calculation based on: APM Terminals, Fact Sheet, Q2 2018.
13. Terminal Investment Limited being the MSC terminal-operating arm with 36 terminals do not provide relevant data of container turnover in 2018.
14. 10 container ports in Turkey, Sweden, Norway, Spain, Portugal, Ecuador, Peru, Malta
15. <https://www.yilport.com/en/media/detail/YILPORT-HOLDING-DELIVERED-EXCEPTIONAL-BUSINESS-RESULTS-IN-2018/55/2023/0>
16. Ocean Freight Market Update, February 2019, DHL Global Freight Forwarding, 20.01.2019.
17. <https://lloydslist.maritimeintelligence.informa.com/LL1124052/DP-Worlds-acquisition-of-Unifeeder-is-no-play-for-global-supply-chain-dominance>
18. UK shortsea capacity grows ahead of Brexit, <https://www.lloydsloadinglist.com/freight-directory/adviceandinsight/UK-shortsea-capacity-grows-ahead-of-Brexit/73765.htm#.XLGZ1qTLioo>
19. Insight: Four Trends to Watch in 2019, https://www.porttechnology.org/news/insight_four_trends_to_watch_in_2019

Overview of the Polish shipbuilding export market

Despite the global crisis, Polish shipyards are finding their place on the market. High quality services, specialist products and cooperation with European leaders have become the recipe for success in these difficult times. Qualified staff, more and more access to new technologies, and excellent design facilities are the greatest attributes of Polish shipyards. The combination of many years of shipyard traditions and experience, with a focus on innovation, ecology and high specialization makes Poland a key supplier of fully-equipped units and ship elements.

Fully-equipped vessels, partially-equipped hulls and mega blocks of giant cruise ships from the Crist shipyard

Fully-equipped specialized ships

Aqua Tromøy live fish carrier for the Norwegian client Artic Shipping AS – a fully-equipped multipurpose live fish carrier, 76.90 m long, 15 m wide with a lateral height of 8 m. This modern, automated and multipurpose vessel designed by the Norwegian design office Seacon AS has been equipped with diesel and electric drives. There are two fish holds on the deck with a total capacity of 3,000 m³.



Aqua Tromøy live fish carrier from CRIST

A passenger and car ferry for an Icelandic shipowner - the modern design allows operation in very difficult marine conditions. The ferry has a length of 69.38 m and a width of 15.10 m, and can hold 540 passengers + 10 crew members. The vessel will be deployed on route between Landeyjahöfn and Vestmannaeyjar - islands in the Westman Archipelago, located 9 kilometers from the south of Iceland.

Partially-equipped hulls for the 21st century

Color-Hybrid, the world's largest hybrid ferry - this partially-equipped passenger-car vessel was built at CRIST at the request of the Norwegian Ulstein shipyard. Color-Hybrid is one of the largest ships recently created in Polish shipyards. The ferry is 160 m long and 27.10 m wide. It will be equipped with a hybrid main propulsion system, which, combined with the relevant unit parameters, will ensure high maneuverability. The battery recharging process will always take place in the port by use of a power cable from special offshore facilities or on the vessel itself. The vessel will accommodate 2,000 passengers and 500 vehicles.



Mega blocks from CRIST shipyard

Polar passenger ship X-BOW hull - a modern, partially-equipped hull for the National Geographic Endurance vessel. The hull is about 125 m long and over 20 m wide. The ship will have the highest ice class and will be built in accordance with the patented design of X-BOW hulls. The use of this solution in a passenger ship will reduce the



M/V Zephyr a partially-equipped fishing vessel from Marine Projects Ltd.

impact of waves on the hull, which will increase the comfort of travel and reduce noise and vibration. The vessel will accommodate 126 passengers in 69 spacious cabins and suites. The innovative “Zodiac” system will facilitate exploration and allow quick and safe descent to land, providing quick access to every destination.

The ship is being built for the owner of Lindblad Expeditions, an enterprise dealing with the organization of cruises in Arctic regions. It also promotes activities aimed at protecting the natural environment. The company works closely with National Geographic.

Acta Centaurus - this partially-equipped vessel for servicing offshore wind farms was created according to the SX195 project developed by the design office Ulstein Design & Solutions AS. The ship is 93 m long, 18 m wide, has a load capacity of 3 200 t and a draft of 6 meters. The deck is 500 m². The SOV (service operation vessel) ship will work on the construction, assembly and maintenance of offshore wind farms.

Mega blocks for giant cruise ships

Mega blocks for the French Chantiers de l'Atlantique shipyard (formerly STX France) - these two 124.5 m-long, 43 m-wide and 8.5 m-high blocks are elements of the Meraviglia-Plus cruise ship, built for the operator MSC Cruises. The blocks weigh about 6 700 t plus equipment. The blocks' power plants are fully-equipped, with no need for cables or starting-up. During the implementation of each block, almost 30 km of pipelines and over 1,000 tonnes of equipment were installed. Two Meraviglia-Plus class cruise ships are being built for MSC Cruises, MSC Grandiosa and MSC Virtuosa. The ships will be 331 m long and 43 m wide, will have 181,000 GT, and will reach a speed of 23 knots. They will be able to accommodate a 1,700-person crew and 6,334 passengers, for whom 2,444 cabins will be built. These vessels will have 19 decks.

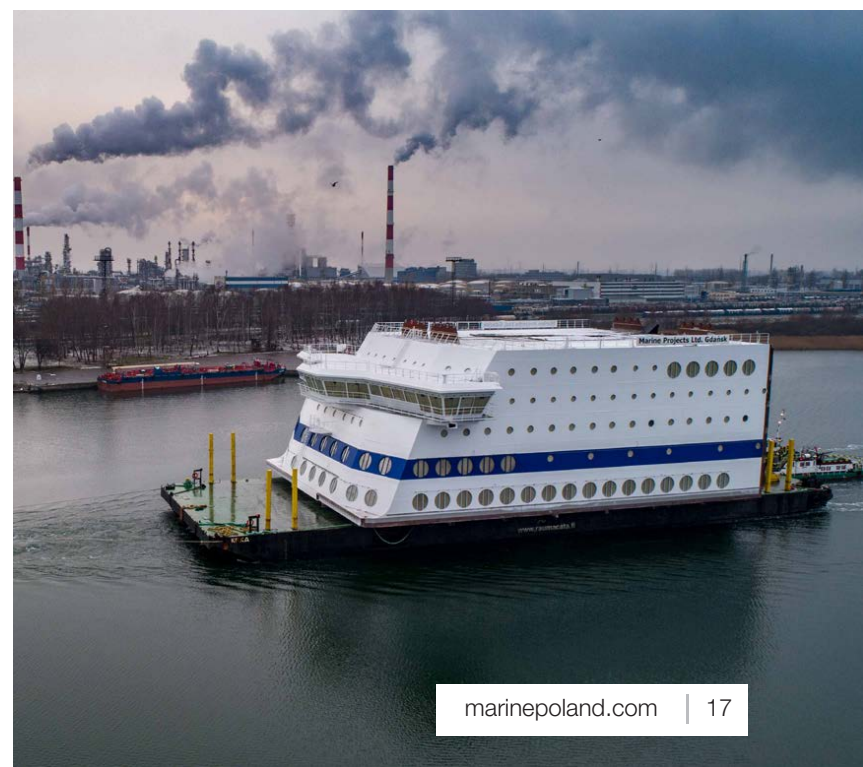
Ships and mega blocks from the Marine Projects shipyard

M/V Zephyr - a partially-equipped fishing vessel for the Larsnes Mek. Verksted AS shipyard. This pelagic trawler was ordered by the British shipowner Zephyr Fishing Company Ltd. from Lerwick on the Shetland Islands. The Zephyr trawler is 75.40 m long, 15 m wide and has a lateral height of 6.30 m. It is equipped with 12 RSW tanks with a capacity of 2 500 m³. The drive power is 6,960 kW (Wärtsilä 12V33). A 14-man crew will work on board.

Hovden Viking - a partially-equipped seine vessel built for the Norwegian shipowner Hovden Senior AS. The purse seiner / Danish seiner unit is 46 m long, 12 m wide and can accommodate a 12-person crew. Its construction was completed at the Norwegian shipyard Larsnes Mek. Verksted.

Blocks for the construction of the new Brittany Ferries ship - two blocks made for the Flensburger Schiffbau Gesellschaft (FSG) shipyard. The six-story aft superstructure block is 48.7 m long, 31 m wide and weighs approximately 2,074 t. The bow part of the superstructure on the same ship is 47.95 m long, 31 m wide and weighs 1 967 tonnes. The navigational bridge is 39 m wide. Both blocks were delivered by the Marine Projects Ltd. shipyard with the interior equipment at an advanced state. They will be mounted on the Honfleur Ro-pax ferry, ordered by the shipowner Brittany Ferries. A modern unit powered by LNG (dual fuel) will be 187,40 m long, 31 m wide, with a draft of 6.35 m, a capacity of 4200 GT and a load line of 2 600 m. It will hold 1,670 passengers on board. The ferry will be deployed on the Caen-Portsmouth route.

Block for the construction of the new Brittany Ferries ship from Marine Projects Ltd.



Superstructure for a large passenger-car ferry for the owner of the Irish Continental Group (ICG) - a four-deck superstructure with a weight of about 5,500 tonnes, together with a decorative chimney, was built by Marine Projects Ltd., in three parts due to its considerable size (total length 158m). The superstructure was handed over to the German shipyard Flensburger Schiffbau in a partially-equipped and completely-painted state, which significantly accelerated the shipbuilding process. Each of the three superstructure blocks was transported to Flensburg on a separate marine pontoon. After arriving on site, with the help of cranes the individual blocks were put on the ferry hull built in Flensburg.



Multicat 3515 - a partially-equipped prototype tugboat from Safe shipyard

A luxury yacht from the Conrad shipyard

Conrad C133 Viatoris - the largest fully-equipped superyacht ever built in Poland. This transoceanic vessel is 40 meters long and 8 meters wide. The yacht has a draft of 2.5 m, weighs 385 t, gross tonnage 388 GT, has a travel speed / maximum of 12/13 knots, and a range of 4000 MM at a speed of 10.5 knots. The yacht was among the finalists in the prestigious World Superyacht Awards 2019. Safety, comfort, luxury, top quality and the use of the latest advanced technologies were priorities both at the design stage and during the construction of this vessel. As a result, this unique model of the Conrad C133 motor yacht was created, which is a combination of world-class design and technology with excellent Polish craftsmanship.

Specialized vessels from the Safe Co. Ltd. shipyard

Multi-functional tugboat Isle of Jura - the second RSV 3315-type unit built by the Safe shipyard for Damen Shipyards Hardinxveld (the first was handed over in 2016). The tugboat was equipped at the Safe shipyard with complete propulsion systems and full pipe systems, and it was also painted. The working documentation and the model, after modifications taking into account the shipowner's comments, were entirely made by the so-

called PR design office at the Safe shipyard. According to Damen, the tugs in this series are 33.18 m in length, 14.5 m in width and 3.85 m in draft, with 499 GT. Their bollard pull is 41.5 t and their maximum speed is 10 knots. The units are designed, among other functions, for towing and anchoring other vessels and for working on the assembly of marine structures.

Seihaust - a fish processing vessel. This prototype vessel is 49.7 m long and 11 m wide. The processing vessel, also used for transporting fresh fish over short distances, is equipped with six RSW tanks with a capacity of 600 m³, and other equipment. Safe constructed a steel hull and an aluminum wheelhouse and additionally fitted a complete drive system and piping systems, and painted the unit.

Multicat 3515 - a partially-equipped prototype tugboat. The ship was commissioned by the Dutch shipyard Damen Shipyards Hardinxveld. The unit was equipped at the Safe shipyard with complete propulsion systems and full pipe systems. Multicat 3515 was also painted. The working documentation and the model were entirely made by the design office of the Safe shipyard. The construction of the tugboat is supervised by the Bureau Veritas classification society.

TBN Trondskjær / TBN Støttfjord - seiners ordered by the Stadyard AS shipyard. These partially-equipped seiners are 39.70 m long and 9.80 m wide. The vessels are equipped with 6 tanks for cooled sea water (RSW) for transporting live fish. The total capacity of the tanks is approx. 425 m³. The ships are designed with three single and four double cabins for 10 crew members.

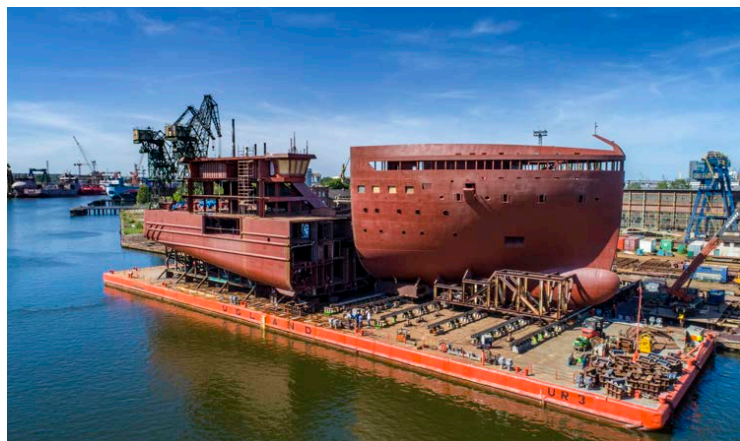


Ocean Star fully-equipped trawler from Nauta shipyard

Fishing vessels from Nauta Remontowa shipyard

Ocean Star - the most effective unit in its class in the world. This fully-equipped trawler was ordered by the Scottish shipowner Mewstead (Fraserburgh) LLP. Ocean Star is 87 m long and 18 m wide. The trawler has been equipped

with a 7,000 kW engine, which, in cooperation with two thrusters, provides it with very good maneuverability when casting and collecting nets. In addition, the most modern equipment has been installed for fishing and fish storage, as well as specialized equipment for locating fisheries and estimating their type and size. Ocean Star was built according to the design of Wärtsilä Ship Design, and its quality was supervised by the world's largest classification company DNV GL.



Blocks from the Montex shipyard

Hybrid ferries for Londoners from the Remontowa shipyard

Dame Vera Lynn / Ben Woollacott - two hybrid ferries ordered by the British shipowner Transport for London. The units are 62.30 m long and 18.80 m wide. They will hold 150 passengers and 45 passenger cars. The lower operating costs of the ferries will be ensured by an environmentally-friendly hybrid drive that has been equipped with two diesel generating sets. Under normal conditions, only one of them will work, and the peak demand for power will be filled by electricity from the battery. The generating sets have been equipped with exhaust after-treatment systems: SCR (Selective Catalytic Reduction) catalysts and DPF (Diesel Particulate Filter).

Hulls and blocks from the Montex shipyard

MF Munken - a partially-equipped hull of a modern hybrid ferry ordered by FosenNamsos Sjø. The ship is 107.70 m long, 16.8 m wide, has a lateral height of 5.50 m, a draft of 4 m, and 3 850 GT. 130 cars and 399 passengers will fit on board. MF Munken has a diesel-electric drive and will be powered by Siemens batteries. Charging time is just 5 minutes. Thanks to the specially developed hull structure, high-efficiency heating and ventilation systems and automatic mooring, the ferry will use over 70% less energy compared to similar units powered by traditional fuel.

Blocks for the arctic cruise ship Fridtjof Nansen - the construction of blocks with a total weight of 2 500 t



Hull of a modern hybrid ferry from Montex shipyard

was completed in 6 months on behalf of the Kleven Verft shipyard and included the bow, stern and superstructure elements. The passenger ship will be 140 m long, 23.6 m wide, 5.3 m deep and will have 20 889 GT. The vessel can hold 530 passengers on board.

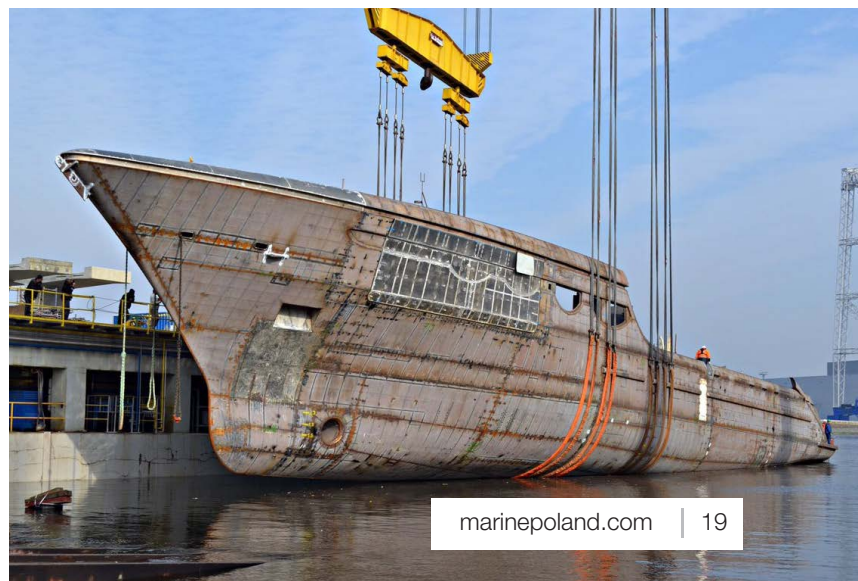
Hulls from the Szczecin shipyard

Mega yacht hulls - the two hulls (79 and 70 meters long, respectively) are 12 meters wide and weigh over 500 tonnes. They were built at the Szczecin shipyard at G + K Steelcon and were commissioned by a German shipyard. The hull structures have been specially designed for this order and they are prototypes.

Eco-friendly ferry for Danes - the unit is 44 m long, 12 m wide and weighs 298 t. It will be equipped with an electric drive. The hull was made by the Spawrem company from Szczecin.

Oscar Sund - a partially-equipped fishing vessel built for a Norwegian shipowner by the Kedat company from Szczecin. MS Oscar Sund is a training unit built for a high school in Meløy, Norway. The ship is 24 m long, 8 m wide and 3 m deep. The hull was equipped with a rudder, screw, echo-sounder and pipe systems.

Launching mega yacht hull from Steelcon in Szczecin shipyard



Crist on the right track!

We talk with the founders of the biggest Polish shipbuilding shipyard.

Crist Shipyard is a globally known brand in the maritime industry. It specialises in highly innovative prototypes, which numerous shipyards consider to be too challenging. In our conversation with **Ireneusz Ćwirko** and **Krzysztof Kulczycki**, the founders of the biggest shipbuilding shipyard in Poland, we talk about their recipe for success in tough times and their development plans, along with their order books for the next 5-6 years.

■ What was the breakthrough for your company?

Ireneusz Ćwirko: It was definitely the moment when we began the construction of the Thor unit, dedicated to the installment of offshore sea farms. This success gave us the possibility to become widely known in the whole world and, as for now, I can tell you that we're a leader in the field of manufacturing jack-up type units in Europe.

Krzysztof Kulczycki: Thor is a floating, self-elevating platform, designed to build and renovate off-shore wind farms units, which we delivered to the German company Hochtief in 2009. The whole process of construction lasted for 9 months and amazingly widened the scope of incoming orders to an extent we would never have suspected.

Ireneusz Ćwirko: Our next project was the most technologically advanced Heavy Lift Jack-Up Vessel unit for a German and Belgian shipowner, mostly known for cooperation with the French company Areva in setting up offshore wind farms on the North Sea. The unit, called "Innovation", is 147.5m in length, with 8000 t deadweight, and equipped with a crane (lift capacity up to 1500 t), engine room (29.000 kW) and four 95 m legs, controlled by an electric system of lifting and lowering, supported by a system of DP2 positioning, which allows fully autonomous hydrotechnical works.



Krzysztof Kulczycki: The construction of a cutting-edge unit like "Innovation" posed a vast risk and was a great challenge. During contract negotiations, we still didn't own any of the production area here in Gdynia. There was no dock, gantry or any of the essential facilities. Fortunately, despite these difficulties, we were able to take over the necessary infrastructure from Gdynia Shipyard.

■ **The biggest dry dock on the Baltic Sea, and one of the biggest gate gantry cranes are really serious assets.**

Ireneusz Ćwirko: Definitely, yes. This enormous structure took the quality in our shipyard to a completely different level, and we took 100% advantage of it.

Krzysztof Kulczycki: It was in 2012. Foreign experts proclaimed "Innovation" as the most innovative sea unit in the world. Our next achievement worth noting was the jack-up type unit Vidar, designed by the Polish company StoGda. The whole construction process took 24 months.

■ **However, after the construction of Vidar, the offshore market faded a bit and you had to look both for a niche in the market and for prototypes again.**



Krzysztof Kulczycki: Fortunately, this is our specialty.

Ireneusz Ćwirko: Due to the fact that our shipyard has always stood on several legs and, in addition to jack-ups, has gained experience in the construction of many types of units, it was essential to realize dozens of projects for construction sites, blocks, hulls, and partly and completely equipped units for our partners.

Krzysztof Kulczycki: In this respect, it's worth mentioning that we're experienced in the construction of specialized vessels such as: feeders, trawlers, cable-ships, units for servicing drilling platforms and for transporting live fish, and ferries. Recently, the implementation of subsequent prototypes has also been realized.

Do you mean the ferry "Electra", which won the international "Ship of the Year Award" in the 2018 Marine Propulsion Awards?

Krzysztof Kulczycki: Yes, among others. "Electra" is our great pride and an export hit, made for the Finnish shipowner - FinFerries. It's a hybrid, battery-fed, electric drive ferry. Electra is equipped with a set of batteries with approximately seven years of operational life. Charging the batteries takes place each time during loading and unloading, and the time needed to do this is just 7 minutes.

Ireneusz Ćwirko: In addition to "Electra", over the last years, we've delivered other interesting projects. In 2016,



we built the floating dock "Zourite", which was used to build the longest and - as project critics point out - the most expensive French sea viaduct. The unit operated around the Island of La Réunion, which is an overseas territory of France, located in the Indian Ocean and characterized by a dangerous, eroded coastline. The 5.4 km-long viaduct is mostly in the sea. Zourite is 106.5 m long and 49 m wide. Its equipment includes two gantry cranes - each of them with a capacity of 2400 t and a span of 30 m. The construction of the road was also possible thanks to eight jack-up legs - using them, the ship is able to lift 14 m above the water level. This construction, commissioned by Bouygues Travaux Publics S.A., took 400 days. In 2017, we constructed the floating dock, "Marco Polo", which was used to build a modern housing estate which will increase the area of the Principality of Monaco, and floating modules for the largest passenger ships in the world. Both projects were prototypes, built for a specific client for specific tasks. Both were spectacular, with a great level of technical

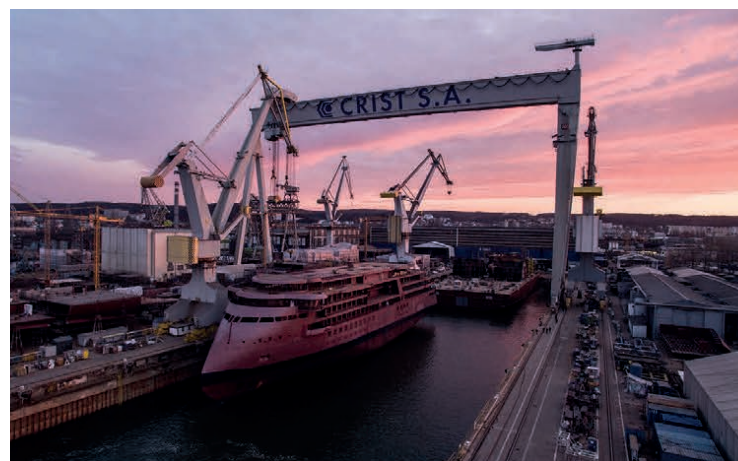


development. We used the latest technologies, such as dynamic positioning, extremely complicated hydraulic systems, and lifting and ballasting systems. And again, our experience in building jack-ups turned out to be very important.

Krzysztof Kulczycki: I also have to mention the world's largest hybrid ferry "Colr Hybrid". In 2018, we delivered this partially equipped passenger-car ferry to its Norwegian owner. It's 160 m long and 27.10 m wide, equipped with a hybrid main propulsion system, which, combined with the unit parameters, will ensure high maneuverability. This vessel will accommodate 2,000 passengers and 500 vehicles.

GospodarskaMorska.pl - Recently, your shipyard widened its portfolio with another specialization.

Ireneusz Ćwirko: Apart from constructing ferries, we've received orders for equipped blocks for vast cruise ships, and entire cruise ships of small or medium size. We completed the so-called mega-block for STX France shipyard (in fact, Chantiers de l'Atlantique), which is 124m in length. It's considered as the engine room part of a luxurious ship which will belong to the shipowner MSC Cruises. This unit is going to be 330m in length, with space for 6300 passengers and 1700 crew members. During these kinds of massive projects, we learn a slightly different logistic approach. It gives us the possibility to coordinate



the whole process properly and build plastic pipelines. At the same time, we've realized that we're able to build whole ships of this size in our dry dock.

Krzysztof Kulczycki: At the moment, we're placing our bets on product diversification, and we choose mid-range projects, which doesn't limit us in terms of our current orders. Right now, we're working on the next mega-block for Chantiers de l'Atlantique, and a partially equipped, multifunctional polar cruise ship with an innovative "x-bow" body for a Norwegian shipowner. This vast unit (125m length, 20m width) will easily handle tough conditions, along with providing luxurious standards for over 100 passengers. Simultaneously, we've almost finished construction works on a modern ro-pax type ferry for an Icelandic company.





Apart from constructing cutting-edge sea units, you are introducing even more innovations in your production sector.

Ireneusz Ćwirko: We aim at the automatization of processes and the thin-lining of constructions.

Krzysztof Kulczycki: Our most recent acquisition are welding robots for spatial constructions. We've already started facilitating training for people to operate them, and introducing the machines into the production process.

Ireneusz Ćwirko: Our company has also received European Union funding for our flat and thin-lining section series. Right now, we're looking for a bank which will support this investment.

How would you rate the current situation of Crist Shipyard, and what do you hope for the future?

Ireneusz Ćwirko: We haven't been in such a good situation in our almost 30-year history. We have full order books for the next 5-6 years and we're very satisfied with the positive response from our clients.

Krzysztof Kulczycki: For the future, we can hope for further interesting, challenging orders, and good partners on whom we can base our development. At the same time,

our infrastructure, work organization and increasing experience put Crist shipyard among the best European shipyards, ready to carry out the largest and most complex projects in the industry.



Good prospects for the first offshore wind farms on the Polish side of the Baltic Sea

There are good development prospects for offshore wind farms in the Polish exclusive economic zone in the Baltic Sea. Zbigniew Gryglas, member of the Polish Parliament and Chairman of the Parliamentary Team for Offshore Wind Energy, said in an interview with the portal GospodarkaMorska.pl: "We are getting closer to the construction phase. We are no longer planning and analyzing; we will soon begin construction". It is estimated that the first Polish offshore wind farm in the Baltic could be built around 2023-2025. The Polish "State Energy Policy until 2040", in which offshore is indicated as one of the main tools for achieving the objectives of renewable energy sources (RES), assumes that Poland will achieve more than 10 GW of power from offshore wind farms by 2040.

The "State Energy Policy until 2040" is currently being reviewed. The document is to be adopted as early as in 2019. It assumes, among others things, that by 2040 the share of coal in electricity production is to fall below 30%, while renewable energy and solar power will play an increasingly important role in the energy mix. Wind turbines on land are to be replaced with wind turbines at sea. - Looking at today's technical possibilities, we expect as many as 1,000 wind turbines that might stand on the Polish side of the Baltic Sea - Gryglas told GospodarkaMorska.pl

Currently, work is also underway on another document - a special offshore act, which is expected to enable the construction of Polish offshore wind farms in the Baltic Sea after 2020. The Parliamentary Team for Offshore Wind Energy is working on its framework. The Team Chairman, Zbigniew Gryglas, emphasizes that such a legal act is indispensable, because there are so many special solutions used in offshore wind energy that it makes no sense for it to be regulated by energy law or other laws. For now, however, it is not known what shape the document will ultimately assume. Grzegorz Tobiszowski, Polish Vice-Minister of Energy, recently underlined, during Polish-British consultations, that the Ministry of Energy is now collecting all suggestions and materials, and then will indicate in which direction future regulations regarding offshore wind energy will be heading.

The world appreciates Poland's potential

According to the EU climate package, in 2020 Poland should increase the share of energy from renewable sources to 15%. According to the Polish Wind Energy Association, in the current situation, the only way to reach the assumed level on time is to launch new wind farms. It is the only large-scale source that can start to deliver large amounts of green energy.

” *Poland's potential is huge, I am convinced of this, especially taking into account the signals from the Polish government, proving that we can expect 6-8 GW of energy from offshore wind farms by 2030. However, I believe that their potential is much greater - says Morten Bæk, Secretary of State in the Ministry of Energy and Climate of Denmark.*

” *Sea wind farms will be able to provide a local source of energy, which means that Poland will be able to significantly reduce the amount of sources imported from abroad - says Giles Dickson, CEO at WindEurope.*

He emphasizes that today all of Europe pays 1 trillion euros every day to bring in energy from other countries. "We import as much as 54% of energy, which is not a good forecast when it comes to ensuring long-term energy security", says Dickson.



The potential for the construction of the first Polish offshore wind farms is also seen by Janusz Bil, Director of the Energy and Mining Department at the British Embassy. He points out that Great Britain is counting on cooperation with Poland in the field of offshore wind energy.

” *Great Britain is the country that currently produces the largest amount of offshore wind energy. We are counting on bilateral cooperation, so both countries can take advantage of it. We are convinced that this is a good direction; Poland must move towards energy transformation and focus on renewable sources, and the Baltic Sea offers very favorable conditions for the development of offshore wind farms - says Bil.*

Janusz Gajowiecki, President of PWEA, emphasizes that offshore wind energy can become another large stable source of energy, right after coal energy, which will naturally complement the Polish energy mix. However, adequate financing is essential for the development of renewable energy.

” *The European Bank for Reconstruction and Development is directed towards the Polish offshore sector. Such huge financial institutions are very interested in the development of wind farms in the Baltic Sea. This external financing will certainly be needed with the project scale of 6-8 billion in relation to one wind farm - says Gajowiecki.*

New wind farms will also be able to operate without state support. Such a possibility is opened by the PPA (Power Purchase Agreement), i.e. direct contracts between energy producers from RES and consumers who want to use clean energy.

Offshore wind farms and what's next?

State budget income from the construction of offshore wind farms in the Polish exclusive economic zone in the Baltic Sea is estimated at as much as 100 billion PLN.

” *As seen in other European countries, wherever offshore wind farms are implemented, the maritime economy, traditional heavy industries and whole coastal regions experience significant revitalization stimuli in the form of job growth and increased tax flow affecting local and regional budgets - says Mariusz Witoński, President of the Polish Maritime Wind Energy Society.*

The development of the wind offshore energy industry in Poland after 2025 can provide employment for over 77 thousand employees. Polish industry is able to provide at least 50% of the value of orders related to the construction of wind farms in the Baltic Sea, and up to 75% in the next few years.

” *Polish industry already produces a lot of components and products that are mainly exported to Great Britain, Germany or the Netherlands. So it is already prepared to also cover the demand, and supply products and services for offshore wind farms that will be created in Poland - ensures Paweł Przybylski, President of Siemens Gamesa Renewable Energy.*

This is a chance for ST³ Offshore, Europe's largest producer of steel foundations for offshore wind farms, GSG Towers and TELE-FONIKA Kable, and many other Polish companies.

The first investors are almost ready

Currently, the Polish state issued nine location permits for offshore wind farm projects located in the Polish exclusive economic zone. Four inventors are front-runners for developing these projects: Polska Grupa Energetyczna, BALTIC TRADE AND INVEST, PKN Orlen and Polenergia, in which 50% of the shares in the projects implemented by the company have been taken over by Statoil / Equinor.

PGE plans to create a 2.5 GW wind project by 2030. For this purpose, PGE Baltica was established, headed by Monika Morawiecka. At the end of January 2019, PGE closed the first stage of the selection of potential strategic partners who will participate in the preparation, construction and operation of the offshore project in the Baltic Sea. Thirteen companies responded to the invitation to participate. Ultimately, PGE intends to sell one of them 50% of the shares in two units responsible for offshore wind farm projects, and then work in developing them in a joint venture formula.

BALTIC TRADE AND INVEST wants to build a 350 MW wind farm by 2025. The company has completed environmental research and is preparing for a geotechnical campaign. - With the permission for artificial islands paid for since 2013, we are obliged by this permission to start construction in 2024 - says Joanna Rzepecka, the Board Director of BALTIC TRADE AND INVEST.

PKN Orlen wants to use turbines when building offshore wind farms, with a height of over 250 m. The company is considering acquiring an external partner for this project in 2019. If an investment decision is made, the first construction-related expenses may be incurred at the earliest in 2023. A company from the Orlen Group, Baltic Power, has already launched environmental research and wind condition measurements in the Baltic Sea wind farm concession area, held by the Group. A team of specialists was also set up to prepare and implement a project for the construction of a technical concept for the construction of offshore wind farms in the Baltic Sea.

Polenergia plans to build two installations with a capacity of 1.2 GW by 2026. On March 12, 2019, the Regional Director of Environmental Protection in Gdańsk issued a decision on the environmental conditions for project implementation for the company IMF Bałtyk III, in which Polenergia has 50% of the shares. This decision concerns the construction of offshore electricity transmission infrastructure connecting offshore power stations with the National Energy System. The total power output from offshore wind farms covered by the decision is to be up to 1,440 MW. The start date of

the construction of the installation depends on when the relevant regulatory act enters into force. Polenergia currently owns offshore wind farm projects with a capacity of 3 thousand MW, which are divided between the following companies: IMF Bałtyk II, IMF Bałtyk III and Polenergia Bałtyk I.

According to the latest WindEurope industry report on European offshore wind energy, in 2018 the total installed capacity of sea turbines in Europe reached 18.5 GW. The Global Wind Energy Council (GWEC) emphasizes in another report that in 2030 wind energy could cover about 20 percent of global energy demand. The total capacity of wind farms is to reach approx. 2 100 GW. That is five times more than today. Such a growth means a reduction of carbon dioxide emissions by more than 3.3 billion tonnes per year and investments of 200 billion euros per year.

Polish wind farms closer to the sea – yet still not at sea.



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 Sølvrans 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.

Ferry - Havyard 936



Polish Navy Modernisation – Support Tug launch

Aleksander Borczyk – Project Coordinator in NED-Project

Recent launch of navy tug 'Bolko' (B860/1) marks an important milestone in NED-Project's history of delivering modern and reliable workboat designs. It is the first in a series of six on an order from Ministry of Defence, built in Remontowa Shipbuilding and also first developed with the help of innovative implementation of enhanced reality design tools.

Aforementioned launch is another milestone in the execution of the agreement, which the Armament Inspectorate of MoD signed in June 2017 with Remontowa Shipbuilding as a result of tender allotment: Technical support and rescue operations at sea, code name "Holownik" („Tug”). The first tug is scheduled for delivery in 2019, with the remaining units to be delivered by the end of 2020.

The multi-role tugs will be used for military and logistics operations support at sea and in ports, firefighting operations, technical evacuation operations, search and rescue operations support as well as oil spills recovery. The ice class will enable operation of the tugs in tough winter conditions. The vessels will feature bollard pull up to 35 T and excellent manoeuvrability due to outfitting with twin azimuth stern drives. The open deck crane will enable carrying of cargoes up to 4 t.

During early stage of B860 35T Navy Tug design, Ned-Project began translation of the BIM models into VR environments. Detailed designs of the wheelhouse and engine room were provided to navy officials, creating a comprehensive platform for discussion on particular technical solutions with the design team.

B860 Tug for polish navy



Pałasz Marine Projekt

HouseBoat „ARKO I”

Konrad Cichocki Naval Architect, Chief Designer

In recent years, HouseBoat recreational units have been gaining more and more popularity.

There are units of various sizes, although we consider the vast majority to be small and light. Sometimes it's more a house, and sometimes more a boat. The common feature is to ensure the comfort of living is as in a house, with the possibility of moving this unit by water. Such units can be observed most often in inland navigation.

Pałasz Marine Projekt decided to deal with this topic in our office as part of R&D.

For the beginning three main assumptions were made:

1. The vessel can be used in coastal shipping.
2. The maximising the use of renewable energy sources to supply the unit, that is, according to trends, the largest possible reduction of harmful gas emissions.
3. The hull should be designed in such a way that it is light and at the same time simple to build.

Despite the small size of the vessel, we used a whole set of computational methods and software available in our office for its design. We put a lot of emphasis on optimizing the underwater part of the hull to use every kW of available energy in the most efficient way.

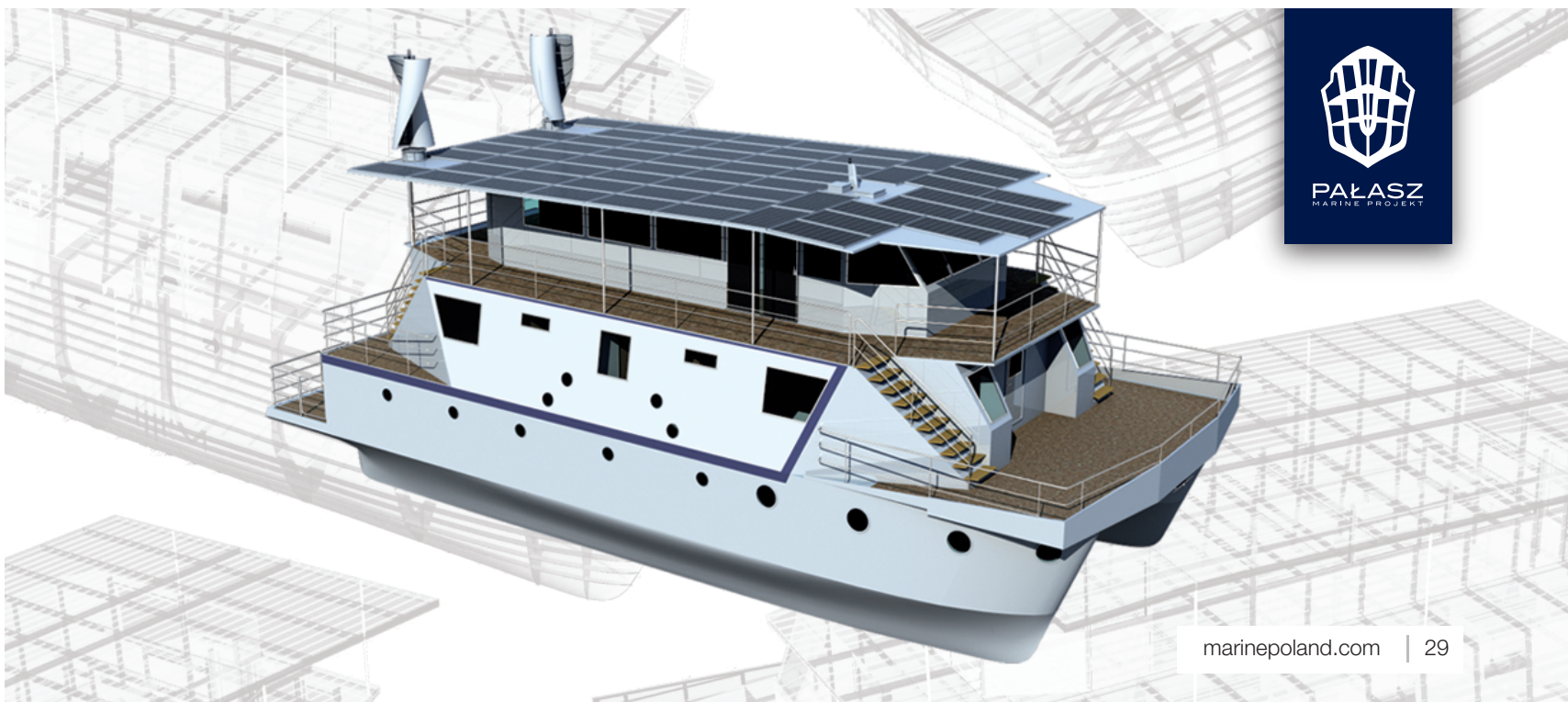
We supported using the CFD method. The whole hull made of aluminum alloy was designed with the use of FEM tools to obtain the lowest mass while minimizing material weight and building costs.

Power is generated by solar panels and wind turbines located on the roof. Energy is stored in a Li-ion battery pack. In the case of adverse weather conditions, there is the possibility of using a combustion generator.

The entire energy management and vessel control system is created in a way so that it is as intuitive to the user as the operation of the smartphone.

HouseBoat „ARKO I”

- L = 22.00 m
- B = 8.80 m
- H = 10.73 m (incl. wind turbine)
- Speed: max 12kn (4kn with use only solar panels and wind turbines)
- 2 x FP propeller + shaft line + electric motor
- Deck area inside: 176 m² (excl. engine, technical and wheel rooms)
- Deck area outside: 102 m²
- Roof area: 114 m²
- Accommodation: 5 x 2 persons (bedroom with bathroom)



Seatech Engineering Ltd.

LNG bunkering

- easy and safe solutions of tomorrow

Krzysztof Czerski, Head of LNG Department

New environmental restrictions concerning air pollutions from ships request a new type of fuels for marine applications.

From a list of all alternative fuels, gas becomes the most attractive one, mainly due to its low cost and relatively the same burning principles as in engines that use conventional diesel.

Gas fuel compared with diesel is emitting **lower by 80% of emissions of Nitrogen Oxide (NO_x) and lower by 20% of emission of Carbon Dioxide (CO₂)**. In addition, gas has no Sulphur nor particulars, therefore all Sulfur Oxide (SO_x) restrictions and limitations for Particular Matters are not valid for blue fuel.

Seatech Engineering Ltd. observes carefully development of gas-fueled ships and gives comprehensive solutions for supply gas to gas fueled ships.

Bunkering solutions offered by Seatech have two main goals.

Easy.

To do so we provide a simple arrangement of pipes, flanges, and valves on board. This optimal solution is a result of hard design work provided by our experienced in LNG sectors engineers.

Safe.

All solutions proposed by Seatech are based on newest requirements of the regulatory authorities as IMO, Classification Societies, Flag state and Local maritime Authorities.

For very basic question asked by maritime market nowadays: "Is LNG safe for marine applications?" Seatech has one answer "Yes it is safe". Following special procedures all LNG operations can be very safe and user-friendly.



StoGda Ship Design & Engineering Sp. z o.o.

Successful designer of jack-up vessels

Tomasz Świątkowski, Vice President

StoGda has been focused on the Offshore Wind Farms for years and has been supporting this idea on Polish market as much as possible by participation as speakers on the Offshore Wind Industry Events or specialists on the meetings with the Polish Government.

StoGda, as a marine design office, is concentrated on designing the vessels employed to build such wind farms on the sea, i.e. jack-up vessels. We have started our adventure with this kind of vessels in 2008.

Jack-Up Platform **THOR** was our first accomplished project and it was completed in 2010.

Our second project, Heavy Lift Jack-Up Vessel **INNOVATION**, was started in 2010. We were involved much more deeply in the project than in the previous one. We upgraded the Basic Design prepared by another design office, engineered Workshop Documentation in a wider range and prepared As-built Documentation including naval calculations. The project was completed in 2012. **INNOVATION** was the most technically advanced and sophisticated vessel in the world that time.

We have gained an extensive experience by taking part in those two projects and our next project, Wind Turbine Installation Vessel **VIDAR** (today's name **VOLE AU VENT**), was started in 2011 and was built by CRIST Shipyard according to our complete design. We made Conceptual Project and Contractual Documentation, as well as Basic Design, Detail Engineering and As-built Documentation. Also model tests, full range of strength and fatigue calculations, design of legs and jacking-up system were in scope of delivery. The project was completed in 2013. We are very proud of this project and this vessel. The Owner is also satisfied with operation of the vessel.

StoGda won the following awards for this project:

- the Award funded by Association of Polish Maritime Industries "Forum Okrętowe" in category of "**Innovative Project in 2014**"
- the Award funded by Work Boat World in category „**The Best of 2014 Jack-up Vessel Designer**".

Participation in those projects has allowed us to gain unique experience, which does not have too many design offices in the world and we are concentrated on offering our concept projects of jack-up vessels to the Owners and Offshore Wind Farms Operators.

StoGda One – Conceptual Project



Discover Gdansk, for your business!

Interview with Alan Aleksandrowicz, CEO of Gdansk Economic Development Agency between 2008-2019. From 2019 Vice-Mayor of Gdańsk.

Why is the Pomeranian region an attractive region for foreign investors?

The main feature of Gdańsk and the Pomeranian Voivodeship, which distinguishes it from other parts of Poland, is its location by the sea and its long coastline, constituting the wealth of this region. This wealth drives the whole sector of the maritime economy and at the same time attracts foreign investors.

The Pomeranian region is a very diversified area. The traditional industry that has been developed here for decades is associated with the shipbuilding sector, ports, transport and logistics, but also with the energy sector (of note, for example, Lotos or Energa), the chemical and construction industries, fisheries and fish processing and the modern technology sector. All of this increases the employment dynamics in our region.

InvestGda's activity is strongly related to the activities of ports or shipyards. How would you briefly describe your activity in the maritime sector?

In creating this agency, we followed the example of the best special economic zones and development agencies in Poland and abroad. We assumed that we need to focus on strategic sectors and investments, in other words, production and logistics investments and the entire modern services sector. We have prioritized what is broadly understood as the maritime economy. We assumed that we will support both projects that will be located in the areas that the agency has, but also any investor in these key sectors who will want to visit Gdańsk.

From the very beginning, we worked very closely with the Port of Gdansk Authority and the terminal operators. We were also involved in the acquisition of 20 key hectares on Ostrów Island by the Pomeranian Special Economic Zone (PSSE) where, currently, the infrastructure for shipbuilding and steel industries is formed. Moreover, Mostostal Pomorze will operate in a newly refurbished industrial hall.

We focused on preparing the port areas for large logistics projects, thanks to which we acquired Goodman, a very important investor in Gdansk, with whom we are implementing the Pomeranian Logistics Center project, covering an area of 110 hectares. It is one of the largest areas of its kind in Poland.

We want potential investors to have the comfort of investing in fully-equipped areas, with commuting possibilities, an electricity supply, teletechnology, and everything that is needed to quickly launch any activity.

We also support the Port of Gdańsk in such investments as the construction of buffer car parks. The port management has taken the lead and decided to realize this difficult task; one of these buffer car parks at Śnieżna Street has already started its operation. It is supposed to handle truck traffic to and from DCT.

What particular offer do you have at the moment for potential foreign investors?

On the one hand, we are focusing on attracting investors and developing infrastructure in the Pomeranian Investment Center, i.e. the place in the port where we built the KOGA office, where all border services and a number of entities related to port operations are located. There is a surrounding area of about 50 hectares, where further infrastructural investments are beginning. In cooperation with the city, we extended Andruszkiewicza street and we built the first stage of the internal layout, with all the infrastructure for all investment areas. This year, we will expand this infrastructure to connect it smoothly with Kontenerowa Street, which is currently being expanded by the Port of Gdańsk management. We aim to complete all of these investments by next year.

Construction of the first stage of the investment will begin soon in the mentioned area of 50 hectares: two warehouse and production halls with a total area of 10,000 m². At the KOGA Center there is already one storage yard, but we will build another, with an area of approx. 1.5 hectares. They will be flexible in terms of space for rent or for lease, with available office space, but also areas prepared for

investments, on which investors can build their own halls.

In the future, we would like to continue with cubature investments, that is, smoothly move to neighboring facilities to create an office and industrial park, which will offer finished space to rent.

We carefully follow logistic trends. Last-mile warehouses and municipal warehouses with an area of up to 10,000 meters are starting to be more and more popular. They are allowing smaller modules to be rented. We want to offer flexible spaces for our Pomeranian entrepreneurs.

We try to establish long-term lease agreements, similar to the policies used by the management boards of the ports in Gdańsk and Gdynia. This distinguishes us from other locations and we have created a mechanism to secure investors' financing. This aspect has often been a barrier to investment, and we are trying to eliminate such barriers.

Are there other investment areas that you are trying to develop?

The area of Płonia, in the vicinity of the LOTOS refinery is one such area. The main reasons for the attractiveness of this location is that it is prepared for typically industrial functions, located away from urban development, and has full coverage of local spatial development plans, allowing various types of production and logistics activities.

The Płonia area is located close to the S7 National Highway and has a total area of about 60 ha. This area already functions in the minds of residents as an industrial zone, which is very important because creating a completely new industrial zone today is an extremely difficult task from the point of view of obtaining social acceptance. Thanks to the spatial development plans and the conditions for such a purpose, an area such as this is in some ways priceless.

I would also like to mention the areas developed along Ku Ujściu Street the advantage of which is their access to the railway infrastructure. PKP is implementing a major EU project concerning the reconstruction of the North Port transshipment station. The Port of Gdansk is also preparing a similar project in the vicinity. The Balticon company has already joined us in this location. An intermodal terminal with access to the tracks will be opened here, and, in the future, a container factory will also be opened.

A smaller industrial area that we would like to activate is the area of Michałki street, in the immediate vicinity of Lotos Kolej and the Panattoni logistics center, up to 10 km from the port. It can therefore be said that this is still a direct port

area, and in addition, perfectly connected to the S7 and A1 roads.

Together with the port authorities, we are trying to create a vision of a fifth-generation port. Typically, as part of this vision, the port is one of the main development engines of the city's economy, also developing the entire industrial zone. Therefore, we are not focusing only on terminals or cargo handling, but also on the entire industrial zone, which exists in a kind of symbiosis with the wharfs.

What facilities are there for your potential investors?

On the one hand, we are trying to prepare a package of "investment incentives", which we are developing with a group of institutions closely cooperating with us. On the other hand, there are a whole range of attractive exemptions from income tax and property tax.

On a daily basis, we cooperate with the team from Invest in Pomerania, who support and simplify administrative procedures. We try as far as possible to simplify the process of obtaining agreements or necessary permits. We do this regardless of the location.

It is worth mentioning that we care about recruitment processes. Often, the measure of the success of a given investment is the protection of human resources or talents. We also adjust the functioning of public transport to suit emerging industrial projects.

We also have an advisory team, used mainly for feasibility studies or business plans for urban projects, but very often, our team conducts all the necessary studies and analyses, and if investors need such support, we provide it.

To sum up - we invite you to invest in Gdańsk; we will help you feel at home here.





GDYNIA - POLISH CITY OF THE FUTURE

IDEAL CLIMATE FOR INVESTMENT, MODERN BUSINESS AND LIVING



Gdynia is a beautiful medium-sized city located in northern Poland, by the Baltic Sea, with a population of approximately 250,000 residents. It is a part of the Tri-City area, which, apart from Gdynia, includes also Gdańsk and Sopot, which together have a population of over 1 million people.

AS ONE OF THE MOST IMPORTANT PORTS IN POLAND, GDYNIA IS PRIMARILY FOCUSED ON PROMOTING THE BROADLY UNDERSTOOD 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, as well as ship and port equipment manufacturers. The largest shipyards operating in Gdynia compete on quality, experience as well as expertise, rather than on price. It is worth noting that half of all logistic and shipping companies in the region is located in Gdynia. Thus the city is the most natural and convenient location for thematic conferences, such as the Maritime Economy Forum, attended by the most important people and companies from the maritime industry, which has been hosted by Gdynia for many years.

During 2018, the Tri-City area also retained its position as one of the most attractive markets in the BPO/SSC

zone both in Poland and in the world. Gdynia, in particular, offers infrastructure that is not only modern but also systematically developed. This is one of the key factors for operating within the services sector as well as making crucial investment decisions with reference to international trading.

GDYNIA IS A CITY WITH MANY ASSETS, SUCH AS A STRATEGIC LOCATION AND GOOD TRANSPORTATION LINKS. ONE OF GDYNIA'S MOST ATTRACTIVE FEATURES IS ITS HIGH QUALITY OF LIFE.

The city is located between the sea and forest, that provides a natural barrier to the kind of urban sprawl that is a challenge for other Polish or even European cities. The city's attractive location, combined with good rail and road connections to the capital city of Poland - Warsaw, has also made it a popular destination for people who want to spend their holidays there, not only from other parts of Poland but also from abroad. The tourism industry is also supported by the cruise port terminal, which brings 100,000 passengers a year to Gdynia. As the interest in Gdynia is constantly growing, in recent years two more modern hotels were opened. It also allows investors from the MICE sector to organize conferences, seminars, and events, supplemented by some interesting



cultural and social events, available to participants in their free time.

The city also does not forget, that its origins remain with the port. Gdynia still depends on it when it comes to the economic condition of the city. Shipyards in Gdynia build ships to construct wind farm towers, research vessels, motorway construction barges, hybrid ferries, and other specialized units. However, the port is also open for the passenger ferries. Recently, the new ferry terminal in Gdynia received PLN 117 million in EU funding. The contractor for the project has already been selected. As a result of the investment, new ferry terminal will enable the service of larger passenger ferries of up to 245 meters in length.

As of now, Gdynia's investment strategy is planned until 2030. The direction, in which the city is supposed to be developing, is set for the next 20 or even 30 years.

ONE OF THE LONG-RUN INVESTMENT IDEAS CONCERNS THE SEA CITY - GDYNIA'S MODERN DISTRICT LOCATED IN THE CITY CENTER, RIGHT BY THE COAST OF THE BALTIC SEA.

Investments planned on land currently being the shipyard's properties are going to revolutionize the

whole city center. The scale of the project is comparable to the changes related to the construction of the city and port in the 1920s. A total of 33 hectares of attractive investment area, located just next to the modern city center full of social attractions is unique on a European scale. According to urban planners, in ten years time, up to 8,000 people will be living in this area, and another 4,000 people will find employment there. The plan of the city is to create a rich, vital district in Sea City.

Gdynia, as a great area for investors and businesses, was also recognized multiple times by independent international institutions. It is worth remembering, that since 2017 Gdynia is a part of the prestigious group of cities and metropolises that have ISO 37120 certification and is one of three Polish cities included in the international platform of smart cities called World Council on City Data, where the position of the city compared to global leaders such as London, Amsterdam or Dubai can be checked. The city was also awarded by the fDi Magazine, which is a part of the Financial Times group, with the title of "The Polish City of the Future" in the 2019/20 edition, third time in a row. During the 2019 edition of the MIPIM in Cannes, Gdynia won the main category for medium-sized cities, as well as the "Economic Potential" category.

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.

The Polish shipyard industry is facing certain problems that surely can be overcome. At present, there are numerous foreign orders for special purpose ships, yachts, and specific ship modules being fulfilled at Polish shipyards. The consolidation plans of the shipyard industry under the supervision of the Ministry of Maritime Economy and Inland Waterway Shipping as well as the specialization of Polish shipyards in the construction of ferries, special purpose ships, modules from the sector of renewable energy and warships should be recognised as steps in the right direction.

It is worth remembering that there are numerous legal institutions in the Polish legal system that certainly make it possible to create models that protect adequately the process of ship construction in the event of cross-border commercial relationships and interests of a foreign investor.

For foreign investors who build their ships in Poland, a contract for a ship construction remains an essential matter, because such a contract will be the source of rights and obligations of each Party involved in the process of ship construction.

In such contracts one may consider the establishment of a suitable arbitration procedure, the governing law, as well as jurisdiction in the event of disputes. One should not forget either adequate securities for both parties in the event of default or improper performance of the contract by the other part, for example mortgage on a ship under construction, contractual penalties, bank guarantees, etc., which make it possible to file claims if a planned project fails. The support of a professional attorney will be necessary for drawing up such a contract.

It is also noteworthy that the arrest of a vessel is possible in Poland, which is a form of securing marine claims, although the arrest is not governed in the Polish Maritime Code. The problem of arrest of the vessel is governed, however, in the International Convention Relating to the Arrest of Sea-Going Ships signed in Brussels on 10 May 1952. The Republic of Poland has been a party of the Convention since 1976 (Journal of Laws from 23 December 1976). A maritime liability that may be secured with the above-mentioned arrest includes also claims that result from building, repairing, or chartering a vessel or fees for the use of a dock. While analysing the issues of arrest of a vessel under the above-mentioned Convention, it is important that this regulation is primarily a civil-law convention and is not the same as the concept of arrest of ship regulated in other legal acts, which in fact also boil down to the arrest of a ship. They include, for example, the temporary detention of a ship under administrative law pursuant to a decision of a port master or the detention of a ship by a competent authority in order to carry out its inspection.

Foreign investors from the shipyard sector should also keep in mind that it is also possible to obtain the European Enforcement Order (EEO) in Poland, which is relatively simple. A creditor has to file an application to a competent authority or court (in the Member State where the proceedings have been carried out) for issuing EEO with respect to a ruling given in the case (e.g. judgement or arrangement).

In Poland, the application is submitted under the regulations of the Code of Civil Proceedings. Obtaining EEO in Poland is inexpensive and easy, which provides the certainty of trading for persons who deal with cross-border commercial transactions.

While using the European Enforcement Order, a creditor should remember that as regards costs of collection proceedings, general rules apply of the domestic law of the state in which the process of recovering liabilities will be carried out. Such costs may vary depending on the currency used in the state as well as on the applicable legal system.

Mateusz Romowicz

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Legal
Marine
Mateusz Romowicz



Alkor Sp. z o.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.
80-873 Gdańsk, Na Ostrowiu 15/20, Poland
phone: +48 58 769 19 19
e-mail: alkor@alkor.pl



ALKOR





AN-ELEC

ELECTROTECHNICS: PROJECT / REALIZATION / SERVICE

Since its establishment in 2006 **AN-ELEC** specializes in providing full electrical outfitting and engineering for marine infrastructure and industry sectors. We deliver our services worldwide.



Electrical switchboards

Own production hall. Realization from design to implementation and maintenance.



Cables installation

Installation of high, medium and low voltage cables in land and sea projects. Assembly, laying or pulling.



Tracks, cable ladders

Installation of cable trays and ladders for projects carried out abroad or in Poland.



Pipes, cableways

Foreign or domestic project in which we can install pipes and cableways. Marine & Offshore project



Control panels

Design, manufacture and assembly of control panels for systems in the land and sea industry.



Service

Starting-up, testing or supervising. Troubleshooting in the ship and land industry.



Electrical equipment

Installation of the final electrical equipment in the marine and land industry.



Fiber optic and LAN

Delivery, assembly and connection of LAN networks cat. 6, 6a, 7, 7a or fiber optic in sea and land projects.



Monitoring systems

Installation and connection of monitoring systems, both in the ship and land industry.



Electrical infrastructure

Review, verification, modernization of the existing electrical infrastructure.



Ship's automation

Modernization, reconstruction, installation for existing or new units.



Fire protection systems

We install and connect fire protection systems for land and sea projects

"Our main goal is to deliver the best possible solutions for shipowners, shipyards and all our customers"

www.an-elec.pl



AN-ELEC

81-061 Gdynia, ul. Hutnicza 40, Poland
phone: +48 58 668 44 00



Baltic Control Poland Ltd Sp. z o.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.

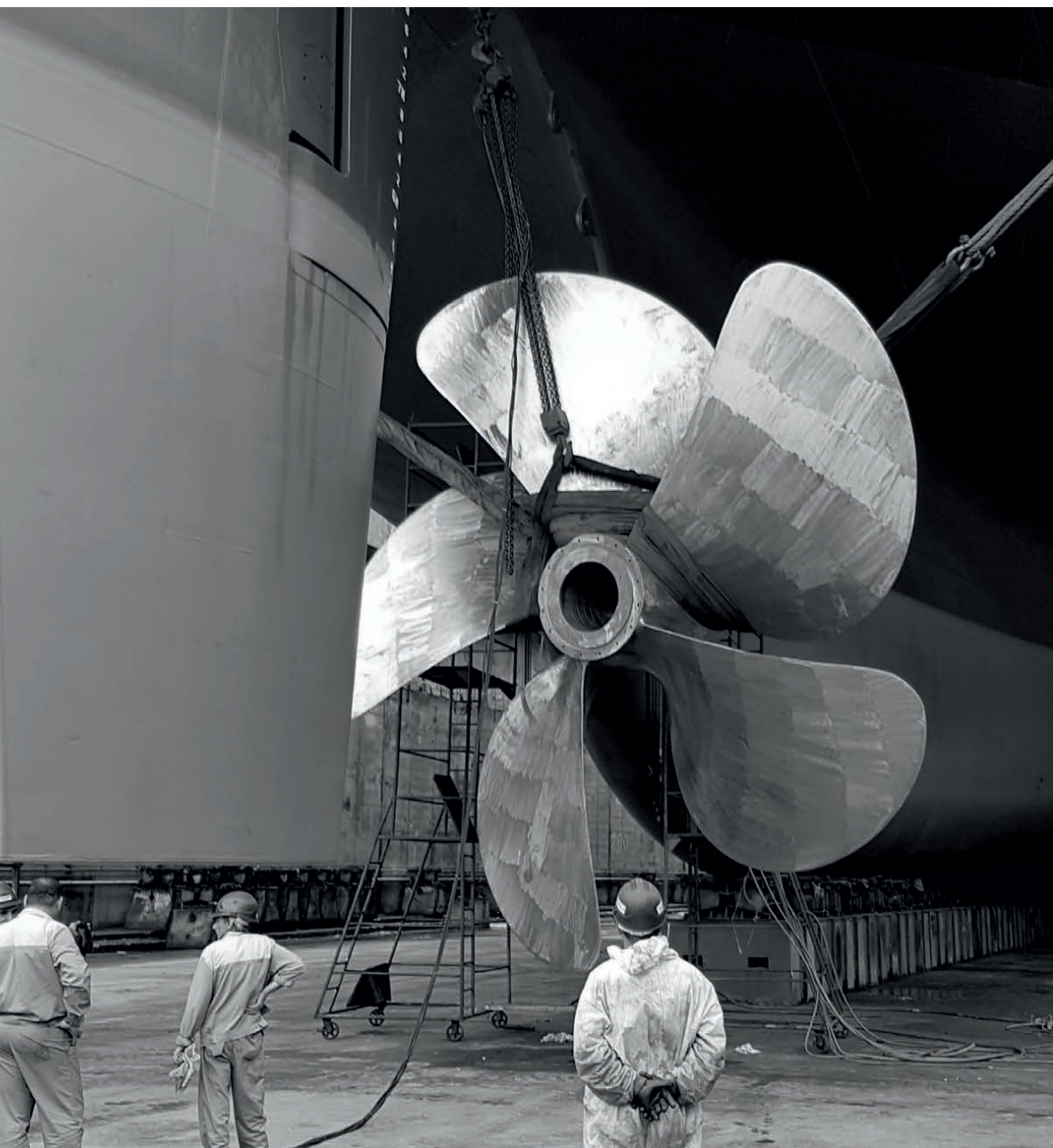
www.balticcontrol.com

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Baltic Control®
Caring about quality





Global Services Statistics 2018

2173 labor days

42 visited countries

429 services performed

118 shaft line services

61 thruster services



WORLDWIDE SERVICE

MARINE PROPULSION SYSTEMS

Bota Technik's core business is marine propulsion systems services and delivery of modern solutions for the global shipping and the offshore market. Located in Gdańsk, Poland, it has a new workshop, production and office facilities. We support international customers.

The company employs highly qualified and experienced engineers whose professionalism allow us to offer a high quality of services, products and projects to our customers. Bota Technik is divided into 6 departments which are Propulsion, Automation, Power Hydraulics, Marine Engines, Design and Logistics.

The main competitive advantage on the local market are the exclusive authorisations received from reputable makers - Cummins, Jastram, Kemel, Vulkan, Masson, Hamilton Jet, Effer and Erma First. This competitive advantage enables the company to play a significant role of an integrator of systems on new buildings and retrofitted vessels.

Bota Technik's Engineering and Activity Profile

- Services of Marine Propulsion Systems (shaft lines, CPP, FPP, thrusters, gear boxes)
- Refurbishments (copper alloy propellers and propeller blades)
- Authorised sales and spare parts for marine propulsion systems
- Propulsion system design (2D, 3D models, calculation, measurements)
- Ships automation (various systems on the ships)
- Marine engines (main propulsion, marine auxiliary engines, generator sets)
- Power hydraulics (engines, steering gears, deck cranes, pumps, winches)
- Control systems (CPP, FPP, services and spare parts)



Control and ships automation systems as well as power hydraulics are the next strong point of our activity. The company provides control system services, designs new control systems, to be installed and also, adapts and adjusts new solutions to older ones.

Bota Technik has the Design Office that actively and continually supports service activities and implements commercial projects for client worldwide. In the field of design, the company has gained extensive experience in the implementation of research and development projects financed from private and public funds.

Bota Technik's activity is certified to meet the ISO-9001 and AQUAP-2110 standards. Moreover, we have a license from the Ministry of the Interior and Administration for the manufacture and marketing of products as well as technology for military or police purposes.

These standards defines us as a high-quality supplier and service company for the shipping and the offshore market globally.



Bulk Cargo – Port Szczecin Sp. z o.o.

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

Bulk Cargo – Port Szczecin established in 1994 is the biggest, multipurpose stevedoring company within the ports of Szczecin and Świnoujście. Bulk Cargo – Port szczecin has evolved from a reloading and storing company specializing mainly in bulk cargoes into organization which handle a broad spectrum of cargoes coming through the ports at the Odra River mouth. Our core business are handling and storing of bulk Commodities: coal, coke, ore, scrap, grain, fertilizer and general cargoes: steel products, forest products, break-bulk in big bags.

We offer:

- Deepest berths in the port of Szczecin
- 10 berths with a total length of 3100 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 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, 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, also we operate as Forwarding agent as well.

The scope of our activities includes:

- International and domestic Forwarding, Logistics supply chain
- Organization of cargo handling, storing, 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

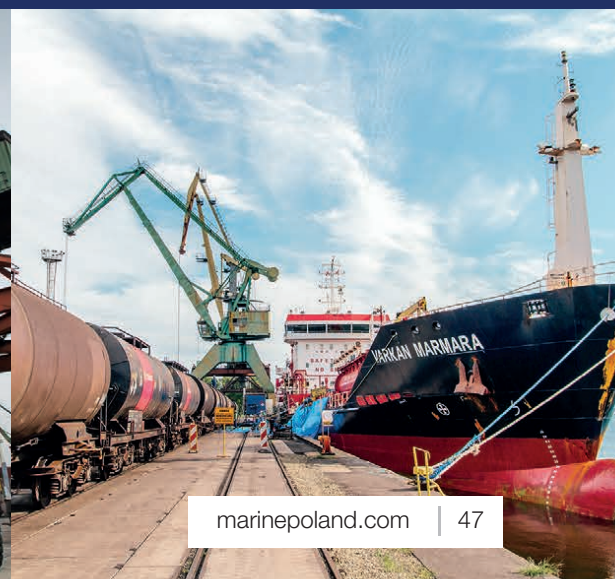
phone: +48 91 430 73 73, 430 71 12 fax: +48 91 462 35 29
e-mail: ppysiak@bcps.pl, pwarchol@bcps.pl



BULK CARGO - PORT SZCZECIN



Simply the best!





C.Hartwig Szczecin International Forwarders Ltd.

- We are one of the largest shipping companies with the Polish capital.
 - Professionalism of the action, we base on more than 155 years of experiences.
 - Through continuous investment, we respond to ever-changing needs of our contractors.
 - We are always at your disposal at any place and time.
 - We constantly improve the quality of our services, among others, through the use of assessments and opinions of our customers.
 - For years, we have a strong position on the market of freight forwarding services.
 - More than 150 skilled workers with full involvement serve each customer, paying particular attention to individual needs and requirements.
- The overriding aim of the C. Hartwig Szczecin company is the high quality of the services and the satisfaction of our customers. We provide our customers with the reliability and professionalism in the organization of broadly understood freight forwarding services, in this:**
- freight forwarding by sea, land, rail, road, air, barge and port handling services, as well as commodity turnover of strategic importance / of dual-use
 - freight forwarding service on the basis of the FIATA bill of lading
 - handling of hazardous goods (ADR)
 - freight forwarding services of heavy and oversized cargoes, Project Cargo
 - storage and handling - we have our own storage areas (storage yards), roofed warehouses with a total surface area of 20 000m² located near highway A6 and the express way S3
 - quality and quantitative inspection and the transport securing in cooperation with reputable companies on an international scale
 - issuing and completing documents in commodity turnover
 - tariff-transport counseling and intermediation
 - advice on transport and customs affairs
 - packaging&customizing and inward/outward processing of goods
 - we have Customs Agency, which provides support/services at the highest level
 - we organize customs clearance in simplified procedures
 - favorable location of the C. Hartwig Szczecin International Freight Forwarders Ltd gives opportunities to take every transport-logistics and forwarding challenge
 - container depot, located near the port of Szczecin, allowing for a full service of cargo containers.

www.hartwig.szczecin.pl

C.HARTWIG SZCZECIN Spedytorzy Międzynarodowi Sp. z o.o.
71-620 Szczecin, ul. Jana Kazimierza 3, Poland
phone: (0-91) 48-06-700
e-mail: management@hartwig.szczecin.pl





CEMET Ltd. Sp. z o.o.

We provide the complete fabrication solution

On the market since 1990, our core activity is steel production. We manufacture a wide range of welded steel machines, machine parts, tooling, special equipment, as well as various welded constructions – such as frames, supports and skids. We typically work basing on the customer's documentation but offer the complete fabrication package: from material sourcing, trough cutting, welding and machining, to surface treatment, final assembly: mechanical, hydraulic/pneumatic and electric, as well as comprehensive testing of finished products. Our flexible production capabilities allow us to deliver short series of tailor-made products, manufactured according to the individual requirements and specifications of our Customers.

We focus on understanding the Customer's needs and expectations and forming long term cooperation built on mutual trust. Products we manufacture are used in a wide range of industries and applications, such as marine, subsea, offshore, metallurgy, automotive & aeroplane production lines, infrastructure, energy and environment protection. Over 90% of our production is delivered abroad, mainly to Norway, UK, Finland, France and Germany.

Our men are highly qualified and have good experience in the metal processing industry. Overall our company employs about 120 people, including 15 mechanical engineers. Quality is another important focus for us. Our Quality Management System is certified according to **ISO 9001** and factory production control is certified according to **EN 1090-1** in classes up to EXC 3. The welding processes are certified in accordance with **ISO 3834-2** and all our welders are duly certified in accordance with the **ISO 9606-1** standard.

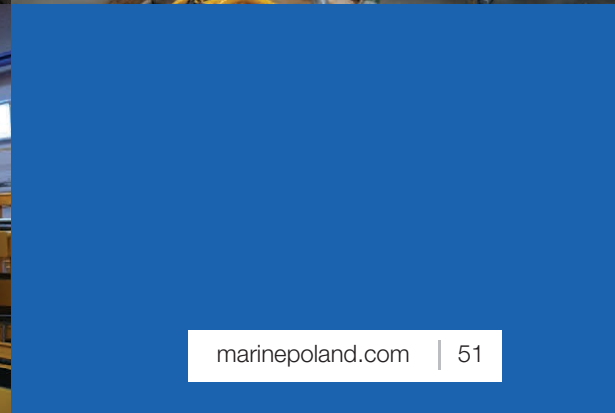
All the welding work is based on approved procedures and supervised by our European Welding Engineer. We follow strict quality standards in our production processes, such as **Norsok M-101** for welding work or **Norsok M-501** for corrosion protection.

Cemet Ltd. has production halls with a total area of 4180 m², equipped with 6 overhead cranes with progressive lifting capacity, up to 2 x 16 tons – at the final assembly area. We have own facilities for shotblasting and painting.

Cemet's experienced staff is always open for new Customers, new cooperation opportunities and challenges.

www.cemet.com.pl

PRZEDSIĘBIORSTWO CEMET Ltd. Sp. z o.o.
80-051 Gdańsk, ul. Sandomierska 34, Poland
phone: +48 58 301 62 91
e-mail: handlowy@cemet.com.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

CRIST S.A.

Czechosłowacka 3, 81-336 Gdynia, Poland

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DAMEN SHIPYARDS GDYNIA S.A.

Damen Shipyards Gdynia S.A.

Damen Shipyards Gdynia offers the design and newbuild of the following types of vessels:

- harbour, coastal and seagoing tugs (also with azimuth propulsion)
- environmental and pollution-fighting vessels
- fast rescue boats and pilot boats
- motor yachts
- buoy-laying vessels

The shipyard was founded by Jacek Duch and Andrzej Denz in 1991, based on the finest traditions of the Polish shipbuilding industry.

In 1996, the company became a member of the Damen Shipyards Group and has since operated under the Damen Shipyards Gdynia S.A. name.

The company was established as one of the first private shipyards in Poland and was based on the expertise of the highest class specialists in the shipbuilding industry. It was intended by its founders to be the company offering the best final product based on own production capabilities and broad cooperation agreements.

Nowadays, Damen Shipyards Gdynia employs about 90 top-class specialists. It cooperates closely with dozens of highly-specialized companies of both Polish and foreign origin. The Damen Shipyards Group offers the design and construction of a wide range of standard vessels. Damen Shipyards Gdynia, as a member of this group, also offers these products, but the basic focus is on building specialized units, designed according to clients' individual wishes and requirements.

Damen Shipyards Gdynia is located on the Baltic Sea in Gdynia, Poland, at the Norwegian Quay in Gdynia Harbour. It is located 23 km from Gdansk international airport. Damen Shipyards Gdynia launches/docks all vessel types.

www.damen.pl

Damen Shipyards Gdynia S.A.
81-336 Gdynia, ul. Indyjska 1, Poland
phone: 48 (0)586 22 14 10
e-mail: damen@damen.pl



DAMEN

DAMEN SHIPYARDS GDYNIA S.A.



DCT.GDANSK.SA

Deepwater Container Terminal Gdansk

DCT GDAŃSK S.A.

The most competitive gateway to the fastest-growing region in Europe DCT Gdansk is Poland's largest and fastest growing container facility, and the only deep-water terminal in the Baltic Sea Region having direct ocean vessel calls from the Far East. Located in the heart of the Baltic in the Port of Gdansk.

The Deepwater Container Terminal Gdansk connects Poland to the largest shipping trade-lane between Europe and Asia, ensuring that Polish goods can be traded with China more efficiently in terms of costs, delivery times and a lower carbon footprint per container than alternative ports.

DCT was the first terminal that attracted direct calls from Asia to the Baltic Sea and is today the destination for the largest vessels in the world departing from China, Korea and other Asian countries. This process initiated a split of the most important shipping trade-lane in the world, Asia – Europe, into Asia – North West Europe and Asia – Baltic.

The terminal handles import and export, transshipment and transit. With an easy nautical accessibility comprising of 17.0m deep approach channel and up to 17m depth along the berth, year-round ice-free access combined with operational excellence, DCT is a natural gateway for all CEE containerized trade volumes. Thanks to infrastructure investments of the Polish Government and the City of Gdansk, DCT terminal is well linked with the international hinterland which ensures its ideal position as a true Central European and Russian Gateway.

DCT Gdańsk is one of the most efficient ways to serve the Baltic Sea market via transshipment and also the most cost competitive way to serve the hinterland markets of the Czech Republic, Slovakia, Belarus and Western Ukraine.

In 2018 DCT Gdansk handled +1.9m TEU, with direct calls by the largest ships afloat. DCT Gdansk is the only terminal on the Baltic Sea capable of handling ships of this size. DCT Gdansk can boast an impressive track-record of continuous development in terminal infrastructure and modern handling equipment. It is also actively involved in various environmental and local community protection activities, being the foundations for sustainable socio-economic development.

- **Annual Throughput Capacity: 3.250.000 TEU**
- **Berth Specifications: 1300m Of Quay Length With Up To 17m Depth**
- **STS Cranes Number : 14**
- **RTG Cranes Number : 40**
- **Reefer Plugs: 1072**
- **Rail Siding: 4 Rail Tracks with Combined Length of 2,5km**
- **Warehouse Size: 8.200 Sq Meters**
- **Terminal Operating System: Navis**
- **Year-Round Ice-Free Access**

www.dctgdansk.com

DCT Gdansk S.A. Deepwater Container Terminal Gdansk
80-601 Gdańsk, Kontenerowa 7, Poland
phone: +48 58 737 90 00
e-mail: marketing@dctgdansk.com



DCT.GDANSK.SA

Deepwater Container Terminal Gdansk





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,

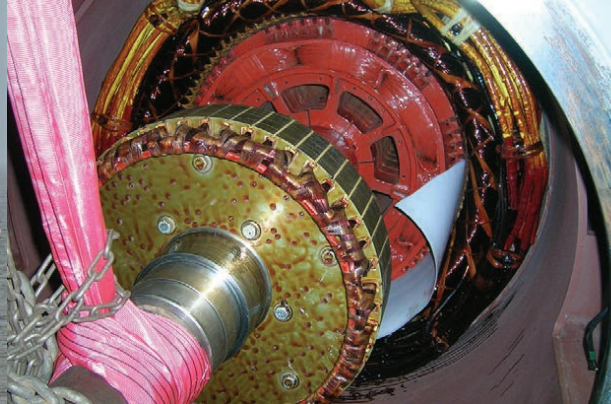
and more...



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 equipment, 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 construction in safe manner.

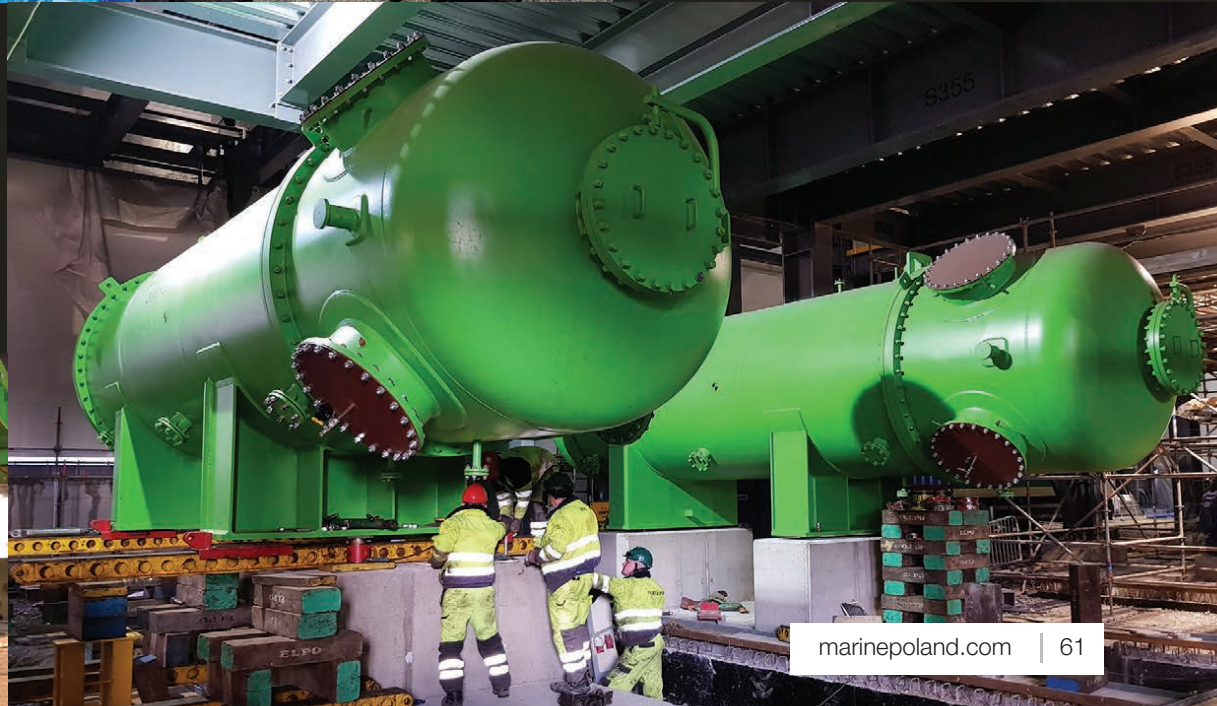
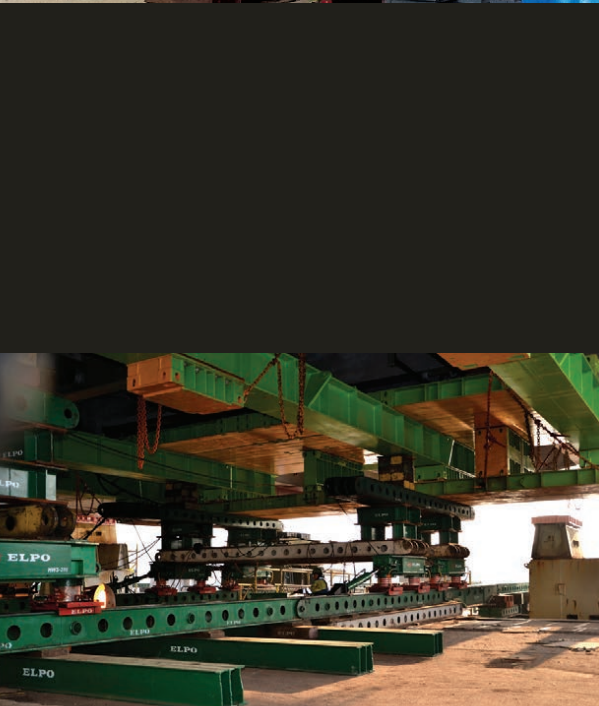
We are also providing services of weighing heavy construction elements (up to 1600 tonnes) by using electronic strain gauge systems with the printout of the weight and the designation of the center of gravity (CoG). We also provide weighing service by means of hydraulic method with simultaneous registration 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 of 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, Gnieźnińska 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 Żarnowiec 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.

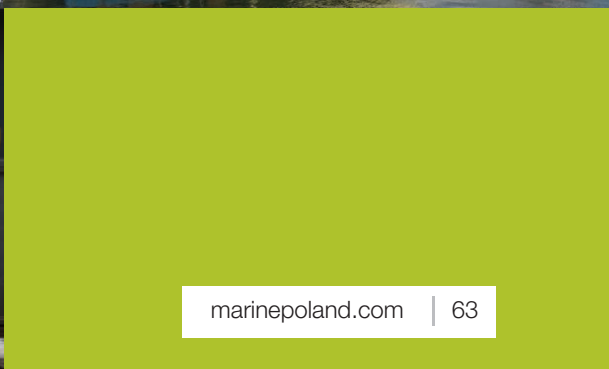
For the last 15 years EPG has been supplying structures for Renewable Industry providing substation platform topsides, elements of subsea foundations, transition piece and external platforms for number of Offshore Wind Farms: Walney, Rødsand, Baltic 2, Butendiek, Arkona, Gwynt y Môr, London Array, Nordsee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

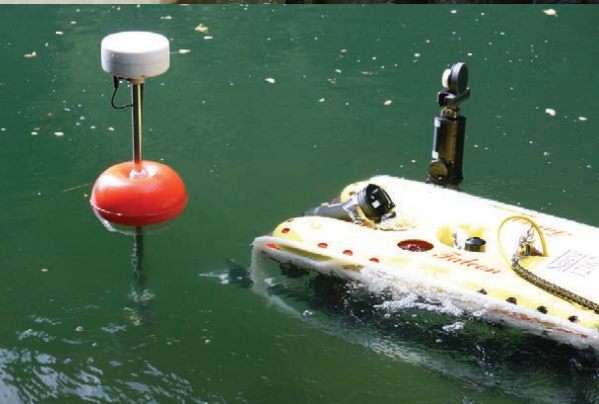
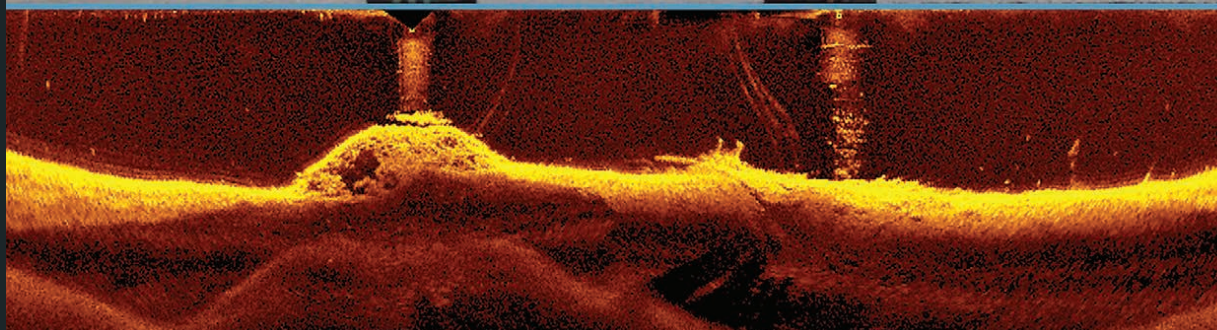
The staff of Escort consists of young but experienced engineers and service technicians, programmers and designers of electronic systems and A class hydrographers. The company also conducts training in the fields of hydrography and the exploration of underwater objects.

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



FAMA Sp. z o.o.

FAMA Sp. z o.o. is a production company with a highly qualified staff and a modern machinery park.

In co-operation with scientific & technical institutions, the design office carries out highly advanced projects. The company implemented ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 systems.

Main product groups:

- winches, pullers, hoists
- cranes, davits
- anchor devices and mooring gear
- ladder devices
- transport systems
- crane and transport equipment
- hydraulic power units
- high-momentum hydraulic motors

We design and produce also specialised devices for individual use.

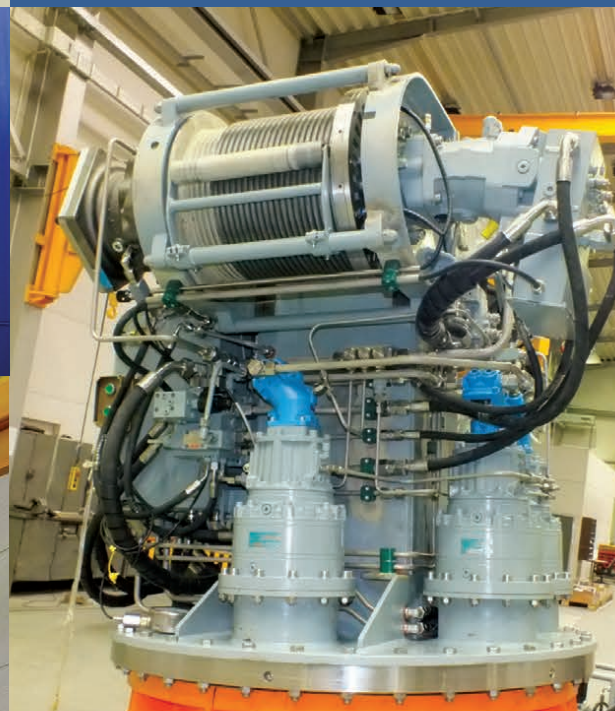
We provide also the following services:

- metal processing: machining on traditional and CNC machine tools
- thermal & chemical processing
- powder painting
- mechanical and gas cutting
- welding of steel and aluminium structures
- repairs of devices
- execution of new parts and devices acc. to delivered
- documentation



www.fama-gniew.pl

FAMA Sp. z o.o.
83-140 Gniew, Kopernika 1, Poland
phone: +48 58 530 76 00 ÷ 05, fax: +48 58 530 76 06
e-mail: sekretariat@fama-gniew.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 certificates 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 University

Gdynia Maritime University is the largest maritime university in Poland and one of the largest in Europe, offering education to future officers of merchant marine vessels as well as engineering and managerial staff for the region and maritime economy.

The origins of Gdynia Maritime University date back to 1920. Today, after nearly one hundred years, thanks to the experience, dedication and knowledge of its employees, our University is ranked among the top maritime universities in the world.

At present, Gdynia Maritime University consists of four faculties: the Faculty of Electrical Engineering, Faculty of Marine Engineering, Faculty of Navigation and Faculty of Entrepreneurship and Quality Science. Our University is the owner of two training ships: SV "Dar Młodzieży" and a research and training vessel MS "Horyzont II".

Gdynia Maritime University runs a number of international scientific research projects and has an unquestionable academic status confirmed by six entitlements to award a scientific degree of doctor (PhD) and two entitlements to award a scientific degree of doctor habilitated (PhD, DSc).

In the last ten years our University carried out projects with a total value exceeding 25 million euros oriented at research, teaching and infrastructure, at the same time expanding its research and laboratory facilities.

Gdynia Maritime University employs highly skilled academic staff and has modern laboratories for research and training in the area of surveys and transfer of technology for the needs of businesses and economic organizations. We provide services which can facilitate access to new, innovative technologies and new potential markets for companies.

The research activity of Gdynia Maritime University deals with issues related to the directions of development and needs of the region. Our University is a beneficiary of projects under the Regional Operational Programme of the Voivodeship of Pomerania, the Ministry of Science and Higher Education, the National Centre for Research and Development, the National Science Centre, as well as of other EU funded programmes and the European Space Agency programme. We carry out R&D works in compliance with multiple priority research directions under Regional Smart Specializations and National Smart Specializations.

www.umg.edu.pl/en

Gdynia Maritime University
81-225 Gdynia, 81-87 Morska St., Poland

Department of Scientific Research and Development
e-mail: pror1@umg.edu.pl

Department of Education
Phone: +48 58 5586 437
e-mail: pror2@umg.edu.pl

Department of Maritime Affairs
e-mail: pror3@umg.edu.pl





Havyard Design & Engineering Poland Sp. z o.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
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e-mail: hde.poland@havyard.com



Havyard Design & Engineering Poland



- machinery
- structure
- systems
- outfitting
- interior



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:

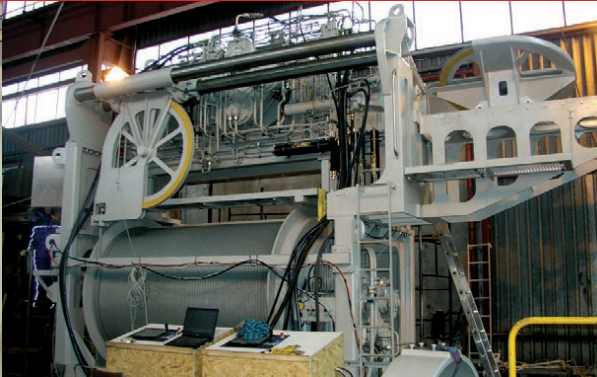
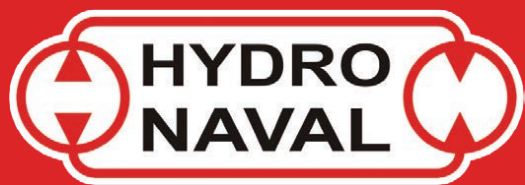
- ISO 9001:2008
- ISO 3834-2:2005
- EN 1090-1
- AQAP 2120:2009
- AEO certificate
- NATO Commercial and Government Entity.

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

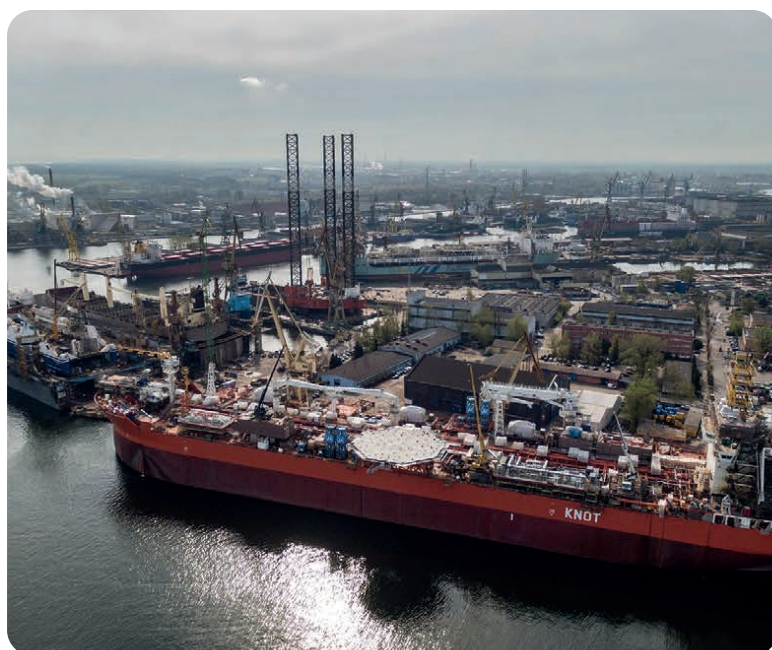


INTERMARE

S O U T H B A L T I C

M A R I T I M E
E C O N O M Y
E X H I B I T I O N

22-24 June 2020
AMBEREXPO
Gdańsk - Poland



INTERMARE South Baltic is a project undertaken to support the maritime economy in the whole region of the South Baltic through a network of companies and stakeholders joined under the common brand **INTERMARE South Baltic**, easily recognized in the region and in other European and global markets.

The goal of the project is the creation of a network of companies and also stakeholders (clusters, employer's organizations, regional and local authorities, etc.) for a greater recognition of SMEs from the SB region on international markets as well as better cooperation in the supply chains within the region. The **INTERMARE South Baltic** project will create and implement a number of measures to integrate the actors of the SB region. The maritime companies from the region will be able to promote themselves at international maritime fairs, cross-border network development meetings, and promotion and activities in Europe.

- Seminars
- Networking
- Exhibitions

- Maritime Data Base
- Workshops

intermare-southbaltic.eu

 **MTG** | MIĘDZYNARODOWE
TARGI GDAŃSKIE SA
GDAŃSK INTERNATIONAL FAIR CO.

Gdansk International Fair Co.
phone: + 48 58 554 92 38
e-mail: intermare@mtgsa.com.pl

EXHIBITION SCOPE

- Shipyards
ship building and repairs
- Ships equipment
- Offshore technologies
- Ports, Harbours
& Terminals equipment
- Yachts equipment
- Maritime security
- Naval equipment
- Education
- Maritime law
- Fisheries and aquaculture
- Shipbrokers and agencies
- Maritime tourism



VENUE



The **AMBEREXPO** Exhibition and Convention Centre is located in the direct vicinity of one of Europe's most beautiful football stadiums – the Stadion Energa Gdańsk.

The **AMBEREXPO** complex consists of three integrated exhibition halls, with a total floor space of 12,000 m², a convention and conference centre with 4 rooms for 1058 participants and a mobile space arrangement option, complete with a Reception Area and VIP Zone, Press Centre, Restaurant, 6000 m² of office facilities, a car park for 430 vehicles and exhibition rail tracks.

amberexpo.pl

AMBEREXPO's functional layout will meet the needs of every demanding customer. The Centre is equipped with the latest technologies in ICT, exhibiting and conferences, including systems for access control and ticketing, simultaneous interpreting, multimedia and Digital Signage displays. These technical solutions make it possible to organise diverse projects, starting from exhibitions, congresses, conferences and training courses through to cultural and entertainment events. The facility's size and functionalities will allow you to seamlessly arrange the space for several events at once.

Intermare South Baltic Maritime Economy Exhibition is co-financed from the Interreg South Baltic Programme - financed from the European Regional Development Fund (ERDF)



European
Regional
Development
Fund



InvestGDA (Gdansk Economic Development Agency Ltd.)
a development agency followed by the City of Gdansk.

Discover Gdansk, **for your business!**

We provide comprehensive consultancy and assistance at every operation stage to Polish and international partners who want to invest money or technical ideas in our region safely and quickly. The highly qualified team with experience and knowledge of local institutions, regulations, conditions and habits is our strength. Another benefit of working with us is the possibility to choose from attractive investment sites.

Gdansk is a business-friendly place – but also a great place to live. It is bordered by the sea on one side and the forests of the Tri-City Landscape Park on the other.

Solidarity was born here, which gave freedom to Poles and united Europe. Today it is a rapidly developing, modern city. It is also a centre of academia, science, business and tourism.

INVESTGDA - main activities:

- Development of investment sites
- Attracting and supporting investors
- Economic promotion of Gdansk
- Consultancy

Development of investment sites:

Pomeranian Investment Centre

A modern Logistics centre located in the vicinity of the Northern Port in Gdansk and the DCT Gdansk container terminal.

Pomerania Investment Centre is located in close proximity to the Sucharski Route national road, in the vicinity of the Port of Gdansk and the Deepwater Container Terminal Gdansk. The total area of 76 ha can be divided into smaller plots. The area of the PCI is intended for production, logistics and service activities.

Gdansk-Plonia Industrial Park

Industrial Park Plonia is an investment area of 30 hectares located in the vicinity of the Gdansk Refinery, municipal wastewater treatment plant, and the Martwa Vistula River, designated for industrial purposes.

The neighbourhood of the plants, as well as access to the national roads, ports and container terminals, PCI, contribute to the attractiveness of the Park's location. The Plonia Industrial Park is a perfect location for investment projects with a high demand on infrastructure, high intensity and different types of production.

Azymutalna

The property is located in the neighbourhood of the Gdansk Lech Walesa Airport. The spatial plan allows for establishing commercial venues with the possibility of building a hotel. The road system for this area is ready together with full technical infrastructure.

Industrial Park – Maszynowa

Industrial Park – Maszynowa is an investment area with 51 ha located in the vicinity of the international airport in Gdansk, rail routes, the Tri-City ring road and the A1 motorway north – south. It is just 15 km from the historic city centre and 20 km from the sea port.

There are still some sites left for further investment projects. The area operates within a special economic zone status which allows investors to obtain exemptions for income tax and the property tax.

www.investgda.pl

Gdańska Agencja Rozwoju Gospodarczego Sp. z o.o.
80-560 Gdańsk, ul. Żaglowa 11, Poland
phone: +48 58 722 03 00
e-mail: office@investgda.pl



Gdansk
Economic
Development
Agency Ltd

investGDA
invest in gdansk



Invest in Pomerania – we care more

Who we are:

- regional investment promotion agency
- one-stop-shop for foreign investors
- coordinated by Pomerania Development Agency Co.
- responsible for economic promotion on behalf of the regional authorities (the Marshal Office of Pomorskie Voivodship, Pomeranian Special Economic Zone, Słupsk Special Economic Zone, Gdańsk Development Agency InvestGDA, the City of Gdańsk, the City of Gdynia, the City of Sopot, the City of Słupsk, Commune of Słupsk, the City of Kościerzyna, the City Commune of Tczew, the City of Pruszcz Gdański, the Commune of Dębica Kaszubska, the City of Starogard Gdański, the City Commune of Malbork, the County Commune of Wejherowo, the City of Rumia, the City of Nowy Dwór)

What we do:

- Custom-made reports about the economic situation in the region
- Reports on legal norms for conducting business in Poland
- Information about available forms of investment support
- Assistance in establishing contacts with local authorities and potential business partners
- Presentation of the real estate market (office and warehouse space) and investment sites
- Organization of investors' visits
- All services free of charge
- In total, we have successfully brought ca. 100 projects that generated 14 000 jobs

***If you want to invest, start a business or work in Pomerania,
contact us at:***

www.investinpomerania.pl

Invest in Pomerania
472D Grunwaldzka Ave., Olivia Business Center - Olivia Six
80-309 Gdańsk, Poland
phone: +48 (58) 32 33 256
e-mail: office@investinpomerania.pl

- **No.1 port hub in the Baltic Sea**
- **Transport gateway to the CEE markets**
- **Diversified economy with niche specialisations**
- **Investment-friendly policies**
- **Advanced system for investment support**
- **Biggest academic center in northern Poland**
- **Advanced research and development facilities**

Invest in Pomerania – we care more for the maritime sector.



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 awareness 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.



Legal Marine

Mateusz Romowicz

Marine Projects Ltd.



MARINE PROJECTS Ltd. Sp. z o.o. is a private owned shipyard operating actively on the shipbuilding market.

During the past 30 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.

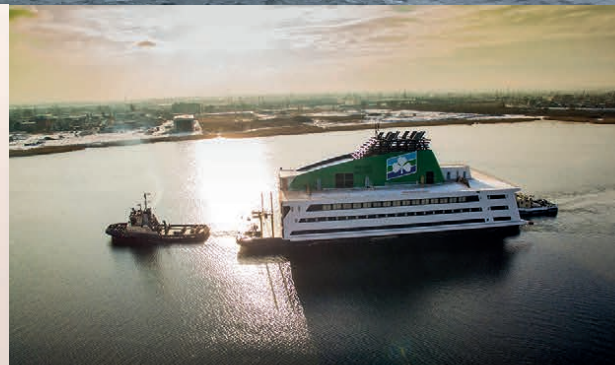
Sienna 45, 80-605 Gdańsk, Poland

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

e-mail: marineprojects@parpro.pl



Marine Projects Ltd.





Based in Gdańsk, we have established ourselves as a leading manufacturer of large steel structures for both our domestic and foreign markets. We carry out projects mainly for the offshore industry (primarily for the Scandinavian market), but also for: shipbuilding, construction infrastructure, petrochemical and oil-processing industry. We also produce construction cranes and bespoke structures.

Our versatile production facility enables us to either make a construction from scratch, or to modernize or renovate any construction. We are constantly investing in fabrication technologies.

Many years of experience gained implementing a variety of complex projects in the field of steel structures, mean that our services have been recognized and appreciated by many clients within Poland and abroad.

Our Main Clients: Kvaerner Stord AS, AS Nymo, Bladt Industries AS, Aker Solutions AS, Aibel AS, Bring Logistic AS, Cargotec Finland OY, National Oilwell Varco AS, Grupa Lotos SA, KT Kinetics Technology S.p.A., Skanska Sverige AB, Polaqua Sp. z o.o., Meriaura Oy Finland.

Our Services:

- fabrication of projects as both a General and Sub-Contractor
- modernization and repair of industrial installations and technological equipment
- purchase of materials
- preparation of shop drawings
- fabrication & assembly
- quality control

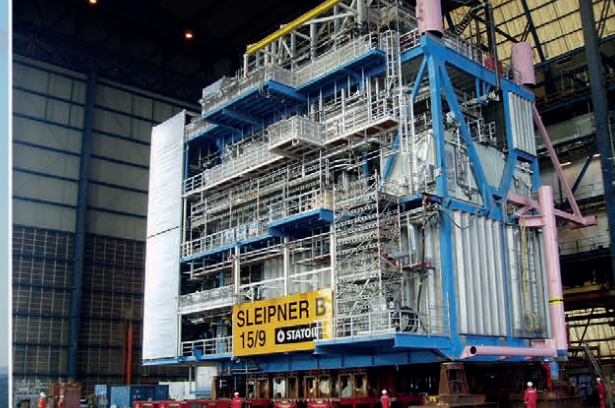
- NDT (Non-Destructive Testing)a General and Sub-Contractor
- Surface protection
- PFP (Passive Fire Protection)
- Loading and sea fastening operation

What we do:

- **Offshore structures:**
Structures for the oil and gas industry, oil rigs, elements of offshore wind farms, subsea construction elements, towers for offshore platforms and wind turbines, aluminium staircases, pipelines and pipeline steel supports (CS, SS, Duplex).
- **Structures for the petrochemical and petroleum industry:**
Fuel tanks, industrial installations, tanks and technological equipment (including technological installations, heat exchangers, furnaces, steel stacks, columns, reactors).
- **Cranes and bespoke structures:**
Sections of gantry cranes and booms, silos, tanks, conveyors, belt conveyors, spreaders (bucket wheel excavator).
- **Shipbuilding and marine structures:**
Booms, vessel ramps, superstructures for floating vessels, hull sections, deck hatches.
- **Infrastructural constructions:**
Bridges, flyovers, footbridges, chimneys structures for industrial halls, stadiums, coalbunkers, halls.
- **Aluminium structures:**
Staircases, ladders, stairs, platforms, handrails, assembly of cable tracks.

www.pomorzesa.com.pl

MOSTOSTAL POMORZE S.A.
80-557 Gdańsk, ul. Marynarki Polskiej 59, Poland
phone: +48 (58) 343 06 37
+48 (58) 343 01 95
e-mail: office@pomorzesa.com.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 marine 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 experienced employees, whose rich experience and 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.





NAFTOPORT Sp. z o.o.

Naftoport - based in Gdańsk Northern Port - is the only crude oil transshipment terminal in Poland and the biggest Polish transshipment 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 refineries. 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 refineries.

The Company handles transshipment for: crude oil, diesel oil, fuel oil, gasoline, jet fuel, condensates. Transshipments 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 facilities 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 17m.

Over the period 1992-2018 Naftoport provided services for 7 ths tankers, transshipped 248 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





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.

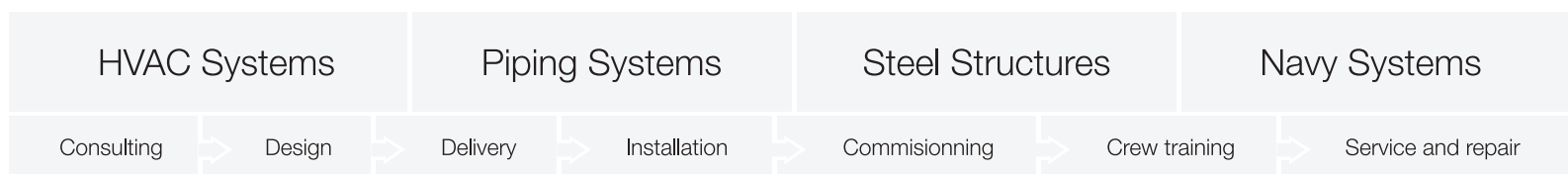
www.nauta.pl

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Waszyngtona 1, 81-342 Gdynia, Poland
phone: +48 58 621 25 00, +48 58 621 63 51
e-mail: poczta@nauta.pl



NAUTA





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 ship-repair 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 services.

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



NAVY  **SAN**
CREATIVE ENGINEERING





COMPLETE CFD
ANALYSIS



SCOPE OF DELIVERY

- Initial & detailed design
- Project planning and quality assurance
- CFD & FEM analysis
- Stability and ship theory
- Structural design
- Naval engineering
- Yard coordination
- Augmented / Virtual reality



UNIQUE MIX OF EXPERIENCE, TRADITION AND NOVEL APPROACH TO DESIGN.

Our team of naval architects adjust to every client's expectations, delivering innovative solutions based on our extensive portfolio of concept designs or on currently in-service vessels.





nglmachining • in-situ machining • solution for industry • nglmachining

COMPANY

The NGLMachining company was founded as an answer to the market demand expecting mobile machining services while maintaining the performance tolerance regime. Our goal is to find an alternative to stationary machining, eliminating the need to disassemble and transport the machined component. We focused our efforts primarily on innovation and non-typicality of applied solutions, as well as the timeliness and the performance precision.

The technical and process solutions we offer found applications in these industry branches, where the dimensions and accessibility of structural elements were a problem in the repair-manufacturing technology. The elimination of transport costs, while expanding service simultaneously, enabled us to perform production tasks significantly faster and, in case of failure, to restore continuity of the production faster.

In order to develop and improve our services, we continually expand our machine park and improve qualifications of our team. By modifying and expanding our offer, we respond to the constantly growing and changing needs as well as requirements of our Customers.

SERVICES

Tasks presented to us by the industry become more and more unusual and complicated. Until recently, some of them were impossible to perform or were a logistic and economical challenge. The opportunities offered to us by mobile machining today are virtually limitless. Combination of technology with skills and experience of operators and measurement teams allows us to perform even the most complicated projects.

During execution of works in the field of mobile machining, we use specialised, portable machines designed for confined spaces. Mobile boring machines, milling machines, and lathes used by us are characterised by a compact and modular structure. This equipment has been designed for work in harsh conditions, using a drive system allowing to deliver optimum power with respect to the load proportion.

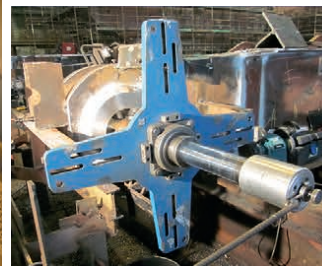
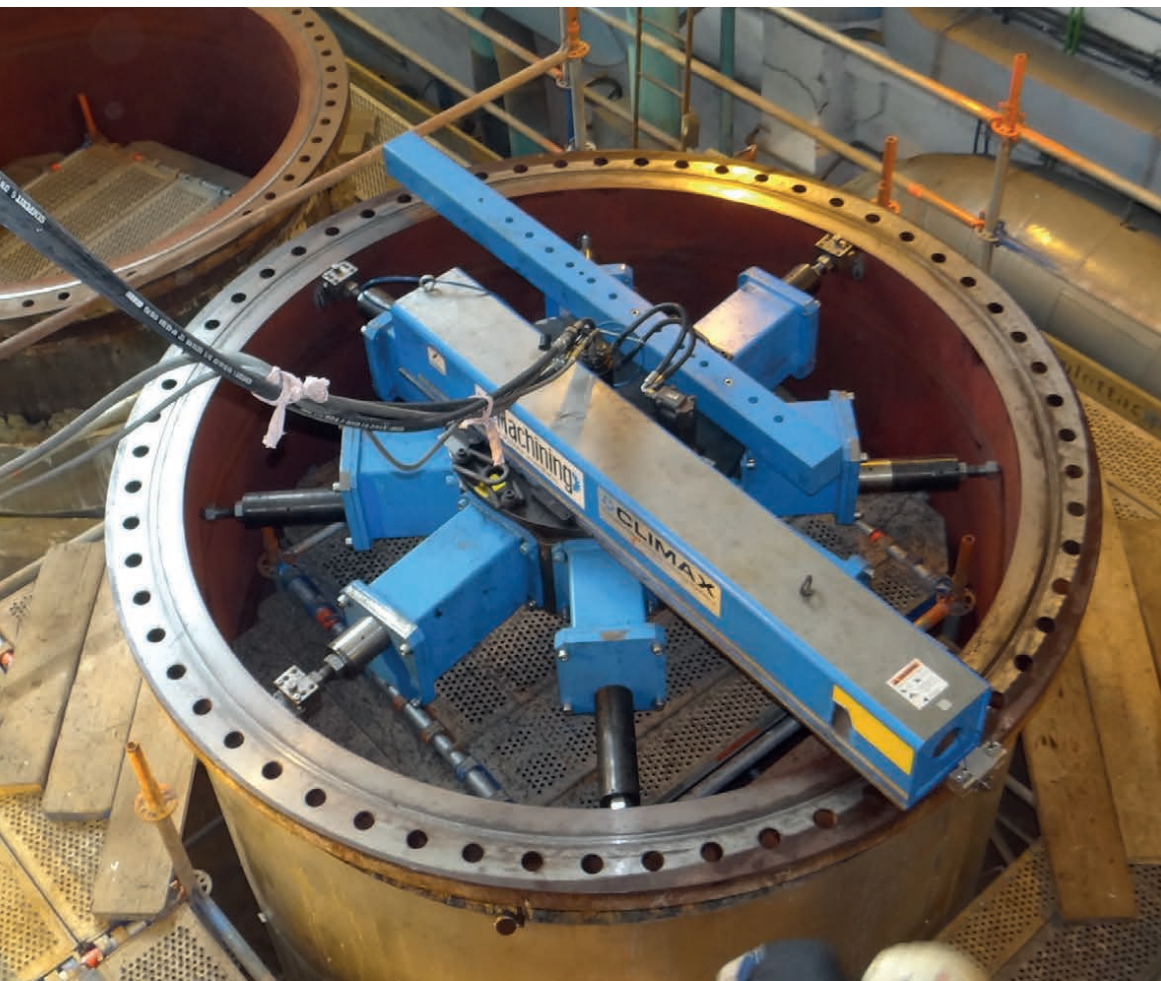
We work at the construction and maintenance operations in power distribution companies, chemical and food industries, in the construction of steel structures and ships.

We reach with our services not only Polish companies, but also the foreign ones. We are everywhere, where the machining is difficult and requires non-standard solutions.

www.nglmachining.com

NGLMachining Sp.j.
80-175 Gdańsk, ul. Orzechowa 5, Poland
phone: +48 505 126 744 / +48 728 998 335
e-mail: r.bogusz@nglmachining.com

in-situ machining



The mobile machining service (in-situ machining) is used to precisely remove excess material while maintaining the performance tolerance regime. Its purpose is to provide an alternative to stationary machining devices and eliminate the need for their disassembly and transport.



Officer Training Centre of Gdynia Maritime University Ltd

Officer Training Centre of Gdynia Maritime University Ltd is nonpublic school, leaded by Officers Training Center (OTC) of Gdynia Maritime University. The school has quality system certificate PN_EN ISO 9001:2001. We offer studies in two

- Navigation – speciality: maritime transportation
- Mechanics and Mechanical Engineering – speciality: exploitation of marine power

School prepares to take exam on the deck officer (navigation faculty) or engineering watch officer (faculty mechanics and mechanical engineering) from Maritime Authority.

The classes take place in the teaching buildings and laboratories of Maritime Academy in Gdynia. Teaching staff are mainly employees of Maritime Academy in Gdynia.

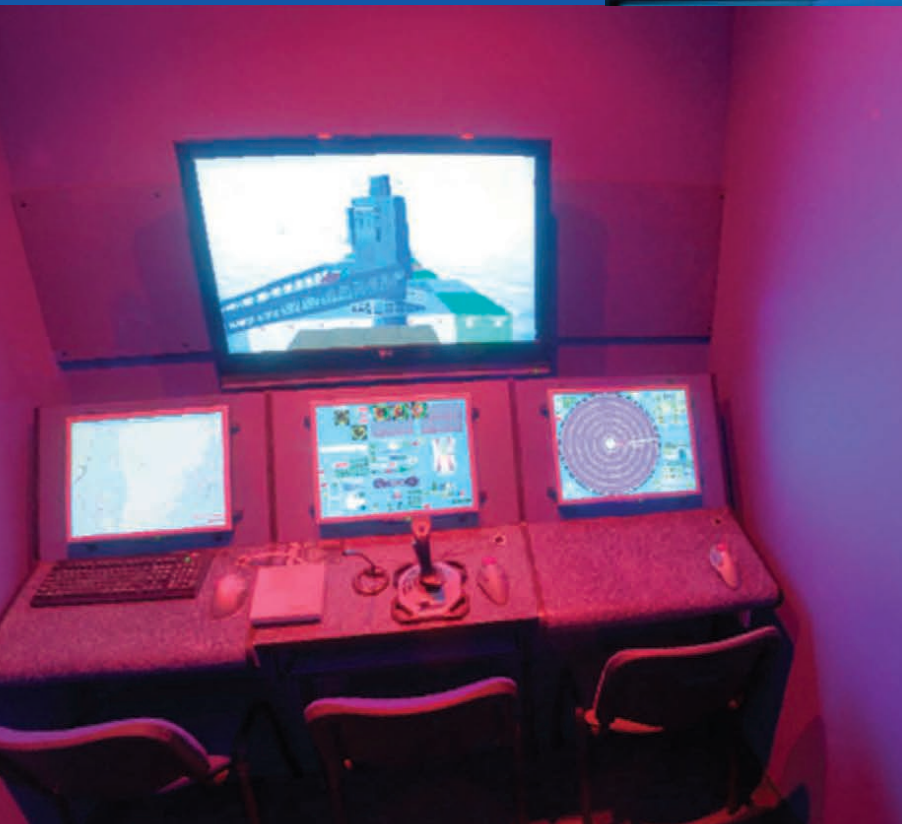
For graduates of Gdynia Maritime School, who has secondary school certificate there is possibility to continue externally studies on Navigation Faculty or Marine Engineering Faculty in Gdynia.

Studies in Gdynia Maritime School are payed and include 2,5 years of professional studies and 1,5 year seamanship during which student gets high salary. Seamanship take place on merchant ship of the reputable shipowners. After finishing school and obtaining a diploma graduates find employment officer at the world's best operators.

Currently there is very strong demand for graduates of maritime schools.

www.sdk.am.gdynia.pl/en/school

Officer Training Centre of Gdynia Maritime University Ltd
81-345 Gdynia, Al. Jana Pawła II 3 pokój nr 320, Poland
phone: (058) 620-19-68, 558-61-11
e-mail: sdkgsm@wn.am.gdynia.pl
sdk@am.gdynia.pl



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 cystems 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

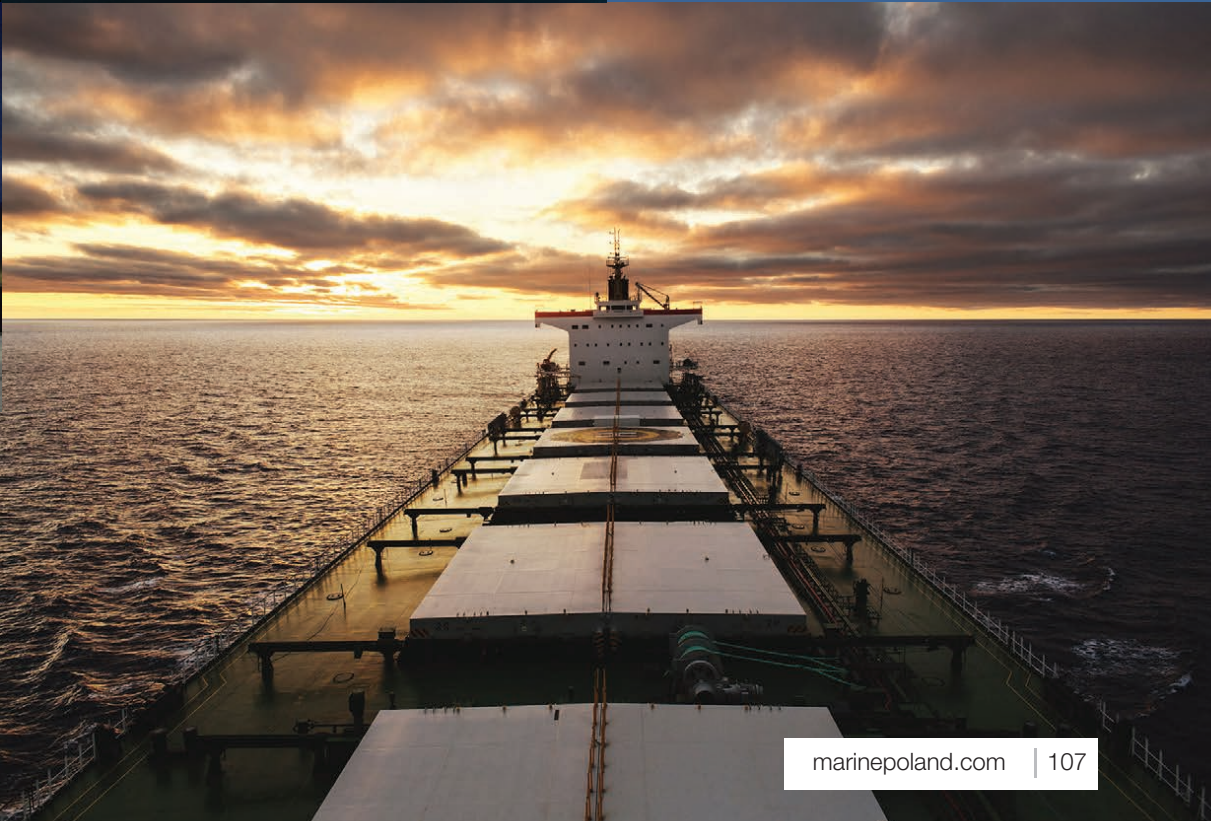
s.olszewski@okmarit.com.pl

www.okmarit.com.pl

Okmarit sp. z o.o.
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phone: +48 58 782 67 00, fax: +48 58 781 92 39
e-mail: okmarit@okmarit.com.pl



MARIT[®]
SHIPBROKING & LOGISTICS CO. LTD.





PAŁASZ
MARINE PROJEKT

Pałasz Marine Projekt.

Pałasz Marine Projekt: Tradition. Experience. Passion.

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, Rhinoceros, FEMAP 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 hull's 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 str. 43, Poland
phone: +48 502 392 148
e-mail: kpiszcza@palasz-marine.pl



PAŁASZ
MARINE PROJEKT

SHIP DESIGN & CONSULTING

3-D MODELING

AVEVA ♦ CADEMATIC ♦ RHINOCEROS

CALCULATION

FEMAP ♦ ANSYS

POLFERRIES

Polish Baltic Shipping is a ferry shipowner with over 40 years experience. Their ferries under the Polferries brand connect Poland with Scandinavia.

Currently, the company operates five ferries: m/f Cracovia, m/f Mazovia, m/v Baltivia on Świnoujście - Ystad and Świnoujście - Copenhagen via Ystad lines and m/f Wawel, m/f Nova Star on Gdańsk - Nynäshamn line.

In the summer season, PBS will open Świnoujście - Bornholm route. This line will be operated by m/f Cracovia.

Polferries is not only a sea carrier, but also a tour operator. They offer trips to the most interesting places in Sweden, Denmark, Norway and Finland. The offer includes accommodation in hotels throughout Scandinavia, as well as holiday stays in cottages on Bornholm.

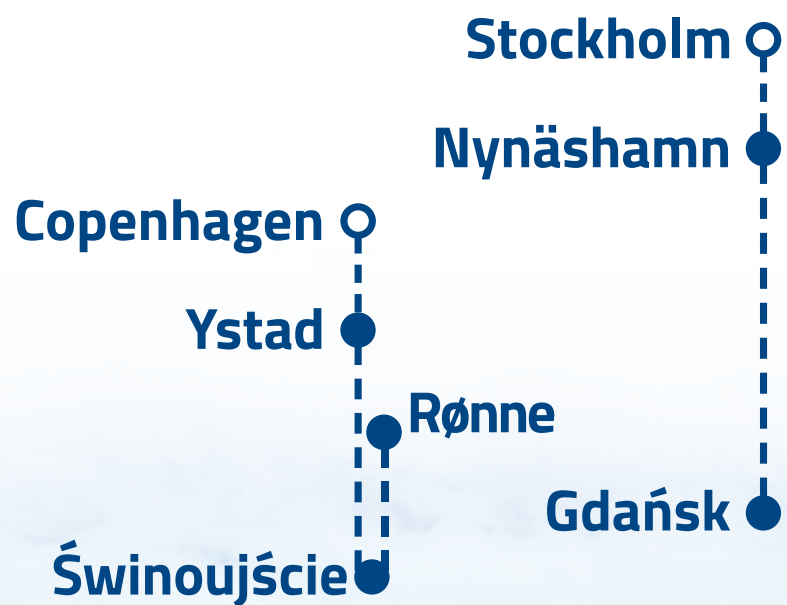
Polferries Travel Agencies offer also business events (conferences, training, team building, etc.) on board. All ferries are equipped with appropriate conference and training facilities.

Polish Baltic Shipping actively support the development of marine education in Poland, proposing attractive "Blue School" program.

We cordially invite you to our ferries!



polferries
POLISH BALTIC SHIPPING Co.



Polish Baltic Shipping Co.
41 Portowa Str., 78-100 Kołobrzeg, Poland
phone +48 94 35 52 102, polferries.pl



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 PŻM 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 Żegluga Szczecińska) and medical (Marine Medical Services). It also includes Pazim, which manages the most attractive office and commercial complex in Szczecin.

PŻM 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, PŻM is by far the largest shipowner, and the PŻM fleet is about three-quarters of all ships owned by Polish shipping companies.

The transport structure of PŻM 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 PŻM vessels have for many years much better results of inspections than the world average.

The PŻM 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).

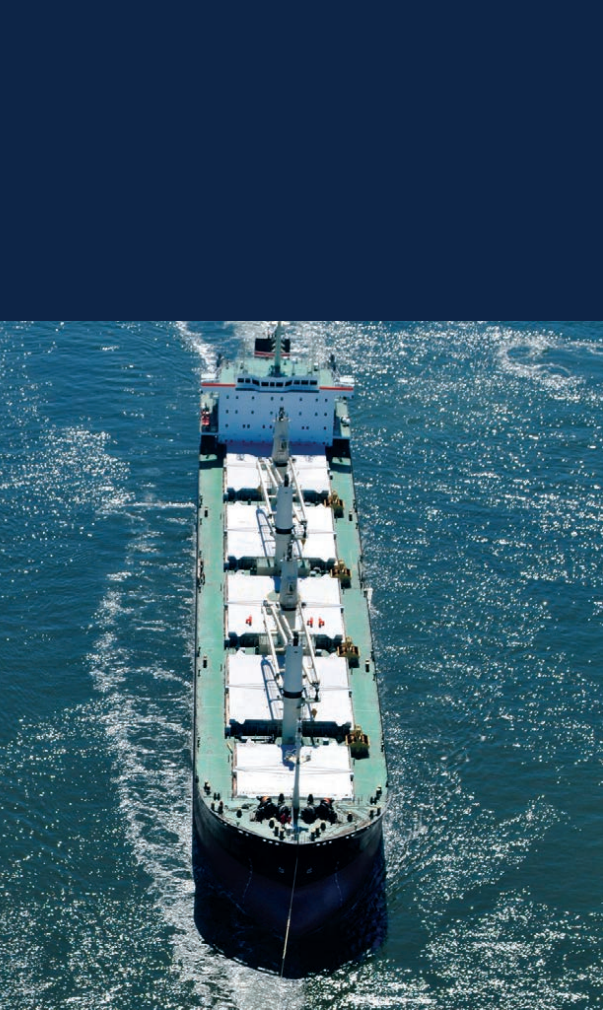
At the same time, the trend of decrease the fleet of the shipowner, which has been performed for a decade, has been halted last year. Since February 2017, ie since the introduction of the government administration, none of the PŻM vessels were sold, while two new bulk carriers from the contract abandoned 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 PŻM 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 PŻM 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





Polski Rejestr Statków

PRS is an independent expert company providing surveys, certification and advisory services for companies from various industries all over the world.

Our services are divided into below areas:

■ **Ship surveys**, that is:

- classification and statutory surveys of sea-going ships, including naval ships and special craft, inland waterways vessels, yachts and boats, and other vessels, as well as facilities related to the exploration and exploitation of the sea and water bodies,
- technical supervision over the production of materials for the construction, repair and equipment of ships,
- survey of containers under construction and in service, testing, inspection and approval of containers,
- development of ship stability and cargo software for specific ships,
- reporting, monitoring and verification of CO₂ emission from ships,
- certification for compliance with ISM and ISPS Code and the requirements of MLC 2006,
- type approval of products, so called EU RO Mutual Recognition,
- advice to ship-owners in emergency situations,
- approval of method 2 for determining the verified container weight;

■ **Industrial Surveys** covering:

- technical supervision over cubature and hydro-technical construction as well as construction and operation of environmental protection objects,

- technical supervision over the construction and operation of pipelines, transportation systems for gas, oil and petroleum products, power, cooling equipment and industrial installations,
- technical supervision over the construction and operation of roads, bridges and related facilities,
- certification and supervision over the design, construction and operation of fixed offshore platforms, based on own regulations,
- certification of offshore wind power plants components,
- supervision over the design, construction and operation of offshore wind farms,
- certification and supervision over the design, construction and operation of energy systems based on renewable energy sources,
- reliability and risk assessments of industrial facilities,
- technical supervision over floating objects permanently moored;

■ **Management Systems Certification and EMAS verification;**

■ **Products Certification** for conformity with the EU directives and regulations;

■ **Certification of welding personnel** in scope of PED directive;

■ **Tests of ship structures flammability** (in PRS own Laboratory);

■ **Engineering Related Consultancy** (technical appraisal and consulting, technical and financial analysis);

■ **R&D** (participation in projects);

■ **Training courses and seminars.**

www.prs.pl

PRS

al. gen. Józefa Hallera 126, 80-416 Gdańsk, Poland

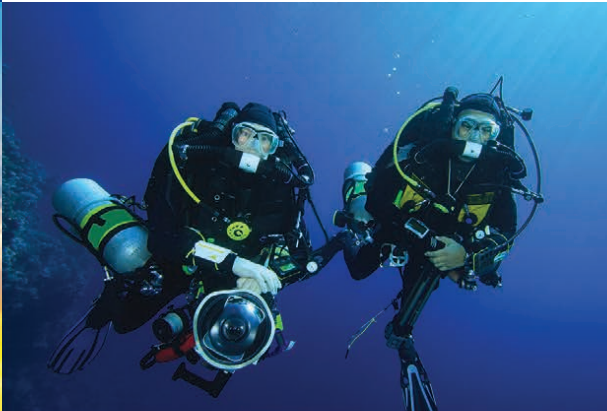
phone: +48 58 346 17 00; +48 58 751 11 00;

fax: +48 58 346 03 92

e-mail: mailbox@prs.pl



Polski Rejestr Statków





Pomorska Specjalna Strefa Ekonomiczna

Invest in a unique place

Ostrów Island in Gdańsk is a unique place on a European scale for the entire shipbuilding industry. Areas revitalized by the Pomeranian Special Economic Zone (PSEZ) are ready for investors interested in ship production, the implementation of offshore projects or large-scale steel constructions.

The island of Ostrów, and especially its front, has an extraordinary investment potential. Perfectly connected areas, located almost in the center of Gdańsk, directly adjacent to the 550-meter Kashubian and Trawler quays and Gdańsk Shipyard are an attractive place for all industrial investments. A project of land regeneration, run by the PSEZ is aimed at adapting them to modern shipbuilding and related production, based on the latest industrial technologies. The new investments will allow not only shipbuilding, but also the construction of large-scale steel structures, including the implementation of offshore projects for Baltic wind projects. The land regeneration will improve its attractiveness and create favorable conditions for new investors.

In total, the area of the island is 23 ha. Revitalization started in mid-2018 and was divided into three stages.

Currently, works are underway on an area of 5 ha, where two modern mounting plates with a total area of 20,000 m² and a load capacity up to 20 tonnes / m² will be created. Hala 33 is also being rebuilt. It will be re-equipped, so that after the purchase of new equipment and lines, units up to 90 m in length can be created there. Moreover, along the Nabrzeże Trawlerowe quay, ships up to 150 m long, their elements and superstructures will be built.

The work on the renovation of the façade and roof of the historic Hala 26 has finished. The renovation of the hala No. 87 is underway. Storage squares with an area of 6,000 m² are also being prepared.

The Pomeranian Special Economic Zone is awaiting investors for a total area of 18 ha. The next stages of revitalization depend on the specific needs of new investors. An undoubted advantage of the location is the possibility of rail transport with the use of the Ostrów railway and siding infrastructure belonging to the Gdańsk Shipyard and GSG Towers. The PSEZ's founders strongly believe that new investors will generate effective synergy between one another, for instance, in the use of infrastructure production lines, such as: a device for cutting and forming sheets, lines of flat sections, maintenance and painting, warehouses, heavy transport, etc.

It is also planned to launch a training center on Ostrów Island for the needs of the shipbuilding industry and other investors located in this area. The zone also provides support in cooperation with universities of the Tri-City and start-ups specializing in modern technologies.

www.strefa.gda.pl

Pomorska Specjalna Strefa Ekonomiczna sp. z o.o.
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PORT GDANSK

the fastest growing
port in Europe.

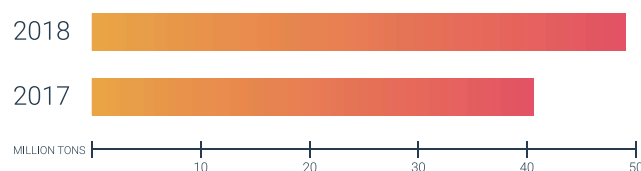


The Port of Gdansk is currently one of the most rapidly developing transport hubs in the Baltic Sea region. Thanks to numerous investments, the Port of Gdansk has a chance in the future of becoming the largest and most important port in the Baltic Sea.

The Port of Gdansk Authority is currently piloting a number of investments, with the aim of developing the Port's infrastructure and increasing its throughput capacity several times over. The expansion programme includes plans for the dredging of the fairways, construction and modernisation of the quays, expansion of the road and railway network and expansion of parking and storage space. The coming years will be a period of dynamic growth for the Port.

The Port of Gdansk's flagship investment will be the construction of the Central Port – the new outer port located within a 500 ha area of artificial piers. The annual volume of goods handled at the Port of Gdansk will increase to 100 million tonnes thanks to the Central Port. This huge investment has already received official support from the Polish government. The authorities have 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.

IN TOTAL: **49 MILLION TONS**
INCREASE: **+20,7 %**



HISTORIC ANNUAL RECORD

In 2018 the Port of Gdansk handled almost half of the goods transported through all Polish ports. It ended 2017 with a historic record of 40.6 million tons of goods handled – no Polish port had ever exceeded this barrier previously. In 2018 Gdansk broke its own record, with more than 49 million tons passing through its quays and terminals – an increase of 20.7% and the highest rate of growth in Europe.

- As a result of these dynamics and the volume of goods handled, the Port of Gdansk moved up from sixth to fourth position on the list of largest ports in the Baltic Sea, ahead of Klaipeda. The goal for 2019 is to advance to third position - says Łukasz Greinke, President of the Board of Port of Gdansk Authority.

To intensify cooperation with Asia, the Port of Gdansk has opened a representative office in Shanghai.

PORT GDAŃSK 
**4TH PORT ON
BALTIC SEA!** 





Photos by: Konrad Ciechanowicz & Kuba Kłos

PORT GDAŃSK



„The goal for 2019 is to advance to third position”

-Łukasz Greinke



Port of Gdansk Cargo Logistics S.A.

Comprehensive port services

Handling and storage
General cargo and bulk cargo
Import and export

For almost **30 years of market activity**. Services are performed on 7 quays located along both sides of the Martwa Wisła river:

- Węglowe
- Rudowe
- Administracyjne
- Oliwskie
- Wiślane
- Szczecińskie
- WOC

Certificate:



Maximum handling capacity of 6 million tons per year.

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

We offer transshipments: 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
- Coal, coke
- Dry bulk cargo as clinker brick, expanded clay aggregate, dolomite, feldspar and bentonite

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

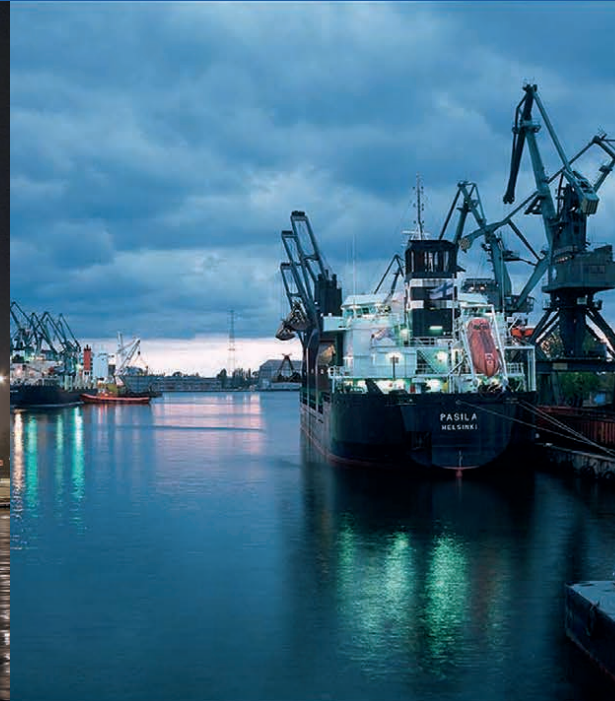
Experience is our strength.

www.pge.pl

Port Gdański EKSPLOATACJA S.A.
Roberta de Plelo 6, 80-548 Gdańsk, Poland
phone: +48 58 737 63 00, +48 58 737 64 20
e-mail: marketing@pge.pl, pge@pge.pl



EKSPLOATACJA
PORT GDAŃSKI





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 23,5 million tonnes per year, and in 2018 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 (803 871 TEU in 2018) 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.,
- HES Gdynia Bulk Terminal sp. Z o.o.
- 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.
Rotterdamka 9, 81-337 Gdynia, Poland
phone: +48 58 627 40 02, fax: +48 58 620 31 91
e-mail: info@port.gdynia.pl





PORT SZCZECIN-ŚWINOUJŚCIE

Port Szczecin Świnoujście S.A

The port complex Szczecin-Świnoujście is a universal and one of the largest Baltic port complexes. It is situated at the mouth of the Oder.

We are a very important element of an integrated transport system:

- element of TEN-T core network,
- element of TEN-T Baltic-Adriatic corridor,
- connection with the CETC corridor (Central European Transport Corridor) and the Scandinavian-Mediterranean Corridor,
- connection with a developed neighbourhood transport network.

Their excellent location makes the ports in Szczecin and Świnoujście the only ports in Poland with access to all environment-friendly branches of transport – maritime, inland via the E-30 road and railway via the CE-59 and E-59 road. In turn, the A11 and A20 motorways link them to the European system of motorways and national road no. 3 (E-65) provides a connection with the south of Poland, the Czech Republic and Slovakia, towards the south of Europe.

In Świnoujście, the southern port comprises a ferry terminal – a leader in ferry services to Scandinavia. The port in Świnoujście also accommodates a terminal dedicated mostly to the handling of dry bulk cargo such as grains, coal and ore. In turn, the northern port is an outer port with facilities for an LNG carrier service. The port in Szczecin handles both general cargo – including containers, metallurgical products and oversized cargo – and bulk cargo – dry and liquid. In addition, both ports offer handling and storage services for agricultural and food products. The total annual turnover in both ports is almost 29 million tonnes.

The ports are administered by the Management of the Szczecin and Świnoujście Seaports Authority SA – owned by the State Treasury. The Management of the Port, pursuing an active investment policy, bravely reaches for EU grants, which makes it a leader in that respect in West Pomerania. The tasks completed in the Szczecin-Świnoujście port complex in 2007-2020 will be worth nearly EUR 500million.

The Szczecin and Świnoujście Seaports Authority SA encourages investors to finance, build and operate their own terminals and to create port supporting industry. The parties concerned are provided with infrastructure allowing access both from the water and land and with technical facilities. The ports have 140 ha of free space to be developed by future investors. They can rely on close cooperation with ZMPSiŚ SA at all stages of project preparation and performance. The land is allocated for long-term lease on preferential terms. Our mission is: creating convenient conditions for the development of the seaports in Szczecin and Świnoujście as the most universal port complex in the southern Baltic.

www.port.szczecin.pl

Zarząd Morskich Portów Szczecin i Świnoujście SA
70-603 Szczecin, ul. Bytomska 7, Poland
phone: +48 91 430 82 20
e-mail: info@port.szczecin.pl



PORT SZCZECIN-ŚWINOUJŚCIE



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 sites
- More than 15 different machines like: ship unloaders, grabs, stacker-reclimers, special cranes etc.

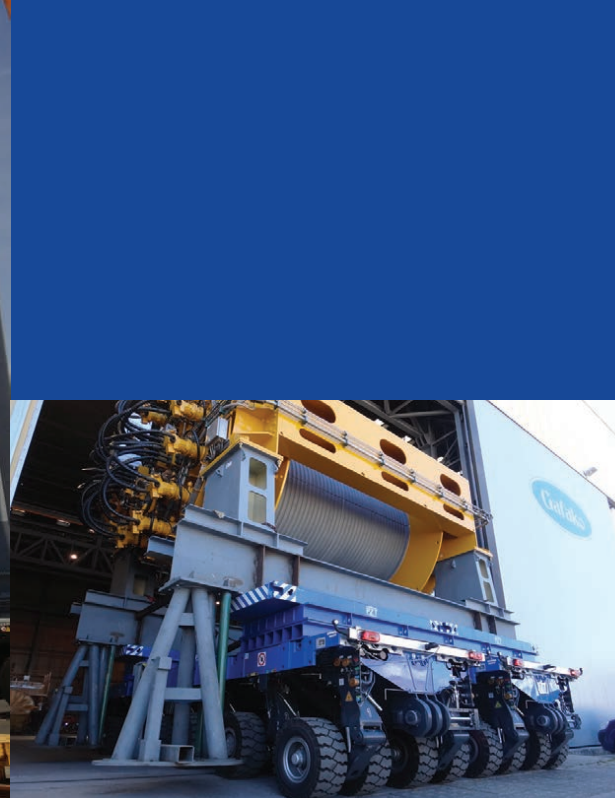
Company location at the port pier is a big advantage. PZT has an access to a heavy load pier area. There is more than 25,000 sqm of heavy load erection space next to the Danish Quay in Port of Gdynia.

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





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.

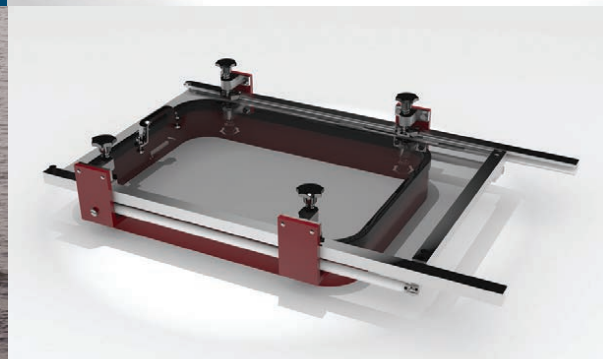
The principal business activity embraces:

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



SAFE Co. Ltd Sp. z o.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 super-structures 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





Sealab Sp. z o.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 - AutoSafe 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.

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e-mail: m.barski@sealab.com.pl, k.filipowicz@sealab.com.pl



SEALAB



Seatech Engineering

Our projects keep the highest standards of modern ships while respecting traditions of naval art.

Seatech Engineering Ltd was established in 2003 as a ship designing company with the main office in Gdansk and subsidiary in Szczecin.

Company profile

Our primary activities are focused on high-value-added projects of medium-sized vessels covering all disciplines of widely understood naval architecture: scientific ships, fishing vessels, ferries, LNG carriers and bunkering vessels, Navy and Patrol Boats or inland navigation ships.

Besides developing its own designs, Seatech Engineering cooperates with shipyards during production processes for new buildings and also supports repair yards in the entire process of retrofit (from feasibility studies and 3D scanning, to workshop documentation and on board supervision).

Scope of activities

Initial design and Concepts – Arrangements, 3D visualizations, hull lines preparation, power predictions, weight balances,

Basic and Class approval designs – hull structures with FEA analysis; piping systems diagrams with flow calculations, closed spaces and deck arrangements; equipment procurement process,

Workshop documentation – steel and aluminum structures with lofting files and bending templates; full coordination of equipment, pipe routing, HVACs and cable trays with production documents as spools or ISOs,

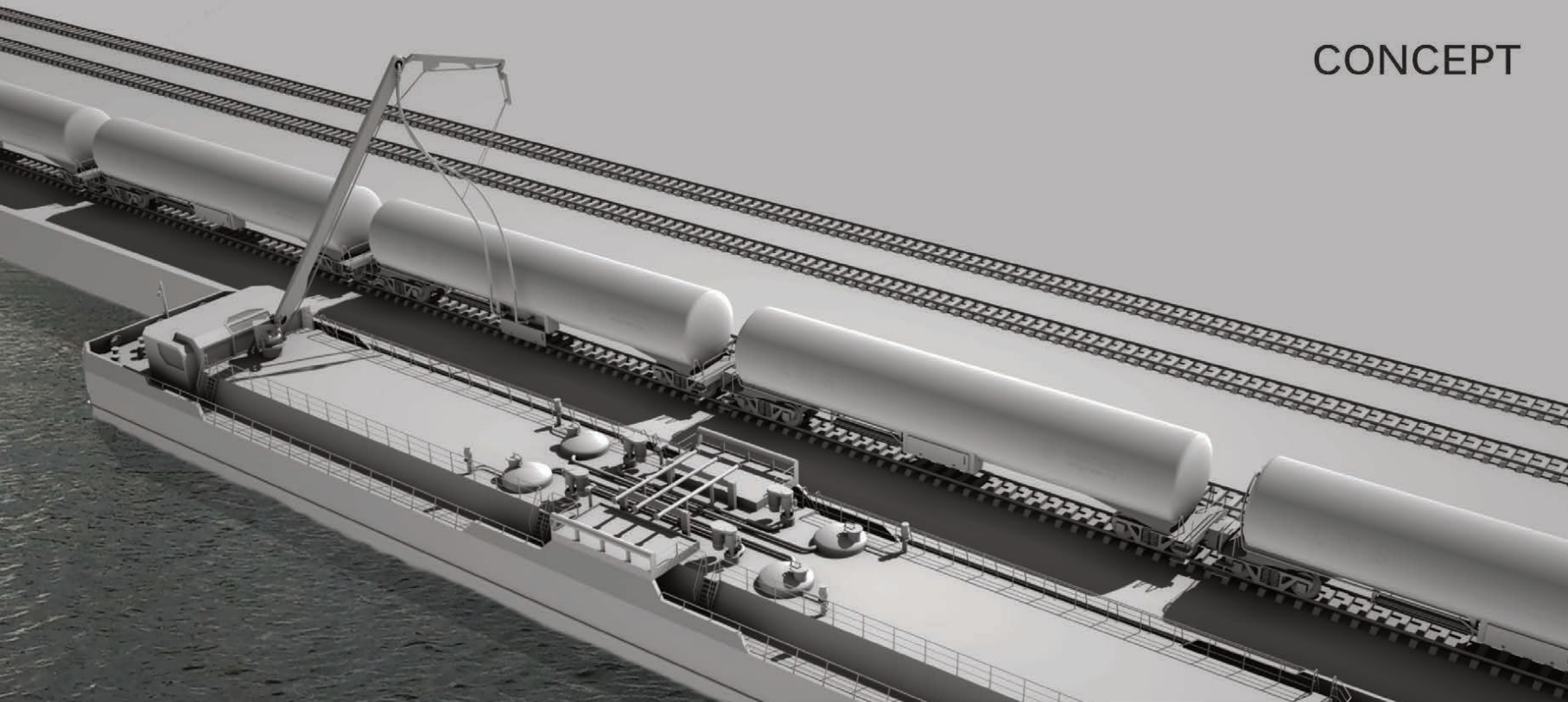
Retrofits scanning and project,

On-board inspections and yard supervising,

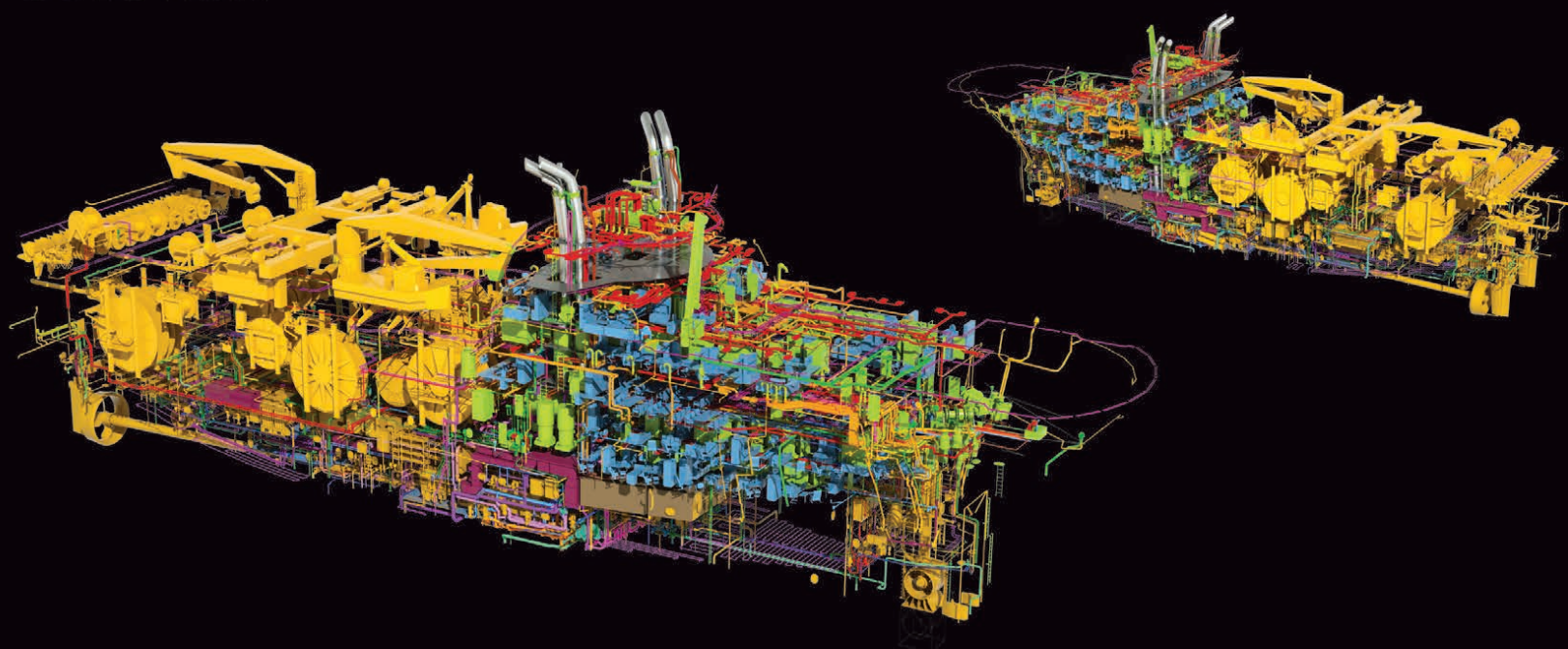
Brokering and consulting.

Main designing tools

- Cadmatic
- Aveva Marine
- 3D Experience
- Rhinoceros
- OctaneRender
- NAPA
- Autodesk (AutoCAD, Inventor)
- GeniE
- Nauticus Hull, Mars 2000



SOLUTION



IMPLEMENTATION





Foundation for Safety of Navigation and Environment Protection Ship Handling Research and Training Centre - Ilawa, 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 pilots from 40 countries were trained at Ilawa Centre. The Foundation for Safety of Navigation and Environment Protection, being a non-profit organisation, is reinvesting all spare funds in new facilities and each year to the existing facilities new models and new training areas were added. Existing training models each year are also modernised, that's why at present the 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 research programmes covering different problems of manoeuvrability (including human effect, 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 Ilawa 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.ilawashiphhandling.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@ilawashiphhandling.com.pl



SHIP HANDLING
RESEARCH AND TRAINING
CENTRE



ILAWA - POLAND





SIARK-PORT Sp. z o.o.

Effective in cargo handling.

Siark-Port Cargo Handling Company was established in 1991. The company offers services in handling of dry and liquid bulk cargo, as well as break bulk cargo. Siark-Port operates on the OPP berth with a length of 275 m and draft of 10.20 m. In addition, it has 65 000 sq m of storage yards. Last year, Siark-Port had the annual turnover of 1.7 million tonnes and handled cargo from more than 200 vessels.

Efficient technology for bulk load unitization

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. Through the use of load unitization method our customers can benefit from:

- avoiding contamination of the load,
- lowering the risk of cargo dampness,
- maintaining high quality of the cargo (quality is the same as it was in the vessel holds),
- transformation of bulk cargo into units (big-bags) that are easy to transport and distribute.

“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 5000 sq 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 handling cargo from vessels 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.”

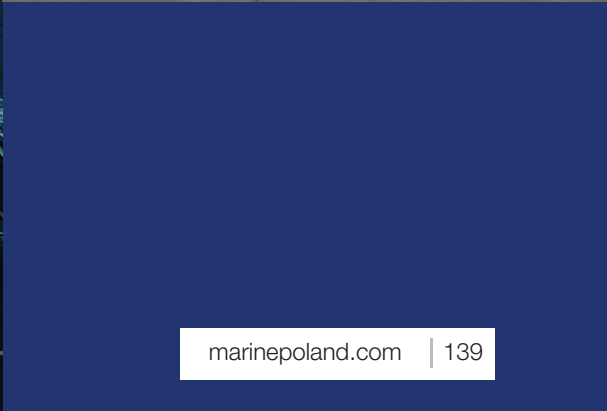
www.siark-port.pl

Siark-Port Przedsiębiorstwo Przeladunkowo-Uslugowe
80-561 Gdańsk, Pokładowa 7, Poland

phone: (58)-343-62-23

e-mail: biuro@siark-port.pl

Sales & Planning 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

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Stocznia Gdańsk S.A.

Stocznia Gdańsk SA is globally known as a ship manufacturer. In its over 70-year history, it has built over 1000 sea vessels of various types and applications for shipowners from around the World. Located in Gdańsk on the left bank of the Martwa Wisła and on Ostrów Island, gave birth to the NSZZ "Solidarność" and hosted numerous historical events like in December 1970 or August 1980.

In 2018 the state owned company – Industrial Development Agency JSC, a company under the supervision of the Prime Minister of Poland acquired from the previous owners the stock in Stocznia Gdańsk S.A. and shares in her sister company GSG Towers sp. o.o.

For both companies, implementation of the development strategy established by the owners meant not only the stable operation of the entities, but also constitutes big chance for the specializations, resulting from the analysis of market needs. This required investment, including computerization and robotisation of the plants, that are now being performed.

Gdańsk Shipyard and GSG Towers are ready to be involved in the projects in the field of broadly understood shipbuilding, offshore (oil, wind & gas) and wind energy. The possession of the largest production hall in Central and Eastern Europe with an area of over 6.5 ha, a well-equipped flat section line and a special line for the construction of wind towers, results in unabated interest from the potential customers.



www.gdanskshipyard.pl

Stocznia Gdańsk S.A.

80-873 Gdańsk, ul. Na Ostrowiu 15/20, Poland

phone: +48 58 769 16 00

e-mail: m.grajewski@gdanskshipyard.pl



Stocznia Gdańsk S.A.





StoGda Ship Design & Engineering

StoGda Ship Design & Engineering is a design company whose activity concentrates both on sea market, where ship and offshore structures are designed, as well as on onshore market, where industrial structures, installations and natural gas compression stations are designed.

StoGda was established in 1997 by former employees of the Gdańsk Shipyard's Design Office.

StoGda has completed contracts with partners from all continents. Ships and other objects designed by StoGda can be met all over the world. StoGda's outstanding values are **quality, on time delivery, innovation** and **fair** business practices. The company attaches great importance to the friendly atmosphere at the office and mutual trust in contact with the clients.

StoGda provides wide range of **design services** in the fields presented on StoGda's World:

- shipbuilding
- conversions
- offshore vessels and objects
- offshore structures
- onshore objects

StoGda was involved in **the most important** ships and floating objects built in Poland within last ten years. For those projects StoGda provided design services, including project development and engineering.

Starting from a series of **jack-up vessels** employed to build the offshore wind farms:

- **THOR** – Jack-up Platform – first jack-up object built in Sea Baltic region.
- **INNOVATION** – Heavy Lift Jack-up Vessel – the most technical advanced and sophisticated vessel in the world that time.

- **VIDAR** (present VOLE AU VENT) – Wind Turbine Installation Vessel – for this project StoGda got award **INNOVATIVE PROJECT**.

Participation in those projects has allowed us to gain unique **experience**, which does not have too many design offices in the world.

Next, **floating technical objects**:

- **ZOURITE** – Heavy Lift Jack-up Barge with the biggest gantry crane installed on the floating object. The barge was a floating tool for load-out, transport and laying viaduct foundations for a 5.4 km long road bridge running along the offshore coast of La Reunion Island located in the Indian Ocean.
- **MARCO POLO** – modern floating dock that was serving as a building stand for concrete caissons to become the part of expanded land of Monaco.

And finally, **battery driven ferries**:

- **ELEKTRA** – double ended car and passenger ferry. She was the second battery ferry in Europe, first battery ferry in EU, first battery car ferry in Europe and first battery ferry charged directly from the onshore power grid. ELEKTRA got award **SHIP OF THE YEAR** in 2018, StoGda got award **INNOVATIVE PROJECT** for this project and Owner, Building Yard and StoGda got one common award for **SIGNIFICANT TECHNICAL ACHIEVEMENT**.
- **HERJÓLFUR** – car and passenger modern ferry RoPax type with lane capacity 340 m and 540 passengers.

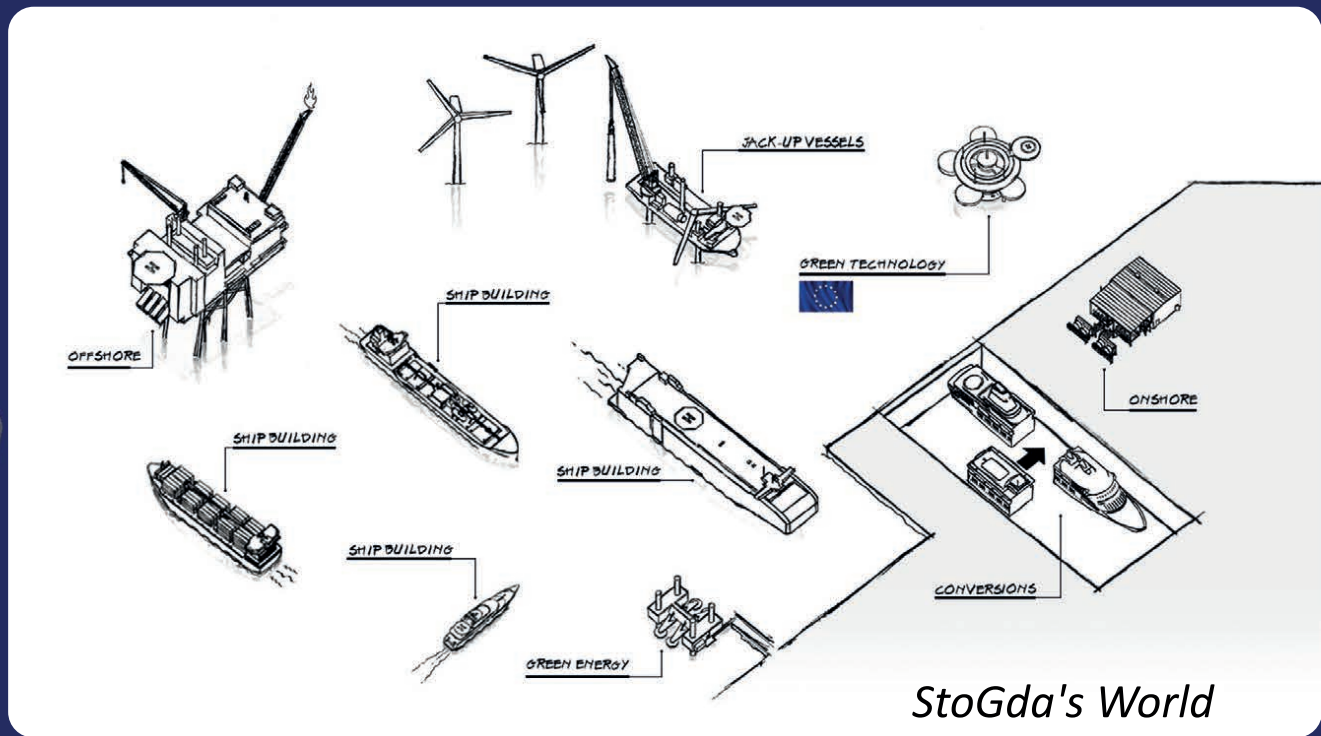
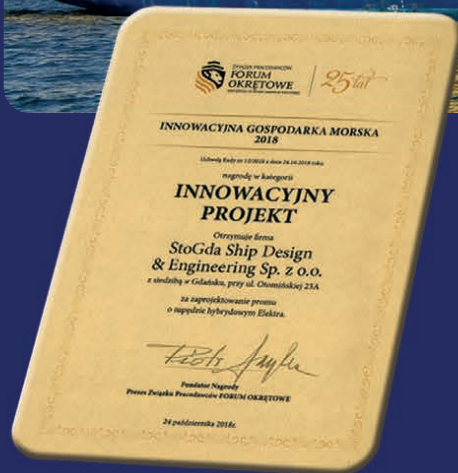
StoGda is also successful designer of economic and ecological **chemical tankers** built in China.

More information about StoGda: www.stogda.pl

www.stogda.pl

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"SHIP OF THE YEAR"
Marine Propulsion Awards 2018



StoGda's World



2013

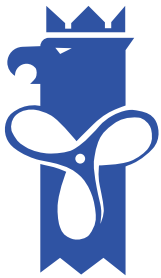


2018



2019





Szczecin Shipyard

Szczecin Shipyard has the character of a compact shipyard which has grouped specialized production centers that implement the entire technological process of shipbuilding.

At the shipyard we build:

- coasters,
- cruisers,
- large-size steel constructions,
- chemical tanker ship,
- oil tankers ships,
- research vessels,
- offshore vessels,
- passenger ships,
- technical floating vessels,
- build carriers ships.

Tradition and high quality characterizes us. The Szczecin Shipyard has always been characterized by high standards of construction solutions and technology. Szczecin Shipyard has 46 hectares of production areas located in the north-eastern part of Szczecin (including over 80,000 thousand m² of production halls and 10 hectares of yard). The 750 m long wharfs are equipped with cranes with a lifting capacity of 16 to 50 tons.



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.

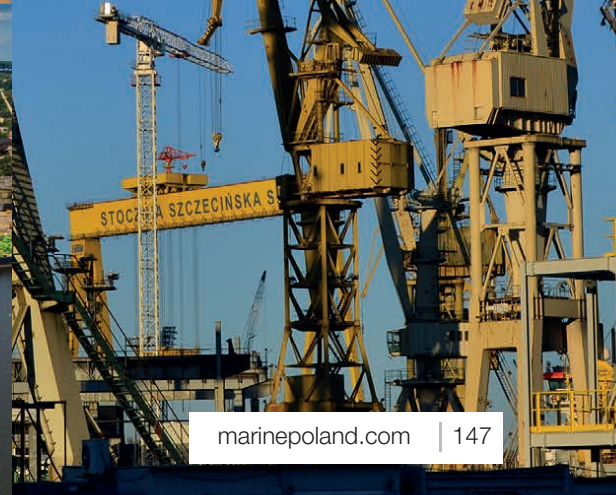
The Szczecin Shipyard is adjusted for shipbuilding through out the infrastructure, organized under stream - center technological chains with prefabrication halls, with incline cranes and wharfs terminal equipment. The largest of the ramps, the New Volcano, is 266 m long, 39 m wide and is equipped with a crane with a lifting capacity of 450 tons. It also has the option of going on a pier over the reservoir. Szczecin Shipyard has an integrated Quality Management System based on ISO 9001: 2015, OHSAS BS 18001: 2017 and NATO publications AQAP 2110: 2016. This system is certified by RINA and DNV GL classification societies, which gives customers confidence in the services offered and provided in the field of projects related to the construction and repair of vessels.

www.stocznia-szczecinska.pl





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STOCZNIA
SZCZECIŃSKA



TechWind MarineLifts

PASSENGER LIFTS	CARGO LIFTS	SOLUTIONS FOR DISABLED PEOPLE	ESCALATORS TRAVELATORS
 <p>Design</p>	 <p>Delivery</p>	 <p>Assembly</p>	 <p>Service and maintenance</p>

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

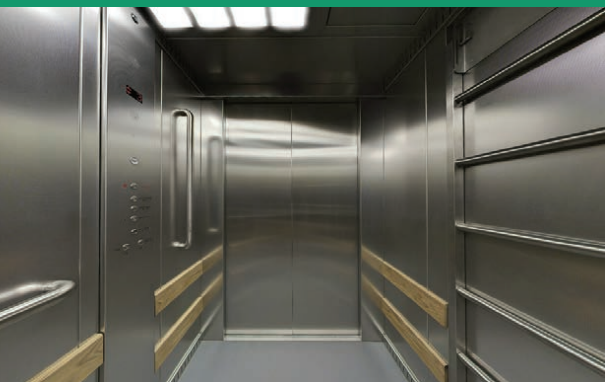
TechWind MarineLifts - Jan Rutkowski
 Dąbrowa 6, 80-297 Banino, Poland
 phone: +48 (58) 684 86 19, fax: +48 58 684 86 17
 e-mail: office@marinelifts.eu



TECHWIND



MARINELIFTS





TELEYARD Sp. z o.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 experienced 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

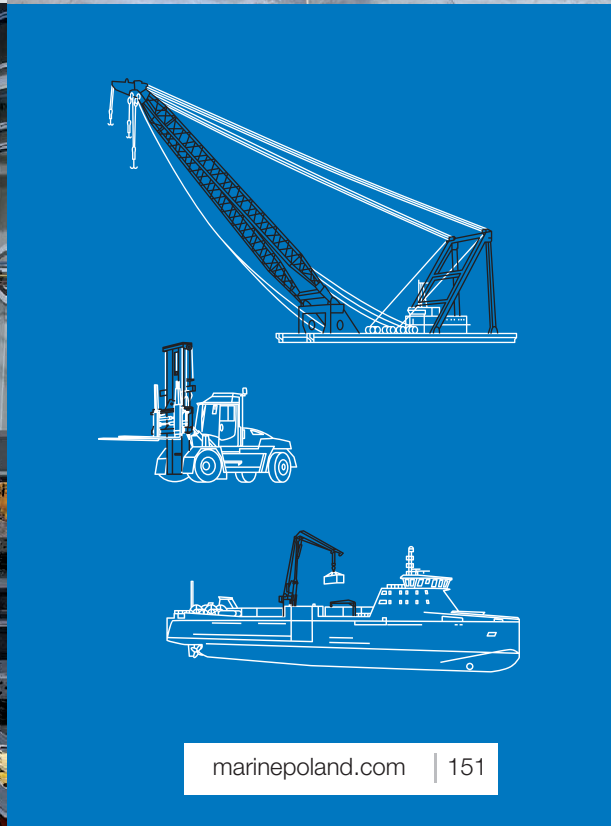
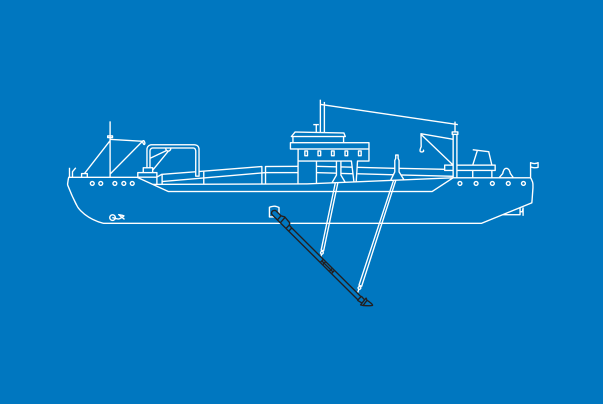
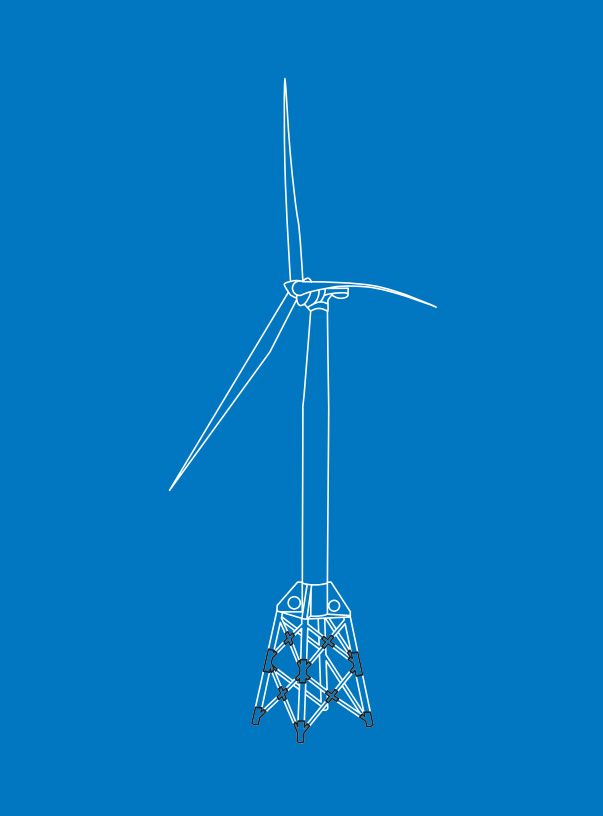
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Index of company presentations

	Alkor Sp. z o.o. page: 38		HYDRO-NAVAL Spółka z o.o. page: 76		Polski Rejestr Statków page: 114
	AN-ELEC page: 40		INTERMARE page: 78		Pomorska Strefa Ekonomiczna page: 116
	Baltic Control Poland Ltd Sp. z o.o. page: 42		InvestGDA page: 80		Port of Gdansk Authority SA page: 118
	BOTA page: 44		Invest in Pomerania page: 82		Port of Gdansk Cargo Logistics S.A. page: 120
	Bulk Cargo – Port Szczecin Sp. z o.o. page: 46		Kancelaria Radcy Prawnego page: 84		Port of Gdynia Authority S.A. page: 122
	C.HARTWIG Szczecin page: 48		Marine Projects Ltd. page: 86		Port of Szczecin Authority S.A. page: 124
	CEMET page: 50		MOSTOSTAL pomorze page: 88		PZT - Portowy Zakład Techniczny page: 126
	CRIST page: 52		MSR Gryfia page: 90		PROMAP Ltd. page: 128
	DAMEN page: 54		Muehlhan Polska Sp. z o.o. page: 92		SAFE Co. Ltd Sp. z o.o. page: 130
	DCT GDAŃSK S.A. page: 56		NAFTOPORT Sp. z o.o. page: 94		Sealab Sp. z o.o. page: 132
	Elektro-Plus page: 58		Shiprepair Yard "NAUTA" S.A. page: 96		Seatech Engineering page: 134
	ELPO Firma Usługowa page: 60		Navy-San LLC page: 98		Ship Handling Research and Training Centre at Ilawa page: 136
	Energomontaż-Północ Gdynia S.A. page: 62		NED Project page: 100		SIARK-PORT Sp. z o.o. page: 138
	Escort Sp. z o.o. page: 64		NGL Machining page: 102		ST³ Offshore page: 140
	FAMA Sp. z o.o. page: 66		Officer Training Centre of Gdynia Maritime University Ltd page: 104		Gdańsk Shipyard page: 142
	Famor - innovative solutions page: 68		OKMARIT LTD. page: 106		StoGda Ship Design & Engineering page: 144
	FAST S.A. page: 70		Pałasz Marine Projekt page: 108		Szczecin Shipyard page: 146
	Gdynia Maritime University page: 72		POLFERRIES Polska Żegluga Bałtycka page: 110		TechWind MarineLifts page: 148
	Havyard Design & Engineering Poland Sp. z o.o. page: 74		Polska Żegluga Morska page: 112		TELEYARD Sp. z o.o. page: 150



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