M NEWS
MARTIFER GROUP

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MARTIFER
GROUP

SUSTAINABLE VALUE CREATION

Environmental, social and governance issues only make sense if they are understood strategically and genuinely, avoiding greenwashing. Based on these assumptions, Martifer defined the Group's primary goal as SUSTAINABLE VALUE CREATION.

CHAIRMAN'S MESSAGE
Under uncertainty and hard-to-make predictions, it is important to assess the future well

INTERVIEW
Carlos Costa, Executive Board Member - Martifer Group

OPINION
Andreia Carreiro, Director of Strategic Innovation at Cleanwatts

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Sustainable value creation

> If you have only just heard about us, we would like to introduce ourselves. We are Martifer Group, and we have just turned 33. We are in 12 countries with three business areas: metallic constructions, naval industry and renewables & energy.

Hello!

This is our new edition of our MNews magazine! We want to share with you what we have been doing and what we want for the future.

If you have only just heard about us, we would like to introduce ourselves. We are Martifer Group, and we have just turned 33. We are in 12 countries with three business areas: metallic constructions, naval industry and renewables & energy. Today, the Group has a very competent team that works with clear and measurable objectives, using tools and methods that allow us to look to the future with the certainty that we have the installed capacity and development potential to project growth in the coming years.

The adverse pandemic context was a huge challenge, adding volatility and uncertainty. We must be very attentive, maintain focus, consistency and coherence and continue to work as a team with rigour and commitment.

In this edition, we present a message from our Chairman, Carlos Martins, who talks about the importance of assessing the future in a scenario of uncertainty and hard-to-make predictions.

Pedro Duarte, our CEO, highlights the start of 2023 with the award of important projects, some of them in the United Kingdom, a country that has had to adapt itself to Brexit, and he highlights the path of consistency and solidness that the Group has been taking in recent years, giving us an optimistic outlook for the future.

Pedro Moreira, our CFO, tells us about the Group's position regarding sustainability issues, a theme present throughout the magazine; he defines Sustainable Value Creation as the main goal.

In Preparing the Future we address the topic of Ship Repair, recognising its dimension and importance in the naval industry area.

In Focus, we pay a visit to two countries: Poland and Angola. And, we get to know a little better our teams and Martifer's history in these countries, all the challenges and achievements.

Also, in this edition, we interview Carlos Costa, an Executive Board Member of the Group. He has been at Martifer for 25 years. His past is almost intertwined with Martifer's history. He led several teams and participated in the beginning of the company's journey in different countries. In an interview, he shows us his vision and the Group's strategy in the context of today's challenges and demands.

And finally, we present what we have done in our different business areas.

We hope you enjoy this fantastic visit to Martifer's world. We may be biased, but...

UNDER UNCERTAINTY AND HARD-TO-MAKE PREDICTIONS, IT IS IMPORTANT TO ASSESS THE FUTURE WELL

The year 2022 will be marked by war in Europe, with its focus on Ukraine, but it is between Russia and the West, and a 10% inflation. Two invoices are to be paid in the near future. This war will consume the resources needed to reconstruct infrastructures and housing and, at the same time, for greater investment in re-equipping the Armed Forces. Trust between the various economic powers is at its lowest level since World War 2. Inflation will lead to an exponential rise in interest rates. And for countries, companies and families, tough days lie ahead.

At Martifer, the year 2022 was one of the best ever. The financial results were very positive, the debt fell once again, and the order book to date allows us to face the next two years with peace of mind.

Being a milestone in Martifer Group's history, the year 2022 will be marked by successful exposure abroad through internationalisation with an industrial presence in the countries and through exports. I am referring to sales, operating results and dividends distributed by the associate companies. For the first time, Martifer does not feel foreign in these countries (Spain, France, the United Kingdom, Angola, Mozambique, Saudi Arabia, Poland and Romania), operating on equal terms with its local competitors.

Under uncertainty and hard-to-make predictions, it is important to assess the future well.

In 2023, we will work on the new strategic plan for the 2024-2027 three-year period, which should be based on fundamental vectors:

1. Grow, assessing markets and giving priority to the countries where we already operate

2. Grow in sales, preferably organically, favouring areas related to energy transition and circular economy

3. Grow, maintaining the trajectory in debt reduction

4. Grow, by being attentive to the opportunities that the market may make available

5. Grow, with the objective of creating

> "We are a mature, experienced and very competent team. If we stay aligned and focused on Martifer's values, I am sure we can approach the future optimistically."

CARLOS MARTINS
Chairman

> “Throughout the last years, we have managed to create the bases of technical, operational and financial robustness capable of giving the best answers to the greatest market challenges in which clients and suppliers, the management team, shareholders and other stakeholders recognise that our Martifer will continue to thrive privileging the most significant values to maintain the trust already earned.”

value while focusing on the profitability of sales

6. Grow, giving opportunities to our talent to develop our professional careers

7. Grow, in line with the best ESG (Environment, Social and Governance) practices

Throughout the last years, we have managed to create the bases of technical, operational and financial robustness capable of giving the best answers to the greatest market challenges in which clients and suppliers, the management team, shareholders and other stakeholders recognise that our Martifer will continue to thrive privileging the most significant values to maintain the trust already earned. We are a mature, experienced and very competent team. If we stay aligned and focused on Martifer's values, I am sure we can approach the future optimistically.

Have an excellent 2023!

2023 STARTED OUT WITH GREAT NEWS FOR MARTIFER

The year 2023 started out with great news for Martifer. We signed contracts worth 120 million Euros, including the biggest ever contract for metallic structure works - the construction of viaducts for the HS2 high-speed rail project in the United Kingdom - and the first contract for the construction of a refrigerated Ethane tank with a 197,000 m3 capacity

to be executed in Belgium for the German company TSE.

Finally, our most significant investment in the last decade - the construction of a new dry dock at our West Sea shipyard in Viana do Castelo - was given the green light.

This is the result of a clear path of consistency and solidness that the Group has been following in recent years, and that directs us towards organic growth, strengthened by the organisational stability that we have favoured, thus deserving the trust of a variety of clients. Our Business Areas and the various countries where we operate are beginning to consistently "pay off", namely the strategy reformulation and

PEDRO DUARTE
CEO

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> In this edition, we also highlight the role of our Geographies as an indispensable factor for the Group's matrix, i.e. for its export and internationalisation profile. More than 85% of our Turnover already relates to exports and projects outside Portugal.

the team rejuvenation. If we manage to execute our budget this year, it will be Martifer Group's 7th consecutive year having positive results and reinforcing its balance sheet, which safely allows us to approach the new 2024-2027 strategic plan with redoubled ambition and determination, but also with the maturity of those who know well the path that has brought us here.

In this edition of our MNews magazine, we highlight the theme of Sustainability as a determining path for our future and one which we cannot avoid. For the Opinion article, we invited Andreia Carreiro, who was recently awarded the European Sustainable Energy Award 2022 in the Woman in Energy category. She highlights the importance of Renewable Energy Communities (RECs) as a factor of company competitiveness. It is because we are aware of this that in 2020 we took the first steps when we signed the protocol with several reference companies in Viana do Castelo, with the endorsement of the City Hall, to materialise the first REC in the Neiva Industrial Area, whose materialisation is taking the necessary steps with the natural speed that these precursor projects have. This is also why we finished our first Small Production Unit (SPU) this February. A SPU is an installation with a maximum connection power of 1 MW based on a single technology (in our case, Solar). All the electricity produced is sold to the Public Service Electricity Grid. And, we will also finish the first Collective Self-consumption Production Unit using dynamic coefficients to optimise energy sharing for Martifer's industrial and office facilities in Oliveira de Frades in the first semester of 2023. This will allow more than 35% of our consumption to come from renewable sources, consequently contributing to our commitment to reducing our carbon footprint.

In this edition, we also highlight the role of our Geographies as an indispensable factor for the Group's matrix, i.e. for its export and internationalisation profile. More than 85% of our Turnover already relates to exports and projects outside Portugal. We visited the extraordinary work being done in Poland - in the Renewables & Energy Business Area - and Angola - in the Metallic Constructions Area - and we talked to our teams.

Finally, two interviews need to be read. Carlos Costa and Santos Lima give us an impressive account of their professional careers and their vision for the businesses they lead. Two managers who have already given a lot to our Group and who symbolise the maturity that we have today and the way in which we intend to pass on their knowledge and the company's culture to the younger generation.

So, we have good reasons to be optimistic about Martifer Group's future.

> Companies should view ESG strategically and genuinely, avoiding greenwashing. Based on these assumptions, Martifer defined the Group's main goal as SUSTAINABLE VALUE CREATION.

PEDRO MOREIRA
CFO

SUSTAINABLE VALUE CREATION

The ESG topic has been gaining relevance in the media space in recent years. The European legislation will continue to serve as a catalyst for regulating these issues in the Portuguese legal system, making the topic unavoidable in organisations and, in particular, in companies.

Companies should view ESG strategically and genuinely, avoiding greenwashing. Based on these assumptions, Martifer defined the Group's main goal as SUSTAINABLE VALUE CREATION. This concept refers to the combination of financial and non-financial objectives and targets connected to Environmental Sustainability, Social Responsibility and Governance, and the alignment of the Strategy with the Sustainable Development Goals of the United Nations Agenda 2030.

As far as Governance and Compliance policies, culture and processes are concerned, the Group has paid particular attention to these issues, as can be confirmed in the Corporate Governance and Sustainability Reports. Examples of this are the adoption and acceptance of the Portuguese Corporate Governance Institute's best practices, the Gender Equality Plan, the Code of Ethics and Conduct, and the representation of gender diversity in the composition of the

Corporate Bodies and the Coordinating Departments.

In the Social dimension, the continuous improvement of working conditions, work-life balance, continuous training and the development of a culture of meritocracy have been fundamental in the Group's recent evolution. Examples of this are taking time off to attend pre-natal appointments, providing and improving office facilities for breastfeeding mothers and the annual "Atreve-te" internship programme with integration routines, allowing new talents to be identified and retained. At the same time, priority has been given to supporting local community development projects, promoting the values of solidarity and citizenship.

Environmentally, the targets intrinsic to the Paris Agreement on climate change are particularly challenging. The Group is aware of the energy transition challenges and the goals of decarbonisation of the economy, and it has been promoting renewable projects for self-consumption, being a pioneer in renewable energy communities of an industrial nature. The Group is also present in the commitment to Hydrogen as an alternative for reducing CO2 emissions through the GreenH2Atlantic Consortium, maintaining its attention to adjacent opportunities, namely "waste to power".

But the Group's main strategic asset, both at the ESG level and in its risk policy, is that it already has a favourable balance in terms of CO2 emissions - "net zero emissions". In fact, through the green energy it produces from renewable sources, the Group avoids CO2 emissions higher than those it emits, namely in its industrial units. This fact is very relevant not only in terms of environmental sustainability but also in strategic terms since it constitutes a natural hedge against the volatility seen in energy prices and in terms of Sustainable Finance - an increasingly relevant topic for investors, financiers and clients.

In the next few years, the ESG challenges will be significant for organisations, and Martifer Group will be no exception. So, it will be crucial to foster policies and procedures on these issues through the ESG & Sustainability Committee and, above all, to allow the consolidation of SUSTAINABLE VALUE CREATION as the Group's main strategic goal.

"But the Group's main strategic asset, both at the ESG level and in its risk policy, is that it already has a favourable balance in terms of CO2 emissions - "net zero emissions". In fact, through the green energy it produces from renewable sources, the Group avoids CO2 emissions higher than those it emits, namely in its industrial units. This fact is very relevant not only in terms of environmental sustainability but also in strategic terms since it constitutes a natural hedge against the volatility seen in energy prices and in terms of Sustainable Finance - an increasingly relevant topic for investors, financiers and clients."

SHIP REPAIR WITH RECOGNISED QUALITY OF WORKMANSHIP

Interview with António Santos Lima, Director of Ship Repair at West Sea

WHAT IS THE USUAL SHIP REPAIR PROCESS, FROM THE AWARD PHASE TO THE DELIVERY TO THE SHIPOWNER?
A typical repair with docking goes through the following phases and tasks:

Preparation of dock blocks, filling up the dock, docking the vessel on the blocks, pumping the water out from the dock; washing the hull with a high-pressure fresh water jet; inspection to define the surface treatment work; gritblasting or disc/sanding, depending on the extent of the hull / painting condition; opening, cleaning and treatment of the sea chest and bow thruster tunnel; eventual replacement of plates and bilge keels; painting scheme according to the specification; repair of bottom and overboard valves; measurement of shaft and rudder clearances, for repair if measurements are out of admissible limits; Wash and calibration of anchor chains; replacement of cathodic protection anodes.

Simultaneously, structural or light steelwork is being carried out in the ship; repair of machinery, pumps and electric motors; replacement of pipework; cleaning, namely of the ballast and fuel tanks, etc.

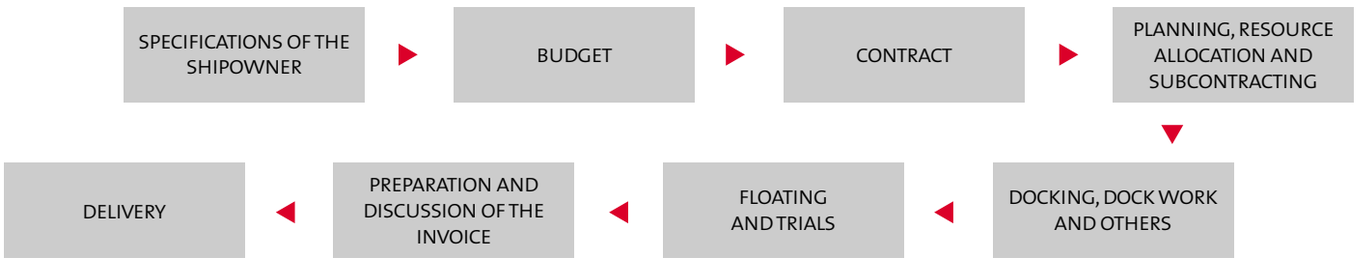
WHAT ARE THE MAIN DIFFERENCES BETWEEN SHIP REPAIR AND SHIPBUILDING?
Despite being jointly called shipbuilding industries and having some aspects in common, Shipbuilding and Ship Repair are very distinct sectors, even though they use identical facilities and technologies and professionals with the same qualifications. Shipbuilding produces goods, ship repair provides services.

Shipbuilding is a complex, work-to-order process, resulting in a wide variation in workload, with alternating periods of excessive load and unproductive periods, which is very penalising for an industry with high fixed costs.

With an extended duration of two to three years, planning, coordination and control of deadlines and costs is mandatory and demanding.

Access to funding is a key competitive factor, as the provision of credit to clients is, in addition to price, a decisive factor for shipowners in selecting shipyards. Its facilitation by some European countries, namely Germany, the Netherlands and Spain, has been a way to circumvent the EC ban on direct aid, which is not the case in Portugal.

TYPICAL FLOWCHART OF A REPAIR



European shipbuilding, which dominated more than 80% of the market until the 1980s, now accounts for around 6% of the global order book and 19% in value, as it focuses on higher-technology, higher-value-added vessels such as cruise and military ships, the only ones it can still compete with. Asia builds 80% to 90% of the world's vessels, a situation that has driven many European shipyards out of business.

For Shipbuilding, a high-cost activity producing high unit value and often unique units, location is not relevant. Travel costs from the construction site to the routes where the ships will operate are insignificant in relation to the total construction cost.

Competing with competitors from countries with cheap labour on current trade vessels is not feasible, so the only possible strategy for success will be to focus on a differentiated market niche, offering products such as more technically advanced cruise ships and military vessels.

Ship Repairs, mostly routine, are of short duration, around 2 or 3 weeks. However, major repairs, such as structural steel replacements, remotorisations and transformations of various types, of long duration, also occur in smaller numbers. It requires equal or even greater technological capacity, due to the use of equipment that is only installed during construction, and great flexibility. Also, the ability to improvise and adapt to the different types of vessels and the constant changes that arise during the course of the work, due to unexpected situations and/or the requirements of the Ship Classification Societies. On the other hand, it requires less programming and less, or no, funding. Additionally, repair has a much simpler structure compared to the shipbuilding needs. This is a favourable factor of great importance.

In Repair, the overall context is very different and positive. The value of the global market, which in 2020 was valued at USD 22,270 million, is expected to reach over USD 44,000 million in 2031, with Europe accounting for 20% of this value.

For the Repair activity, location is important and is always a crucial factor for the choice of the repair shipyard, in particular for mandatory routine repairs.

The privileged location in relation to the main shipping routes is a very positive factor for Portuguese shipyards, although there are countries in the Baltic and Black Sea with very competitive prices, namely Turkey, which already has 10% of the world repair market, just after China. Nonetheless, for higher volume repairs, namely with large quantities of structural steel, competition from those countries is strong, and many ships are lost to those markets, which can compensate despite the detours. Even Portuguese ships have noticed Turkey.

The favourable climate, labour costs still lower than those of direct competition in Western Europe (which has been reducing and tends to disappear) and our recognised capacity for improvisation, which is a virtue in repairs, are also preponderant competitive advantages for the Ship Repair activity in Portugal.

It is an activity that will always exist in Europe, whether or not there are crises, whether or not there is globalisation, and whether or not there is a tendency to relocate economic leadership to Asian or other emerging countries. Thus, the prospects for this type of industry in Portugal are naturally encouraging, with competition being mainly European.

As maritime trade is the backbone of the world economy, with around 90% of goods being transported by sea, the shipping industry is heavily dependent on freight rates, which in turn depend on developments in the global economy.

“In Repair, the overall context is very different and positive. The value of the global market, which in 2020 was valued at USD 22,270 million, is expected to reach over USD 44,000 million in 2031, with Europe accounting for 20% of this value.”

WHAT COUNTRIES ARE OUR MAJOR CLIENTS FROM?
Our major clients come from Europe, namely Germany, the Netherlands, Belgium, Spain and Denmark.

WHAT TYPE OF SHIP REPAIR IS THE MOST PROFITABLE?
Dredgers, and chemical and liquefied gas vessels.

AND THE MOST CHALLENGING?
The type of ships mentioned above, due to the complexity and technology of the equipment and the demanding deadlines due to the costs of immobilising high-value freight ships.

WHAT ARE THE BIGGEST RISKS IN THE FUTURE OF SHIP REPAIR?
The possible changes in the international environment given the current great instability and unpredictable evolution.

WHAT MAKES A CLIENT CHOOSE WEST SEA?
The recognised quality of the workforce, the ability to meet deadlines and reasonable price competitiveness are factors that have led to the loyalty of important clients, which have guaranteed us a good occupation of the available resources and led to the decision to invest in a new dock that will allow us to enter the market for larger ships.

WHAT DO YOU FORESEE FOR THE COMING YEARS IN SHIP REPAIR? AND SHIP REPAIR AT WEST SEA?
This is an activity in which competition, unlike in shipbuilding, is mainly European, since location is decisive and therefore favourable, although there are relatively close countries, such as Turkey, with much lower prices that justify detours for larger repairs.

The lower risk and positive results led to the decision to strengthen this sector with the construction of a New Dock, of larger size and greater draught (220 m x 45 m x 7.5 m), now possible with the recent deepening of the access channel, allowing the repair of ships up to 60 000 DWT, which will increase the repair capacity, positioning West Sea as one of the most important shipyards in Europe in this area.

In the New Dock, we will be able to receive the most frequent types of ships we usually work with Dredgers, Chemical Vessels, LPG takers, Container Carriers, and General Cargo vessels, and also enter the market for Ferries and medium-sized Passenger Vessels, currently impossible due to draught limitations.

Based on the history of repairs at the current docks and taking into account that the average turnover per vessel will be greater due to the size, an increase in turnover of more than 50% can be expected.

> “The recognised quality of the workforce, the ability to meet deadlines and reasonable price competitiveness are factors that have led to the loyalty of important clients, which have guaranteed us a good occupation”

NEW DOCK

A PROJECT THAT WILL ENHANCE AND ADD ANOTHER DIMENSION TO THE WEST SEA SHIPYARD

The construction of a new dock will increase its production capacity, allowing it to receive larger ships from the traditional markets where it has operated until now, to allow it to continue the excellence of the service it has provided in terms of quality, speed of execution and incorporation of engineering solutions.

The project aims to improve access conditions to Bugio Pier and the shipyard, and it will stimulate industrial development and the local economy, as well as foster the creation of a competitive cluster in the Portuguese shipbuilding industry, increasing the competitiveness of the port infrastructure.

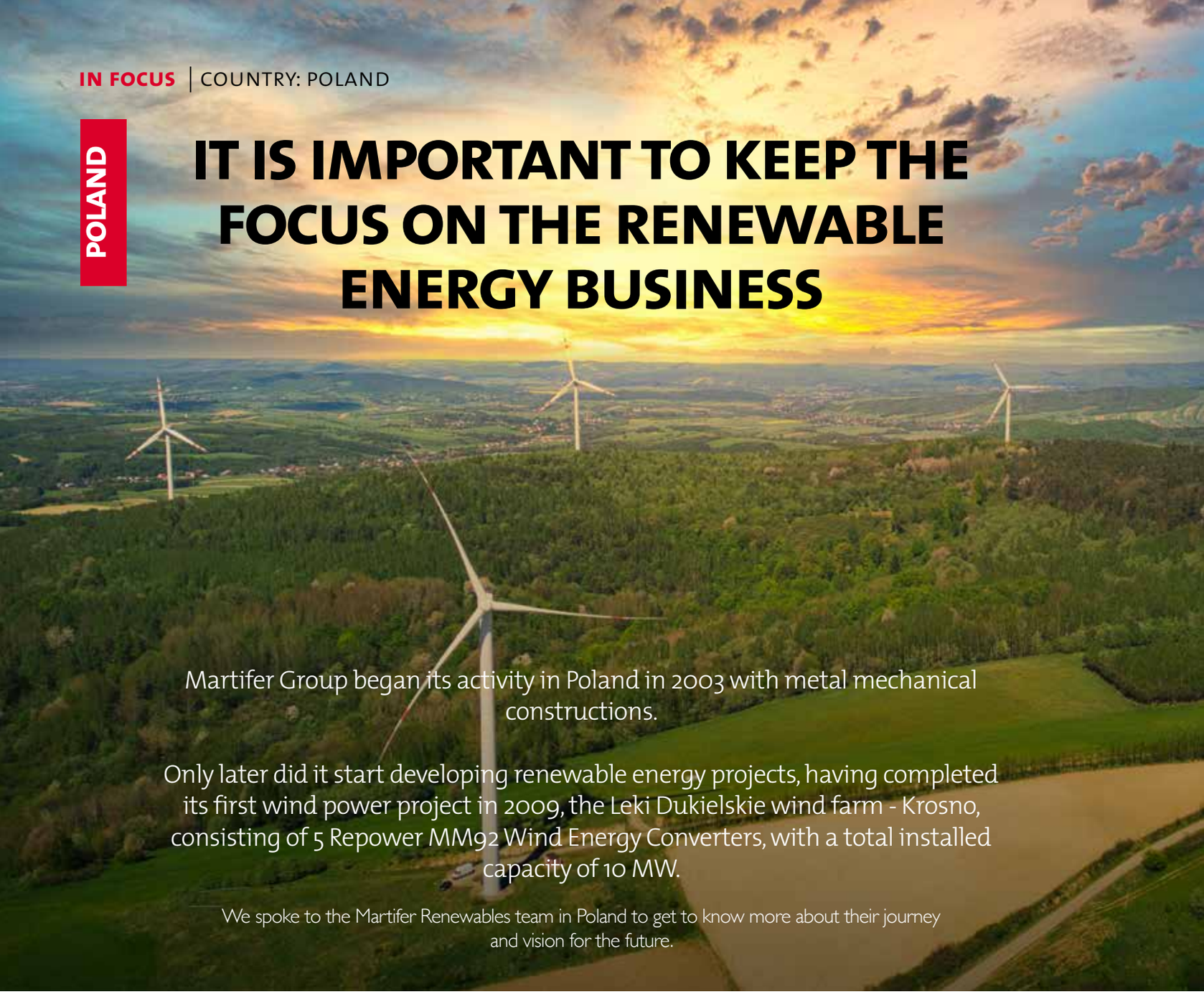
The project, which is included in the Strategy to Increase the Competitiveness of the Continent's Network of Commercial Ports – Horizon 2026, counts on the investment from APDL - Administration of the Ports of Douro, Leixões and Viana do Castelo of around 17.4 million Euros and a private investment from West Sea, which will build a new dry dock aligned with the Bugio pier, taking advantage of the old ramp.

The contract is to be executed in eight months and has an intervention area of approximately 190 thousand square metres. The new dry dock will allow the docking of vessels up to 220 metres long and 45 metres wide.

> "This dock will completely transform the structure of the shipyard. These shipyards are around 60 years old and this dock will create more comfortable production conditions and make ships of higher quality and more technologically advanced."

POLAND

IT IS IMPORTANT TO KEEP THE FOCUS ON THE RENEWABLE ENERGY BUSINESS



Martifer Group began its activity in Poland in 2003 with metal mechanical constructions.

Only later did it start developing renewable energy projects, having completed its first wind power project in 2009, the Leki Dukielskie wind farm - Krosno, consisting of 5 Repower MM92 Wind Energy Converters, with a total installed capacity of 10 MW.

We spoke to the Martifer Renewables team in Poland to get to know more about their journey and vision for the future.

After this first project, how has Martifer Renewables' journey in Poland been?
Following the construction of the Leki Dukielskie Wind Farm (10 MW), Martifer Renewables in Poland proved to be a credible company which works in project development and construction, and asset management. Martifer earned IKEA's interest, which resulted in the sale to IKEA not only of Leki Dukielskie but also of other wind projects - Bukowsko (18 MW), Rymanow (26 MW) and Gizalki (36 MW).

It was the beginning of a long cooperation that still lasts, with a worldwide known company that has made Martifer Poland more attractive for potential partners and clients.

What have been the most significant challenges over the years?
The most difficult period was when the Group faced financial problems. The renewable energy business requires significant financial means, and at that time, it was more complicated to find a strong partner that trusted Martifer's experience and financially supported the development of its new projects during those difficult years.

What projects stand out?
All renewable energy projects - no matter how big or small - bring many challenges, from fundraising and adapting to the ever-changing European and Polish legislation.

Another difficulty in Poland is the insufficient capacity of the grid, which often paralyses or completely prevents the development of some projects.

Another challenge is to find suitable plots of land in a country whose borders have changed over time as a result of World War 2, communism and reprivatisation.

A project that stood out was the Gizalki Wind Farm which was developed and sold during a severe crisis in the renewable energy business in Poland. Many other investors were fleeing Poland at the time, but Martifer continued its

> “A project that stood out was the Gizalki Wind Farm which was developed and sold during a severe crisis in the renewable energy business in Poland. Many other investors were fleeing Poland at the time, but Martifer continued its work with great resilience and successfully completed the project.”

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work with great resilience and successfully completed the project.

In Poland, Martifer can be proud of its team that has been working together since the beginning. The first Martifer employee - currently a Technical Director - started working for the company in 2005 and is still part of the team today.

How do you define the presence of Martifer Renewables in Poland at the moment?
After the completion of the Gizalki wind farm in 2013, Martifer Poland divided its focus between wind and solar projects. Its current project portfolio includes four PV parks in operation, plus two more under construction, which will be in operation by the end of the first half of 2023.

These projects already allow Martifer Poland to be financially self-sufficient.

Martifer Poland is synonymous with credibility, sustainability, and technical capacity and it has a strong and solid team with a long history together, which brings value to the Group.

How is the team structured?
The current Country Director of Martifer Poland is Kamil Tondos (he has been a member of the Polish team since 2008).

The team focuses on project development, asset management, construction management and operation and maintenance. Martifer Renewables in Poland also supports other business segments that remain in Poland.

Is Poland still an important country for the Group?
Poland is of great importance to Martifer Group, especially in the current political situation in Europe. The country needs to secure alternative energy suppliers and needs to become more self-sufficient and independent in terms of energy production, which creates more business opportunities.

With proven experience, a vast portfolio of wind and solar projects, and involvement in asset management and construction with major Polish commercial entities, Martifer is undoubtedly an asset to the Group.

What do you foresee for the coming years in this country?
Having a common border with Russia, Belarus and Ukraine, Poland cannot really predict its future as long as the war between its neighbours continues. It is impossible to clearly predict what might happen in the coming months or even years in terms of the country's security.

What we do know is that Poland, during the last 20 years, has been experiencing rapid and stable economic growth. Even the events of recent years (the pandemic and Russia's attack on Ukraine) have not dramatically slowed down Poland, which sends a positive message to Martifer Group. It is important to keep the focus on the renewable energy business, which is crucial for the country like never before.

ANGOLA

THE TRANSFORMATION OF THE ANGOLAN MARKET

The company has already participated in several reference projects in the country, such as airports, towers, office buildings, commercial buildings, bridges, viaducts, sports infrastructures, and shipbuilding, among others.

In Angola, Martifer has only one facility with two factories. A metallic structures factory with a total area of 12,000 sqm, with the capacity to produce 10,000 tonnes of metallic structures per year and a factory for aluminium systems with a total area of 5,000 sqm, with the capacity to produce 15,000 sqm of façade cladding per year.

The company has already participated in the construction of major projects in Angola, such as the Chevron headquarters, the Imob Building, the Fénix Tower, the Kilamba Tower, the Sodiba Factory, the Sonangol Distribuidora headquarters, the Glass Factory, the Multipurpose Arena, the Luanda, Namibe and Catumbela Airport Rehabilitation, the Kero Hypermarkets, the Unitel headquarters, the Financial City and more recently the GINGA.COM project, the Covid-19 Campaign Hospitals, the Cabinda General Hospital, the Soyo Naval Base, bridges, viaducts and Jackets.

We talked to the Martifer Angola team, to get to know more about its path and its vision for the future.

With a new management team since 2018, how do you define Martifer's presence in Angola at this moment?
We are alive. We had to reinvent ourselves and get out of our comfort zone a bit. Today, in addition to steel structures and façades, we are also dedicated to civil construction and shipbuilding projects. We are available and prepared for large-scale projects, but we are also focused on smaller projects, guided in all scenarios by the commitment, quality and technical rigour for which Martifer is known.

What have been the biggest challenges over the last five years?
There were many. We have recovered the team, the identity and the good name of Martifer, doing a lot with very little. Resilience, a spirit of sacrifice and availability are basic rules here in this house. Keeping the activity and the pace up even during the pandemic without ever turning our back on the country and the company. We contributed to the construction of six COVID-19 Campaign Hospitals. Strong local competition from companies strategically linked to the main construction companies.

What projects stand out? Because of their size, because of their difficulty, or for another reason?
I would without a doubt highlight the work on the Cabinda General Hospital due to its logistical and technical complexity, the COVID-19 Campaign Hospitals due to the time frame and lack of resources, the Integrated Communication Project due to its complexity and size, the Manufacture of the jackets due to their complexity, and the Manufacture and Installation of the Floating Jetty due to its innovation, in Angola, and its complexity.

How is the team structured?
In a perfectly defined and aligned way. Here everyone knows what they have to do and how far their power goes. A very "in-tune" and versatile orchestra. I am very proud of this team. It is rewarding to watch our people grow and evolve.

Is Angola still an important country for the Group? Why?
In my opinion, Angola will always be an important country for the Group. Angola and Portugal are countries with

strong trade relations. In recent years, Angola has made an increasing contribution to the Group's accounts, and I believe that in the next few years, there may still be some more growth.

What do you foresee for the coming years in this country?
We will keep our identity and try to grow in a sustainable way. There is a lot of work to do in Angola, and I think that Martifer, with its knowledge, capacity, availability and resilience, can play a very important role which will reflect in our results.

> "Here everyone knows what they have to do and how far their power goes. A very "in-tune" and versatile orchestra. I am very proud of this team. It is rewarding to watch our people grow and evolve."

RENEWABLE ENERGY COMMUNITIES AS A FACTOR OF COMPETITIVENESS AND GREEN POSITIONING OF COMPANIES

“Nowadays, energy represents a considerable cost in the operation of companies, which is a penalising factor that negatively impacts their economic and productive activity...”

Given the current energy situation, there is a need to accelerate energy transition to ensure greater robustness and independence from external sources, as well as to comply with the European design of carbon neutrality, in order to stimulate the development of a green and sustainable economy.

Nowadays, energy represents a considerable cost in the operation of companies, which is a penalising factor that negatively impacts their economic and productive activity, in combination with other critical factors, such as scarcity and the increase in the prices of services, raw materials and other resources, also due to the increase in inflation.

As such, it is necessary to invest in energy efficiency, in optimising consumption, in increasing the penetration of renewables, in reducing the use of fossil fuels, among others, to strengthen economic activity and stimulate productive capacity based on an approach of economic and environmental sustainability, but also social - a dimension that companies should never neglect.

This is possible, in an immediate way, through collective self-consumption and with the creation and/or participation in Renewable Energy Communities (RECs), since by this, it is possible to produce energy from renewable sources near the place of consumption, in a logic of self-consumption; consume, store and share (buying, selling or ceding) with members of the community, or, injecting the surplus into the network, and this can be done by consumption points near the injection site, contributing to greater decarbonisation, through the local integration of renewables in consumption, with lower losses associated with the transport of energy.

There are good examples, although (still) few, of RECs in Portugal that serve as inspiration to modernise, democratise and decarbonise the energy sector with the active participation of energy users, as they enable a set of citizens and/or entities, of any legal nature, public or pri-

ANDREIA CARREIRO
Director of Strategic Innovation at Cleanwatts *

vate, to join together to be members of a community.

RECs ensure greater energy autonomy and a significant reduction in energy costs through efficiency and self-consumption, as well as the possibility of generating income by sharing energy with the various members of the REC, namely during periods when they are not operating, for example, bank holidays, weekends and holiday periods. This energy can be shared with neighbours, employees or any consumer in the vicinity of the production site.

Therefore, RECs are fundamental to achieve energy transition, together with the digital transition, in a fair, democratic and cohesive way, enhancing the development of innovative business models with the active participation of companies, which ensure a green strategic positioning, and an increase in their competitiveness, on the one hand, by decarbonising their consumption, and on the other hand, by the significant reduction of the energy invoice arising from the integrated management of self-consumption, as well as by the possible revenues generated by sharing energy in the local community.

This way, companies adopt an active role of social and environmental responsibility by promoting the development of RECs, making essential energy services accessible to all, including the most vulnerable, promoting the development of a sustainable local economy, and actively contributing to carbon neutrality.

* https://www.cleanwatts.energy/

> “There are good examples, although (still) few, of RECs in Portugal that serve as inspiration to modernise, democratise and decarbonise the energy sector with the active participation of energy users, as they enable a set of citizens and/or entities, of any legal nature, public or private, to join together to be members of a community.”

AARM 4.0 PROJECT
FEASIBILITY ANALYSIS AND PREPARATION OF THE IMPLEMENTATION PLAN

The AARM 4.0 project aims to develop metallic structures with high-strength low-alloy steel (HSLA). The project started in October 2020, and, to date, activities have been carried out on researching the concept of Industry 4.0 (A1) and processing in the cutting and welding of high-strength steel (A2).

At this moment, the consortium (Martifer Construções Metalomecânicas, Faculty of Engineering - University of Porto (FEUP) and INEGI) is focused on the updating of the data acquisition and production management infrastructure, the digitalisation of production records and the modernisation of maintenance and stock control tasks.

Although SAP software is currently the main aggregator of production data at Martifer, it has been insufficient in being able to overcome some of the Industry 4.0 challenges that have arisen. However, SAP will continue to be the backbone of the solution responsible for the organisation and storage of data; this is due to the existence of familiarity by the production management team, the unaffordable necessary change in the event of a change, and the existing integration already in place with the rest of the Group's tools. The challenge is to add modules and methods to supply the functions that SAP does not have. Here, we find WeClick.

This software was created in the early 2000s in order to meet the specifications of that time. It has undergone changes and updates over time, but the paradigm shift of Industry 4.0 makes necessary a profound change in the scope of this software. In this new change, the role of this software will be to be a software intermediary, as well as to serve as a platform for data entry and visualisation. On the one hand, the existing modules relevant to the solution will be expanded: communication with SAP will be maintained since WeClick will serve as a Front-end, increasing the number of variables changed; the authentication of the operator at the workstation will continue to be via WeClick, this time with new indicators.

IN SUMMARY, THE UPGRADE INTENDED TO BE MADE TO WECLICK INCLUDES:

- Removal of unused modules and of modules whose use is too complex or inefficient;
- Addition of communication channels for collecting data from devices or equipment;
- Extension of the use of WeClick to areas not previously covered (painting, etc.);
- Creation of dashboards at different levels, relevant to each area of activity;
- Inclusion of modules to record stops, interventions and other maintenance needs;
- Filling in quality documentation and production reports.

These items are part of a solution that will cover all of Martifer's productive area, and due to their scale, they also require adjustments in their implementation and scope. For this reason, these specifications may be subject to change until the final deployment.

DIGITISATION OF PRODUCTION RECORDS

When it comes to the digitisation of production records, only after an initial structuring of the tools is it possible to think about the next step: the digitisation of production records. When it comes to welding processes, there are already a series of production parameters (EPS, type of wire to be used, etc.) pre-defined within Martifer, which have only been recorded on paper. The main challenges at this point are the creation of an initial database with everything that is standard and transversal to various processes, as well as the incorporation of this database as an object accessible by SAP transactions and logical in its structure.

MODERNISATION OF MAINTENANCE TASKS AND STOCK CONTROL

Regarding the Modernisation of maintenance tasks and stock control, and in parallel with the other aspects mentioned so far, opportunities were identified within Martifer's industrial units to improve processes via digitalisation. Here, what we propose is to facilitate some routine tasks that may involve large displacements (given the size of the pavilions) or visual inspections of materials. By transforming this information into dashboards visible to management, it is possible to remotely monitor, for example, welding wire greenhouses throughout the factory (reducing delays in supply), and it is possible to control which batch numbers exist in each production area (being able to compare these figures with those placed during quality control).

RESEARCH AND TESTING IN THE PROCESSING OF HIGH-STRENGTH STEELS (CUTTING AND WELDING - A2)

In order to evaluate and monitor in situ the thermal delivery to the materials during the binding process, a 30 mm plate welding specimen was made, instrumenting the two 30 mm plates to be joined with four thermocouples.

This welding refers to a welding coupon (30 mm plate) by multipass, having a butt-to-butt joint type and a ½V chamfer. The preheat temperature set was 175°C, and the interpass temperature was less than or equal to 210°C. The preheat temperature should encourage the dissipation of hydrogen from the weld joint and increase the cooling time of the thermally affected area. In order to better understand the phenomena that occur during the welding process, testing was set up to take temperature values in an extensive manner, i.e. with several sources and acquisition methods.

To carry out the monitored test, an experimental setup was set up at Martifer's premises consisting of:

- a thermographic camera mounted on one of the tops;

- 4 thermocouples were placed on the plates to be welded in four different positions: two at the top of the vertical cut plate, 40 mm from the end and 10 mm from the welding joint, another thermocouple at the bottom of this plate in the area where the welding seam starts, and one in the centre of the bevelled plate;

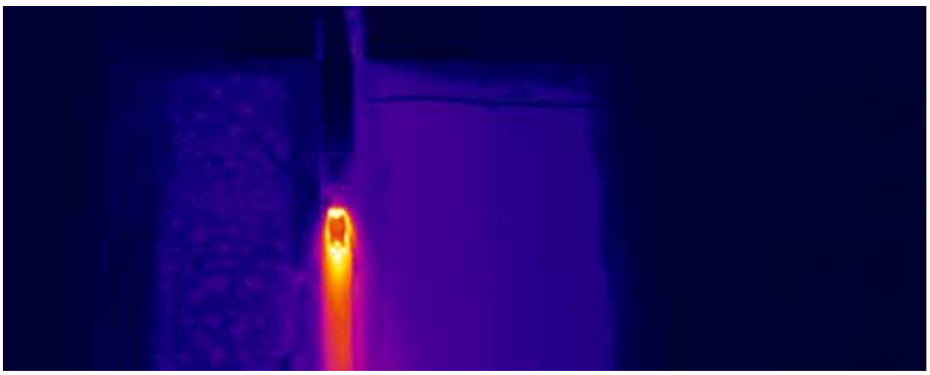
- a Kempi X5 welding machine with data collection capability for each seam, purchased as part of the project;

- a qualified welder;

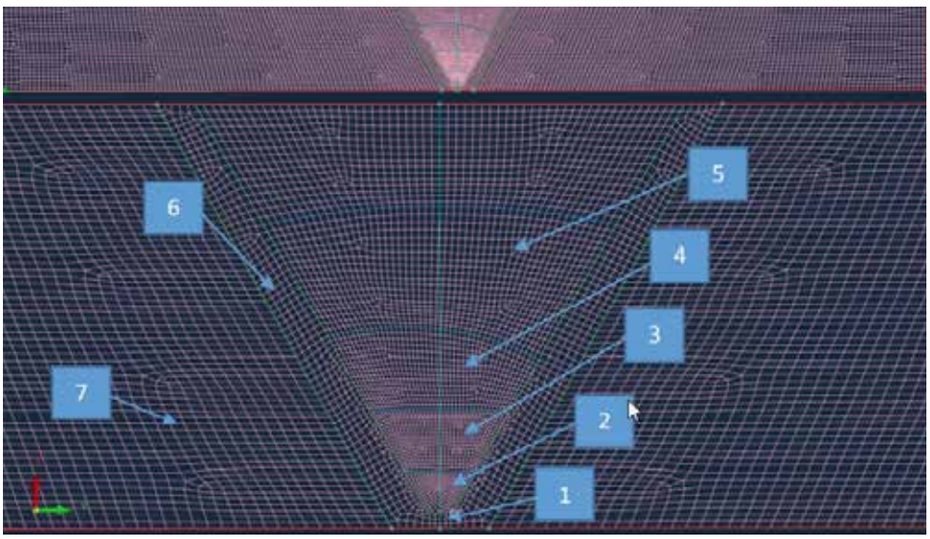
- a computer for data acquisition and storage.

Following the opportunity to study thermal phenomena, the welded coupon resulting from the process was used to extract specimens for rotating bending fatigue tests.

> "This will result in an organisation-wide document which will record all the results and the "lessons learned" during the project. This document will be a "best practices manual" for the production of welded structures in high-strength and low-alloy steels."



During the process, the camera was used, together with thermocouples, to control the interpass temperature. Besides reducing the measurement errors that the conventional method provides, this form of control may have an influence on the final characteristics of the weld, which will be confirmed in the resulting specimens.

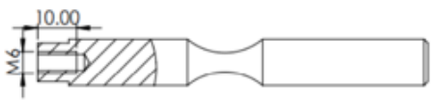


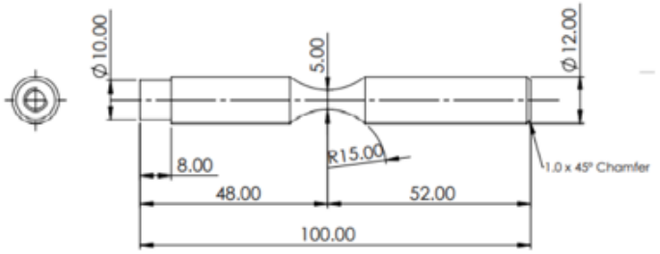
To better understand the thermophysical aspects involved in welding and their influence on the quality of the final piece (in dimensional and mechanical terms), the development of numerical simulation models, by the finite element method, using Sysweld® software, applied to the welding processes and joint types under study, has already begun.

Thus, the models and solutions obtained for a 2D and 3D analysis will be compared and analysed using the Sysweld® software.

FATIGUE TESTS

For the evaluation of the fatigue behaviour of the welds, two coupons produced with S690QL steel were selected for specimen extraction.





These specimens will be rotated and subject to a bending moment, and the forces giving rise to the bending moment will not rotate. The specimens can be mounted as a simply supported bar with a single-point or a two-point loading or as an embedded bar with a four-point loading. The test is continuous until the test specimen fails or a predetermined number of stress cycles is reached.

NEXT STEPS:

Feasibility analysis and preparation of a plan to implement the "Industry 4.0" concept at Martifer Construções Metalomecânicas.

Feasibility analysis and preparation of the implementation plan for the production of welded structures in high-strength and low-alloy steels.

This will result in an organisation-wide document which will record all the results and the "lessons learned" during the project. This document will be a "best practices manual" for the production of welded structures in high-strength and low-alloy steels.

Through this project, Martifer, as a leader in the metal mechanical construction sector, thus participates in one of the global trends in metal mechanical construction, which is the use of these materials of difficult processing, as they have great advantages in cost reduction and sustainability.

ENGINEERING CAPACITY AND THE PRESENTATION OF INNOVATIVE SOLUTIONS ARE CLEAR ADVANTAGES

Carlos Costa has been an executive Board Member of Martifer Group since 2021 and has been responsible for the operations of Martifer Metallic Constructions since 2018. He celebrates 25 years at Martifer in 2023, and his path is almost intertwined with Martifer's history, having led several teams and having initiated the company's journey in different countries. In an interview, he shows us his vision and strategy for the Group facing the challenges and demands of today's world.

INTERVIEW WITH CARLOS COSTA, EXECUTIVE BOARD MEMBER OF MARTIFER GROUP

> I was young and enthusiastic about the project presented to me by Carlos Martins and the possibility of being part of a young company that aspired to grow, with an entrepreneurial DNA, and already with some remarkable projects at the time.

MNEWS | In 2023, you will celebrate 25 years at Martifer. Congratulations! How was your first day? What struck you the most?

CARLOS COSTA | I usually say that that was last century, in November 1998. I was 27 years old and had come from a very exciting project which was Norte Shopping in Matosinhos. I participated in it from the beginning, in 1995, until its inauguration in 1998. These were three years in a transversal role in the various construction contracts and projects of the development which gave me a very rich insight into the various specialities of construction and design of a building of that size.

So, I already knew Martifer since the metallic structure of the skylights of the Shopping Centre was made in Oliveira de Frades, and I had already visited the company to accompany the manufacture of these structures.

I was young and enthusiastic about the project presented to me by Carlos Martins and the possibility of being part of a young company that aspired to grow, with an entrepreneurial DNA, and already with some remarkable projects at the time.

On the first day, I remember we left the company and attended meetings with clients. Two or three meetings in which we talked about small projects, such as the roofing of a church building, and large projects involving hundreds of tonnes of structure, such as the base of the Intermarché in Paços de Ferreira.

MN | At that time, Martifer was very different. It had won its first projects with national and international visibility, such as Expo 98, and was about to begin its expansion. What was it like to be part of that growth?

CC | I was hired to be the Commercial Director, and, at that stage, we potentiated all the curriculum and experience acquired in the eight years of Martifer's

> “It was exactly that: a challenge. In almost 25 years, I have had contact with and been part of the first teams to move to over 20 different countries.”

‘life’ to make the company’s name grow and spread.

It was also at this time that two important decisions were made for Martifer’s strategy: the acquisition of a small company working in aluminium, Caixilhar, which became Martifer Alumínios; and the first internationalisation of Martifer to Spain, opening an office in Valencia.

With these two changes, a new product and a new geography for expansion and me being the commercial head, I was immediately hooked. It was necessary to create teams and restructure routines for budgeting and preparing proposals and, from there, to expand the market, approaching new clients and new projects.

MN | The process of an award of a project can be very complex and time-consuming. What are the characteristics that differentiate us in the decision-making of our clients?

CC | The engineering capacity and the presentation of innovative solutions are clear advantages, associated with the large installed industrial capacity. Cutting-edge knowledge of construction solutions makes us a benchmark player worldwide.

Some characteristics which may differentiate us in a client’s decision-making in a project award process include experience and technical ability since the capacity to understand and fulfil the project’s requirements is crucial; reputation and track record of success - Martifer has a long track record of carrying out bold and successful projects, leading to a good reputation in the market; the effective communication that characterises us - the ability to communicate clearly with the client and to respond quickly and efficiently to the client’s needs and concerns; flexibility and adaptability, that is, the ability to adapt to changes in the project and to unforeseen challenges.

MN | Which project has struck you the most up to now and why?

CC | I can’t choose a single outstanding project because there are many that have struck me and for the most diverse reasons. However, I can mention some very important ones, like the Saint Gobain Glass factory in Calarasi (between 2005

and 2006), which even originated Martifer Romania: because of its dimension, because it was a turnkey project, because it was in a completely new country for Martifer and because the client believed in us, in how we would be able to deliver that building on time.

Another very remarkable project was the roofing and façades of the Dublin Airport Terminal 2 for D.A.A. at the end of the first decade of the 2000s, in which we signed one of Martifer's biggest contracts, once again in a country where we had no track record and with all the difficulties and demands we know today of those who work in the British Isles.

Lastly, a reference to the works in Brazil, namely the bridges in Rio de Janeiro, the Manaus Arena and the Museum of Tomorrow, which, beyond the technical difficulty, were extraordinarily difficult to execute given the geographical, political and social context.

This capacity, which is in the DNA of Martifer's people, to adapt to what is new is truly extraordinary.

MN | Your professional career includes work in various countries such as Spain, Poland, Romania, Algeria and Brazil... Knowing that cultural diversity is a challenge in leadership, what was it like leading teams in such different countries and cultures? What did you learn?

CC | It was exactly that: a challenge. In almost 25 years, I have had contact with and been part of the first teams to move to over 20 different countries. If, at the beginning, Spain was the natural evolution to a neighbouring country where we had all been before and where there were some cultural affinities, Eastern Europe was quite different. When, in the early 2000s, we decided to move to Poland and build a factory there from scratch, the fall of the Berlin Wall had occurred just over a decade earlier, and the culture, values and working methods were quite different from those we were used to. As soon as we commissioned the steel struc-

> "... reputation and track record of success - Martifer has a long track record of carrying out bold and successful projects, leading to a good reputation in the market; the effective communication that characterises us - the ability to communicate clearly with the client and to respond quickly and efficiently to the client's needs and concerns; flexibility and adaptability, that is, the ability to adapt to changes in the project and to unforeseen challenges."

tures factory in Gliwice, we immediately sought to expand, not only into other businesses but also into neighbouring countries that had recently opened up to Western Europe. That's when we opened branches in Berlin, Prague, Bratislava and later Bucharest in 2005.

It's easy to imagine what those days were like, with so many requests coming from so many different places... We quickly realised that, with so much dispersion, everything would be very difficult, so we took a step back and decided to centralise the activity in Poland and Romania. We also realised that, after all, Poland and Romania were not the "El Dorado" they initially seemed, that they were markets that "put up a fight".

In the early 2010s came the challenge of the Brazilian market, prompted by the construction of stadiums for the World Cup. I lived in Brazil for two years, starting at the end of 2012. It was a country I found difficult to work in, despite the excellent team that accompanied me. Many of those people who were with me in Brazil are still with us. Despite the language, which seems to be the same, there are profound cultural, social and mainly political and tax differences. The projects we worked on were also of high technical and logistical complexity. It is a 'country the size of a continent' with 200 million inhabitants, a real challenge.

The Algerian market was also a difficult market, where divestment turned out to be the best solution. What we learned from all this was that the cultural, social, legal and tax contexts are extremely important and that you cannot assume that just because the business opportunity looks good, it will be a success. Currently, we know that mature markets such as France, Spain and the UK are the best solution. They are geographically close, we master the languages and we have some cultural affinity. There is still ongoing investment both at public and private level. This is the location but we will always be attentive to look at and take advantage of isolated opportunities in other countries.

MN | Looking back at the last few years, marked by the pandemic, the war and economic and social disruption, in your perspective, what influence did this context have on Martifer Group? How were we able to adapt?

CC | These last few years have been distinctive for most companies, but they have allowed us to test our capacity, resilience and reaction to radical changes in the situation. We realised that, despite the size of the company, we have the necessary flexibility to face new paradigms of the way of working, and we have even made changes in the way we are that would probably be unlikely before a pandemic on a global scale.

The macroeconomic context of 2022 also brought challenges due to the scarcity of raw materials and labour, inflation, etc., which forced us to improve our contractual management with clients, always approaching them from a constructive perspective for both parties, in order to be able to face up to the great increases experienced in the construction sector.

We have also realised that the events of the last three years also bring changes in the way we work that will have an impact in the medium and long term: we feel more and more the need to captivate and retain the enormous talent we have in-house.

"Currently, we know that mature markets such as France, Spain and the UK are the best solution. They are geographically close, we master the languages and we have some cultural affinity."

MN | Taking into account this same context, what will be the biggest challenges in the area of metallic construction in the future?

CC | Whether we like it or not, we cannot escape the issue of ecological sustainability. We are a company that is at the forefront when it comes to reducing the environmental impact of its activity, such as the balance in the production and use of 100% "green" energy that we already produce. We are also at the forefront when it comes to good environmental practices, and we have been a certified company in this area since practically the beginning of our existence. But we know that legislation is changing, as well as market forces, which increasingly require action around the issue of sustainability and the circular economy. Rethinking metallic construction so that it is reusable, its life is extended, and it is recyclable (it already was) is increasingly important. This involves working with our suppliers and clients to align strategies and expectations so that working towards a better future is not a mere formality on paper.

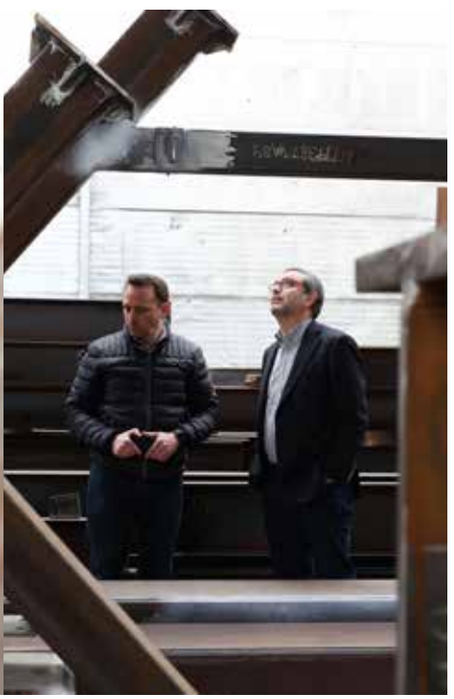
The other great challenge, perhaps even a greater one, is that of people. As I mentioned, the last three years have brought to the world a new way of working and thinking about people. Our main objective today is to retain and engage our people. We recognise the talent we have in-house, and we want to keep them by investing in their training and development. We have many stars in-house who can progress and grow with the company.

It is with sadness that I see some people considering replacing Martifer with other newly created or very young companies. Working at Martifer is synonymous with security, of working in a financially solid company, financially robust, where the name opens doors due to the recognition of the work developed. All of us must have a feeling of belonging, where each one plays an important part, and the pride to tell our family and friends about the remarkable projects we have developed and which are Martifer's curriculum.

MN | What competencies does the Group have today that allow us to look to the future with optimism?

CC | The main competencies are those that clients already see in us: an enormous technical capacity associated with a great industrial capacity to face the challenges that are placed in our way. The complementarity between the various business areas - constructions, the naval industry and renewables & energy - is a solid factor for what lies ahead in terms of the future.

> "Our main objective today is to retain and engage our people. We recognise the talent we have in-house, and we want to keep them by investing in their training and development. We have many stars in-house who can progress and grow with the company."



For younger people, it may seem unattractive to work in a company for 25 years. However, I can assure you that in Martifer, for me, it hasn't been. It has been quite the opposite. The group went through the adaptations inherent to enormous growth and grew to be about three times bigger than it is today. But it was in the last decade, and after a world crisis, that the company was forced into a major restructuring that brought us to where we are today. Today we have a well-organised house, well managed, by an excellent and well-led team, with clear and defined strategies aligned with the main values that are put into practice, with consistency, every day. This is the fruit of many days and nights of work.

MN | Lastly, what message would you like to leave to the whole team at the beginning of this year?

CC | Congratulations to everyone for your hard work and dedication last year. This year, we are ready to face new challenges and opportunities. Let us keep our passion and determination, working together as a team to achieve our goals and be successful. Believe in yourselves and in your potential. We are excited about what the future holds and look forward to working together on new projects and challenges.

> “We are excited about what the future holds and look forward to working together on new projects and challenges.”

PERFIL

CARLOS COSTA
52 YEARS OLD

EXECUTIVE BOARD MEMBER OF MARTIFER GROUP

With a degree in Civil Engineering from the Faculty of Engineering of the University of Porto (FEUP), Carlos Costa began his professional career in 1995 at Cinclus, part of Sonae Group, where he was involved in the Norte Shopping project, in Matosinhos, until the end of 1998.

Then, he joined Martifer Group, where he has made his professional career, always part of the area of metallic constructions and façades.

He began as commercial director of Martifer Construções, and was soon appointed board member of the façades area (at the time called Caixilhar). He was at the centre of the company's internationalisation to Europe in the early 2000s, and was later involved in the 'Brazil project', where he led the team for two years.

In 2018, he assumed the leadership of the operations of the Metallic Constructions area in the Group. More recently, he was appointed executive Board Member of the Holding Company.

In his spare time, he enjoys playing padel (he is a federated athlete) and tennis, and cinema; he suggests "Inglourious Basterds" by Quentin Tarantino, because of the geniality of the director, adding that it could be any other movie by that director; and "The Gilded Cage" by Ruben Alves, particularly for expatriates, because at the time he saw it, he was living in Brazil, and the plot made perfect sense. He also reads in his free time. The last references are "Sapiens, a brief history of Humankind" by Yuval Noah Harari, which gave him a new perspective on the history of humankind. He also recommends the book "Winning", by Jack Welch, which was published in 2005, at a time when Carlos Costa was taking up the challenge of being a board member and it was, therefore, memorable.

He highlights two cities that have touched him: Buenos Aires on a personal level, and London which has been very important in terms of professional achievement.
But his choice for a good holiday is the Alentejo Coast. He considers himself to be impatient, and as his main quality, he highlights the fact that he is a mediator. His family is his safe haven, and so he has as idols his three children, whom he describes as so different and so remarkable.

António Castro
Renewables & Energy, Board Member

We may ask ourselves whether it makes sense for a group mainly connected to the metal-mechanics and naval industry to have a renewable energy business area when it is known that in this business, the „main raw material" is intensive capital.

Given the good economic and financial results of Martifer Renewables in recent years (2022 is no exception), and also the importance and added value it has and will bring to Martifer Group to be in the front line in the challenge of energy transition and the consequent reduction of greenhouse gases, the answer seems to be affirmative.

Maybe many people don't know that at the moment, Martifer Group already covers its carbon footprint and will cover even more with the start-up of the Production Unit for Self-consumption in Oliveira de Frades. The Babadag wind farm in Romania and the solar parks in operation in Poland and now also in Portugal contribute to this.

In macroeconomic terms and knowing the new reality that Europe and the World are going through, it is undoubtedly strategic for Martifer Group to continue to invest in this business area.

Three major trends favour the implementation of more ‚renewables' in Europe:

1. THE CLIMATE EMERGENCY WE ARE LIVING

Before February 2022 (invasion of Ukraine), Europe had already set an ambitious target of carbon neutrality by 2050 - European countries presented a set of targets for 2030 (National Energy and Climate Plans) and for 2050 (Roadmaps for Carbon Neutrality).
Example: the 2030 Energy and Climate Plan's target for Portugal for solar PV is 9 GW, having recently exceeded 2 GW of installed capacity - implementation margin

2. INVASION OF UKRAINE

- The imposition of sanctions on Russia and the consequent cut in natural gas supplies to Europe have put the security of supply back at the top of the agenda
- It reinforces the central role of renewables in the European energy mix
- EU has presented a plan to accelerate the installation of renewable energy plants through administrative simplification (Repower EU) – and further measures are expected
- Poland is a special case - political, cultural and historical rivalry with Russia. The energy issue takes on a dimension with a more profound meaning than in the countries of Southern Europe
- Poland's 'renewables' target for 2030 is 45 GW and for 2045, a 35% increase, but with the current political situation in Europe, Poland will have to reassess the means for its energy self-sufficiency.

3. LASTLY, THE ELECTRIFICATION OF MORE ECONOMY SECTORS

- It is not just a matter of replacing coal-fired power stations with 'renewables' (black electricity for green electricity), but of electrifying consumption that was previously ensured by other energy sources
- One example is electric vehicles, whose adoption is exceeding all expectations
- In summary, the demand for electricity will increase substantially, and this implies increasing the development of new renewable electricity generation projects

To maintain this successful path, it is necessary to:

- Focus on markets with opportunities which we know well and where we already have local teams: Poland (main market), Romania, Portugal and Argentina

- Focus on EBITDA and positive net results

- Maintain and strengthen the teams in the countries where we operate, continuing to develop greenfield projects: obtaining significant capital gains through asset rotation.

Filipe Rosa
Renewables & Energy, Board Member

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The last three years (2020, 2021 and 2022) have turned out to be very sui generis years and have irreversibly changed the way we approach projects and the way we must prepare them, given the instability (raw materials, logistics, inflation, etc) we are experiencing worldwide. However, in 2022 we managed to grow once again in the Energy segment (Industrial Maintenance and Oil & Gas), with 2022 being the year in which we prepared the bases to diversify our portfolio of clients. It was the year in which the diversification of this business segment was prepared and introduced, to be materialised in 2023, 2024 and 2025. In this context, we were awarded at the end of December 2022 what will be the largest ethane tank in the world, with a capacity of 197,000 m3 and which will be part of the largest industrial complex, currently under construction in Europe, which is the INEOS Project ONE, in Belgium.

In Renewables, particularly in Portugal and in Romania, important steps were also taken so that in the near future, we will once again be players by right, ensuring at the same time the necessary recognition in the Portuguese market and expanding our operation in the geographies where we are present, namely in Romania, leveraging and maximising the existence of the asset we have, which is the Babadag wind farm.

For all these reasons and facing world adversity, we can state that 2022 was not only a year of growth but also an extremely positive year, both operationally and commercially, where our teams, once again, excelled and made every effort, always with an extraordinary team spirit and sense of mission.

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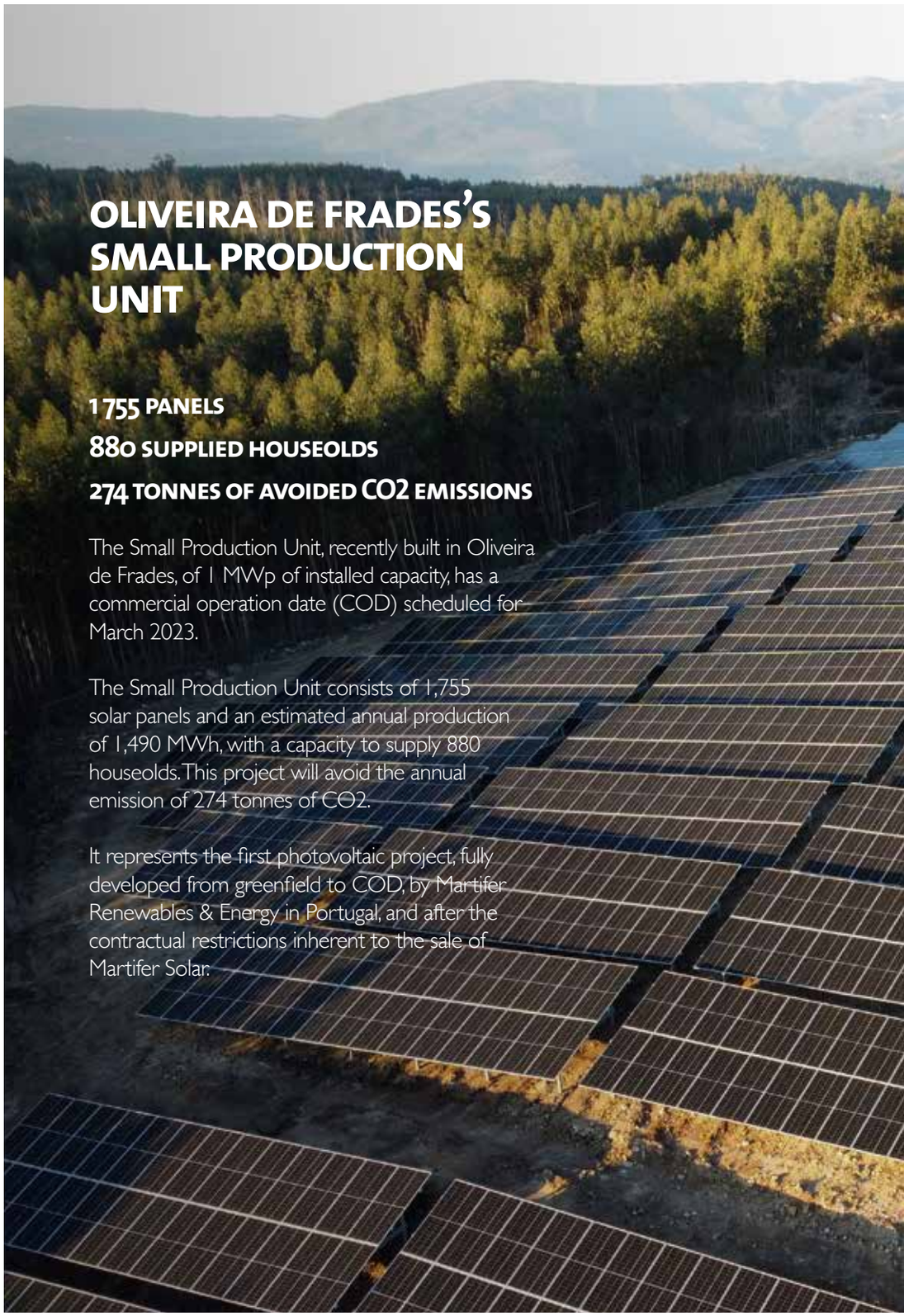
INVESTING IN CLEAN ENERGY SOURCES IS THE ONLY SOLUTION TO REDUCE THE CARBON FOOTPRINT

MORE RENEWABLE ENERGY IN OLIVEIRA DE FRADES

Martifer Group and the Municipality of Oliveira de Frades signed a protocol for the creation of the Renewable Energy Community of the Industrial Zone of Oliveira de Frades and the implementation of two electricity production projects from renewable sources i) an energy production unit for self-consumption, composed by a 2.1 MW wind turbine and ii) a 1 MWp photovoltaic energy production unit, that includes 1,755 photovoltaic modules, 4 inverters, installed on a 1.4 hectare a plot.

This protocol also includes the implementation of a Self-consumption Production Unit, installed at the Water Treatment Plant of Oliveira de Frades, aiming to reduce the energy costs of the Municipality.

The signing ceremony of the protocol, counted with the attendace of the Mayor of Oliveira de Frades, João Valério and Martifer Group's Board Members, Pedro Moreira and António Castro.



OLIVEIRA DE FRADES'S SMALL PRODUCTION UNIT

1 755 PANELS

880 SUPPLIED HOUSEOLDS

274 TONNES OF AVOIDED CO_2 EMISSIONS

The Small Production Unit, recently built in Oliveira de Frades, of 1 MWp of installed capacity, has a commercial operation date (COD) scheduled for March 2023.

The Small Production Unit consists of 1,755 solar panels and an estimated annual production of 1,490 MWh, with a capacity to supply 880 houseolds. This project will avoid the annual emission of 274 tonnes of CO_2.

It represents the first photovoltaic project, fully developed from greenfield to COD, by Martifer Renewables & Energy in Portugal, and after the contractual restrictions inherent to the sale of Martifer Solar.

1,755 PANELS

880 SUPPLIED HOUSEOLDS

274 TONNES OF AVOIDED CO2 EMISSIONS

ARGENTINA WITH SOLAR PROJECTS

The Argentinian market continues to present itself as a challenging market. With investments already made in this market and considering its potential, the Group maintains its commitment to this country.

Currently, the Group holds around 315 MW of solar projects in its pipeline located in several provinces of Argentina, including San Juan and San Luis, and is bidding, jointly with a national power generation player, for a major tender, that aims to supply power to an international mining company.

Martifer Group has decided to retain and remain in the Argentinian market, focused on the development of small projects, as well as on the search for investors for the projects already in ready-to-bid stage.

SELF-CONSUMPTION PRODUCTION UNIT | OLIVEIRA DE FRADES

Near Martifer Group's headoffice, located in the industrial zone of Oliveira de Frades, the project of a Production Unit for Self-consumption is under construction to supply energy to the Group's industrial facilities and offices. A wind tower was installed, that once complete, is estimated to produce around 3,700 MWh per year. The capacity factor, which relates the total energy produced to the total energy that the turbine would produce if it operated at its rated maximum power, corresponds to 20.1%. The installation of this wind turbine will satisfy about 37% of the annual consumption of all of the Group's facilities in the Oliveira de Frades industrial area, and the energy surplus will be sold to an energy trader.

PRODUCTION OF 3,700 MWH/YEAR

CAPACITY FACTOR 20.1 %

MEETS AROUND 37 % OF THE MARTIFER GROUP'S FACILITIES' ANNUAL CONSUMPTION

ENERGY SURPLUS OF ENERGY SOLD TO AN ENERGY TRADER

REDUCTION OF ENERGY COSTS

THIS INVESTMENT TAKES INTO CONSIDERATION SEVERAL FACTORS:

- Reduction in energy costs (total savings are variable depending on the consumption profile and location of the wind farm/solar park);

- Strengthening the commitment to a more sustainable environment, through the consumption of green energy, with a very positive impact in terms of marketing/ valuation of the product;

- There is currently a strong discussion in the European Union about taxing companies on CO2 emissions.

- Growing trend to impose requirements for qualification in international tenders associated with the ecological footprint of companies
- Processes for the environmental certification of companies

Electricity production through Production Units for Self-consumption is regulated by Decree-Law no. 162/2019 of 25 October, which establishes the self-consumption of renewable energy, establishing the discipline of the production activity associated with the renewable energy installations for self-consumers, differentiating between individual self-consumers, group self-consumers and Renewable Energy Communities.

In addition to consuming and producing renewable energy, self-consumers may share, store and sell surplus energy, and there may be more than one point of consumption connected to one or more renewable energy production units.

Individual self-consumers are consumers who produce renewable energy for their own consumption at their premises located in national territory and who can store or sell electricity of their own renewable origin, provided that, for non-domestic renewable energy self-consumers, those activities do not constitute their primary commercial or professional activity.

Group self-consumers correspond to a group of two or more self-consumers in physically close dwellings and industrial, agricultural or commercial facilities. Each self-consumer will be responsible for complying with legal responsibilities.

Renewable Energy Communities are also a form of group self-consumption; however, they require participants to be part of a legal entity supported by a local renewable energy revenue concept to meet local needs.

GREEN.H2.ATLANTIC WITH POTENTIAL NATIONAL INTEREST STATUS

“The Green. H2.Atlantic project expects to create 1,147 direct jobs and 2,744 indirect jobs throughout the hydrogen value chain, with an estimated investment of over 150 million euros, of which 30 million come from funds allocated by the European Commission (Horizon 2020 programme).”

The Green.H2.Atlantic project, in which Martifer participates, aims to produce green hydrogen in Sines. In September 2022, it was recognised by the Portuguese Agency for Investment and Foreign Trade (AICEP) with the status of Potential National Interest, according to Decree-Law no. 154/2013 of 5 November.

The status was awarded by AICEP, in recognition of the project's strategic importance for Portugal. Factors such as strategic investment and the attraction of major international investors/partners, job creation, stimulation of the local and national economy, investment in innovation and in energy transition from renewable sources, among other factors, all played a part in the decision.

All the entities consulted were in favour: the Portuguese Environment Agency, the Directorate-General for Energy and Geology, the Institute for Nature Conservation, Portuguese Tourism and the City Council of Sines.

This status translates into closer monitoring by the Permanent Commission for Investor Support on all the licences, authorisations or approvals required by the central and local administration for the execution, simplifying and streamlining the entire process.

In November 2022, the project submitted the Proposed Definition of Scope for the Environmental Impact Assessment, which will be subject to public consultation. In January 2023, the Portuguese Environment Agency (APA) gave its favourable opinion to this Proposed Definition of Scope, considering that it, in methodological terms, serves as guidance for the preparation of the respective Environmental Impact Assessment.

Project engineering development is also underway to establish the Tender for Engineering, Procurement and Construction (EPC). This development will serve as a basis for the preparation of the Environmental Impact Study and the submission of the various licensing processes.

The Green.H2.Atlantic project expects to create 1,147 direct jobs and 2,744 indirect jobs throughout the hydrogen value chain, with an estimated investment of over 150 million euros, of which 30 million come from funds allocated by the European Commission (Horizon 2020 programme).

Portugal and particularly Sines, offer unique conditions in the development of a green hydrogen economy, with the use of infrastructures and local synergies and access to the existing electricity grid. This project is also an important contribution to the European hydrogen strategy to achieve carbon neutrality by 2050, in which renewable hydrogen will play a key role.

“Portugal and particularly Sines, offer unique conditions in the development of a green hydrogen economy, with the use of infrastructures and local synergies and access to the existing electricity grid.”

ENERGY

INDUSTRIAL MAINTENANCE, WITH AN INCREASING NUMBER OF PROJECTS IN DIFFERENT GEOGRAPHIES

The Industrial Maintenance and New Builds segment is already a relevant and important reality within Martifer Group. Martifer Renewables & Energy, counts on five currently active long-term industrial maintenance contracts.

Maintenance work has been continuous, given the current increase in the number of contracts, intensifying in the case of combined cycle power generation plants in the spring and summer months, aiming to prepare Europe for the winter at a time energy supply costs and energy independence are widely discussed.

The main industrial maintenance projects, completed or active, carried out by Martifer Renewables & Energy are the following:

INSTALLATION OF DRAINAGE PIPING (SLOPS) AT THE CLT TERMINAL

Sines, Portugal | Completed

Prefabrication and Assembly of new Drainage Pipework (Slops), Companhia Logística de Terminais Marítimos (CLT), comprising the following works:
- Exhaustive Topographical Site Survey
- Preparation and Definition of Isometric Drawings
- Procurement of all piping and fittings
- Prefabrication of piping spools
- Installation of piping & Execution of associated NDTs (including hydrostatic testing).

MANUTENÇÃO E REPARAÇÃO DE TANQUE DE ARMAZENAGEM DE GASÓLEO

Sines, Portugal | Completed

Maintenance and Repair of Storage Tank no. OP-T417, at the Sines Refinery, comprising the following works:
- Exhaustive Topographical Site Survey
- Procurement of all Materials and Accessories
- Complete replacement of the Tank Roof
- Partial replacement of the Tank Bottom
- Replacement and (partial) revamping of the Fire Service lines.

MECHANICAL MAINTENANCE CONTRACT WITH SIEMENS ENERGY

Saudi Arabia, Armenia, Bahrain, Belgium, Slovakia, Spain, France, India, Israel, the Netherlands, Portugal, Turkey | **Completed**

Within the scope of the contract executed with Siemens Energy, for the Mechanical Maintenance of Combined Cycle Power Plants, the year 2022 was marked by a wide geographical coverage, as a result of the trust that Siemens Energy has been placing in Martifer Renewables & Energy, and its execution teams.

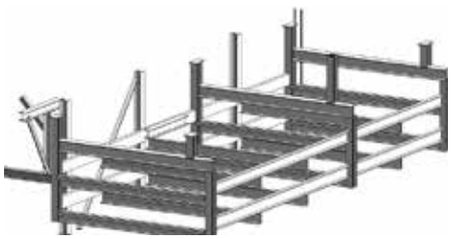
During 2022, it was also possible to specialise Martifer's staff in the maintenance of turbine combustion chambers, which we believe is a step forward in the relationship we have been building with Siemens Energy, since 2020.

ENERGY

MAINTENANCE AND REPAIR OF A DIESEL STORAGE TANK

Azores, Portugal | Ongoing

Maintenance and Repair of Storage Tank no. 9A, located in Azores (Santa Maria Island), Portugal, comprising the following works:
- Exhaustive Topographical Site Survey
- Procurement of all Materials and Accessories
- Basic and Detail Engineering of the Storage Tank
- Complete replacement of the Tank Bottom
- Replacement of Peripheral Bottom Sumps by a Central Bottom Sump
- Prefabrication and Assembly of the vertical and Helical Access Ladder
- Prefabrication and (partial) assembly of the tank piping (external and internal).



MODULARISATION & MANUFACTURE OF PIPE RACKS

Oliveira de Frades, Portugal | Ongoing

Modularisation and Manufacturing of Pipe Racks Modules for the Pharmaceutical Industry
- Basic and Detail Engineering of Pipe Racks
- Procurement of all Materials and Accessories
- Prefabrication of Pipe Racks (PAR's)

SINES REFINERY MAINTENANCE CONTRACT

Sines, Portugal | Ongoing 2018-2024

Maintenance contract for all of the Sines refinery facilities, in the mechanical, piping, locksmithing, electrical and instrumentation specialities, divided into the following intervention areas: Plant 1 - production of gases, petrol, aviation fuels, diesel and fuel oil | Plant 2 - vacuum distillation and visbreaker | Plant 3 - hydrocracker, hydrogen production and sulphur recovery unit;
Utilities - production and distribution of various utilities to the refinery | Cogeneration Plant - steam and electricity generation unit for the refinery, with a total output of 82 MW | Product Handling - refinery storage facility with a capacity of 3,500,000 m3.

MAINTENANCE CONTRACT FOR ENERFUEL (BIODIESEL PLANT)

Sines, Portugal | Ongoing 2020-2024

Maintenance contract for the whole of Enerfuel's facilities (biodiesel plant), in the mechanical, piping, locksmithing, electrical and instrumentation specialities. This industrial unit produces FAME (fatty acid methyl ester) biodiesel, from used cooking oils and waste animal fats, with an installed capacity of 25 kton of biofuel per year.

MAINTENANCE CONTRACT FOR THE FURNACE FIRING SYSTEM AT THE SINES REFINERY

Sines, Portugal | Ongoing 2020-2024

Operation and Maintenance Contract for the Sines Refinery Furnace Firing System, including the execution of daily routines (checklist) to ensure their good performance.

MECHANICAL MAINTENANCE CONTRACT FOR COMBINED CYCLE POWER PLANTS

EMEA - Europe, the Middle East and Africa | Ongoing 2020-2024

Mechanical Maintenance Services for Gas Turbines, Steam Turbines and Generators in Combined Cycle Power Plants and occasionally Nuclear Power Plants throughout the EMEA Region (Europe, the Middle East and Africa).

MAINTENANCE CONTRACT FOR LOCOMOTIVE DYNAMIC COMPONENTS

Nacala, Mozambique | Ongoing 2018-2024

Maintenance and Recovery Services of GE Dash9 Locomotive Traction Engines, including all Mechanical Maintenance, Machining, Painting and all Electrical and Instrumentation Services, including Rewinding of Electric Motors (as and when required).

MAINTENANCE AND REPAIR CONTRACT FOR THE HL06 WAGONS

Nacala, Mozambique | Ongoing

Maintenance and Repair of 106 Wagons of Type HL06, compreenhing the following works:
- Removal of the Existing Plates
- Checking and Repairing (when and if necessary) the Structural Integrity of the Wagons
- Prefabrication of the new Wagon Lining Plates
- Application of new Wagon Lining Plates
- Blasting & Painting of Wagons

REPAIRS TO PIPING AND JET-A1 TANKS

Azores, Portugal | NEW PROJECT

Repairs of the Piping and JET-A1 Tanks of the Airport Operations of Santa Maria Island, Azores, comprising the following works:
- Exhaustive Topographical Site Survey
- Procurement of all Materials and Accessories
- Prefabrication of the Piping, Supports, etc.
- On-site Mechanical Assembly, including Interconnection Tie-ins
- NDTs (hydraulic test included).

MECHANICAL ASSEMBLY OF AN ETHANE STORAGE TANK

Antwerp, Belgium | NEW PROJECT 2023-2025

Mechanical Assembly of a 197,000 m3 capacity Ethane Tank, including the following works:
- Procurement of all Carbon Steel Materials and Accessories
- Prefabrication of all Materials, including piping, supports, etc
- Mechanical assembly of the tank and all its components
- Mechanical assembly of all internal structures and associated piping

Carlos Costa
Metallic Constructions, Board Member

"The Roaring Twenties"

We all heard about the roaring twenties when we studied history in primary school. What we didn't know at the time was that this expression would not only apply to the roaring twenties of the 20th century but also to the 21st century.

We started the decade with a pandemic with an ultra-fast spread due to globalisation, with lockdowns on a large scale and a huge global effort to face this disease that at the time was unknown and had devastating impacts.

We also learnt that human beings, when put to the test and faced with a possible catastrophic event for humanity, can ultimately work together globally, regardless of nationality, beliefs or economic situation. We also learnt that human beings adapt quickly to new ways of living and working.

When we started to suffer the consequences of the pandemic on consumer chains, the "icing on the cake" came: as if the general supply difficulties were not enough, one of the most important shipping channels in the world was "clogged" with a large ship, the Evergreen, which ended up delaying even more what was already difficult.

In the midst of the global economic crisis brought on by the closure of borders and travel, albeit in full recovery, comes an unforeseen effect: after a year and a half of accumulated savings and liquidity, arises galloping inflation compounded by yet another "crazy" event: a fierce war in the middle of Europe. There is apprehension, there are shortages of some materials, prices of raw materials rise, with a particular impact on metals.

All these events have had a clear impact not only on the lives of businesses but also on the lives of individuals. These twenties have been challenging years for everyone, both for the Martifer teams around the world who have remained in action and for the headquarters team, who has ensured the normal functioning

of operations. The success of these great projects is due to the dedication and commitment of these people.
2022 was a year of continued recovery of results and team consolidation. This year's operating income was similar to 2020 but with a recovery compared to 2021. Be reminded that 2020 was the year of the pandemic, where many projects stopped, and many others were cancelled. Projects that were not won in 2020 ended up not being produced in 2021 and 2022, with the due impact on order books and turnover. The forecast for 2023 is for moderate growth in both operating income and project margins. The activity in France will have a greater weight in 2023, continuing the growth of recent years in that market. The UK market, after a year of lower activity due to the change in our commercial strategy, will once again have a significant weight, largely due to the new railway and airport infrastructures planned for that country.

In the other geographies where we are present, namely Spain, Romania, Saudi Arabia and Angola, we expect to continue on the previous year's path with moderate growth. We are keeping an eye on projects outside these geographies in order to replicate the success achieved in Switzerland, Belgium, Rwanda and the Ivory Coast.
At a time of uncertainty about the future in macro-economic terms, when we cannot predict the end of the war in Ukraine, when inflation will stop or the rise in interest rates, the lack of public investment in projects of size for our country, etc..., the management of a company must reduce risks so as not to jeopardise the future. What we pass on to our people is the security of working in a financially sound company recognised for its technical and execution capacity. We work every day to create a sense of belonging in each of our employees and to keep talent in-house. The beginning of 2023 is the time to thank the entire team for their commitment and dedication and to ensure that they will continue to excel in the future. Training will be a major focus of the management to achieve this.

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BIRMINGHAM, UNITED KINGDOM

HIGH SPEED 2 CONNECTS LONDON TO NORTHERN ENGLAND

Martifer Metallic Constructions was awarded a contract for the supply and installation/erection of the railway viaducts' steel structure in Birmingham as part of the High Speed 2 (HS2) project - a new high-speed railway line that will connect London to the North of England. High Speed 2 is the largest infrastructure construction project in the UK and in Europe, and the most important economic and social regeneration project in the last decades, making a unique contribution to carbon neutrality.

The contract has an estimated value of €68 million, and the estimated duration for the works is 47 months.

The manufacture of the metallic structure will be carried out mainly at Martifer Group's industrial headquarters in Oliveira de Frades, allowing the Group to strengthen its exports, which currently represent more than 85% of the turnover of the metallic structure segment in Portugal.

The award of this contract is a demonstration of confidence in national engineering and in Martifer Group's technical capacity.

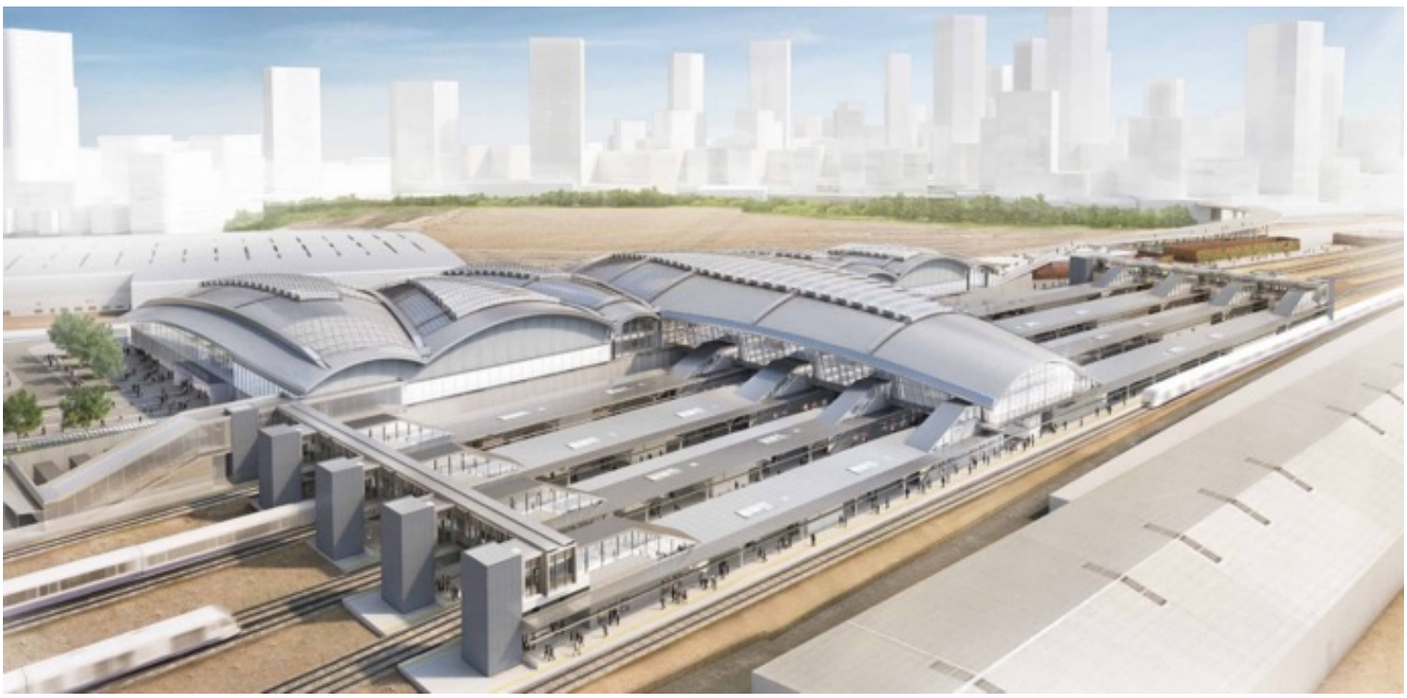
LONDON, UNITED KINGDOM

MARTIFER'S METALLIC STRUCTURES AT THE OLD OAK COMMON STATION

Martifer Metallic Constructions was awarded the contract for the supply and assembly of the metallic structure of the GWML station, belonging to the Old Oak Common Station (London), as part of the High Speed 2 (HS2) project. This is Martifer's second project for HS2, after the three viaducts in Birmingham.

The client is the Balfour Beatty-Vinci--Systra joint venture, and the awarded package consists of 1,545 tonnes of metallic structure, which includes the station's access corridors to the platforms, as well as the platforms' stairs, lifts and canopies.

This project has as its main driver the fact that it connects London to Birmingham in less than 1 hour, and Martifer is on both project fronts in what is considered the largest infrastructure construction project in the UK and in Europe.



MANCHESTER, UNITED KINGDOM

MANCHESTER AIRPORT IN THE DESIGN DEVELOPMENT PHASE

Martifer Metallic Constructions was awarded a 2-phase contract for the Pier 2 at Manchester Airport Terminal 2.

The first phase consists of an initial engagement for support and consultancy during the design development, and the second phase is the supply and construction of the Pier 2 metallic structure, façade and roof.

The client is Mace/MAG, and the awarded package consists of approximately 7,200 sqm of façade and 1,100 tonnes of metallic structure. The pier will provide the terminal with 10 new boarding gates for small and large aircrafts, and is estimated to be completed in the 3rd quarter of 2024.

This will be Martifers' first project in Manchester, and once again, it associates Martifer with a project of great importance for the development of the UK infrastructure network.

This will be Martifers' first project in Manchester

LISBON, PORTUGAL

ORIENTE GREEN CAMPUS, THE FIRST LEED PLATINUM BUILDING

Oriente Green Campus, the first LEED Platinum building in the Greater Lisbon region, is one of Martifer Metallic Constructions' most recent projects in the façade segment.
The project consists of the rehabilitation of a 3-storey office building, designed by the KPF-Kohn Pederson Fox architecture office in partnership with Saraiva & Associados and the project managed by Engexpor.

The developer is Orion European Real Estate, with Norfin managing the investment through its client Fundo Multiusos Oriente FEIIF.

It is called "the office of the future" in addition to the LEED Platinum certification, which guarantees the highest level of sustainable construction with a focus on reducing the carbon footprint. It will also have the WELL Gold seal, which aims at the health, safety and well-being of its users. The balance between green practices and local tradition will be reflected in the building's façade, which incorporates terracotta pieces, favouring the blue and white colour palette typical of the city of Lisbon, according to the architectural office.

A new opportunity to demonstrate Martifer's capacity to develop innovative technical solutions consisting of different materials and to execute them according to the architect's demanding quality requirements.

The works awarded include 14,800 sqm of stick façades and curtain walls, including doors and windows, 8,200 sqm of cladding (composite and terracotta panels), 113 linear metres of glass balustrades, 1,622 ml of steel balustrades and 2,237 sqm of standing seam roofing.

MONS, BELGIUM

NO-ONE REMAINS INDIFFERENT TO GARE DE MONS

Martifer Metallic Constructions has successfully completed its participation in the construction of Gare de Mons.

Today, Gare de Mons clearly assumes the status of an architectural reference and symbolises the synergies between culture and technology in the city of Mons.

With a very characteristic aesthetic, the new station impresses, and it is impossible to dissociate it from Calatrava's "show architecture".

GARE DE MONS WINS CONSTRUSOFT BIM AWARDS 2022, IN THE INFRASTRUCTURE PROJECTS CATEGORY

Martifer Metallic Constructions' work on Gare de Mons as a BIM project was recognised at the Construsoft BIM Awards. Gare de Mons was the Portuguese winner in the Infrastructure Projects category.

Martifer has already received this award with the La MECA and with the Geneva Airport projects, in 2019.

MARSEILLE, FRANCE

MARSEILLE-PROVENCE AIRPORT CELEBRATES ITS 100TH ANNIVERSARY

The Vinci-Martifer consortium was awarded the contract to build and refurbish the Marseille-Provence Airport in August 2021. This project includes the construction of a new building and the partial renovation of Terminal 1.

Martifer is responsible for the execution, supply, manufacture and installation/erection of around 4,900 tonnes of metallic structure and 34,000 sqm of façades, skylights and cladding.

On 22 September, a year of work was celebrated in the heart of Marseille Airport at a cocktail which brought together all those involved in the project.

Our client, Aéroport Marseille Provence, the architecture office Foster + Partners, as well as the project managers WSP and Tangram shared their vision of the work already done and their satisfaction with the VINCI Construction France - Martifer Group consortium.

The ceremony included the unveiling of a sculpture representing the combination of reinforced concrete and metallic structures in the project.

Work continues on several fronts, including the baggage sorting area, the refurbishment of the existing building and the erection of the metallic structure, the skeleton of the future heart of the airport.

LIFTING THE FIRST PIECES ON THE 100TH ANNIVERSARY OF MARSEILLE AIRPORT

Martifer started lifting the metallic structure of Marseille Airport on 19 October.

This was an important milestone in the project's execution and, for the client, it had even greater significance, as it coincided with the celebration of the client's 100th anniversary.

Martifer's consortium partner Vinci thanked and congratulated our work, as well as FOSTER's (architecture office) and the client (AMP).

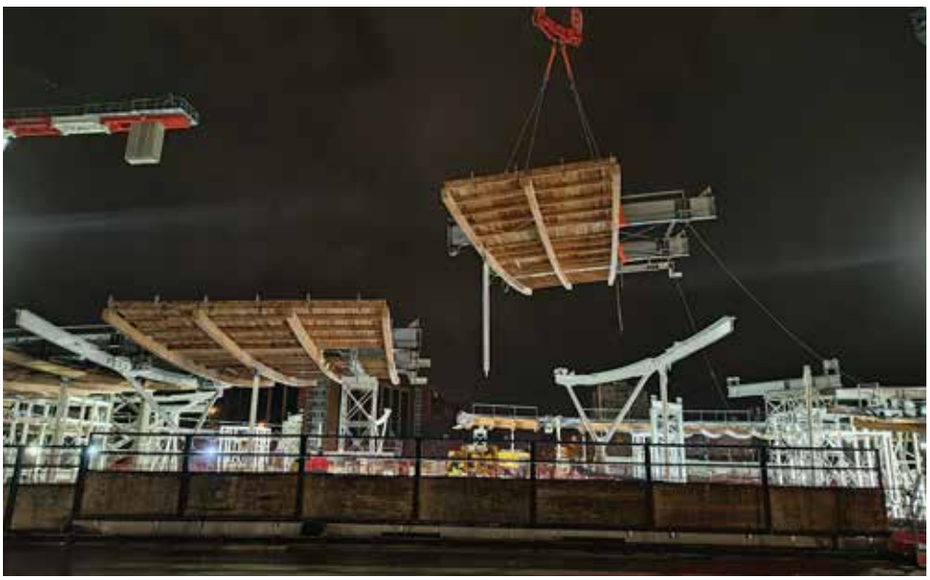
MARTIFER METALLIC CONSTRUCTIONS ACHIEVES 50% OF THE ERECTION OF THE TOTAL METALLIC STRUCTURE AND 75% OF THE MAIN STRUCTURE.

18 of the 24 main pillars are already in place, and work is ongoing.

On the ground, the team assembles the skylights - large structures manufactured at the façade factory in Oliveira de Frades. In total, 36 skylights out of 60 have already been made.

PARIS, FRANCE

ASSEMBLING THE DÔME AT THE GARE DE NOISY-CHAMPS



The "Dôme" is the dome of the Gare de Noisy-Champs station and is made up of two propellers divided into 24 modules. It is shaped like an elliptical spiral, of great structural complexity, combining metallic structures, transverse wooden porticos and glass façade, and it is also supported by metallic arborescent pillars. The steel structure project is done entirely in BIM - Building Information Modelling.

Gare de Noisy Champs is undergoing the most critical assembly stage. Time is precious, and nights and days have to be carefully planned. At the same time, on the ground and at height, teams need to be rigorously organised to keep up with the complexity of this structure.

The modules are pre-assembled on the ground. As soon as the metallic structure is ready, the wooden beams are installed. The wooden platform is then installed. When this work is completed, the modules are lifted by the site's crane towers. At height, our welders join the modules together.

The Noisy-Champs station is a creation of Agence d'architectes-urbanistes Duthilleul by architect Jean-Marie Duthilleul and is part of the Le Grand Paris Express project, the largest transport project in Europe. An automated transit network that will improve multimodal transport in the Grand Paris region. Located between the municipalities of Noisy-le-Grand and Champs-sur-Marne, each helix starts at one of these and joins at the top.

LYON, FRANCE

GARE DE LYON PART DIEU STARTS THE FINAL PHASE

Martifer Metallic Constructions started the construction of the third and last phase of the work at Gare de Lyon Part Dieu in February, which will last until August. It includes 850 tonnes of metallic structure and 4,600 sqm of collaborating sheet divided by two interior floors, also in metallic structure.

About the two previous phases:
Phase 1 - Nord Hall was done between January and March 2022 and included 265 tonnes of metallic structure, which was handed over to SNCF for operation in June. Nord Hall is currently open and fully functional.

Phase 2 - Pompidou South Hall was done between August and January 2023 and included 635 tonnes of metallic structure and 1,700 sqm of collaborating plate divided by two interior floors.

Gare de Lyon Part Dieu has SNCF (Société Nationale des Chemins de fer Français) as its client and AREP architecture. Martifer is responsible for the execution of the 1,750 tonnes related to the metallic structure project. The work includes the supply, manufacture and painting of the entire main and secondary structures of the new Hall and the Béraudier Gallery, and all the manufacturing is being carried out at the Group's industrial facility in Romania.

RHIAD, SAUDI ARABIA

PARK & RIDE MOVES FORWARD AND BEGINS TO TAKE SHAPE

The Park & Ride project is included in the Riyadh City Mobility Vision, which features six intersecting lines with a system of over 170 km of railway tracks and 85 stations.

Martifer Metallic Constructions' contract includes Line 3, which has been awarded to a construction consortium containing the Italian group Webuild, India's Larsen & Troubo and Saudi Arabia's Nesma & Partners.

The project was awarded to Martifer in July 2020. However, this coincided with a huge shortfall in the Saudi government's budget, which meant that most government projects came to a halt.

Martifer is responsible for the execution of the façades in four buildings adjacent to the respective stations, which will be car parks, hence the designation Park & Ride, for stations 3A1, 3D1, 3G2 and 3K1.

After some negotiation between the government and all consortia, the project restarted in October 2022, and it is currently in an accelerated phase of execution, with the stations in the finishing and completion phase and the Park & Rides starting the finishing phase, where Martifer's contract is included.

Work is scheduled to be completed by September 2023, and the Riyadh Metro is expected to be operational in 2024.

MADRID, SPAIN

SANTIAGO BERNABÉU REACHES HALF WAY

Martifer is participating in the refurbishment of Real Madrid's stadium, the legendary Santiago Bernabéu, which is now gaining a new life.

Inaugurated in 1947 in a match between Real Madrid and Belenenses (Portugal), Real Madrid's stadium has undergone other renovations - in 1955, 1980, 1992 and 2001 - and, since June 2019, it has undergone renovations to become the "Santiago Bernabéu of the 21st Century". Florentino Pérez, president of the club, said during the launch of the project, "We must have a vision of the future that the moment demands of us, and that future includes a new Bernabéu that shall be a reference in the 21st century, avant-garde, comfortable and safe, with the best technology and that is a source of income for the club". He added that Real Madrid aims to have the "best stadium in the world" and the path chosen was the renovation of the Blancos' home, the famous Santiago Bernabéu.

Martifer Metallic Constructions is manufacturing, in Oliveira de Frades, the roof modules, in the form of blades and has already reached approximately 60% of manufacturing.

The manufacturing process includes the laser cutting of the stainless steel sheet and fabrication of the metal panels using welded pins to connect to the aluminium substructure, a concept developed specifically for this unique project. These components are fully modelled in 3D to ensure the curved lines of the design for the new Bernabéu.
On-site, the assembly team is doing an excellent job, having already reached 1,000 modules, reaching 48% of the total work. Work has also begun on the cladding of the stadium's inner ring, a complex job in every aspect, from the technical solution to the resources and methodology needed to carry out the work on site.

In addition to the assembly and installation of the modules, other works were subsequently awarded, including the entire cladding of the ground floor with imposing façades composed of aluminium panels and aluminium blades. We can say that Martifer Metallic Constructions is at the entrance of this new stadium.

MADRID, SPAIN

83-85 CASTELLANA WITH LARGE FORMAT FAÇADE

Constructora San Jose awarded Martifer Metallic Constructions the contract to renovate the façades of the lower floors of the 83-85 Castellana building.

A few metres from AM Growth, a project recently completed by Martifer and the Santiago Bernabéu Stadium, Martifer completes the triangle in the AZCA financial area with this intervention.

The owner is Monthisa, and the project is designed by CBRE with the support of the consultant ENAR.

Martifer's intervention consists of the execution of the main double skin façade (4,000 sqm) made of an inverted inner curtain façade and jumbo-sized exterior glass (8 by 2.7 metres). Both skins are joined together and supported by tension rods that create a sufficient gap for maintenance work. At the client's request, this façade was tested at full scale mock-up in the test-laboratory achieving the target performance criteria with flying colours.

Martifer is also responsible for the cladding to the main columns with glass, the suspended ceilings in mirrored composite panels and an exterior tree-like structure composed of stainless steel tubes that brings a unique aesthetic to the façade.

The ground floor, inside and behind the building, will have a curtain wall façade that gives shape to the shop windows of the different commercial spaces, and includes automatic sliding doors and aesthetic shades.

ABIDJAN, IVORY COAST

MARTIFER HAS COMPLETED THE ASSEMBLY OF THE FÉLIX HOUPHOUËT BOIGNY STADIUM IN ABIDJAN

The Félix Houphouët Boigny stadium in Abidjan will be one of the venues for CAN 23, which will take place in June 2023. It is the second stadium with the participation of Martifer Metallic Constructions in the Ivory Coast. Its DNA is demanding work, right from the initial design phase.

The structure is complex and variable, with a very low degree of repetitions in order to adapt to an existing architecture, incorporated into a hillside. The main beams of the roof have a span of 37 metres (one 25-metre part + one 12-metre part), with flanged connections and a strong structural component in pipes.

One of the challenges of the project was the transport by cargo-ship, which required demanding planning.

The stadium is located between a hillside and one of the main entry routes into Abidjan, next to the Ébrié Lagoon. This location meant that the parts had to be stored inside the stadium and that, for example, the lighting towers had to be assembled at night, with the road closed.

"The experience that Martifer's team gained with the Bouaké Stadium was very important in terms of the specific conditions of the local market, as well as the framework conditions between our work and the evolution of Mota-Engil's work.
The synchronisation between the demolition and the reconstruction phases of the reinforced concrete structure (as well as the subsequent works: roof cladding, general infrastructures and the construction of the game areas) and the work of Martifer was fundamental. We already knew part of the Mota-Engil team, which facilitated all this interaction.

We were proud to once again lead a versatile and committed team. Always coping with the constraints that came their way, sacrificing their rest time, even during the night, holidays and weekends." Carlos Pinto Serra, Diretor de Produção, Martifer Construções

LUANDA, ANGOLA

MARTIFER ANGOLA COMPLETES THE INTEGRATED COMMUNICATION PROJECT

In January 2020, Ginga.Com - Comunicação, Multimédia e Telecomunicações awarded Martifer Angola the construction of its new facilities in Luanda.

A turnkey project for the construction of a development that includes television studios, radio, an online newspaper, offices, shared services and entertainment.

This complex is intended for audiovisual production and has a gross construction area of approximately 7,025 sqm.

Martifer was the general contractor of the project (design and execution) and 'gave birth' to the Rede Girassol complex, a unique audiovisual development in Angola.

LUANDA, ANGOLA

FROM MARTIFER ANGOLA'S FACTORY TO THE BARRA DO DANDE OCEAN TERMINAL

Martifer Angola is participating in the construction of the Barra do Dande Ocean Terminal (Sonangol project) with the supply of various offshore equipment, with special emphasis on the 18+3 pile jackets.

The manufacture of the structures (510 t) is being carried out at Martifer's factory in Angola and requires a unique logistical process: truck 8.5 metres wide, variable lengths between 10 and 13 metres and a height of 3 metres.

Deliveries began in December 2022, travelling about 70 kilometres along the roads of Luanda (EN100 and Via Expresso) until they reached Barra do Dande.

In addition to the construction of the terminal, the contract includes the completion of the refined products storage park and the construction of the ship berthing dock.

The Barra do Dande Project, in the Bengo province, is of strategic and national interest and integrates the objectives defined in the Angolan Executive's 2018-2022 National Development Plan as the main platform to ensure the storage and reception of oil products for the country's strategic, security and operational reserves, in addition to promoting the Dande as an important hub for the storage and commercialisation of fuels in the region.

OTHER PROJECTS IN ANGOLA

CAR AND PASSENGER LOADING/ UNLOADING WHARF - LUANDA

For the embarkation and disembarkation of vehicles and passengers in the Port of Luanda, Martifer Angola is installing/connecting the blocks of the vehicle quay and manufacturing and installing the blocks of the passenger quay. The client is Alfermetal.

SOYO NAVAL BASE - SOYO

This project is the modernisation of the Soyo Naval Facility, a project for the Angolan Ministry of Defence. This will make it a modern infrastructure with high-quality standards and in accordance with international standards in the Maritime Defence and Security sector.

The client is Mota-Engil Angola, and Martifer Angola is responsible for the manufacture and assembly of the aluminium frames.

NOSSO ZIMBO 2 - CAMAMA

Nosso Zimbo 2 is a 4.8-hectare village comprising 196 villas.

All the houses have got three bedrooms, with a construction area of 160 sqm, set in plots of 238 sqm each.

Martifer Angola is responsible for the manufacture and installation of all aluminium frames and balcony balustrades in the 196 villas.

OTHER PROJECTS IN ANGOLA

DONDO BRIDGE - DONDO

Martifer Angola is responsible for the manufacture and installation of a 120-tonne bridge in Dondo, consisting of two 20-metre spans with a 12-metre cross-section.

This bridge, for the client Norafrica, is part of a set of three bridges being built in Cuanza-Norte.

SPECIAL STRUCTURES FOR THE BARRA DO DANDE OCEAN TERMINAL

Martifer Angola is manufacturing some special structures for the Barra do Dande Ocean Terminal, namely floating spacers, 300KN harbour buoys, among other structures.

These structures will allow vessels to dock safely without jeopardising their cargo.

PRENDA HOSPITAL - LUANDA

With Acail Angola as its client, Martifer Angola is responsible for the manufacture and erection of the metallic structure and cladding of the roof and façade of the Prenda Hospital extension.

This extension is intended to increase the capacity of the current infirmary and technical centre.

ACAIL ANGOLA'S HEADQUARTERS - LUANDA

Martifer Angola is participating in the expansion of Acail Angola's headquarters.

The extension involves the replacement of the façade cladding of some existing buildings and the construction of new pavilions.

HAEMODIALYSIS CENTRES

With Acail Angola as its client, Martifer Angola has collaborated in the construction of modern haemodialysis units, participating in the manufacture and erection/installation of metallic structures, roofing and façades, manufacture and installation of interior and exterior glass and aluminium balustrades.

NÓ DA SAMBA GANTRIES - TALATONA

Samba signalling gantries were built. Martifer Angola was responsible for the manufacture and erection of road signalling gantries for the client Tecnovia Angola.

The project seeks to address the urban mobility needs of Luanda's population, which is growing on average twice as fast as any other city in Angola.

SAN SEVERO II
ITALY
No. of towers: 5

Supply of 5 wind towers model N163 5X TS108 TiN, including the purchasing of all materials, totalling approximately 1,329 tonnes of steel.

HANGEST
FRANCE
No. of towers: 3

Supply of 3 wind towers model N131/3900 TS120 TiT, including the purchasing of all materials, totalling approximately 873 tonnes of steel.

EBEN
FRANCE
No. of towers: 5

Supply of 5 wind towers model N131/3000 TS120 TiT, including the purchasing of all materials, totalling approximately 1,124 tonnes of steel.

PROJECT 2550
NORWAY
No. of towers: 4

Supply of 4 wind towers model E92/S/67/5K/01, including the purchasing of all materials except for the plate and flanges, totalling about 655 tonnes of steel.

PROJECT 2551
NORWAY
No. of towers: 2

Supply of 2 wind towers model E92/S/83/5K/01, including the purchasing of all materials except for the plate and flanges, totalling about 419 tonnes of steel.

PROJECT 2557
DENMARK
No. of towers: 6

Supply of 6 wind towers model E82E4/S/77/5K/01, including the purchasing of all materials except for the plate and flanges, totalling about 1,378 tonnes of steel.

WIND TOWERS

7 780 TONNES OF STEEL MOULDED TO PROVIDE CLEAN ENERGY

PROJECT 2564
FRANCE
No. of towers: 5

Supply of 5 wind towers model E53/S/49/3K/01, including the purchasing of all materials except for the plate and flanges, totalling about 238 tonnes of steel.

PROJECT 2565
FRANCE
No. of towers: 6

Supply of 6 wind towers model E53/S/49/3K/01, including the purchasing of all materials except for the plate and flanges, totalling about 285 tonnes of steel.

PROJECT 2567
FRANCE
No. of towers: 4

Supply of 4 wind towers model E53/S/49/3K/01, including the purchasing of all materials except for the plate and flanges, totalling about 190 tonnes of steel.

PROJECT 2568
UNITED KINGDOM
No. of towers: 7

Supply of 7 wind towers model E82-E4/S/57/4K/01, including the purchasing of all materials except for the plate and flanges, totalling about 1,153 tonnes of steel.

PROJECT 2569
FRANCE
No. of towers: 6

Supply of 6 wind towers model E82-E4/S/67/5K/01, including the purchasing of all materials except for the plate and flanges, totalling about 1,030 tonnes of steel.

PROJECT 2570
SPAIN
No. of towers: 2

Supply of 2 wind towers model E44/S/54/3K/01, including the purchasing of all materials except for the plate and flanges, totalling about 106 tonnes of steel.

Vitor Figueiredo
Naval Industry, Board Member

“Everything that has been achieved and everything that is planned has only been and is only possible because our teams are resilient and dedicated, having demonstrated the ability to fight at all times and under all circumstances.

The year 2022 was seen at its start as the year of full recovery after the pandemic experienced the two years before, far from imagining that Europe and the World would enter a war for which the economies were not prepared.
It was a year in which we, once again, had to adapt, face the problems and work with new variables, such as inflation, the energy crisis and the rise in interest rates.
Still reflecting the pandemic, in 2022, the Naval area did not grow in terms of volume of activity due to the slowdown in construction. Despite this, it was a year marked by the completion and delivery of the World Traveller vessel (the 4th one of the Explorer series) and the start of the construction of the Avalon Alegria.
This slowdown in construction proved to be an opportunity to fill capacity with significant growth of the Ship Repair activity, allowing the best-ever results to be achieved in this segment. The registered numbers were undoubtedly significant, with about 50 vessels repaired in Viana do Castelo and 75 vessels repaired in Aveiro, and a turnover that exceeded the previous year by more than 40%.
For the year we are now beginning, the uncertainties remain, but our prospects are optimistic.
The commercial work for new constructions, which has been developed over the last few years, is now beginning to prove effective, and the business prospects and opportunities that are currently in the pipeline make us believe that we are on the right track. For the Repair segment, the start of the year is off to a good start, with the repair load fully taken for the first four months of the year.
2023 will also be the year that will be marked as the year of investment in the construction of the new Dock no. 3. This is one of the Group’s biggest investments. It is a strategic and fundamental infrastructure for the coming years, allowing the Naval Area to continue to grow in the Repair segment by being able to offer services for larger vessels.
Everything that has been achieved and everything that is planned has only been and is only possible because our teams are resilient and dedicated, having demonstrated the ability to fight at all times and under all circumstances. To all, here is our most sincere gratitude for the commitment and dedication you have placed to the service of the Company!”

SHIPBUILDING

WEST SEA DELIVERS WORLD TRAVELLER TO MYSTIC CRUISES

The World Traveller was delivered to Mystic Cruises in September. She is the fourth Polar Expedition vessel to be built at West Sea.

The ship's interiors were designed by Portuguese architects, and the materials were produced by national companies, always with the coordination of the West Sea team.

SEA TRIALS WERE SUCCESSFUL

The World Traveller completed sea trials on 18 September. The ship underwent sea trials from 29 July to 1 August, from 14 to 15 September and from 17 to 18 September.

In the first trials, several final tests/tunings were carried out on the ship's different systems (power generation and propulsion, air conditioning, automation systems, navigation and communication systems, sewage treatment plant, fresh water generation, fire detection and fire fighting, evacuation, and all safety systems, etc.) This is the first time that these systems and equipment are tested while the ship is at sea. After the tests were completed, ship performance tests were carried out, such as speed tests, manoeuvrability tests, and noise and vibration measurements, among others.

In the second sea trials, held in September, the Dynamic Position & Poscon (DP) were tested, a system that allows the ship to remain fixed in a predefined position (a system widely used by the vessel in areas such as Antarctica and the Fjords) and included in the Kongsberg systems/equipment supply package. This trial, which was scheduled to last approximately 24 hours, was interrupted after a problem in one of the gearboxes, but it was quickly resolved and went out to sea again and tested on 17 and 18 September.

The test was successfully completed. In total, around 130 people of various nationalities took part in the sea trials.

SHIPBUILDING

WEST SEA SIGNS CONTRACT TO BUILD A RIVER HOTEL SHIP FOR THE DOURO RIVER OPERATION

West Sea signed a contract to build a River Hotel Ship, the Avalon Douro, for Douro Maritime Operations/United Rivers.

The construction of the ship and its operation will be monitored by Douro Maritime Operations, and the tour operator is Avalon Waterways.

Avalon Waterways is a tour operator offering cruises in Europe, China, South East Asia, South America, India and the Galapagos Islands.

Avalon Waterways currently has at least 14 vessels in Europe and two in Asia, two in South America and two in Africa.

At the end of the year, West Sea installed the first three blocks of the Avalon Douro.

On a busy day, blocks 102, 103 and 104 were assembled on the Construction Platform.

The installation of all blocks is expected to take three and a half months.

SHIP REPAIR

FEATURED PROJECTS:

DOURO SERENITY | DOURO SPIRIT

Douro Serenity and Douro Spirit are river cruise ships which belong to Douro Azul. 80 metres long and 11 metres breadth, the ships docked at the construction platform in December.

Main works:
- Normal docking work;
- Repair of the port side thruster (on the Douro Serenity).

VIKING OSFRID | VIKING TORGIL | VIKING HEMMING | VIKING HELGRIM

These four river cruise ships belong to Viking Cruises. 80 metres long and 11 metres breadth, the ships entered Dock no. 1 in December.

The main works carried out were:
- Normal docking work;
- Work for special certification of ships.

LOLA B

The Lola B is a container ship owned by Boluda Shipping. With a length of 155 metres and a beam of 21.7 metres, the ship arrived at West Sea in September.

The main works carried out were:
- Silicone hull treatment and painting;
- Removal of shaft and rudder;
- Removal of all hatches;
- Checking the alignment of the hatches;
- Installation of the ballast water treatment system (BWTS).

CT DANIEL

The CT Daniel is a container ship owned by USC Barnkrug. With a length of 134.4 metres and a beam of 22.7 metres, the ship entered Dock no. 1 in October.

The main works carried out were:
• Normal docking work;
• Installation of the ballast water treatment system (BWTS).

FERDINANDA S

The Ferdinanda S is a Steermar container ship. With a length of 171 metres and a beam of 27 metres, the ship arrived at the shipyard in October.

The main works carried out were:
• Upgrading and painting of the hull above the waterline and the superstructure;
• Improvement and general painting of loading cranes;
• Improvement and general painting of the port and starboard false edge side towers;
• Various locksmith works.

SPICA J

The Spica J, a container ship owned by Jüngerhans Maritime Services GmbH, arrived at the West Sea shipyard in June. With a length of 140 metres and a 22.4-metre breadth, the vessel docked at the Construction Platform.

The main works carried out were:
• Normal docking work;
• Treatment and painting of the cargo hold;
• Improvement of the hatches;
• Installation of the Ballast Water Treatment System.

SHIP REPAIR

FEATURED PROJECTS:

BRAGE R

The Brage R, a dredger belonging to Rohde Nielsen, arrived at the West Sea shipyard in May. With a length of 89.6 metres and a beam of 13.67 metres, the dredger has moved into Dock no. 2.

The main works carried out were:

- Various jobs in all specialities;
- Replacement of the dredging system;
- Repair of overflows;
- Stripping and painting of the cargo hold.

CHRISTOPH SCHULTE

The Christoph Schulte, a chemical tanker owned by Bernhard Schulte Shipmanagement Singapore, arrived at the West Sea shipyard in May. With a length of 119 metres and a 20-metre breadth, the vessel docked at the Construction Platform.

The main works carried out were:

- Normal docking work (hull treatment and painting, shaft and rudder clearances and bottom valves checking);
- Installation of the Ballast Water Treatment System (BWTS);
- Stripping and painting of cargo tanks;
- Various piping , mechanical and electrical work.

SATURN

The Saturn, a container ship owned by HS Schiffahrts GmbH, arrived at the West Sea shipyard in May. With a length of 161.3 metres and a beam of 25 metres, the ship entered Dock no. 1.

The main works carried out were:
• Normal docking work;
• Installation of the Ballast Water Treatment System.

EMILY KOSAN

BW Epic Kosan's gas vessel Emily Kosan arrived at the West Sea shipyard in March. With a length of 100 metres and a beam of 16.6 metres, it entered Dock no. 2.

The main works carried out were:
• Normal docking work;
• Improvement of windlasses;
• Repair of the gearbox;
• Various locksmith and piping works;
• Installation of the Ballast Water Treatment System (BWTS).

EVENTS

WEST SEA PARTICIPATES IN ATLANTIC POLEX EXERCISE

Maritime Authority conducts an anti-pollution exercise in Viana do Castelo.

On 4 and 5 May, another edition of the ATLANTIC POLEX exercise to combat pollution in marine environment took place in Viana do Castelo, organised by the Directorate for Combating Pollution at Sea of the National Maritime Authority.

This exercise was based on the simulation of an explosion on board a container ship about 20 nautical miles (approximately 37 kilometres) southwest of Viana do Castelo. The explosion caused a large crack in the ship's hull, spilling a large amount of oil and causing several containers to fall overboard. The pollution will affect an area on the high seas as well as in the coastal area of Viana do Castelo, namely in the Lima river estuary, the harbour, the urban ecological park, plant nursery areas and beach areas.

Around 128 people were involved in this exercise with different resources, in different scenarios, on land and at sea. West Sea actively participated in the initiative, with the main emphasis on the third scenario, where pollution was simulated in the marina and wharf. In this scenario, the internal emergency plan was activated, with the use of containment barriers, the skimmer and the intervention brigades.

ATLANTIC POLEX is an annual marine pollution incident response exercise which aims to test the national pollution incident contingency plan in the different types of scenarios where an incident could occur: at sea (offshore), in the harbour, in marinas and on the beach.

EVENTS

WEST SEA PARTICIPATES IN A PRACTICAL COURSE ON COMBATING POLLUTION AT SEA

West Sea participated in a practical training course for operators to combat pollution at sea, which took place on 20, 21 and 22 April at the Maritime Authority School and which included a total of 2 members of the Operational Environment department (Docks and Quays) and the Docks and Means of Transport department.

The main objectives of the course were to:
- Train emergency response procedures in the event of a pollution incident or accident;
- Train the operation of decision support tools to support operations to combat marine pollution;
- Prepare the resources of the National Maritime Authority to combat pollution of the marine environment in the open sea, in the harbour and in riparian areas;
- Train the Rapid Intervention Brigade to Combat Sea Pollution and engagement with local and regional entities, namely the Administration of the Ports of Douro, Leixões and Viana do Castelo, the Municipality of Viana do Castelo and regional and local Civil Protection agents, as well as private entities such as West Sea.

The course was divided into two parts: a theoretical part and a practical component. Written assessment of the knowledge acquired was also carried out.

The theoretical component covered various topics related to the clean sea plan, prevention and response to incidents, hazardous substances, containment, equipment, recovery, dispersants and IT tools.
In the practical component, the following scenarios were addressed: manual beach collection techniques, barriers, retrievers, transfer pumps and collection tanks.

EVENTS

WEST SEA CELEBRATED ITS 8TH ANNIVERSARY!

West Sea started operations at the Viana do Castelo shipyard on 27 May 2014, and since then, it has completed a total of 17 constructions (10 river cruise ships, 2 military vessels, 3 polar expedition vessels, a dredger and a drydock gate), 4 conversions and 320 repaired vessels.

Vitor Figueiredo, Board Member of West Sea, tells us about this path.

"You often hear the phrase "time is relative", and indeed it is!

It seems like it was yesterday that we started the West Sea project, but in the meantime, 8 years have already gone by. They were years of many challenges, many struggles, dedication and above all, they were years lived with great intensity, soul and resilience by all the employees who are part of this team.

Today, West Sea reaches its 8th year of activity, and it is with great satisfaction that we look back on this journey full of challenges, some easier, others quite difficult, but all were very challenging and certainly contributed to the individual growth of each one of us and also to the collective growth as an organisation. We should be proud of what has been done, but we should also feel a sense of responsibility and be confident in our abilities to continue the work that has been done so far.

There is a long way to go, and many more anniversaries to be celebrated!

Today, the company has a different maturity compared to the first years. It has managed to reach this level of excellence with the effort and dedication of all. We should be proud of this journey. The last two years have been exceptionally different and have presented other challenges that were previously almost impossible. But they did happen! The need to reconcile operational activity and the existence of a worldwide pandemic created obstacles and difficulties that only the determination of those who are part of this "family" has allowed the company to keep running safely, always putting people's health and well-being first, but not neglecting its objectives.

Over eight years, we have managed to learn from mistakes, improve performance, innovate and evolve. Each year, the challenge becomes greater, and the team has managed to overcome obstacles. Today we are better, but we know that there is still much to improve and much to develop.

In 8 years, 17 ships were built and delivered, 2 are under construction. We have 2 more in our order book, and we have just signed the contract for the construction of another river cruise ship.

In the area of repair, we have repaired and converted more than 320 ships in total. We are proud to see the West Sea brand recognised in the international market as a shipyard of excellence in the field of ship repair.

These are figures that show the capacity for execution that is present in the company's culture and are indicators that the commitment to shipbuilding and repair has its continuity assured. It is in this context that Martifer Group has approved one of the largest investments ever made in the construction of the new dry dock that is ready to start.

Troubled times continue, and the war in Europe has made our mission even more difficult. The past was not easy. We believed we could do it, and we did it. Now it's still not easy, but we all keep believing that we will make it.

West Sea has contributed to Viana do Castelo's projection beyond borders, and when we are visited by our clients, we are immensely proud of what they feel and what they share with us."

SHIP REPAIR

NAVALRIA - FROM COD FISHING TO LUXURY HOTELS

NAVALRIA REPAIRED MORE THAN 75 SHIPS IN 2022 AND STARTED 2023 WITH THE REPAIR OF SOME VESSELS THAT AREN'T STRANGERS TO US.

Cod fishing brings Navalria regular and lots of work at the shipyard. An example is the repair of the Calvão trawler, which completed a major intervention earlier this year.

Scenic's luxury hotel ships, the Azure and the Emerald Radiance, came into dock for routine repair work. These 5-star hotel ships were built at West Sea and delivered in 2016 and 2017, respectively.

THE CALVÃO

Work on the trawler called the Calvão included replacing and blasting bottom and deck, cleaning and treating tanks and replacing valves, hull grates and bottom filters.

At the stern, the panels, false edge and fins were replaced. The crane and the windlass were intervened, and the mooring was also replaced. Finally, the overall painting of the ship was carried out.

THE SCENIC AZURE AND THE EMERALD RADIANCE

The hotel ships return to the shipyard for the upgrading of bottom valves, repair of cabins, side shell rollers, replacement of bottom plates and general painting.

UPCOMING PROJECTS

In the last week of February, the Santa Maria Manuela sailboat returns to Navalria. She will undergo bottom cleaning, painting and disassembly of the propulsion system, with the replacement of shaft sealing.

The Invicta, Costa do Sal Hotel, will also return to the shipyard for docking, bottom stripping, painting, bottom sealing, valves and bulb treatments.

Then it's the turn of the cod fishing vessel, the Aveirense, and the tug, the Aquiles.

MARTIFER GROUP'S STAFF MEETING

TODAY, TOMORROW, TOGETHER

On 21 October, the Group gathered around 450 people at the 2022 Staff Meeting at Europarque in Santa Maria da Feira. A long-awaited meeting that, in addition to stimulating ties between people, served to promote the Group's strategic alignment. Due to restrictions during the pandemic, this kind of meeting had not been held since 2018.

Throughout the day, the different speakers addressed the different areas of the Group, analysing the last few years, and they presented the future prospects and objectives. Closing the morning session, the guest Daniel Bessa spoke about how to 'Manage in times of the greatest uncertainty'.

EVENTS

MARTIFER SIGNS PACT TO BOOST YOUTH EMPLOYMENT

Martifer signed the "More and Better Jobs for Youth Pact", which has the high patronage of His Excellency the President of the Republic and aims to make a real change in the current context of vulnerability associated with youth employment. The initiative stems from the "White Book More and Better Jobs for Youth" and is promoted by the José Neves Foundation and the Government through the Secretary of State for Labour.

With this partnership, Martifer Group is committed until 2026 and, with a set of fixed goals, to reinforce the focus on several indicators, namely to hire and retain young employees, to guarantee quality jobs for young people, to train, develop and give a voice to young people.

Carlos Oliveira, Executive President of the José Neves Foundation, highlights that this "is a very important agreement for the country, which unites companies and public entities to respond to a reality that the country has been struggling with for too many years: the vulnerability of youth employment, even the most qualified, who tend to be more exposed to unemployment and low salaries. Something needs to be done to change the state of things, and the signed Pact will make it possible to measure its impact and results. We also hope that many more companies will join. We are making it happen, and the role of companies is key to a structural change in this situation."

Besides the High Patronage of His Excellency the President of the Republic, the José Neves Foundation and the Secretary of State for Labour, the Business Roundtable Portugal, the National Youth Council (CNJ), the Institute for Employment and Professional Training (IEFP) and the Youth Employment Observatory, which is responsible for monitoring the Pact, are also associated to the Pact.

EVENTS

MARTIFER ANGOLA RECEIVES EMBASSY AND AICEP

At the end of 2022, Martifer Angola received the visit of Francisco Alegre Duarte, Ambassador of Portugal in Luanda, Francisco Pinto Mouraz, Counsellor, João Falardo, President of AICEP and Raquel Milú Forte, also from AICEP in Luanda.
João Sousa, Managing Director of Martifer Angola, presented the company and its reference projects.

The visit included a presentation of the Group and a tour of the various departments and manufacturing facilities. They also learned more about two projects: the Cabinda Hospital and the Girassol Network headquarters.

Martifer has been in Angola since 2007 and employs around 300 people, being one of the reference companies in the Construction sector in Angola.

MARTIFER RECEIVES THE 22ND ENGINEER MEETING OF THE CENTRE REGION

On 28 May, the 22nd Engineer Meeting of the Centre Region was held in São Pedro do Sul, with 180 participants. After lunch, there was a visit to Martifer with an initial presentation of the Group, followed by a visit to the metallic structures and wind tower factory, focusing on the manufacture of wind towers based on this year's theme, "Engineering and Health".

The Regional Engineer Meeting of the Centre Region is the oldest regional meeting of the Portuguese Engineers Association and was resumed this year after two years of interregnum (2020 and 2021) due to the constraints of the Covid-19 pandemic.

EVENTS

IST VISITS WEST SEA

On 11 November, West Sea was visited by 28 students from Instituto Superior Técnico (IST) in Lisbon.

During the visit, the students of the Naval Engineering course were able to see the entire process of building a ship, from conception to the final product.

The visit started in the technical design department and included the various workshops of the shipyard.

LUÍS MONTENEGRO, PRESIDENT OF THE SOCIAL DEMOCRATIC PARTY, VISITED WEST SEA

On 10 November, Luís Montenegro, president of the Portuguese Social Democratic Party, visited West Sea as part of a week dedicated to the District of Viana do Castelo.

The visit included a brief presentation of Martifer Group and West Sea, and ended with a visit to the facilities and the current projects at the shipyard.

EVENTS

COMMITTEE ON ECONOMIC AFFAIRS OF THE ASSEMBLY OF THE REPUBLIC VISITED WEST SEA

On 28 November, West Sea hosted the Committee on Economy Affairs, Public Works, Planning and Housing of the Portuguese Parliament, chaired by Afonso Oliveira.
The Port of Viana organised this visit do Castelo and it was part of an event organised by APDL - Administração dos Portos do Douro, Leixões e Viana do Castelo, which began in the Port of Leixões in the morning.

The group of 30 MPs was welcomed by Pedro Duarte, Vitor Figueiredo and Renato Amorim at West Sea.
The visit included a tour of the facilities and the ongoing projects at the West Sea shipyard.

PORTUGUESE ENGINEERS ASSOCIATION AT WEST SEA

On 12 July, 23 engineers from the 'Civil Engineering College – North' and from the Viana do Castelo Delegation of the Portuguese Engineers Association made a technical visit to West Sea's facilities.

The Commercial Director accompanied the visit and gave insight into the engineering involved in the construction, repair and conversion of the vessels intervened at the shipyard. It was also possible to see the whole construction process, from the building of the blocks, the pre-outfitting, docking, the plumbing workshop, the mechanical workshop, outfitting and the final product.

EVENTS

WEST SEA WAS PRESENT AT PORTO MARITIME WEEK 2022

On 28 September, West Sea took part in the 3rd edition of Porto Maritime Week, with the participation of Vitor Figueiredo in the seminar: "Shipbuilding industry: evolve or disappear?".
The 3rd edition of Porto Maritime Week took place from 26 to 30 September at the Crowne Plaza Porto, in the Port of Leixões, and featured 50 speakers in the 11 scheduled sessions. It was a week dedicated to the maritime sector in Portugal, which brought together hundreds of professionals, and national and international speakers, to reflect on and discuss the present and future of intermodality, ports, maritime transport, training, human resources, the cruise industry and the naval industry, among other issues.

WEST SEA PARTICIPATED IN SMM HAMBURG 2022

West Sea was present at SMM - 30th International Maritime Fair from 6 to 9 September in Hamburg, Germany, with the aim of promoting the shipyard and welcoming professionals from the shipbuilding industry.

SMM is a trade fair that has been bringing together professionals from the shipping industry from all over the world since 1963. At this fair, professionals have the opportunity to learn about innovations in the maritime industry and potential clients, as well as attend conferences and exhibitions.

This year's edition featured 2,000 exhibitors of 100 nationalities and expects to welcome around 40,000 visitors.

SOCIAL RESPONSIBILITY

WEST SEA DELIVERS VEGETABLES AND FRUIT TO THE SOCIAL CANTEEN

On 20 and 21 June, West Sea promoted among its employees a collection of fresh fruit and vegetables for the Social Canteen of Nossa Senhora da Caridade in Viana do Castelo.

The Social Canteen of Nossa Senhora da Caridade is located in the parish of Abelheira and serves an average of 200 meals a day. Meals can be eaten there or home-delivered. There is also a takeaway service available. And it is open 7 days a week. Its purpose is to respond to homeless people, passers-by, drug addicts, and non-integrated people in the city of Viana do Castelo, at risk or loss of social inclusion for a temporary or permanent period, contributing to a dignified, comfortable and healthy life, providing direct help to the socially excluded.

SPORTS EQUIPMENT FOR MONSERRATE SCHOOL

Responding to the request for support from the Association of Parents and Guardians of the Monserrate Kindergarten and Elementary School (APEEJIEBM), West Sea collaborated with some equipment and materials for the restructuring of the playgrounds and leisure areas of the schools.

The aim of this project, which started the year before, is to renovate the playground (with the acquisition of some sports equipment), the vegetable garden and give a new life to part of the green areas.

West Sea, sensitised to the need to create better conditions in the playgrounds of these children, donated some material and equipment focused on the leisure areas of the institutions (protective helmets, skipping ropes, footballs and basketballs, and paints for painting and retouching games drawn on the ground).

CONSTRÓI A TUA CARREIRA NA MARTIFER

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