M NEWS
MARTIFER GROUP

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MARTIFER
GROUP

GENEVA AIRPORT

National engineering and technical capacity of Martifer Group.

INTERVIEW

Miguel Lobo, Martifer Renewables Board Member

António Castro, Martifer Renewables Board Member

RESEARCH AND DEVELOPMENT

Transparency and sustainability in a challenging glass façade

MARTIFER METALLIC CONSTRUCTIONS

Production of wind towers, a product of excellence in Martifer's portfolio

MARTIFER RENEWABLES

Martifer Renewables wins a tender in Argentina

MNEWS
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PUBLISHER
Grupo Martifer, Apartado 17,
3684-001 Oliveira de Frades
Portugal

DIRECTOR
Carlos Martins

EDITORIAL DIRECTOR
Paulo César Ferreira

EDITORIAL STAFF
Corporate Communication

CONTRIBUTORS IN THIS EDITION
Alberto Coelho, António Castro, Arnaldo Figueiredo, Carlos Martins, Carlos Costa, Cristina Fernandes, Daniela Ferreira, Filipe Rosa, Joel Silva, José Pereira, Luís Valadares Tavares, Manuel Silva, Miguel Lobo, Nuno Pina, Pedro Rodrigues, Pedro Vale, Rui Matos, Tiago Mesquita

DESIGN
Sandra Cruz

PHOTOGRAPHY
Martifer Group's image bank,
DouroAzul image bank, iter.org

PERIODICITY
Annual

TRANSLATION
Andreia Bastos

COVER

GENEVA AIRPORT
National engineering and technical capacity of Martifer Group.

Carlos Martins
Chairman of Martifer Group

2018 WILL BE THE YEAR TO PREPARE OUR FUTURE WELL

Martifer completed another year last 21st February 2018. Over these past 28 years we have experienced almost everything: growth, leadership, internationalization, diversification, restructuring and consolidation. Years of gold and also years of great difficulties are part of our history. 2017 was when we felt the "turnaround". And why?

It was the year in which we returned to having positive results and, more importantly, to having cash available to answer the daily needs. It was the year in which we consolidated the activity in Viana do Castelo. We were able to respond to repair works and to ship construction, very demanding technically and within very tight deadlines, in an operational performance in accordance with the best expectations.

It was the year in which we were able to enrich our order book allowing us to face 2018 and 2019 with optimism. It was the year in which we won the first contract in the Oil & Gas market sector, which will make us a player in this so demanding sector, in which we want to be. It was the year in which we regained the trust of our clients and suppliers. It was the year in which we felt proud again to belong to Martifer.

And if 2017 was the year where we got back on our path, 2018 will be the year to prepare our future well. And, to prepare our future well, we must learn to read the past and especially the recent past. It is necessary to learn from the mistakes and not to repeat them, but also to try to replicate every day the best of what we know how to do. And we have a lot of what is good: we have capable people that are prepared to respond, in this increasingly demanding market, to the most complex challenges.

Throughout 2017, we prepared the future so that in 2018 we can implement a new corporate governance structure. We want to have a more professionalized management, more independent from the shareholders, more focused on the company and on the implementation of its strategic plan. An administration in which the company comes first, because if it is so, all who are part of it (shareholders, employees, suppliers and clients) create a win-win situation. This way, the reference shareholders of the company, my brother and I and Mota-Engil decided to delegate part of our competencies to an Executive Committee led by Pedro Duarte. Pedro Moreira will also be part of this Executive Committee, as the person responsible for the Administrative and Financial areas, who is recognized for his rigor and competence.

Pedro Duarte faces a great challenge. The choice rested, above all, on his knowledge of the company and on the recognition given by the people with whom he has worked. He is an engineer who likes the industrial process; he knows how to train and how to motivate his teams. We recognize his ability to assess risk; he knows how to study the company and is able to cope with adversity. But his greatest attribute is his LEADERSHIP SKILLS. We ask Pedro for serenity and coldness, but also for the warmth and affection to build a strong, capable and solid team. The success of companies depends on the capacity of its leaders to create motivated teams, oriented towards the fulfilment of very well defined objectives.

Going back to 2018. If nothing unusual happens in the world, 2018 has everything to be better than 2017. The year 2018 will be the year to prepare the future. Our focus should be on productivity and innovation. We all know that it is possible to do more and better. 2018 will be the year to increase productivity, to plan well and to perform even better. It will be the year to retain good clients, those who recognize our work, those who treat us as partners. It will be the year to sell more internationally, but to produce more in Portugal, in Oliveira de Frades and in Viana do Castelo. It will be the year to align the whole team, to invest in training, in knowledge, in innovation. It will be the year in which the execution of the GALP contract in Sines should position us in the Oil & Gas market as a reference company in the sector. It will be the year in which we will prepare our future well.

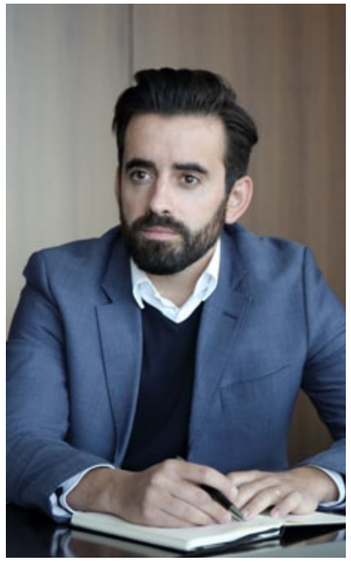
Now that I will no longer be the CEO, I am heartened and grateful to all those, that together with me, made Martifer a national leading company, spread across the various corners of the world. From May onwards, I am going to have a non-executive position, however I will always be available to accompany the company, wherever and whenever my contribution produces added value. Everyone knows that they can count on me, especially this new management team.

Thank you.

WHAT DISTINGUISHES THE MARTIFER RENEWABLES TEAM FROM OTHER TEAMS IS ITS ABILITY TO OVERCOME CHALLENGES

INTERVIEW WITH MIGUEL LOBO, MARTIFER RENEWABLES BOARD MEMBER

Miguel Lobo has 15 years of experience in the energy sector. Part of the Group since 2009, he has been over the years responsible for geographies in North America and South America and is now the General Manager of Martifer Renewables in Latin America.
In an interview, he shows us his vision on the energy sector and on the current economic context.



MNEWS | Long droughts, devastating wild fires, extreme floods. Climate change is an ever more increasingly urgent concern. António Guterres, UN Secretary General, stated at the Earth Summit at the end of 2017 that "We are investing in our own disgrace", arguing that there is an urgent need to invest in the future and not to subsidize fossil fuels. How is renewable energy the solution?

MIGUEL LOBO | Electrical power is directly linked to economic development and the well-being of the population. Today, the conventional generation of electrical energy is responsible for 80% of greenhouse gas emissions in the European Union, being one of the main causes of climate change and air pollution. To have an idea, about 25% of the world's global emissions of greenhouse gases come from the burning of coal, of oil and of natural gas for power generation.

Since the development and use of energy are closely linked, the role of renewable energy sources becomes critical for an economic development with low environmental impact.

Continuous improvements in efficiency and increased mass production of components that form a wind farm or a solar park naturally lead to cost reduction. Another important aspect that leads to cost reduction is the increase in the competition between the manufacturers of those components (today there are dozens of manufacturers of wind turbines and photovoltaic panels), as well as the increased competition among the promoters of these projects, as is Martifer Renewables.

To have an idea of how the price of renewable energy production has fallen in recent times, for example, in the auction of November 2017 in Mexico, renewable energy projects were awarded at an average tariff of U$20/MW.h when in March 2016 projects were awarded at an average tariff of US$48/MW.h. In Brazil in 2015 the average tariff of the solar energy auction was R$300/MWh and in 2017 it was R$145/MWh. In Argentina in August 2016 the average price of the bid was US$57/MW.h while in October 2017 it was US$41.76/MW.h.

Wind power and solar energy (especially photovoltaic) benefited from the combination of cost reduction and increased efficiency. Today, they can be proud of providing clean, reliable and affordable energy from renewable sources. Renewable energy is, without any doubt, the solution for a sustainable future!

MN | Given this context, what is the role of Martifer Renewables and what

> "The strategy of Martifer Renewables is based on value creation for the Shareholders, through asset rotation. We promote, or better we develop and build when we have the financial capacity and operate the projects."

are the strategic guidelines to affirm itself in the market?

ML | The strategy of Martifer Renewables is based on value creation for the Shareholders, through asset rotation. We promote, or better we develop and build when we have the financial capacity and operate the projects. When the projects enter the operation phase, we usually sell them, thus closing the cycle of value creation. The goal is to grow with that value generation, but lately it has not been possible to reinvest in the development and construction of projects as we would have liked to.

MN | With an almost 10-year presence in Latin America, what projects can you highlight in Martifer Renewables' curriculum?

ML | If we add the solar and wind energy projects in Latin America that were sold, we sold more than 800MW of projects in different stages of development. Of those 800MW, around 400MW have already been built, which represents a total investment of approximately 400 million Euros.

I must highlight the partnership with Banco Santander in Brazil from 2010 to 2013 where, together, we built 95MW in four different wind projects, the two wind projects sold to CPFL Renováveis with approximately 15MW in 2014 and the solar projects sold to Engie Group which came into operation at the end of 2017, that add up to about 140 MWp.

MN | At the end of last year, it was announced that Martifer Renewables was awarded a 100MW solar energy project at an auction held in Argentina. What challenges and opportunities does this market present to Martifer Renewables?

ML | This was without a doubt another important achievement of the Martifer Renewables team in Latin America. In the year in which the Group decided not to expose itself any further to the Brazilian market, we focused more on the other two countries where we operate in Latin America: Argentina and Colombia. Colombia is still defining its renewable energy policy, whereas Argentina is already in the second renewable energy tender. The Argentinean Government has the objective to achieve the mark of 10GW of renewable energy projects in operation in 2025. My perspective is that, like other countries, this objective will be widely exceeded.

> "Colombia is still defining its renewable energy policy, whereas Argentina is already in the second renewable energy tender. The Argentinean Government has the objective to achieve the mark of 10GW of renewable energy projects in operation in 2025."

Relying on the experience of the Brazilian team, we created a "task force" in September and in October in Buenos Aires to submit a proposal to the Argentinean Government.

At the end of last year, the results were made public and we received the news that we had been awarded a contract of purchase and sale of energy for 20 years. The project has to be in operation by October 2019.

In what concerns Argentina, given its size and its economic growth in recent years and its investment in renewable energy, it will certainly be one of the main markets for Martifer Renewables.

MN | What competitive advantages can we identify in Martifer Renewables that differentiate it from other players with the same positioning?

ML | The biggest competitive advantage of Martifer Renewables is its team. I can speak more about the Latin American team, and what distinguishes the Martifer Renewables team from others is its ability to overcome challenges. In Brazil, the team faced many failed expectations, completely beyond their responsibility and always had the strength to rise up, overcome obstacles and continue responding to the adversities.

MN | What are the greatest challenges and opportunities for Martifer Renewables in the coming years?

ML | The world undergoes a transformation in what concerns the energy paradigm. With the cost reduction in the construction of wind and solar projects, this form of energy has become increasingly attractive and, today, it is more competitive than the majority of conventional energy sources in almost all parts of the world.

> "The biggest competitive advantage of Martifer Renewables is its team. I can speak more about the Latin American team, and what distinguishes the Martifer Renewables team from others is its ability to overcome challenges."

Martifer has a wide experience in all phases of the renewable energy activity and it is, therefore, an important player at the global level in this industry; it is present in some of the main world markets, such as Saudi Arabia and Latin America.

One of the challenges of Martifer Renewables is to identify the risks of its activity and to try the best possible to mitigate them. The renewable energy activity has technical, environmental, legal and regulatory risks and we need to be very well prepared to anticipate and minimize these risks.

Having the right people, we are well prepared for that challenge. Talking about people, the protection of human capital is crucial. Perhaps the greatest danger that we face is to lose competent employees, who have worked many years, to our competitors because we weren't able to offer challenges that motivate those employees.

"Companies are the people" and we must create conditions for them to feel good. With competent and motivated professionals, we have better conditions to achieve the objective of the Shareholders which is value generation. Thus, it is urgent to protect the Human Capital. We can do it by creating challenging perspectives, which are essentially based on the growth of Martifer Renewables, for the employees. In recent years, that has not happened and, therefore, we need to change that quickly.

> "One of the challenges of Martifer Renewables is to identify the risks of its activity and to try the best possible to mitigate them. The renewable energy activity has technical, environmental, legal and regulatory risks and we need to be very well prepared to anticipate and minimize these risks."

PROFILE

MIGUEL LOBO
38 YEARS OLD

MARTIFER RENEWABLES GENERAL MANAGER FOR LATIN AMERICA AND MARTIFER RENEWABLES BOARD MEMBER

Miguel Lobo has been a Board Member of Martifer Renewables since 2017 and is now General Manager of Martifer Renewables in Latin America. He has a degree in Electrical and Computer Engineering and a postgraduate degree in Renewable Energy by FEUP (Oporto University Engineering Faculty) and an Executive MBA by IESE Business School; and he has a vast experience in the renewable energy sector.

He started in 2003 at Gamesa Energy Portugal, a Spanish company, also present in Portugal, which promotes renewable energy projects. In that company, he was responsible for the construction of more than 350MW. In 2009 he began his career at Martifer Renewables, having been the US Country Manager between 2009 and 2010, accumulating the position of Technical Director at Martifer in Brazil. In 2011 he was appointed the representative of Martifer for the local partnership in Brazil. In 2014, Martifer Renewables began operating alone in Brazil and he became the General Manager of the company in that country. In 2016, with the expansion to Argentina and to Colombia, he became the General Manager of Martifer Renewables in Latin America. Over the years, professionally, he was responsible for the development and sale of more than 1,000MW and for the construction of more than 600MW of renewable energy projects.

He considers himself to be a resilient person and acknowledges that working is an addiction. His life motto is "Quitters never win and winners never quit" and, therefore, he says with certainty that "Luck takes a lot of work!". He likes jogging, the cinema and being with family and friends. Traveling is also a passion and the city of election is Oporto; the city in which he was born. He keeps good childhood memories of holidays spent in Oporto and it is where he started his professional career.

A GOOD DEAL IS WHAT BRINGS CAPITAL GAINS TO THE GROUP IN THE PRESENT BUT ALSO FOR THE FUTURE

INTERVIEW WITH ANTÓNIO CASTRO, MARTIFER RENEWABLES BOARD MEMBER

António Castro has many years of experience in the construction and energy sectors. He joined the group in 2008 and since then he has been responsible for Martifer Renewables in Central Europe. In an interview, he shows us his vision on the energy sector and on the current economic context.

MNEWS | **Long droughts, devastating wild fires, extreme floods. Climate change is an ever more increasingly urgent concern. António Guterres, UN Secretary General, stated at the Earth Summit at the end of 2017 that "We are investing in our own disgrace", arguing that there is an urgent need to invest in the future and not to subsidize fossil fuels. How is renewable energy the solution?**

ANTÓNIO CASTRO | Renewable energies are already a reality and represent an irreversible trend. Proof of this is that globally in recent years the investment in renewable energies has gradually overcome the investment made in conventional energy. This means that, irrespective of what Mr. Trump (and some others) think, coal represents the past and renewable energies are part of the future.

And I say that they are part of the future because in the short term it is still not technically possible to have a country with a mix of production of electrical energy 100% dependent on renewable energy sources, mainly because of its intermittence and the consequent imbalance between production and consumption (because we need to have light regardless of the sun shining or the wind blowing).

However, in the medium-term, and it will be much sooner than we think, if we add electricity storage solutions to solar parks and wind farms, we will be able to increase drastically the penetration of intermittent renewable energies in the electricity network of a country. Currently there are already several companies testing storage systems at industrial scale. The ones that are commercially more viable are the systems based on lithium-ion batteries. The amounts invested in various storage technologies have grown exponentially, so it is a matter of time until we have systems that are competitive in terms of price and that are technologically mature.

In the very long term, the future of energy has to do with us learning to replicate the mechanism of production of solar energy. If we think about it, the Sun is a giant furnace, where a brutal amount of energy is produced. And I don't know if everyone in Martifer knows this, but our group participates in the international consortium which is building a reactor that will try to imitate how the Sun works (the ITER project in France). It should be without a doubt a reason of pride for all of us!

MN | **Given this context, what is the role of Martifer Renewables and what are the strategic guidelines to affirm itself in the market?**

AC | Martifer Renewables is the Martifer group company that is dedicated to the development, construction and operation of electricity generation plants from renewable sources of energy and, thus, has the role of promoting this type of solutions in Portugal and in the world. It has been doing so since 2005, having already been successful in several countries, and having accumulated experience with the participation in wind and solar projects with an installed capacity above 1200 MW.

Since it is a business that needs intensive capital and taking into account the financial constraints felt by Martifer in recent years, Martifer Renewables must ensure and value its greatest asset which is the know-how of its teams that work successfully to develop projects in partnership with other groups with greater financial power. We have done

> "The amounts invested in various storage technologies have grown exponentially, so it is a matter of time until we have systems that are competitive in terms of price and that are technologically mature."

so in the past and we should replicate it in the future with clients such as IKEA, Santander, Engie, Galp, Ferrostaal, Energix, Windflower, Alior, Stage Capital, etc..

MN | With an almost 10-year presence in Poland, what projects can you highlight in Martifer Renewables' curriculum?

AC | We have many good examples in Martifer Renewables. But, I can highlight the projects that opened doors to new business. And for me, these are the most relevant, because a good deal is what brings capital gains to the group in the present but also for the future.

The most recent example of this was the construction and subsequent sale of project Âncora in Portugal, which seems to me to be a fabulous example of how Martifer can be part of the solution in financially enormous projects, despite the constraints

> "... Martifer Renewables must ensure and value its greatest asset which is the know-how of its teams that work successfully to develop projects in partnership with other groups with greater financial power. We have done so in the past and we should replicate it in the future..."

that we live under. Not forgetting that this project, as well as having generated very relevant capital gains to the group, also had the power to revive the business of metal tower production, which Martifer Construções had abandoned a few years before.

Leki Dukielskie and Bukowsko were projects in Poland that helped to create a lasting relationship with IKEA Group, which in the meantime has bought two more wind farms, developed and built by Martifer. It should also be noted that we had the capacity to obtain European and Polish funds to implement these projects; which meant that not only did we survive the harshest moments from a financial point of view, but we were also able to contribute financially to the group.

Above all, what I believe is very, very important is to create credibility: with the companies with which we work, with the City Councils with whom we develop long-term projects, with the banks that provide funding. We complied with the undertaken commitments, delivering a quality product and creating value for all.

MN | Martifer Renewables has invested in Poland in these past few years. Is this investment to be continued? What challenges and opportunities does this market present to Martifer Renewables?

AC | Martifer has invested but, more importantly, it has now been reaping the rewards of the investment made in Poland in the last couple of years. All projects built by Martifer Renewables have been sold. We sold our first two projects to IKEA Group in 2011, already in operation. In 2013 we sold a third project also to IKEA, bust this time with partial funding from them and the remaining through bank financing. The last project in 2015 was 100% financed by IKEA, which shows the importance of creating lasting relationships with strategic partners. At the moment we continue to develop projects, both wind farms and solar PV parks (for now, these have been limited to a predefined short list).
We also render asset management services to third parties for projects already in operation. Partnerships have been already established, so as soon as our projects gain access to long-term PPAs through tenders which are expected to occur in the coming months, it will be possible to build and to sell. This is the objective of Poland's team, who is very committed and motivated.

MN | What competitive advantages can we identify in Martifer Renewables that differentiate it from other players with the same positioning?

AC | The main competitive advantage of Martifer Renewables is its team, its know-how accumulated over the past 13 years. After a first phase, roughly until 2009, where the group invested greatly in the development of projects in various geographies (we have to say, at least, that it was done in an atypical and not focused way), from 2008-2009 until today we have tried to make the maximum, with the lowest possible financial resources, focusing our operations in a few markets, but in markets with high value. This must be the Focus!

We cannot compete with the big players in the market; so, to survive, we were forced to learn how to identify the best locations to install wind farms and solar parks, to develop projects quickly and efficiently and to develop a network of partnerships that allow us to finance projects (either in terms of equity or debt). And this can only be achieved with a highly competent and motivated team.

MN | What are the greatest challenges and opportunities for Martifer Renewables in the coming years?

AC | The current market trend is not to have any more subsidized rates for new wind and solar projects. This trend is global. Every week there is news of tenders in Mexico, India or in Saudi Arabia, where the selling price of electricity is increasingly low and in many places it is already cheaper to produce electricity through wind farms

> "Leki Dukielskie and Bukowsko were projects in Poland that helped to create a lasting relationship with IKEA Group, which in the meantime has bought two more wind farms, developed and built by Martifer."

and solar parks than through conventional plants (natural gas, coal, etc.).

To continue to be competitive in this type of tenders, our know-how continues to be crucial to identify the best projects. However, it is also very important that we have the ability to negotiate the purchase of equipment at the best price and the possibility to have access to cheap sources of financing. To achieve this, we continue to rely on partners who are financially more robust. Thus, we must continually prove our merit, innovate, think and rethink business models so that we can continue to find strategic partners who trust Martifer Renewables to develop and implement wind farms and solar parks.

> “... we must continually prove our merit, innovate, think and rethink business models so that we can continue to find strategic partners who trust Martifer Renewables to develop and implement wind farms and solar parks.”

PROFILE

ANTÓNIO CASTRO
63 YEARS OLD

MARTIFER RENEWABLES GENERAL MANAGER FOR CENTRAL EUROPE AND MARTIFER RENWABLES BOARD MEMBER

António Castro has been a Board Member of Martifer Renewables since 2008 and is now General Manager of Martifer Renewables in Central Europe. Graduated in Civil Engineering at the Faculty of Economics of the University of Porto, he has a vast experience in the area of construction and renewable energy.

He started his professional career in the area of civil construction in several leading Portuguese construction companies. He was responsible for all operations of the company Soares da Costa in Africa, as Commercial Director and local representative of the Board of Directors. He was also General Manager of Mota-Engil in Central Europe and member of the Board of Directors of Mota-Engil International.

In 2008, he began his career at Martifer Renewables as General Manager for Central Europe, coordinating the development, construction and operation of wind farms in these geographies.

Playing sports and aircraft modeling are his hobbies. He doesn't live without jogging on a daily basis, whenever he can, with the exception when he is on business trips or when the cold or the pollution do not allow it. Trainers and other equipment are always part of the luggage. Creation of team spirit, definition of strategy and focus on the essential are the qualities that he highlights. He is passionate about life and has as his motto “insist, don't give up, insist...”.

THE FUTURE IS BUILT EVERY DAY

Arnaldo Figueiredo
Martifer Group Board Member

The future is built every day.

This is what we have been doing at Martifer since the beginning of 2015 when we defined a new Strategic Plan for the Group.

This Strategic Plan determined as main priorities for our success, the following:

- to focus on the Metallic Construc -tions core business (metallic struc -tures, aluminum and glass and the shipbuilding industry), to resize the Renewables activity and to try to enter the Oil & Gas sector;
- to adapt the structure to the reality of the business, in particular to the increase in internationalization;
- to reinforce the Business Control functions;
- to improve Processes and Operational Efficiency;
- to restructure the Bank Liabilities.

Today we can say that we accomplished in essence what we set out to do. Proof of this is the way we now live and our current relationship with all our stakeholders, which were much different in 2014.

Year after year we all perceive that the Group is better, more organized and with greater capacity to answer to challenges, in addition to a greater rigor in the control of operations, which allows us to know exactly the real situation in which we find ourselves. And, I am certain that in 2018 we will continue like this.

> "We believe this change to be a natural evolution of a Group, that although already 28 years old, continues to have the same ambition and desire to evolve that it has always expressed since its establishment..."

This reality allows us to look towards the future with optimism and think that "the worst is over", without, however, lowering our guard and continue to work and fight every day to improve all our activities even more.

Of one thing I am sure, even if we work well, everything can always be improved, so we cannot and should not accommodate and think that everything is already ok.

With reference to the above and because companies have to accompany the dynamism of the world, this year at the General Assembly to take place in May, the shareholders will make an important decision: the approval of a new corporate governance structure, where for the first time none of the representatives of the main shareholders, I'M and Mota-Engil, will occupy executive positions.

We believe this change to be a natural evolution of a Group, that although already 28 years old, continues to have the same ambition and desire to evolve that it has always expressed since its establishment, and that brought it to this day as a benchmark reference, nationally and internationally, in its sector.

We are thus convinced that the renovation that accompanies this new governance structure is the one that best answers the challenges of the future.

MY PILGRIMAGE IN MARTIFER, 2009-2018

FROM THE PRE-CRISIS TO THE NEW MARTIFER

Luís Valadares Tavares
Non-Executive and Independent Board Member, 2009-2018

I remember clearly the invitation that I received in 2009 to integrate, as a non-executive and independent Board Member, the Board of Group Martifer, which got me excited but also got me worried, because I always adopted a very intervening style in non-executive functions and the doubt was evident: would it be possible to bring value to a business group so complex in its organization, so diverse in its activity sectors and present in so many geographies covering several continents, only through the meetings of the Board in Oliveira de Frades and subsequent contacts?

However, I soon realized that the winds of change advised to value the perspective of someone exogenous to the system. Thus, I lived my first term very marked by the rapid growth dynamic of a group who was then celebrating 20 years of existence. But 20 years is always a difficult age to be - not only for young people but also for businesses - and since 2011 we started to feel the hardness of the economic and social crisis that would shake western economies, especially, the small and vulnerable Portuguese economy.

Which oracle wouldn't have been regarded as insane if, even right in the middle of the 2011 rescue plan, he/she were to predict the sudden and quick disappearance of some of our main economic groups? And yet, without prior notice, many of our best brands evaporated; whose logos we had known since childhood, from the most famous Banks and Insurance Companies to Telecommunications Companies, from the Cement Companies to the most prestigious Construction companies, as if all gobbled up by quakes and planetary upheavals.

Group Martifer was, as is known, on the front line of the risk: organization structure resulting from the abovementioned accelerated growth, high exposure to economies that were raising shields to defend themselves against new threats, the "core business" was the construction sector - perhaps the most hit by the crisis - and, as if these factors were not enough, being a subcontractor in its main projects!

Now, once more, it was confirmed that the fate of a Group depends, first and foremost, on the team that manages it. And so, it was possible to rethink its strategy, adapting it to new markets and to redefine its organization and management structure, benefiting from its main shareholder, the Mota-Engil Group, to which I believe it contributed conveniently, in time and in mode.

But this plan is only possible to fulfill in modern times in partnership and in coalition with the society that surrounds us and, in particular, with clients, with suppliers and with the banks. The most important asset of any company was boosted: the confidence that is attributed to commitment, to dedication and to the competence of all its leaders and employees.

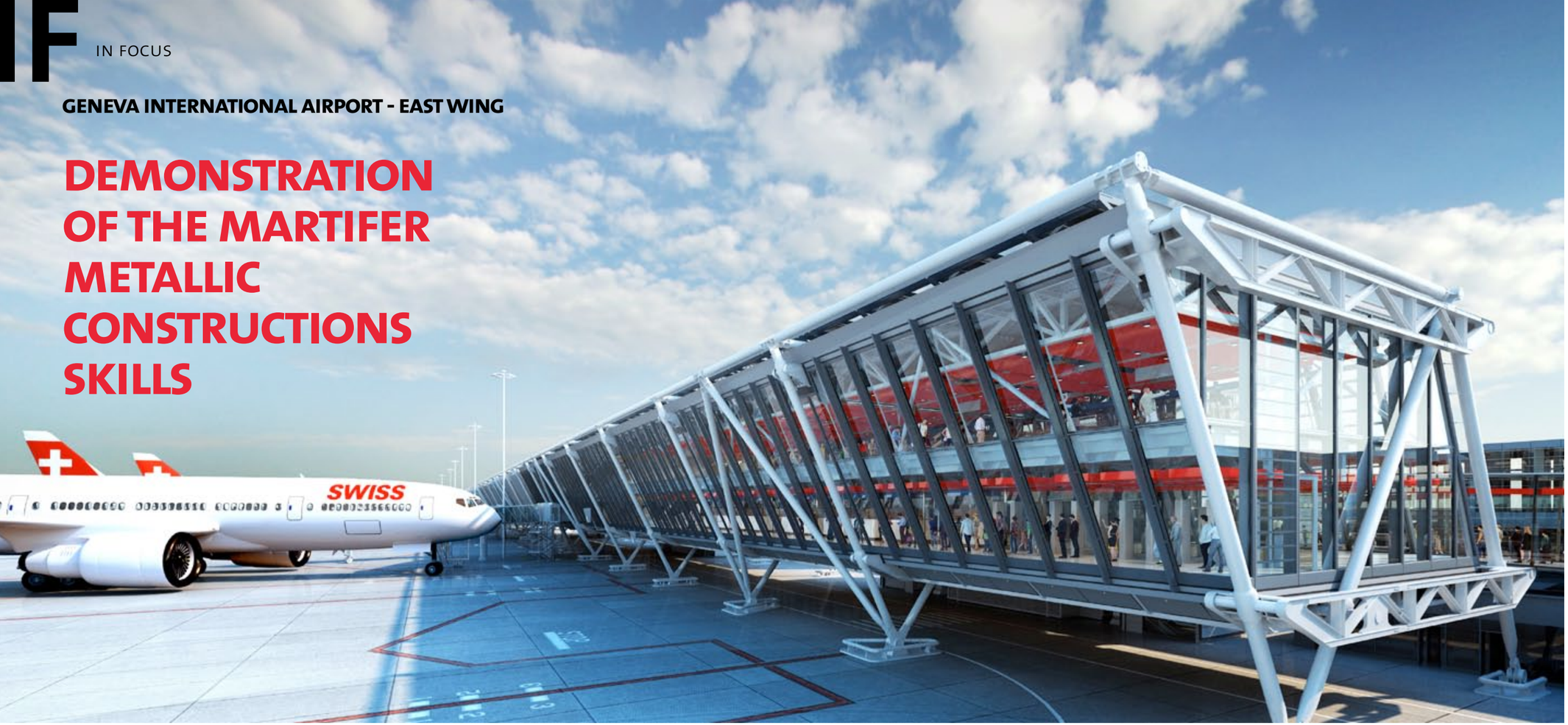
This is why Martifer belongs to the small group of those who survived the most difficult times and now trails sustainable paths for financial balance and profitability, already having premonitory confirmations, namely obtaining in open competition new metallic constructions contracts, such as the new facilities of the Geneva International Airport, totaling 45 million euros, the pavilions and shopping centers in Saudi Arabia and the innovative project of the New Midland Metropolitan Hospital in the United Kingdom, thus entering for the first time the promising and growing health sector.

But not less significant, is the revival - finally successful after numerous known and failed attempts by our Government - of shipbuilding in Portugal, thanks to Martifer and through West Sea with very positive results not only associated with the contracts with the Portuguese Navy but also with the tourism market (Douro Azul) and with international cruises (Mystic Cruises); hundreds of jobs were created which already have caused a significant impact on the revitalization of the region of Viana do Castelo.

I, therefore, believe my independent judgment to be well-grounded and my sense of having come through in this unlikely pilgrimage of almost a decade; although this does not mean ignoring the future challenges to overcome, but because I believe in the goodness of the new organizational and management structure of Group Martifer and because I have no doubt that this Group will continue to benefit from the restless, creative and innovative spirit of its helmsman, Carlos Martins, always discovering new opportunities and inventing the best solutions for Martifer, for the new Martifer.

GENEVA INTERNATIONAL AIRPORT - EAST WING

DEMONSTRATION OF THE MARTIFER METALLIC CONSTRUCTIONS SKILLS



The construction of the Geneva Airport is one of the most important projects in Martifer Metallic Constructions's order book. HRS Real Estate SA awarded Martifer the supply and assembly of the metal structure for the expansion of the new East Wing.

Architecture by Jacques Bugna SA and design by Rogers Stirk Harbor + Partners, the building, known as the "East Wing", will replace the current facilities that were built as a temporary measure in the second half of the 1970s. These installations are now obsolete and will be demolished.

The new building will be around 520 meters long, 20 meters wide and 19 meters high. These modern facilities will enable the render of better-quality services for passengers travelling on intercontinental flights. Travellers will be able to board planes and disembark on two air bridges (currently there is only one), which will help to streamline passenger flows and, above all, it will mean no more bus transfers.

The project includes the production and assembly of approximately 7500 tonnes of metal structure of the main buildings Jetée and Processador, and of secondary support buildings, in particular connecting buildings and stairways and 15000 sqm of collaborative plate, among other works. The production of the metal structure will be done mainly in the industrial facility of the group, in Oliveira de Frades, allowing the strengthening of the exporter side of group Martifer, which currently represents more than 80% of the turnover of the metal structure segment in Portugal.

The award of this contract is a demonstration of confidence in national engineering and in the technical capacity of the group Martifer.

2017

Award of the project in July

Beginning of the production of the metal structure at the end of the year

2018

Beginning of the assembly of the metal structure during the 1st semester

2019

Completion and delivery of the main metal structure of the Jetée building

2020

Completion and delivery of the project

About the new building

It replaces the airport's current wing for large aircrafts, having been built as a temporary wing, in the mid-1970s, and as a high-performance energy building

It allows the upgrade of the facilities

It enhances the safety of the aviation operations

It intends to maintain and strengthen long-haul services to meet the region's economic, tourism and diplomatic needs

It allows Geneva to be better connected to the growth centers of the world

Characteristics of the building

6 contact positions for large aircrafts (compared with currently 3 contact positions and 3 non-contact remote positions)

Dimensions: 520 meters long, 20 meters wide, 19 meters high

Cuboid-angled Façades

Metal exo-structured glass façades

Passenger flows above the apron

Service road at apron height

Customs road and technical facilities in the basement

Photovoltaic roof

The production of the metal structure will be done mainly in the industrial facility of the group, in Oliveira de Frades, allowing the strengthening of the exporter side of group Martifer, which currently represents more than 80 % of the turnover of the metal structure segment in Portugal.

CARLOS COSTA, BOARD MEMBER OF MARTIFER METALLIC CONSTRUCTIONS IN INTERVIEW

What makes the Geneva Airport a special project for Martifer?
In addition to being a project that demonstrates our skills and that cements the position of Martifer among the European industry leaders, the Geneva Airport project creates stability at various levels in our company.

It is a long-term project for our type of activity and, as such, it can be planned ahead.

The fact that it is a project of 7 building modules (7 gates) almost identical; it allows optimization at all levels due to repeatability, necessarily causing an impact on productivity increase and on the level of detail engineering, both in production and in assembly.

The success of this project may be important for future projects, because it will be able to show potential clients and also competition that Martifer is here to stay and is one of the most credible companies of the sector.

What are our client's expectations?
With the evolution of the negotiations with the client, I realized that the number of companies in Europe accredited for the execution of this contract is very low.

More than a contractual or price negotiation, our focus was on showing the client that Martifer has the technical skills and the right people for the execution of this project with such high requirements, mainly in production.

Today, I can say that our client feels and hopes to have found the right partner, with the right technical skills and productive capacity, so that the project is a success. Therefore, we will work to meet the client's expectations, always offering the best solutions, efficiently and effectively, demonstrating that we are capable and, ideally, that we are the best partner for this type of project.

What Martifer characteristics allowed us to win this project?
A set of characteristics were fundamental for the signature of this contract. I can highlight two of them that were fundamental: our curriculum in previous projects, which allowed us to be approved by the client, by the designers associated with the project and by the consultants; and, the quality certifications that we have, especially execution class 4 (EXC4).

Is there any specificity in the country that we have to take into consideration?
I would say that easily adapt to Switzerland, especially in the canton of Geneva where French is spoken. It is also a canton where the Portuguese emigration is very much present, so our employees will also adapt more easily.

Only a special note due to the fact that Switzerland is not an EU-country and, as such, there are customs to cross, in particular transport of goods. The work culture in Switzerland also has some specific characteristics, but I believe that our multicultural experience will allow us a quick adaptation.

TRANSPARENCY AND SUSTAINABILITY IN A CHALLENGING GLASS FAÇADE

AUDITORIUM OF THE NEW HEADQUARTERS OF BANCO POPULAR IN MADRID

The auditorium of the new headquarters of Banco Popular in Madrid is one of the reference projects of Martifer Metallic Constructions due to the uniqueness of its façade, which explores the concept of transparency and sustainability.

Architecture by Ayla Arquitetos and inspection by ENAR, Martifer Metallic Constructions was responsible for the construction of the façade of the auditorium building; the façade in double glass skin, with each glass pane approximately 9.5 meters high and 2.6 meters wide, weighing approximately 1.3 tonnes.

THE CHARACTERISTICS OF THE PROJECT

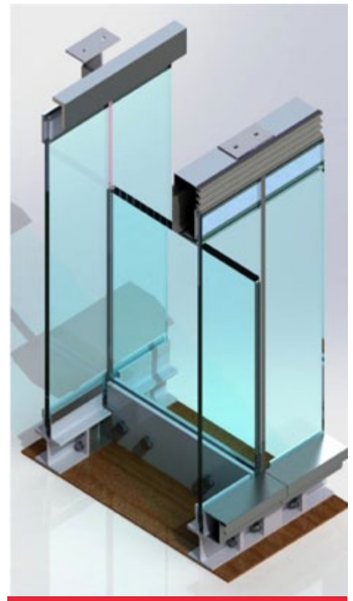
The outer and inner glass units are 2600 x 9500 mm (width x height) and are separated in 700 mm by intermediate glass fins, embedded with 7980 mm in height.

On the top part of this structural glass system there are two continuous rail system lines which were fully developed and duly certified to enable maintenance, cleaning and the replacement of all of the façade glass.

All of the glass was produced with a low content of iron oxide base, commonly called low iron glass and laminated with respective heat treatment so as to prevent spontaneous rupture of the glass due to excessive energy absorption.

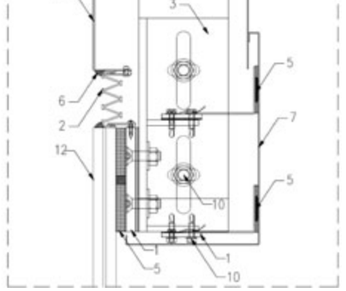
The interior and exterior panels are positioned and adjusted three-dimensionally by a hidden metallic frame structure. In the upper part, the system that has the two inner and outer skins of glass allows vertical movements. The incorporation of the intermedium glass fins that act as bracing was carried out by high-density polymers, with the help of resins and highly resistant stainless steel bolts.

> “... each glass pane approximately 9.5 meters high and 2.6 meters wide, weighing approximately 1.3 tonnes.”

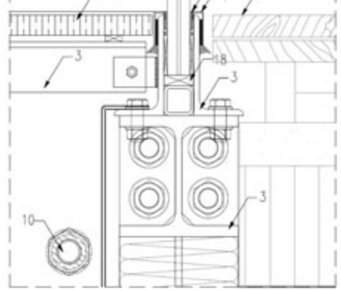


3D modeling of the idealized system during the design phase

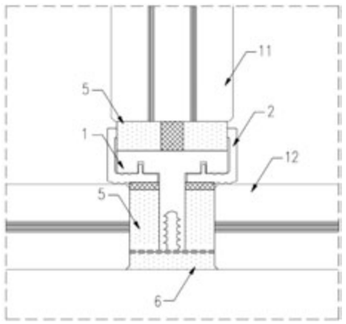
Sample (in a reduced scale): appearance of the adopted system



Upper detail



Lower detail



Typical detail

CAPTION

1 - Aluminium anodized profile (alloy EN AW-6063)
2 - Black EPDM profile (88 Shore)
3 - Galvanized steel profile
5 - Structural bonding
6 - Silicone sealant
7 - Stainless steel plate
10 - Stainless steel fixings
11 - 10101044 (heat-strengthened glass 10mm , 4 PVB)
12 - 10108 (heat-strengthened glass 10mm, with 8 PVB)
13 - Stone
17 - Finish floor
18 - Setting block

NEW LABORATORY DESIGNED TO TEST THE PROTOTYPE

> “Due to the large size glass of the façade, it was necessary to create a special chamber (the first of the Iberian Peninsula with these characteristics) to carry out the laboratory tests.”

As is usual in this type of special projects, all previous sketches, drawings, 3D modeling and structural, thermal and acoustic calculations are essential for the correct development and guarantee of the adopted system, in what concerns the desired architectural and aesthetic concept, as well as its performance requirements.

To build a “glass box” of this type which ensures maximum transparency, without including many visible elements, the first step was to define the structural concept of the façade and to make various calculations for all used components.

After the completion of various calculations, as well as the final definition of the type of glass to use, it was necessary to test the mock up at full-scale, in a certified laboratory, to prove all regulatory requirements and those required by the Client/Architects and the Inspection Entity. Only with satisfactory laboratory results would the production and assembly be able to move on.

Due to the large size glass of the façade, it was necessary to create a special chamber (the first of the Iberian Peninsula with these characteristics) to carry out the laboratory tests. We tested the air permeability, the waterproofness and the resistance to wind and to impact, in accordance with the regulations. The results were satisfactory.

A very rigorous quality control system and various laboratory analyses (to check chemical contamination and adhesion between the various materials used to avoid future and serious conditions in this type of façade) were required for the choice of various materials that would be used as well as in production.

ON SITE ASSEMBLY

The installation was without any doubt a huge challenge. For that reason, a 3D simulation was previously developed with the assembly sequence to ensure a proper execution.

The difference in the base of the “glass box” demanded a double-check of the leveling of all fixing structures to ensure the perfect fit of the glass. After verification of the overloads, the area was modelled to allow the analysis of the installation tolerances for future movements. It was very important because, in addition to the dimensions of the glass, each unit weighs more than 1.3 tonnes.

NAVAL INDUSTRY

KNOW-HOW AND ENGINEERING FROM PORTUGAL TO SEVERAL GEOGRAPHIES

SHIPBUILDING

Portugal

PRIORITY ELEGANCE
RIVER CRUISE

PRIORITY SERENITY
RIVER CRUISE

SCENIC EMERALD
RIVER CRUISE

DOURO SPLENDOUR
RIVER CRUISE

VIKING HELGRIM
RIVER CRUISE

DRAGA DRAGUS
DREDGE

NRP SINES
PATROL VESSEL

NRP SETÚBAL
PATROL VESSEL

WORLD EXPLORER
POLAR SHIP

France

PORTAS COMPORTA
DOCK GATES

SHIP REPAIR

Germany

JOHANNA SCHEPERS
CHEM TANKER

DAVIKEN
LPG TANKER

WILLY
TANKER

DORIS SCHEPERS
CONTAINER

ARA ATLANTIS
CARGA GERAL

GOVIKEN
LPG TANKER

United Kingdom

MORITZ SCHULTE
CHEM TANKER

CLAMOR SCHULTE
CHEM TANKER

JOHANN SCHULTE
CHEM TANKER

Portugal

MONTE XISTO
TUG

SANTA MARIA MANUELA
SCHOOL NAVY

SACOR II
TANKER

VIKING TORGIL
PASSENGER

AMAVIDA
PASSENGER

QUEENISABEL
PASSENGER

PONTA DO SOL
GENERAL CARGO

MERCURIO
REBOCADOR

CORVO
GENERAL CARGO

CASTELO DE VIANA
TUG

TEJO ALGÉS
GENERAL CARGO

VIKING HEMMING
PASSENGER

Spain

REGINA BALTICA
PASSENGER

Belgium

L'ÉTOILE
DREDGE

LE SPHINX
DREDGE

LE GUERRIER
DREDGE

Switzerland

ESKY
GENERAL CARGO

Denmark

TANJA KOSAN
LPG TANKER

MARTIFER METALLIC CONSTRUCTIONS

WE'VE BEEN BUILDING

LISBON, PORTUGAL

BRAÇO DE PRATA, A NEIGHBORHOOD WITH ROOTS IN HISTORY

The project Braço de Prata is a 28-apartment building part of an allotment with 12 buildings, where Martifer Metallic Constructions was responsible for the supply and assembly of the entire ventilated façade.

The façade, with around 2000 sqm, has a steel and aluminum profile sub-structure, which supports more than 8000 aluminum and ceramic tiles bonded to aluminum panels, as well as 400 sqm of glass screen shadows.

The ceramic was specially developed for this project by the Italian architect Renzo Piano, in white and blue, to inspire the traditional tiles of ancient Lisbon.

The ceramic units are structurally bonded to a new extruded aluminum profile, with the application of lateral and top clamps that allow the sequential assembly of the units and guarantee a good pos breakage behavior.

The whole process underwent rigorous mechanical tests, including various types of aging of the panels and of all the several material used, in order to ensure the safety and the structural demands of the developed system.

The glass screen system is divided into fixed and mobile/ motorized units of monolithic glass, which allow openable areas in each apartment.

This support and motorization system of glasses was totally developed by Martifer and consists of a set of specific parts, developed on a case by case basis, which allowed the correct functioning of the whole system; it required a big study on the compatibility of accessories, due to the very small spacing between the glass, especially in the curved area, in which each glass unit had different opening angles.

The work is finished, and some deeds of sale have already been signed. The building will soon receive the first homeowners.

LISBON, PORTUGAL

HOSPITAL DA LUZ INCREASES ITS CAPACITY

Martifer Metallic Constructions is in the initial stage of the project relating to the extension of Hospital da Luz. Having as client the consortium Mota Engil - HCI, Martifer is responsible for the supply and assembly of the façades, window systems and cladding of the extension of the Hospital. The works include 4500 sqm of façades covered by aluminum screen shadow, a solution that demanded the development and implementation of a new system, where new dies/ extruded profiles had to be created and produced.

The building will have three floors for car parks (from floor -4 to floor -2), three floors for services (from floor -1 to floor 1) and 5 floors dedicated to inpatient treatment (from floor 2 to floor 6). It will also have an inner courtyard in the central zone, completely waterproof and surrounded by glass, which will extend in height from the floor -1 up to floor 4.

Architecture by Risco, Hospital da Luz is one of the largest hospital complexes in Lisbon. This extension will allow an 80% increase in its capacity.

During the execution of the works, the existing hospital will remain in operation, which will involve great coordination between the various participants in the project.

LISBON, PORTUGAL

BUILDING 41 OR CITY TOWER

Martifer Metallic Constructions is taking part in the construction of a 17-floor office tower at Fontes Pereira de Melo Avenue, right in the heart of Lisbon. This is one of the major projects coming up in the capital city and it will change the city's image.

Martifer is responsible for the production and assembly of the 7000 sqm exterior façade, a façade built in a modular system.

The building is already starting to take shape, not only because the tower is already high, but also because the assembly of the façade doesn't have a scaffold that covers it entirely; it has but a mobile structure that moves to where the works are taking place.

FARO, PORTUGAL

EXTENSION OF FARO AIRPORT

Faro Airport's new terminal was inaugurated in July 2017 and this was a very important project for Martifer Metallic Constructions which began working on it in November 2015. Martifer was responsible for the production, transport and assembly of 2200 tonnes of metal structure (columns, plate girders, known as "rib beams", and reinforcement of existing structures) and 10200 sqm of standing seam ("Roofzip" type), 3600 sqm of façades and 2600 sqm of composite panels.

In addition to the specificities of the project, one of the biggest challenges was to carry out the work with some areas of the airport open to the public, which required increased efforts by the assembly team.

RIYADH, SAUDI ARABIA

KING FAHD BRIDGE, RIYADH UNDERGROUND

The King Fahd Bridge is a challenging project for Martifer Metallic Constructions, from the level of demand of the client to the logistic process of the assembly, painting and welding of the bridge segments, over a very busy road at any time of day or night.

Near completion of the assembly of the main segments (33 in total), during the 1st half of 2018 several tasks will be executed: the assembly of the secondary elements, painting, the descimbre and the removal of temporary structures.

This is the third bridge executed by Saudi Martifer, in Riyadh, after the Abi Bakr Bridge and the Karwest Bridge. It is the most complex and the largest of the three. It is a bridge that has a great visibility for the population, because it is part of the new Riyadh Underground network. It is over King Fahd Road, opposite the King Abdullah Financial District (KAFD) and it connects line 4 to line 1, which is compulsory for those travelling to the airport.

Logistically, the execution of the pre-assembly is done 6 km away from the final assembly zone, which requires special transport of large dimensional segments (up to 30 metres long and weighing 130 tonnes).

LUANDA, ANGOLA

IMOB BUSINESS TOWER, THE HIGHEST BUILDING IN LUANDA

The IMOB Business Tower is an office and commerce building with 33 floors above ground level and 1 underground floor (27 floors for offices, 6 floors for car parks and commerce and a panoramic restaurant on the roof). It is currently the highest building in Luanda (135 metres high).

The works carried out by Martifer Metallic Constructions include the production and assembly of 4000 sqm of modular façade, 585 sqm of traditional façade, 200 sqm of frames, 490 sqm of aluminum guards and 10500 sqm of coating in composite panel.

The height of the building and its specificities required that all the installed façades and coatings were sized and custom made, which led to the development of new solutions. To meet the architect's expectations, the modular façade was executed from a new façade system, where new matrices/profiles had to be developed and produced and where the whole system had to be tested and certified in a laboratory.

The tasks assigned to Martifer Metallic Constructions are nearing completion, which is scheduled to occur in March.

MIDLAND, UNITED KINGDOM

MIDLAND METROPOLITAN HOSPITAL, A STATE-OF-THE-ART HOSPITAL

Martifer Metallic Constructions is finishing the works on the Midland Metropolitan Hospital, a state-of-the-art hospital, which will provide service to 500000 users.

The modular façade designed by Martifer allowed to meet the client's needs in terms of deadline anticipation, since it incorporated all the different coatings in a single modular system.

From a total of 2213 modules, 2143 Modules (97%) are currently installed; the missing 70 modules will be assembled according to the availability of the areas.

We are currently at the stage of additional works. We are in the process of preparing 4000 sqm of ceilings in aluminum plate and 3 steel shades covered in glass.

The project is expected to be completed in mid-June 2018.

SOME KEY DATA

In the assembly phase, an average of 20 modules were installed per day.

The largest modules weigh 1300 kg and their size is 6500 mm x 2240 mm.

The completion dates for the contractual works were anticipated in approximately 2 months.

LONDON, UNITED KINGDOM

BATTERSEA, FROM A POWER STATION TO A SHOPPING, BUSINESS AND RESIDENTIAL COMPLEX

The Battersea Power Station began to be built in 1933 by Giles Gilbert Scott and, after some decades in operation, it stopped generating energy in 1983.

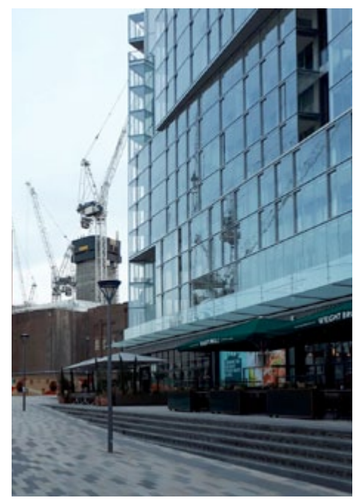
Located on the south bank of the River Thames, in Battersea, the central district of southwest London, it was abandoned for 30 years and has become one of the city's most exciting tourist attractions.

Its popularity is partly due to having been chosen for Pink Floyd's "Animals" album cover and for being shown in the movie "Help" about the Beatles.

The ambitious rehabilitation project, in which Martifer Metallic Constructions had the opportunity to participate, aimed at transforming the old Battersea thermoelectric power station in one of London's leading shopping, business and residential complexes. This rehabilitation project has already attracted Apple that chose it as its headquarters in the United Kingdom.

With the works already completed, Martifer was responsible for the production and assembly of about 5000 sqm of façades, coatings and other works.

More recently, Martifer was also given the opportunity to participate in the rehabilitation of the arches over the railway line in the western area of the complex, an area intended for shopping.



LONDON, UNITED KINGDOM

WEST END GATE, A LUXURY CONDOMINIUM IN THE HEART OF LONDON

The developer Berkeley Homes is the Client. Martifer Metallic Constructions is responsible for the execution of the entire outer cladding of the building, from the second floor up to the roof.

With a total intervention area of 24300 sqm, the works include the production and assembly of 12550 sqm of modular façade of which 7800 sqm with coating in GRC (Glass Fiber Reinforced Concrete), 2160 sqm of windows and 6200 sqm of cladding of lacquered aluminum plates for the balconies (walls and ceilings), 4350 sqm of SFS (Secondary Frame System), 1850 sqm of waterproofing/ balcony flooring. However, the works on the roof consist of 1295 sqm of waterproofing/ flooring and production and assembly of 223 sqm of aluminum Z-shaped grilles.

West End Gate is a luxury condominium with 29 floors, situated in the centre of London, designed by the architect office Squire & Partners.

BORDEAUX, FRANCE

MÉCA, A BUILDING THAT STANDS OUT BECAUSE OF ITS UNCONVENTIONAL GEOMETRY

The Maison de l'Economie Creative et de la Culture (MÉCA) has a unique architecture and it will be the headquarters of three important cultural entities of the region: FRAC, OARA and ECLA (entities in the areas of contemporary art, performing arts and cinema/ audiovisual). The complex has two large concrete towers (36 metres and 24 metres high). One of the towers is the ECLA headquarters and the other the OARA headquarters.

The bridge between these two buildings is the FRAC headquarters and it was here that Martifer intervened. This connection between the two towers is sustained by a metallic structure, different trusses and a secondary structure. The 4 main trusses that connect the two concrete cores have spans that are approximately 30 metres long.

The unconventional geometry of the building, characterized by the different existing plans in the façade and the roof (two buildings of different heights connected by a "metallic bridge") brought on technical difficulty that was reflected transversely in the studies, in the production and in the assembly.

Between the river and the city, MÉCA, in addition to offices, will have 1200 sqm exhibition space for temporary and semi-permanent exhibitions, two auditoriums, a 400 sqm stage and an anphitheatre with 266 seats. The terrace, the restaurant and the ramps facing the river will be a major contribution to attract visitors. The architectural project is by Bjarke Ingels, a Danish architect, together with the Freaks office in Paris.

A singular architecture design that will certainly show off on the banks of the Garona River and on Martifer Metallic Constructions's portfolio. Martifer is currently in the final phase and it should complete the works soon.

PARIS, FRANCE

PORTE DE VERSAILLES

Martifer Metallic Constructions is taking part in the modernization of the Paris Convention Centre, being responsible for the design, production and assembly of the metal structure in Pavilion no. 6.

Martifer's Client is the company Leon Grosse and the owner is Viparis.

The work carried out by Martifer includes the production and assembly of 2000 tonnes of metal structure and the aplication of 15000 sqm of collaborative plate for the execution of the mixed architecture structure on the roof of the pavilion. This mixed architecture structure on the roof will have the particularity of also supporting a leisure area which will also have areas where fruit and vegetables can be grown. Around 4700 sqm of intumescent mortar will also be applied.

In relation to the metal structure, the pillars are built in plate and trusses in tubes (4 m high and with a 30 to 60 m free span) will be applied. Martifer will also assemble 15 smoke removing chimneys on the roof of the pavilion and 2 metal footbridges that will connect to existing structures.

The project is currently undergoing civil construction works. The assembly of the metal structures is due to start in the beginning of May.

PARIS, FRANCE

MARCEL RIVIÈRE INSTITUTE AND DENIS FORESTIER HOSPITAL

The MGEN - Marcel Rivière Institute and the Denis Forestier Hospital has 4 buildings dedicated to psychiatric treatment and geriatrics, in the city of La Vérrière, and a central restaurant to support this complex.

Martifer Metallic Constructions is responsible for the production and assembly of approximately 1000 windows of various typologies/ dimensions and 1900 sqm of traditional façade.

Martifer also has the responsibility of producing and assembling 4000 sqm of perforated plate, applied on the façades (shading).

The systems used in the windows (OC+ and FP by SAPA) as well as in the traditional façade (ELEGANCE 52 by SAPA) are certified by "Avis Technique". This project is very complex due to the great variety of window types as a result of the different specializations that they integrate in the buildings, especially in the ones dedicated to mental health. Some windows of the rooms dedicated to the most severe psychiatric cases will have reinforced P6B glass and will have strengthened locking systems.

The production was begun in Oliveira de Frades in the last quarter of 2017, and the assembly phase started at the beginning of 2018.

PARIS, FRANCE

PARIS ASIA

The Paris Asia Business Centre is a business complex dedicated to import/ export activities with Asia, near Charles de Gaulle Airport.

Martifer Metallic Constructions was responsible for producing and assembling approximately 14000 sqm of traditional façade which corresponds to 390 shops, 1 restaurant and 1 office building.

The traditional façade that was used is an ELEGANCE 52 by Sapa system, which is certified by "Avis Technique"; it has double glass filling and opaque panels with rock wool in the slab zone. The project has been completed, and the provisional reception has been received.

MARSEILLE, FRANCE

ITER, CONSTRUCTION OF THE "TOKAMAK COMPLEX" BUILDING

Portugal has been present in the construction of this project, with Martifer's participation in it since 2013. At this stage, Martifer Metallic Constructions is responsible for the design, production and assembly of approximately 1632 tonnes of metal structure for Building no. 11 (Tokamak). Building no. 11 will be the home of Tokamak, an experimental nuclear fusion reactor, which will replicate in laboratory conditions the nuclear fusion reactions that occur in the interior of stars, such as the Sun. It is expected that this process is one of the future technologies for the generation of clean, renewable and cheap electrical energy.

This building is an integral part of the "Tokamak Complex", which consists of 3 separate buildings:
· Tokamak - building no. 11
· Tritium - building no. 14
· Diagnostic - building no. 74

This building is 72 meters high, 80 meters long and 51 meters wide and complies with demanding production, assembly and quality standards.

One of the peculiarities of this building is that it has two 1500 tonnes travelling cranes. These travelling cranes are supported by 20 rail beams weighing approximately 21 tonnes each. Given the size and capacity of the travelling cranes, the very structure that supports them (pillars and rail beams) is very robust. The biggest pillars are 4.5 meters wide and weigh 31 tonnes.

The assembly will have to be done using a high capacity crane due to the building's own height and due to the distance at which the lifting means will have to be placed.

Currently the project is undergoing the stage of detailing the links, the study and the elaboration of procedures for production and assembly. The production is expected to start within the next couple of months and the assembly at the beginning of next year.

The completion of a project with the importance of ITER demonstrates Martifer's ability to build emblematic projects with a high degree of technical requirements.

MADRID, SPAIN

HELIOS - VIA DE LOS POBLADOS 1, COLOR SERVING ARCHITECTURE

The project Helios - Via Poblado 1, in Madrid, with architecture by Fenwick Iribarren, consists in a set of two buildings with the same architectural concept, formed by two blocks each, in which black and white are combined in the exterior façades incorporating a serigraphy on all the windows, as well as on the cladding of the composite panels in black and white.

It is a technically very demanding project at a static, thermal and acoustic level, which aims to create a superior quality office complex.

Martifer Metallic Constructions is responsible for the supply and installation of approximately 14000 sqm of traditional aluminum façade, 24000 sqm of composite panel that has metal structure in the base, totaling around 4500 meters. The project also includes other works in a smaller scale: ceramic façades, fire panel in between floors and lifelines for the building's maintenance.

It is one of the greatest projects in Spain at the moment, with short execution deadlines, which demanded a great effort of the technical department in developing solutions. It is another opportunity for Martifer to demonstrate its production and assembly capacity to meet the deadlines agreed with the Client. Its completion is scheduled for the end of the summer of 2018.

MADRID, SPAIN

CASTELHANA 163, A NEW SKIN FOR THE TWO FAÇADES

Many of the emblematic buildings of Madrid are in need of rehabilitation, taking into account new norms and to improve the comfort and aesthetics of the buildings.

In recent years, Martifer Metallic Constructions has been able to respond to this need and has already in its portfolio reference projects such as Torre Serrano, Torre 30 (Ilunion) and the recently completed Serrano 73.

Castelhana 163 is a building with two symmetrical façades in two of the busiest streets of Madrid, the Capitán Haya and Castellana streets. Martifer's intervention in this project consists in the dismantling of the existing façade and the creation of a new façade that will radically change the image of the building. This façade will be produced with various materials: steel, aluminum, glass, honeycomb and Krion, also including the architectural lighting integrated in the façade. The total area of the façade is 3000 sqm.

One of the great challenges of the project is the complexity of logistics, safety, auxiliary means and the assembly process, because it is in the center of Madrid and because it will be business as usual during the entire project for the companies that have offices in this building.

PICOS VERDES
PORTUGAL
No. of towers: 1
The wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. The tower is 100 m high and weighs 177 tons.

QUINSSAINS II
FRANCE
No. of towers: 2
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 2 towers weigh 348 tons.

SCAER CRENORIEN 80
FRANCE
No. of towers: 2
Each wind tower has 3 sections 2 cylindrical sections with a 4.30 m diameter and 1 cylindrical section with a 2.95 m diameter. Each tower is 80 m high and the 2 towers weigh 256 tons.

SCAER CRENORIEN 69
FRANCE
No. of towers: 2
Each wind tower has 3 sections 2 cylindrical sections with a 4.00 m diameter and 1 cylindrical section with a 2.95 m diameter. Each tower is 69 m high and the 2 towers weigh 202 tons.

SCAER LE MERDY
FRANCE
No. of towers: 4
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 4 towers weigh 708 tons.

BRECHFA FOREST
UNITED KINGDOM
No. of towers: 28
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 28 towers weigh 4956 tons.

OLEN & BEPRO
BELGIUM
No. of towers: 2
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 2 towers weigh 354 tons.

SSH
FRANCE
No. of towers: 3
Each wind tower has 3 sections 2 cylindrical sections with a 4.00 m diameter and 1 cylindrical section with a 2.95 m diameter. Each tower is 69 m high and the 3 towers weigh 303 tons.

EDPR
PORTUGAL
No. of towers: 7
Each wind tower has 3 sections 2 cylindrical sections with a 4.30 m diameter and 1 cylindrical section with a 2.95 m diameter. Each tower is 100 m high and the 7 towers weigh 1218 tons.

MAUNÇA
PORTUGAL
No. of towers: 8
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 8 towers weigh 1416.

SAINT MARTIN L'ARS
FRANCE
No. of towers: 5
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 5 towers weigh 885 tons.

MOLENBAIX
BELGIUM
No. of towers: 5
Each wind tower has 4 sections 3 cylindrical sections with a 4.30 m diameter and 1 conical section, which ends with a 2.95 m diameter. Each tower is 100 m high and the 5 towers weigh 870 tons.

IN 2017

PRODUCTION OF WIND TOWERS, A PRODUCT OF EXCELLENCE IN MARTIFER'S PORTFOLIO

NAVAL INDUSTRY

AN INTENSE BEGINNING OF YEAR AT THE WEST SEA SHIPYARD

The beginning of this year at the West Sea shipyard has been as intense as last year, which was a year full of construction projects and ship repairs. The shipyard began the year with several construction projects and repairs in its order book. West Sea has 300 employees but there are more than 800 people working daily in the shipyard, collaborating in various projects.

SHIPBUILDING

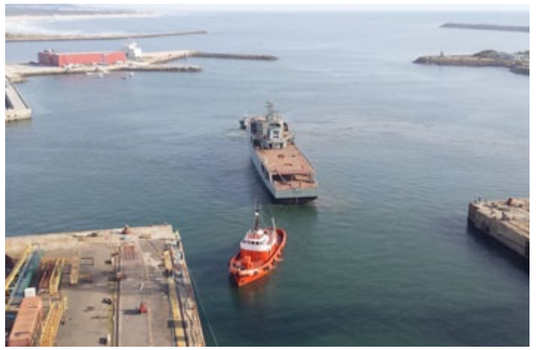
OCEAN PATROL VESSELS (OPV'S)

The NRP Sines and the NRP Setúbal are floating in West Sea's outfitting basin. The NRP Sines is currently in the outfitting phase while trials are being carried out on the mooring position. The NRP Setúbal, also in the outfitting phase, is starting the trials while moored at the quay. The two Ocean Patrol Vessels for the Portuguese Navy were the first shipbuilding contracts awarded to West Sea, in May 2015, and are due to be delivered in 2018.

The NRP Sines and the NRP Setúbal represent, in full, the most visible sustained and sustainable way to achieve a continuous and joint development between industry, the Defense and the Navy, allowing to allocate to and to supply Portugal with the necessary means and knowledge to equip and develop the Portuguese Navy in terms of patrol and war vessels.

These vessels also demonstrate West Sea's ability to meet the requirements, over a short period of time and within the expectations and needs of this project in particular.

Therefore, West Sea intends to look and to develop its skills in the long term and not in the short or medium term, since this ship class in particular ensures the modernization and provision of the Portuguese Navy in terms of warships, in accordance with its needs, but it also represents a highly exportable product which may be produced in Portugal and exported to other parts of the world, where Portugal presents itself as the bearer of the know-how of a very high added-value product.



SHIPBUILDING

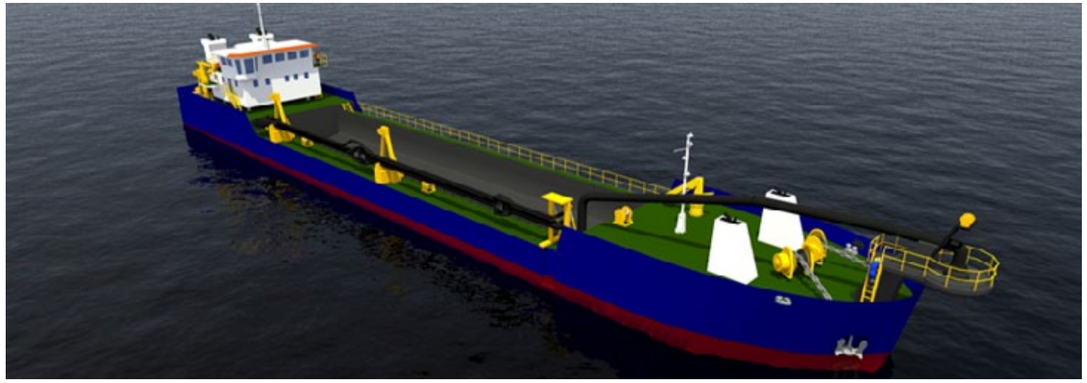
DRY DOCK GATES - TOULON MILITARY SHIPYARD

Already with a dock gate delivered to the client Joseph Paris, West Sea is currently negotiating the construction of the second gate for the Toulon Military Shipyard; a broader scope of intervention than the already executed is expected. 42 meters long and 15.5 meters high, each gate weighs approximately 440 tonnes.

This challenging project for the French Navy shows, once again, West Sea's ability to adapt and to meet the specific needs of the project and of the client, in a short period of time, maintaining and fulfilling the expectations regarding safety, quality and project planning.

SHIPBUILDING

TRAILING SUCTION SPLIT HOPPER DREDGER



The Trailing Suction Split Hopper Dredger (TSSHD) José Duarte, under construction, is a unique project in this range with a 1045 m3 capacity; it has the versatility to dredge up to 40 m in depth and up to 20 nautical miles, without restriction while navigating in areas A1, A2 and A3. With the delivery scheduled for October 2018, it is entering its final stage. The TSSHD has and LOA of 73 metres and a beam of 11.40 metres, while using a 4-metre operational draught.

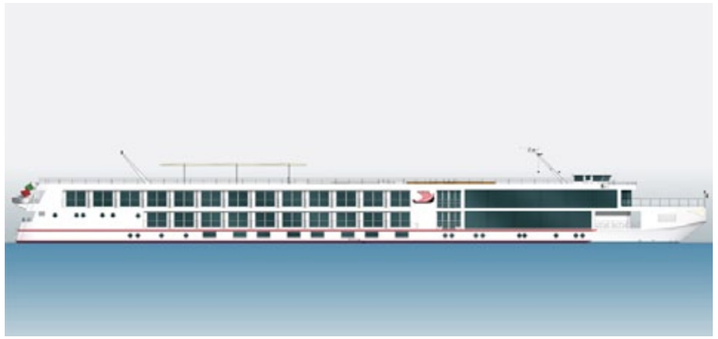
The design, development, construction and testing all done in 14 months' time and the time was the biggest challenge in this project. What differentiates it from the rest of the projects is the modelling of the vessel as well as the integration of equipment and systems, with architecture restrictions on beam and draught - in order to operate and navigate the Douro river - and, at the same time, to be classified as an unrestricted vessel, which will allow it to navigate and operate in the areas of navigation A1/A2/A3.

SHIPBUILDING

THE VIKING HELGRIM SHIP-HOTEL

In the final phase of detail design and block building stage, this river cruiser is similar to the Viking Osfrid. This new ship will be part of the VikingCruises fleet, being operated by International Mystic Sales, in the Douro River.

It is 79.85 meters long and has a 11.40-metre breadth and a 7.20-metre air draught. The ship will have 53 cabins for passengers and 15 for the crew.



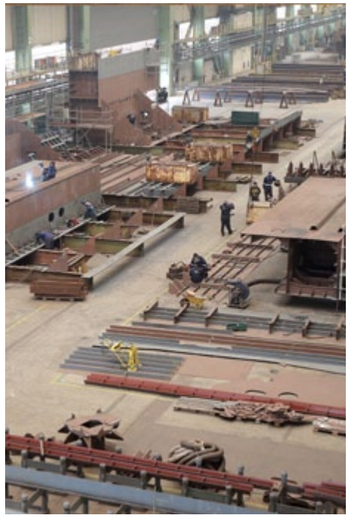
SHIPBUILDING

DOURO SPLENDOR

Identical to the Douro Elegance ship, the Douro Splendor, a ship-hotel for Douro Azul, is in the final phase of painting, interior outfitting and the final stages of the installation of machinery and systems. It will be 79 meters long and it will have a 126-passenger capacity.

SHIPBUILDING

WORLD EXPLORER



The luxury cruise vessel is designed to navigate in Antarctica. It is curently in the final phase of the basic design, in an advanced stage of the detail design and, simultaneously, undergoing block production and assembly. A super ship is growing; 126 meters long and with a 19 meter beam, it will occupy West Sea's construction platform. It will have a capacity for 176 guests and for 125 members of the crew.

The World Explorer represents West Sea's entry in an important and competitive market segment, which will undergo an exponential growth in the next 5 to 8 years and of which West Sea wants to be part, in order to achieve a continuous and sustainable growth in this particular range of vessels.

West Sea has already repaired and/or re-fitted 139 vessels.

It already has 12 shipbuilding projects:

Delivered:

- 5 Cruise Ships for the Douro River
- 1 dry dock gate for the Toulon Military Shipyard

In progress:

- 2 Ocean Patrol Vessels for the Portuguese Navy, under construction, to be delivered in 2018
- 1 Trailing Suction Split Hopper Dredger (TSSHD) up to -40 m for the company Dragus, to be delivered in 2018
- 1 Expedition Ship for the company Mystic Cruises, to be delivered in 2018
- 1 Cruise Ship for the Douro River for the company International Mystic Sails
- 1 Cruise Ship for the Douro River for the company Douro Azul

SHIP REPAIR

PROJECTS IN THE SPOTLIGHT

Since the beginning of the year, West Sea has already received 11 vessels for repair, for periodic maintenance, including interior re-fit projects.

For annual maintenance it received four passenger vessels which sail on the Douro River: the Alto Douro, the Douro Queen, the Viking Osfrid and the Douro Cruiser.

In what regards periodic maintenance works, the shipyard has been/ was responsible since January for work done on the ferries Lobo Marinho, Funchalense 5 and Wec Goya and on the LPG carrier DorotheaSchulte.

Undergoing interior transformation are the Viking Hemming and the Douro Torgil; the works are taking place in the Gaia Pier.

The historic vessel Santa Maria Manuel(originally a cod vessel trawler) is in the Navalria shipyard also undergoing an interior re-fit in a joint project by two companies: Navalria and West Sea.

In 2017 the following repaired vessels can be highlighted:

WILHELM SCHULTE

TANKER

Length: 155 m
Breadth: 23,10 m
DWT: 18.094 t

- Treatment and painting of the vessel
- Improvement of the main machine
- Renewal of several pipes
- Renewal of the cargo tank supports
- Improvement of cargo pumps and condensers
- Replacement of steel
- Improvement of the bow and windlasses

MONTE BRASIL

CONTAINER VESSEL

Length: 126,25 m
Breadth: 19,4 m
DWT: 8.450 t

- Treatment and painting of the vessel
- Repair of steel in the hatches
- Repair of the guides of the containers
- Improvement of various pumps and coolers
- Replacement of several pipes
- Several tasks of all specialties

TANJA KOSAN

LNG TANKER

Length: 106,98 m
Breadth: 15,7 m
DWT: 5.996 t

- Treatment and painting of the vessel
- Removal and replacement the seals of the shaft lines
- Removal and repair of the helm
- Improvement of the main machine
- Improvement of cargo pumps, the capacitor charge and the reheater
- Several tasks of all specialties

BRAGE R

DREDGER

Length: 89,59 m
Breadth: 13,67 m
DWT: 3.200 t

- Treatment and painting of the vessel
- Replacement of approximately 100 tonnes of steel in the hopper
- Repair of dredging equipment
- Replacement of several pipes
- Several tasks of all specialties

PROJECT ÂNCORA

AN OVERCOME CHALLENGE

In 2013 the Ventinveste consortium was seen as a very bleak picture.

In what concerns project development, only 12 MW were in operation of a total of 400 MW that had been awarded. And the remaining projects which were already licensed weren't inspiring interest amongst banks to be financed. Thus, the shareholders Galp and Martifer tried at all costs to reduce the injection of new capital in this project.

Industrially, the picture was not more encouraging. After ending the partnership with Repower (now called Senvion), Martifer closed several of its industrial units associated with the Ventinveste consortium; it had even stopped its core activity of steel tower production.

In the background of all these developments was the contract signed by Ventinveste and the Directorate General for Energy and Geology (DGEG) which imposed several obligations on the members of the consortium and, in particular, on group Martifer for being the only entity involved in the two business areas: project development and the industrial cluster. The breach of these obligations, as well as the possible abandonment of this project would have an overall impact of around 100 M€ (50 M€ of which in group Martifer).

At the end of the year 2013, the opportunity arose to bring a new partner (the German company Ferrostaal) to the projects already developed by the Ventinveste consortium, totaling 171 MW - Project Âncora.

However, for this opportunity to become real it would be necessary to achieve the impossible: to ensure that the projects had a specific profitability (so that the new shareholder would be interested in them), to minimize to the maximum new capital injections by the initial shareholders (Galp and Martifer), to ensure that the acquisition of Senvion turbines was made at very competitive prices, to renegotiate the deadlines for the implementation of the projects with DGEG, to agree on the financing of these projects through a bank consortium (160 M€), to ensure that the obligations of the industrial cluster were met and, the icing on the cake, to have Martifer Construções produce the 84 steel towers for project Ancôra.

After months of intense negotiations with the new partner (Ferrostaal), with Senvion, with banks and with DGEG, at 2 am of a Friday in November 2014, the renegotiated contract was signed with the DGEG, as well as the financial close with a consortium of three banks (ING, Santander and BPI). Now, the only thing missing was to build and finish the project within the agreed deadlines.

After months of overcome challenges, almost on a daily basis, the last wind turbine of Project Âncora was connected to the grid in August 2016; the project was built within the deadline, within the budget and with the expected quality!
A few months after being in operation, an international bid was initiated for its sale. The interest generated exceeded all expectations, having been received several bids from international investors. After a lot of careful thought and consideration, the shareholders of Project Âncora concluded the sale of their shares in March 2017.

In sum, from a project that represented a direct responsibility for group Martifer of around 50 M€, we managed not only to have a capital gain for the group, but also to reactivate the activity of producing steel towers for wind turbines and, especially, to meet all obligations of group Martifer within the scope of the Ventinveste consortium.

ARGENTINA

MARTIFER RENEWABLES WINS A TENDER IN ARGENTINA

The Ministry of Energy and Mines of Argentina announced the award of approximately 800 MW of solar energy projects, within the scope of the Renew 2.0 Program, last December. This Program aims to change the energy matrix in Argentina by increasing renewable energies.

One of the projects, a 100 MW project located in the municipality of Iglesia in the San Juan province, distancing approximately 1000 km from the capital Buenos Aires, will be developed by Martifer Renewables, which, thus, takes the first step in the development of its activity in Argentina.

This is the second tender held by the Government of Argentina. The total awarded capacity of solar energy projects since the first tender is around 1700 MW.

THE GLASS SUPPER EVENT 2017

AN EVENT SPONSORED BY MARTIFER METALLIC CONSTRUCTIONS

Martifer Metallic Constructions was an official sponsor of The Glass Supper Event 2017, which took place on 7th December, with the participation of more than 400 guests from all over the world.

"Visible yet invisible, the neutrality of glass and why it is such an essential structural material in terms of healing the environment and cultivating human creativity. Future-proofing buildings with glass, day lighting design and lasting improvements in the creation and design of the urban space." was the main theme of the presentations throughout the day. The Façade 2017 Awards were presented at the end of the event.

Martifer is proud to have sponsored this important event that brought together the authentic leaders from the architectural glass design and construction industry.

THE LONDON DESIGN MUSEUM AND HOLLAND GREEN

RIBA LONDON AWARD WINNERS 2017

The Design Museum and the residential Holland Green W8 buildings were awarded a RIBA London Award 2017. It is with great pride that we see acknowledged a project that was a challenge for Martifer Metallic Constructions, because it is situated in one of the most emblematic areas of London and because of the development of new solutions for façade systems.

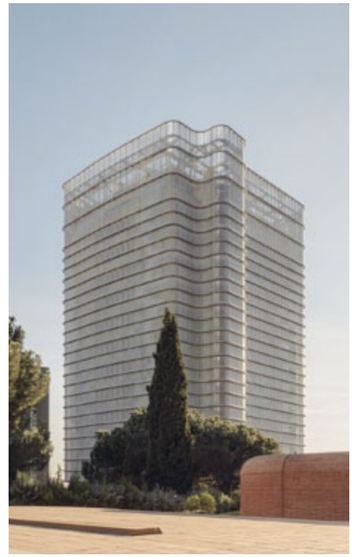
Located in one of the most expensive avenues of London, High Street Kensington, next to one of the city's emblematic parks, Holland Park, this project includes 3 residential buildings that surround the London Design Museum. It was one of the first luxury residential projects that Martifer developed in London, where the value of an apartment starts at 6,000,000.00 pounds.

The London Design Museum, architecture by OMA, is one of the largest museums dedicated to contemporary design. Its architecture has a concrete parabola-shaped top that highlights its uniqueness.
For Martifer, the great challenge of this project was the development of solutions for the window system, developed from scratch by Martifer, in partnership with the aluminum supplier Reynaers.

HIGHLIGHTED IN ARCHITIZER

TORRE 30

Torre 30 in Madrid is one of the projects highlighted by the website Architizer, a platform that brings together the best architecture projects, allowing professionals of the area to have access to the best. The refurbishment works of Torre 30 done by Martifer Metallic Constructions ended in 2016. Project by Antonio Ruiz Barbarin Arquitectos and façade advisory services by ENAR, it was an architectural challenge which involved the development of an innovative solution with the structural welding in aluminum, for the coating of the building.



MARTIFER METALLIC CONSTRUCTIONS

AT THE 11TH CONFERENCE ON STEEL AND COMPOSITE CONSTRUCTION

Martifer participated in the 11th Conference on Steel and Composite Construction, as it did in previous editions, which was held in Coimbra, on 23rd and 24th November 2017.

This event has as main objective to disseminate the latest innovations and achievements in metallic constructions, seeking to contribute decisively to the promotion, consolidation and expansion of the sector. It is intended that the conference be a privileged place for the exchange of ideas and experiences among the various participants in the design and execution of steel and composite constructions, as well as in the research and teaching fields.

In one of the commercial and technical sessions, Martifer presented the project Kink Abdullah Sports City, a stadium built in Saudi Arabia.

MARTIFER METALLIC CONSTRUCTIONS CELEBRATES

30 YEARS OF THE SIMPSON HAUGH ARCHITECTURE OFFICE

Integrated in the Clerkenwell Design Week, which took place in May 2017, the Simpson Haugh architecture office conceptualized a metal sculpture, which was turned real by Martifer. The sculpture, called "THIRTY", celebrates the 30-year history of the architecture office. It is approximately 3 meters high and has vertical bars that in perspective form the number 30 on one side and on the other side, the initials SH.

The Simpson Haugh architecture office was responsible for the project Battersea Power Station Phase 1: Circus West Village and is one of the most renowned architecture offices in the United Kingdom.

The Clerkenwell Design Week took place between 23rd and 25th May and is the most important design and architecture festival in London. The Clerkenwell neighborhood is recognized for its vanguardism and is home to numerous offices of creative industries. During that week, the various entities open their doors to the public to expose their work.

MARTIFER METALLIC CONSTRUCTIONS

AT GLASS PERFORMANCE DAYS 2017

The Glass Performance Days 2017 (GPD2017), the greatest conference of the glass industry, took place in Tampere in Finland. Already on the 25th edition, GPD promotes experience sharing on construction and urban planning projects, also focusing on energy and environmental efficiency requirements.

The auditorium of the new headquarters of Banco Popular, in Madrid, a unique project for its characteristics, was the project chosen by Martifer to present at the conference. A challenge in what regards the application of structural glass.

The auditorium is a large glass box with large dimensions: 9.5 × 2.6 m. It has two skins and the concept of the project is to give priority to transparency, minimizing the visibility of all the supporting window structures.

MARTIFER AT MEETINGS ON CIVIL ENGINEERING

CLOSER TO UNIVERSITIES

With the goal of promoting contact with students, future engineers, Martifer participated in several academic initiatives within the scope of engineering.

In 2017, it participated in the Meetings on Civil Engineering of the University of Aveiro and in the First Meetings on Civil Engineering of the Engineering Faculty of the University of Porto.

Organized by the Students of Civil Engineering Association, the 7th edition of the Meetings on Civil Engineering of the University of Aveiro was held on 2nd, 3rd and 4th November 2017 and Martifer was one of the Gold sponsors.

The Meetings included the Business Forum, in which speakers from various entities participated. The themes addressed the professional integration in the labor market and the implementation of projects within business environment.

António Matos Silva, Technical Director of Martifer Metallic Constructions, represented the group and was one of the speakers. Under the theme "King Abdullah Sports City Stadium", he addressed various topics about the construction of this impressive stadium in Jeddah, Saudi Arabia. A case study of a Martifer project completed in 2013.

The students were invited to visit the premises of group Martifer, in Oliveira de Frades, where the execution of a project was explained to them, from design to production.
In March 2017 in Porto, the First Meetings on Civil Engineering were held by the International Association of Civil Engineers Students in partnership with the Department of Civil Engineering of the Faculty of Engineering of the University of Porto. Martifer Metallic Constructions presented the case study King Abdullah Sports City Stadium.

MNEWS
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