

2021 Activities Report



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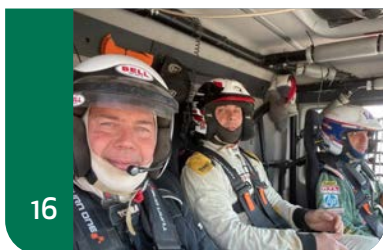
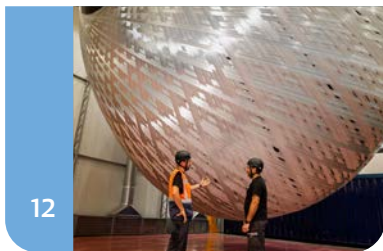
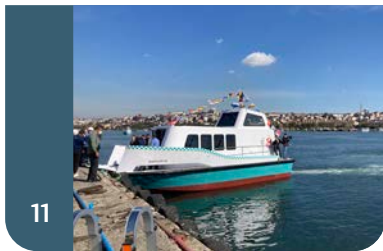


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Executive Letter

Dear Customers, Colleagues, and Friends,

As most expected, the economy, working conditions and all aspects of our lives continued to be impacted by COVID19 throughout 2021. Our organization adapted quickly by transferring experience gained from the previous year, to work beyond COVID-19 interruptions and achieve our company targets. We had many challenges but thanks to the devoted efforts of our employees, the understanding of our customers and the support of our suppliers, we were able to overcome many difficulties by working together.

Among the biggest again this year...

In 2021, we succeeded in being the 570th largest exporter in Turkey according to the study of "Turkey's Top 1000 Exporters in 2020" by the "Turkish Exporters Assembly (TEM)". We were also ranked as the 506th in "Turkey's Top Industrial Enterprises" report by the Istanbul Chamber of Industry (ICI). We were honoured to find ourselves in good company, earning a spot on these lists along with the top companies in Turkey. Despite 2021 being another year in which major crises were experienced all over the world, our team performed above our expectations, and we were proud to be included in this success list again.

Our focus is on safety and quality at METYX USA...

We accelerated our growth in all our locations. METYX USA tripled in size in 2021 and expects another robust year of growth in 2022. Starting up a new operation in the middle of a pandemic and a critical supply and worker shortage have challenged all of us, but we are moving forward and have made great strides, especially considering the obstacles. Our operations grow exponentially while we remain focused on safety and quality. We have invested in talent and resources to add new equipment and several lines in production this year. With cooperation between our factories and across our workforce, we worked diligently, to transfer knowledge through many months of training. With the assistance of our European colleagues and other industry professionals visiting us- we have been able to make great progress. Still, there is more work to be done, to really showcase our best efforts and the quality product we are known worldwide for producing.

On the sales side, we expanded our customer portfolio to Canada and Mexico. With our new distribution partnerships with Composites Integration and Adapa Adaptive Mould, we have also established our footprint as an equipment supplier in the US market.



Besim Uğur Üstünel
CEO
METYX Composites

Manisa site has become the center of our wind energy production...

Our constructions and investments continued throughout the year. We built a new "administrative affairs" building on our premises along with a new laboratory and R&D center. We transferred a canopy from our Hungarian site, and we transformed it into a cafe/resting area for our employees in Manisa facility.

We also invested in a new pultrusion line. All our trials were completed in 2021 and we are preparing to launch production soon in our Manisa facility. We believe this opportunity will bring significant business opportunities to METYX worldwide.

We understand our role in the local community...

As for Hungary, we extended our tools to maximize the capacity at our site and increased our recruitment efforts to grow our team. Although we are working towards growing the company, it is equally important that we do our best for the economic and cultural development in all the places we go. We take a great deal of pride in supporting various organizations and were pleased to sponsor the local water polo team competing in the Hungarian first league in 2021. Building the local communities up along with our workforce and our business opportunities, all go hand in hand. We will continue to invest in the people in and around our facilities.

In closing...

We are so pleased to partner with all of you and to know that despite the challenges, we are working with wonderful team members, customers, and business partners. This has helped to make our year extraordinarily successful and one we are immensely proud of. We remain hopeful as we settle into 2022. We must all do our part to be positive, show resilience, be vigilant about COVID and take care of ourselves and one another. We believe there will always be difficulties and disasters that we live with- the true test of our grit and resolve is how we move on from them.

Stay healthy and well.



METYX USA Updates

Our US Operations Grows Exponentially, While Keeping Focused on Safety and Quality

METYX USA tripled in size in 2021 and expects another robust year of growth in 2022 as well. Starting up a new operation in the middle of a pandemic and a critical supply and worker shortage has challenges, but the company is moving forward and have made great strides, especially considering the obstacles. Some of the highlights for the year are as follows:

METYX USA invested in talent and resources to add new equipment and several lines in production this year. The plant has been very busy, and all associates wear the hat of “safety leader.” They have maintained for 3 years now, a lower-than-average Occupational Safety and Health Administration (OSHA) incident rate for our industry.

It is reorganized and added new leadership to the Production area. The operators have been tasked with learning machines and production processes very quickly. With help from Turkish and Hungarian colleagues and other industry professionals visiting the site, METYX USA has been able to make great progress.

The facility completed ISO 9001 recertification audit in the US. ISO certification is proof from a third party that an organization companies with an ISO management standard. This demonstrates to key stakeholders that it is a well-run business that has structure, stability and is ready for growth.

On the sales side, the company expanded their customer portfolio to Canada and Mexico with the wind industry as well as within the US, METYX grew significantly with the distributor Superior. With the new distribution partnerships

with Composites Integration and Adapa Adaptive Mould, the company has also established a footprint as an equipment supplier in the US market. Tooling business is growing with molds being imported from Turkey for US customers. METYX signed a 2-year Supply Agreement with Blue Wind in Pensacola, Florida for supplying fabric for the nacelles that are produced there for GE. For 2022, the focus will be on fabric and core kitting activities.

It has been managed through the last 2 years of a global pandemic with caution and care for fellow co-workers. It has not always been easy, and with the uptick in COVID cases, it was needed to be extra cautious and thoughtful about social distancing, mask wearing and watching out for one another moving into the Spring and Summer months.





METYX HUNGARY Updates

METYX Operation in Hungary Continues To Grow By Raising Industry Standards During The Last 2 Years and Emphasizing Quality, Efficiency, Occupational Safety, and Environmental Awareness Policies.

In 2021, METYX Hungary continued to grow and meet market needs by providing sustainable production continuity by including **Quality, Operations Efficiency, Healthy and Operational Safety Excellence** to customer needs quickly and above industry standards, as in previous years.

In the Composite Industry, which constantly evolves, quality standards increase every year. METYX Hungary factory is integrated with ISO, OSHA, ISO 16949 quality and management systems for certificate renewals, adaptation of new quality standards and in-house certified training such as APQP for Wind. As required by market needs, many of these aspects are integrated into the certification processes and executed, resulting in increased staff competencies.

Within the scope of digitalization, SAP\HANA System integration was successfully carried out in 2021 and process improvements continue in this context.

Additionally, remote work brought about by the global pandemic was quickly adapted by METYX Hungary in accordance with the World Health Organization requirements. All customers, employees and stakeholders experienced a successful period of operations as a whole.

The company mitigated supply chain disruptions which were plaguing all industries throughout 2021, including the composites market. METYX leveraged its size and position in the composites market to get ahead of shortages where it could and to respond to customer requests very quickly. In order to do this, the company maintained the commitment to investing in human capital and machinery investments, adding 30% capacity in the machinery and a tremendous amount of expert talent to the team in 2021.

These investments will continue to increase for the coming years as a result of the market requirements and the vision of the expert staff. The design and architectural activities in the new production hall of approximately 4.000 sqm, were completed early in 2021. In 2022, METYX will start the construction of a new production hall in our Somogyi Region, which is an investment favorite in the European Union. In this context, 2.000 sqm will be a logistics hub by considering the supply chain needs and will add strength and flexibility to the group in this sense. The agreements for the machinery investments they planned for the production hall have also been completed. It is announced that by the Second Quarter of 2022, METYX Hungary will have increased the capacity, production diversity, and flexibility by 50%.



METYX USA Inc. Has Become Adapa Adaptive Molds And Composite Integration Dealer For US Region

2021 has been an exiting year for METYX USA in terms of a distribution as well. First, the company agreed on selling Adapa Adaptive Mold system in the US region and then it has also partnered with Composites Integration within the US. In doing so, the company furthered the existing relationship, having been working together for Turkey RTM industry since 2007.

The UK Company Composite Integration provides market leading technology for composites manufacturing, specializing in RTM and Infusion in multiple sectors including renewables, aerospace, automotive and defense. As two companies have been engaged in a strong partnership for some time in Turkey, they made a commitment to create the same synergy for our USA customers. METYX RTM product line, METYCORE infusion mat, and Composite Integration RTM machines would be combined for an attractive package for RTM, RTMLight and Infusion manufacturing.

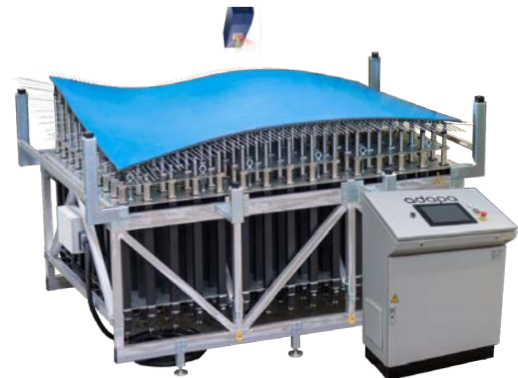
Adapa, the worlds leading supplier of intelligent reconfigurable molds for curved surfaces, is specialized in mechanical innovation and computer aided manufacturing with a focus to facilitate modern curved aesthetics by enabling a cost effective and environmentally friendly production process. The adaptive molds enable manufacturing companies to produce low-repetition curved designs faster, more affordably, and more sustainably than alternative technologies. One mold is reconfigurable in minutes and eliminates the waste and cost of multiple low-volume molds to be built. METYX USA will market Adapa's patented reconfigurable mold technology towards fabricators of composites and support the architects and consultants involved in creating curved designs and architecture in the USA. Right after the partnership announcement North America composite market, Adapa and METYX, came to an agreement to cooperate for Turkish market as well.

METYX USA also introduced fabric and core kitting in 2021 and is supplying precisely formed materials for projects in different market segments including wind, clean room, battery box and RTM/infusion manufactured products.

METYX USA is offering the tooling capabilities of METYX Turkey and has begun to sell the tooling in the USA which is competitive even with the long transit required.



Composite Integration - Ciject One & Ciject Zero.



Adapa A/S



METYX Multiaxial Glass Fiber Fabrics Gain GRP Drinking Water Pipe Approval

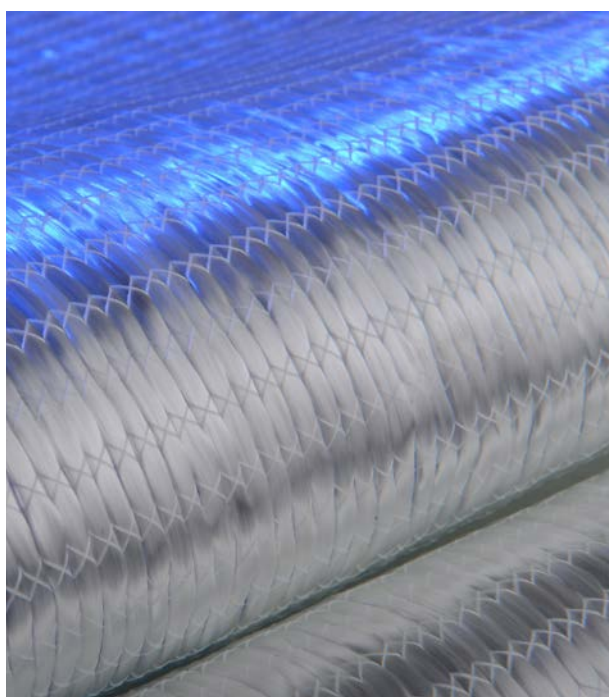
The METYX range of multiaxial glass fiber fabrics has recently gained accreditation for being safe to use in the manufacture of unsaturated polyester, vinyl ester and epoxy resin glass fiber reinforced (GRP) drinking water pipes and GRP potable water storage systems.

METYX multiaxial glass fiber fabrics were independently tested according to the migration standard XP P 41-250-2 by CARSO-Laboratoire Santé Environnement Hygiène de Lyon, and are now certified for use in the reinforcement of materials in contact with water according to circular DGS/SD7A/2006/370. The CARSO Group is the leading provider in France of water analysis as part of the wide range of analytical services carried out by its European network of specialist laboratories.

Multiaxial glass fiber fabrics also known as non-crimp fabrics (NCF) are made up of one or more layers of unidirectional glass fibers stitched together. This type of GRP reinforcement is well established for the manufacture of water, drainage and sewage pipes.

Bahattin Sendogan, METYX European Sales Director commented: "The addition of this new drinking water pipe approval has extended the reinforcement product offering that METYX is now able to supply to both new customers and our existing GRP pipe producers using METYX's multiaxial fabrics for their water, drain and sewage pipe needs."

Along with this latest product approval, METYX has also been awarded DNV GL and Lloyds Register certifications for marine and wind energy composites applications. METYX manufactures and supplies all its products from its four 'state-of-the-art' production facilities in Turkey, Hungary and the USA, which all operate under ISO accreditations.





IBEX 2021



CAMX 2021

Trade Show Activities 2021

Even many of the major trade shows have been postponed to 2022, METYX was still able to attend:

JEC Connect

(Online event)

June 1-3

IBEX 2021

(Tampa FL, USA)

September 29 - October 1

CAMX 2021

(Dallas, USA)

September 21 - 24

METS 2021

(Amsterdam, Netherlands)

November 17 - 19

METYX USA Chief Technology Officer Stephen Misencik was a speaker at CAMX 2021 education session and presented "Thermoforming Cores for Significant Weight Savings Using Adaptive Mold Technology".



CAMX 2021 - METYX USA CTO Stephen Misencik

Planned events for 2022

JEC EUROPE 2022

(Paris, France)

May 3 - 5

METYX COMPOSITES SUMMIT 2022

(Izmir, Turkey)

May 23 - 27

SAMPE 2022

(Charlotte, NC, USA)

May 23 - 26

IBEX 2022

(Tampa FL, USA)

September 27 - 29

COMPOSITES SUMMIT TURKEY 2022

(Istanbul, Turkey)

October 6 - 8

CAMX 2022

(Anaheim CA, USA)

October 17 - 20

METS 2022

(Amsterdam, Netherlands)

November 15 - 17

AMI WIND TURBINE BLADE MANUFACTURE 2022

(Düsseldorf, Germany)

December 13 - 15



METS 2021



METYX Pledges Support for the Women's Empowerment Principles

Joins the almost 5,000 signatory companies that are part of supporting and advancing the Women's Empowerment Principles

METYX, a global leader in the composites industry, is now one of the 5000+ signatory companies that are part of supporting and advancing the Women's Empowerment Principles.

The Women's Empowerment Principles (WEPs) are a set of Principles offering guidance to businesses on how to promote gender equality and women's empowerment in the workplace, marketplace and community. Established by UN Global Compact and UN Women, the WEPs are informed by international labor and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, gender equality and women's empowerment.

Ugur Ustunel, METYX Group CEO, said: "I believe in women's capabilities and their unique strengths to face imposing challenges. Women are fearless when it comes to changing the world to make it better place. This is why it is so important to support women in the workplace and to be intentional about placing them into leadership positions where they will build a better future for all of us. The power women have when supported by employers and by the world is invaluable. To create sustainable, growing and innovative futures- we must all encourage the elevation of women."

WEPs are a primary vehicle for corporate delivery on gender equality dimensions of the 2030 agenda and the United Nations Sustainable Development Goals. By joining the WEPs community, METYX is committing to this agenda and to work collaboratively in multi-stakeholder networks to foster business practices that empower women.

METYX is more powerful with women!



“METYX makes a significant contribution to the sector and the national economy”

- Alper Kalaycı, Chairman of the Board of Directors of ENSIA

Alper Kalaycı, Chairman of the Board of Directors of the Association of Energy Industrialists and Businessmen (ENSIA), has 24 years of experience in the energy sector. He shared his quarter-century career story including the foundation, goals and objectives of ENSIA; and Turkey's energy production and consumption issues:

First of all, we would like to get to know you better. Can you briefly tell us about yourself?

I was born in Ankara in 1973. I completed my primary, secondary and high school education in Bolu. I graduated from Dokuz Eylül University, Department of Mechanical Engineering in 1998. I started my career as an installation and maintenance engineer of the first wind power plants in Turkey between the years 1998 and 2001.

I started working for Aero Wind Industry Inc. that is located in the Aegean Free Zone and producing Turkey's first composite wind turbine blade in the year 2001. I have been working as the General Manager of the same company since 2009. I am also the General Manager of the WEC Tower company, which manufactures wind turbine concrete towers in Izmir Torbalı.

On March July 2016, I joined the founding staff of the Association of Energy Industrialists and Businessmen (ENSIA) and served as Vice-Chairman of the Board of Directors until March 2021. I was elected as the Chairman of the Board of Directors at our General Assembly held on March 26, 2021 with the approval and support of our members.

In addition to ENSIA, I am a Member of the Board of Directors of the Western Anatolian Industrialists and Businessmen's Association (BASIFED), Aegean Region Chamber of Industry (EBSO) 31. I am the Chairman of the Other Plastic Products Professional Committee, a Member of the Izmir Chamber of Commerce (IZTO) Renewable Energy Commission and a Board Member of the Offshore Wind Energy Association (DÜRED), a Board Member of the Composite Industrialists Association and a Board Member of the Association of Industrialists and Businessmen of the Aegean Free Zone (ESBIAD).

What was the driving factor in the establishment of ENSIA?

ENSIA is a non-governmental organization that set out with the vision of “Turning Turkey into an international center producing equipment, technologies and projects in the field of renewable energy and energy efficiency”. Over the past five and a half years, we have achieved significant achievements in this direction. ENSIA, a “project association” in itself, is a non-governmental organization that adopts creating accurate information and awareness for the renewable and clean energy sector as its main purpose. We created a great synergy by integrating the excitement of our members in our Board of Directors, each of whom has proven successful in their fields, with the experiences of our friends in our previous projects.

Among the most important projects of our association, which has come a great way in its institutional deconstruction in the last five years, is the “Best For Energy”, in which we are a stakeholder of the Izmir Development Agency (IZKA). Based on the “clustering” approach; Best For Energy, which aims to provide sectoral transformation in Izmir and its surroundings, and to realize the production of clean energy equipment and environmental technologies, will cover the years 2020-2023 and will last for 36 months.

With Best For Energy, which has been awarded a grant of 3.1 million Euros by the European Commission within the scope of the Competitive Sectors Program of our Ministry of Industry and Technology, we aim to increase the investments and exports of our companies, which are in the clean energy chain and want to focus on this field, by improving their capacities.

Today, we are a non-governmental organization that houses the 65 most powerful companies of our country under its roof, and its members account for 32 thousand of the employment created. Likewise, our 19 Academic Members and 14 Individual Members, who also carry out very valuable scientific studies on renewable and clean energy; continues to add value to our association.

We resolutely maintain our stance, considering every company investing in our country as “domestic”, considering that domestic energy should be produced with domestic equipment, and

taking the initiative to attract new main and subsidiary industry investments to our sector.

Would you make a general assessment of the renewable energy sector in Turkey?

We can say that 2021 was a year in which the investment momentum accelerated for the renewable energy sector. It is also a very important issue that 98% of the facilities commissioned during the year are renewable sources. In this case, undoubtedly, the impact of the new Renewable Energy Support Mechanism (YEKDEM), the start of which was postponed for six months due to the pandemic, has been great. With the rapid launch and gradual commissioning of investments that want to take advantage of the previous dollar-based support mechanism, the investment intensity in our sector has increased. The year 2021 also went down in history as a year when the 10 thousand Megawatt limit, which is the psychological threshold point in wind energy, was exceeded. Now we're going to go into a bit of a stationary period. We can say that this breathing period will continue in 2022.

Where do you see the wind energy sector in Turkey in the next 10 years?

We have completed the year 2021 in wind energy by reaching the installed power figure of about 11 thousand Megawatts. On June 30, 2021, we underwent a radical change in the Renewable Energy Support Mechanism (YEKDEM). Investments, which paused for a period in 2020 due to the pandemic, have gained serious momentum in the last year. However, an important point that we would like to draw attention to at this point is the fact that the volume of projects licensed by the EMRA has been seriously reduced.

The installed capacity of Turkey is 1500-2000 MW, while there were licenses issued for about 10-11 thousand MW. Even then, the authorities said, "We have licensed 10 thousand MW, 2 thousand have been made, 8 thousand have not been made. Actually, there's licensing. Licenses cannot be realized, there is no shortage of project stock," they said. Today we have reached 11 thousand Megawatts as installed capacity. But the amount of the production license is 12,300 MW. So the stock of licensed projects is nearing completion. In the new period, instead of receiving a direct license application, it will be continued with YEKA projects. For this reason, I think that new YEKAs should be completed and commissioned quickly. This situation is also necessary to achieve the strategic goals set by our Government for the year 2030. It is necessary to ensure that new license calls are made quickly and new power plants are installed in the designated investment areas.

If we act quickly in this regard, I think that we will very easily reach the installed capacity of 20 Gigawatts in 2030 and even pass it. Both the public bureaucracy and our investors should focus on completing and commissioning at least 1000 MW of wind energy investment every year in our country. I think that we can easily achieve this goal with our wind energy potential, our very strong production infrastructure in the main and subsidiary industries.

Are government incentives sufficient in Turkey?

The YEKDEM mechanism, which ended on June 30, 2021, was indeed a mechanism that was very accurately constructed, although it had minor problems, pushed the system to sustainable growth and proved it with the installed power figures reached. YEKDEM has a great share in our success to rise to the 7th place in Europe and the 13th place in the world in the installed capacity of RES today. This mechanism has had a leveraging effect not only on the installed power figures, but also on the formation of a workforce trained in the main and subsidiary industrial infrastructure of our country's wind energy. A similar period can be said for Solar, Geothermal and Biomass energy sources. As industry representatives, our view is that the most important incentive is predictability. Exchange rates have very high volatility in the last year, the disadvantages of the destabilization environment that we face in financing costs...

The devaluation of the dollar exchange rate by more than 100 percent in 2021 negatively affects long-term plans not only in our sector, but also in all investment areas. If a sustainable and predictable climate is created in exchange rates and bureaucratic mechanisms, Turkey may face a tremendous investment momentum. The renewable energy sector has long moved away from being a sector that struggles to survive on government incentives.

What should suppliers pay attention to in wind energy?

Since wind turbines are designed with a life expectancy of 30+ years in all kinds of harsh climatic conditions, it is very important that all kinds of parts to be used and all kinds of raw materials in these parts have the specified technical characteristics and certifications. It is important to have a supply chain in such a way that continuity is ensured without compromising quality standards at any time. In addition, because new models are being released very quickly in the sector, suppliers must also be able to keep up with these changes.

Can you make a general assessment about METYX's contribution to wind turbine production in Turkey?

The fact that one of the most powerful companies in our country, such as METYX, joined the ENSIA Family in 2020 undoubtedly gave us great strength. Mr. Ergenç is also successfully serving as a Member of our Board of Directors. Marine, automotive, transportation, wind energy, construction and architectural applications, entertainment, sports, and construction industries, serving METYX Composites; High-Performance Technical Textiles, in the production of among the leading manufacturers in our country. It carries out a very high value-added production. In this aspect, it makes a significant contribution to both our sector and the national economy in a positive way. I would like to thank your company for its contribution to our industry and wish you continued successful work.





Use of L-RTM Process in Boatbuilding

RYDS, METYX Swedish distributor Sundström's customer, is a modern boat manufacturer. RYDS' heritage is of Swedish patience, genuine craftsmanship and productive entrepreneurship. Factors which are intangible but easy to take on board, and which may, in fact, be the best foundation a company can have.

Since 2012, unlike many boatbuilders, they have been producing their boats with L-RTM method. It is noteworthy that in boatbuilding, a vacuum infusion method is widely preferred than L-RTM method.

There are two main reasons why RYDS Boat chooses to use L-RTM process in their production, first is it is faster. The company produces 400 boats per year and L-RTM process is the best option for high speed production in these ranges. The

second main reason of choosing L-RTM process is that they receive the best surface quality on both sides of the boats- the outcome of the surface finish is always perfect, A side and B side.

Achieving the perfect surface finish of the products also gives the advantage of reducing finishing preparation man hours, which results in cost savings in addition to faster production.

In addition to these advantages, using the L-RTM process results in a cleaner production area when compared to other boat production methods.

RYDS produces around 400 boats in a year with different sizes. METYX is proud to supply them with RTM fabric METYCORE, stitched mat and pvc core materials.





A Sea Taxi From Composite Materials

Istanbul is a seaside and busy city with a high population that needs to benefit from all opportunities for public transportation to avoid big traffic jams. The Metropolitan Municipality implemented the “Sea Taxi” project, which is made by local products, in 2021. Istanbul City Lines preferred METYX for the composite materials of the project. A total of 50 sea taxis will be produced with a next generation design that will appeal to citizens and be environmentally friendly.

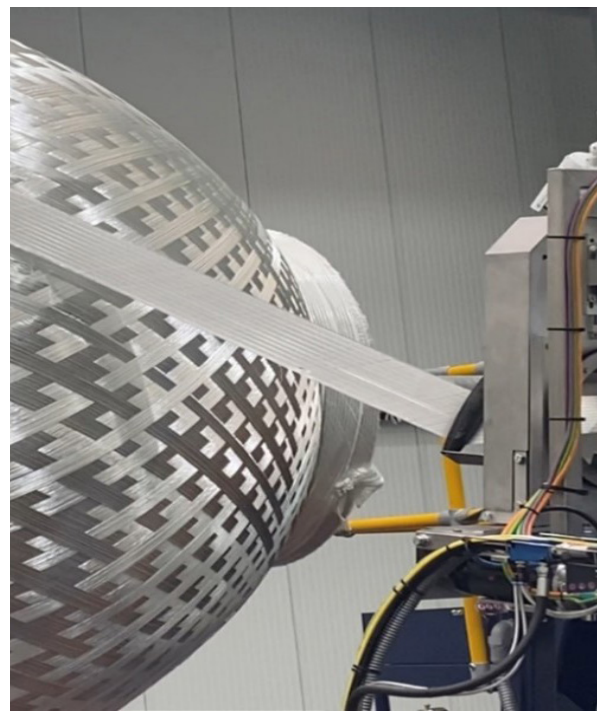
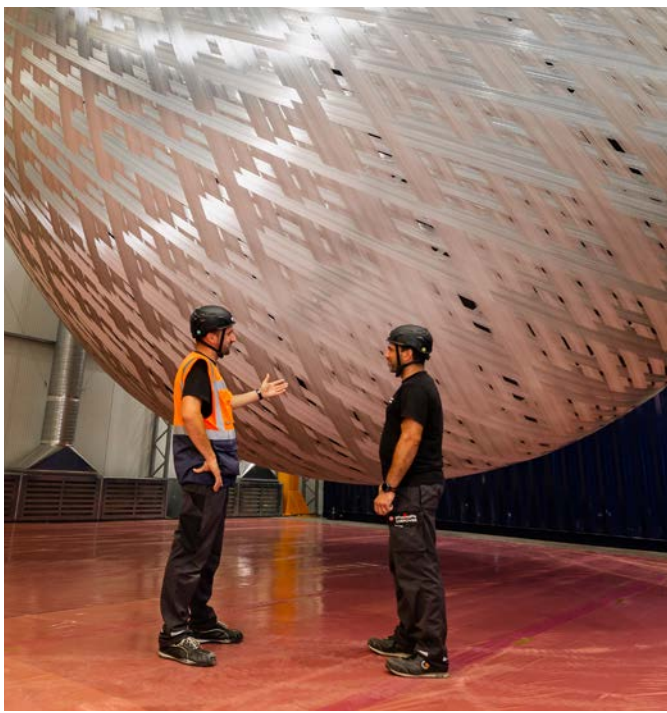
In sea taxis with a capacity of 10 passengers, there are two personnel, a captain and a sailor. Passengers can make reservations by selecting the pier, date and time they want to travel to via the mobile application.

Sea taxis are boats produced with 100% composite material. A vacuum infusion method is used in production of the sea taxis. The reason for choosing the vacuum infusion method is to make the boats as light as possible and to minimize fuel consumption. In addition, in terms of maintenance and repair, composite boats have a longer life than metal hull boats, and they do not encounter situations such as rusting and corrosion.

All structural and consumable composite materials of the boats were supplied by METYX. These products are mainly; glass multiaxial fibers, PVC core materials, skin coat and infusion resins, and infusion vacuum consumables.

The next goal of IMM is to produce electrically powered versions of these boats.





METYX Solutions Helped CorPower to Build the Buoy for Wave Energy

CorPower Ocean brings a new class of high efficiency Wave Energy Converters (WECs) enabling robust and cost-effective harvesting of electricity from ocean waves. The design principle is inspired by the pumping principles of the human heart and offers five times more energy per ton of device compared to previously known technologies, allowing a large amount of energy to be harvested using a small and low-cost device. The CorPower WEC's unique ability to become transparent to incoming waves provides survivability for the WEC in storm conditions. CorPower's is headquartered in Sweden, with offices in Portugal, Norway and Scotland.

Company's Wave Energy Converters are point absorber type, with a heaving buoy on the surface absorbing energy from ocean waves. The buoy is connected to the seabed using a tensioned mooring system. Novel phase control technology makes the compact devices oscillate in resonance with the incoming waves, strongly amplifying the motion and power capture. The system has improved survivability in storms, thanks to its inherent transparency to incoming wave energy in long storm waves.



Generators and power electronics are standard components known from the wind industry, enabling well-known grid connection architecture. Product concept is optimized for 10MW clusters, where the electricity is collected from an array of WECs into a collection hub. Each 10MW hub delivers grid quality electricity with standard 33/66kV electrical connection commonly used in offshore wind, with a single control and data acquisition interface over fibre and radio-link to the hub. Each WEC operate autonomously by a programmable logic controller located inside the device. The wave farm concept is based on combining WEC clusters in arrays, connecting to a common grid export cable.

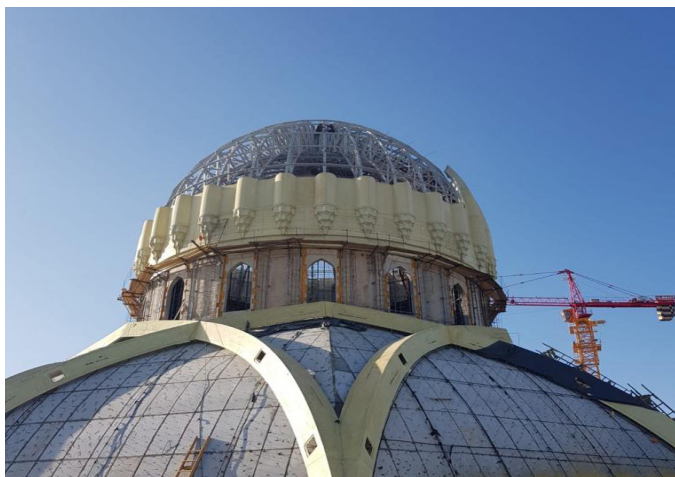
To achieve a lightweight design for the buoys that allows for maximum extraction of energy per installed tons of machinery in the ocean, CorPower was faced with the challenge to produce a large scale spheric composite sandwich hull, using filament winding.

METYX has been working closely with CorPower to achieve not only the optimal fabric for best design, but also to manufacture prefabricated parts to be incorporated inside the device.

As CorPower Ocean is developing a certificated prototype, it is critical to build it with certified products that meet state-of-the-art quality standards, manufacturing technologies and materials available on the market.

"Our cooperation with METYX has allowed us to meet the toughest quality requirement, adding an extra layer of confidence in the development of our high-efficiency wave energy converter, bringing clean energy to the world from our oceans" says Kevin Rebenius, Commercial Director at CorPower Ocean.

METYX provided glass multiaxial fabric and pet core kit for the project.



Courtesy Photo of Islamic Center of Civilization, Tashkent

The Use of GRP Panels Allows Advanced Fiberglass Industries Adding an Aesthetic View in Their Projects

Advanced Fiberglass Industries, was established in the UAE in 1997 and currently has two facilities of 35,000 sq. ft and 15,000 sq. ft in which they carry out some monumental projects. AFI offers high quality "plug and play" solutions. The company has worked with different architects for every project. The beauty of working directly with architects is that we can take their creation and help them advance it with aerospace style material and construction methods.

At AFI, they work with the customers and suppliers in adopting best practices in reducing waste, water wastage and raw materials -taking the necessary precautions to prevent the pollution of the environment.

AFI have used METYX products for GRP construction in the following projects;

1) Manufacturing, Supply and Installation of GRP Oval Lights, Lobby Calligraphy and Spiral Staircase

Project: Museum of The Future

Client: M/S Meraas

Main Contractor: M/S Bam Higgs & Hills

Sub-Contractor: M/S Advanced Fiberglass Industries

Location: Dubai

2) Manufacturing, Supply and Installation of GRP structures

Project: Construction of Islamic Center of Civilization

Location: Tashkent, Uzbekistan

3) Design, Manufacturing, supply and installation of ceiling, hostess desk and blob for restaurant

Project: Switch Restaurant

Client: North 51

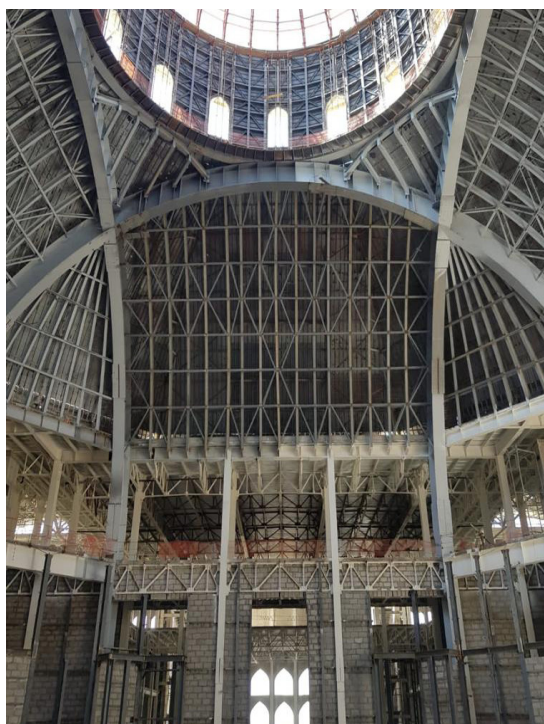
Location: Dubai

4) Manufacturing and Installation of GRP Panels for the dome decorative villa (E161)

Project: Villa E161, Emirates Hills

Client: ALEC Fit out

Location: Dubai

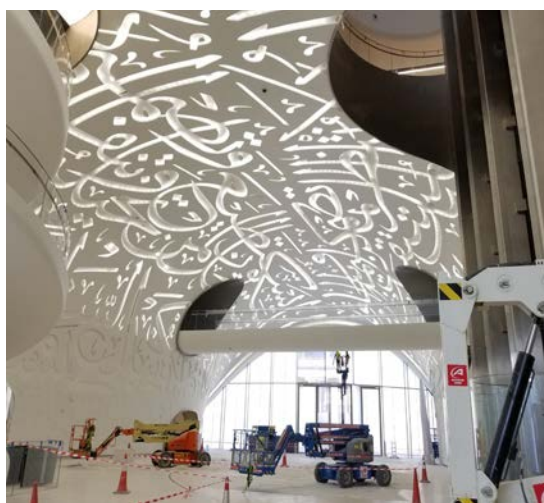


Courtesy Photo of Islamic Center of Civilization, Tashkent

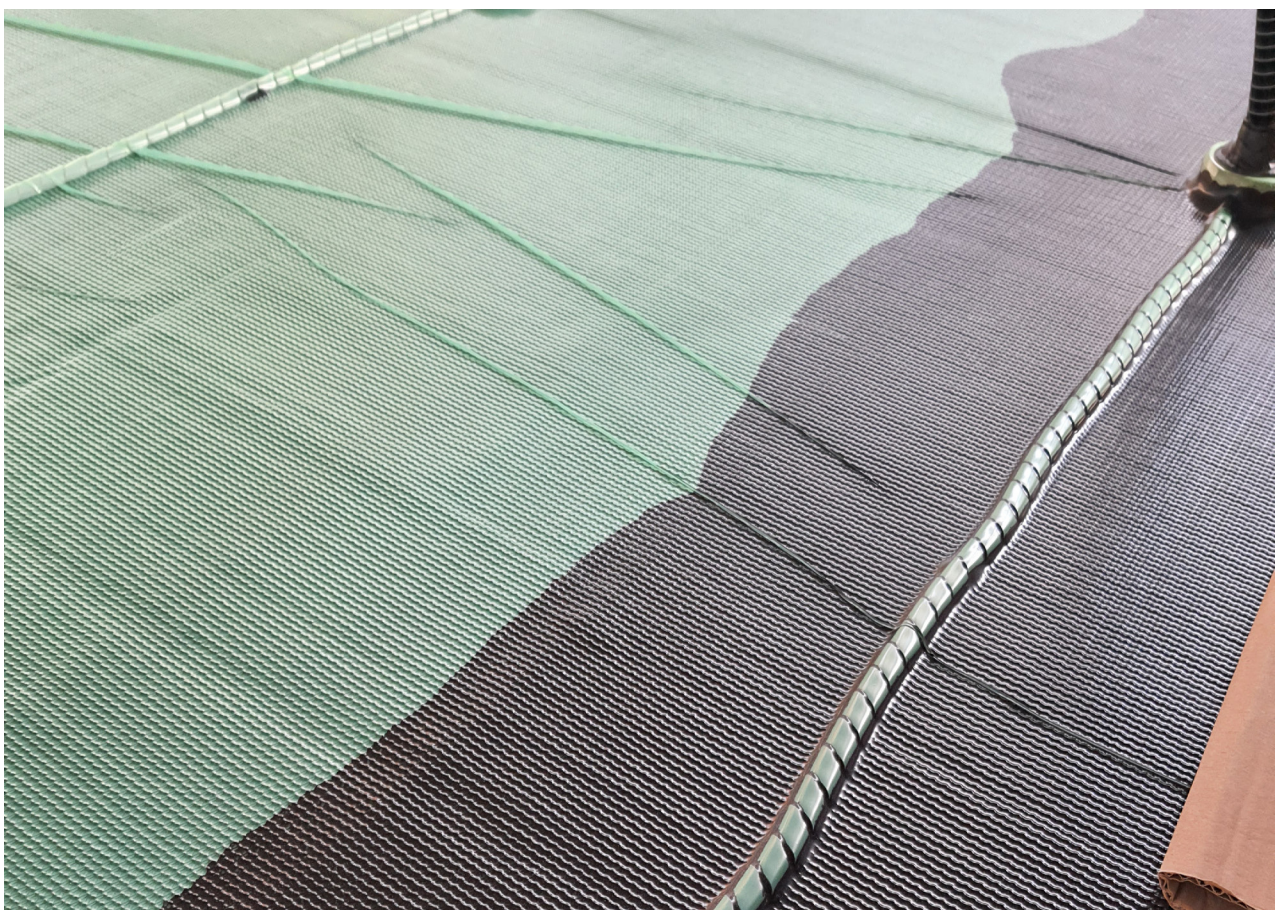
The practical uses of GRP are virtually endless. Its unique physical properties allow it to be easily tooled, molded and manufactured to meet almost any specifications. They chose to work with METYX because of engineering, it is easy for designers/manufactures to calculate or design the composite builds more accurately.



Courtesy photo of Switch Restaurant



Courtesy photo of Dubai Museum of the Future Interior (calligraphic lobby)



ACS Composite Use Infusion Method for Liquid Tank Production

ACS COMPOSITE was established in 2014 with 100% domestic capital as a result of 25 years of experience and provides a wide range of parts supply and increases the product range with the support of R&D and P&D provided to its partners.

Centered in Izmir-Turkey, the company, which has a production area of 2500 m² including a confined zone of 1500 m² has more than 60 employees.

The company is expanding its service area based on the advantages of composite materials. They are currently active in the production, design and assembly of various composite epoxy parts reinforced with glass and carbon fiber (automotive, rail systems, construction machinery, defense industry, energy, maritime sectors) and parts production, design and assembly for mobile vehicles-modular structures.

ACS Composite has recently started to produce liquid tanks for trucks, using the infusion method which makes a product lighter, more resistant to corrosion, lowers mold cost, and forming without any problems.

Knowing and doing business with METYX Composites since 2005, the company has continued to work since ACS was founded in 2014. METYX Composites provides multiaxials, mold gelcoat and resins, core materials, infusion consumables etc.

“They always help with devotion, regardless of working hours, in both information support and supply, so we will always continue to work with METYX Composites.” Seyit Ali – Production Manager of ACS Composite





VOLKAN: It is Good to be Able to Say “We Can Do It”

Volkan was founded in 1974 to manufacture firefighting vehicles. Volkan efforts to save lives without having financial expectations force it to innovate each time and do what is necessary for success. Volkan has started manufacturing its own fire pump in 1978. And today, it conducts its production processes with its 300 populated staff on a 135.000 m² plant. 25.000 m² of the plant constitutes of closed area by making use of all of the opportunities of production technologies in Izmir, Turkey.

Volkan is among the few companies in the world that designs and manufactures ARFF vehicles according to ICAO and NFPA standards. The company's LION Class ARFF vehicles are designed for the requirements of civil airports and air forces in large stations. Lightweight composite material and polypropylene hidden tanks reduce the net weight to the

minimum and maximizes the speed of intervention. These vehicles are designed and manufactured from chassis to all superstructure components and they include of high power engine and fire extinguishing components to allow users dispense high volumes of water, foam and DCP when needed.

Volkan has been working actively since 2014 with METYX for the LION ARFF vehicles composite parts, they have chosen METYX as a project partner in 2018 and their business volume has been greatly increased. Biaxial Glass Fibers, PVC foam and consumables are supplied from METYX.

The company claims: “With our business partner, who has supported us in fast material supply in the days when our business volume grew, we survived the crises in 2018 and 2021 in a manner worthy of business partnership.”





Good Use of METYX Gift!

METYX Composites has always believed in building a strong relationship with its partners and always tried to foresee and fulfil the potential needs of its customers. That's why it invests in unusual but handy promotional materials.

One of the promotional materials that METYX Composites distributed a couple of years ago was a Leatherman multi-tool. Of the many positive feed backs that were received from the partners, one of them stood out for sure. The export director Pierre Calmon from Resoltech – an epoxy formulation and production company and part owner of Composite Patch, a company using Resoltech resins and METYX carbon fabrics to produce field composite repair patches, shared that he has been using the tool at the Dakar race that was held in January 2022.

In the Dakar race that took place in Saudi Arabia, he was racing as co-pilot on Truck 546 that was racing not to win but to give assistance to 5 racing buggies from Century Racing. The job was to race as fast as possible in order to be able to give assistance to the race cars on the special stages. In that case he frequently used Leatherman to punch holes in the carbon fiber body of the car to attach it with Zip ties. Century Racing did not have resins curing fast at 3°C - the temperature a night in the desert, so Calmon ended up repairing some of the bodies of the cars with composite patches.

The carbon patches are mainly used in the yachting world – the composite patch is the sole on board repair system on all Volvo Ocean Race boats for example, and the majority of racing multi hulls and IMOCA boats. In the automotive industry, it is used mainly on race cars like the Dakar or Le Mans series.





YOU ARE INVITED

5th METYX COMPOSITES SUMMIT

May 23 - 27, 2022 Izmir, Manisa TURKEY

Don't miss this key event highlighting the latest techniques and innovations in the composites industry!

Composites Conference: May 23 - 24 / Izmir - Kaya Thermal Hotel

RTM Training: May 25 - 26 / Manisa - METYX-Telateks Production Site

Infusion Training: May 27 / Manisa - METYX-Telateks Production Site

METYX, one of the global brands of the composite world, started its preparations for the fifth METYX Composite Summit, the first of which was organized in 2007. The event includes two days of composites conference followed by one day of infusion school and two days of RTM school. The composite conference will be held in Izmir Kaya Thermal Hotel on May 23-24. Stories of the companies and industry leaders that draw attention due to their global success will serve as a roadmap for all participants seeking to innovate. Additionally, the education track is designed to provide the maximum amount of targeted content, including theory and hands-on practice, partnered with Composites Integration. This is an excellent opportunity to learn about the latest techniques and innovations in the composites industry and to participate in hands-on, practical training.

The METYX Composites Summit is suitable for everyone from those who are new to the industry, to experienced professionals seeking to improve themselves and learn the latest technologies.

Composites Conference

Our conference is an opportunity to learn about the latest manufacturing techniques in the composites industry and to follow case studies and best practice presentations from various industry experts. Presenters from world-class companies will talk about many topics, such as boat-building, wind turbine blade manufacturing, adaptive mold systems, core materials and fire retardant systems.

Infusion Training:

The program will include the latest in infusion to enable a quick start for newcomers and advanced techniques for those with experience.

- Practical demonstrations and training in infusion
- See the latest in resin infusion technology - invaluable for newcomers and experienced molders
- Theoretical training combined with practical demonstrations
- Process techniques and troubleshooting
- Case studies illustrating industrial applications

RTM Training:

The program will include the latest in RTM technology to enable a quick start for newcomers and advanced techniques for those with experience.

- Pattern design and construction (using the pre-prepared practical example)
- Building the 'A' surface mold
- Thickness-waxing and flange design
- Use the completed 'A' surface molds to demonstrate the thickness-waxing stages.
- Building the second 'B' surface mold
- Use the fully waxed molds to show the PVA, gelcoat and start the laminating stages
- Finishing the mold (opening, cleaning, polishing, release agent application)
- Use the finished mold(s) to demonstrate the commissioning of a new mold
- Mold design (injection strategies etc)
- Materials for RTM (fibres, cores, resin, release agents etc)

For further details please visit www.metyx.com or just send an email to metyxsummit@metyx.com

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