

2011 Activities Report



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4



10



14



18

Company News

Executive Letter.....3

New Manufacturing Center..... 4-5

New Max 5 Carbon Fabric Production Line 6-7

New Staff Highlights8

Trade Shows.....9

Automotive

L-RTM for City Buses 10-11

RTM Solutions for Trucks and Tractors 12-13

Marine

Flagship Catamaran Project..... 14-15

Dual-Purpose Yacht 16-17

Sponsorship

Cyclist 18

Water Polo 19

Executive Letter

Dear Friends and Colleagues,

Another year of exciting developments and undertakings is behind us. In 2011 - the most successful year in our company's history - we expanded into new business units, new products and services, and new geographies. We are grateful to you, our customers and partners, for the trust you have vested in both our company and our products.

This is a momentous time for METYX Composites, and we would like to share some of our latest company developments with you.

Investments

This year we made our largest investment in recent years, which was the acquisition of a 12,500 square meter factory in the Manisa Industrial Zone in Manisa, Turkey. This new facility will be at the center of our plans for growth over the next five years.

In 2011, we also purchased more high-end machinery for multi-axial reinforcement production of carbon and e-glass fibers. This will significantly increase our current production capacity and satisfy an ever-growing demand for this product group.

Another major investment was the acquisition of a large 5-Axis CNC machine and other equipment required for our state-of-the-art Tooling Center, which was up and running in February 2012. We are excited to offer you new products and services as a result.

Vital Qualifications

We completed vital qualifications in the wind energy industry for blade and nacelle production. There were also important qualifications and market penetration in new European countries and in the South American automotive and transportation sectors.

“Reinforced” METYX Composites Team

We hired several highly skilled professionals with great industry experience to join the METYX Composites team in 2011. Their expertise helps us best serve you. It also adds to our agility in the marketplace as we pursue aggressive growth plans across different business units and in various regions throughout the world.

The Year Ahead

We have a challenging but equally exciting year in front of us. In addition to advancing our ongoing businesses, we will launch two new business units at our Manisa facility. We are working hard to collaborate across all business units as we continue to evolve our product-driven company with the needs of our customers at the core of all we do.

We expect 2012 to be a very dynamic year in all our markets, but we also recognize that some of our principal geographies are still in uncertain times. What we know for certain is that our commitment to you, our customers, is unwavering. Our ultimate goal is always to make you successful. We have faith in your loyalty and your engagement. Together, we will not only accomplish all our goals, but surpass them.

On behalf of the entire METYX Composites team, thank you for your ongoing support. We look forward to a successful 2012.

Best regards,



Ugur Ustunel
Co-Director
METYX Composites



Tunc S. Ustunel
Co-Director
METYX Composites

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New Manufacturing Center and Business Unit

Citing strong global demand for its products and services - along with a strategic decision to create a new business unit - in the third quarter of 2011, METYX Composites announced it was building a new 12,500 square meter (134,550 square foot) factory in Manisa, Turkey. Although company headquarters remains in Istanbul, the new facility will drive aggressive plans for growth over the next five years. As part of a long-term plan, the site will also allow for future expansion.

The new manufacturing center is located 20 kilometers from the city of Izmir in the Manisa Organized Industrial Zone, widely considered to be one of the top ten industrial zones for investment in the world. METYX Composites, a division of Telateks A.S.®, invested 4.5 million euro in facilities and infrastructure at the new plant. The Manisa facility will also be at the core of a progressive, five-year investment of 8.5 million euro in high-end machinery. Ugur Ustunel, Co-Director, METYX Composites, noted that “the new factory will be one of the largest industrial investments in Manisa in the past five years.

“We are investing in the region with the most potential for growth,” explained Ustunel. “Manisa is locat-

ed in the Aegean region, which accounts for about 80 percent of the country’s wind energy potential. We believe that this investment creates a greater logistical advantage for our wind energy customers. The location has an extraordinary geographical position between Europe and

Asia, and is in close proximity to the Middle East, the Balkans, and North Africa. Moreover, the zone provides access to major ports, proximity to our suppliers, and has a generally favorable business climate, which will benefit all our customers across industries,” Ustunel continued.

Construction of the new factory began in mid-2011 and is expected to be completed in early 2012, with auxiliary buildings to be completed in the fourth quarter of 2012. The facility will begin operations in early 2012 with the launch of METYX Composites Tooling Business Unit. METYX

Composites new, state-of-the-art Tooling Center, which the company announced in September 2011, will be one part of this forward-thinking business unit. The Tooling Center will incorporate a 5-Axis CNC machine for large scale plug and mold production, and will serve all METYX

Composites customers worldwide as a value-added service.

METYX Composites plans to ramp-up production at the new manufacturing center in phases throughout 2012, offering a new generation of composites products and services for its customers. “This investment underscores our long-term commitment to the composites industry,” said Ustunel.

Ustunel further commented: “This is an exciting time at METYX Composites. The commitment to our loyal customer base is what drives all the decisions we make. As we expand our business, we will strengthen our portfolio of offerings, improve logistics, and offer even more comprehensive services and support, all while helping our customers grow their own businesses. We are also proud that our investment is expected to create many new jobs locally.

“We will share more details about our investment plans in the coming months. We are grateful to our customers, partners, and distributors for our continued growth, particularly during these challenging economic times, and we look forward to working together as we execute our vision,” Ustunel concluded.



New Max 5 Carbon Fabric Production Line

As part of an ongoing commitment to carbon fiber processing, METYX Composites invested in a new, state-of-the-art MAX 5 carbon reinforcement production line. This is the most recent in a series of planned investments at the company's headquarters in Istanbul and at its new Manisa, Turkey facility. METYX Composites plans to offer a new generation of composites products and services to complement its existing portfolio.

"The MAX 5 platform will enable us to manufacture even lighter-weight carbon reinforcements, and sever-

al other types of reinforcements, by spreading high K carbon tows with great precision. It will also complete our offerings in the carbon reinforcements product group, a highly successful group for our customers and our company alike," commented Tunc S. Ustunel, Co-Director, METYX Composites.

Along with the MAX 5 platform, METYX Composites also invested in a new Carbon UD tape production line and a MAX 3 type multi-axial stitched fabric production line. These investments will significantly increase the company's current

production capacity for carbon reinforcements.

"These carbon investments were partly initiated to support requirements from the wind energy and automotive industries, in addition to prepreg producers. Our new production lines will be up and running in early 2012," stated Ustunel. "We are excited about the opportunities these new carbon reinforcement lines will bring. We look forward to the innovative projects ahead and to serving our elite customer base with the best quality, value, and advancements in the industry," Ustunel concluded.



Carbon Tows



Carbon Reinforcement

New Staff Highlights

We are proud to welcome several renowned industry professionals to the METYX Composites team. Their diverse backgrounds will be beneficial to our company and customers alike.

Andreas Kestler



Andreas Kestler has 35 years of business experience and has been working for international companies in Germany and Norway for the last ten years. He has been in the composites industry since 2004, when he was hired as an

Export Manager for Devolt. Mr. Kestler has an extensive background in building customer relations across diverse industries, including wind energy and automotive. He started working with METYX Composites in 2011 and has already established new distributors for the company in multiple countries. Mr. Kestler has also been to several production sites where he has effectively supported clients and offered cost-saving recommendations based on his vast knowledge of technologies and processing methods. He is currently based in Hamburg, Germany.

Peter Zieher



Peter Zieher was hired in 2011 as Telateks Sales and Marketing Manager. Peter brings the whole organization a wealth of experience from the textile industry, with a specialization in interlining and other nonwovens. He has been

based out of Germany throughout his career. His responsibilities in terms of sales, marketing, and customer relations have spanned many textile regions throughout the world. Peter will mainly focus on classical textiles and nonwovens, but will support all technical textiles activities within METYX Composites as well.

Karl Mula



Karl Mula, METYX Composites, Senior Technical Advisor, has been in the composite business for nearly 35 years. He got his start in 1976 at a small workshop in Turkey, where he produced windsurf boards composed of EPS foam with a carbon/aramid/epoxy skin. This was followed by several small projects, including the production of floaters for ultra-light airplanes and composite boats.

In 1986 he shifted his field of interest to industrial composites and produced parts for turnkey petrol stations. It was here that he designed and produced his first RTM molds for manhole covers that conformed to H90 standard (90 ton load).

In 2003 he joined one of Turkey's largest shipyards as the Yard Manager. That same year, the yard acquired Turkey's first large scale 5-axis CNC router (X-12,500 / Y-8,500 / Z-4,000). In 2004, he conducted Turkey's first large-scale infusion on a 52 foot motor yacht in a direct negative mold, which he produced on this CNC. It was soon to be followed by 75 and 102 footers.

For the last five years he has continued to manage his own composite company, primarily focusing on the automotive sector. He has also worked as a freelance composite consultant in Turkey and abroad.

Karl has now joined METYX Composites to share his vast experience with our customers.

Trade Shows

METYX Composites was an exhibitor at the following trade shows in 2011:

- **ACMA Composites 2011**
Fort Lauderdale, FL, USA – February 2-4
- **International Symposium on Composites RTM**
Saint-Avold, France – February 9-10
- **JEC Composites Show**
Paris, France – March 29-31
- **Composites Europe 2011**
Stuttgart, Germany – September 27-29
- **JEC Asia**
Singapore – October 18-20
- **METS**
Amsterdam, Holland – November 15-17
- **Wind Turbine Blade Manufacture 2011**
Dusseldorf, Germany – December 6-8

The METYX Composites team looks forward to meeting you at the following trade shows in 2012:

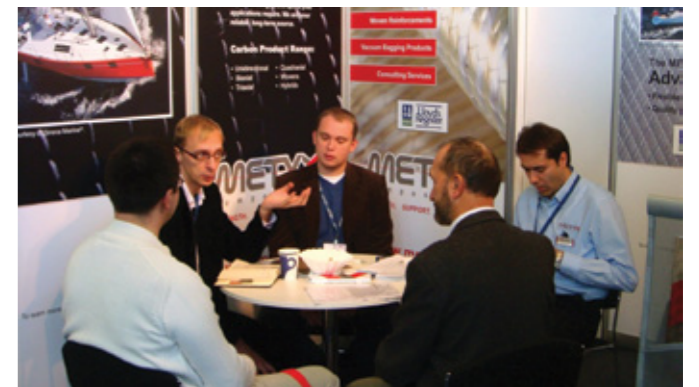
- **ACMA Composites 2012**
Las Vegas, NV, USA – February 21-23
- **JEC Composites Show**
Paris, France – March 27-29
- **JEC Asia**
Singapore – June 26-28
- **HUSUM WindEnergy**
Husum, Germany – September 18-22
- **Composites Europe 2012**
Dusseldorf, Germany – October 9-11
- **Feiplar**
São Paulo, Brazil – November 6-8
- **METS**
Amsterdam, Holland – November 13-15
- **Wind Turbine Blade Manufacture 2012**
Dusseldorf, Germany – December 2012



JEC Asia



JEC Europe



METS

L-RTM for City Bus Production in Mexico

As of October 2011, the METYX Composites RTM range was qualified for use by the largest city bus manufacturer in Mexico. AYCO, located just outside Mexico City, is a well-respected company with a long history of noteworthy accomplishments in the local automotive market. AYCO is also a prominent exporter of buses to Latin America.

METYX Composites, together with longtime partner EFA 2000, took on this new AYCO project. The Senior Technical Consultant at EFA 2000, Mr. Jose Manuel Bey, was the project leader.

EFA 2000 S.L.

He delivered both an effective plan and successful outcome while working closely with a dedicated AYCO technical team.

The project was to train the AYCO team on RTM tooling for one of the best-selling city buses in production at AYCO. The team started with the rear mask

molds, which they successfully completed and later transitioned to production. In the process, AYCO learned about best practices in RTM production techniques. The team also discovered first-hand that significant quality improvements and a reduction in resin consumption are achieved through the use of consistent, high-quality METYCORE technical textiles and closed mold L-RTM manufacturing.



AYCO City Bus



First L-RTM rear mask after demolding



AYCO technical team with their first RTM mold

Building on the momentum of this fruitful project, AYCO's new goal is to convert all their hand-laid GRP parts to L-RTM by the end of 2012. As a newcomer to L-RTM, the AYCO team has a strong willingness to learn, as well as the dedication required to excel in this new process.

AYCO and METYX Composites signed an annual supply agreement after the 2011 qualification. Ugur Us-tunel, Co-Director, METYX Composites, commented: "We are grateful for the trust AYCO has placed in our company and products. We wish them tremendous success in all their endeavors."

RTM Solutions for Automotive

MVC Solutions in Plastics, a leading Brazilian company in product development and engineering plastics solutions, uses METYX Composites reinforcements from the METYCORE product group in the manufacture of harvester tractor hoods and truck ceilings. Gilmar Lima, Director, MVC commented: "We prefer METYX Composites reinforcements due to their superior quality and their excellent resin flow. We also benefit from the custom widths. METYX Compos-

ites reinforcements contribute to the excellence of our products."

CNH Hood T8000

In 2011, MVC developed new components for their recently launched CNH T8000 tractor series. The project included components made of polypropylene and polyethylene (front fenders, rear fender covers, battery box cover, top front panel, and wheel panel sides), as well as an RTM hood.

The RTM hood was almost three meters long, weighed approximately 80 kilograms, and posed the greatest challenge for MVC in this project. It was necessary to adjust the manufacturing process along with other project variables, including the need for an appropriate resin to meet the engine's high temperature requirement (over 150° C). In addition, the hood required variations in thickness throughout the part. As a result, the tooling and the production process were adjust-

ed to make the front part of the hood more structured. This added structure helped accommodate the metal grids and other components found in the front area of the hood.

Using similar techniques, MVC also produces components for other models of CNH tractors such as the Farmall and TL.

Iveco Stralis NR Ceiling

Another product made by MVC is

the Iveco Stralis NR truck ceiling. As part of its truck nationalization program, Iveco replaced the imported SMC ceiling with an RTM ceiling produced by MVC. In addition to reducing the initial costs, RTM enables faster design changes, which contributes significantly to a lower overall cost of implementation.

At JEC Europe 2011, MVC presented a truck ceiling made of RTM-S, which is a Light RTM variation. It is an inno-

vative process that combines thermoset with thermoplastic in order to improve product surface quality, thereby eliminating the need for gelcoat. RTM-S also reduces the preparation time needed for painting - or even eliminates the need for painting at all - when using special thermoplastic layers.

In 2011, MVC produced 5,000 RTM ceilings, each weighing approximately 75 kilograms and measuring approximately 2.3 meters.



CNH Hood T800



Iveco Stralis NR Ceiling

Flagship Composite Catamaran Project

After delivery of the award-winning M/Y Meya Meya, custom yacht builder Logos Marine of Turkey embarked on another challenging yacht project at their high-tech facility in Tuzla, Istanbul: a composite catamaran motor yacht called Curvelle Quaranta. This 33.7 meter (110 foot) yacht was awarded Best Concept Yacht Design Under 50 Meters in 2011 at an international yacht awards event.

Curvelle Quaranta is the largest composite catamaran ever built in Turkey and is unique due to the carbon-hybrid reinforcements used. Production of Curvelle Quaranta started in April 2011 after detailed in-house engineering with a one-off male plug. Production continues in

full swing with a scheduled launch in November 2012. The Quaranta, as it is called, is a flagship vessel and the first to be built of her series after four years of development by Curvelle.

“METYX Composites supplies the full package of the exceptional performance GRP materials for this project, including a large quantity of METYX Composites biaxial and carbon-glass hybrid reinforcements, Airex core materials, Hexion epoxy, and Aerovac vacuum consumables. These advanced materials have long-term cost benefits of lower weight, lower maintenance, higher durability, and greater longevity of the product,” commented Sertac Serbest, Production Manager, Logos Marine.

Due to Quaranta’s wide beam and four decks, the 33.7 x 9 meter power catamaran has the interior and exterior space equivalent to that of a 40 meter performance monohull yacht, which was the inspiration for the yacht’s name meaning forty in Italian. This performance motor yacht with maximum speed of 25 knots, and a cruising speed of 23 knots, also has a transatlantic range of 10 knots. To ensure optimal panoramic views, all cabins are on the main deck and have enormous windows (2.5 meters in length and 0.9 meters in height), which are made possible by the strong sandwich structure.

The RINA-certified Quaranta with their unrestricted range-classification

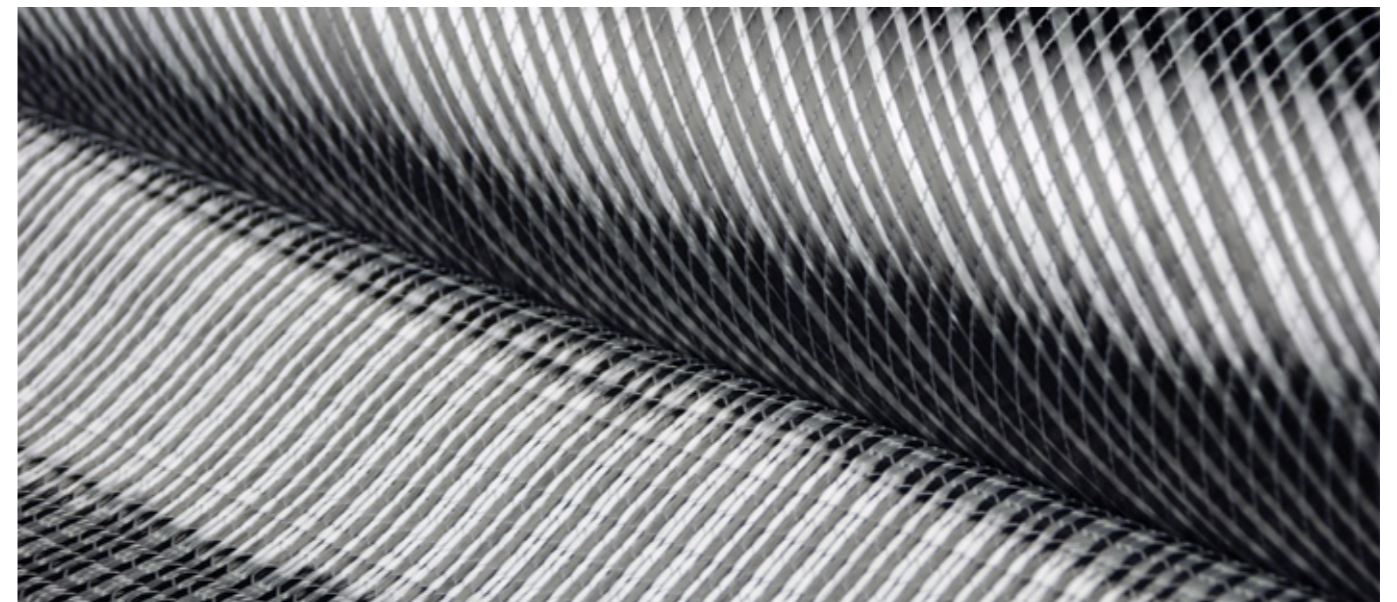
for commercial yachts, verifying that the vessel is designed with the latest commercial yacht MCA regulations.

“As our composites solutions part-

ner, we worked in great accord with METYX Composites during every step of the design, development, and production of this flagship vessel. METYX

Composites is not only an exceptional

manufacturer and but also a comprehensive supplier for our turnkey composites needs. We look forward to working with them again on our next challenge,” concluded Mr. Serbest.



Carbon-glass hybrid reinforcement used to strengthen the structure of the Curvelle Quaranta



Curvelle Quaranta



Carbon reinforced epoxy hull structure

Sophisticated Dual-purpose Yacht

Alp Somer – a partner at M.A.T., a premier performance sailboat-builder in Izmir, Turkey – described one of his company's newest projects involving a dual-purpose yacht and large quantities of METYX Composites materials and expertise. Mr. Somer explained: "The M.A.T. 1010 is our latest IRC design using the lessons learned over many successful custom and production IRC projects. Combining good looks, all-around performance, as well as a comfortable deck and interior layout, the M.A.T. 1010 has already proven itself on the racecourse with wins in the UK, France, and the Mediterranean. Built to a very high standard by M.A.T. as the successor to the highly popular M.A.T. 12, the 1010 allows a dedicated racer to focus on winning in IRC, or a family to enjoy the best in performance cruising, as well as a bit of racing."

Significant expertise and a high level of technology are required to build a fully-equipped 10 meter boat worthy of ORC 2 blue water races, while maintaining a weight of a mere two tons (with the exception of the keel and the bulb). Building techniques and new materials put M.A.T. 1010 in a different category than its predecessor, the highly successful M.A.T. 10, which was first built 10 years ago. Although both boats weigh the same, the weight distribution varies, which



M.A.T. 1010

benefits the racing performance of this new generation of boats.

M.A.T. 1010 also has a hull structure that is 700 kilograms lighter and 2.1 meters deeper, as well as a ballast that is 700 kilograms heavier - all of which helps to deliver a sailing area that is 50 square meters larger than M.A.T. 10. Additionally, M.A.T. 1010, is certified for Ocean Class with its ISAF Plan Review Certificate.

"Sophisticated materials contribute to the success of M.A.T.," remarked Mr. Somer. A sandwich structure comprised of Airex PVC foams and METYX Composites multiaxial fabrics was heavily used in the hull, deck, and most inner structures. Furthermore, the yard used METYX Composites and Aerovac vacuum consumables for the infusion of all structural components.

For non-slip surfaces, the yard uses Axel Plastics semi-permanent release agents, which is critical to ensuring success in this part of the molding. As for the joinery of sectional walls and for all hull-to-deck joints, M.A.T. preferred to use Crestomer structural adhesives. "All of these composites-related materials were either produced or supplied by METYX Composites – our longtime, reliable partner," Mr. Somer concluded.

Talented Young Cyclist

Tamer Can Bayram, a local cyclist with great potential, now works at METYX Composites. "We met Tamer during the summer of 2011. At the young age of 18, he had been a cyclist for three years. This talented athlete was working at a burger house and simultaneously training everyday with great hopes for the future," explained Ugur Ustunel, Co-Director, METYX Composites.

The METYX Composites leadership team saw good character and a strong work ethic in Tamer, who was eventually offered a job at METYX Composites' new facility in Manisa. METYX Composites also sponsored Tamer's preparations for the domestic competitions in 2012.

"There is no doubt in our minds that Tamer will excel both at work and in his sport. His commitment, discipline, and his ability to be a team player have already made us proud," Mr. Ustunel concluded.



Shooting for the Stars in Water Polo

Another fun project that has proved beneficial for a group of young athletes was the co-sponsorship between METYX Composites and its partners - 3A Composites, Twaron, and Duratek - for the manufacture of lightweight shooting boards used by water polo teams in the Turkish National League.



Historically, these boards were made from MDF or similar materials with metal or aluminum envelopes. In most cases, the boards were too heavy for players to carry without risking injury, especially considering the slippery surfaces surrounding pools. Another disadvantage was the short product life cycle of these boards, which would quickly become waterlogged and lose their integrity.

In order to provide a better alternative for these shooting boards, the METYX Composites team and its partners collaborated. They produced a lightweight sandwich structure with the vacuum infusion process using AIREX R63 damage tolerant foam, Twaron aramid fibers stitched in multiaxial form by METYX Composites, and Duratek epoxy resins to complete the matrix.

Shooting Boards

Ugur Ustunel, Co-director, METYX Composites, said: "We chose these best-in-class performance materials due to their ability to withstand the powerful slamming forces of water polo shots. A senior team player can shoot a 400 gram water polo ball at speeds exceeding 100 kilometers per hour. Considering the repetition and long-term usage of the boards, we wanted to make use of the best possible materials for the project."

Most tournament goals accepted by water polo leagues FINA and LEN are produced using aluminum profiles, which are frequently damaged and quickly become unusable. "With this in mind, we created a shooting board strong enough to withstand

many years of powerful shots thanks to all the parties involved in this interesting project for Turkish water polo youth," Mr. Ustunel added.

Bulent Ohri, METYX Production Manager in Istanbul, was the leader of this project and successfully completed the build of the initial set of 10 boards. The first two prototypes are already in use at ENKA Sports Club, and both sportsmen and trainers alike are very satisfied with the results.

The new and greatly improved shooting boards are over three times lighter than conventional boards, significantly stronger, and have a much longer product life cycle.

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METYX®
composites

Twaron®
The power of Aramid