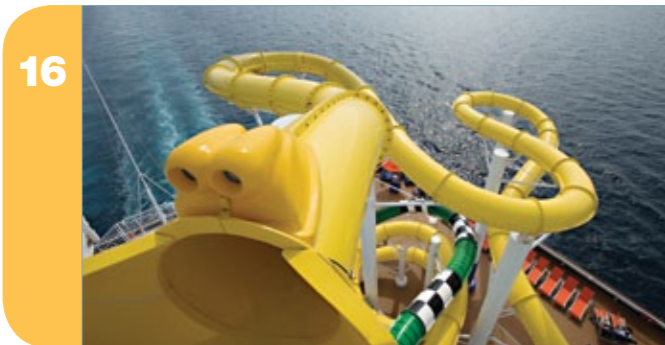


2013 Activities Report



METEX[®]
c o m p o s i t e s

STRENGTH. SUPPORT. SOLUTIONS.



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Executive Letter

Dear Customers, Colleagues, and Friends,

2013 was an extraordinary year for METYX Composites®! We take this opportunity to reflect on some of our recent accomplishments as we position ourselves for the amazing opportunities the future holds.

Strategic Acquisition

Our most noteworthy achievement in 2013 was the acquisition of North American Bus Industries® facility in Kaposvar, Hungary. The state-of-the-art manufacturing center, which is now METYX Composites Hungary, strengthens our presence in Europe and marks a substantial achievement toward our vision of building a global manufacturing network.

Growth in Core Material Processing and Kitting

Activity at METYX Composites Kitting Center (MCKC) increased three-fold in 2013, as we added new clients to our elite customer base in Turkey and expanded our engineering and operations teams to support our growth throughout Europe. Our Manisa, Turkey manufacturing facility is well poised for continued expansion in this sector of operations.

Momentuous Qualifications

METYX Composites was qualified to supply glass multiaxials for three prestigious LM Wind Power® production facilities in Europe. Our team worked diligently to offer customized, world-class products and services, which help this client gain an edge in the fiercely competitive wind energy market.

Another important qualification came from Enercon® where our team demonstrated the ability to supply core material kits at high production volumes. We believe that this achievement will help assure customers across industries that our Kitting Center is ready for the upcoming challenges of the E.U. market.

Investments in Advanced Machinery

To support the growing demands of our customers, we invested in our multiaxial knitting machines department at our Manisa, Turkey factory. We also invested at MCKC where several five-axis CNC machines were added, along with certain custom developed machinery. MCKC is now operational 24 hours a day, seven days a week for round-the-clock manufacturing.

2014 and Beyond

Our goal in 2014 is to bring METYX Composites Hungary into full operation. From this new, central location, we will serve customers globally by delivering existing METYX Composites products and services, as well as adding new ones to help customers compete most effectively. Our plan is to provide long-term value with a special focus on the requirements of our clients in the automotive, wind energy, and transportation industries.

A Note of Thanks to Our Customers

As always, we are driven by your needs. We look forward to working closely with you, to supporting you, and to delivering exceptional results that improve the quality and efficiency of your manufacturing. We appreciate your business.

Best regards,



Ugur Ustunel
 Co-Director
 METYX Composites



Tunc S. Ustunel
 Co-Director
 METYX Composites

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METYX Composites Hungary facility, formerly NABI Kaposvar.

Introducing METYX Composites Hungary

METYX Composites announced its acquisition of North American Bus Industries' (NABI) former production facilities in Kaposvar, Hungary on November 14, 2013. The transaction includes a state-of-the-art composites manufacturing facility and ancillary buildings totaling 12,000 square meters of closed space and over 230,000 square meters of industrial land. An existing, highly skilled workforce with many years of industry experience remains in place.

NABI Kaposvar built full composite city buses from 2002 to 2013 for American cities, including Los Angeles, Phoenix, Tampa, and others. The facility employed 230 people with an extensive knowledge base in composites and 11 years of experience in high-end composites manufacturing.

The NABI team in Hungary was trained at TPI Composites' facilities in the United States from 2001 to 2002. Scottsdale, Arizona-based TPI is a global provider of structural composites products for the wind energy, military and transportation markets.

NABI's legacy complements METYX Composites' manufacturing expertise

gained from a decade of serving composites customers across industries. This expansion builds on the momentum of METYX Composites' acquisition of LEDA and ACT assets in Mondavio, Italy in 2012. It also marks a substantial achievement toward the METYX Composites vision of building a global manufacturing network.

The former NABI facility will function as METYX Composites Hungary beginning the first quarter of 2014. Ugur Ustunel, Co-Director, METYX Composites, explains the plan: "We will duplicate some of our existing METYX Composites business units in Hungary to strengthen our presence in Europe and to provide logistical advantages to regional customers and beyond. In parallel, we will follow opportunities in downstream composite products with the goal of developing new products and services to support our elite customer base."

"We look forward to integrating METYX Composites Hungary into our company and to delivering composites solutions that continuously enhance the competitiveness of our customers across industries," Tunc Ustunel adds.

“ We believe that METYX Composites Hungary can easily become a center for composites excellence and are incredibly excited about this new venture. The facilities and the knowledge base in Kaposvar are world-class. Moreover, this part of Hungary is a low-cost region. We are certain that both METYX Composites and our customers will benefit from these advantages. ”

— Tunc Ustunel, Co-Director,
METYX Composites



Production of a bus.



Production of a bus.



The METYX Composites Staff at Turk Kompozit, October 2013

Trade Shows

METYX Composites was an exhibitor at the following trade shows in 2013:

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • ACMA Composites
Orlando, FL, U.S.A.
January 29-31 • JEC Europe
Paris, France
March 12-14 • JEC Asia
Singapore
June 25-27 | <ul style="list-style-type: none"> • Composites Europe
Messe Stuttgart, Germany
September 17-19 • Turk Kompozit
Istanbul, Turkey
October 3-5 • Composites Engineering
Birmingham, U.K.
November 12-13 | <ul style="list-style-type: none"> • METS
Amsterdam, Holland
November 19-21 • Wind Turbine Blade Manufacture
Dusseldorf, Germany
December 3-5 |
|---|---|---|

METYX Composites was also a proud sponsor of Turk Kompozit 2013, the premier event for the Composites Industry in Turkey, organized by the Turkish Composites Manufacturers Association. It was a highly successful first show with 52 well-known exhibitors and attendees from across the globe.

Staff Highlights



METYX Composites welcomes Francesco Berardi to the team from Italy, where he most recently worked for LEDA, ACT, Pershing, and Benelli. As of

March 2013, Francesco has been serving as the Core Kitting Operations Manager for the manufacturing facility in Manisa, Turkey. His first priority was to produce blade core kits for Enercon

(Aero industries), which are already in mass production.

Berardi's business philosophy is very customer-oriented, always focused on the goals and vision of the client. He is a proponent of Lean thinking and Lean manufacturing methods to assure the client receives the best quality, performance, and value.

Berardi comes to METYX Composites with a total of 11 years of experience in the composites industry. Working as an engineering manager in the marine industry (performance yacht), he gained

great insight into the composites world from the end-user perspective. His years on the R&D side of the composites exposed him to the newest innovations in the industry. His later work producing Vestas nacelles (managing the industrialization for trimming with five-axis CNC machines) gave him an expansive knowledge base in the wind energy market. He also brings four years of core kitting experience, working with three-, four- and five-axis machines, as well as various core materials, including PET, PVC, Balsa, and PU.

The Flexible and Distinct Sanlorenzo SD122

Through continuous research and development, Ameglia, Italy-based Sanlorenzo offers the world's yacht connoisseurs an unrivaled range of unique motoryachts, each demonstrating a truly timeless design.

Sanlorenzo SD122 is no exception. The 122-foot yacht is a standout in the marketplace as the largest Sanlorenzo fiberglass semi-displacement yacht. The SD122 was introduced to deliver total flexibility within the most stable platform. Her many layouts set the SD122 apart from competitors. She offers features in-

cluding the possibility of five staterooms, captain's quarters behind the pilothouse, huge tender storage below decks, a true tri-deck layout, and a head on the upper deck, cleverly concealed inside the funnel. The elegance of the exterior is enhanced by the large windows of the superstructure, flowing continuously from stern to bow.

METYX Composites provides all the e-glass multiaxial materials for manufacturing the SD122. Vacuum infusion is used to produce the bulkheads, deckhouse, and upper deck.

“ METYX Composites is proud to contribute to the production of a yacht with such distinctive quality and craftsmanship. ”

— Tunc Ustunel, Co-Director,
METYX Composites



The Curvelle Quaranta Superyacht



The World's Largest Carbon Hybrid Composite Catamaran



Salon

As she begins her debutant season at Cannes, Monaco, and Fort Lauderdale at some of the world's top super yacht shows, the Curvelle Quaranta is turning the heads of many industry leaders. Now, as Quaranta embarks on her maiden marketing voyages around the yacht shows of the world, she is about to break with convention again – this time with her mode of operation.

High-performance composites

Conventionally, the hulls of super yachts are built of steel and their accom-

modation blocks from aluminum. They are typically of a monohull design with a 30-meter high-speed hull, which is 6.5 meters at its widest point. Designers are generally forced by such physical constraints to place the sleeping cabins for passengers deep below decks, close to the yacht's water line where the view through small portholes is somewhat limited at best. Oh yes, and most custom designed yachts are built for just one person – the owner!

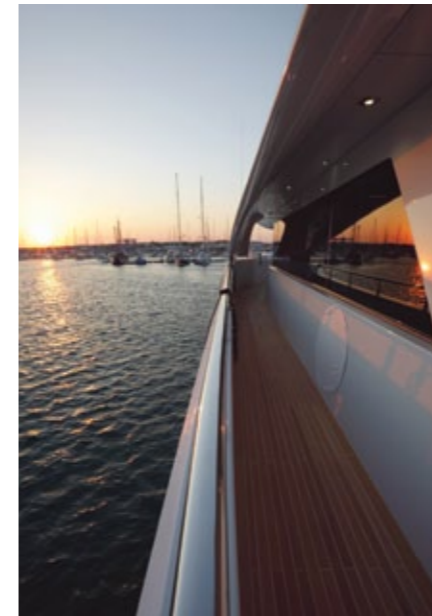
Carbon, glass and epoxy

Take every single one of those concepts, turn them on their head, and you have Quaranta, a brand new super yacht fit for the 21st century. She is built with composites. METYX Composites supplied the full package of exceptional-performance GRP materials used to construct the twin catamaran hulls and her entire accommodation block. Large quantities of METYX Composites biaxial and carbon-glass hybrid reinforcements, Airex core materials, Hexion epoxy, and Aerovac vacuum consumables were sup-

plied to Curvelle to build the yacht at the Logos shipyard in Tuzla, Turkey. Using advanced materials has a long-term cost benefit when it comes to operating the yacht. Lower weight, lower maintenance, higher durability, and greater longevity of the product all add to her appeal in the current yacht buyer's market.

Massive windows

With the massive amount of space available across a yacht that is nine meters at its widest point, the designers have been able to give passengers the luxury of main deck cabins. Each of these luxuriously appointed sleeping suites has a massive window through which to see the world as it cruises by. The strong sandwich structure makes possible these side openings that are 2.7 meters in length and 0.9 meters in height. The Italian classification society, RINA, has given the openings their approval, certifying Quaranta with an unrestricted range - classification for commercial yachts and verifying that the vessel complies with stringent commercial yacht MCA regulations.



Portside



Suite

Because of her wide beam and four decks of living accommodation, the 33.7-meter motor yacht has the interior and exterior space equivalent to that of a 40-meter performance mono-hull yacht. It was this fact that gave rise to the yacht's name Quaranta meaning forty in Italian.

Syndicated ownership

Aboard an ordinary monohulled super yacht, there would generally be six double staterooms. Here, due to the design flexibility, you get to choose how many you want. Have three, four, five or six! It is up to you, and if you get bored with the layout you have chosen, chances are the crew, given an hour or so, can switch it around. The reason for such a radical shift from the normal lies in the marketing of this yacht. Where most super yachts are built for a single owner to enjoy, this one is destined to have a total of seven owners through an innovative syndicated ownership plan which has ironed out the kinks that have caused disappointments for those who have tried it before. Luuk van Zanten believes it is important for as many people as possible to enjoy all the pleasures of a luxury motor yacht lifestyle. With syndicated ownership, he is con-

vinced it is possible to do so with only a fraction of the commitment.

This yacht would cost about \$14 million to buy outright. When sold to seven entities, each pays \$2 million, and everyone gets help from the company to run the boat and make sure that the figures they jointly pay are roughly the same as if they owned the boat outright. Those who dock in St. Tropez in high season pay more than those who dock elsewhere in low season. The group of owners is in control and decides how to manage the yacht. Given her low finished weight, Quaranta can be classified as a performance yacht, meaning she is capable of speeds up to 20 knots but is more likely to cruise at slower speeds. At nine knots, she has enough range to cross the Atlantic Ocean on a non-stop journey that would take between one and two weeks. This allows each of the yacht's seven owners to enjoy several weeks of summer cruising in the Mediterranean and winter sunshine in the Caribbean.

Groundbreaking work

Quaranta is the culmination of five years of work for the yacht's project man-

ager and visionary, Luuk van Zanten. He spent years in the planning and conceptual stages before the construction team began the in-house engineering of the one-off male plug. The one-shot vacuum bagging process on a catamaran is harder than in a monohull vessel because of the shape of the twin hulls. Quaranta is the largest carbon-hybrid composite catamaran ever built in the world, and it is unique because of the METYX Composites carbon-hybrid reinforcement used in the construction.

Production Manager Sertac Serbest, who oversaw the yacht's construction says, "Our supplier, METYX Composites, was particularly helpful at the early stages of the project with our preparations of the appropriate materials and the selection of the GRP consultancy company. As our composites solutions partner, we worked in great accord with their team during the design, development, and production of this revolutionary super yacht. They have proven themselves to be not only an exceptional manufacturer but also a comprehensive supplier for our turn-key composite needs."

Courtesy of JEC Composites Magazine n° 84, page 38-39.



Wind blade production

LM Wind Power Qualification

LM Wind Power® is one of the world's leading suppliers of components and services to the wind turbine industry. With over three decades of experience, LM Wind Power has established itself as the preferred supplier of customers worldwide. Nearly a quarter of all global wind turbines in operation today are fitted with LM Wind Power blades. These blades save more than 93 million tons of carbon dioxide emissions annually.

In one of the most important qualifications in company history, METYX Com-

posites was qualified to supply glass multiaxials (focusing on e-glass and h-glass) to three prestigious LM Wind Power production facilities in Europe. The METYX Composites Quality Assurance and Operations teams were held to very strict and demanding qualification process requirements in order to ensure best-in-class wind energy blades for LM Wind Power's elite clients. The entire METYX Composites team worked diligently to offer customized, world-class products and services to help ensure maximum com-

petitiveness for this renowned client.

The METYX Composites team already completed some key projects for LM Wind Power and successfully delivered to all three European plants. Additional qualifications are in progress and should be concluded in the first quarter of 2014.

"We are very happy to be serving the world's largest wind blade manufacturing company and look forward to increasing our cooperation with LM Wind Power," stated Bahattin Sendogan, Sales Team Leader, METYX Composites.



Wind blade production

Catching the Wind in Turkey

Turkish company Avrasya Ruzgar (translated in English as Eurasia Wind) has 13 years of experience in wind turbine blade manufacturing, inspection, repair and maintenance, and composite molds and paint-coating systems. The company was recently awarded a 21.5 meter blade production as part of the prestigious National Wind Energy Systems project known as MILRES. Given the vast potential of the wind energy market in Turkey, the MILRES project, spearheaded by the Turkish Ministry of Energy, promotes the use of renewable energy sources and lays the foundation for a Turkish wind energy industry.

As a subcontractor of Turkish Aerospace Industries, Inc. (TAI), Eurasia Wind collaborated with the TAI design team to

develop a turbine blade suitable for wind regimes in Turkey. After completion of the aerodynamic and structural designs, Avrasya Ruzgar partnered with METYX Composites for the production of the plugs. After delivering high-gloss, ready-to-mold plugs, Avrasya Ruzgar produced the molds with infusion using METYX Composites high-performance multiaxials.

The blades are now being produced at the Avrasya Ruzgar factory in Izmir, Turkey. The state-of-the-art facility has the capacity to produce blades up to 50 meters in length and to machine blade roots up to four meters in diameter. Static tests for the blades have been successfully completed, loading the blade to 110 percent maximum load.

“ We are happy to use METYX Composites multiaxials, core materials, and consumables in our project, which expressly helped us to finish the project on-time and in a cost-effective manner. ”

— Bugra Akbiyik,
General Manager,
Avrasya Ruzgar



Composites to the Rescue

Founded by a former volunteer fire-fighter, Volkan, of Izmir, Turkey, has been an industry leader in the manufacturing of firefighting vehicles and equipment for airports and industrial plants since 1974. Volkan products are currently in use in 38 countries worldwide.

Volkan's newest vehicle, the Aircraft Rescue and Firefighting (ARFF) Lion, was designed and produced to be used in civilian and military airports all over the world. This innovative fire truck is the first vehicle in the Volkan fleet to be manufactured with a full composite body.

With METYX Composites as their supplier for glass multiaxials, numerous infusion materials, including flow mesh, peel ply and other consumables, as well as PVC Foam, Volkan produced the Lion using the infusion technique and sandwich laminates. The body of the vehicle, its hatch, cover, and front cabin are all composites parts.

Volkan Lion has been well-received in the marketplace, offering numerous advantages over vehicles designed with more traditional materials.





Carnival Sunshine WaterWorks.

Composite Waterslides Deliver the Fun

The cruise ship Carnival Sunshine set sail in May 2013 with a new waterpark designed and installed by Polin Waterparks and Pool Systems of Istanbul, Turkey. The ship's massive new WaterWorks waterpark sports a racing theme and covers 1,500 square meters (16,145 square feet). WaterWorks includes three spectacular slides and an aqua play structure with 40 different interactive water features. One of the Aquatubes is a record-breaker for

the cruise line. The nearly 102 meter (334 foot) enclosed Twister slide is the longest waterslide on any Carnival cruise ship.

Polin has long been a pioneer in waterslide manufacturing technologies. The technologies employed in producing the Carnival Sunshine's WaterWorks slides are what make the end-product so appealing. Resin Transfer Molding (RTM) has only recently been used in the manufacture of waterslide attractions. The pri-

mary advantage of RTM is that it allowed Polin to create each of the WaterWork's slide components with a shiny, smooth interior and exterior. The technique also allows for stronger yet lighter waterslides that are easier to install. WaterWorks' slides are superior waterslides not only aesthetically, but also with regard to physical properties.

A longtime METYX Composites customer, Polin uses METYCORE MAX in manufacturing because it delivers a faster resin flow and allows highly filled resins to be injected with great precision and improved surface finish.

Polin Waterparks and Pool Systems was founded in Istanbul in 1976 and has become one of the world's leading companies in the design, manufacture and installation of waterparks, waterslides, and water-play attractions.



Carnival Sunshine WaterWorks.



Photo Exhibition

Mustafa Tughan Anit Photo Exhibition

Professional industrial photographer Mustafa Tughan Anit has executed several key photo shoots for METYX Composites in the past. In recognition of his contribution to the company, METYX Composites sponsored a photo exhibition of his artistic photography. For the past two years,

Anit has shared his passion for art photos taken exclusively with his iPhone and uploaded to Instagram at <http://instagram.com/tughan>, where he has a significant following worldwide.

Curated by the famous Turkish photographer and cinematographer Cemil

Agacikoglu, the exhibition came to life at the popular Ritim Galata Bar in Taksim at the city center of Istanbul, November to December 2013. The vibrant event was a success, and METYX Composites took pride in fostering an appreciation of Anit's work.

Celal Bayar University's Alternative Energy Club

METYX Composites sponsored Turkey's Celal Bayar University's Alternative Energy Club team, EcoMagnesia, in the Shell Eco-marathon Europe where they competed against more than 3,000 students. The famous Rotterdam, Netherlands event that takes place annually in May 2013 challenges European students to build energy-efficient vehicles and explore new concepts in mobility and fuel efficiency.

METYX Composites supplied the Celal Bayar University team with multiaxial reinforcement materials and vacuum infusion training to create a lightweight, durable body for their solar vehicle, Tarzan II. The components for the vehicle were built

in METYX Composites' manufacturing facility in Manisa, Turkey. EcoMagnesia has produced five solar vehicles since 2007 (two sponsored by METYX Composites). Weighing just 30 kilograms, Tarzan II's car-

bon fiber shell helped make it the lightest Turkish vehicle among the competition.

Tarzan II placed first in Turkey and 20th overall in the Prototype Battery Electric category.



Tarzan II



The Ariba VI

Istanbul Technical University's Solar Vehicle

One of Turkey's leading technical universities, Istanbul Technical University (ITU), has an innovative solar car team that has built six solar vehicles, focusing on fuel efficiency and sustainable mobility. The team and the vehicles, both sponsored by METYX Composites, have competed in various national and international competitions.

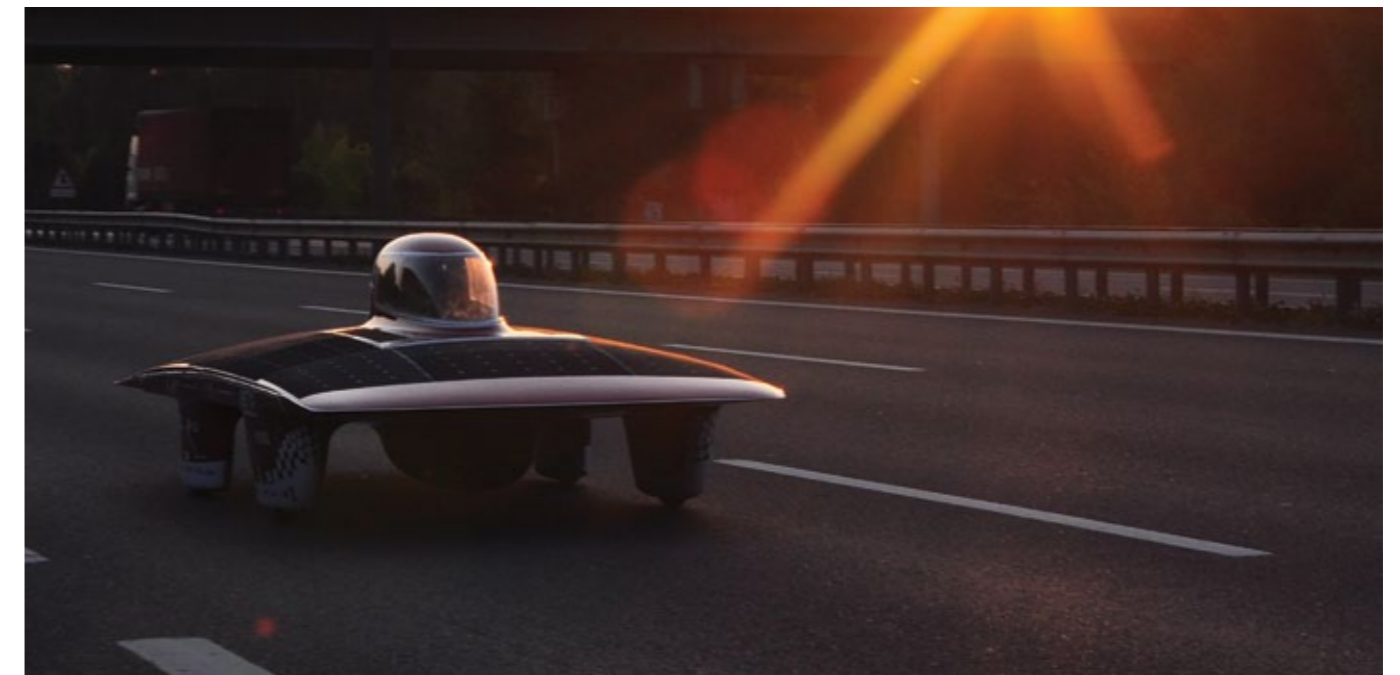
As in years past, this year's solar vehicle, Ariba VI, was built using METYX

Composites reinforcements and technical guidance to help make it as light and efficient as possible.

Among Ariba VI's first achievements was a successfully completed test run from Istanbul to Ankara, a distance of 452 kilometers (281 miles), powered by the solar energy and just two Turkish Liras (less than \$1 USD) of fuel. In recognition of this accomplishment, Turkey's current Minister of Energy and Natural Resources

presented the team with grant of 30,000 Turkish Liras and commissioned a solar car for the ministry. Ariba VI also competed in the World Solar Challenge 2013, a race which covers 3,021 kilometers and spans six continents.

ITU's solar car efforts have won national and international awards, and the team is recognized as one of the country's emerging talents in the field of solar energy vehicles.



The Ariba VI



Photo courtesy of LM Wind Power®

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