Dear customer and partner,

Gurit is proud to bring you our latest Marine Newsletter packed with details of all the exciting projects in which our specialists have recently been involved.

Happy reading,

The Gurit Marine Team

America’s Cup

Congratulations to Emirates Team New Zealand on a spectacular achievement: their fourth win of the Auld Mug following the 36th America’s Cup, achieving victory over Team Luna Rossa Prada Pirelli. Gurit is proud to be an official composite material supplier to ETNZ, and commends all the challengers on their efforts.

Shortly after the end of the regatta, the British group INEOS Team UK filed as Challenger of Record for the 37th America’s Cup, with the agreement that the AC75 Class will remain the class of yacht for the next two Cup cycles. While there has been no official confirmation of pre-event races, rumor has it that INEOS Team UK has suggested some portion of the program take place in the Solent and Isle of Wight – the historic home of the first America’s Cup. ETNZ has said “The Venue for the Match will be determined within six months and the dates of racing announced in the Protocol, if not before.” Stay tuned!

Read more on: https://www.americascup.com/
Philip Aikenhead has been promoted to the role of Head of Sales, Europe, Middle East, Africa (EMEA) for Marine and Industrial. Phil has been a valuable member of the Gurit Team since 2011 and has extensive knowledge of the Gurit product range, our customer base and distributors, together with years of composites experience in boat building and racing competitively in global regattas. Congratulations Phil!

**New Head of Sales EMEA for Marine / Industrial**

With the marine industry focusing on sustainability, builders around the world are looking for ways to make their products and processes more environmentally friendly. Gurit’s Kerdyn™ Green PET foam, made from up to 100% recycled plastic, is helping these companies meet their objectives.

One such organization is Brunswick Boat Group, headquartered in Knoxville, Tennessee. Their parent company has been a part of the recreational market since 1845 and has been involved in the marine industry for over sixty years.

Brunswick has made a commitment to sustainability across their corporation, and as part of meeting that aim, they have shifted to using Kerdyn™ Green in their structural core applications, decks and parts.

“Our transition to Gurit’s Kerdyn™ core was seamless and the material processes beautifully. It also helps to achieve our long-term sustainability goals,” says Sean Minogue, Advanced Manufacturing Manager at Brunswick Boat Group.

Following their replacement of previous core materials with Kerdyn™ Green in their boat production, Brunswick will consume the equivalent of over 4 million recycled plastic bottles and save 7,000 trees annually.

Read more about Brunswick: [https://www.brunswick.com/](https://www.brunswick.com/)

**Bottle to boat – Kerdyn™ Green makes waves at Brunswick**

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Read more about Brunswick: [https://www.brunswick.com/](https://www.brunswick.com/)
Recycled carbon fibre surfboard

JUC Surf make the world’s first recycled carbon fibre surfboards and have partnered with us for more sustainable composite materials for manufacturing of their boards.

“Gurit’s Kerdyn® PET structural foam, which we are using to make some of our surfboards, is unlike anything in the current market. It has high density and buoyancy meaning our boards are resistant to damage and sit higher in the water than a regular surfboard. This presents a design challenge as the boards we create need less foam to remain buoyant and with a new stiffness profile, offer exciting performance challenges that we are currently exploring to make amazing feeling surfboards. Gurit’s Kerdyn™ PET has fundamentally changed how we design surfboards and we love it for both its environmentally friendly aspect, strength, and the fact that it’s easy to shape.

“In addition, we are using the new Gurit AMPRO™ Bio resin, which works and acts exactly like any epoxy resin we’ve used before, with the added advantage of being bio-derived. We’ve made the change because it’s simply better for the environment and works great.”

Dr Filip Stojcevski, Co-founder and CEO, JUC Surf.

Read more: https://www.jucsurf.com/

Gurit® Kerdyn™ Green
Recycled Thermoplastic Core

Gurit® Kerdyn™ Green is a highly adaptable, recyclable, thermoplastic core material with a good balance of mechanical properties, temperature resistance, density and cost for a wide range of applications and processes in the marine industry.

- Up to 100% recycled PET content
- Reduced resin uptake
- Compatible with all types of composite manufacturing techniques
- Higher densities available

www.gurit.com
Sustainable Gurit

100% electricity from renewable energy sources

As of 2021, Gurit will source all its electricity from renewable power sources. The amount of greenhouse gas emissions avoided by switching to renewable energy corresponds to the equivalent amount of emissions caused by driving 3,084 times around the globe in an average car, or 84,000 m³ of avoided loss of arctic ice.

Reducing waste

For Gurit, reducing or avoiding waste is a priority. We focus not only on the materials we dispose of, but on the manner in which we design our processes and products to minimise environmental impact. This includes the efficient use of resources, re-designing packaging to reduce transportation requirements, and the recovery of materials in order to re-introduce them to the production cycle.

Using sustainable and responsibly developed materials

Since post-consumer PET is widely recycled, there is an opportunity to utilise an already well-organised supply chain. Gurit recently invested in the vertical integration of the recycling technology, beginning with the recent acquisition of a PET recycling business in Italy. Gurit Italy PET Recycling specialises in the recycling of PET bottles and the production of recycled PET flakes and granules later used for extrusion of recycled PET core. This allows Gurit to secure quality and cost-effective raw material supplies for its PET strategy, deepen its knowhow of this specific material supply, and link the value chain elements starting from the recycled bottle down to a finished quality core, Kerdyn™ Green.
A Sustainable Stunner -
Baltic 68 Cafe Racer

When a well-known customer of Baltic Yachts asked them to deliver an eco-friendly daysailer, the Finnish builder knew they had an exciting challenge ahead. Engaging international-award-winning designer Javier Jaudenes, the team began to determine how to maximize sustainability while maintaining performance.

The high-performance Baltic 68 Café Racer is being built using eco-friendly materials with 50% of the hull reinforced with Bcomp ampliTex™ flax, a naturally grown product which dramatically reduces the yacht’s carbon footprint. Building on our collaboration with Bcomp, Gurit has converted the flax reinforcement into Gurit SPRINT™ prepreg material, saving labor and time during the build.

“Gurit’s SPRINT™ materials are easy to work with and have been helpful in saving us build time.”

Thomas Lill, Baltic Yachts’ Composite Materials Purchaser

The outer hull skin laminate is a combination of flax and carbon fiber, utilizing Gurit ST 94 and ST 95; the flax material is also used in the solid laminate of the hull bottom and structural bulkhead skins. On the luxuriously appointed finished interior, the product will be incorporated into floorboards and other cosmetic finishes.

The yacht is eco-friendly in its mechanics as well, including a zero-emission engine, hydrogeneration while sailing, and a high efficiency air conditioning system that reduces power needs by 30% and can be run on solar panels. The Baltic Café Racer is scheduled to launch in May 2021.

For more information:
Visit: https://www.balticyachts.fi/yachts/baltic-68-cafe-racer/
Watch the video: https://vimeo.com/477584759/384ec9598c

The Baltic Café Racer in build

The Baltic Café Racer interior
Jaguar Powerboats

Jaguar Powerboats was formed in the 1980s by Jack Clarke, a renowned racer with numerous world and US championships and offshore speed records. Jack’s legacy was the creation of fast, reliable, and safe offshore racing powerboats.

When John Clarke, Jack’s son, took over the company, he continued the tradition, and has since added semi-custom lines of fishing and recreational vessels to the Jaguar lineage. One of Jaguar’s driving concepts is integrity over profit – paying close attention to the craftsmanship of each boat they produce. Part of that commitment to quality includes the use of Gurit Corecell™ M80 in every boat they have built since the mid-1990s.

Jaguar currently has a 55 and 36 in build in their North Carolina facility, both of which will be at the Fort Lauderdale International Boat Show this October.

Read more: https://jaguarpowerboats.com/

High Performance Yacht Design conference (HPYD7) in Auckland

The HPD7 Conference, organised by the Royal Institute on Naval Architects (RINA) NZ and the University of Auckland was held recently in conjunction with the America’s Cup regatta in Auckland. The event is a highly acclaimed world class technical conference with both a virtual and physical component which attracted some of the most prominent researchers, authors, designers and engineers from around the world including 15 papers from 14 authors.

The focus of the informative technical sessions was on the design, analysis, testing and performance of cutting-edge racing and super yachts. Papers were presented on a broad range of topics relating to the design of high-performance sailing yachts, including: Performance prediction and measurement, Computational methods, Wind tunnel and towing tank technology, Materials and structural analysis, Regulations and rating rules, Hull and Appendage Design. The conference also had an excellent social programme with representatives from the four America’s Cup design teams available for an hour of questions, providing delegates with both opportunities for learning and networking.

Gurit was proud to be a sponsor of HPYD7 and participated in the technical forum with a presentation on “Designing and building for impact; quantitative dynamic shear strengths of sandwich core materials” by Gurit Composites Engineer, Thomas Basset. The HPYD 7 Conference will be held again in 2024.

To find out more about core impact performance and dynamic testing results, please contact our Gurit Composite Engineering team on contact@gurit.com

I personally wouldn’t use any other core in a boat that runs at the speeds ours do. The strength to weight ratio is excellent, and the reason we are willing to offer a lifetime warranty on our hulls and decks is because we use Corecell. ”

John Clarke, Jaguar Powerboats
A new foiling speed machine: the Vortex Pod Racer

Recently McConaghy Boats has released the design for its new Vortex pod racer, a one-person sailing rocket on foils that promises all the speed of America’s Cup style racing, but in a relatively easy-to-use pod. The pod allows sailors to sit in a comfy seat, with all the sail and foil controls right at the hands and feet of the sailor.

McConaghy Boats co-owner and director, Mark Evans, wanted a way for sailors to get the thrills that come with high-speed sailboat foiling, but without having to scramble around on a foiling Moth.

“This new foiling speed machine can be flown like an airplane”, says McConaghy’s Mark Evans.

To sail the Vortex Pod, the pilot/sailor sits inside a cockpit and flies the Vortex like an airplane, controlling the trim and heel (bank) with a joystick and foot pedals to steer. There is no hiking, sliding around on tramps or ducking under a boom. The Vortex’s innovatively simple control system allows the sailor/pilot three-dimensional freedom while flying approximately one metre above the water at speeds of 30 knots.

Lightweight design for speed

Built from carbon fibre, the Vortex pod racer is lightweight, stable, and requires minimal operational effort from the pilot to get underway and airborne. The Vortex pod racer can be launched direct off the beach or via a ramp. Once in the water, the rudder and forward T-foils are easily deployed and retracted from the cockpit controls.

McConaghy’s currently has the first Vortex Pod Racer under construction with materials supplied by Gurit at its facilities in Zhuhai, China. McConaghy Boats is one of our long-standing clients with over 50 years of experience and excellence in composite construction with a presence in both Australia and a world class facility in China.

To find our more, visit: https://vortexpodracer.com

“For over 25 years, Corecell™ has been the only choice for McConaghy Boats, due to its performance and reliability: anything from a foiling moth to 100-foot maxi ”.

Mark Evans, Co-owner and Director
Gurit Marine Regional Contacts:

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Composite Engineering

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