



Rondal Review

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Rondal continues course

Last fall, we shared the results of our Strategic Review and our comprehensive plan to see Rondal thrive through this decade by diversifying our markets, increasing efficiency, value and customer focus, and by placing reliability at the core of everything we make. These are worthy aspirations and in this issue, you will see how all of these things are turning from lofty goals into our standard operating procedure.

I am proud of the way our team members – those who have been with us many years and new hires – have embraced this vision and you will meet a number of them in this issue. Reviewing what Rondal is and does is an energizing process. I am confident that every team member approaches their work with a sense of purpose, knowing they can have a meaningful impact in various areas such as product development, operational efficiency, and customer satisfaction.

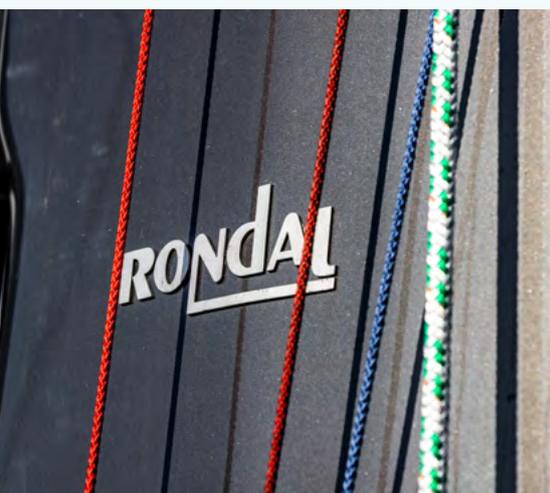
Yachts equipped with Rondal equipment did well at the St Barths Bucket and as you will see, we were there to support them. We go from strength to strength with our latest evolution of captive winches with power so massive it is hard to comprehend. The fact that we can build and test our gear inhouse is not just a matter of pride but also of boosting efficiency and that translates to delivery time. The composite products we co-

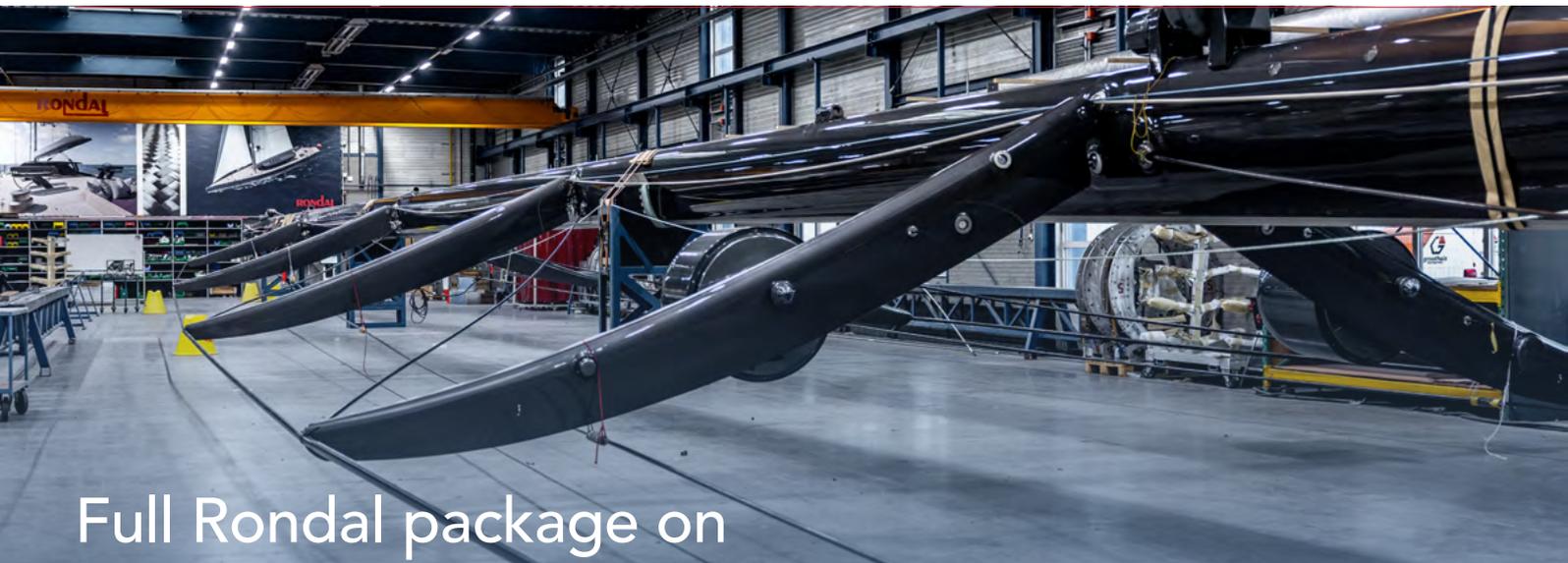
developed with Royal Huisman for Nilaya put us at the forefront of supplying not just super sailing yachts but super motoryachts as well.

Between recently being added to the list of Lloyd's Register certified rig surveyors, and having our prototype solid wing sail elevated to the level of finalist in an important technical competition, I can attest that these are exciting times at Rondal. But with the approach of the spring and summer sailing seasons, it will be time for our customers to make some excitement of their own; you'll find our events calendar for the remainder of 2023 tucked inside. Rondal will be there through every nautical mile.

Best wishes,

*Harald Lubbinge,
Managing
Director*





Full Rondal package on Performance cruiser Nilaya

Rondal played a major role in meeting the owner's brief for Nilaya, an optimized performance cruiser launched by Royal Huisman earlier this year. Not only did Rondal supply the mast and boom, but also the new generation captive winches and deck gear.

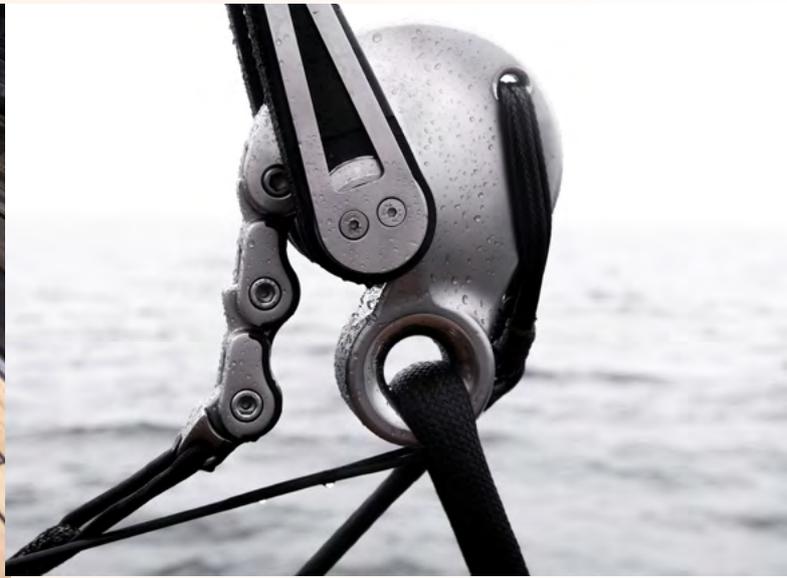
The carbon fiber expertise of Rondal was integral to the construction of the yacht itself. Weight reduction for the 46.82m sloop designed by Reichel / Pugh and Nauta Yacht Design began with a collaborative effort between the engineering teams at Royal Huisman and Rondal. To meet strict weight targets, the builder relied on Rondal for the following carbon fiber gear:

- Keel trunk
- Twin rudders
- The recessed tender well on the foredeck
- Crew companionway entrance
- Steering pedestals
- The 17.5 meter-long carbon composite coachroof
- Guest cockpit structure
- Watertight bulkhead
- Bimini

Rondal's role in project 405 Nilaya shifted from product supplier to system integrator according to one of the project managers. By working with the builder and naval architects through the design and build process, it was determined where carbon composites could be used to maximize the advantage of stiffness and weight savings.

When it came to the primary propulsion for this Panamax speedster, Rondal's team worked closely with the naval architects on the sail plan and rig loading and with sailmaker Doyle Sails on the specifics of managing Doyle's new structured luff sails. Nilaya's blade jib, for example has no headstay lock but uses lashings instead, a switch that saved 100kg.





The towering mast is tapered in two directions at the top, a small refinement that saved 50kg, but weight saved in a very significant place. To take advantage of the very narrow headsail sheeting angles, Rondal created a radical new curved carbon fiber spreader design that is both shorter and more aerodynamic than anything previously available. These handsome spreaders also allow more J2 area.

For the mainsail, a unique and simple hook replaces moving parts to lock the main's headboard onto the halyard car. At the opposite end of the spar, rethinking the mast base and integrating the halyard turning blocks and their jammers into the mast collar lightened and simplified the deck construction.

Another first was placing traditional running backstays with locks – this by owner request. The arrangement saves 1,200kg over the typical arrangement utilizing captive winches below deck and 3-4 cubic meters of volume in the lazarette.

Perhaps the biggest leap forward was the development of new hybrid carbon/aluminum captive winches that are half the weight of the conventional all-metal captive winch. These hybrids utilize an economical aluminum bracket and housing but a carbon drum. The new drum construction allows the diameter to be trimmed from 600mm to 450mm the weight dropping simultaneously from 890kg to 430kg for an 18 ton winch pulling at 60 meters per minute.

A number of these innovations are already finding themselves going into Royal Huisman's next two builds, project 408 and 410, and the latter will have even larger Rondal captive winches.

The Royal Huisman project 405 Nilaya is a project we are very proud of. The project has challenged us in many ways. The sailtrials are in full swing and completion is fast approaching. We obviously wish the owners of Nilaya fair winds and following seas.



Efficiency first

Expansion facilities of Rondal



It takes effort, manpower and capital investment to keep Rondal at the leading edge of marine product technology. Beyond the design and engineering, there is the all-important team of specialists who enable products to be made and prototypes to be tested to their breaking point.



Recently, we caught up with Operations Manager Adri Wolf who supervises a team of 40 to 50 people who keep production humming. Wolf has been with Rondal for nine years and is part of the company's strategic planning team.

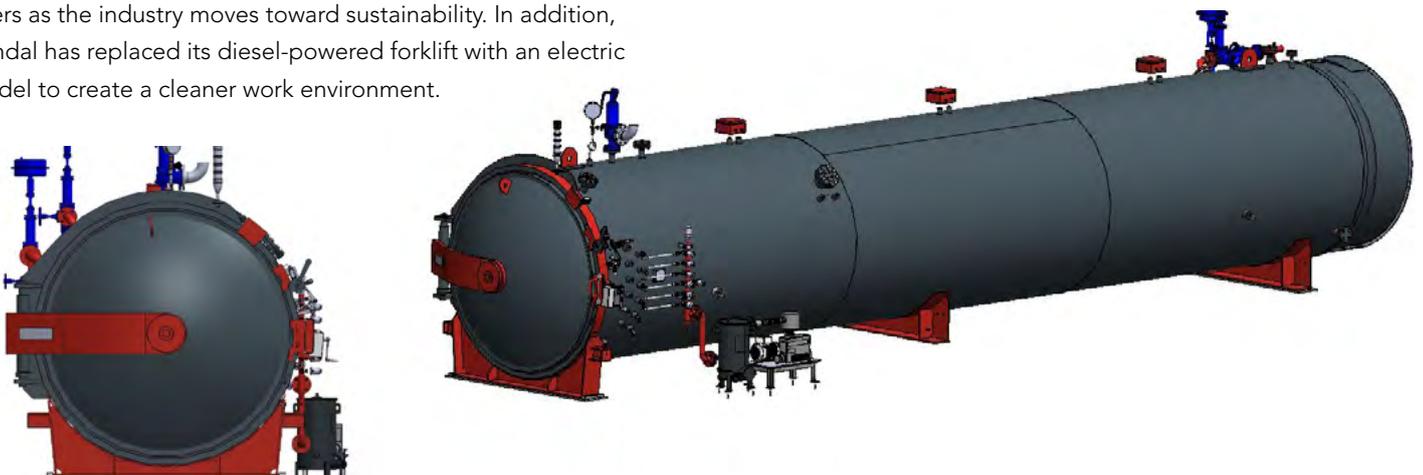
"The basics of the materials we use haven't changed during the last decade, but we have developed ways to use them more efficiently.

We are innovating how to use materials in the best way," Wolf says. "For example, we have developed our efficiency with prepreg carbon fiber to the point carbon parts can be price competitive with fiberglass."

Speaking of efficiency, he notes that partnering with universities provides Rondal with an ad-hoc intern work force to study and test new materials. Current interest areas are bio resins and bio fibers as the industry moves toward sustainability. In addition, Rondal has replaced its diesel-powered forklift with an electric model to create a cleaner work environment.

In 2020, management invested in a new JET system to upgrade its large curing oven. Similar to the fan in a convection oven, the JET system keeps superheated air in the curing oven moving across all part surfaces. A brand new autoclave is on order for curing large component parts such as hatches, doors, spreaders, cosmetic parts etc. And while it may not seem sexy, a state-of-the-art ultrasonic cleaning tank measuring a cubic meters makes sure there is no construction debris in tight-tolerance winch parts as they are prepared for finishing. Not only is it thorough, but the ultrasonic cleaning tank is much faster than a human.

As yachts seem to be getting bigger all the time, so too, must Rondal's ability to test the gear it develops. Having recently delivered captive winches capable of pulling loads of 24 tons, Rondal needed to keep pace by upgrading the testing area where gear is pushed beyond design limits to its breaking point. Wolf says a new and heavier test bench fitted with powerful hydraulic rams can exert 50 metric tons of force or up to 150 tons in a pinch, which is good news since Rondal has 32-ton captive winches on order!



New product line

Rondal Mooring Winches



Imagine captive winches for mooring operated by wireless remote-control unit, enabling a single watch keeper to select and check each line in turn and to trim as necessary. Sounds good, right? Get to know Rondal's winches for mooring applications.

Rondal is always looking at the most efficient ways of line running on board. In our system, loads on all the winch sheaves are monitored and integrated with the vessel's AMS system. The system's load capacities fulfill well-established Classification requirements.

Operating almost entirely hands-free, it substantially reduces crew safety risks, is cleaner and more precise to operate. No cleating on bollards is required. When trimming the mooring line, no manual line handling needed, and is possible from a safe position. Two crew members, each with a control unit, can split the responsibilities for faster adjustment if needed. With the Rondal captive winches for mooring, we supply a complete mooring system that we can integrate together with yacht builders. We also have experience with both electric and hydraulic winches.

In addition to the all-important issues of safety and functionality, the low-profile, below-deck installation of captive reel mooring winches meets every owner's desire to de-clutter and 'de-industrialize' the deck spaces of an otherwise impeccably designed private superyacht.

Want to know more about these mooring winches? Get in touch with Rudy Jurg: r.jurg@rondal.com.



Mooring has never been easier!



Service Update



Rondal is certificated for Lloyd's mast and rigging inspection

Rondal used the occasion of the Palma International Boat Show to announce that it has been awarded certification as a Lloyd's Register Approved Service Supplier for the survey of masts and rigging on Bermuda (fore and aft-rigged) vessels. Joining the elite, small cadre of rigging service companies receiving the Lloyd's Register (LR) marque is an important step for Rondal's growing aftersales service and support business.

The world's leading classification society, Lloyd's Register is the principal body in the maritime sector for approving safety standards on superyachts as well as on commercial ships. Sailing vessels seeking to obtain or renew Lloyd's Register Certification must be able to document that services such as measurements, test, periodic surveys or maintenance of safety systems or equipment have been provided by Lloyd's Register Approved Service Suppliers.

"We have worked with Lloyd's for a long time on certification of many of the products we manufacture such as spars, winches and hatches," said Harry Mijnsbergen, Rondal's Manager of Service and Aftersales. "They are well aware of our work and this audit was largely about finetuning the specifics and procedures from our service. We have already been training all members of our survey and service team in this methodology."



To achieve this approval, Lloyd's Register Auditors examined Rondal's methods, documentation processes and training to make sure they meet its necessary quality standards. With safety on board being the top priority, any yacht crew or owner can be satisfied that rig surveys by LR certified companies guarantee that

rigid procedures are followed to safeguard a structured and complete process.

Most of Rondal's mast and rigging survey work is performed on superyachts, with the majority being for yachts beyond 40 meters in length. Harry Mijnsbergen said that the new Lloyd's Register accreditation, acquired in April 2023, will empower Rondal to provide the most comprehensive maintenance and safety inspections possible.





RECENT & CURRENT ACTIVITIES

- SY Panthalassea (Amsterdam Yacht Service): Rigging
- SY Badis (MB92 La Ciotat): Rigging
- Undisclosed sailing yacht (Huisfit): Several refit actions ongoing. Main saloon doors are being modified
- Undisclosed motoryacht (Huisfit): Hardware has been mounted on the beautiful new wooden masts and these masts have been placed back on the ship
- MY Atlantide (Huisfit): Hatches

UPCOMING ACTIVITIES

- SY EOS (Lürssen Yachts)
- SY Red Sky (Balk Shipyard)
- SY Ethereal (Huisfit)
- SY Wisp (Huisfit)
- SY Elfje (Huisfit)

After the summer holidays, Rondal will become extremely busy with all these refit projects; Red Sky just arrived in Urk and all other yachts arrive between August and October 2023. The bulk of our work will be servicing and refurbishment of hatches, captive winches, spars and rigging.



Innovation as a cornerstone of Rondal's production

Everybody talks about innovation, but the important question is if innovation is truly part of a company's DNA or merely a branding exercise. In today's instant-everything world, a rush-to-market manufacturing bias is sometimes used as a strategy with possible performance flaws forgiven by click totals and media buzz.



Is there a conflict between innovation and reliability? Hermen De Jong, innovation manager for Rondal says, "The solution is rigorous testing." Not coincidentally, Rondal's Core Values tagline is "Ultimate Reliability."

"We can develop prototypes and test them without waiting for a customer request. It can be costly, but not as costly as sending a product to sea without knowing if it works reliably."

The Rondal innovation team works with leaders such as Artemis Technology, an offshoot of an America's Cup program, and the Royal Dutch Aerospace Laboratory (NLR). Rondal and Artemis began developing a carbon fiber wing sail in 2022. This year, a nine-meter prototype of its automated, carbon composite wing sail for yachts is a finalist for the JEC Innovation Awards in the category Maritime Transportation & Shipbuilding.

Innovation has been a cornerstone of Rondal's production since its founding and it has enjoyed being challenged to go further by knowledgeable owners. It was just such a push that led to the development of the hydraulic Performance Boom, the first system able to maintain constant outhaul tension of a mainsail furling into a boom. The first yacht featuring this product was

Saudade, 112-foot sloop delivered in 1994. And since then the innovation and development of this performance boom have been ongoing.

With Performance Booms becoming an industry mainstay, four years ago Rondal turned its attention to slashing weight from captive winches via high-compression carbon fiber drums and weight savings in the aluminium frame. While previous captive winches had been hydraulic only, Rondal started researching high-voltage DC power captive winches already 8 years ago, with experiments that propelled the company to pole position in the race to equip DC-powered superyachts. "Our goal was DC winches as powerful as hydraulic winches, even though at the time we weren't sure there would be a world market," De Jong says. Rondal has now delivered a full suite of DC-powered captive winches to three exciting sailing superyachts: Baltic 142, Royal Huisman 404 and an undisclosed mega sailing yacht. "That captive winch program took guts and persistence," De Jong noted. "But today, each of these winches cuts the weight of traditional captive winches by 20 percent and matches the pulling power of hydraulics." These 24 ton winches will soon be eclipsed by even mightier models for a sloop with 32 ton pulling power and a holding force of 48 tons.

Also in R&D phase are applications for bio-resins and natural fibers, and a force-feedback system for joystick winch controls that give haptic feedback to the user – a system that enables the sailor's to have a better feel for the force ramp-up on the sheets and that Rondal sees as an important safety measure as well.





Wing Development JEC Innovation Awards 2023

Rondal selected as finalist for JEC Innovation Awards 2023 with the automated carbon composite Wing Sail.

This new Wing Sail concept is highly efficient, automated and can be ready-to-sail in seconds, maximizing the time vessels rely solely on clean, renewable wind propulsion. It's world's first large structural composite wing produced using a single adaptive mold with integrated heating to manufacture individual curved wing skin panels from pre-preg materials that were then bonded together to assemble the final structure.

This Wing Sail is developed with project partners Artemis Technologies and Curve Works. Unfortunately the team didn't win the award, but we're thrilled to be nominated as finalist and are absolutely delighted that the awards committee has recognized the potential of this new wing concept. "We can't wait to continue leading the way in enabling a new generation of clean, silent and highly efficient yachts powered solely by the wind.", as our Innovation Manager Hermen de Jong speaks.

Working together on big dreams with the TU Delft Hydro Motion Team

The TU Delft Hydro Motion Team is a group of 23 students from Delft University of Technology. This team is developing the first foiling hydrogen-powered boat in the world. With this project, they are working together with partners such as Rondal to accelerate the transition to green energy. Here, they are developing the boat's carbon fiber foils in a four-month process where they can use the facilities and the knowledge of Rondal.

In July, the Hydro Motion Team will compete in the Monaco Energy Boat Challenge, where they will race for the world championship.

Rondal is a proud partner of this team and will give them full support on this championship.



WASP Rondal membership update

In early February, Sales Manager Wim Mooiweer attended an important wind propulsion conference in London. Held at the IMO headquarters, the conference focused on the future of wind-propelled ships.

The goal of this technology is to reduce fuel consumption and emissions from commercial shipping and improve transportation efficiency. This is a market

with great potential, but still in its infancy. Currently there are 23 ships (out of a total fleet of 55.000) that are wind assisted. This year the number will double.

Rondal believes in the future of wind propulsion, so we'll keep looking for innovative solutions.



Rondal and Baltic Growing together

Rondal has a history of helping the best get better. It is worth noting that Rondal has supplied spars and components to three of the largest and most complex yachts ever to launch from Baltic Yachts: 175-foot Pink Gin in 2017, 142-foot Canova in 2019, and 146-foot Path in 2021, plus winches, feeders and hatches to Baltic's 197-foot flagship Hetairos launched in 2011.

According to Jason Vaasen, Rondal's project manager for Baltic projects, these remarkable projects are symbolic of a long working relationship. "We know what we have to offer each other," says Vaasen. "We are a one-stop-shop for Baltic with doors, hatches, winches, spars and rigging." This understanding adds efficiency to the start of a large project; now beginning the bid specifications process is a phone call instead of half a day of meetings. Working with a Baltic client's naval architect and sailmaker as well as the yard, Rondal is involved in the project from the sale through the completion of the warranty period and beyond, through its after-sales department. While Rondal is not an exclusive supplier to the Finish builder – Baltic is, after all, a custom builder – business between the two parties is smooth and direct.

For 2023, Rondal is pleased to be supporting the builder's latest milestone. "We turn 50 this year and we have invited some of our biggest partners to celebrate with us," announces Henry Hawkins, Baltic's executive vice president. "Historically, over the last 10 to 15 years, we have been growing with Rondal as the boats have gotten bigger and more complex. We have turned to Rondal for deck gear, hatches and companionways."

Hawkins recalled Rondal's breakthrough performance boom able to maintain outhaul tension while reefed that was delivered for Visione in 2002. "Rondal is purposeful in that the products they make are built to last," Hawkins noted. More recently, for Canova, Rondal designed and delivered high-voltage DC-powered captive winches plus the mast and boom for this globe-trotting yacht equipped with an innovative Dynamic Stability System.

Team Rondal wishes the team of Baltic a Happy Anniversary and many more years of success.





Rondal well represented at the Bucket Regatta in St Barths

The Bucket Regatta is now in its 28th year, and Rondal has been a part of the event since the beginning. As one of the world's premier suppliers of aluminum and carbon spars, winches and other deck gear, Rondal equipment was featured on 15 of the 23 sailing yacht entries in the 2023 St Barth's Bucket Regatta.

In addition to equipment, Rondal staff have also been present at this event for many years, supporting many boats with pre-regatta checks and service and maintenance work. Jan Slot and Leonard Smit have worked for the company for more than 25 years and are familiar faces to many owners, skippers and crews, and welcomed onboard many yachts to offer their expertise. Jan Slot has not only been on many yachts, he was also a crew member on the well sailed and winning yacht, Wisp.

Leonard Smit was aboard the star-studded sailing yacht Action, whose skipper he has been in touch with by email and phone for years, but never met. He was invited to be a crew member and got soaked at the mast in very brisk conditions. Says Leonard, "The name Action says it all - there was plenty of action on deck. With Olympic and World Championship sailors on board the boat was pushed to the limits in very windy conditions varying between 20-26 knots. The spinnaker always went up when other boats were sailing with jib only."

A relative newcomer to Rondal is our Sales Manager Rudy Jurg. He was aboard the mighty 62m schooner Athos, which had just undergone an 18-month refit at Huisfit. This classically styled yacht has a huge sail area, the spinnaker alone is over 1,350 square meters, and at one stage, the boat was reaching at more than 17 knots. This sail area was supported by two carbon Rondal masts.

After a very close race with boats only a few boat lengths apart, they finished third overall. Jurg commented: "I am very proud to be part of Team Rondal - seeing our equipment on some of the most beautiful yachts in the world gives you a great sense of pride in our people and facilities. Racing aboard Athos was a great learning experience in terms of coordinating the handling of so much sail and safely maneuvering the boat on the race course. The primary goal of the boat was to be safe, not break anything, and have fun. All three goals were achieved and celebrated in style."



Upcoming events

- Monaco Energy Boat Challenge
3 - 8 July
- Cannes Yacht Festival
6 - 11 September
- Monaco Yacht Show
23 - 30 September
- Ibiza JoySail
27 - 30 September
- Metstrade
15 - 17 November

New faces at Rondal



BOAZ DIKKEN

HENK JONKMAN

HERMEN DE JONG

With only a few vacancies left to fill, Rondal can proudly say that the Rondal team is almost complete.

We would like to use this occasion to introduce to you our new Sales Engineer, Boaz Dikken, and our relatively new Project Manager Henk Jonkman.

We also like to introduce Innovation Manager Hermen de Jong. He's working in the company for more than eight years. De Jong will focus on different innovative aspects, like sustainability, sailing systems, user experience and tools and methods.



Vacancies

Production worker carbon Engineer

Project Manager Purchasing officer

In brief

DELIVERED AND ONGOING PROJECTS

- We have an order in progress for a large number of aluminum hatches
- We produce composite window frames for Wajer Yachts on request
- We recently finished an undisclosed project where we replaced a furler boom for a performance boom
- We delivered a moveable floor for Royal van Lent
- We started the production of five mooring winches for Royal van Lent
- We replaced four aluminum hatches on SY Lionheart with four lightweight composite hatches
- We delivered an escape hatch for a mega motoryacht

NEW BUILDS

- Undisclosed mega sailing yacht: winches and feeders. Sea trials successfully completed
- Undisclosed sailing yacht: winches, saildrums, main sheet arch, composite coach roof and cockpit. Sea trials in May
- SY Royal Huisman project 405 Nilaya: mast, boom, hatches, winches, furlers, sail drums, composite bimini, coach roof, cockpit and keeltrunk. Sea trials in May
- MY Royal Huisman project 406 Sportfish Yacht: hatches, live bait tank, grill and prepreg sunshades
- SY Royal Huisman project 408 Aquarius II: masts, booms, winches, hatches, deck equipment
- SY Royal Huisman project 410: mast, boom, winches, hatches, deck equipment

For allowing the use of photos special thanks to Tom van Oossanen, Cor D. Rover Design, Cory Silken, TU Delft Hydromotion Team, Baltic Yachts, Sailing Energy and Carlo Baroncini



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