





# PRODUCTS THAT ENSURE ULTIMATE RELIABILITY IN ANY SITUATION

Rondal designs and manufactures high-performance sailing systems and equipment for superyachts. Rondal is recognized as the best for its unrivalled Dutch build quality and innovative technical solutions, achieved through a dedicated focus on continuous improvement in both products and services.

As a building partner, Rondal leverages decades of experience and relieves the client by taking on turnkey projects. The products of Rondal ensure ultimate reliability in any situation.

The Rondal team consists of approximately 75 professionals, including highly qualified engineers, composite workers, CNC machine operators, welders, and mechanics as well as a host of complementary specialists.

With decades of experience in composite and aluminum engineering and manufacturing, Rondal serves the market with specialized products for both sailing yachts and motor yachts.





## RONDAL COMPOSITE EXPERTISE

Rondal's expertise in composite mast manufacturing, combined with our dedicated facilities, provides an excellent infrastructure for diversification into other product groups.

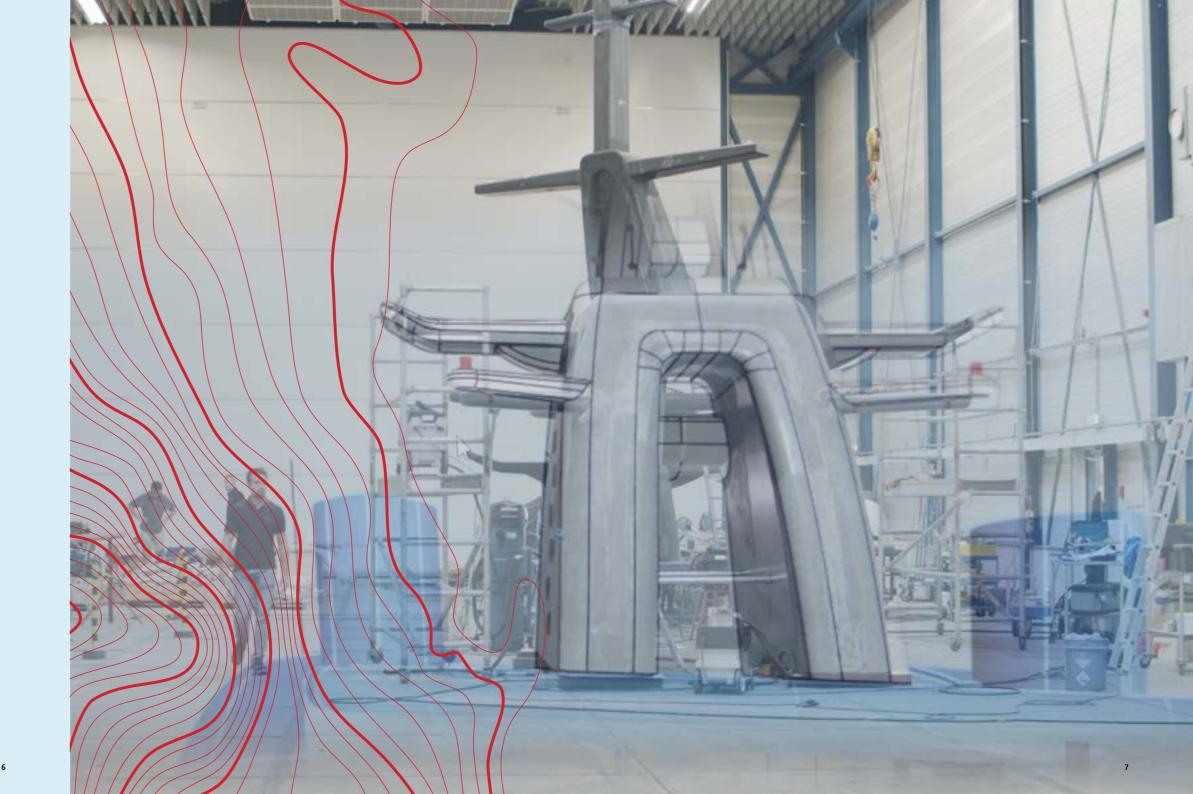
In recent years, Rondal has built up a significant portfolio of composite projects.

#### **Customized Solutions**

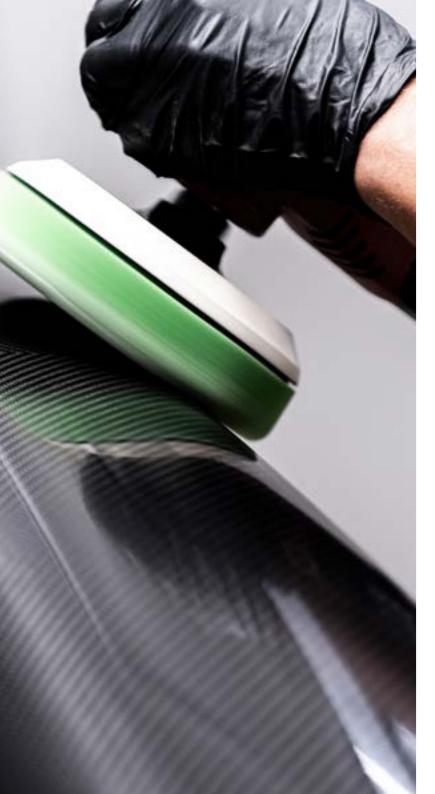
Rondal offers a full range of options, from 'plug-and-play' systems to exclusive composite construction. Rely on the expertise of specialized composite design and engineering companies to consistently ensure the best possible design.

#### Collaborative approach

To gain valuable insights, Rondal collaborates with external partners, including the nearby Royal Netherlands Aerospace Centre (NLR) and various universities.







# ADVANCED COMPOSITES & PRODUCTION

Rondal's manufacturing facility stands as a testament to precision and innovation. The space is meticulously designed and optimized to cater to various aspects of composite manufacturing, with specialized areas tailored for distinct production stages.

These facilities collectively highlight Rondal's commitment to superior manufacturing standards and their ability to meet the most demanding composite production requirements.

8,407 M<sup>2</sup>

total facilities

2,450 M<sup>2</sup>

composite workshop (temperature and humidity controlled)

1,750 M<sup>2</sup>

composite assembly area

750 M<sup>2</sup>

dedicated painting hall

CNC CUTTING MACHINE for fibers

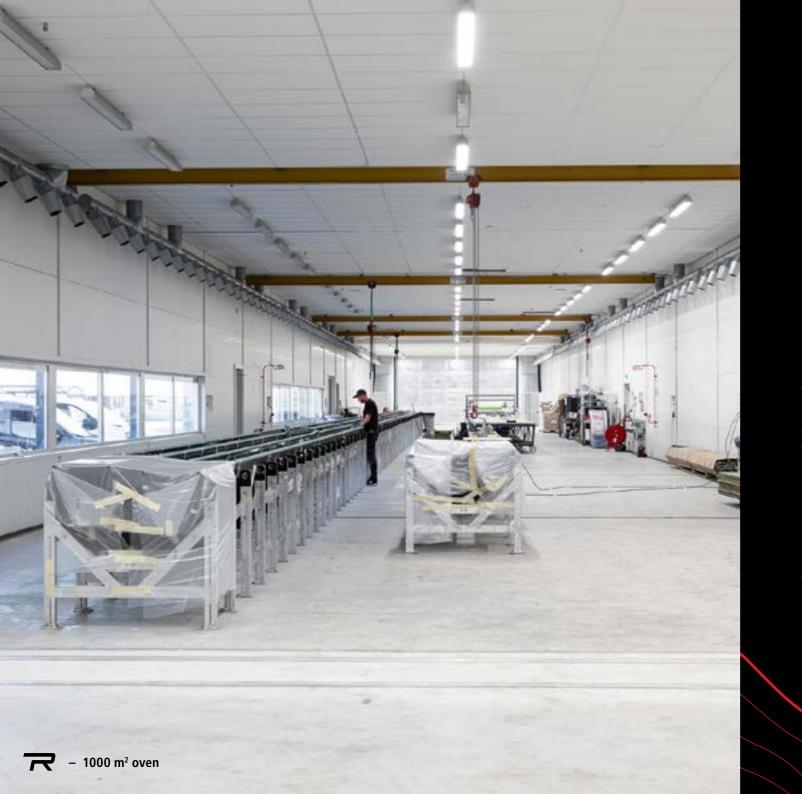
LLOYD'S, RINA, AND DNV

certified workspaces

## TWO AUTOCLAVES

- 7 m long and 1.2 m in diameter
- 9 m long and 1.7 m in diameter





# OUT OF AUTOCLAVE (OOA) MANUFACTURING

Rondal was an early adopter of the OOA (Out of Autoclave) production method and has since perfected the art. OOA enables very lean and flexible production with virtually unlimited freedom in size and shape. OOA and advanced pre-preg laminate products allow for fast production times while easily achieving aerospace-grade results.

Our purpose-built ovens, one measuring over 1,000 m<sup>2</sup> and the other more than 20 m<sup>2</sup> (modular oven), can both cure at temperatures up to 100 degrees Celsius.

## **COMPOSITE BENEFITS**

- High strength / low weight
- Cost effectiveness
- Aesthetics: freedom of geometry
- Insulation
- Sonar / radar transparency
- Non-magnetic
- Low maintenance
- Chemical / corrosion resistance
- Fatigue resistance
- Limited thermal expansion
- Cosmetic carbon

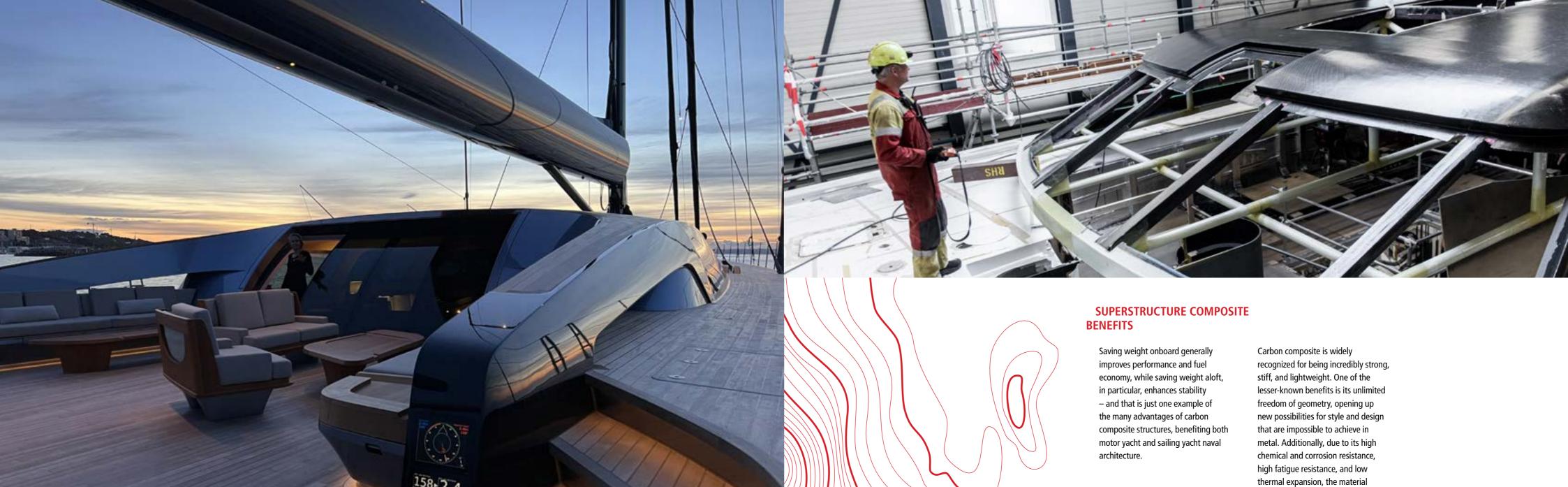
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# RONDAL COMPOSITE PRODUCTS

- Masts, booms, and spreaders
- Rudders and foils
- Superstructures and biminis
- Canopies and hardtops
- Radar masts
- Custom high-loaded parts (main sheet arch, keel trunk)
- Deck hatches
- Large hatches / garage doors
- Specials





- SY Sarissa | superstructure

requires no maintenance.



## **COMPOSITE SPECIALS**

Rondal is pleased to demonstrate its value where one-off products are required, recognizing that our industry is a creative and challenging world in which architects and yards strive to offer the best possible solutions for engineering challenges and unique, innovative features.

#### Examples include:

- Windscreen surrounds / window frames
- Interior / exterior furniture (cosmetic / structural)
- Louvers
- Steering pedestals
- Sail drum
- Winches
- Stanchions
- Ladders
- Helm stations
- Furniture
- Protective covers
- Boom cradle
- Pool covers
- Platforms





## **PRODUCTION QUALITY**

Quality is ensured throughout the production process:

- Lloyd's, RINA, and DNV certification for used materials
- Stringent work process with records kept for each layer of material, date, batch number, etc.
- Controlled temperature and humidity in production hall
- Controlled temperature and humidity in storage facilities
- Controlled temperature and vacuum during curing cycles
- More than 25 years of experience in composite production



# ADVENTURE IS WAITING FOR YOU THERE

WITH PRODUCTS THAT ENSURE ULTIMATE RELIABILITY IN ANY SITUATION

#### Rondal

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