

yachtwerft  
meyer ○○○



NAVY AND AUTHORITIES

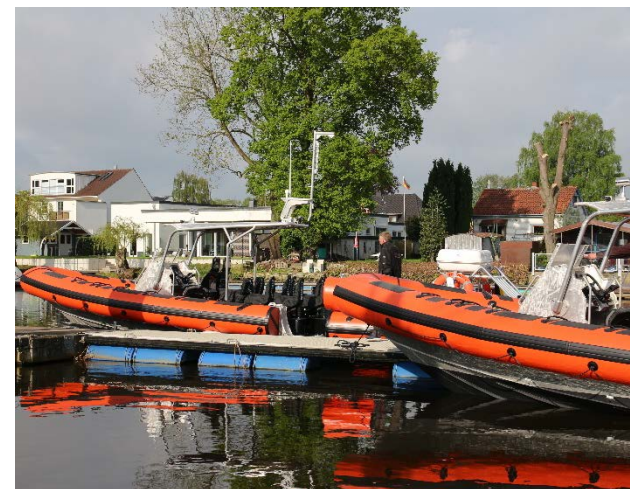


## COMBAT SWIMMER TRAINING AND SAFETY BOAT FROM THE GERMAN NAVY

In-house design and construction. 6x 9.00 m RIB

[Click to watch video](#)





## COMBAT SWIMMER TRAINING AND SAFETY BOAT FROM THE GERMAN NAVY

In-house design and construction. 6x 9.00 m RIB

[Click to watch video](#)





## RIB FOR THE GERMAN FEDERAL POLICE

8.30 m D-Rib for the German Federal Police. Carbon Construction for minimum weight.





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8.30 m D-Rib for the German Federal Police. Carbon Construction for minimum weight.





## RIB FOR THE GERMAN FEDERAL POLICE

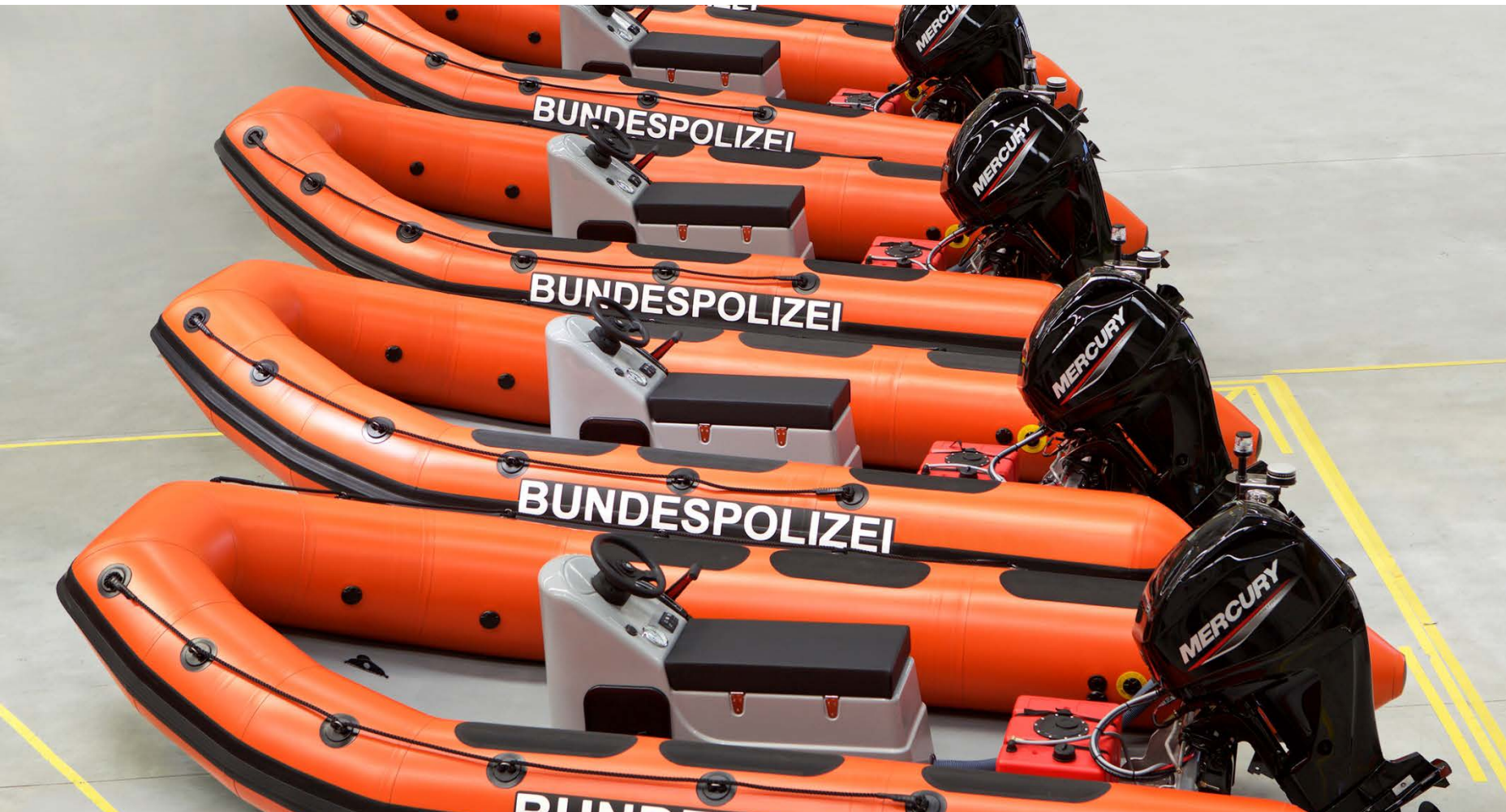
8.30 m D-Rib for the German Federal Police. Carbon Construction for minimum weight.





BOATS FOR ARCTIC AND ANTARTIC CRUISES  
4 x 6.00 m RIB boats





## BOATS FOR THE GERMAN FEDERAL POLICE

5 x 4.20 m RIB boats





#### 5.20 m CUSTOM SOLAS RESCUE BOAT

Carbon construction for weight minimization

Complete SOLAS certification

Structure, stability, and fire tests were carried out successfully



## CUSTOM SOLAS RESCUE BOAT

5.20 m





#### 7.00 m SEMI-CUSTOM SOLAS RESCUE BOAT

Complete SOLAS certification

Structure, stability, and fire tests were carried out successfully



SEMI-CUSTOM SOLAS RESCUE BOAT  
7.00 m





SEMI-CUSTOM SOLAS RESCUE BOAT  
6.20 m

**6.20 m SEMI-CUSTOM SOLAS FAST RESCUE BOAT**

Complete SOLAS certification  
Structure, stability, and fire tests were carried out successfully

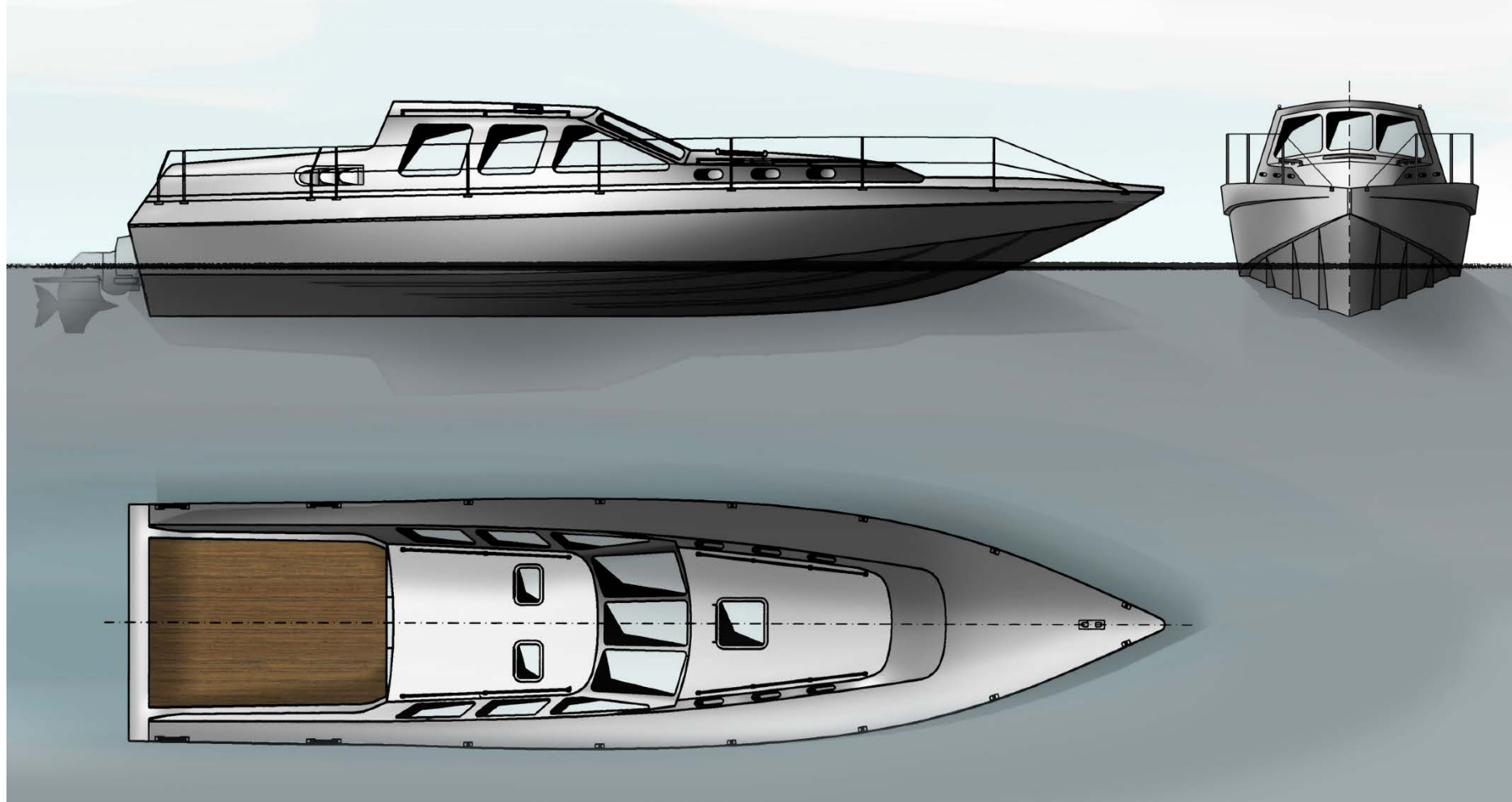






SEMI-CUSTOM SOLAS RESCUE BOAT  
6.20 m

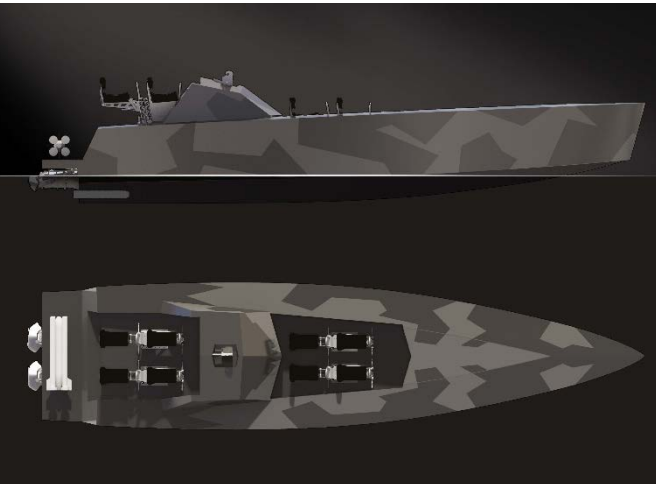
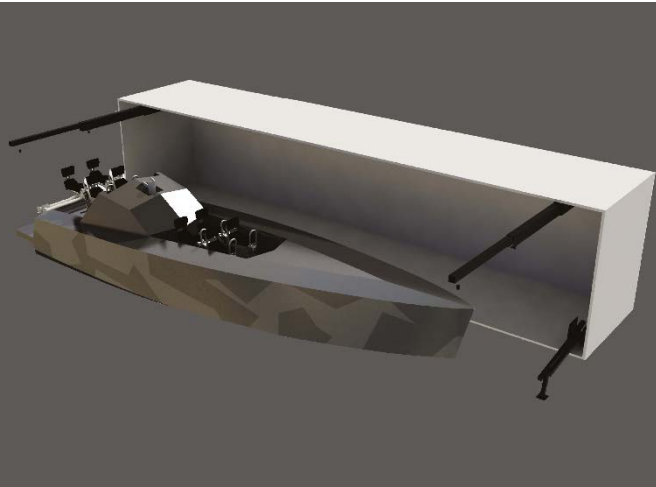




## CONCEPT FOR A 12 M PATROL VESSEL

Width: 2.93 m | Draft: 1.10 m | Displacement: 8.5 t

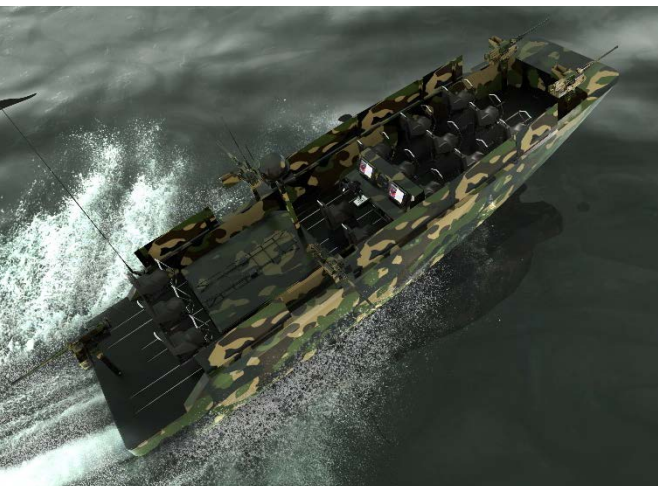




## CONCEPT FOR MANNED AND UNMANNED OPERATION

10.50 m special operation crafts. Can be transported in a 40' standard container.

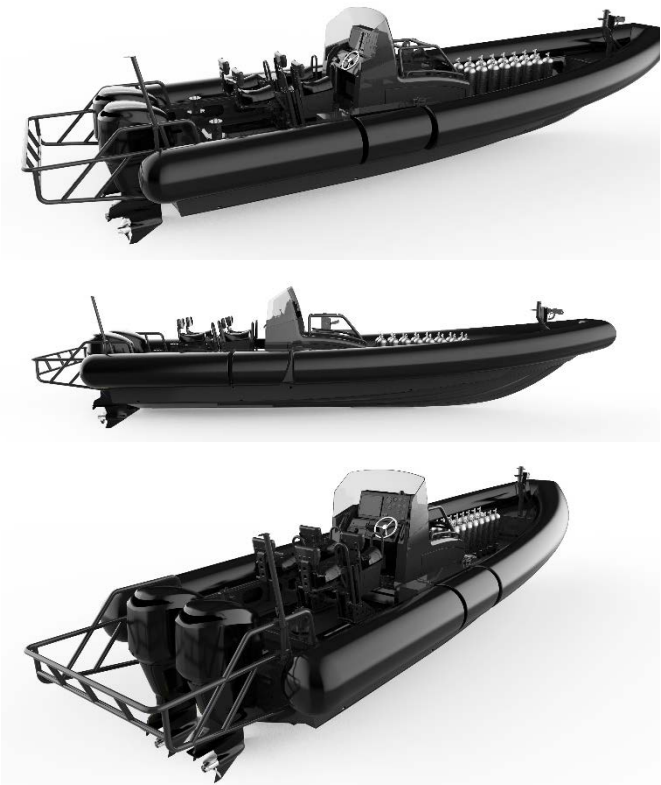




## CONCEPT FOR AN ARMY RIVER BOAT

Jet propulsion and aluminum hull.





CONCEPT FOR AN ELECTRO RIB  
8.70 m concept for diverse uses.





## CONCEPT FOR AN ELECTRO RIB

8.70 m concept for diverse uses.





## CONCEPT FOR ZOLL

8.50 m ZOLL – Daughter boat





COMPOSITE AND EQUIPMENT

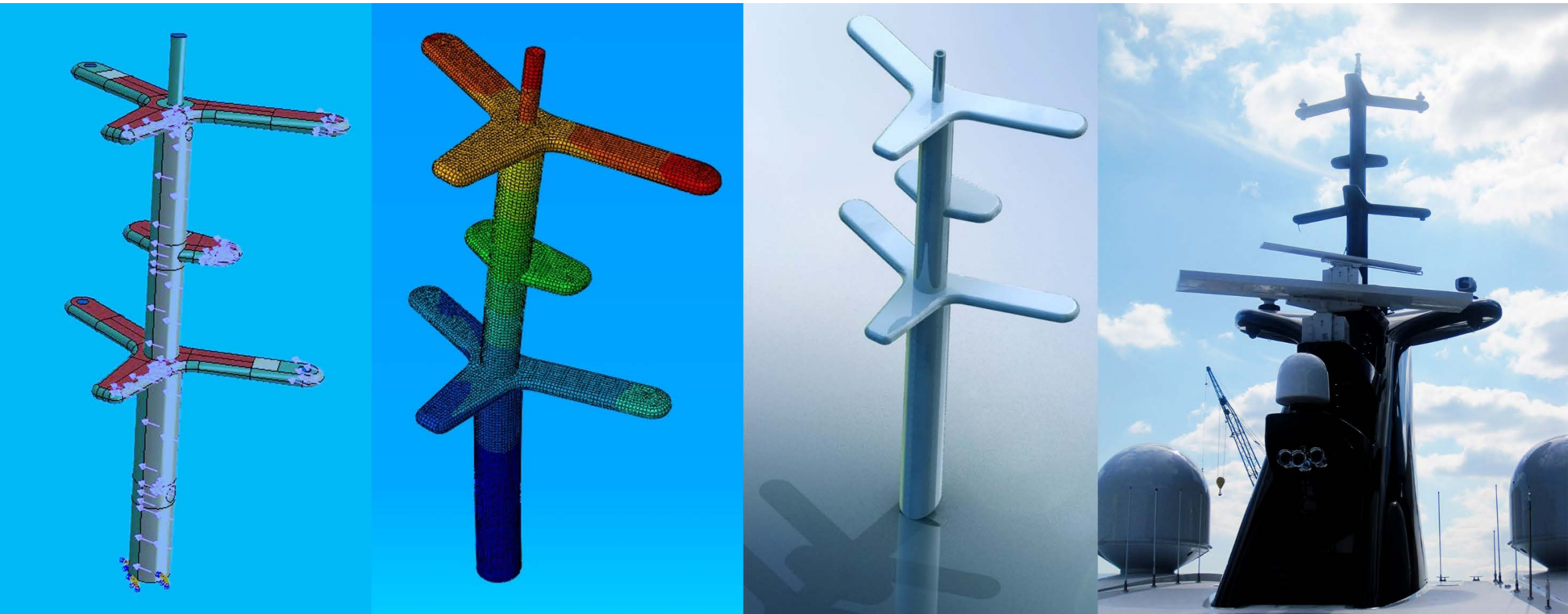




## MASTS

In-house calculations and construction.





## MASTS

Static and dynamic strength calculations and production of equipment masts for superyachts



## HANGAR DOORS

Carbon construction for low weight with high rigidity. Designed for 80t blast pressure.





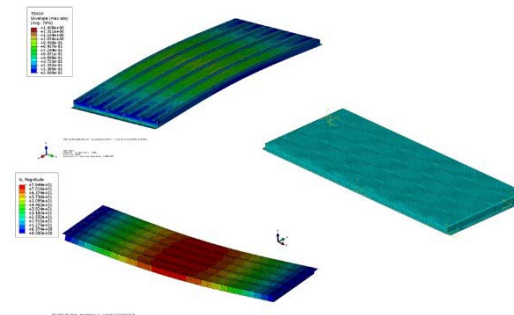
## HANGAR DOORS

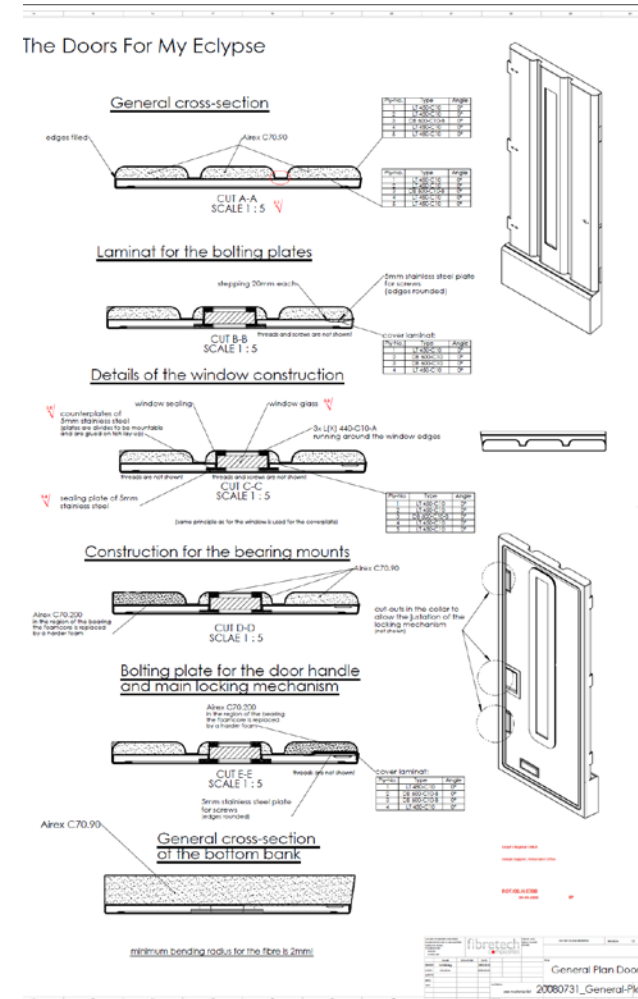
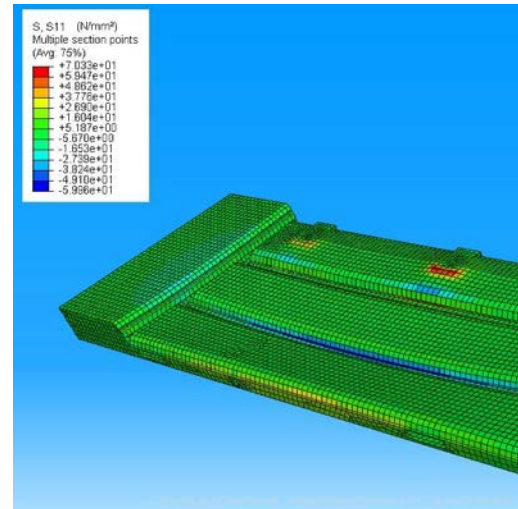
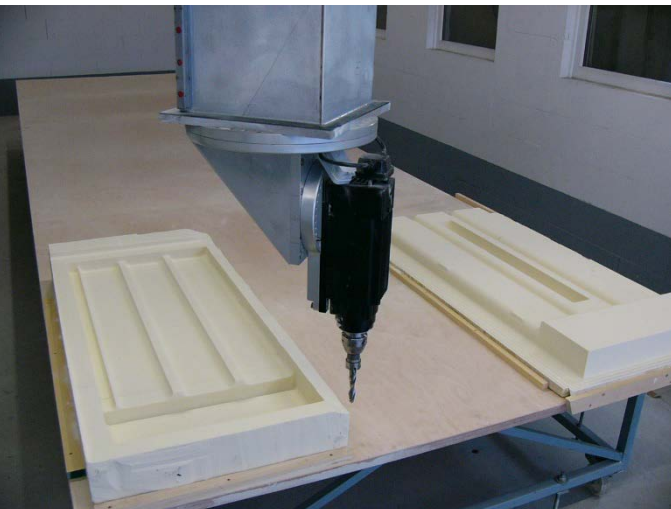
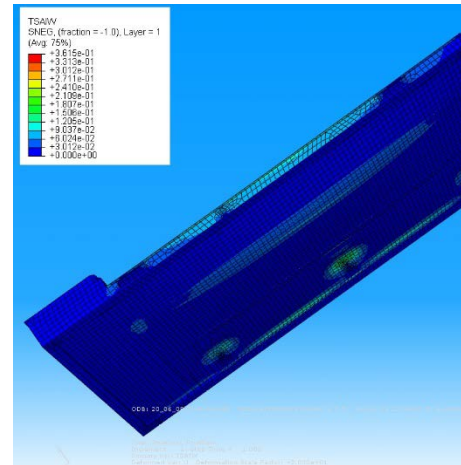
Carbon construction for low weight with high rigidity. Designed for 80t blast pressure.

### CONSIDERABLE WEIGHT REDUCTION

achieved through optimal use of the possible material properties and appropriate construction.

Reduction from 2500 kg to 500 kg

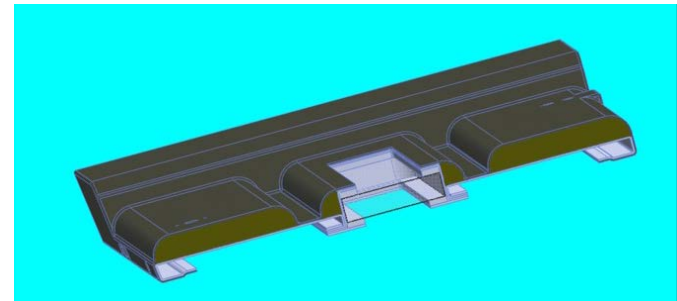
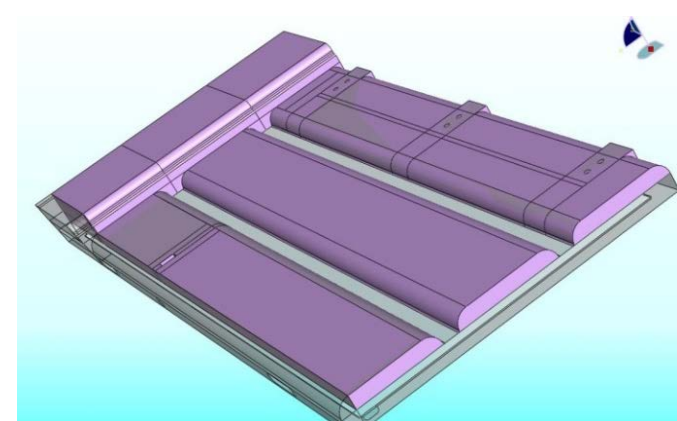




## SUBSTANTIAL WEIGHT REDUCTION VS. ALUMINUM

Elaboration and planning and construction of outer skin doors in composite construction.

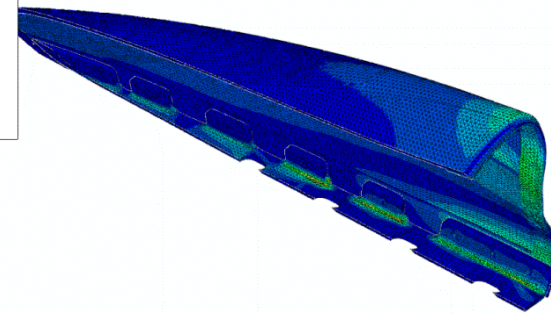
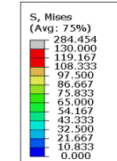
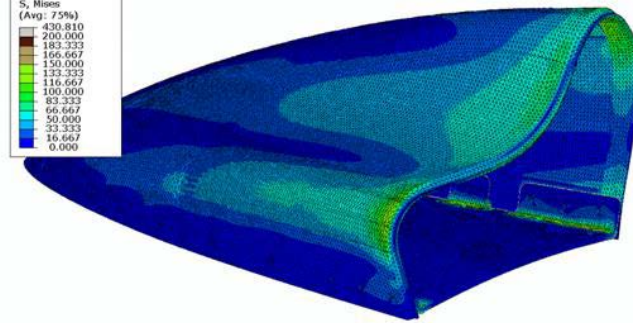
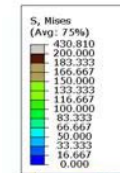
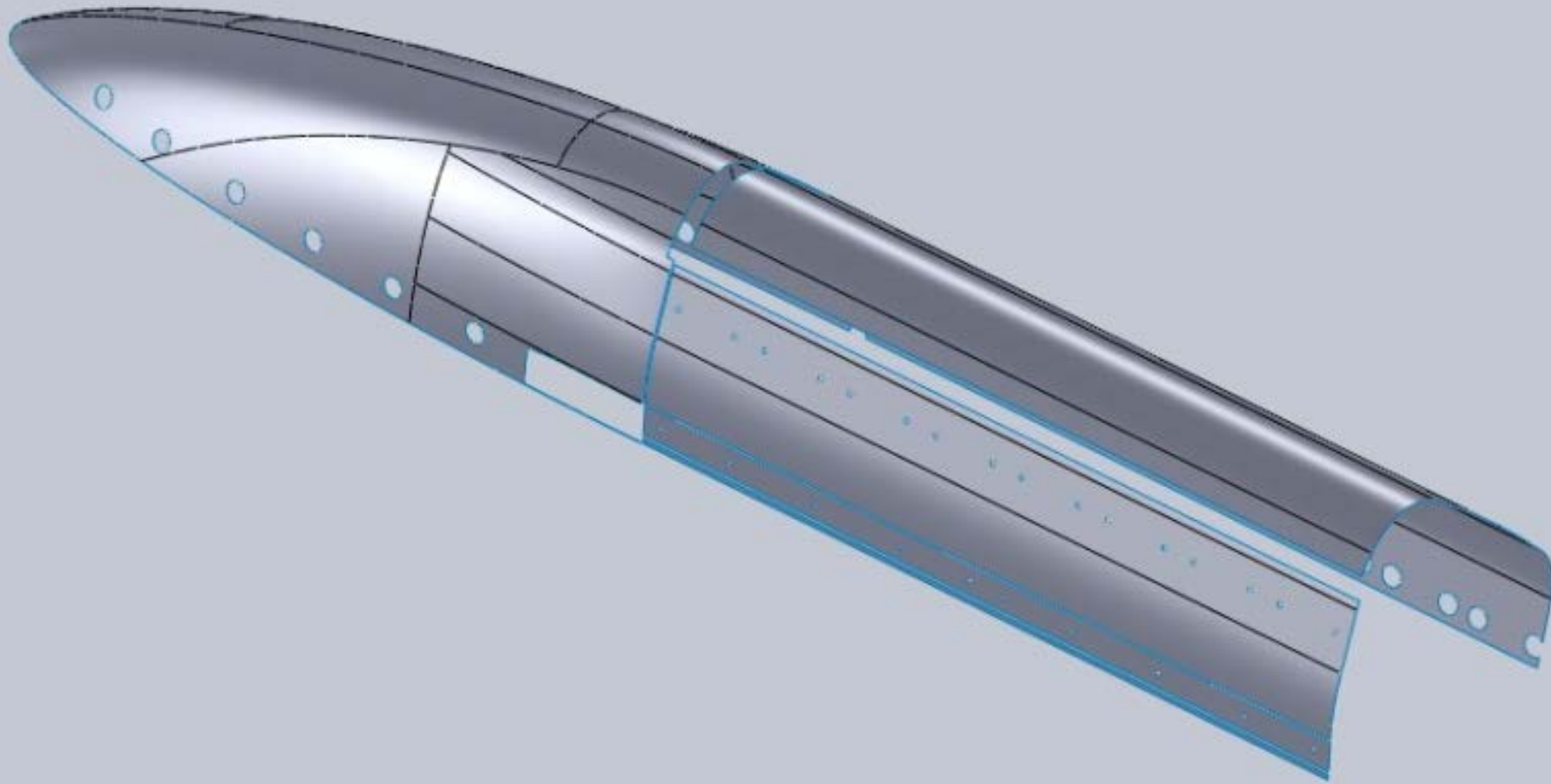
Substantial weight reduction compared to the originally planned aluminum doors, including fire tests with acceptance LRS.



## EXTERIOR DOORS

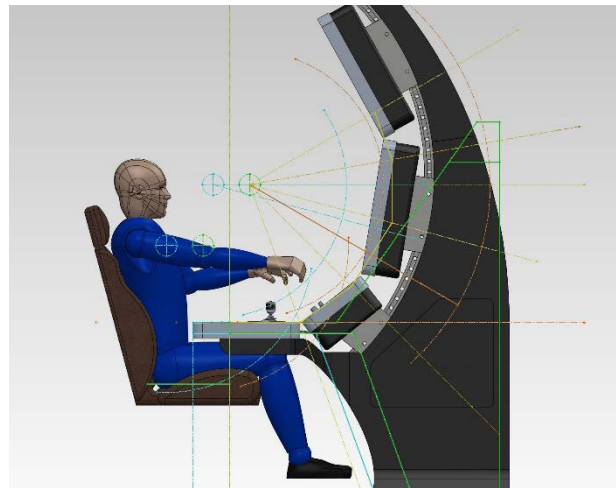
Outer skin doors made of carbon-reinforced plastics





## SONAR CLADDING

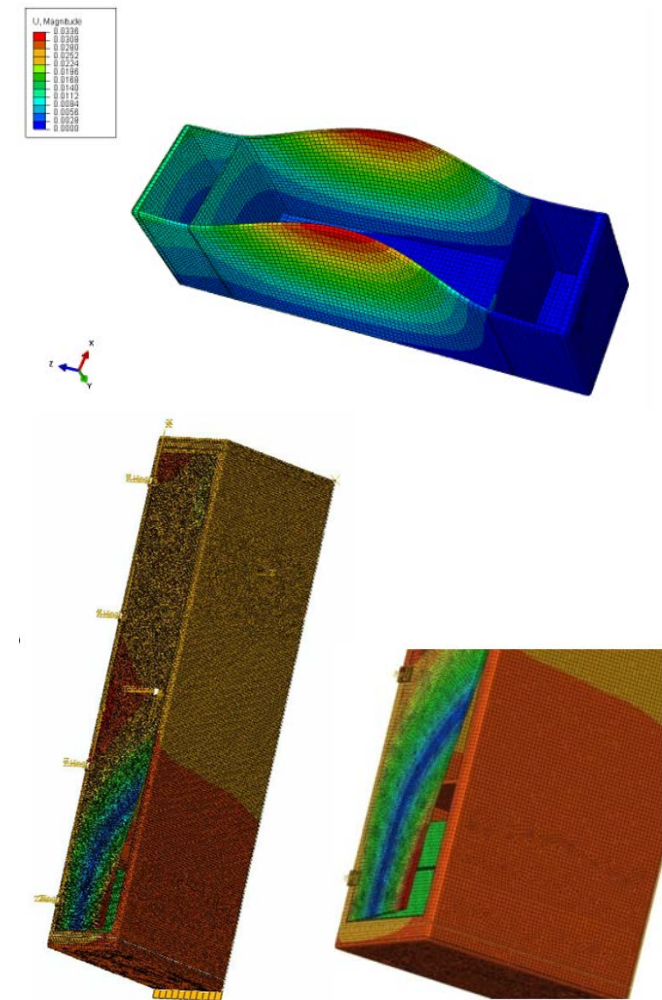
Construction, optimization and creation of a laminate plan for a sonar cladding.



## CONTROL CONSOLES

Feasibility studies, new developments, design and construction as well as FEM analysis and prototype construction of operating consoles in CFRP sandwich construction.  
Light and shock resistant construction.





## FURNITURE IN CFRP LIGHTWEIGHT CONSTRUCTION

Development and prototype construction: Weight savings of over 40% with a higher load capacity could be achieved.

Dynamic FEM analysis and load simulation using the example of a lightweight military locker.





## STORAGE BOXES

Composite parts for mine sweepers: sonar tracks, covers, storage boxes.

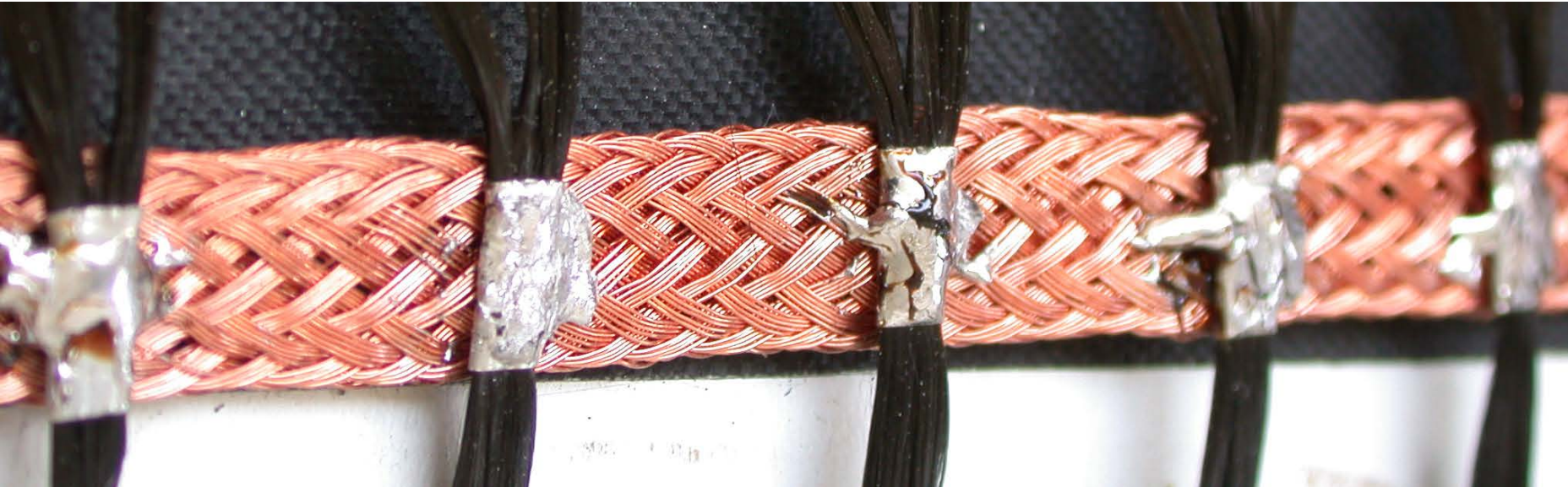




## COMPONENT FOR NAVAL VESSELS

FRP parts for mine-hunting boats: sonar rails, disguises, storage boxes.





## SERVICES

Fibretemp technology.

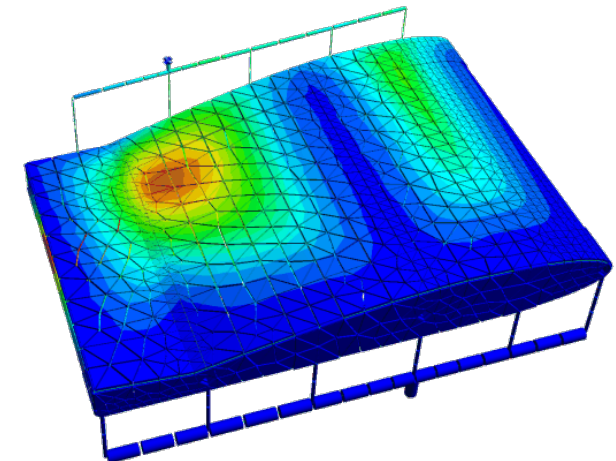
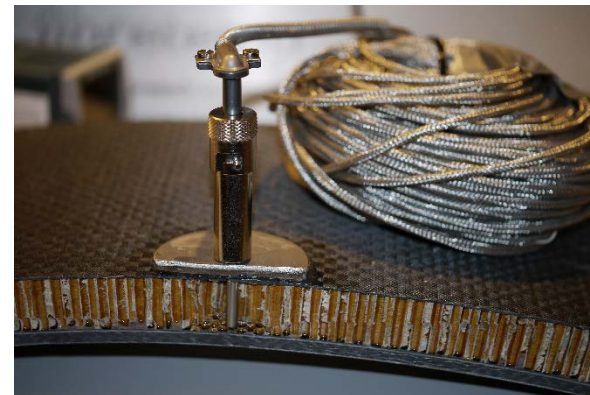
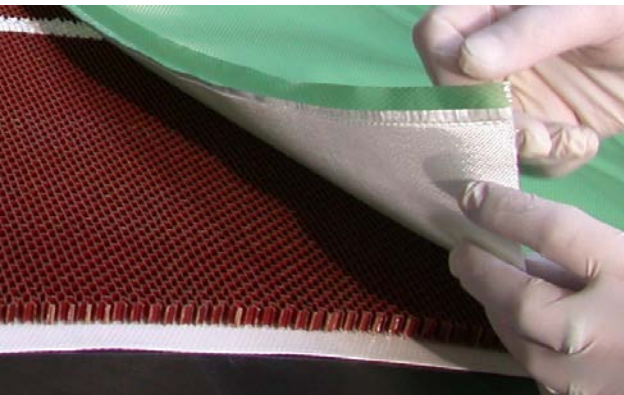
FEM analysis

Project planning and design.

Design, manufacture and documentation.

Material characterization in our own laboratory, e.g. DSC analyzes

Patented technology for heatable molds in carbon sandwich construction.



## FEM ANALYSIS, ENGINEERING AND MORE

In-house services





## FIRE RESISTANCE TESTS

Certificate for low flammability according to IMO





## PROTECCORE FOR BALLISTIC PROTECTION

Proteccore® technology for bulletproof fiber composite panels.

Up to 60% weight reduction compared to steel plates.





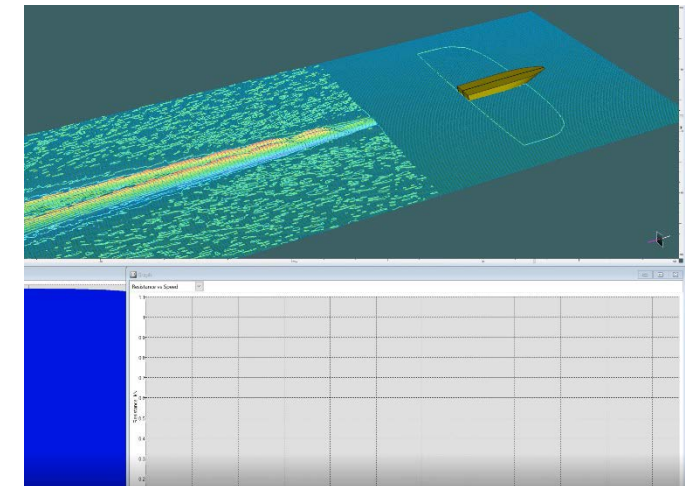
IN-HOUSE SERVICES





ENGINEERING, DESIGN AND DEVELOPMENT

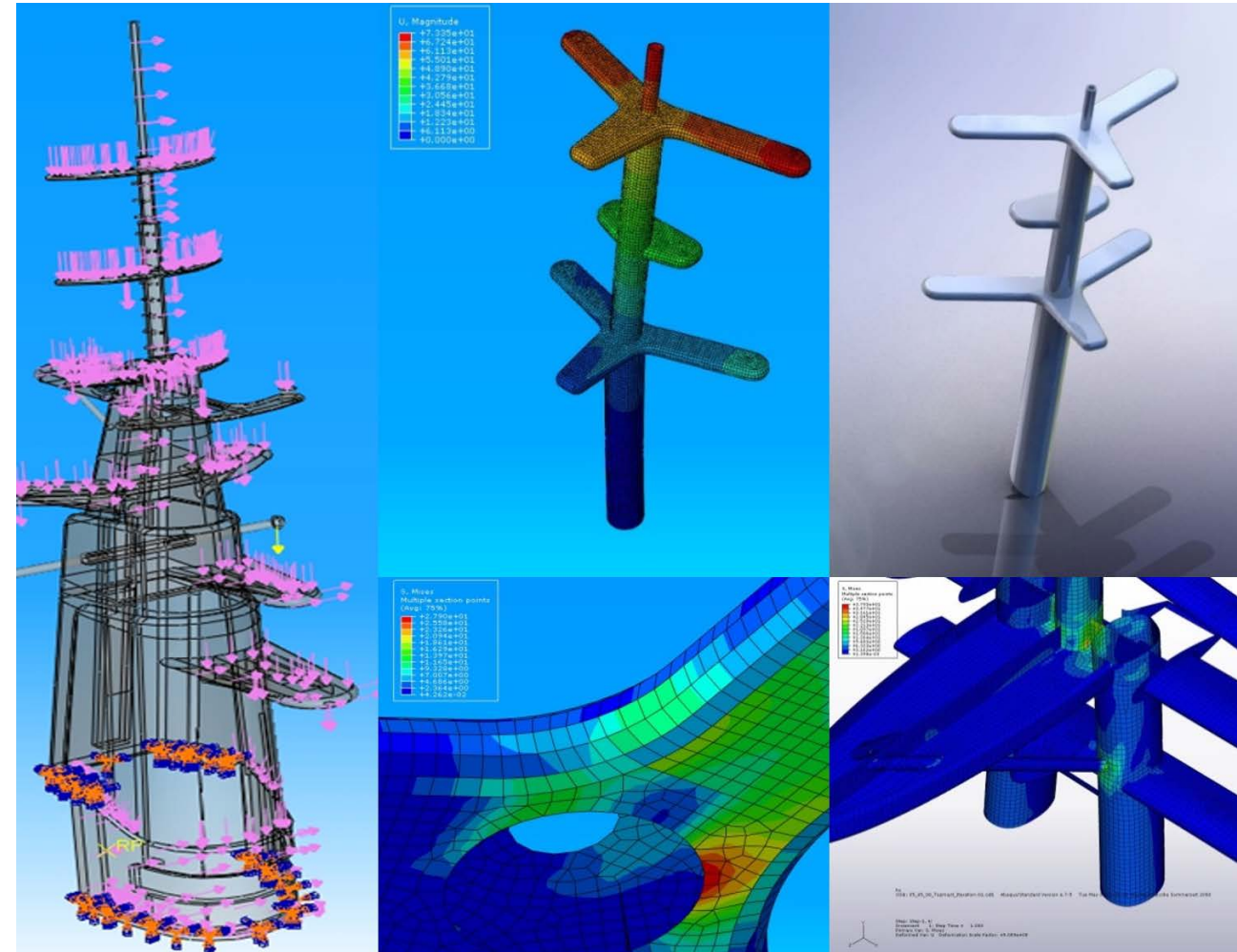
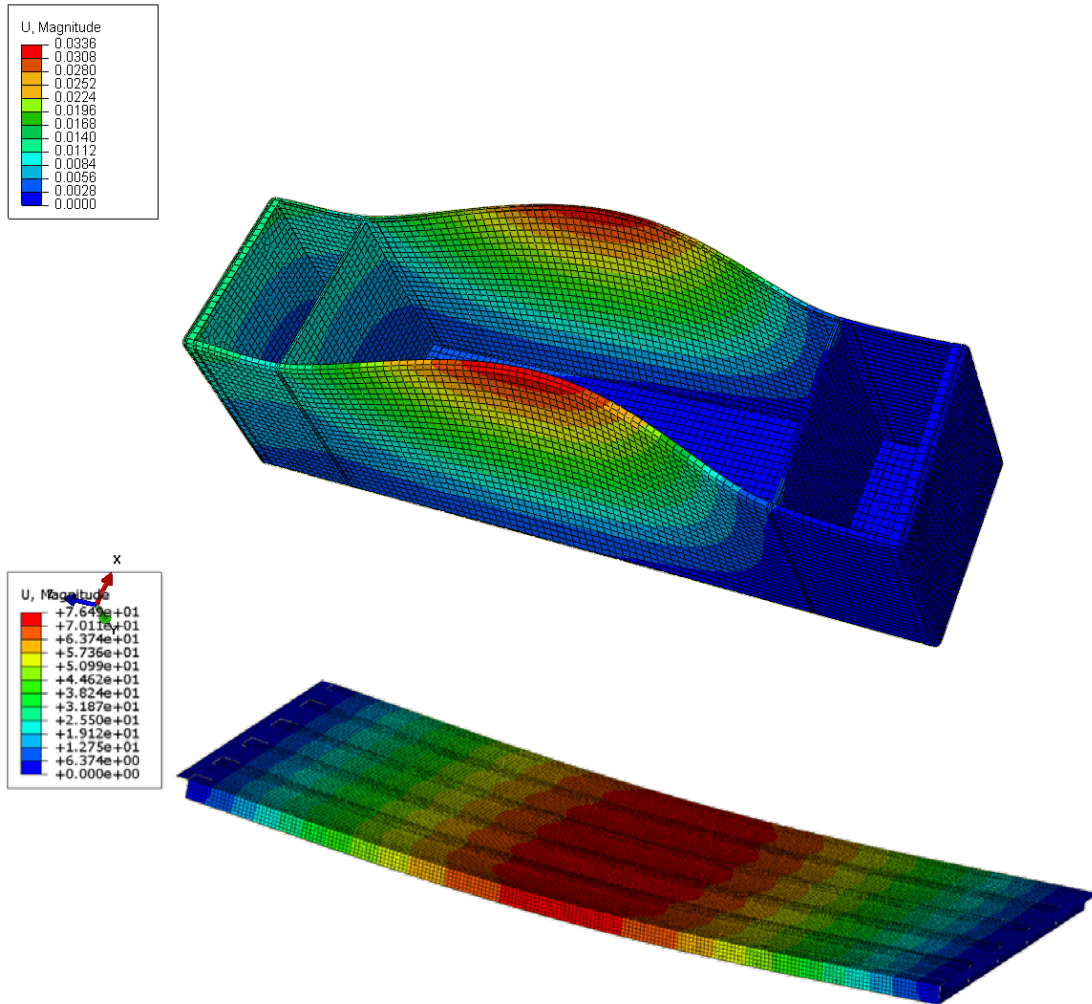




## ENGINEERING, DESIGN AND DEVELOPMENT

2D CAD drawings and documentation | 3D Models in Solidworks, Rhino, and Maxsurf | Simulations





## ENGINEERING - FEM ANALYSIS

Static and dynamic strength calculation and construction of Hangar doors, Masts, Sonar covers, Furniture, and many more.

FEM Analysis in cooperation with Fibretech-Composites.

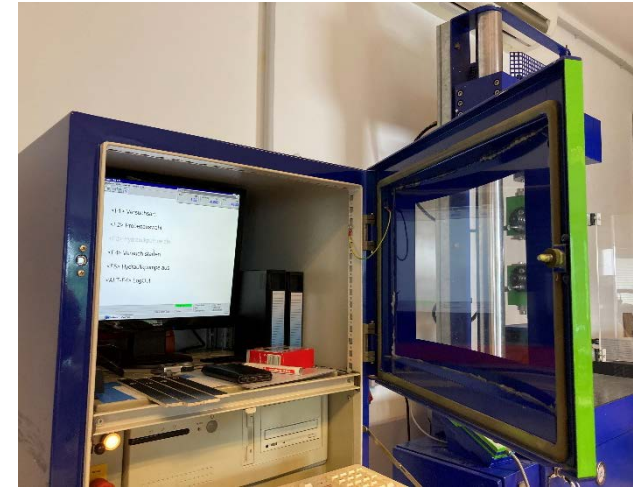
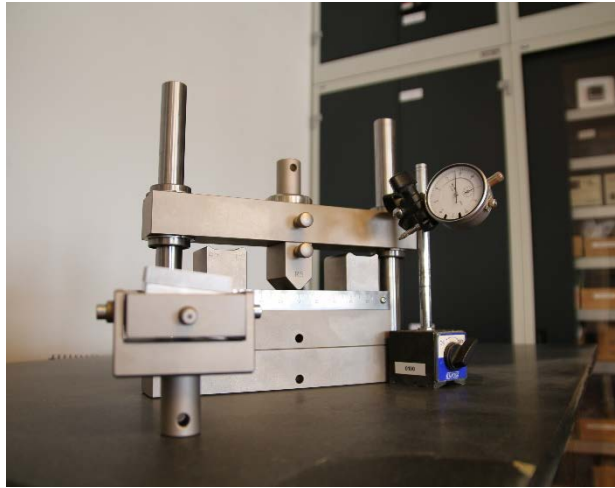




## RESEARCH AND TESTING

If a project requires bespoke technology, we have the resources and capability to develop and deliver the right solution, and have a long track record of doing so. We even analyse our structures for resonance and noise transmission to be certain that our tenders are the quietest.





## TEST LABORATORY

We have in-house our own laboratory to test materials to meet our high standards.

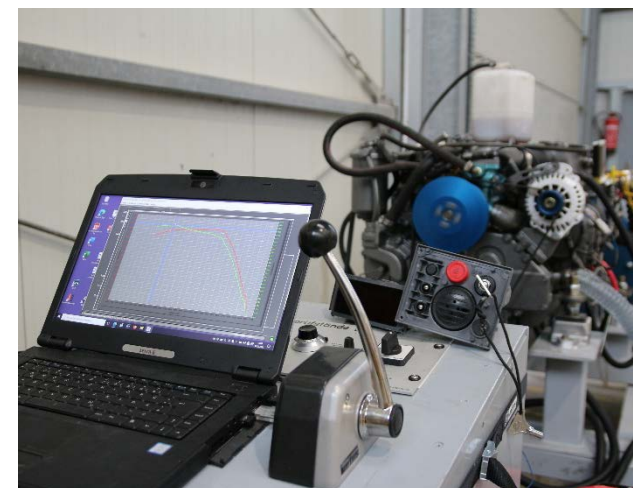
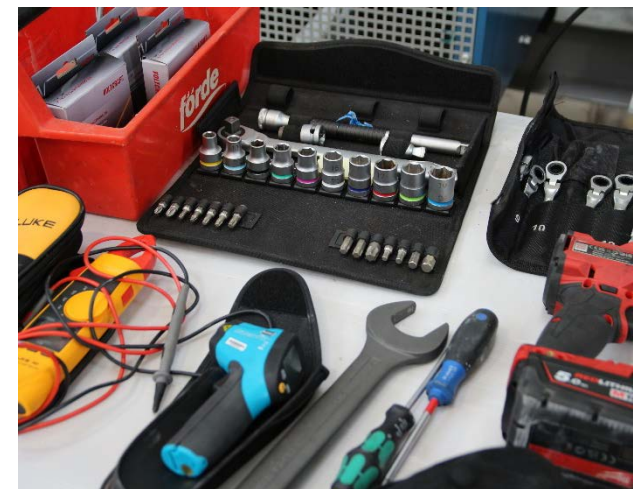




## 5-AXIS MILLING MACHINE

Development of our products | Creation of mockups and molds.









## PAINTING HALL

Our paint-shop can be heated up to 90° and measures 16m x 8m x 6m





## REFIT AND MOBILE SERVICES

As highly qualified boatbuilders with the ability to solve the most intractable problems, our customers receive personalised support worldwide. It's our way of building long-term relationships. Technical support, repair, refit and the spares delivery are all part of our mobile service.



# EXPERIENCING NATURE IS THE ESSENCE OF YACHTING

Tenders designed to preserve the wilderness

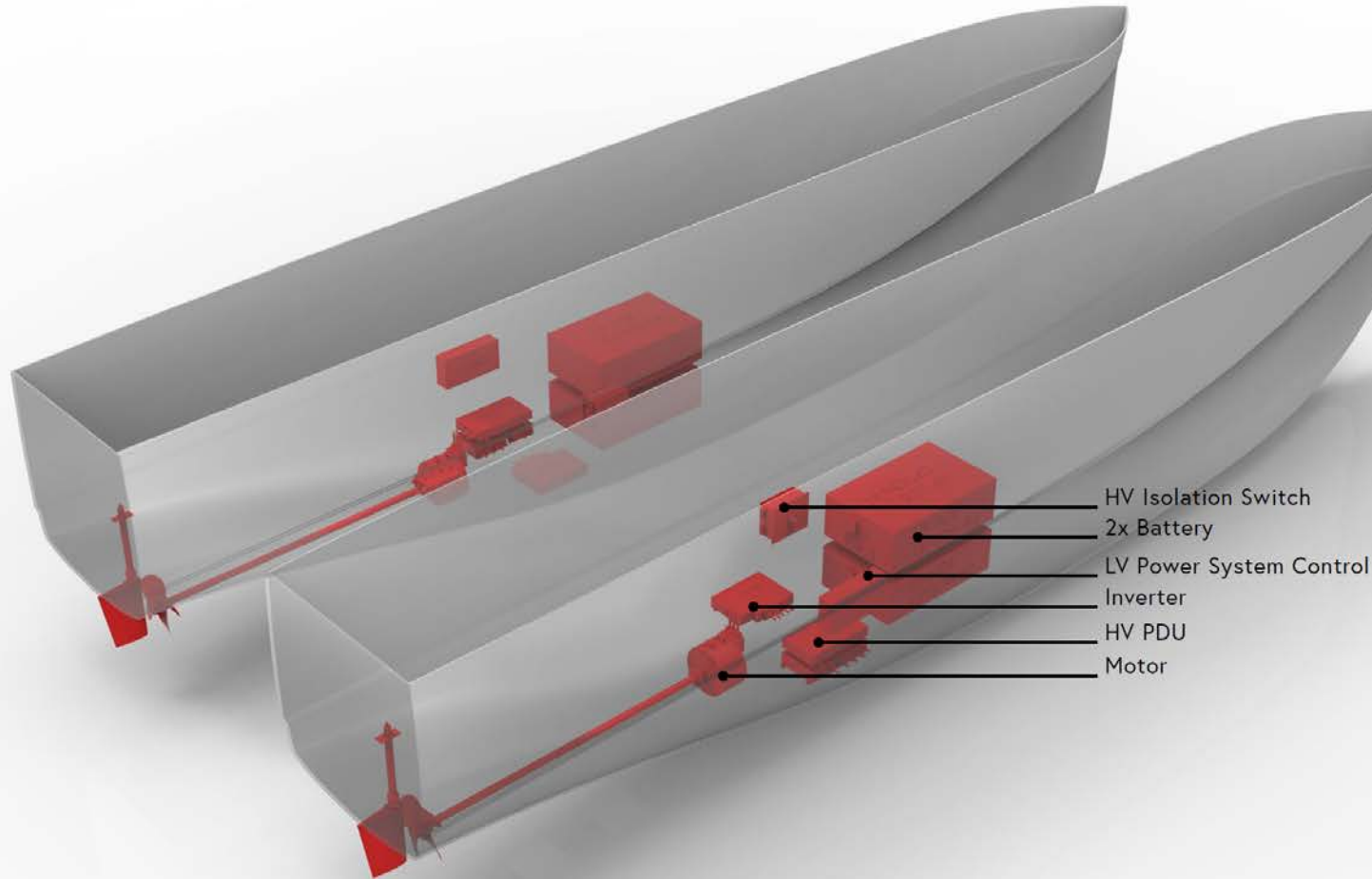
SUSTAINABILITY  
across our shipyard



# SUSTAINABLE PROPULSION

## ELECTRIC & HYBRID SOLUTIONS





#### CHARACTERISTICS

Electric  
100 + miles  
Long range  
Speed up to 12 Knots

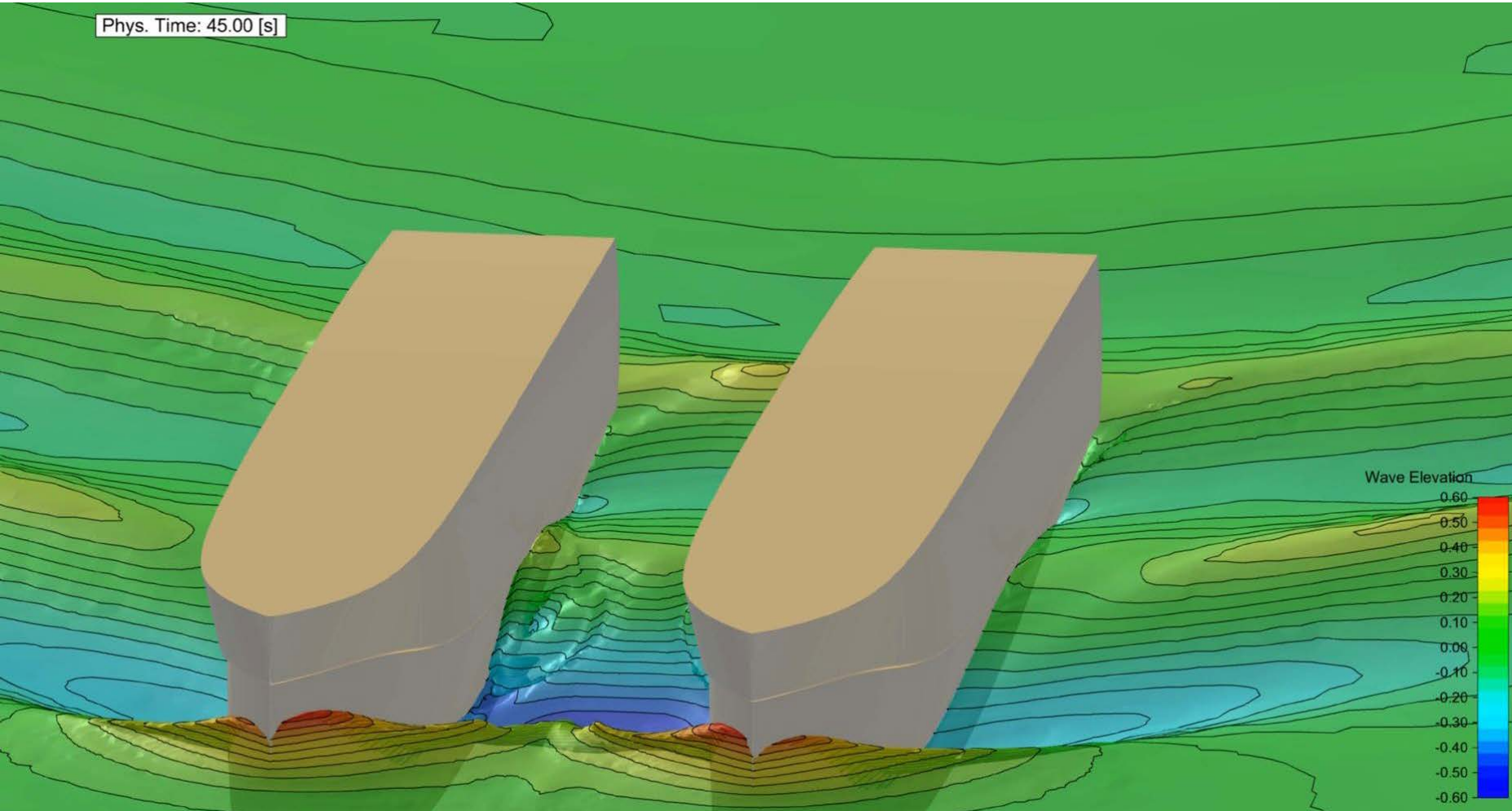


## ELECTRIC PROPULSION

Catamaran

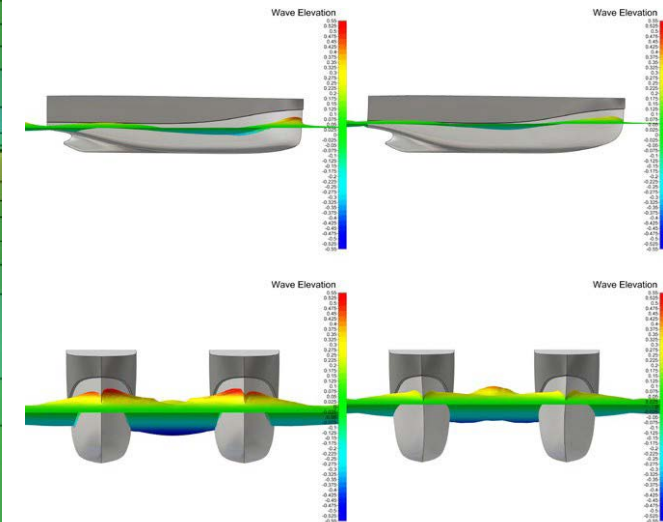


Phys. Time: 45.00 [s]



## HULL OPTIMIZATION – PERFORMANCE

Optimizing the efficiency of the hull for a long-range electric catamaran by running CFD analysis



ELECTRIC PROPULSION  
Catamaran



#### CHARACTERISTICS

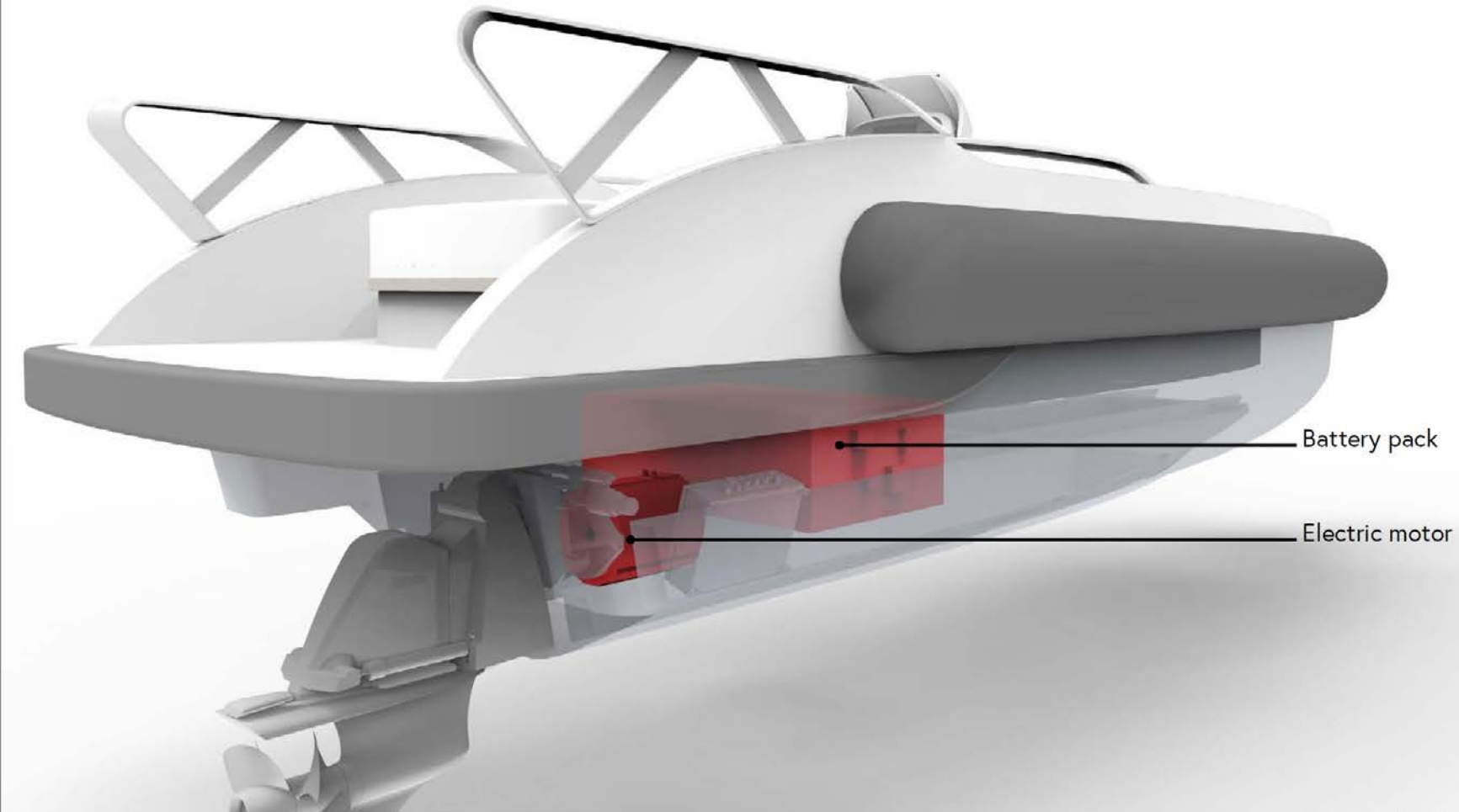
Powerful motor & zero pollution  
Quiet planing  
Access to restricted waters  
Fast charging  
Easy manoeuvring  
Low maintenance



## ELECTRIC PROPULSION

CCLine Open Tender 6.8 m





#### CHARACTERISTICS

- Powerful motor & zero pollution
- Quiet planing
- Access to restricted waters
- Fast charging
- Easy maneuvering
- Low maintenance



## ELECTRIC PROPULSION

CCLine Open Tender 6.8 m





#### CHARACTERISTICS

220 hp petrol Engine  
27 hp Hybrid module fully integrated in drivetrain  
Electric driving up to 8 kn  
Average 1hr drive time @6kn  
DNV-GL certified batteries

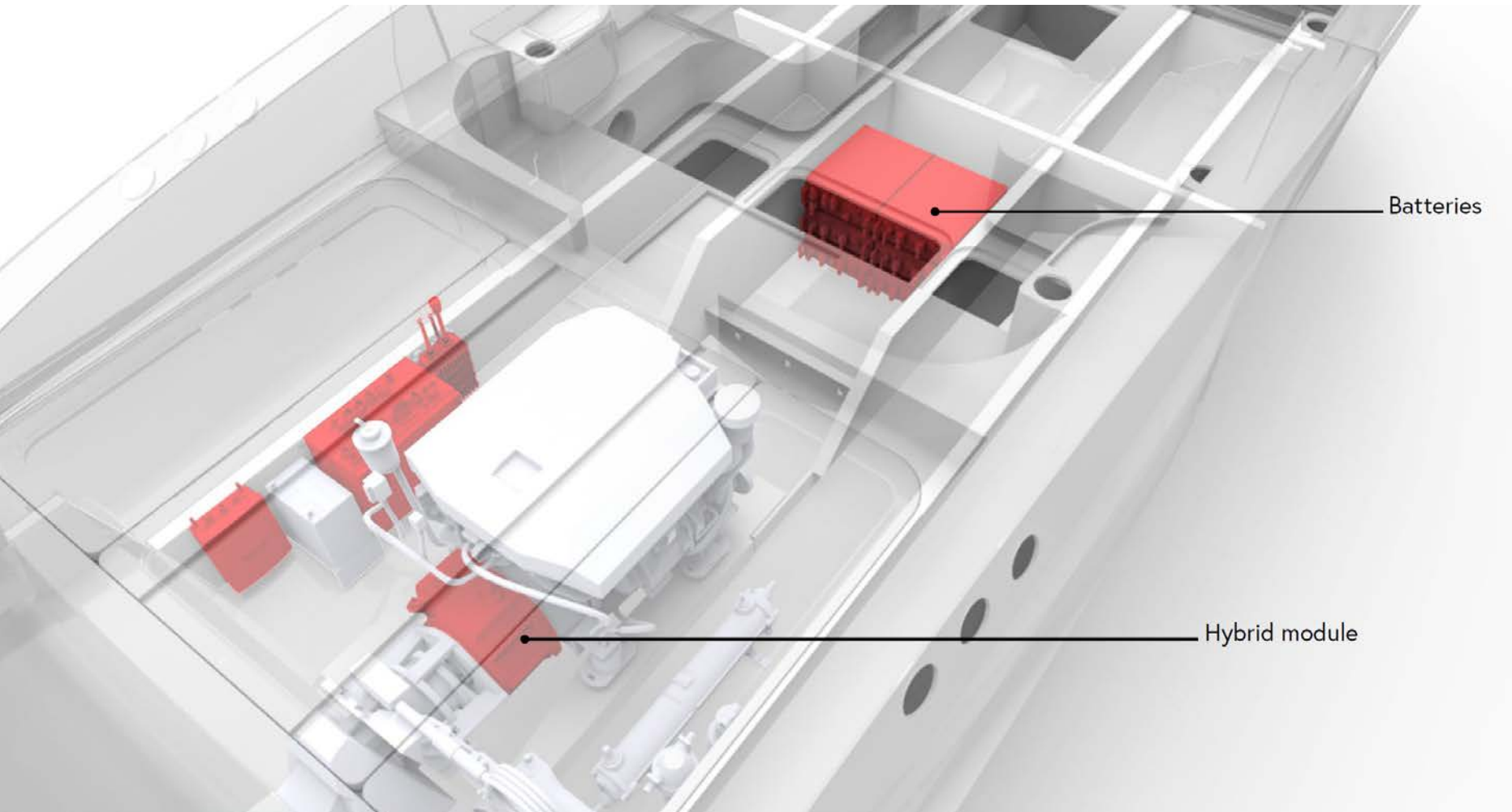


## HYBRID PROPULSION

Silverline Open Tender 8.12 m

○○○  
*SILVERLINE*





#### OPPORTUNITIES

- No emissions and noise at slow speeds
- Reduced fuel costs
- Access to restricted waters
- Easier maneuvering
- No fear of empty batteries
- Smaller engine can achieve the same acceleration



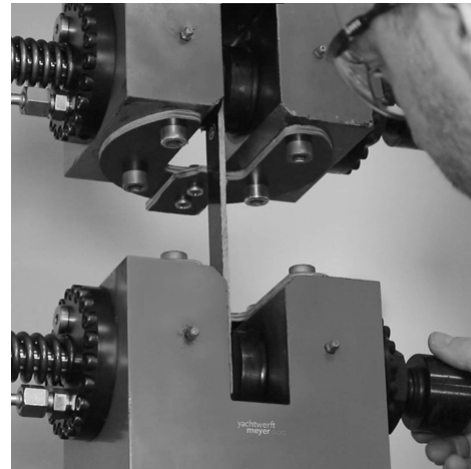
## HYBRID PROPULSION

Silverline Open Tender 8.12 m

  
**SILVERLINE**

# RENEWABLE MATERIALS

RESEARCH – FLAX-FIBRE SANDWICH PANELS

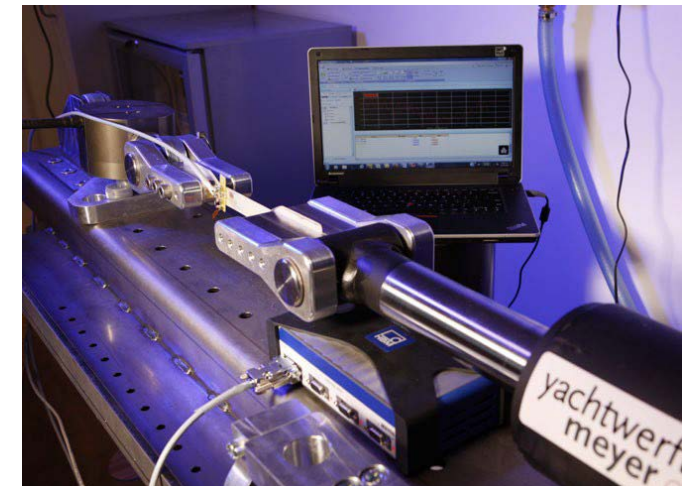






#### IN-HOUSE LABORATORY TESTING NOVEL MATERIALS

- Examining new materials
- Verifying their properties
- DSC thermal analysis to ISO 11357-1
- Dielectric measurement
- Tensile, compression and shear tests
- Setting quality standards
- Improving material quality



**We don't guess, we find out!**





# OUR RESEARCH PROJECT

Building with flax-fiber sandwich panels

- Designing the panels
- Assessing different types of flax fibre.
- Using natural cork as core material.
- Achieving comparable properties to conventional E-glass with PVC foam core.

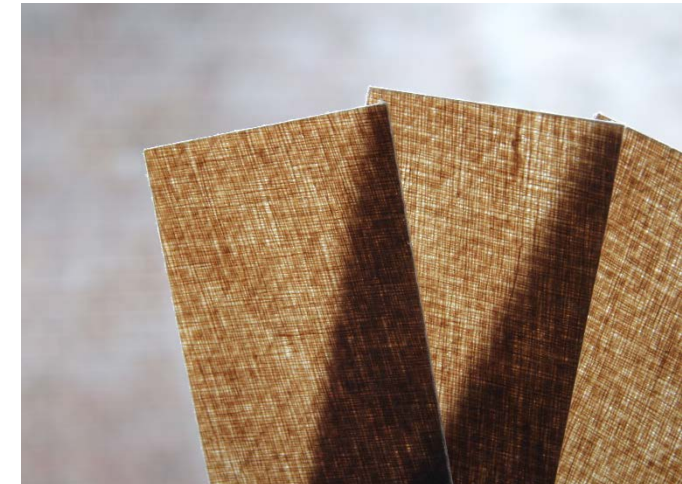




Different types of non-crimp flax fabrics

#### WHY FLAX FIBRES ?

- best sustainable alternative.
- very good mechanical properties.
- low or even negative carbon footprint.
- available on the market today.
- good vibration absorbance and strong noise insulation.
- ideal for high levels of comfort required in top- end products.

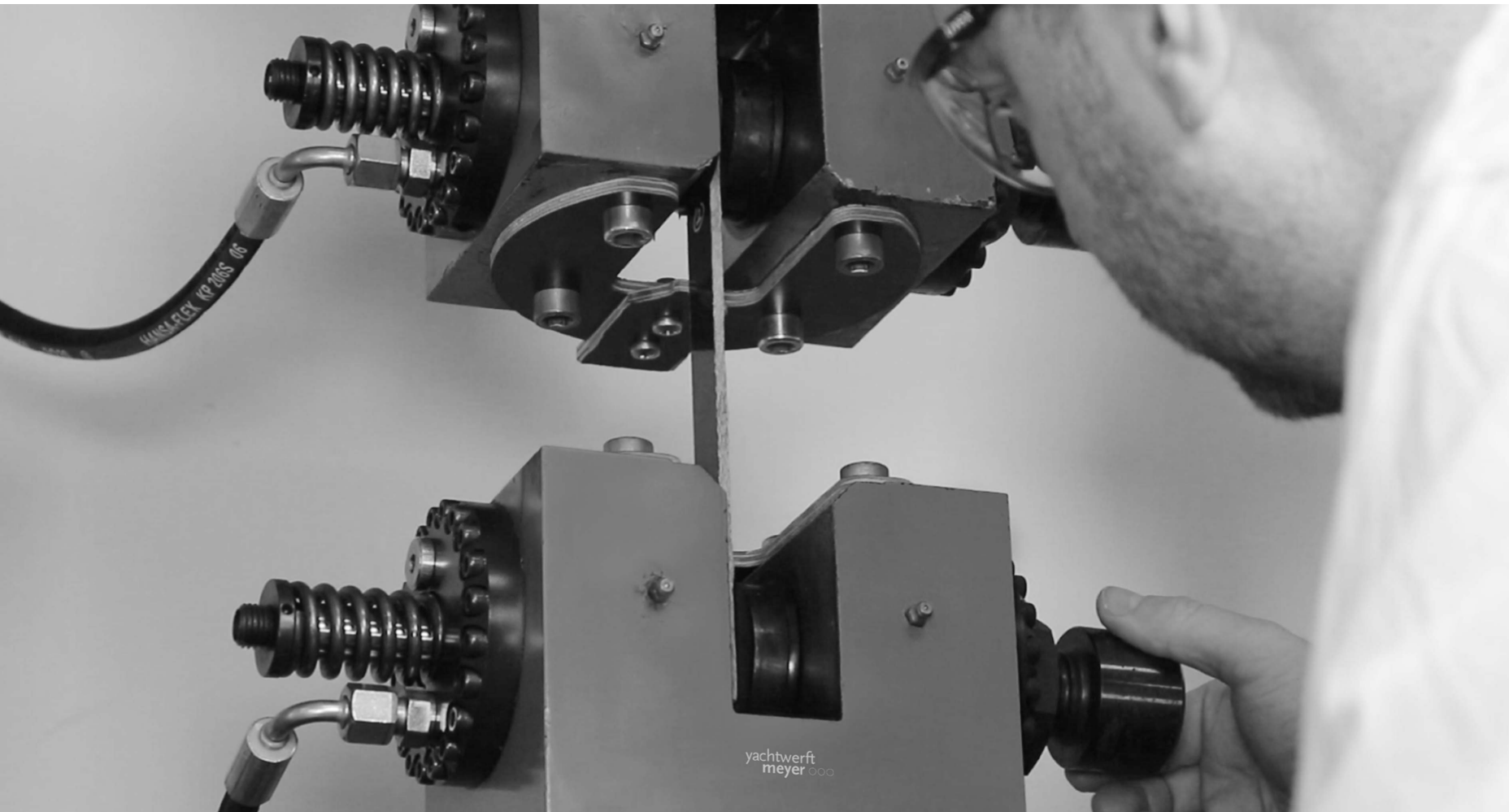


Flax fibres in bio-based epoxy matrix as top layer for panels

## RENEWABLE MATERIALS

Research – Flax-fibre sandwich panels

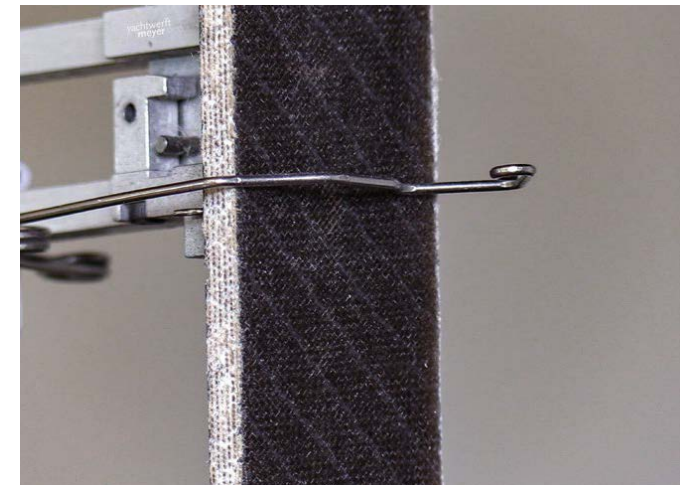




## BEND, STRETCH AND SHEER TESTING OF FLAX FIBRES IN A BIO-BASED EPOXY MATRIX

Flax showed greater stability than standard lay-up

Tension test in accordance with DIN EN ISO 527



## RENEWABLE MATERIALS

Research – Flax-fibre sandwich panels





#### WHY CORK CORE ?

- explored as an organic core material for interior sandwich panels.
- very low environmental impact.
- alternative to current foam cores.
- naturally regrows in 7 to 10 years.
- highly water-repellent. No rot from water absorption.
- superior shock and impact protection.
- excellent sound insulation due to high density and granulate structure.



## RENEWABLE MATERIALS

Research – Flax-fibre sandwich panels





# FLAX-FIBRE SANDWICH PANELS

The renewable alternative

- Near identical mechanical properties to conventional panels
- Only slightly heavier
- Better fire resistance / retardance
- Flax fibers are hollow, giving more stability on impact
- Cork core has better acoustic properties than conventional panels
- Ultimate sustainability – cork regrows without harming the tree.



# SUSTAINABILITY

ACROSS OUR SHIPYARD



## SUSTAINABILITY AT YACHTWERFT MEYER

Geothermal heating system at our office building for more than 10 years.

Environmentally integrated wash-down area for boats, protecting the river and surroundings from contamination.

Workshops thermally insulated beyond the norm, heating with the latest technology.

All lights within the yard are LEDs

Paint shop equipped with air filters to minimize particulate pollution.

Responsible disposal of oil and bilge water, as well as paint.

Use of bio-based oil in all hydraulic machinery and lifting appliances minimizes the risk of contamination.

Electric crane, not diesel.

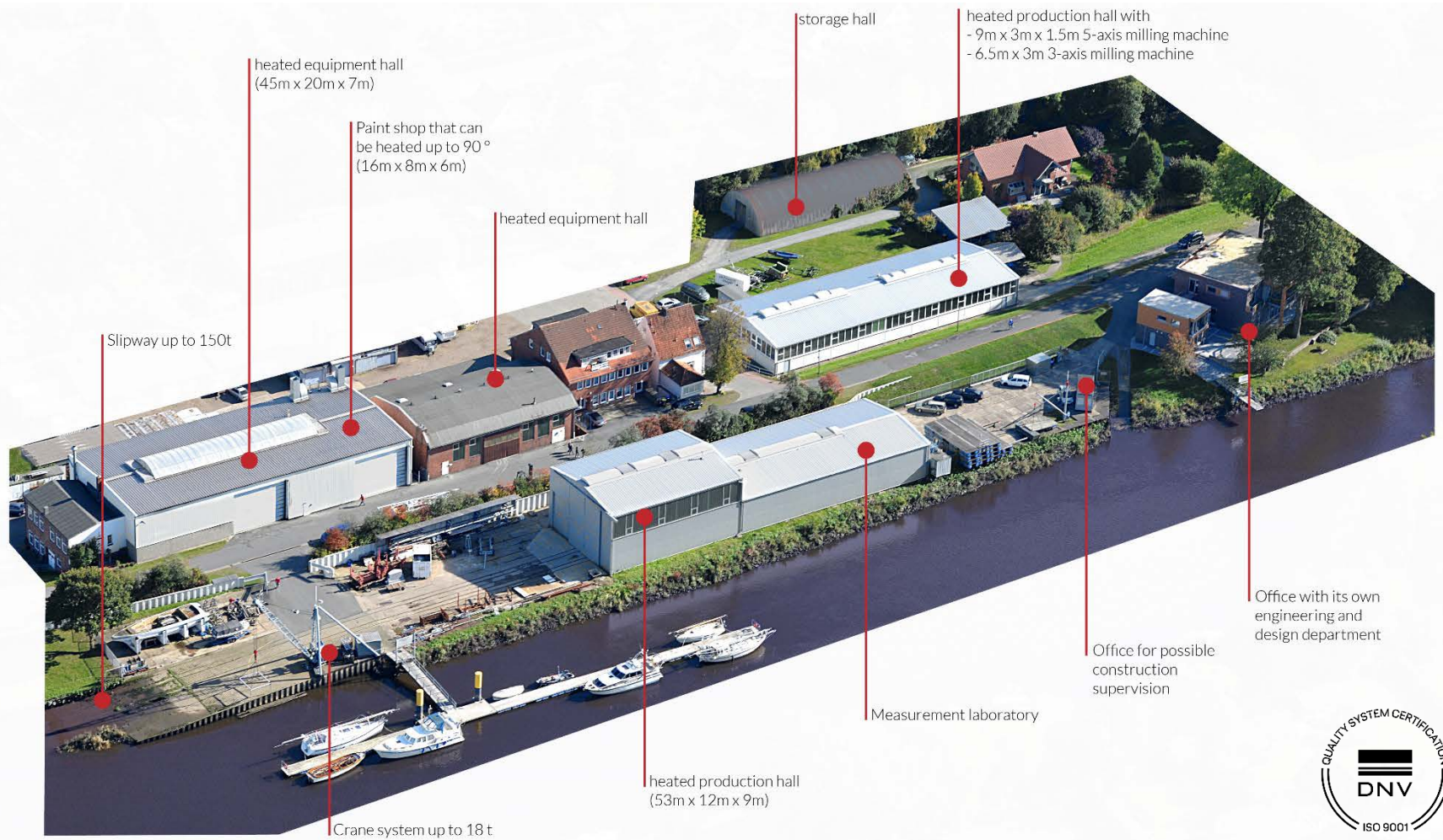
YWM's office is going paperless and the company is testing new ways to perform tasks digitally.



## SUSTAINABILITY

Across our shipyard





## yachtwerft meyer GmbH

More than 26 years of experience in Composite Construction

Continuous research and development for new production techniques.

Trusted partner in the fields of yacht building, naval technology, automotive and aviation industries.

In-house design and engineering department.

FEM – Analysis for strength, vibration and shock resistance in-house (Fibretech-Composites GmbH) .

In-house test laboratory for structural testing and DSC Analysis.

ISO 9001:2015 certification.



# YOUR EXPERT PARTNER FOR INNOVATIVE MARITIME SOLUTIONS.

[yachtwerft-meyer.com](http://yachtwerft-meyer.com)



## MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 15000405801-MS-C-RvA-DEU Initial certification date: 21 March 2016 Valid: 21 March 2021 – 30 March 2024

This is to certify that the management system of  
**Yachtwerft Meyer GmbH**  
Am Lesumdeich 8, 28719 Bremen, Germany

has been found to conform to the Quality Management System standard:  
**ISO 9001:2015**

This certificate is valid for the following scope:  
**Engineering, manufacturing, verification and delivery of boats (Yacht-Tender, working boats, governmental crafts) and Yachts and equipment parts for Yachts in composite structures, wood or aluminum and structures made of composite materials.**

Place and date:  
Barendrecht, 16 March 2021



For the issuing office:  
DNV - Business Assurance  
Zweiloesweg 1, 2904 LB Barendrecht, Netherlands

*Erika Kriek*  
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.  
ACCREDITED UNIT: DNV GL Business Assurance B.V., Zweiloesweg 1, 2904 LB Barendrecht, Netherlands - TEL: +31(0)102922089 - www.dnvgl.com/assurance

### Hauptzollamt Bremen

Seite 1 von 2



POSTANSCHRIFT Hauptzollamt Bremen, Postfach 10 50 20, 28050 Bremen

Yachtwerft-Meyer GmbH  
z.Hd. Frau Michaela Meyer  
Am Lesumdeich 2  
DE-28719 Bremen

Dienstgebäude Konsul-Smidt-Straße 29,  
28217 Bremen  
BEARBEITET VON Anne Ehrlich  
TEL +49 (0) 421-3897-1204 (-0)  
FAX +49 (0) 421-3897-1199  
E-MAIL poststelle.hza-bremen@zoll.bund.de

DATUM 01.03.2018

BETREFF Erteilung einer AEO-Bewilligung

BEZUG Ihr Antrag vom 09.05.2017

ANLAGEN 1 AEO-Bewilligung DE AEOC 124330, eine Rechtsbehelfsbelehrung

OZ **Z 0520 AEO/B - B 1102 - DE AEOC 124330** (bei Antwort bitte angeben)

Sehr geehrte Damen und Herren,

hiermit bewillige ich Ihnen den Status eines AEO „Zollrechtliche Vereinfachungen“ gemäß Artikel 23 Abs. 3 in Verbindung mit Artikel 28 VO (EU) Nr. 952/2013 (Unionszollkodex - UZK) unter Vorbehalt.

Über den Bestand der Bewilligung wird bei Eingang von Erkenntnissen der Finanzämter zu schwerwiegenden oder wiederholten Verstößen gegen steuerrechtliche Vorschriften gem. Artikel 39 Buchstabe a), Artikel 41 UZK in Verbindung mit Artikel 24 DV (EU) 2015/2447 (UZK-IA) entschieden.

Ich weise darauf hin, dass Sie nach Artikel 23 Absatz 2 UZK verpflichtet sind, mich über alle Umstände, die sich auf die Aufrechterhaltung oder den Inhalt der Bewilligung auswirken können, zu informieren.

Mit freundlichen Grüßen

Im Auftrag

(Ehrlich)



www.zoll.de

Öffnungszeiten Mo – Do: 07:30 – 16:00, Fr: 07:30 – 15:00

Bankverbindung: BBk Oldenburg, BLZ 280 000 00, Kto: 280 010 03  
IBAN: DE 52 2800 0000 0028 0010 03, BIC MARK DE F 1280

yachtwerft meyer GmbH

ISO 9001 certified

AEO

YOUR EXPERT PARTNER FOR INNOVATIVE MARITIME SOLUTIONS.

[yachtwerft-meyer.com](http://yachtwerft-meyer.com)



- Autoflug
- Abeking & Rasmussen
- Airbus
- Amels
- Atlas Elektronik
- BAAINBw
- Beschaffungssamt des Bundesministerium des Innern
- Blohm & Voss Shipyards GmbH
- BMW
- Bundespolizei
- Deutsche Marine
- Deutsche Zollbehörde
- Enercon
- Eurocopter
- Feadship
- Lürssen
- Marinearsenal Wilhemshaven
- MTG Marinetechnik GmbH
- Oceanco
- Rheinmetall Defence
- Schiffbauversuchsanstalt Potsdam
- Schiffbauversuchsanstalt Hamburg
- Spirit Aero Systems
- Emden Dockyard
- Wasser- und Schifffahrtsverwaltungen des Bundes



## REFERENCES

[yachtwerft-meyer.com](http://yachtwerft-meyer.com)



yachtwerft meyer gmbh  
Am Lesumdeich 2  
28719 Bremen  
Germany

Fon +49 - (0)421 - 98 503 950  
Fax +49 - (0)421 - 98 503 959

Web [www.yachtwerft-meyer.de](http://www.yachtwerft-meyer.de)  
Mail [info@yachtwerft-meyer.de](mailto:info@yachtwerft-meyer.de)



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