

# INTERNATIONAL MEDIA LAUNCH BMW i8 ROADSTER



BMW i AND TEAM MALIZIA  
COOPERATION





# TEAM MALIZIA

YACHT CLUB DE MONACO

## MAIN RACES

2018 - 2020



2018

2019

2020

1 Monaco Globe Series,  
3<sup>rd</sup> - 8<sup>th</sup> June

1 Sea to summit  
Monaco - Corsica,  
April

1 The Transat (solo)  
Plymouth - New York,  
May

2 AAR Atlantic  
Anniversary Race,  
Bermuda - Hamburg  
8<sup>th</sup> - 22<sup>nd</sup> July

2 Lorient - Bermuda -  
Lorient,  
June

2 New York - Vendee  
(solo),  
June

3 Trophe Azimut IMOCA,  
20<sup>th</sup> - 23<sup>rd</sup> September

3 Germany Tour,  
Helgoland - Kiel Record,  
Kiel Week,  
July

4 Route du Rhum solo  
IMOCA,  
Guadeloupe - Saint Malo  
4<sup>th</sup> - 18<sup>th</sup> November

4 Fastnet Race,  
July

5 Round Britain and  
Ireland Race,  
August

6 Trophe Azimuth  
Lorient,  
September

7 Transat Jacques Vabre  
Pierre and Boris Transat  
double handed,  
November





# MALIZIA

## IMOCA OPEN 60

Sail area upwind:  
between 240 and 330 m<sup>2</sup>

Sail area downwind:  
between 460 and 620 m<sup>2</sup>

Combustion engine  
system: 377 kg

Length: 18.28 m (60 feet)  
Beam: approx. 5.50 m  
Draught: 4.50 m

First IMOCA generation  
with hydro foils

Mast height:  
29.00 m



Type of keel: Canting



Ballast tanks: 2.5 tons  
of water on each side





# BMW i8 ROADSTER

374 hp / 275 kW

System output

53 km

Electric range\*

$\leq 2.0$  ltr + 14.5 kWh

Consumption / 100 km\*

4.6 sec

0 - 100 km/h

250 km/h

Top speed

Sports car performance  
with efficiency of  
a compact car



BMW electric motor

Carbon fibre frame

BMW three-cylinder  
high-performance  
combustion engine

\* According to WLTP regulations.





ACC V5



90 ft Trimaran



AC45F



AC50

2002

2007

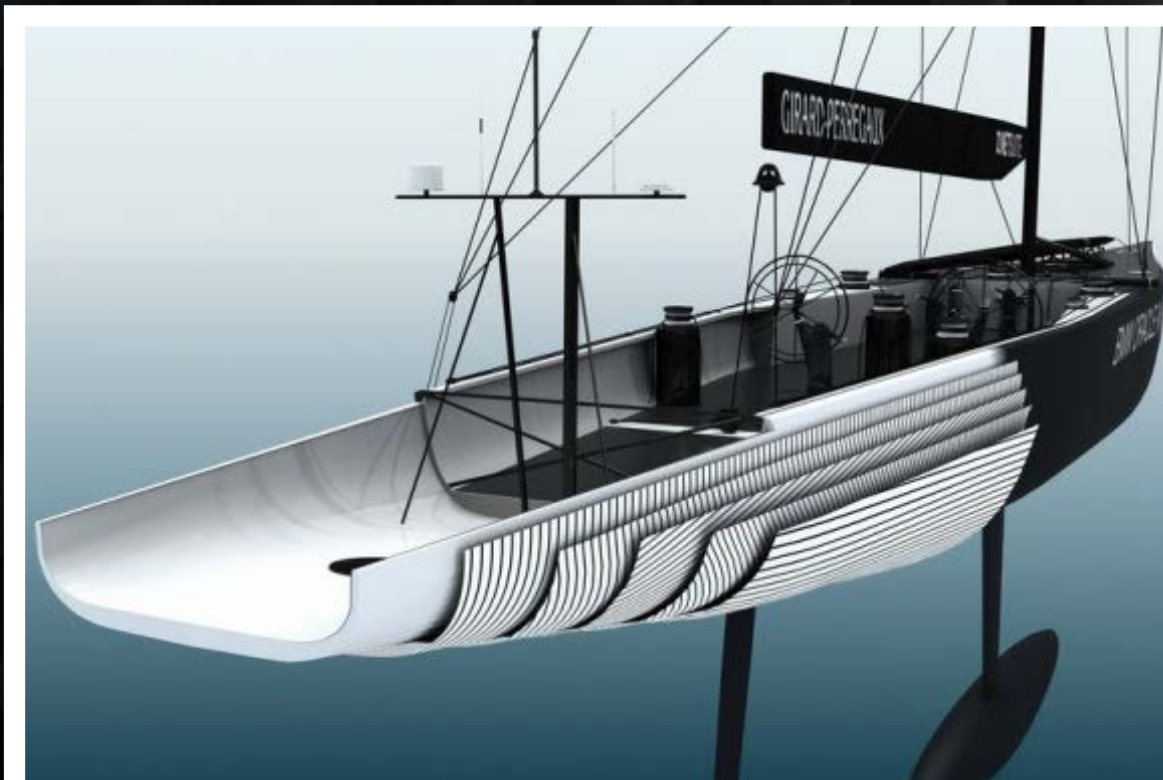
2010

2013

2017

# HISTORY

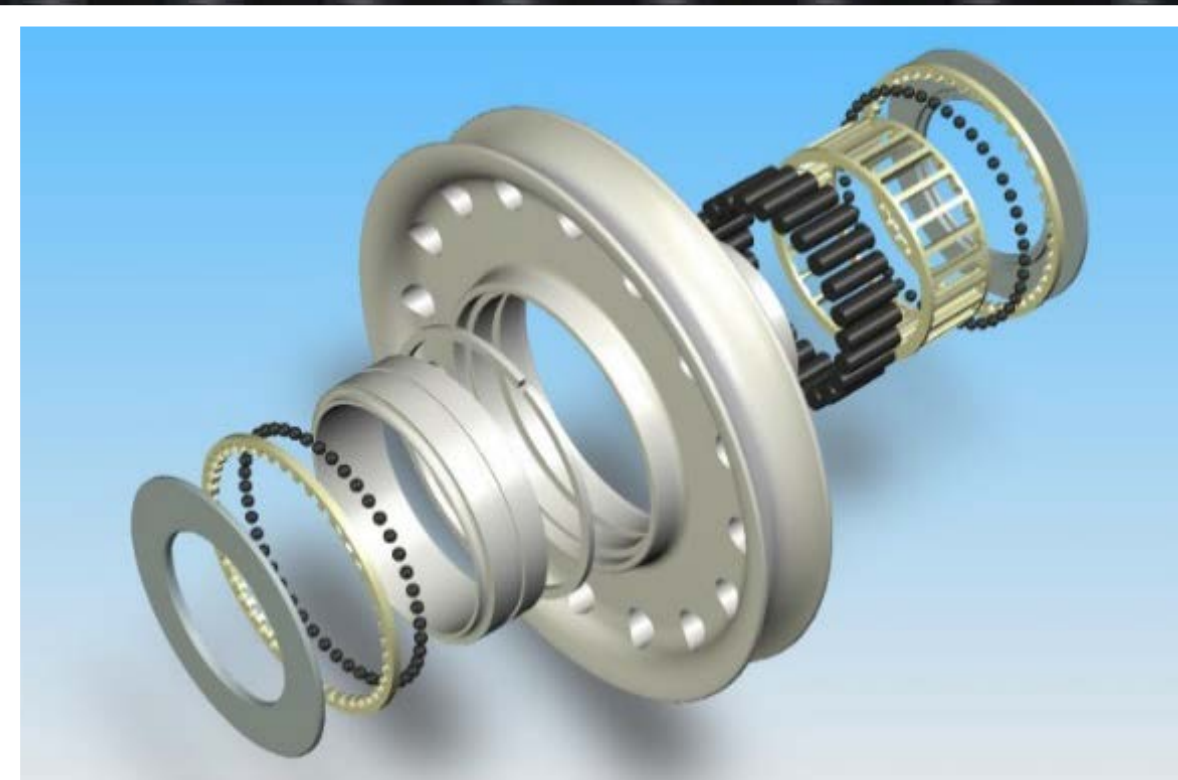
BMW HISTORY IN SPORTS TECHNOLOGY - SAILING.  
AMERICA'S CUP.



Process &  
Optimization



Stainless Steel Keel Fin

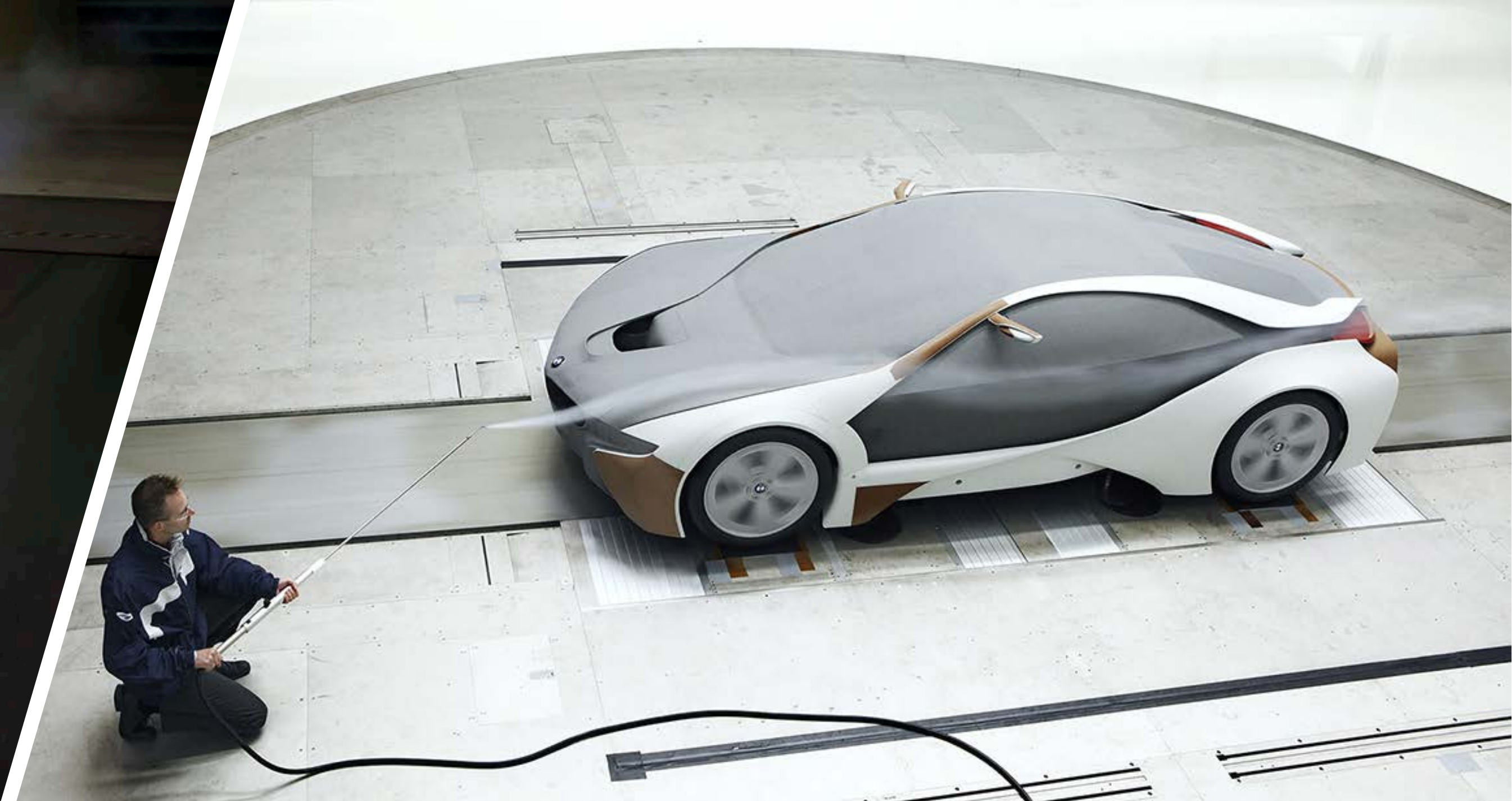


Ceramic Bearings -  
Winches

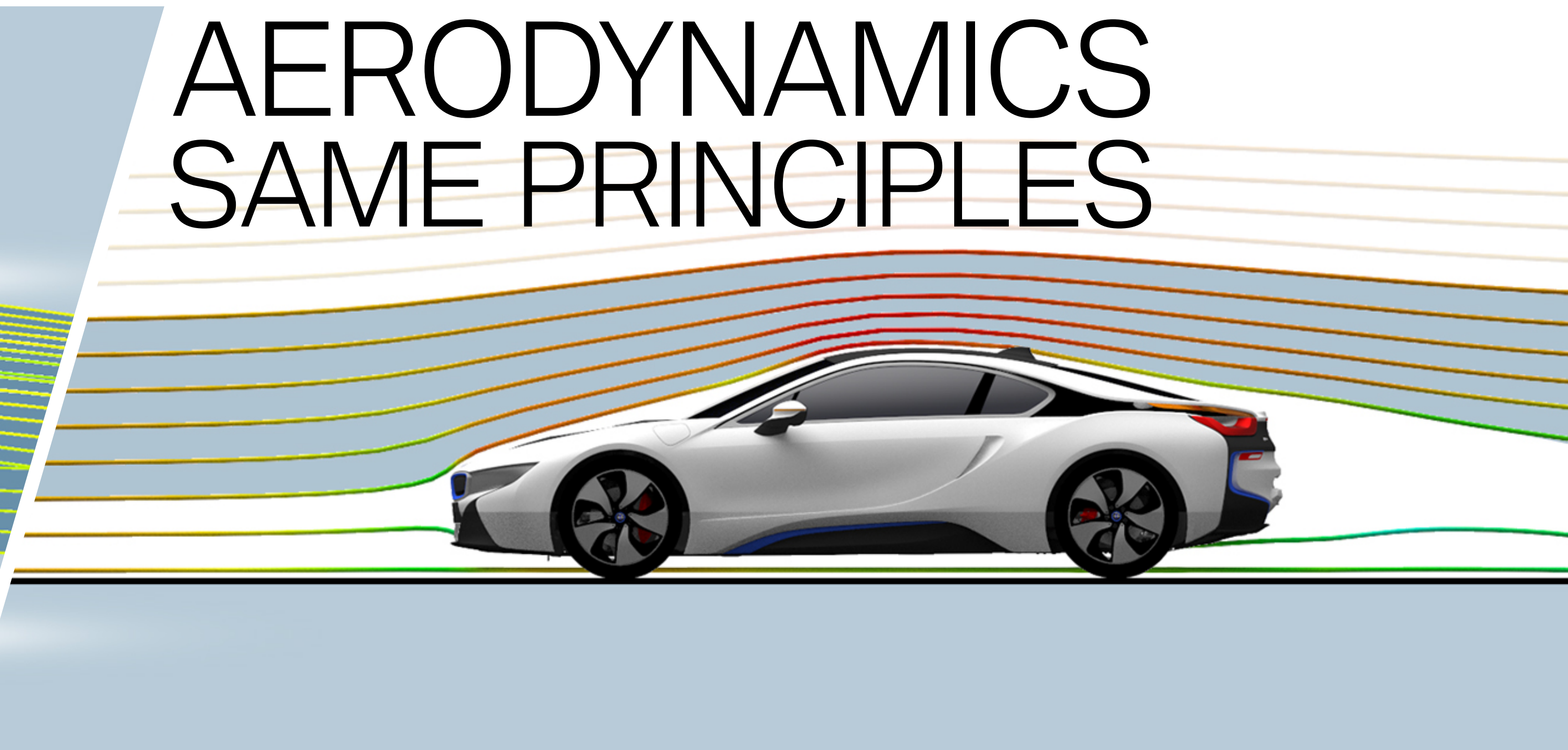
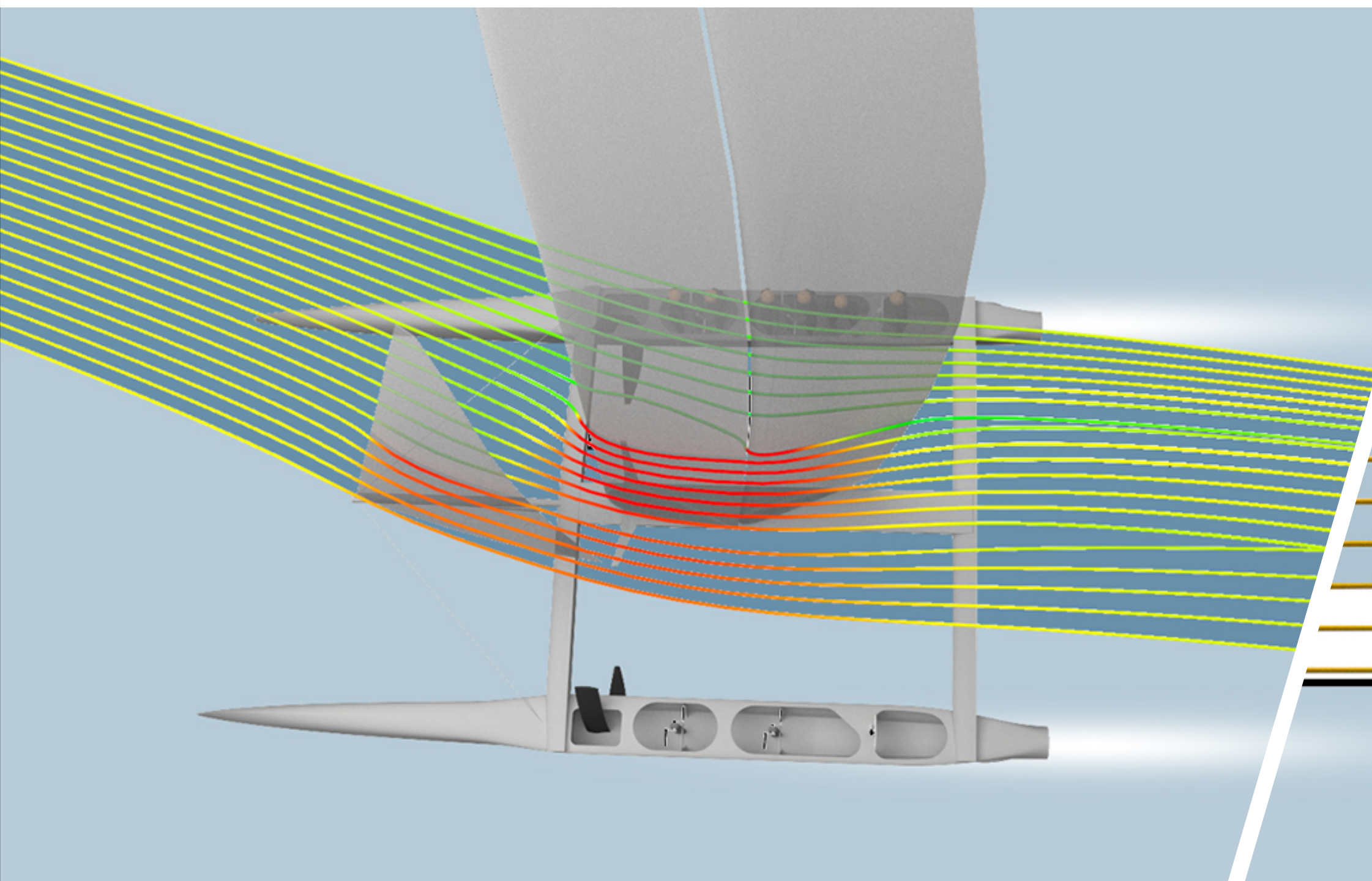


Aerodynamic  
Development





AERODYNAMICS  
SAME PRINCIPLES







AMERICA'S CUP  
TECHNOLOGY FOR THE ROAD

2004

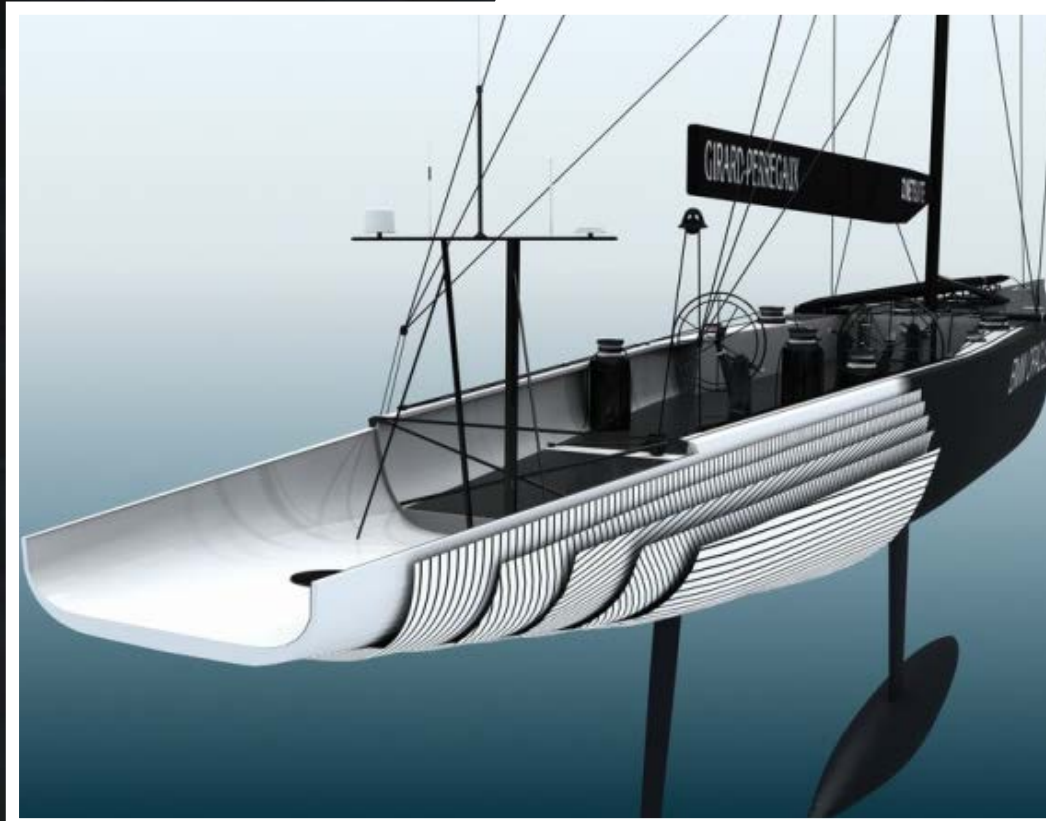
2007

2010

2011

# THE CARBON STORY

HOW CARBON KNOW-HOW EVOLVES.

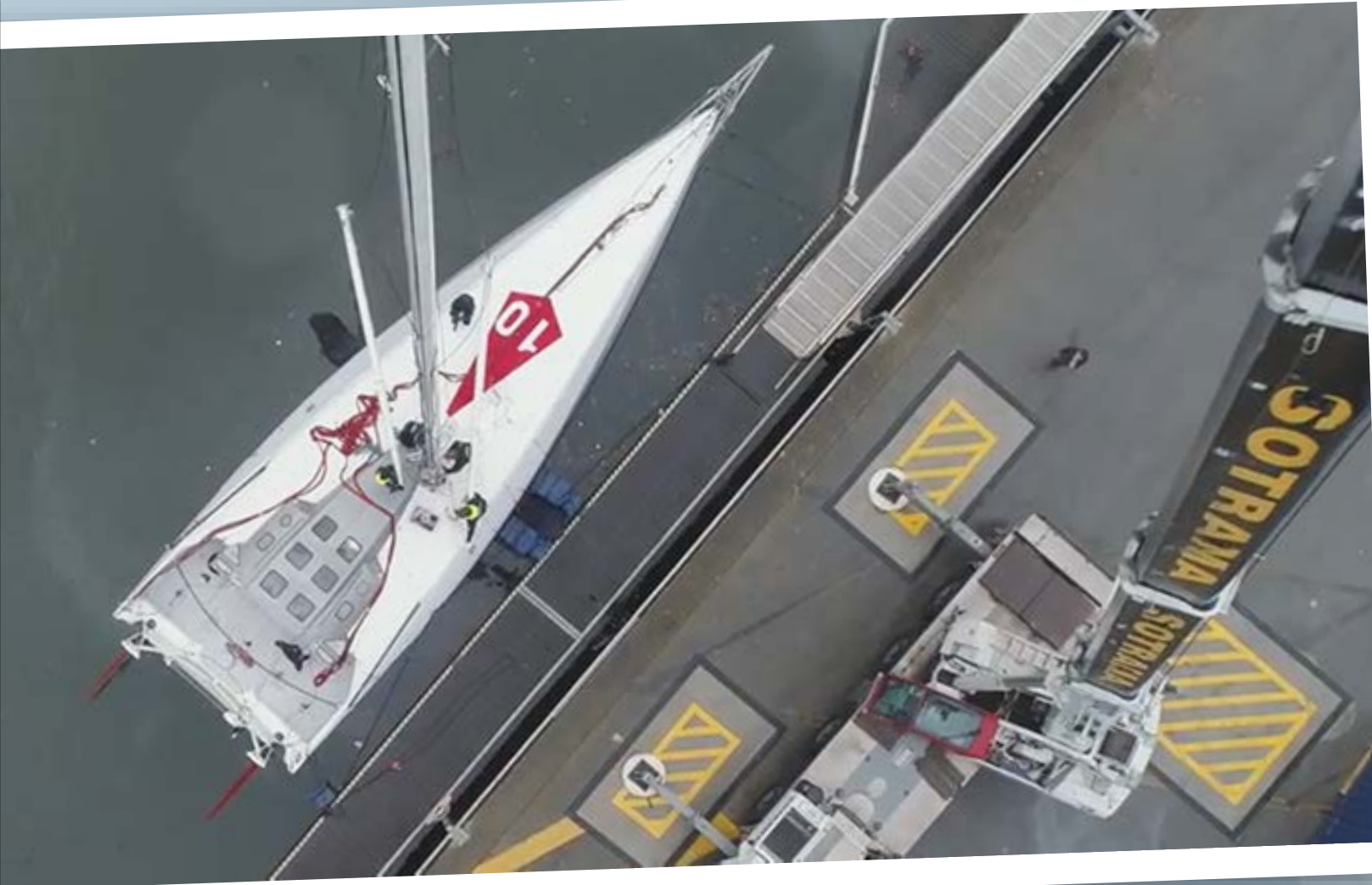


BMW  
Oracle Racing

BMW

BMW i3 / i8  
Development





# TECH TRANSFER

16.03.2018:  
Season kick-off 2018

Lorient

FIZ / Munich

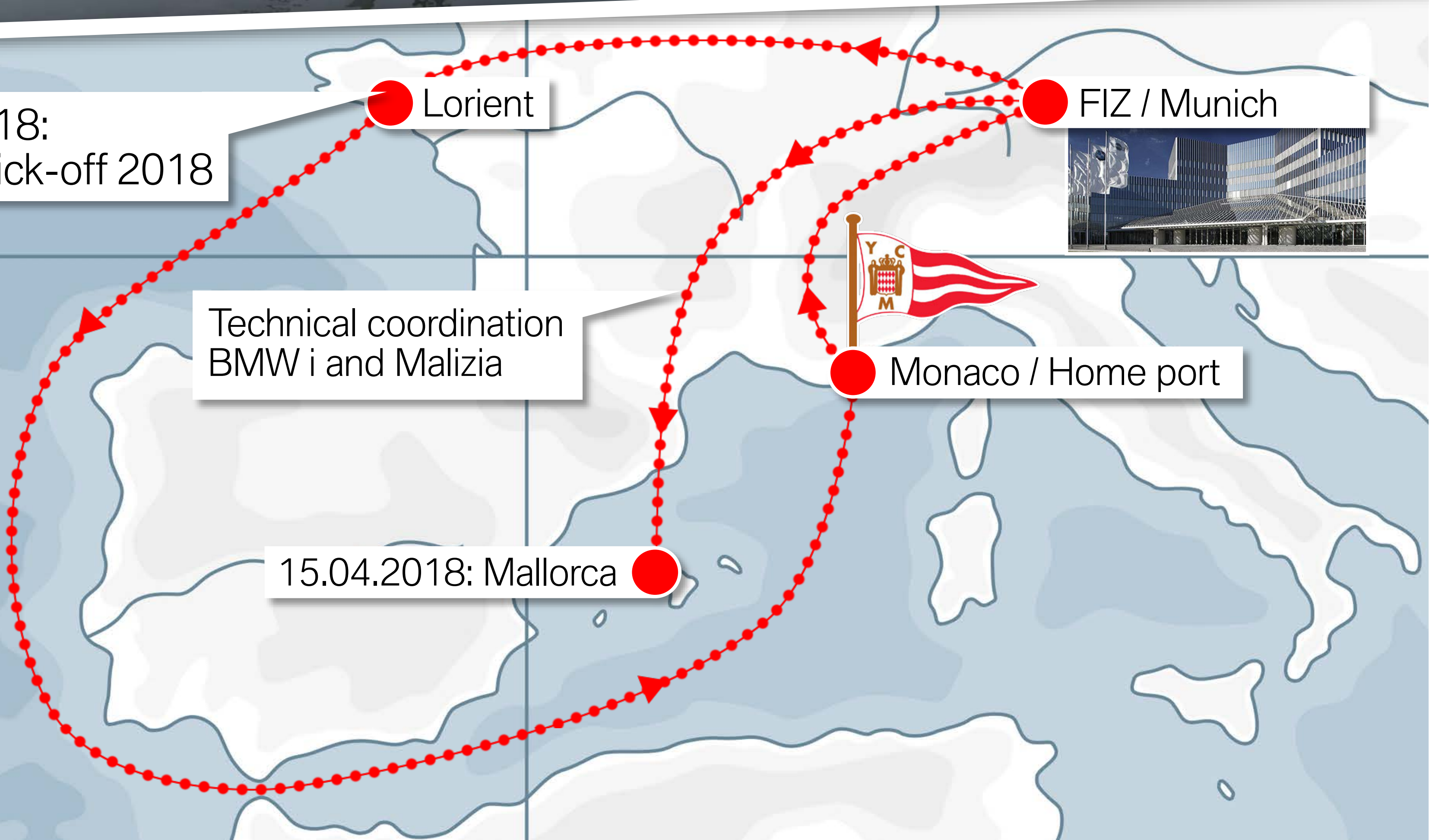


Technical coordination  
BMW i and Malizia

Monaco / Home port



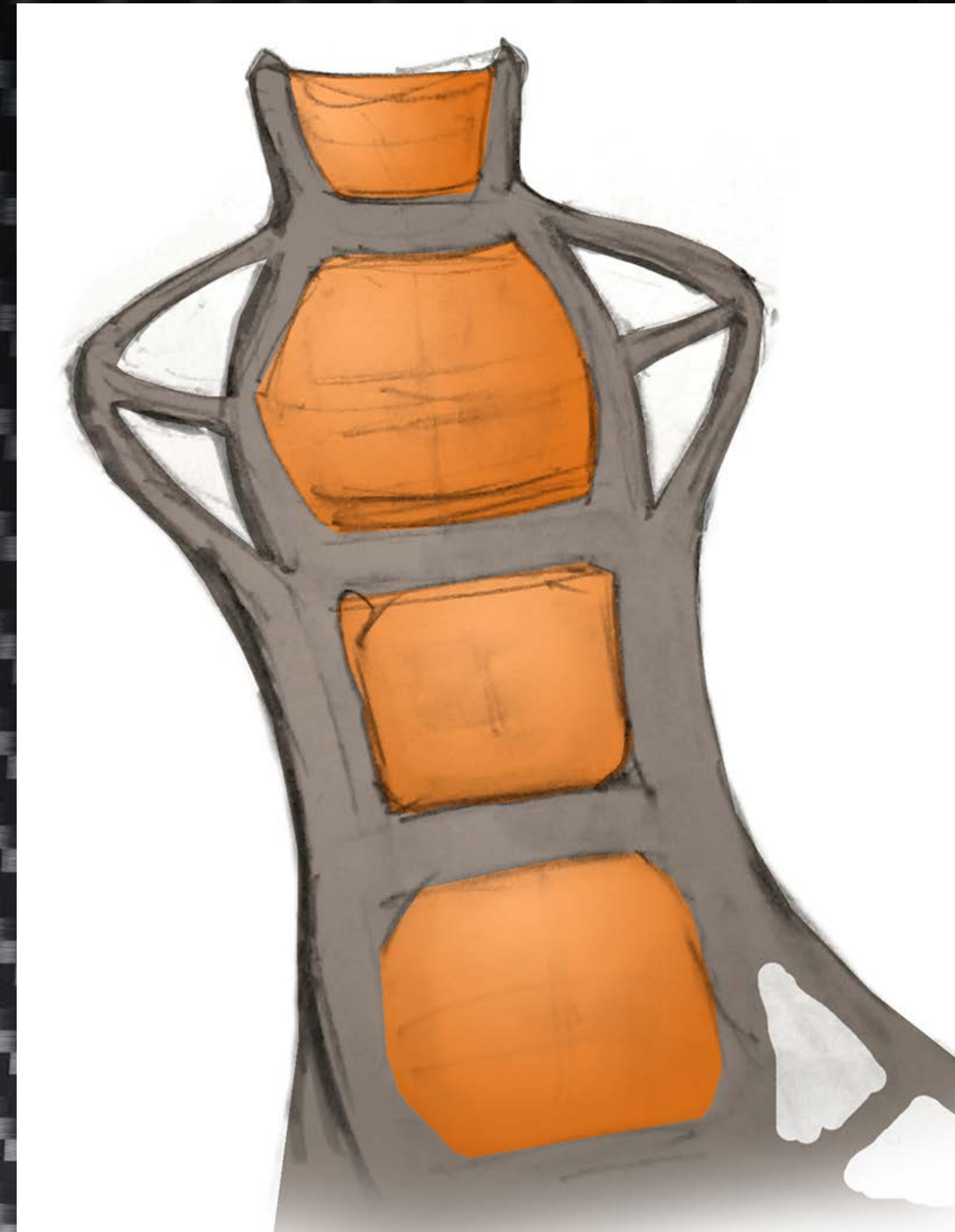
15.04.2018: Mallorca





# LOOK INTO THE FUTURE

Next generation navigators seat: Increased weight reduction out of a bionic optimisation.





# BMW i AND TORQEEDO COOPERATION

- » Leading-edge lithium batteries by BMW i fully integrated into Torqeedo motor systems.
- » Making the best of automotive technology available for boating.

**torqeedo**

**DEEP BLUE**  
**Lithium-Ion High Voltage Battery**  
Engineered and manufactured by BMW





# » LEADING EDGE BATTERY TECHNOLOGY.

**Torqueedo**



## POWER 48-5000

Taking lithium batteries for boats to a new level.

- » Build with BMW i3 battery module technology.
- » Record level energy density: 145 Wh/kg on battery level - 68 % better than typical LiFePo4 batteries.
- » Record level cycle life: 80 % capacity remaining after 3000 cycles.
- » Superior safety based on Torqueedo's 5-step safety system.
- » Specifications:
  - » Useable energy: 5,000 Wh.
  - » Nominal capacity 5,275 Wh.
  - » Waterproof IP67.
  - » Weight: 36.5 kg.





# »» LEADING EDGE MOTOR TECHNOLOGY.

*torqeedo*

## CRUISE 10 i / 20 i

Lightweight high efficiency electric motor.

- »» Field-oriented control, electronically commutated brushless motor, rare-earth magnets.
- »» Peak efficiency (motor and motor electronics combined) 92 %.
- »» Motor RPM: 7000.
- »» Propeller RPM: 1400.
- »» Gear: 5:1 with 98 % efficiency.





# » FULLY INTEGRATED SYSTEM.

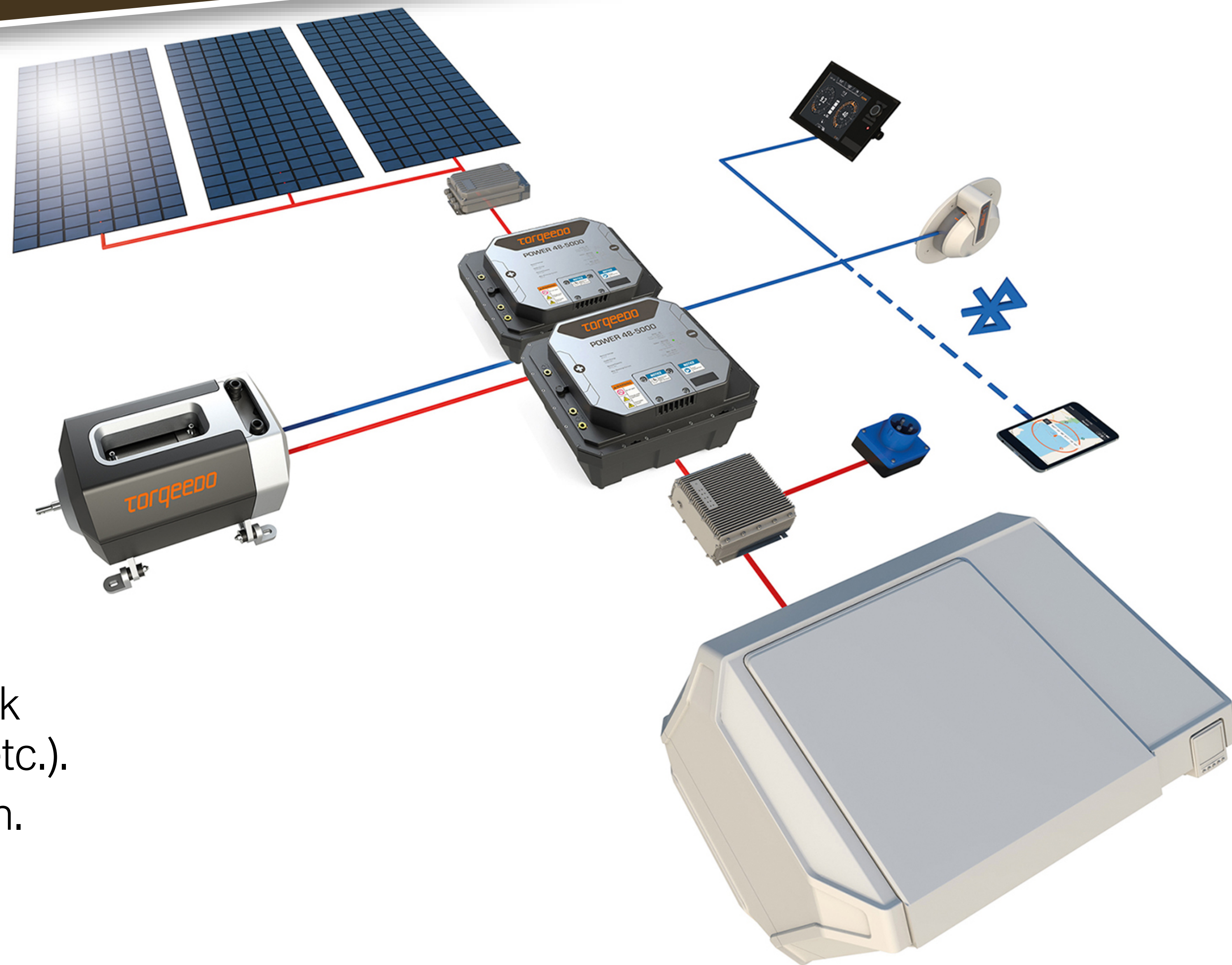
*torqeedo*

## » Components:

- » Batteries.
- » Motor.
- » Throttle with on-/off- and kill-switch.
- » Onboard computer.
- » DC-to-DC converter (24 V system).

## » Functionalities provided:

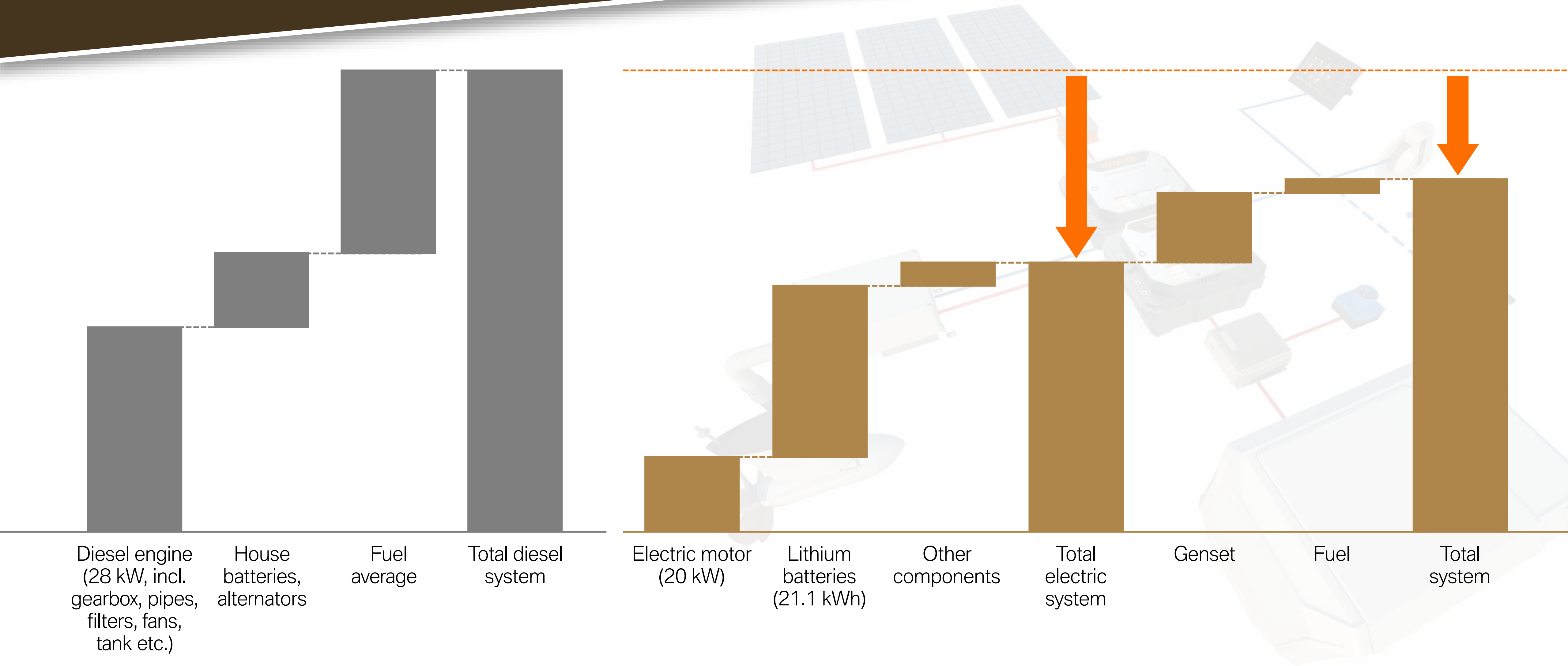
- » Propulsion.
- » Energy management for 24 V network (autopilot, canting keel, watermaker etc.).
- » Power generation via hydrogenation.
- » Integration of solar.





# »» THE LIGHTEST DRIVETRAINS ARE ELECTRIC.

*torqeedo*







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# ZERO EMISSIONS

DURING VENDÉE GLOBE - DIESEL SYSTEM STAYS PLUMBED

