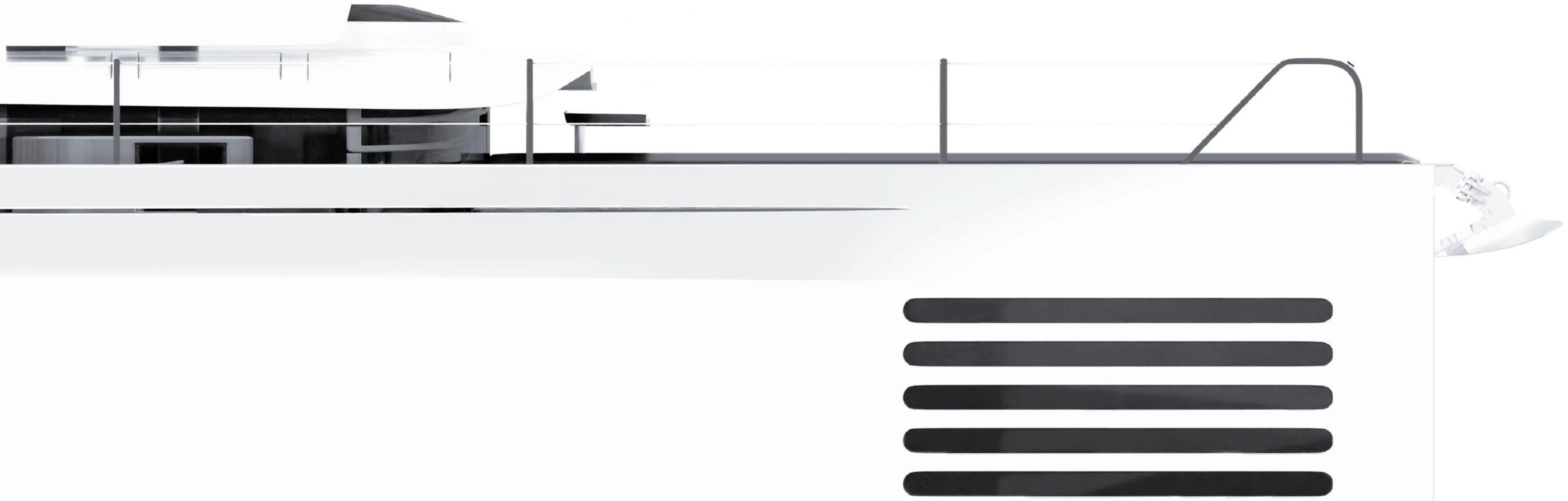


Bachelor`s Thesis Jacob Hass

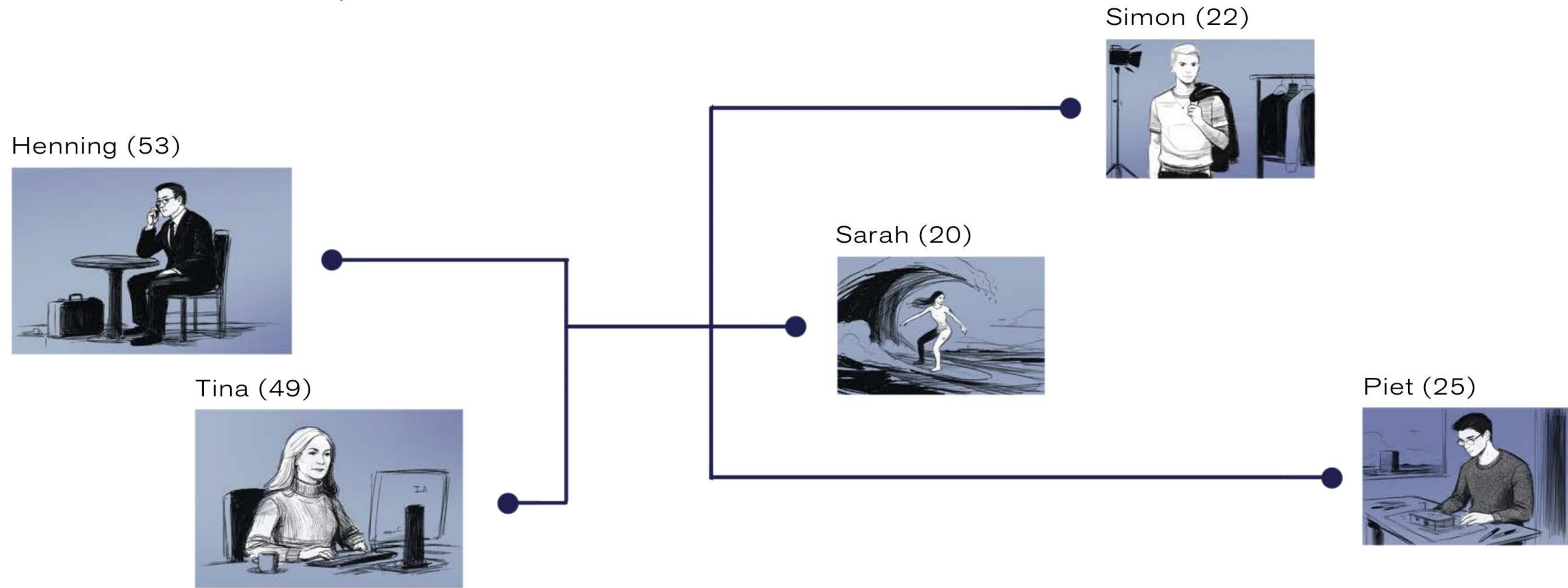
„Design and development of a 55-foot catamaran with a transformable sailing system “

in cooperation with judel/vrolijk & co.

supervised by Prof. Lutz Fügener



Persona for the concept



Project video JV 55 – Childhood memories of Henning

This video shows Henning's childhood memories. They are intended to convey an emotional understanding of who Henning is and what kind of childhood he had.



Owner groups



couples



families



friends

Research phase

MODX 70



Marsaudon 525



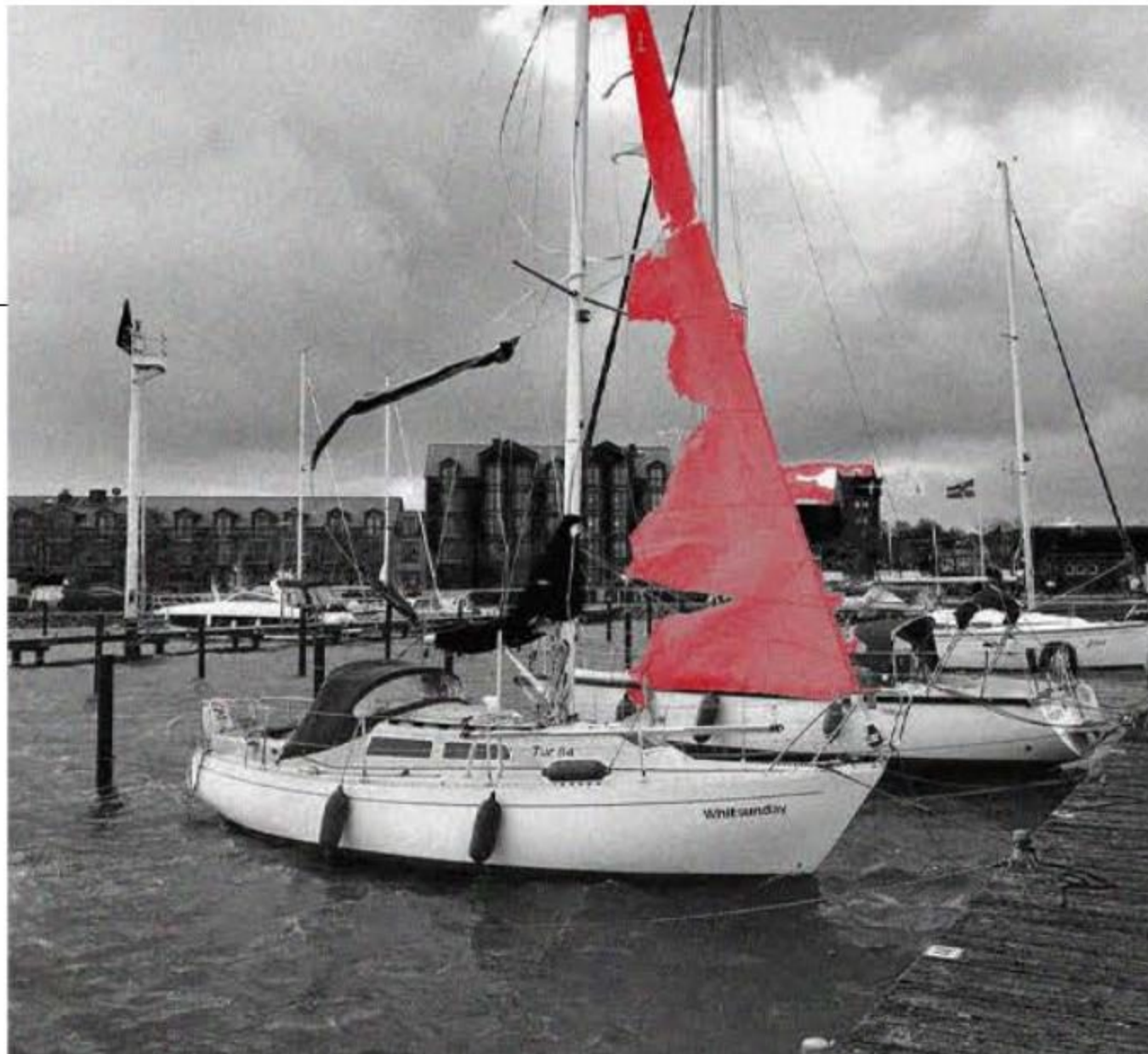
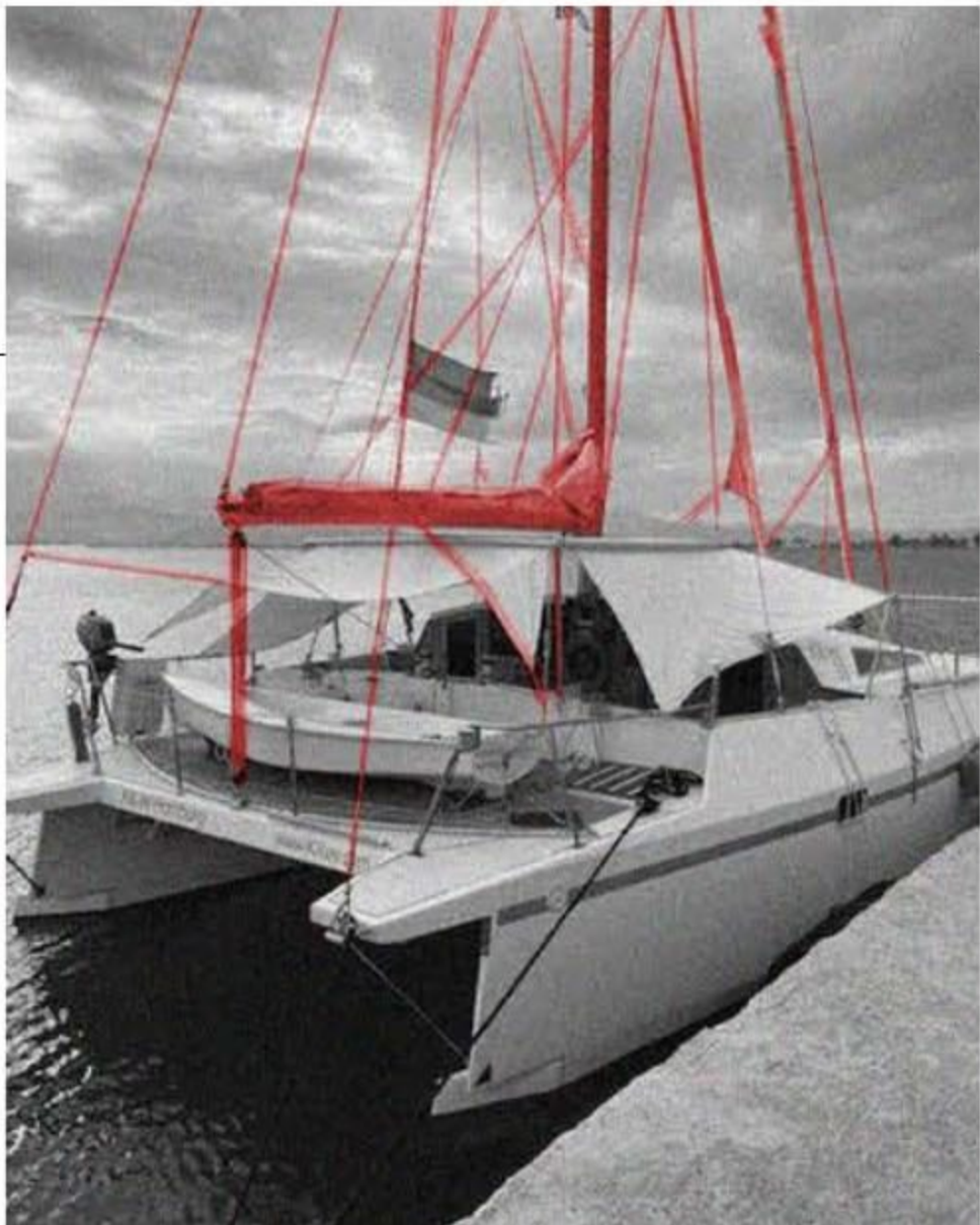
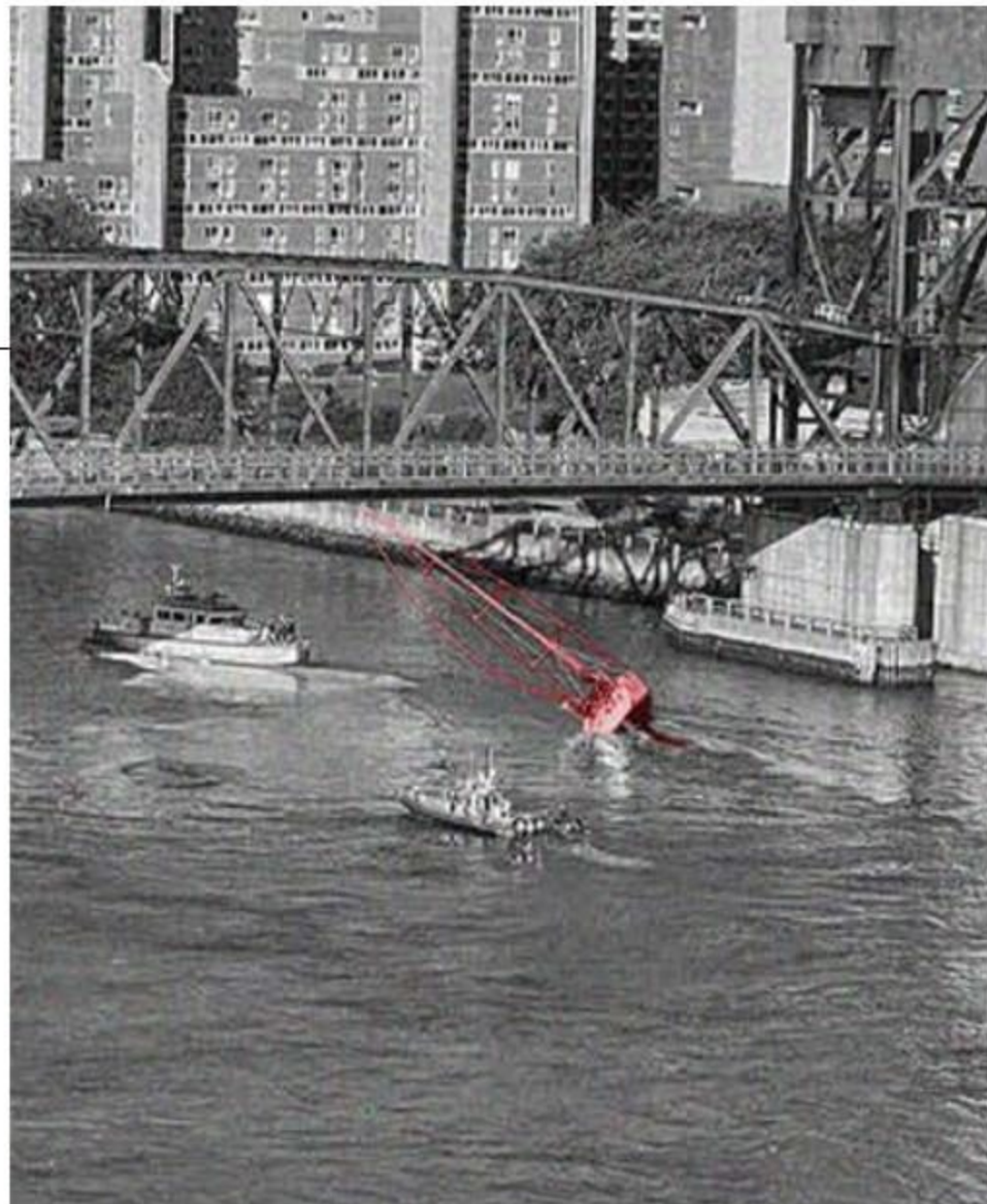
Looping 50



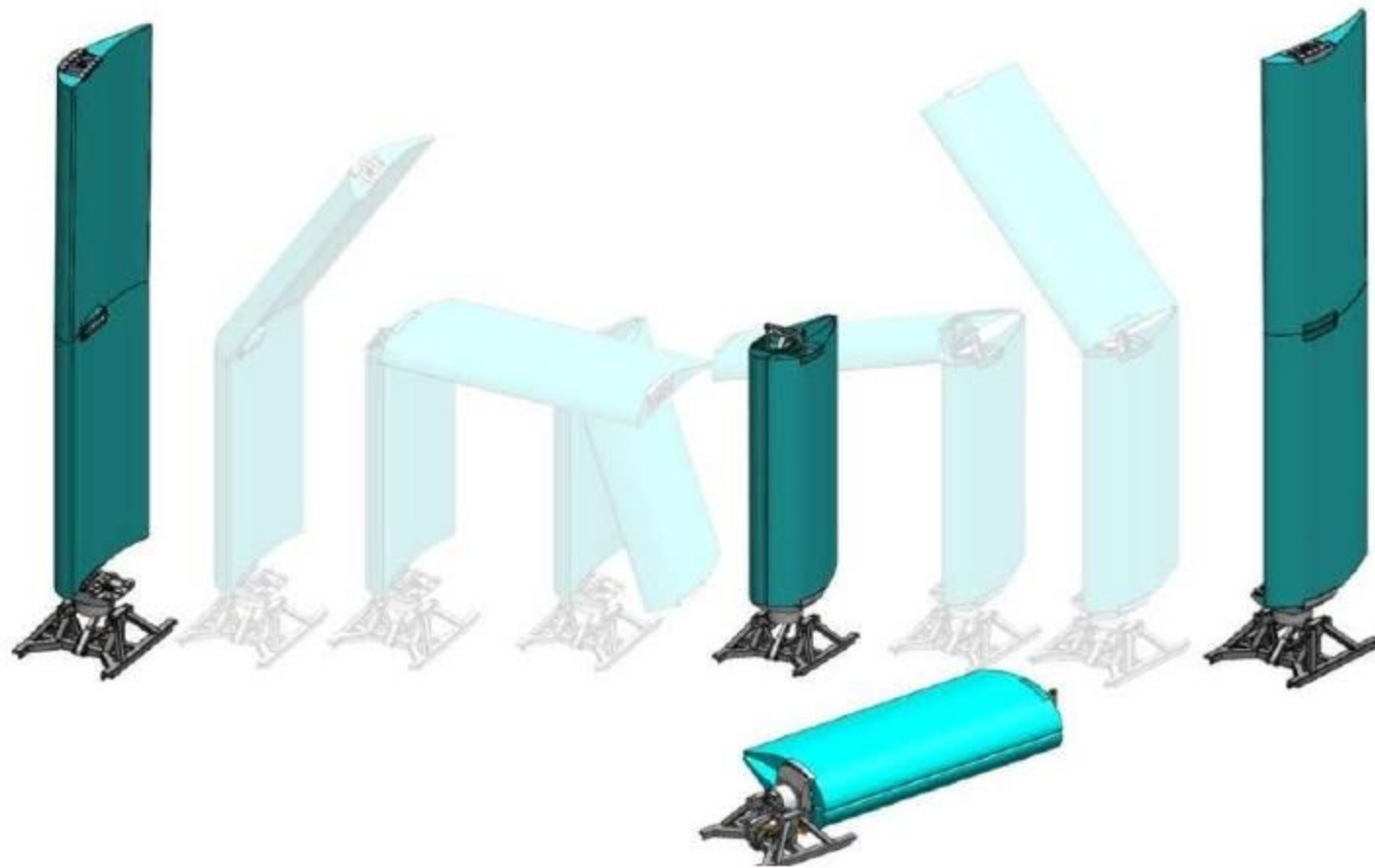
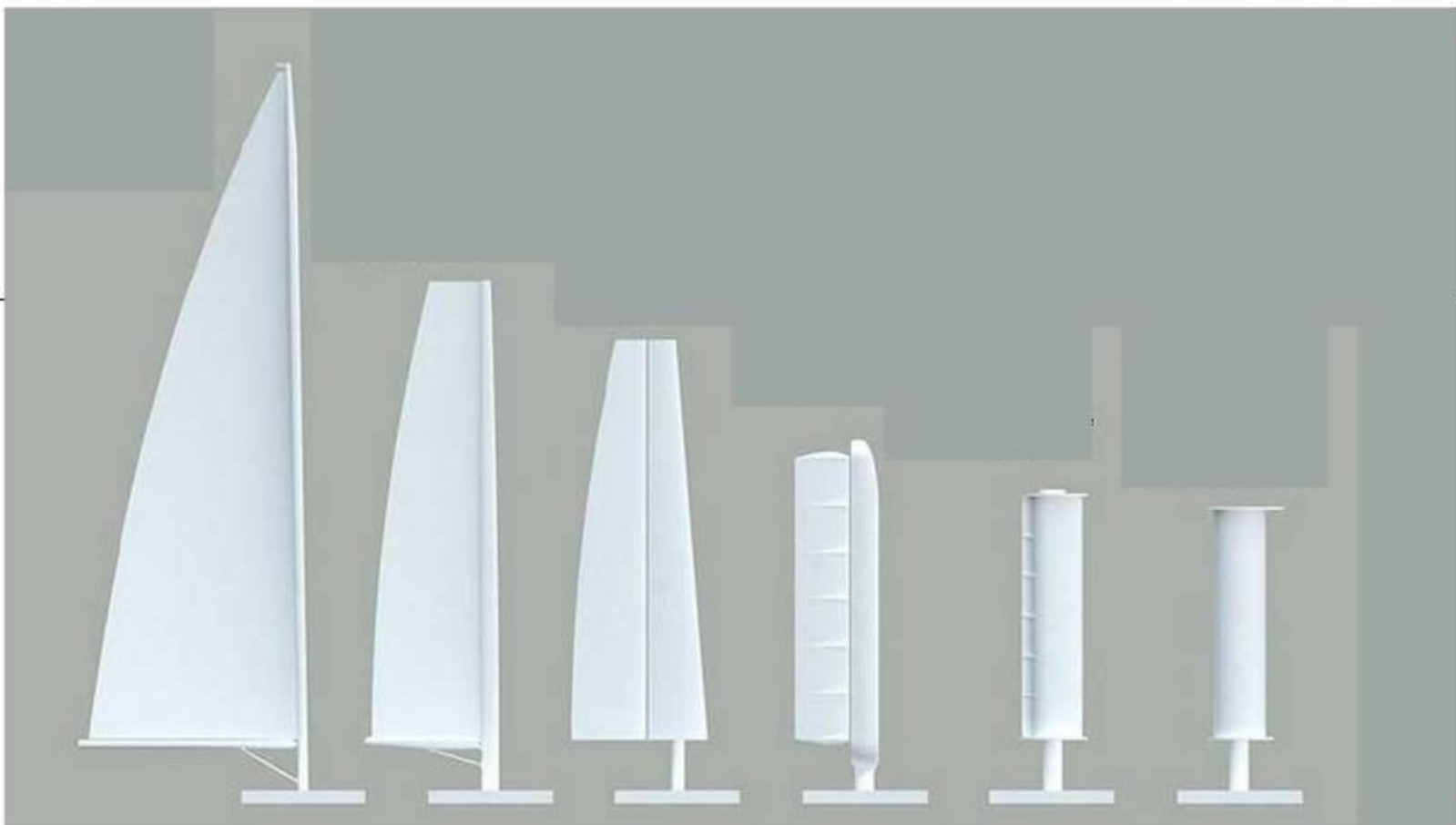
Lagoon 50



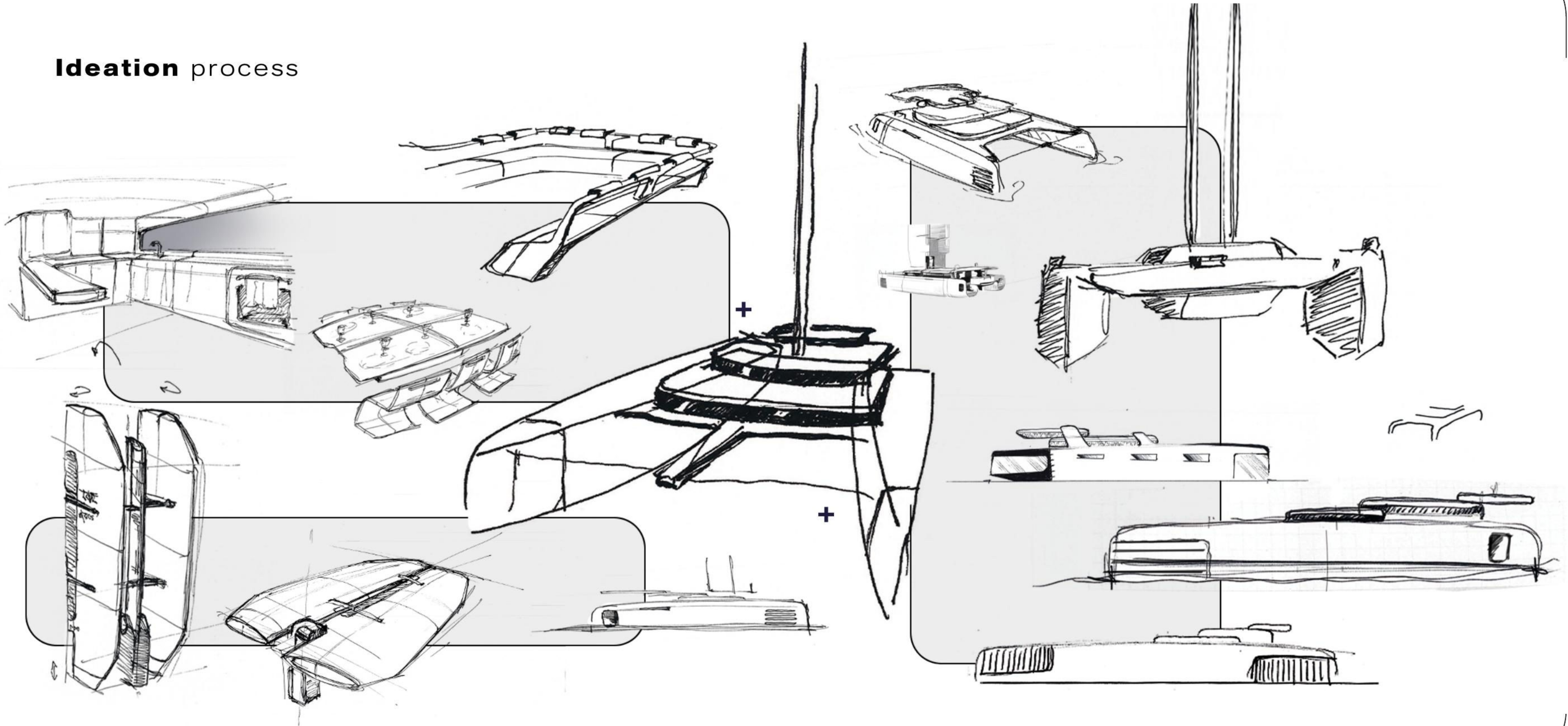
Problems to be solved



Solution approaches

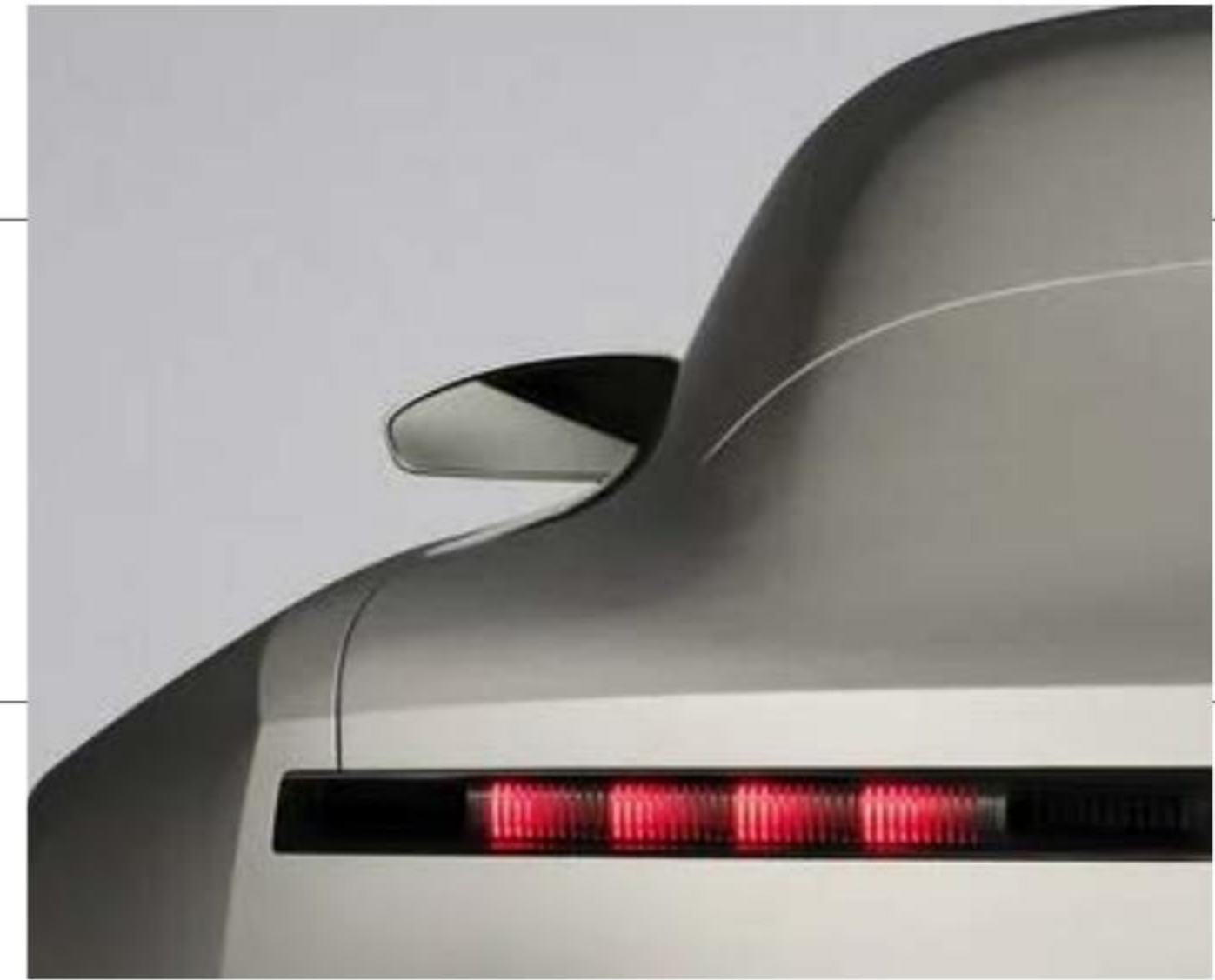
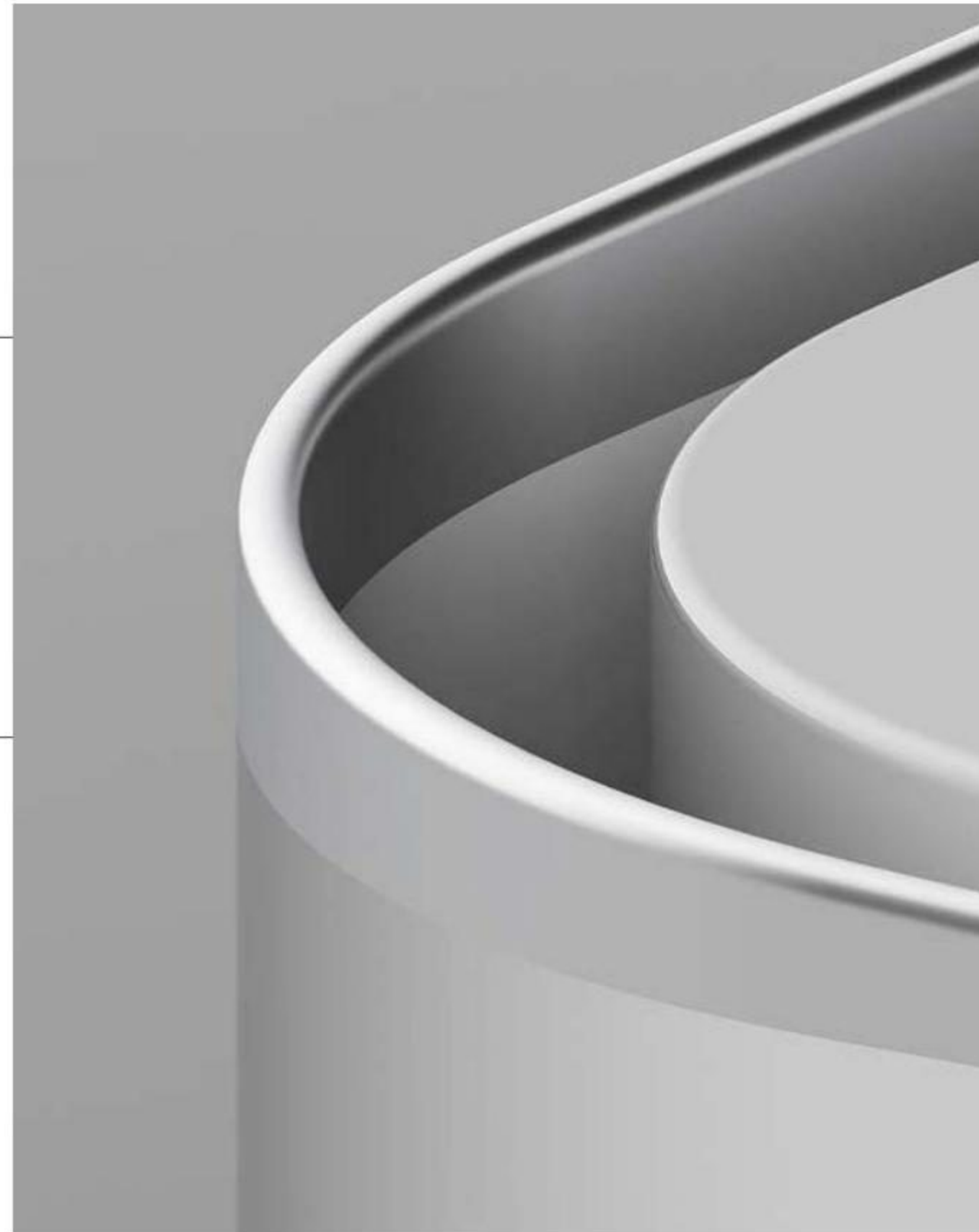


Ideation process



Design **language**

Exterior inspiration:

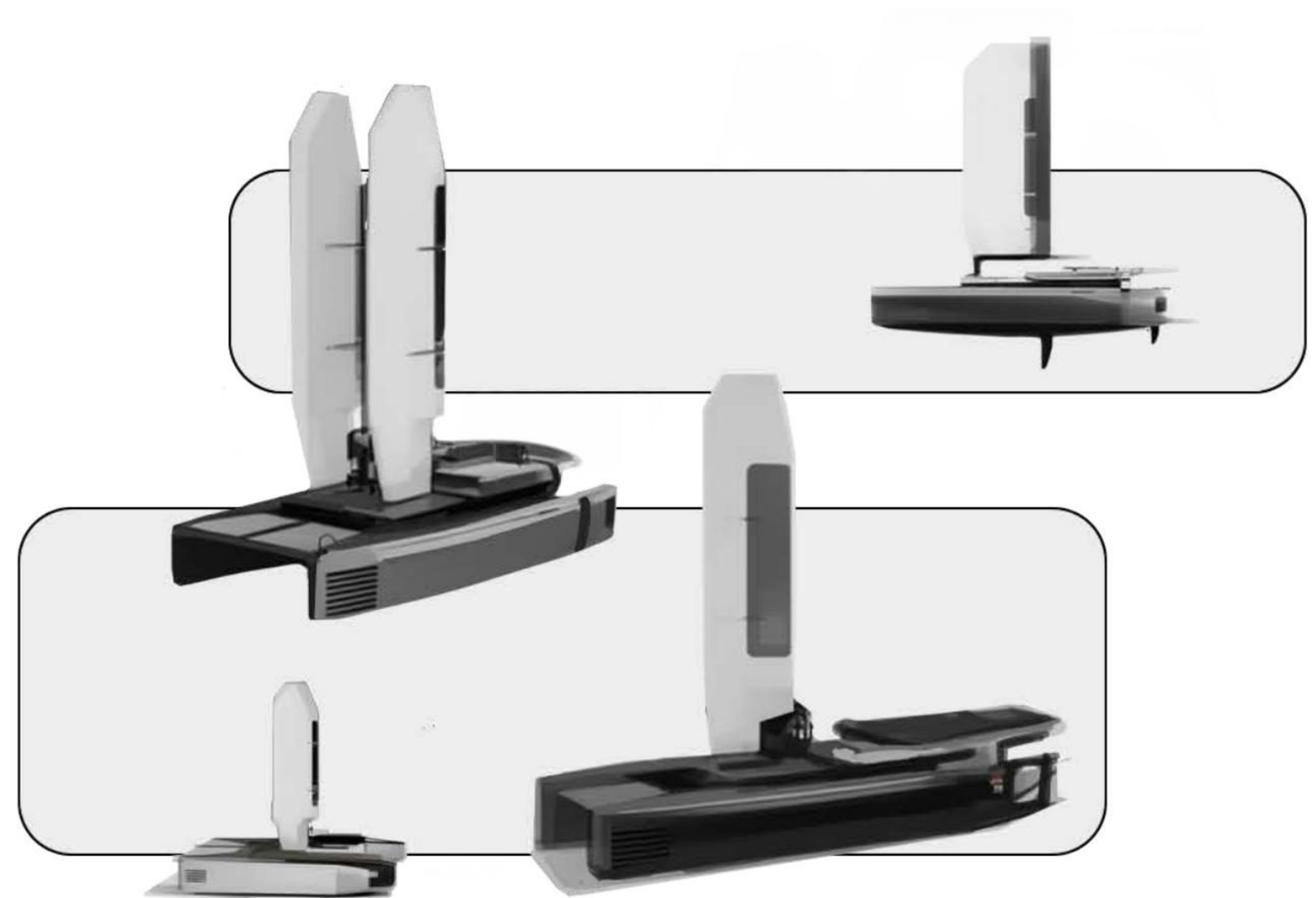
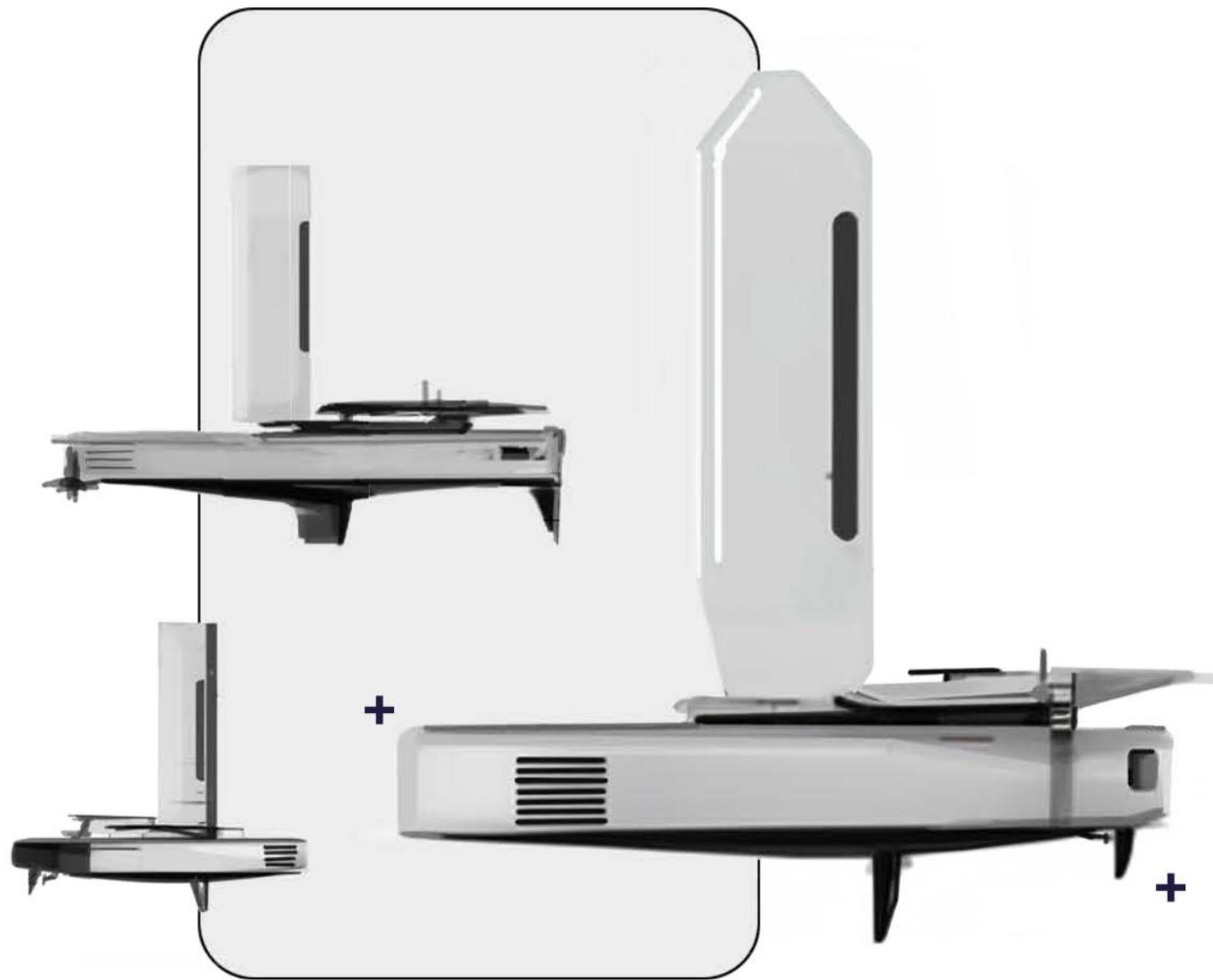


Design **language**

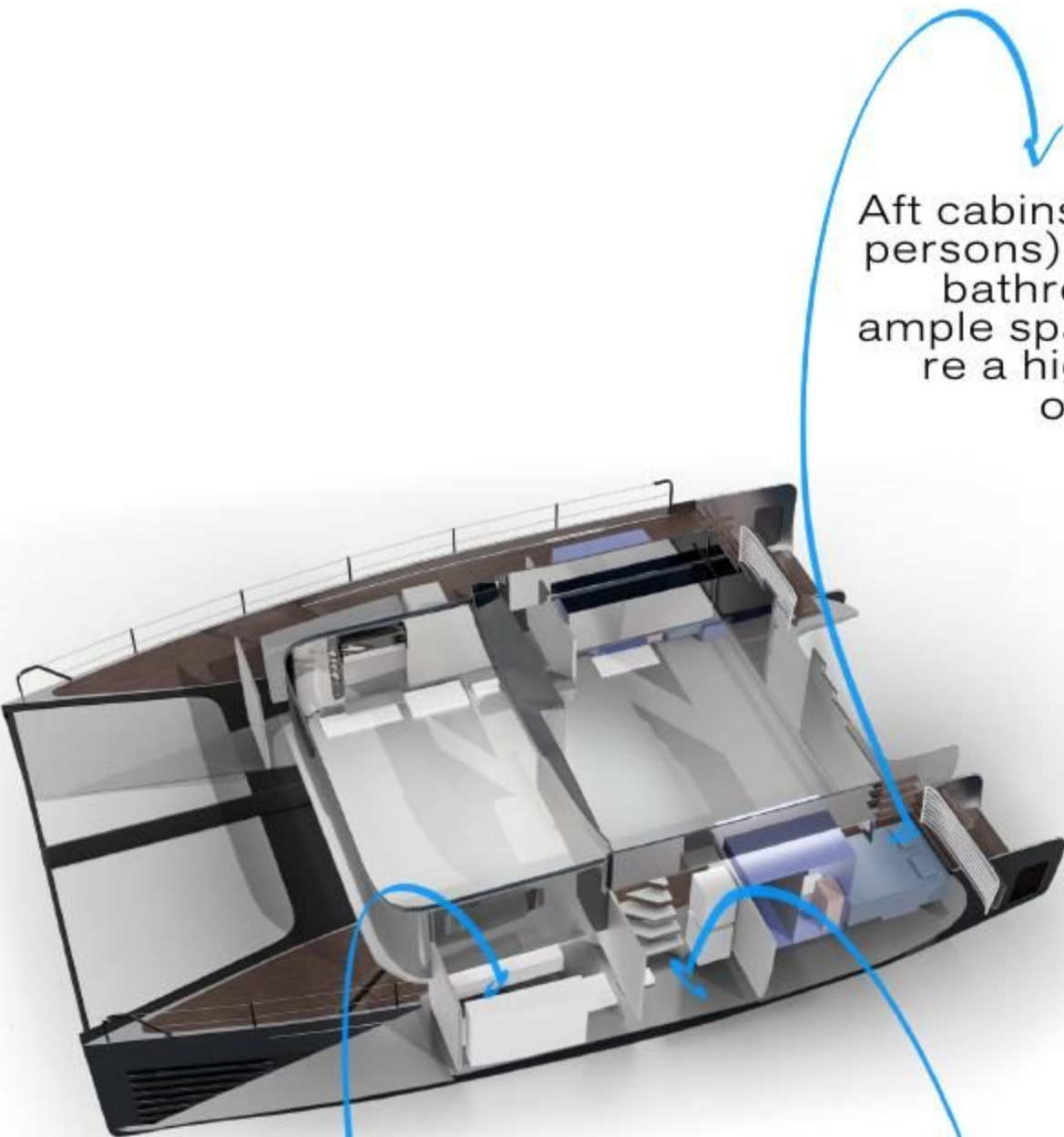
Interior inspiration



Photoshop ideation



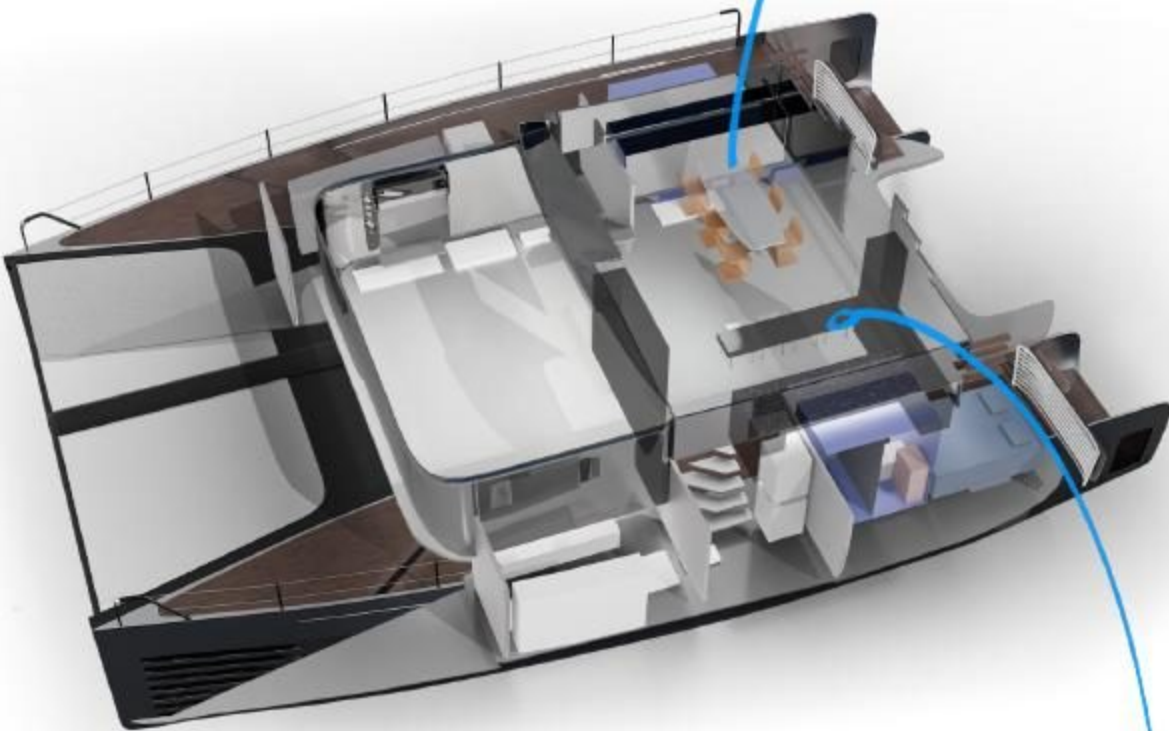
Room **Layout**



Aft cabins (each for 2 persons) with private bathroom and ample space to ensure a high quality of life

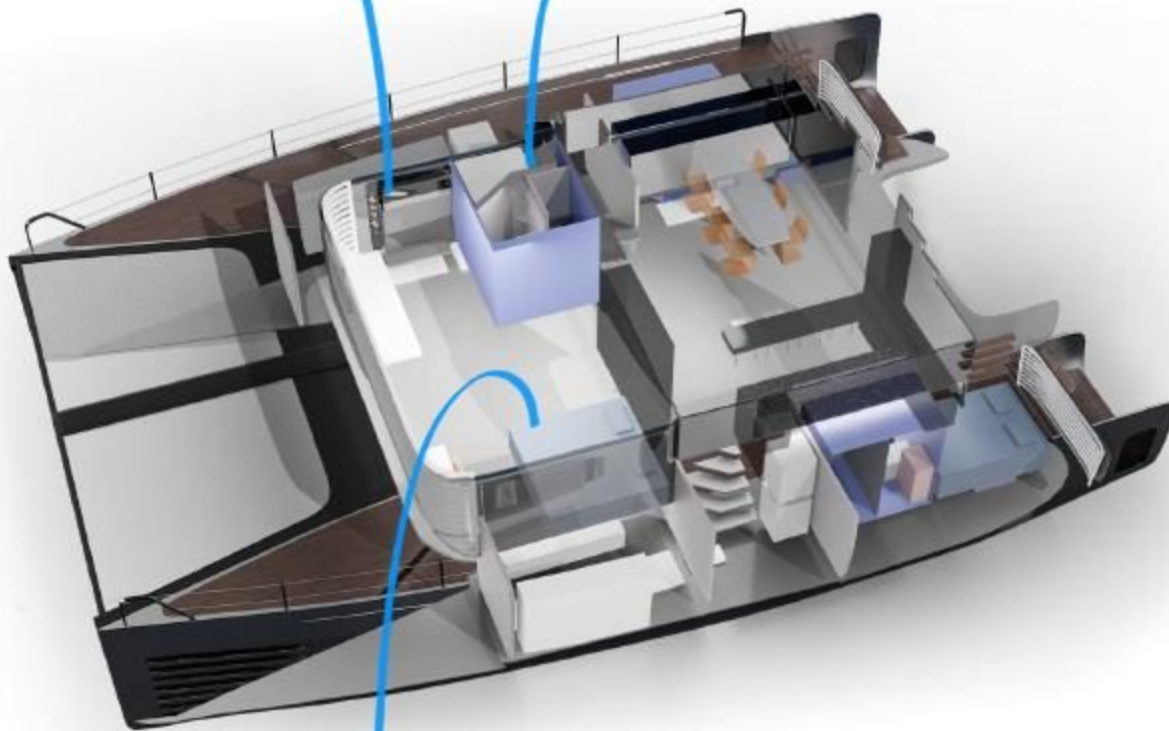
Large storage space / possible additional +1 cabin for skipper or guest visit

Staircase exit + washing machine and dryer



Dining area in the lounge

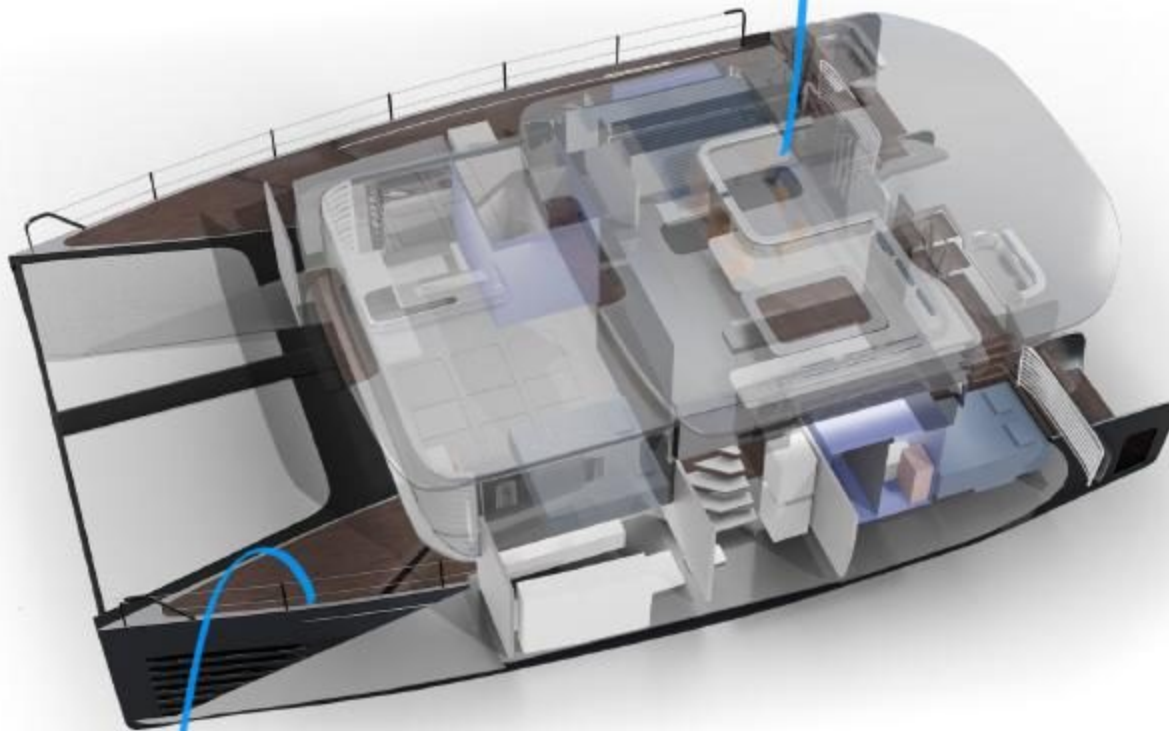
Modern kitchen with as much space as possible and kitchen islands



Exit from the owner's cabin to the hull on the starboard side

Large bathroom

Owner's cabin with large double bed and sofa



Upper deck with a wide variety of seating options and lounge areas

Variable cabin (option of relaxation room for the entire crew, room for crew or simply storage space)

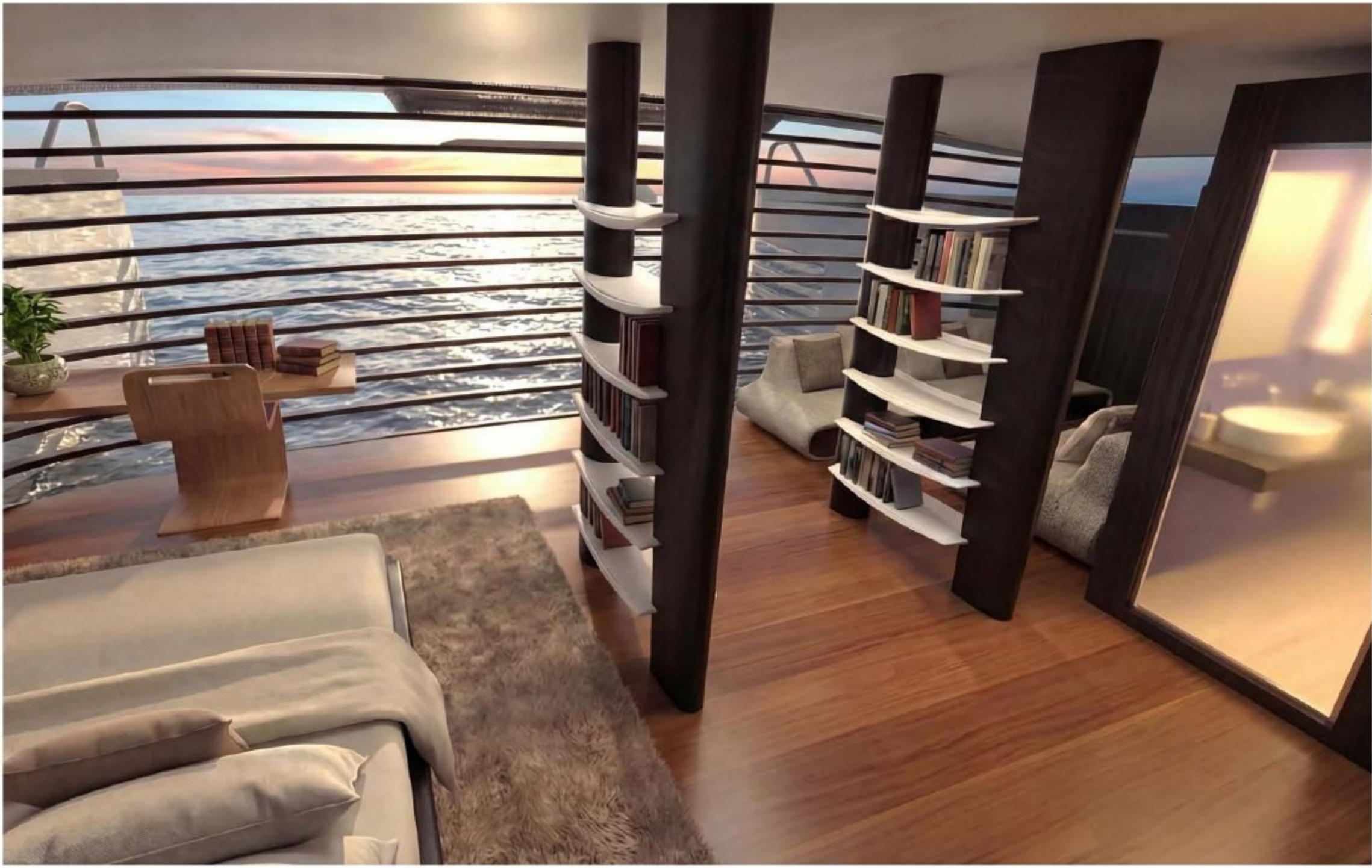
Interieur design



Kitchen and lounge from the inside, spacious and modern



Dining room and social area inside the catamaran



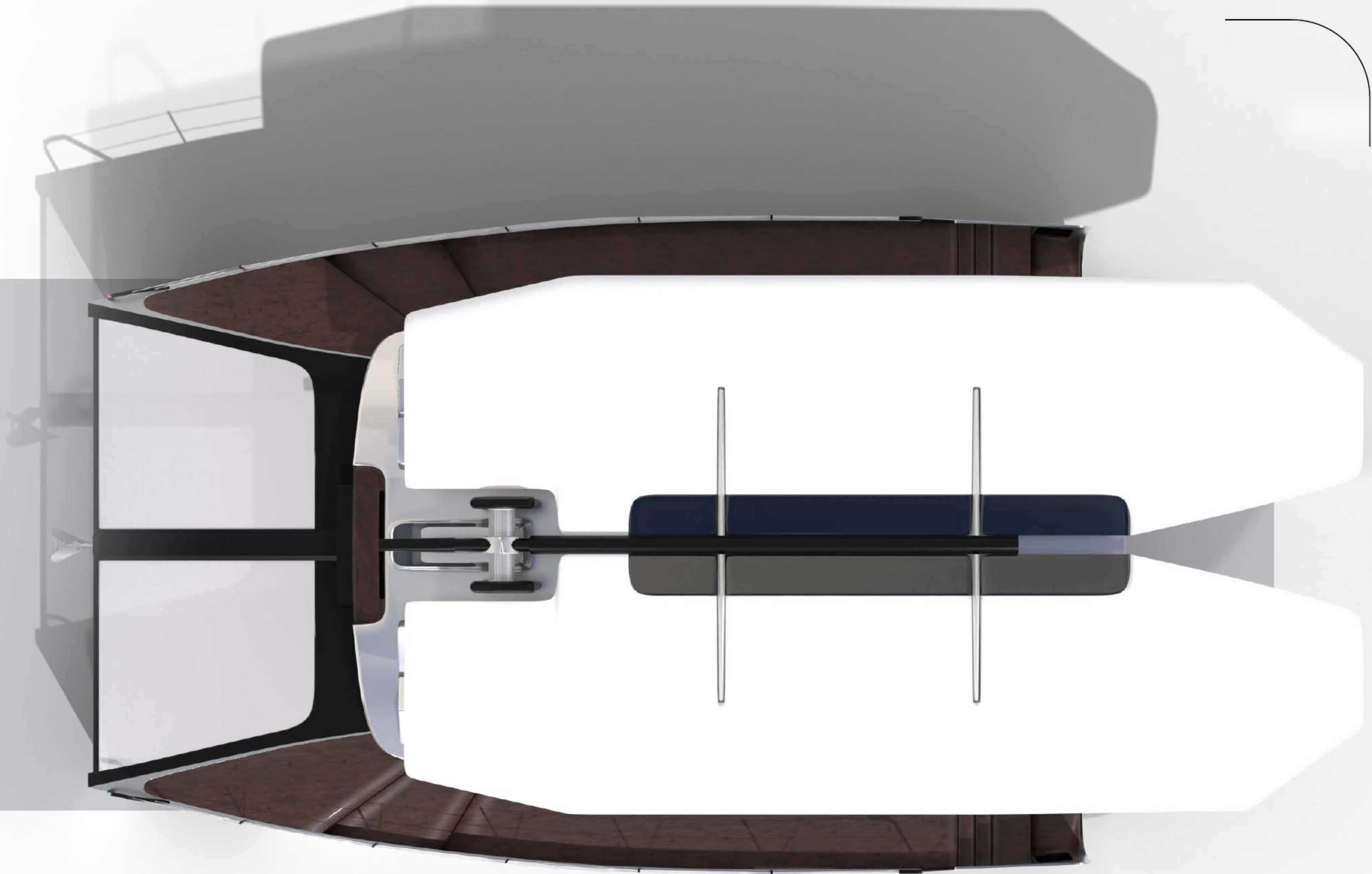
Large owner's cabin, located in front of the saloon rather than in the hull as is usually the case. A large panoramic window provides a breathtaking view.

Project video JV 55 – Insights into Henning's life today

Henning is now 56 and has purchased the JV55 catamaran. Final result of my JV55 design concept as part of my bachelor's thesis.

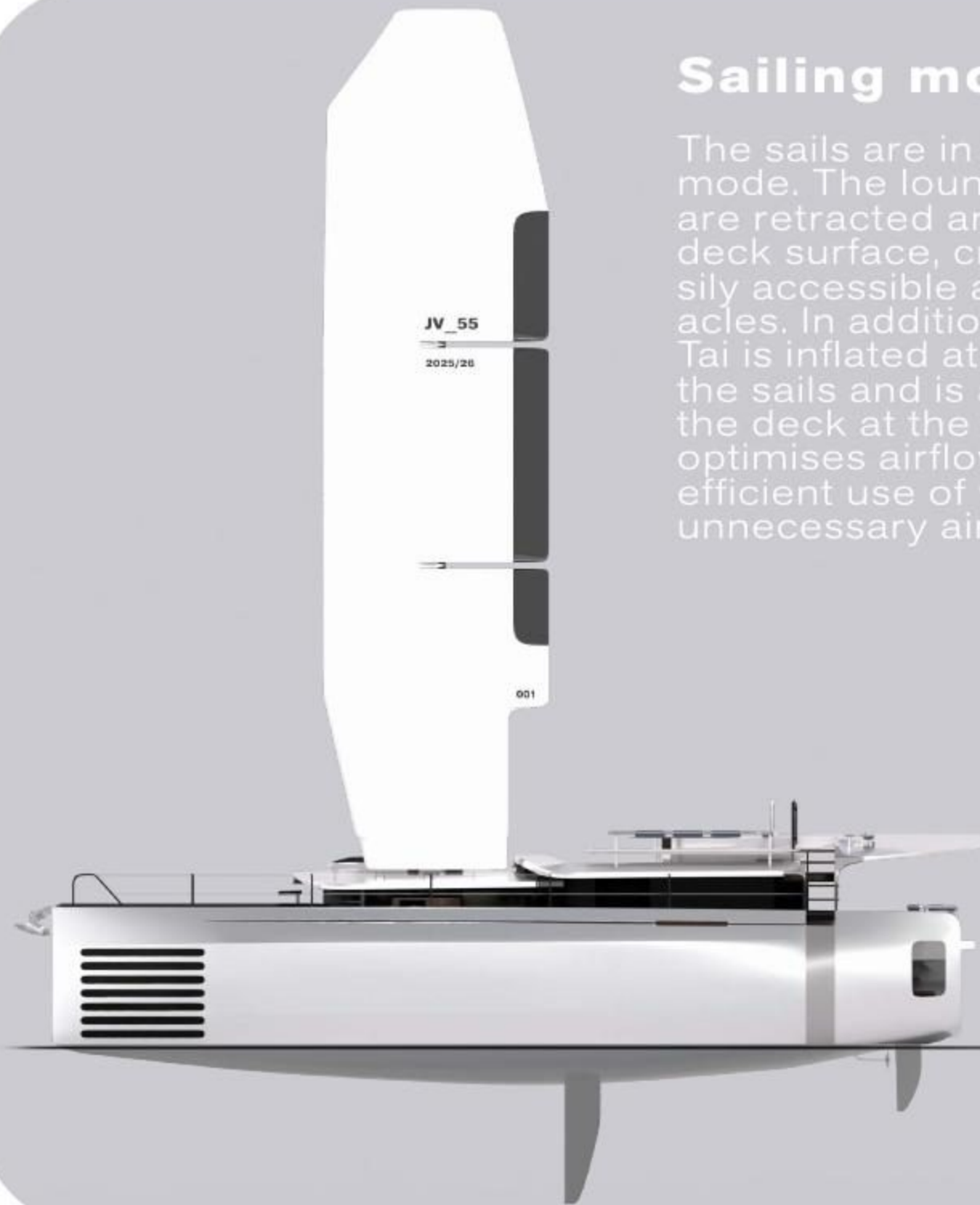


3D - **Renderings**



Sailing mode

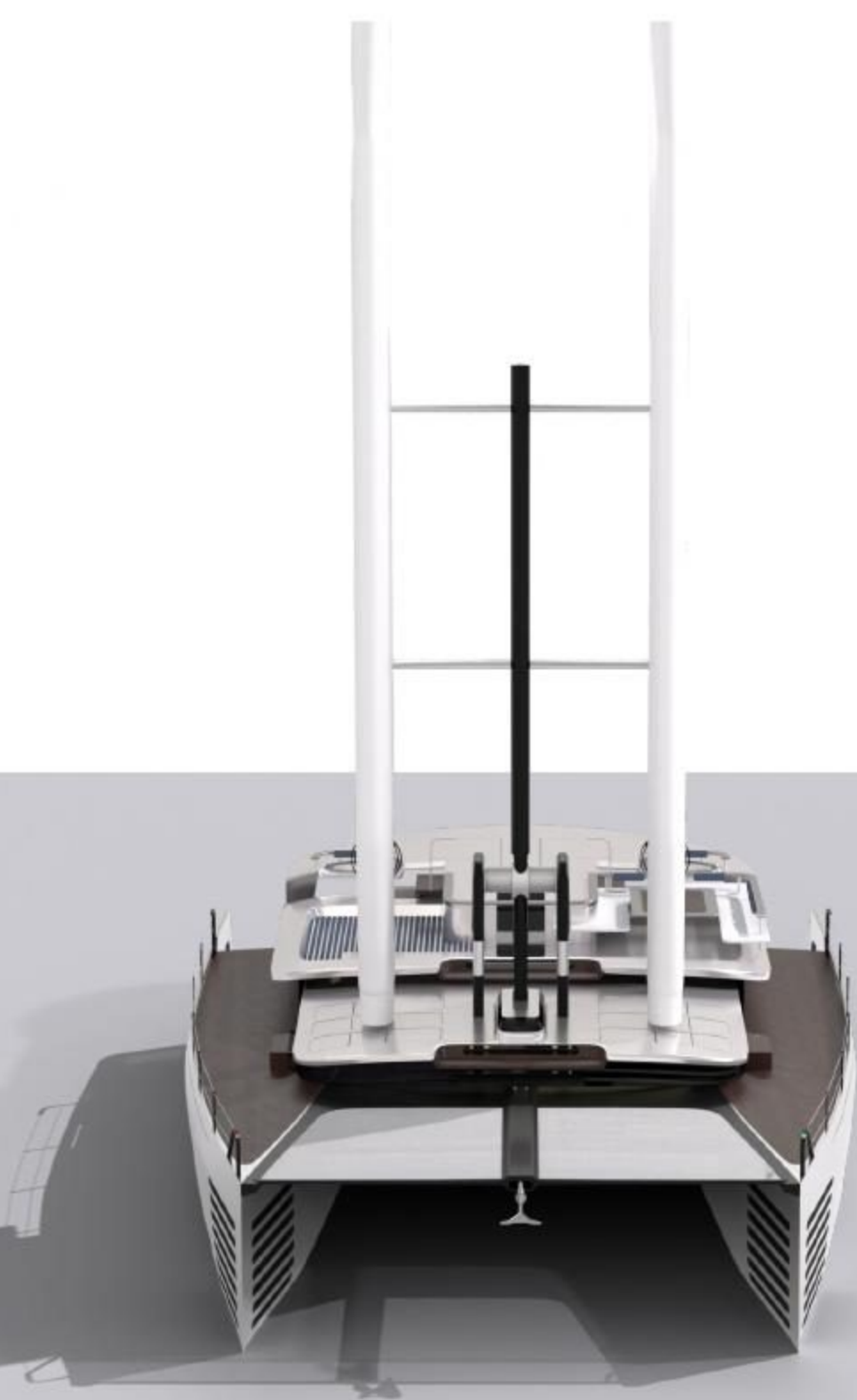
The sails are in the raised sail mode. The loungers and table are retracted and form part of the deck surface, creating a clear, easily accessible area without obstacles. In addition, the Inflatable Tai is inflated at the lower end of the sails and is almost flush with the deck at the top. This further optimises airflow, enables more efficient use of wind and prevents unnecessary air turbulence.



JV_55

2025/26

001

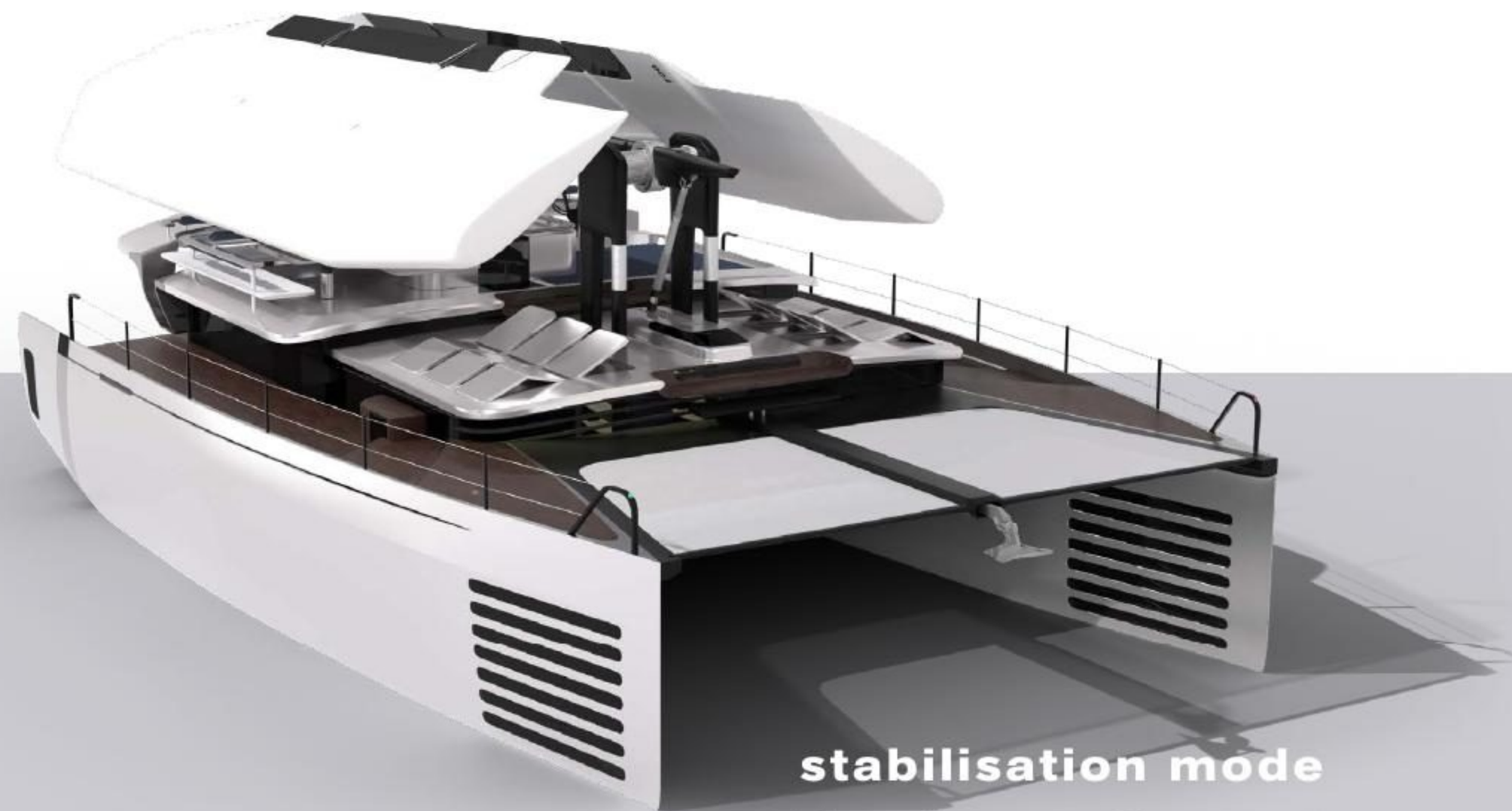


JV_55

2025/26

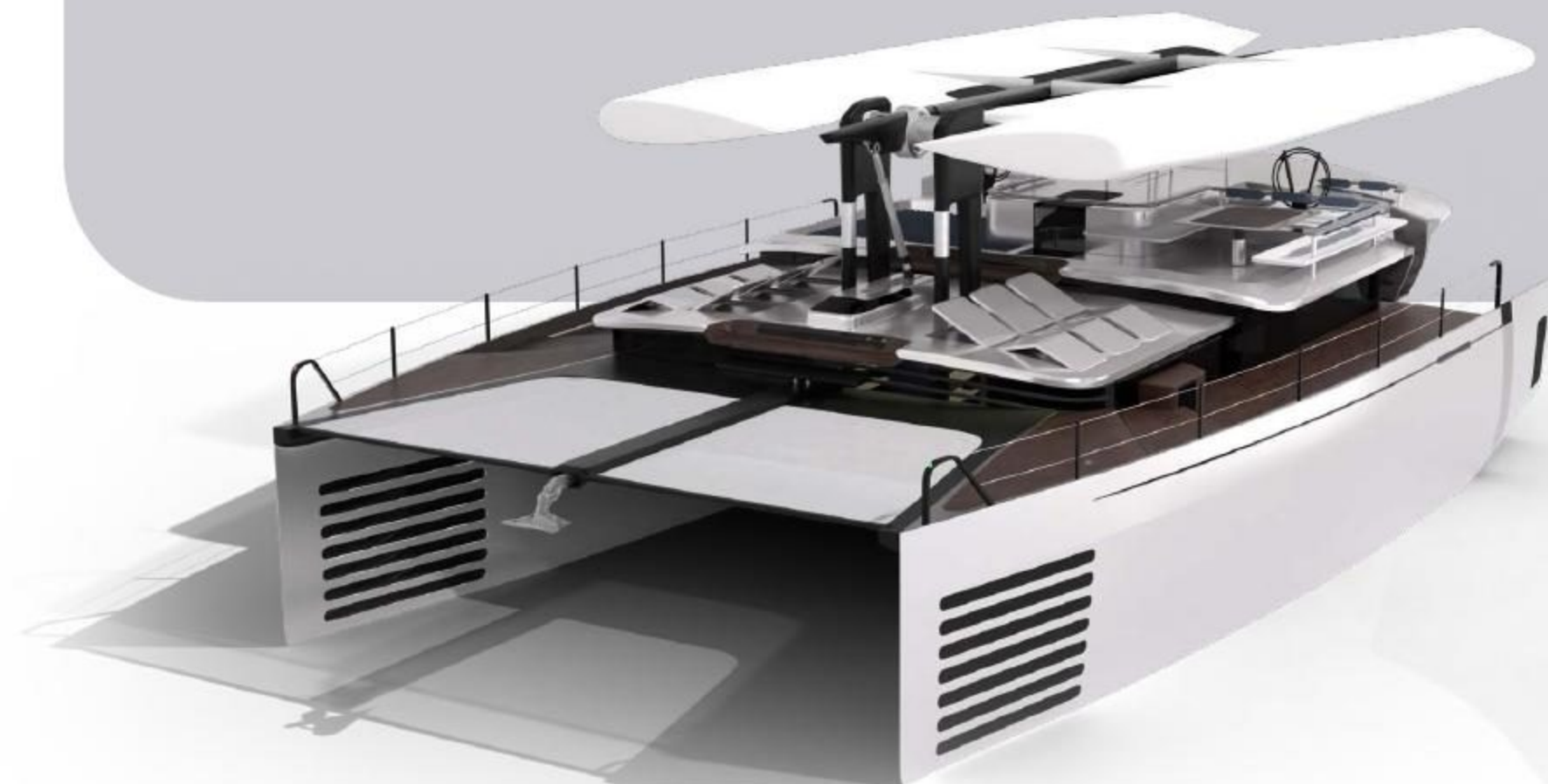
001





stabilisation mode

The sails are positioned so that the wind hits the sail surfaces directly. Underflow is avoided, which further stabilises the catamaran in stronger winds.

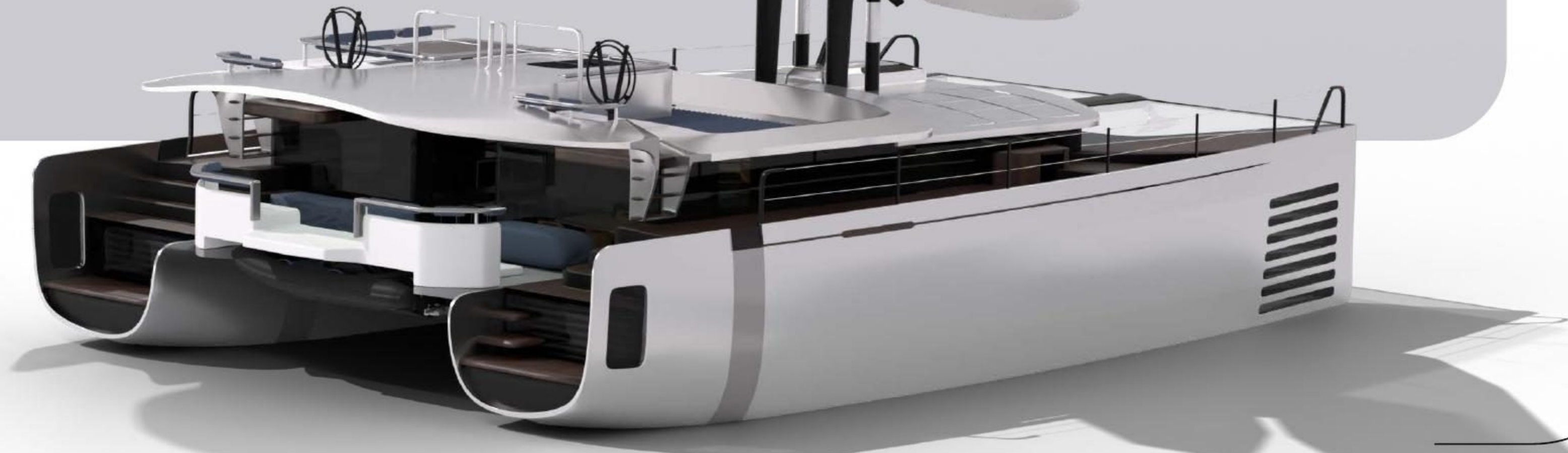


JV55



Movie mode

The sails can also be lowered partially, which is ideal for using the sunbathing area on the upper deck for a movie night. The film is projected directly onto the large sail area by a projector.



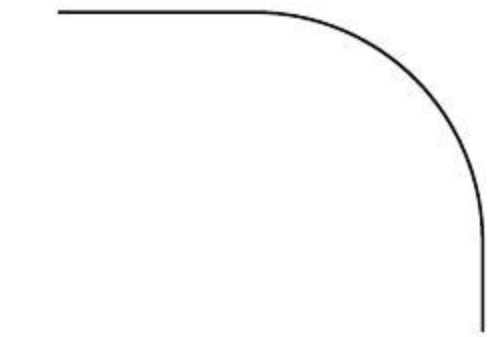
17



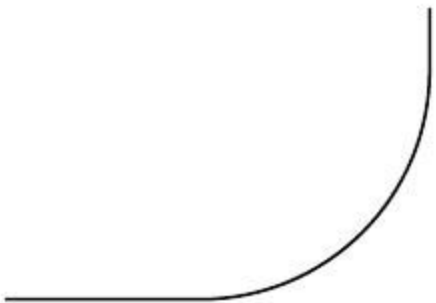
Non-sailing mode

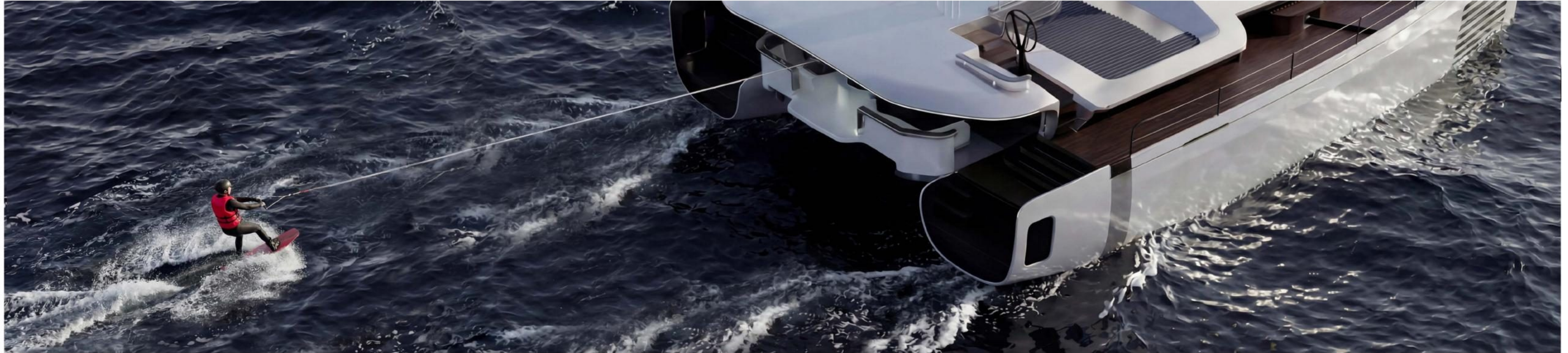
The sails are folded down, reducing the air draft. The sun loungers and table are extended, transforming the upper deck into a usable lounge and relaxation area with additional shade. The catamaran is fully usable. The extended sun loungers and raised table allow you to sit, eat and relax outdoors.

DM7

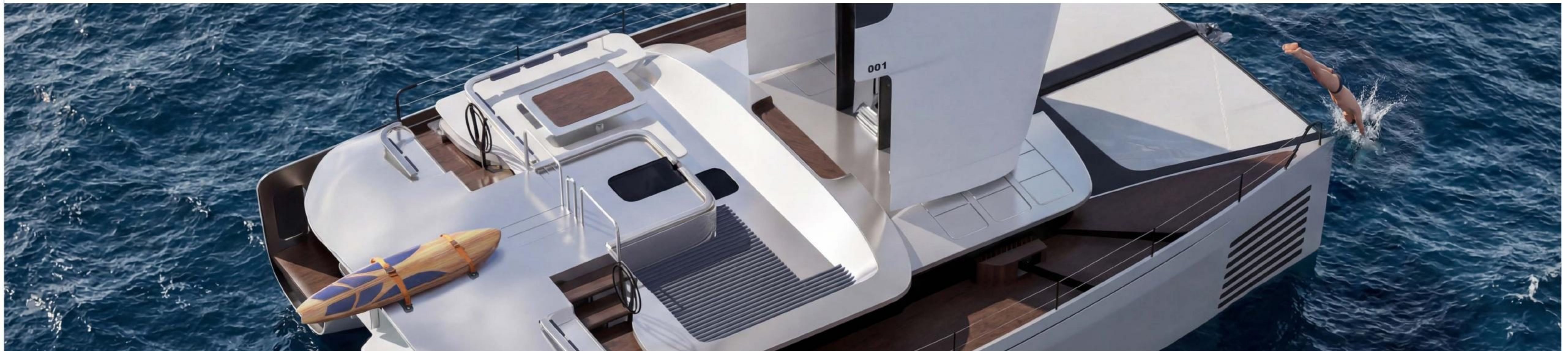


use case 1





use case 2





use case 3

use case 4





use case 5



...ready for an adventure ? :)