

A Designer Who Understands User Needs, Feasibility & Manufacturing



Owein Iveson



I'm **Owein**, nice to meet you!

British industrial designer, educated in Finland focused on scalable products, with experience integrating sustainability and EU regulatory requirements into manufacturable solutions through rapid prototyping and late-stage development delivering functional, user-centred solutions.



CV



LinkedIn

Patents:



"A re-usable cartridge (Ibrido)" - EPO2025

Experience:



Torggler S.r.l, Italy
Industrial Designer, (01/2026- Present)
Late Stage Designer for Regulations, Thesis Researcher, (08/2025-Present)
Design Development Team Lead, Intern, (09/2024-05/2025)



Aalto University, Finland
Marketer (08/2022-Present)
Teaching Assistant, Introduction to Design Research (08-12/2025)



Kaupunkiliikenne Oy (Helsinki Public Transport Authority)
Industrial and Secure Design, Thesis Researcher, (01-06/2024)



Posti Palvelut Oy, Finland
Strategic Designer, Contracted Worker, (09-11/2022)

Education:



Aalto University, Finland
Master's Programme in Collaborative and Industrial Design
2024-2026 GPA4.9/5
Bachelor's Programme in Design
(Minor: Sustainable Design in Entrepreneurship)
2021-2024 GPA4.4/5

Portfolio Contents

03-08



IBRIDO

A 21st century **sustainable silicone cartridge** complying with upcoming EU regulations. EPO Patent Pending.

Torggler

09-17



TURTLE MHU

A next generation Mobile Health Unit transforming remote healthcare in Northern Europe.

ETELÄ-KARJALAN
hyvinvointialue

LAB University of
Applied Sciences

18-21



STRATA

A timeless **stackable mug concept** designed for ergonomic use.

22-24



KINO

Multimodal Speaker inspired by 1970s architecture.

"Hybrid" IBRIDO

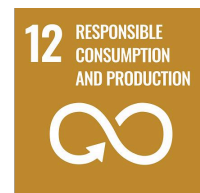
A Sustainable Silicone Cartridge

Ibrido is a **patent pending**, sustainable redesign of conventional plastic cartridges used for sealants, addressing a major recycling challenge which is: the inseparability of residue and packaging, while meeting the aims of upcoming EU regulations (ESPR & PPWR).

In collaboration with:

Torggler

Project SDGs:



Systems Used:



All visualisation by me

Project Positioning

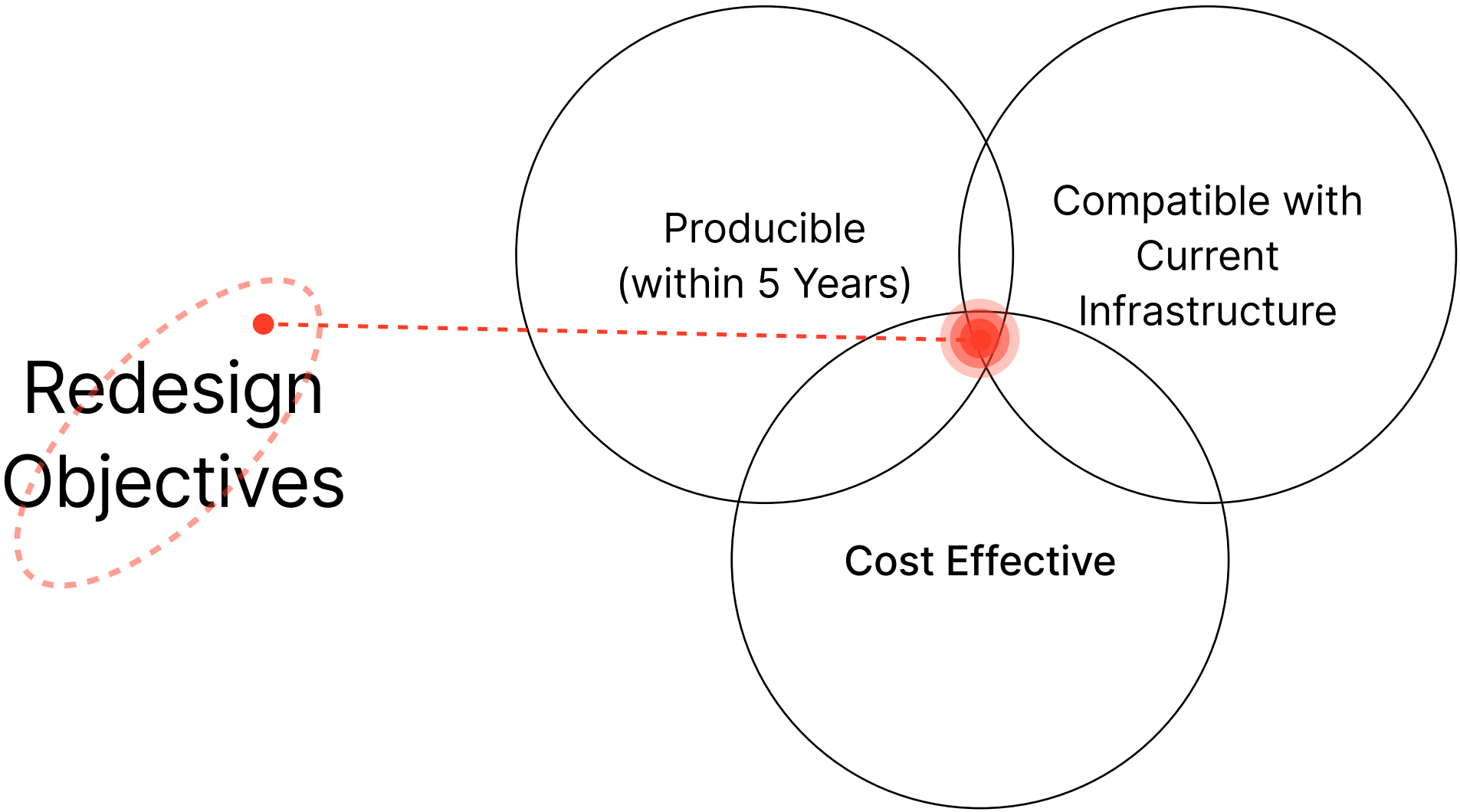
Need

600 Million non-recyclable plastic silicone cartridges go to landfill every single year, **equivalent to 30,000 tonnes**.

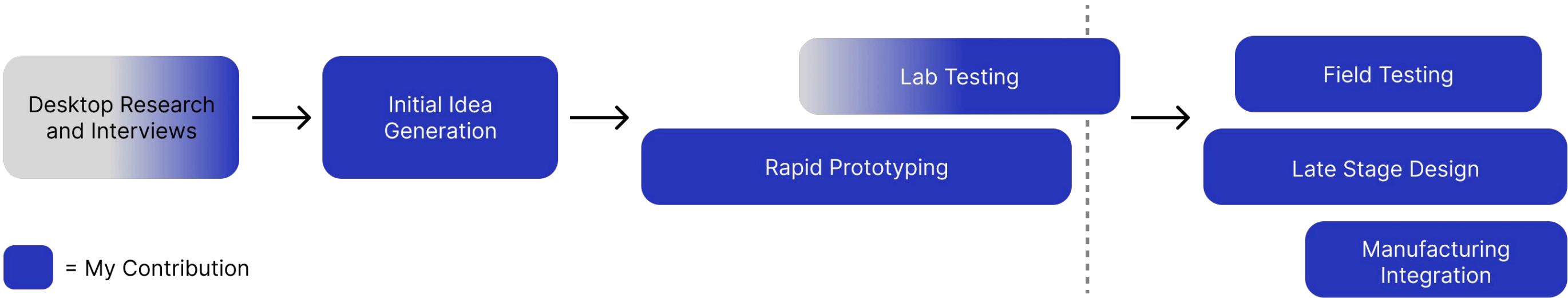
EU Regulations are forcing companies to design products complying with eco-design regulations.

Brief

Our objective was to challenge the single-use nature of plastic silicone packaging by **redesigning the standard silicone cartridge to reduce the amount of non-recyclable waste created**.



My Contribution to the Ibrido project:

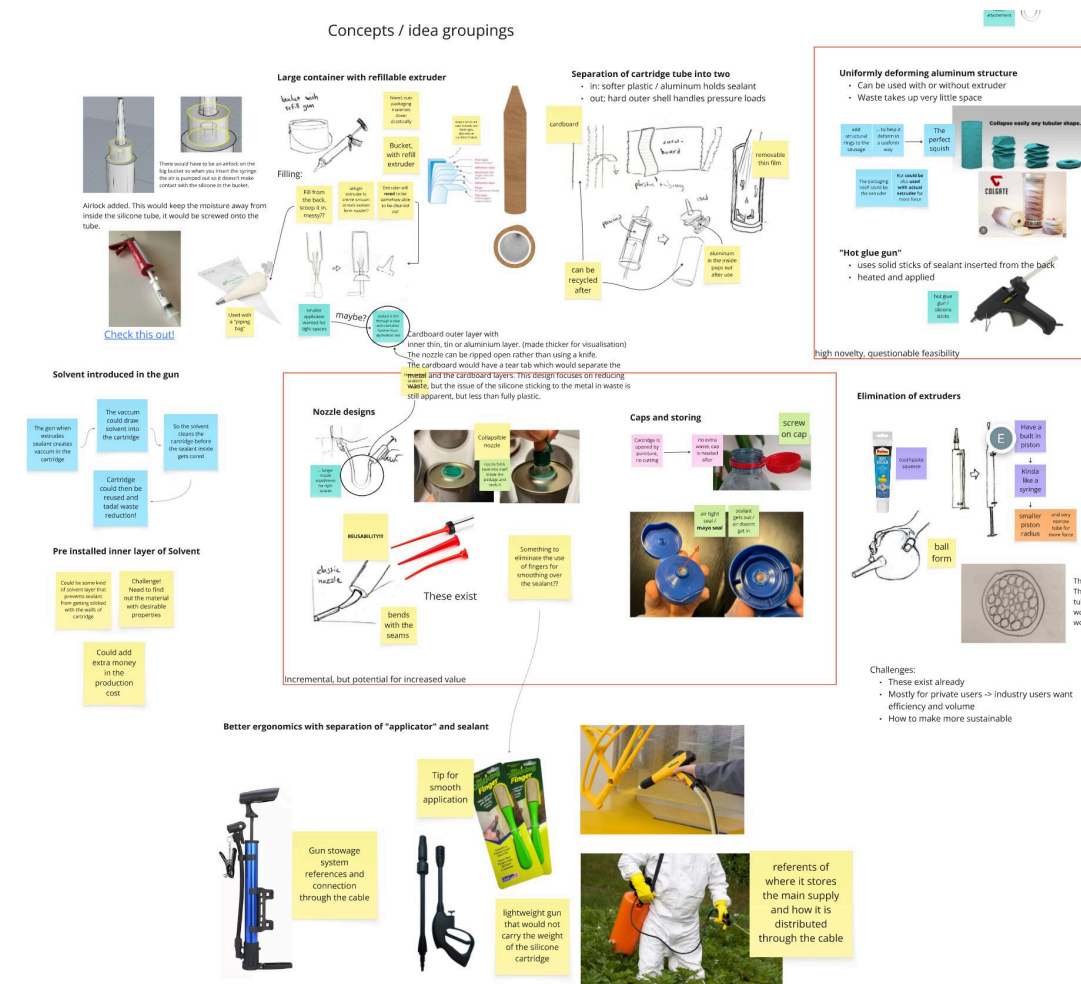


- Phase 1 Group work (2024-2025)**
- Oversaw the design direction and development of Ibrido
 - Generated ideas and rapid prototyped to TRL4

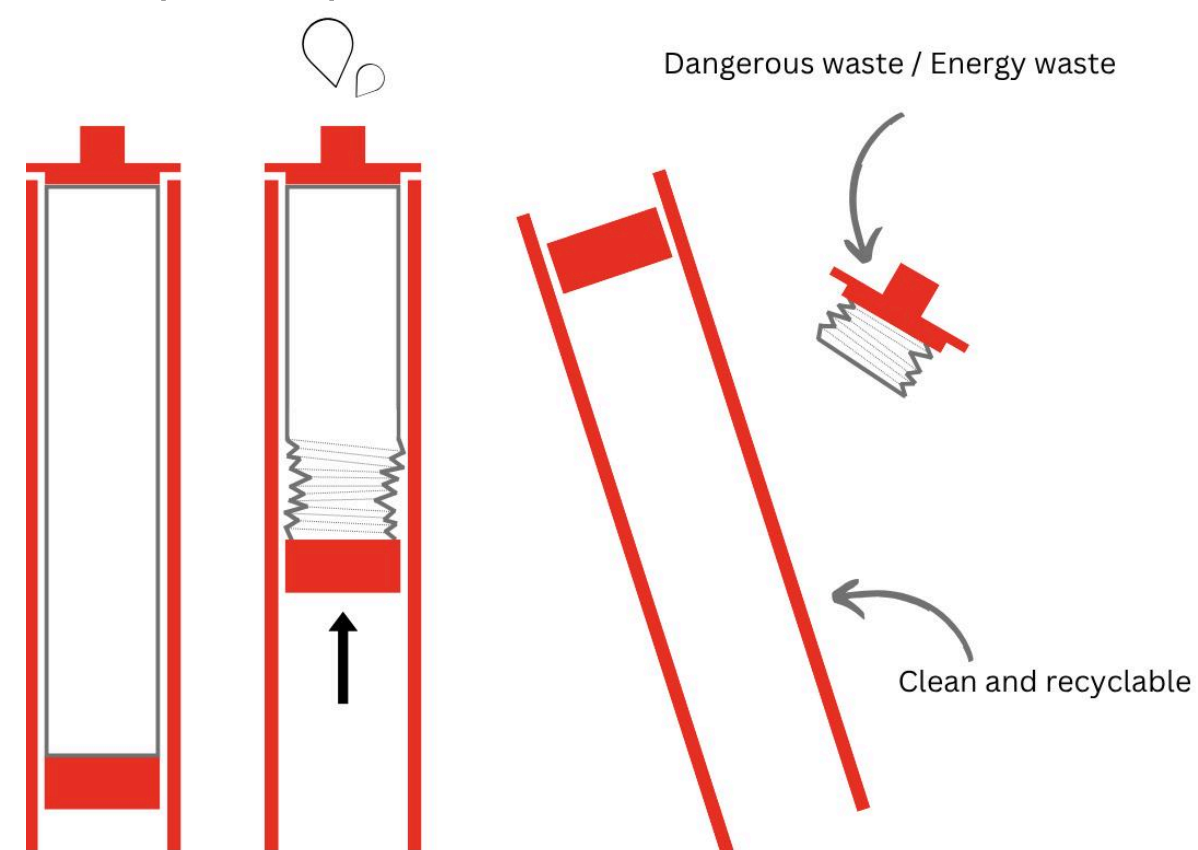
- Phase 2 Solo work (2025-2026)**
- Conducted the late stage design development beyond TRL4 to TRL7.
 - Made Ibrido compliant with ESPR and PPWR regulations.
 - Made Ibrido pre-production ready with injection moulding.

Phase 1: Ideation and Rapid Prototyping V1

Collaborative Idea Generation:



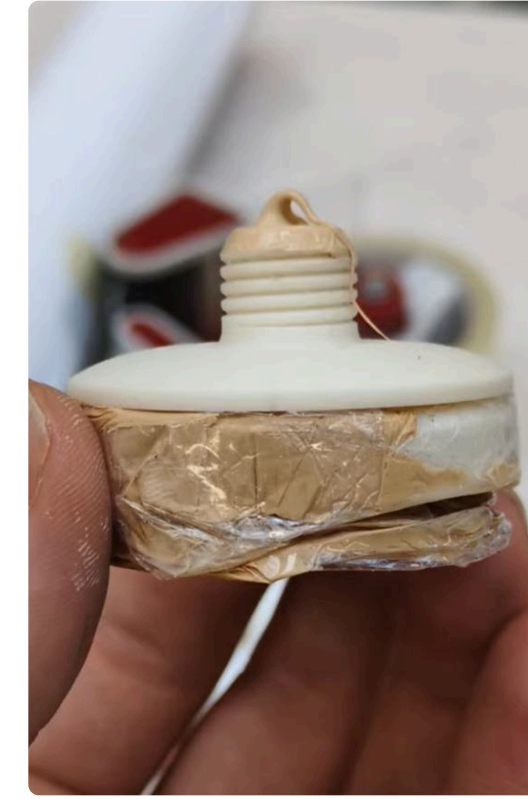
Concept Principle:



Rapid Prototyping (TRL2-3):



Cap Variant Testing



Bag Testing



SLS Printing

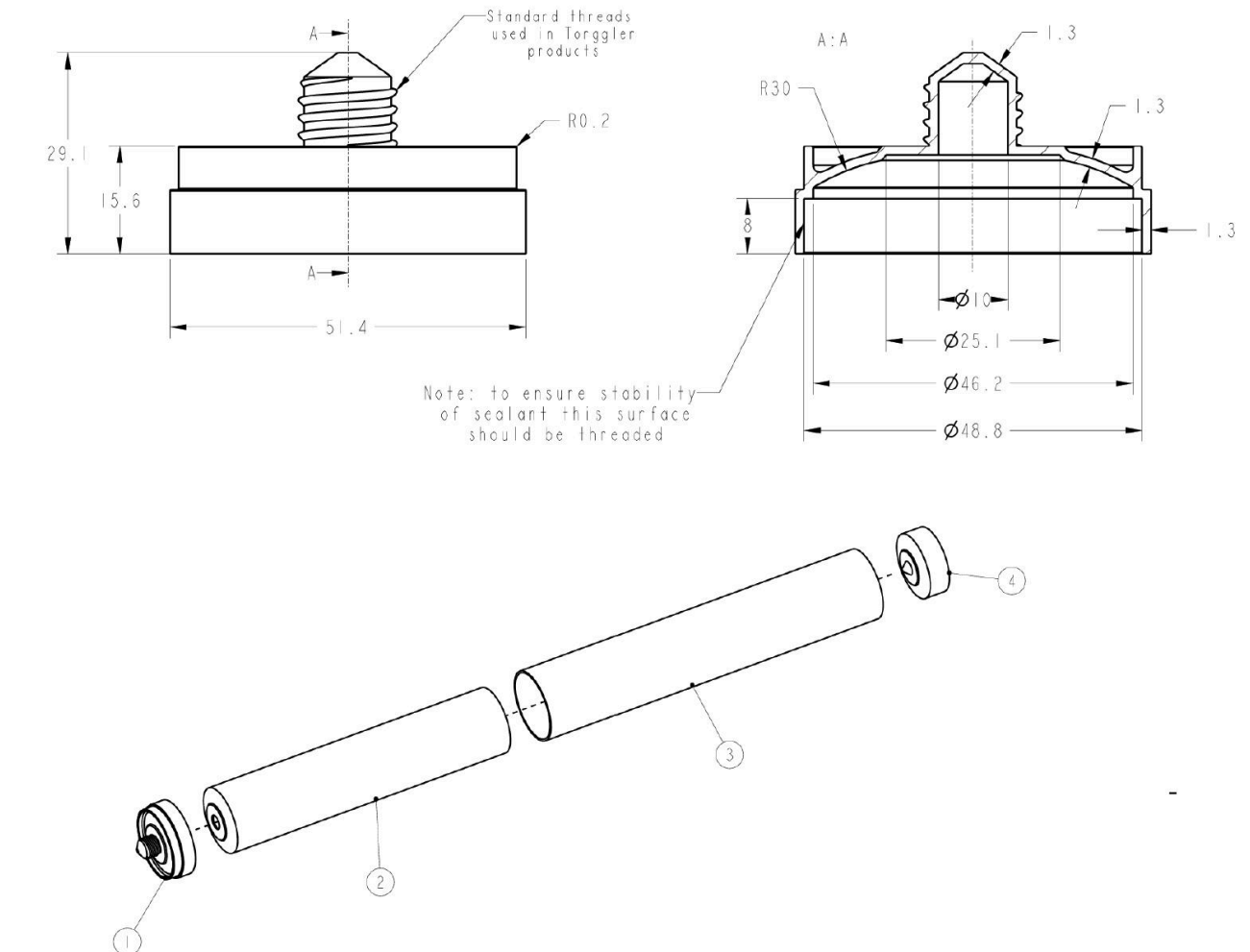
Final Model (TRL4):



V1 Top Cap



Functional Prototypes



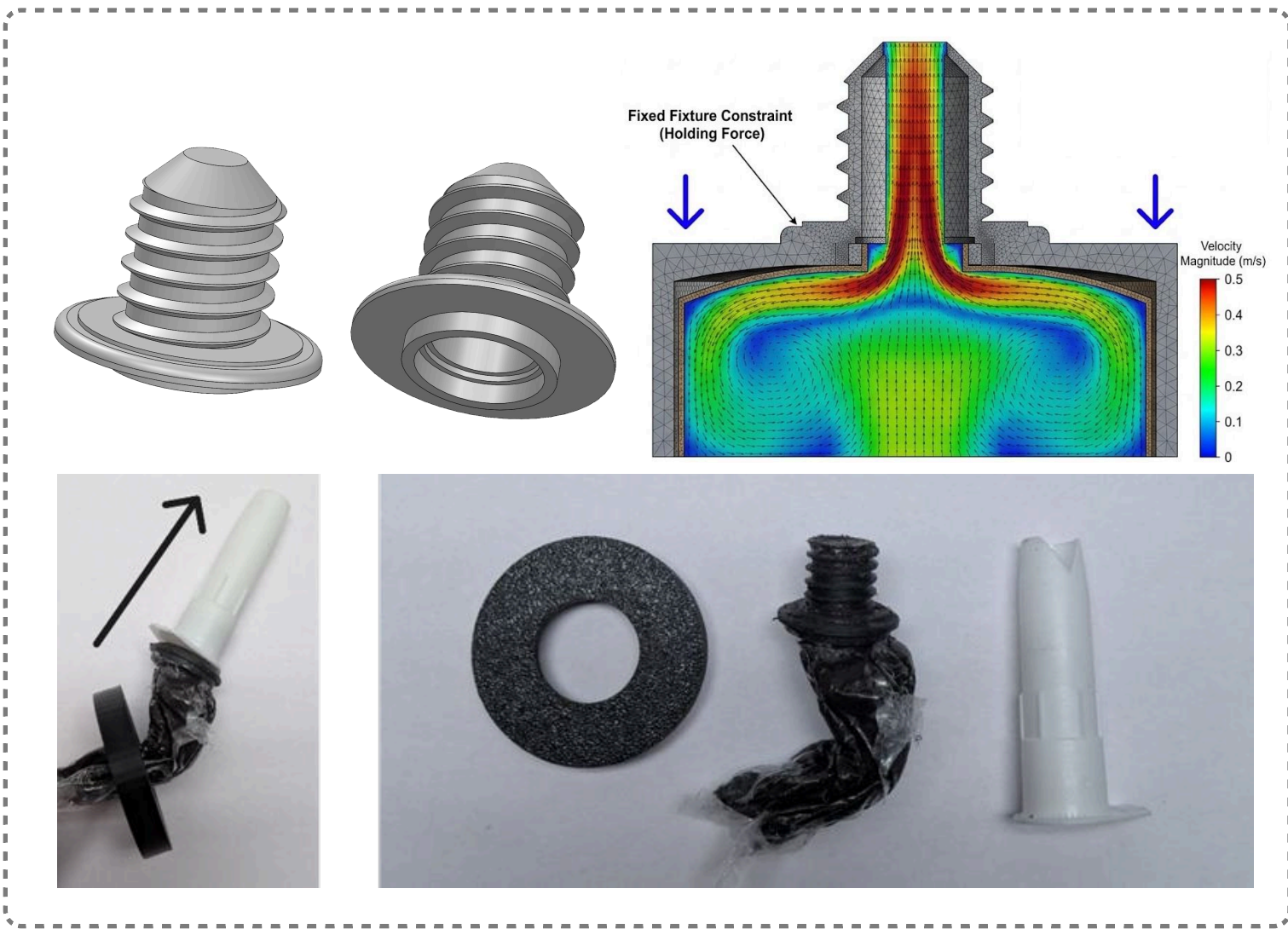
Phase 2: Design for Mass Production and Regulatory Compliance V2

After the PDP phase, I continued the Ibrido project independently, focusing on late-stage development. This phase aligned the concept with upcoming EU PPWR, and ESPR requirements by reducing plastic use and material waste.

Phase 1 Ibrido V1

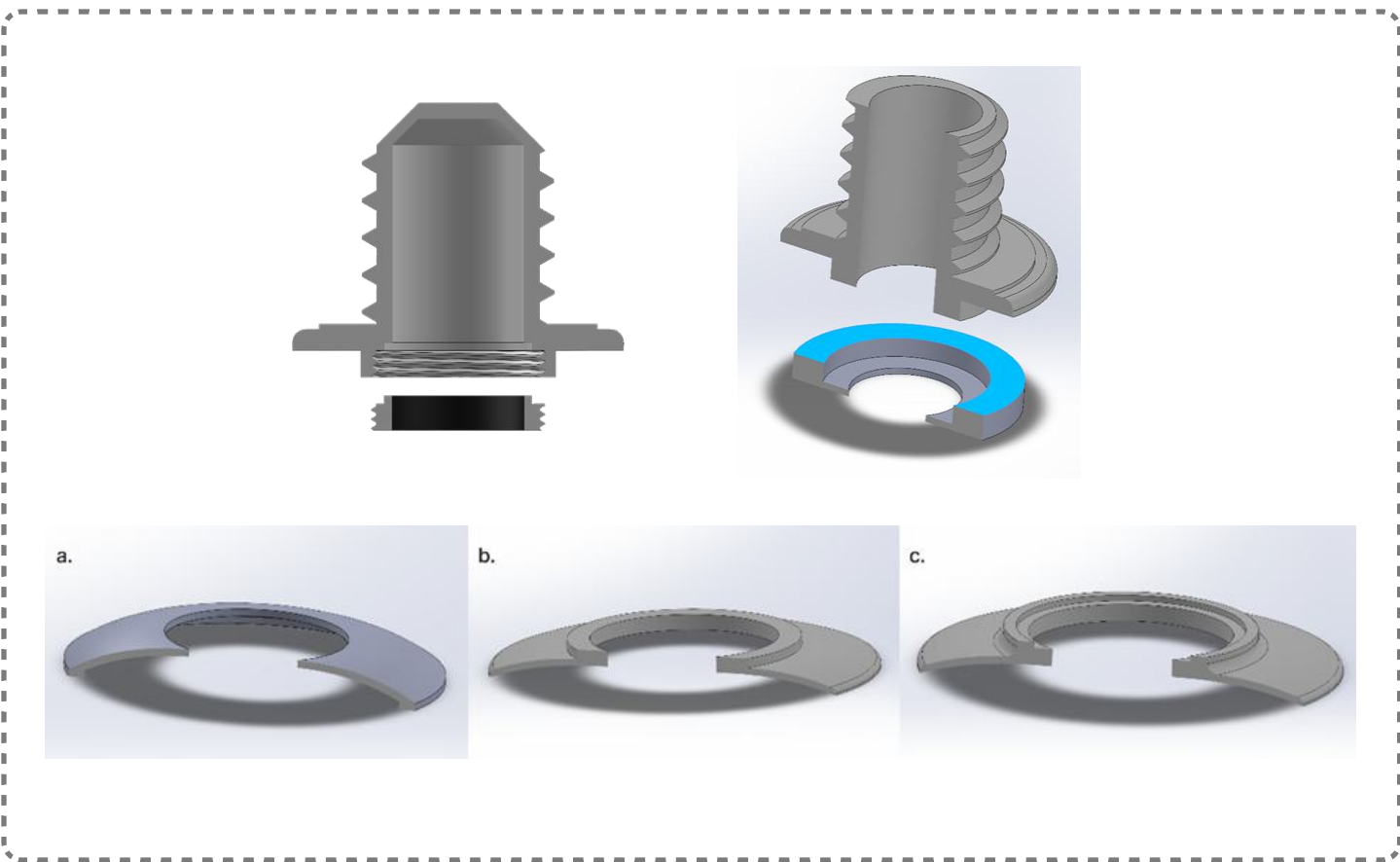


V2.1 & CFD



In line with ESPR and PPWR the redesigned top cap reduced material from 6.11 g to 1.5 g, a 74.47% reduction.

V2.2-2.6 (TRL5)

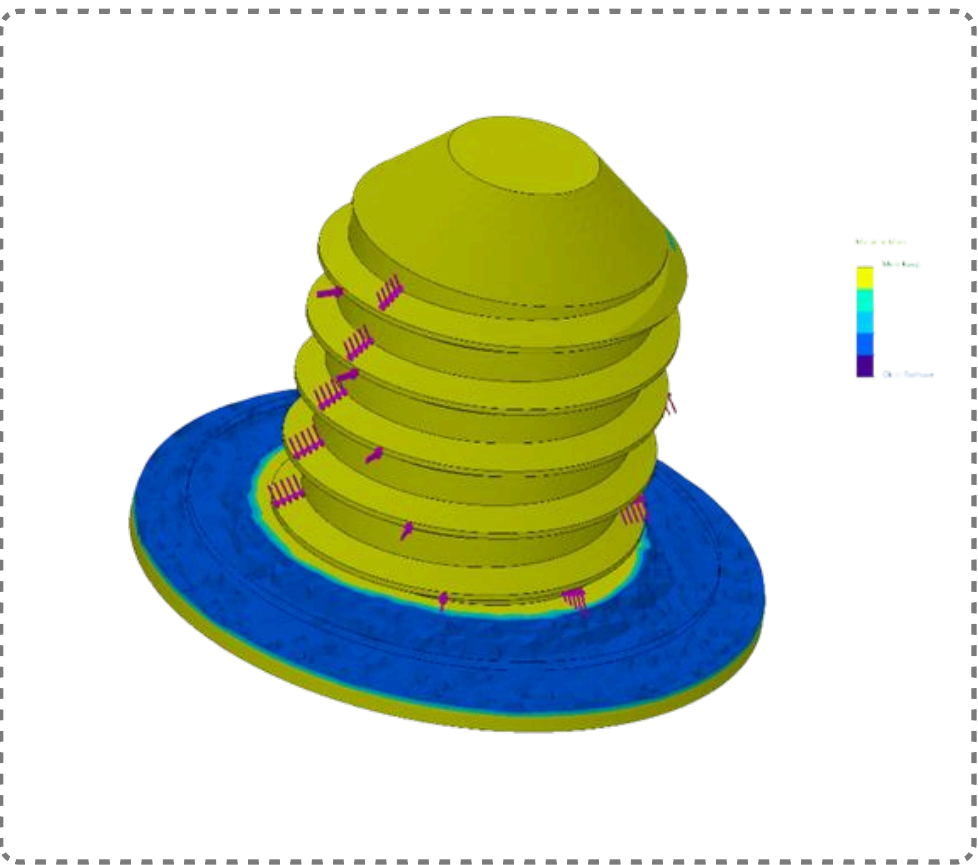


Exploring several attachment methods including:

- Threaded fitting
- Ultrasonic welding
- Snap-fit disc variants.

'C' snap fit performed best, showing consistent results across eleven extrusion tests.

V2.7 Topological Study (TRL6)

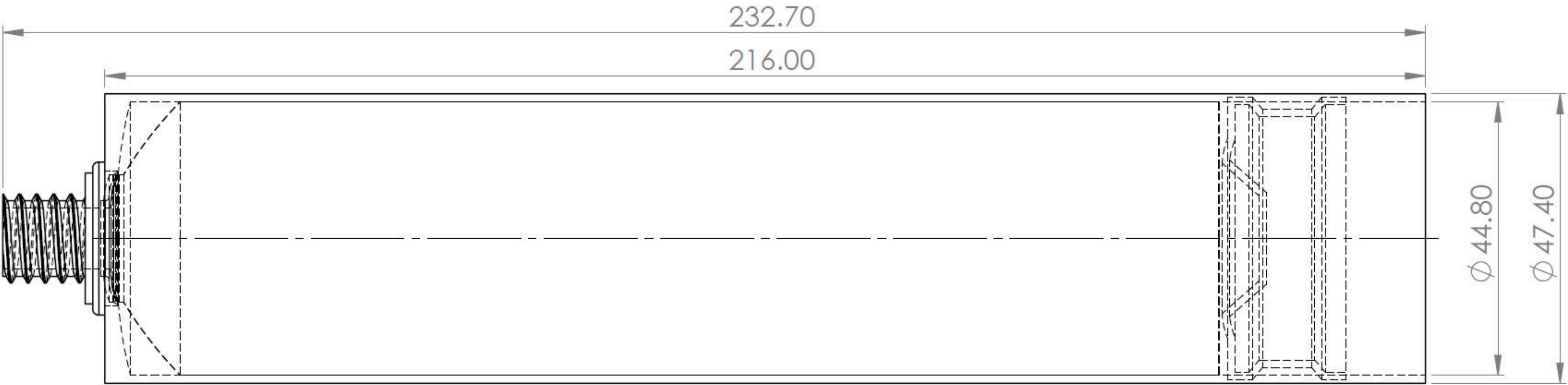
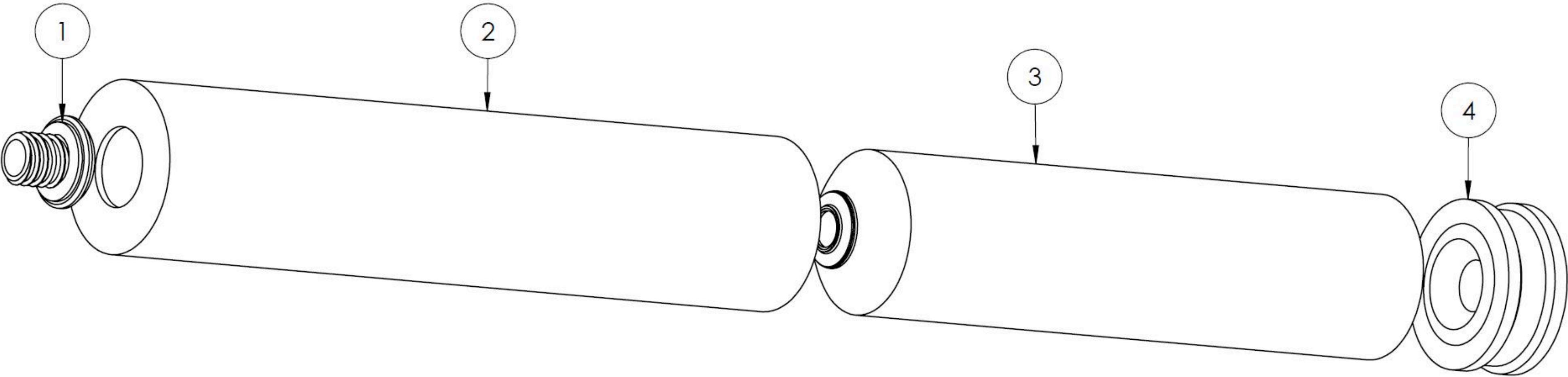


Topology optimisation reduced material use by a further 17%, lowering the rHDPE mass to 1.25 g.
The design now complies with PPWR and ESPR minimum necessary requirements.

Assembly and injection moulding process begins (TRL 7+)



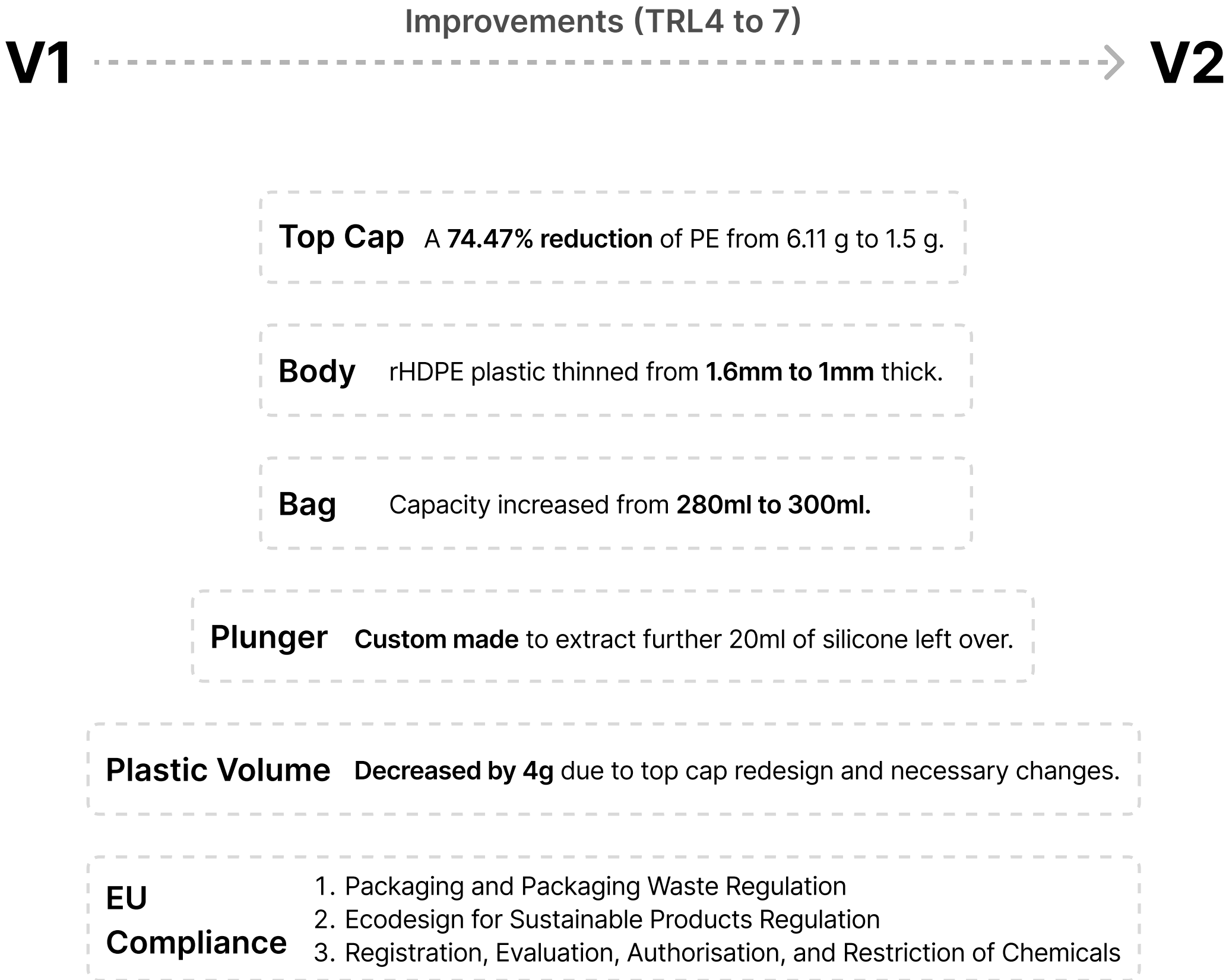
Component View of Ibrido System



- 1. Top Cap
- 2. Cardboard Body
- 3. Inner Bag
- 4. Plunger

Version 1 to Final Design

Ibrido progressed from Version 1 to Version 2 with the late stage design and preparation for industrialisation while staying within concept and patenting parameters.



TURTLE MHU

Mobile Health Unit

The Turtle MHU is a **speculative 2035** concept of **mobile healthcare delivery**, addressing the need for adaptable, rapid, and decentralised care through an expandable autonomous driving unit.

In collaboration with:



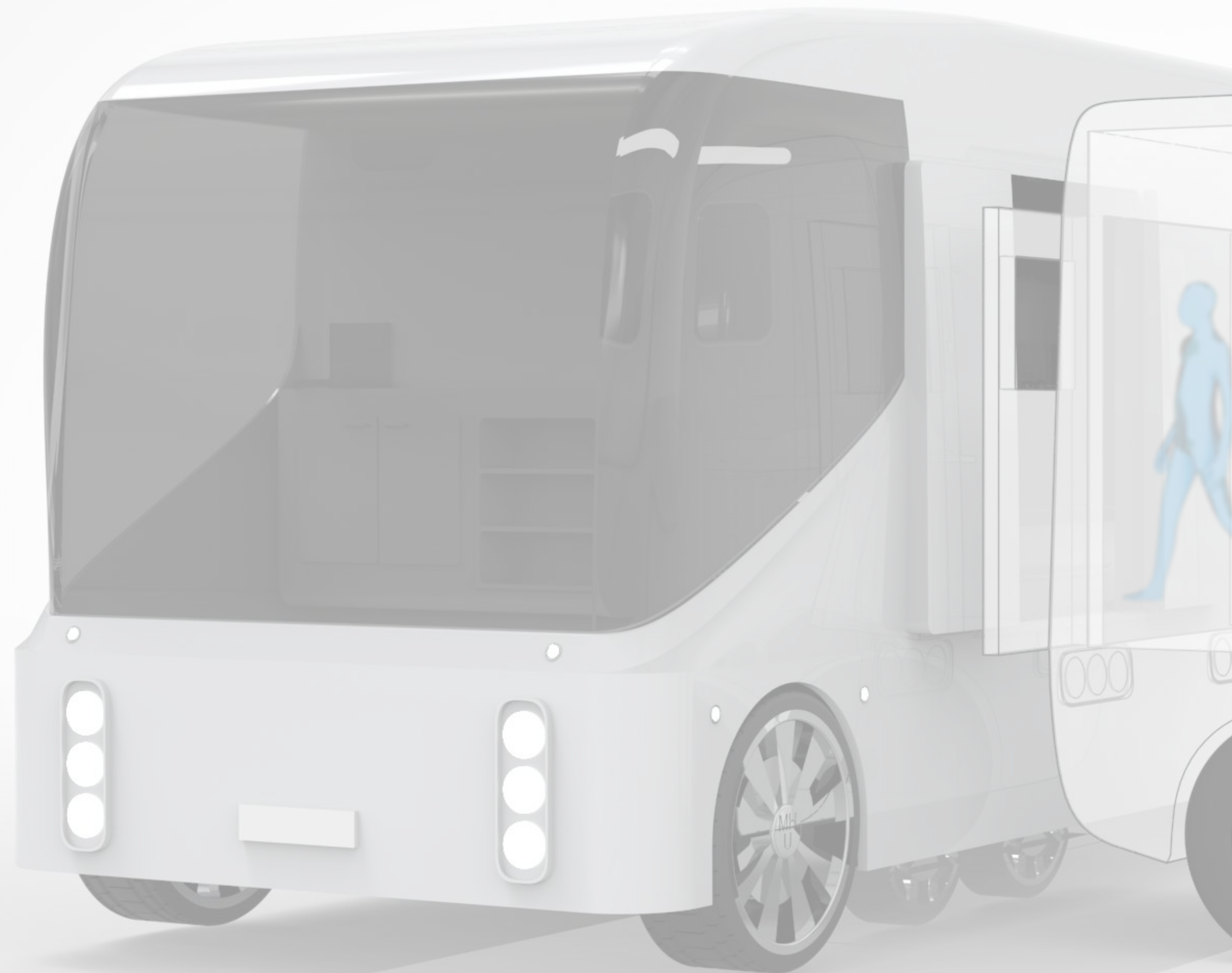
ETELÄ-KARJALAN
hyvinvointialue



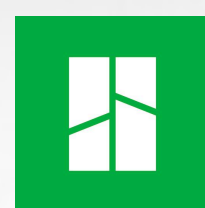
LAB University of
Applied Sciences

Team Project | 7 weeks | 3 members
My role: Team Lead / Industrial Designer
Team: Industrial Designer, Mechanical Engineer

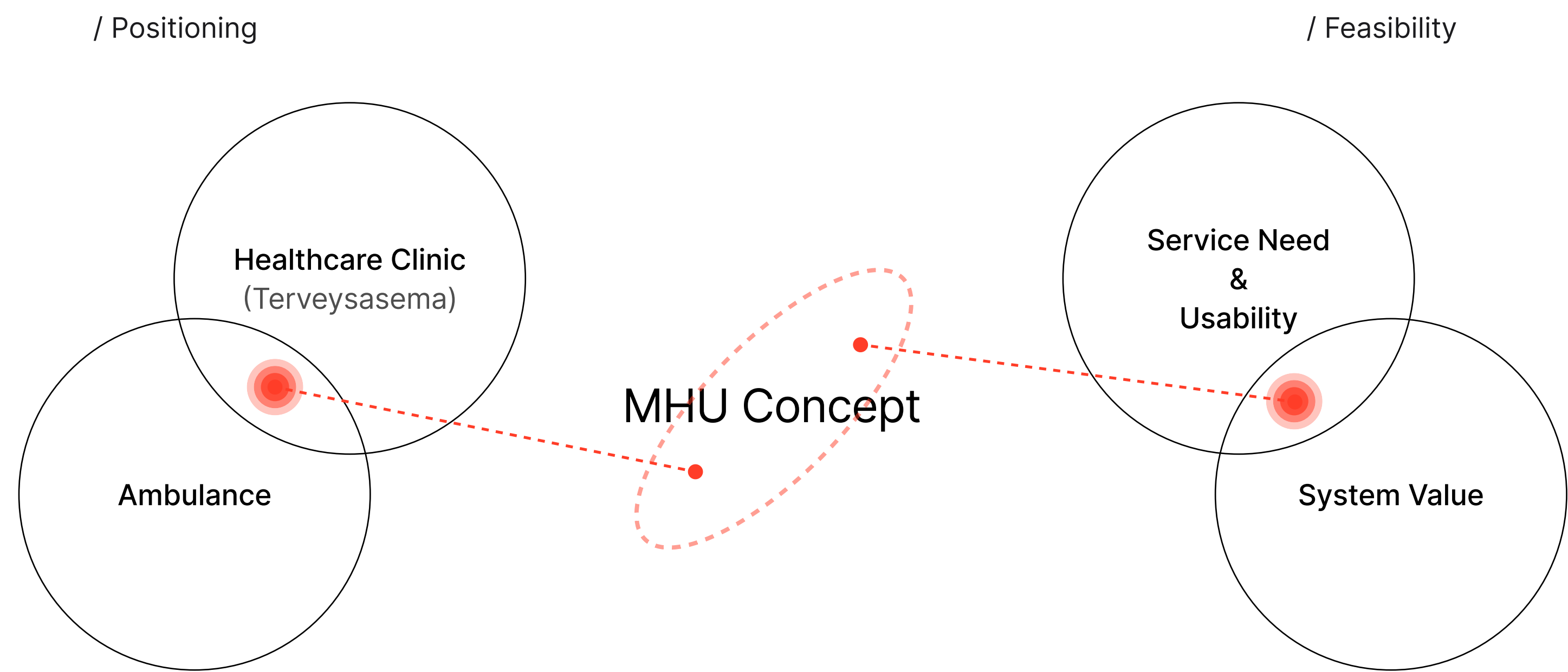
Project SDGs:



Systems Used:

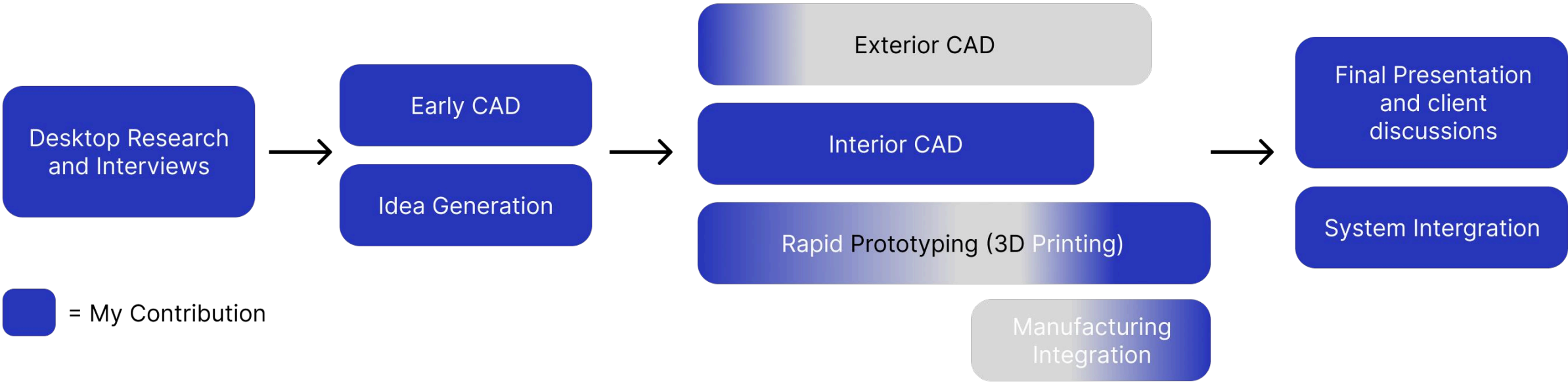


Project Positioning



- Brief** Develop a Mobile Health Unit to provide healthcare to remote areas in Northern Europe in 2035.
- MHU 2035** MHUs are transportable or relocatable structures that provide **flexible healthcare solutions** in response to a community's immediate and long term needs (Red Cross). By 2035, we envision a tightly knit, resource limited, yet technologically advanced Nordic society.

My Contribution to the project:



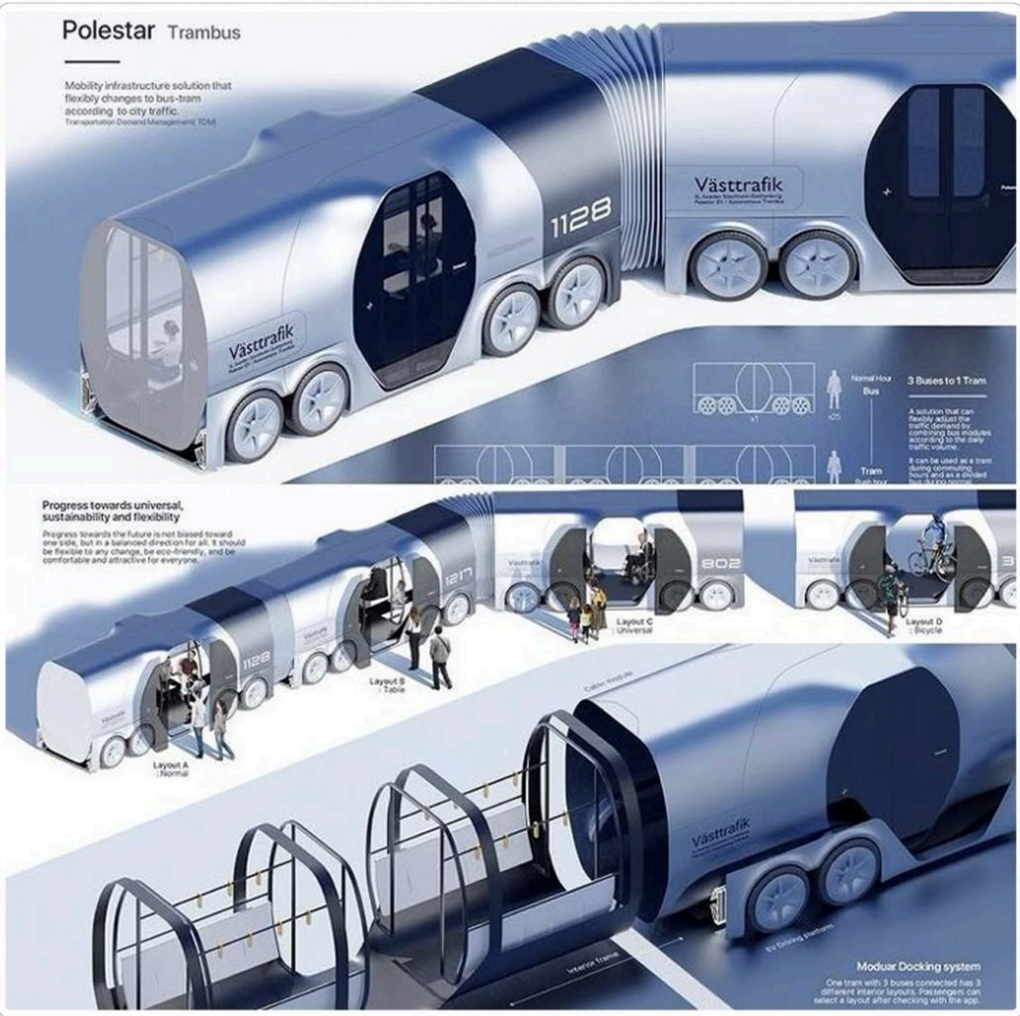
Moodboard and Ideation

To understand the context of 2035, I investigated future concepts for the healthcare and automotive sectors, paying attention to the overall system. I was inspired by:

Autonomous Driving

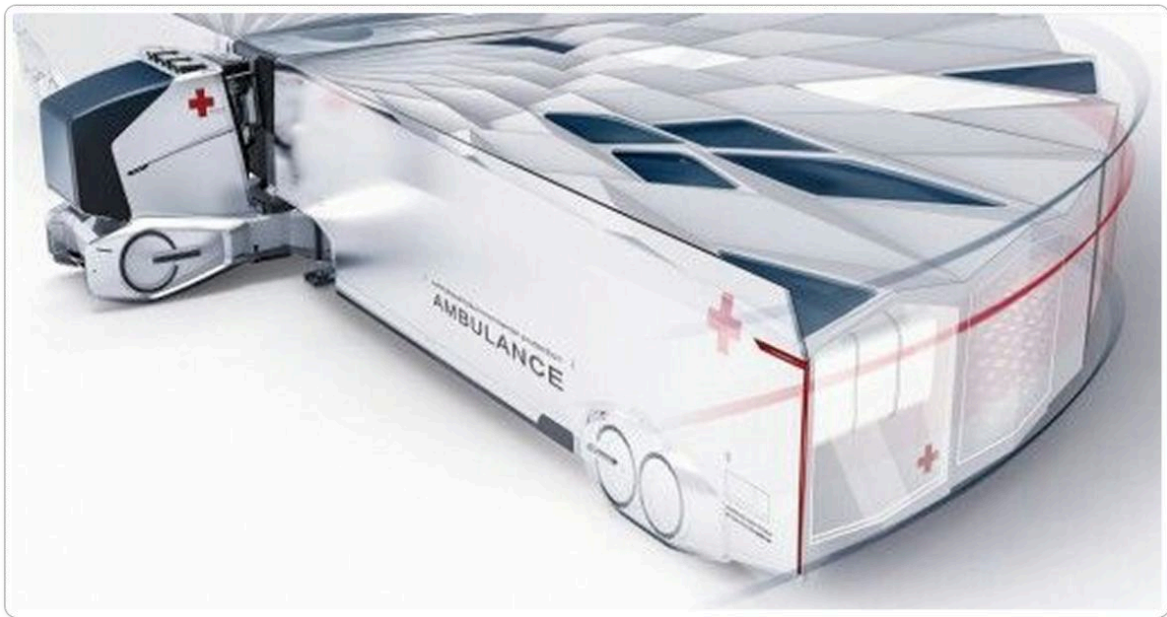
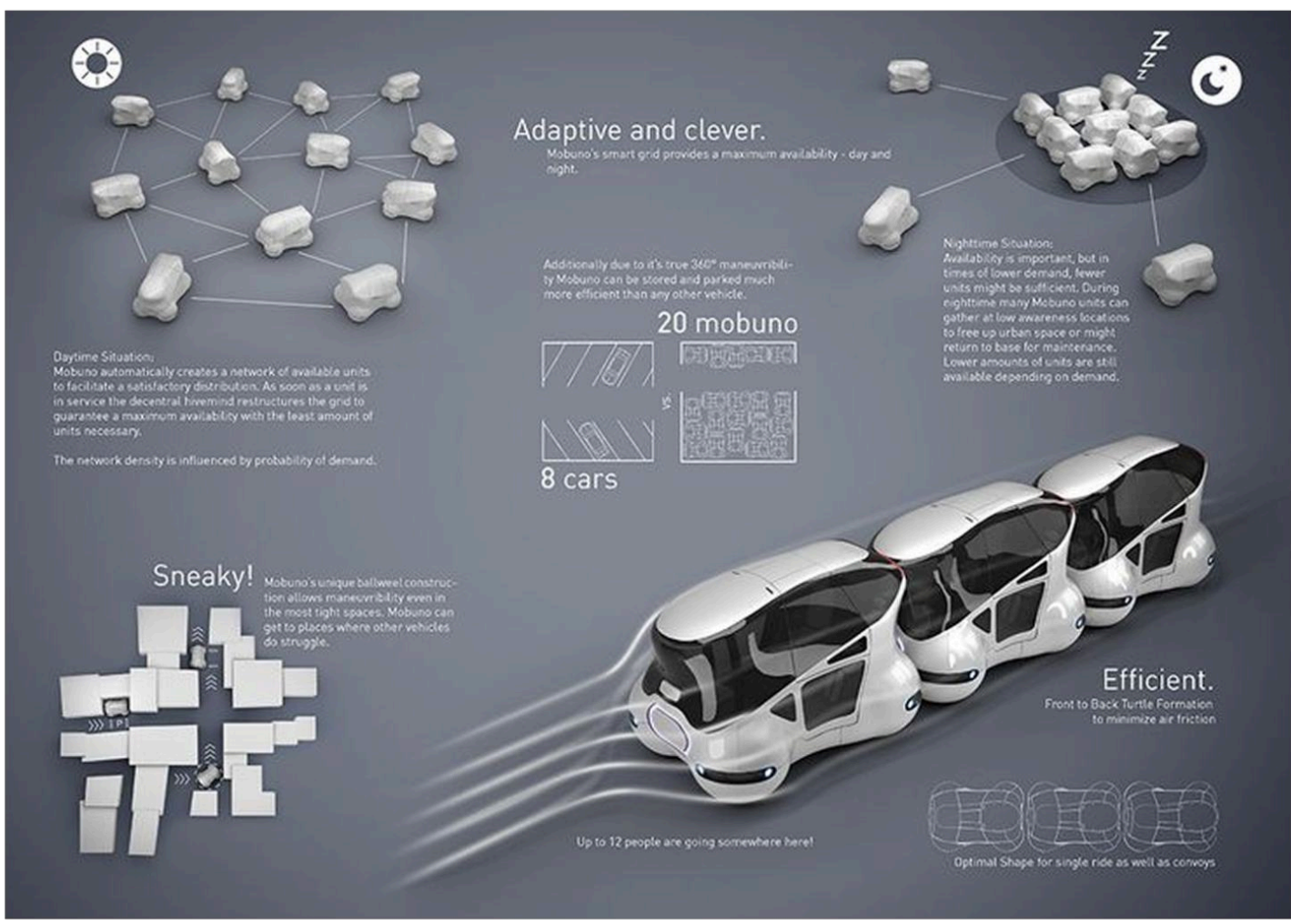


Healthcare workflow inspiration



Driving Pods

Medical automation and potential for convoys

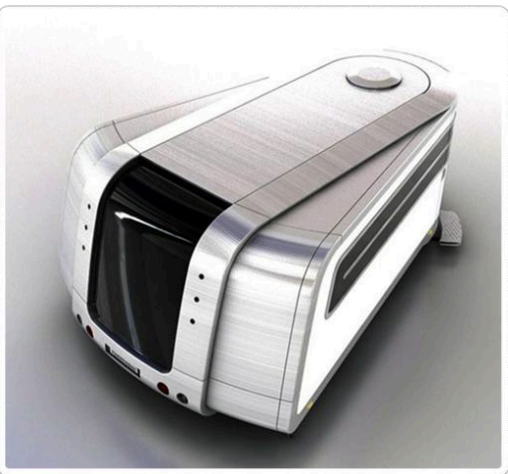


Increasing the usable interior space, essential due to EU vehicle size limits

Futuristic Hygienic Appeal



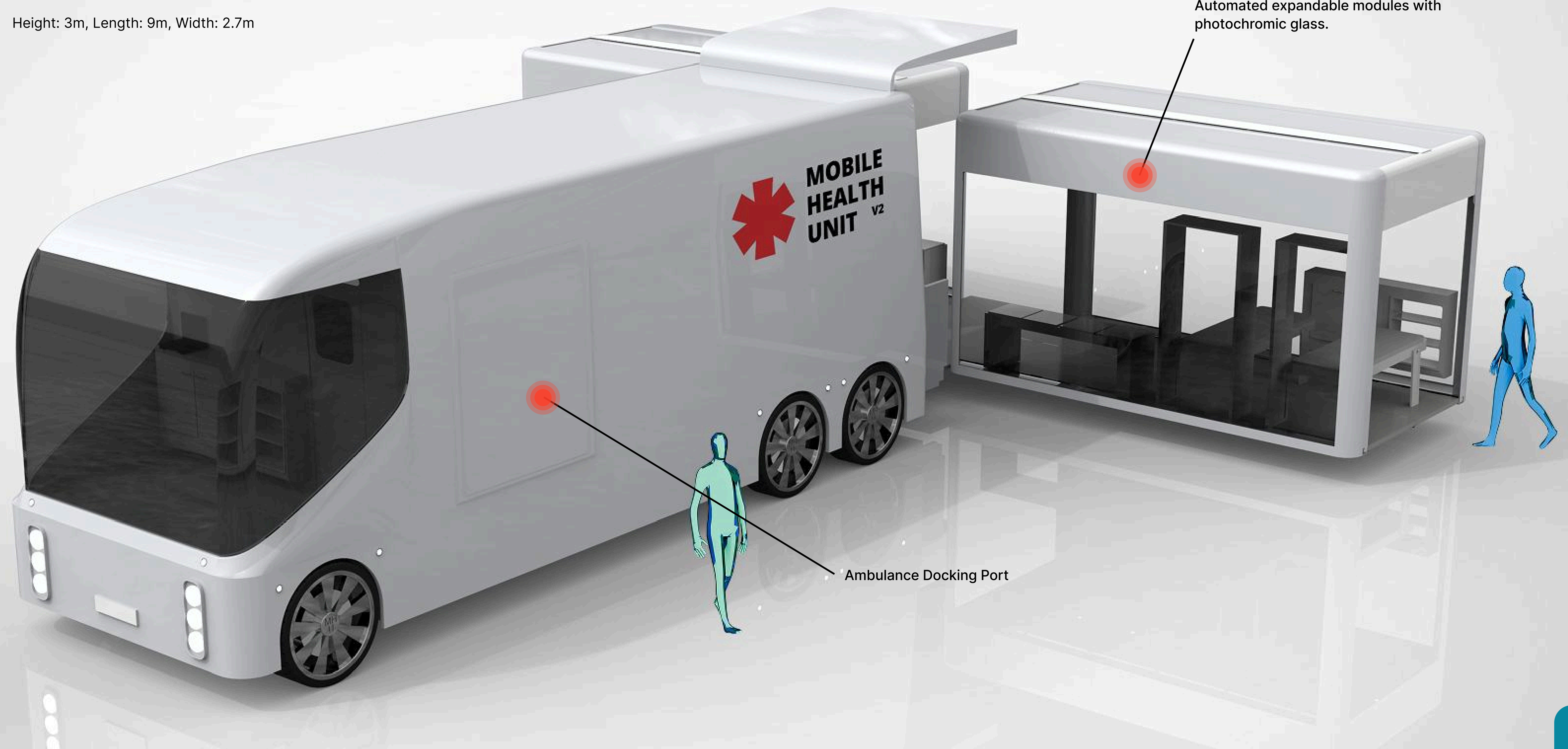
Expandable structures



Final Design MHU Concept

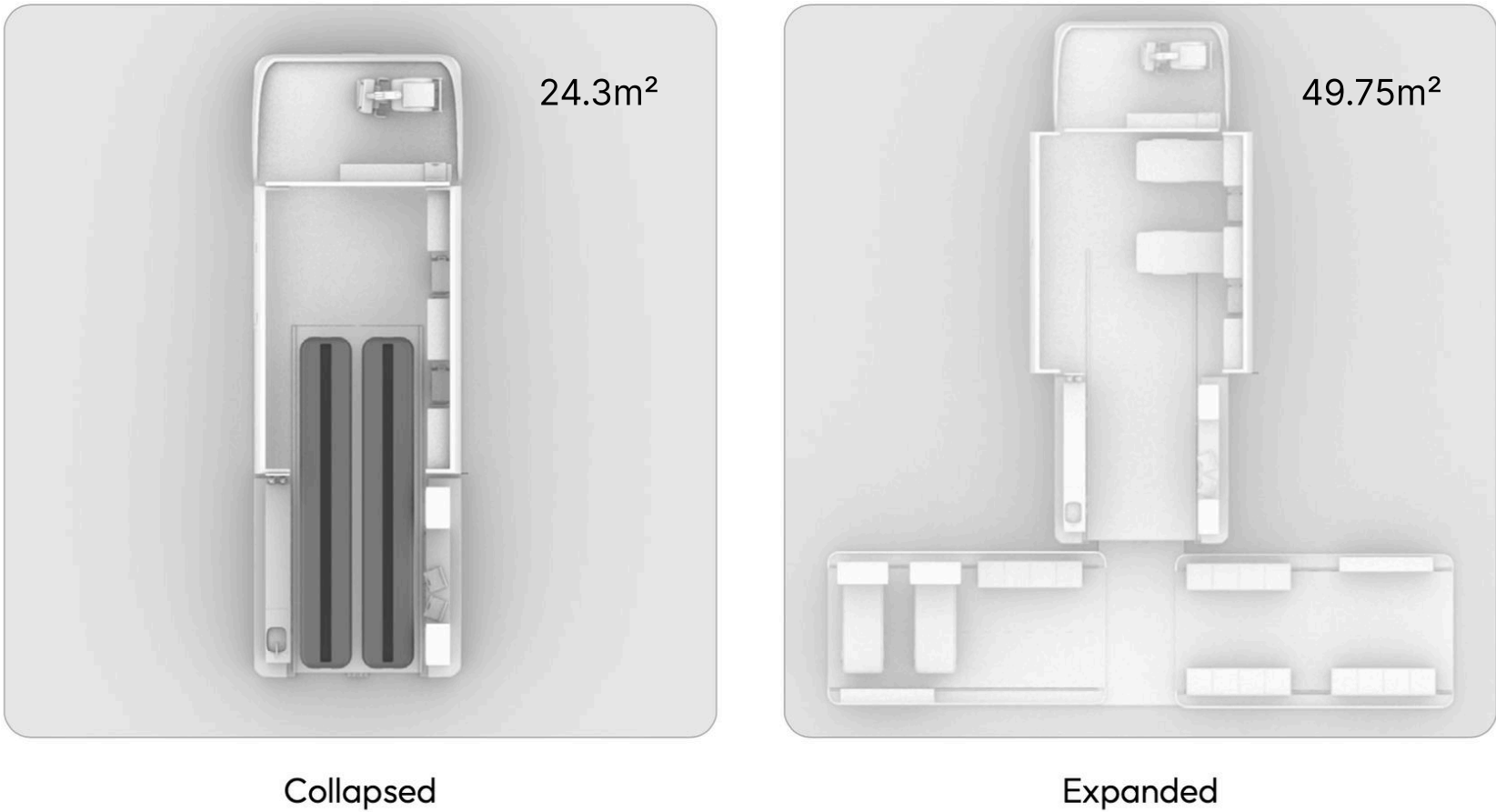
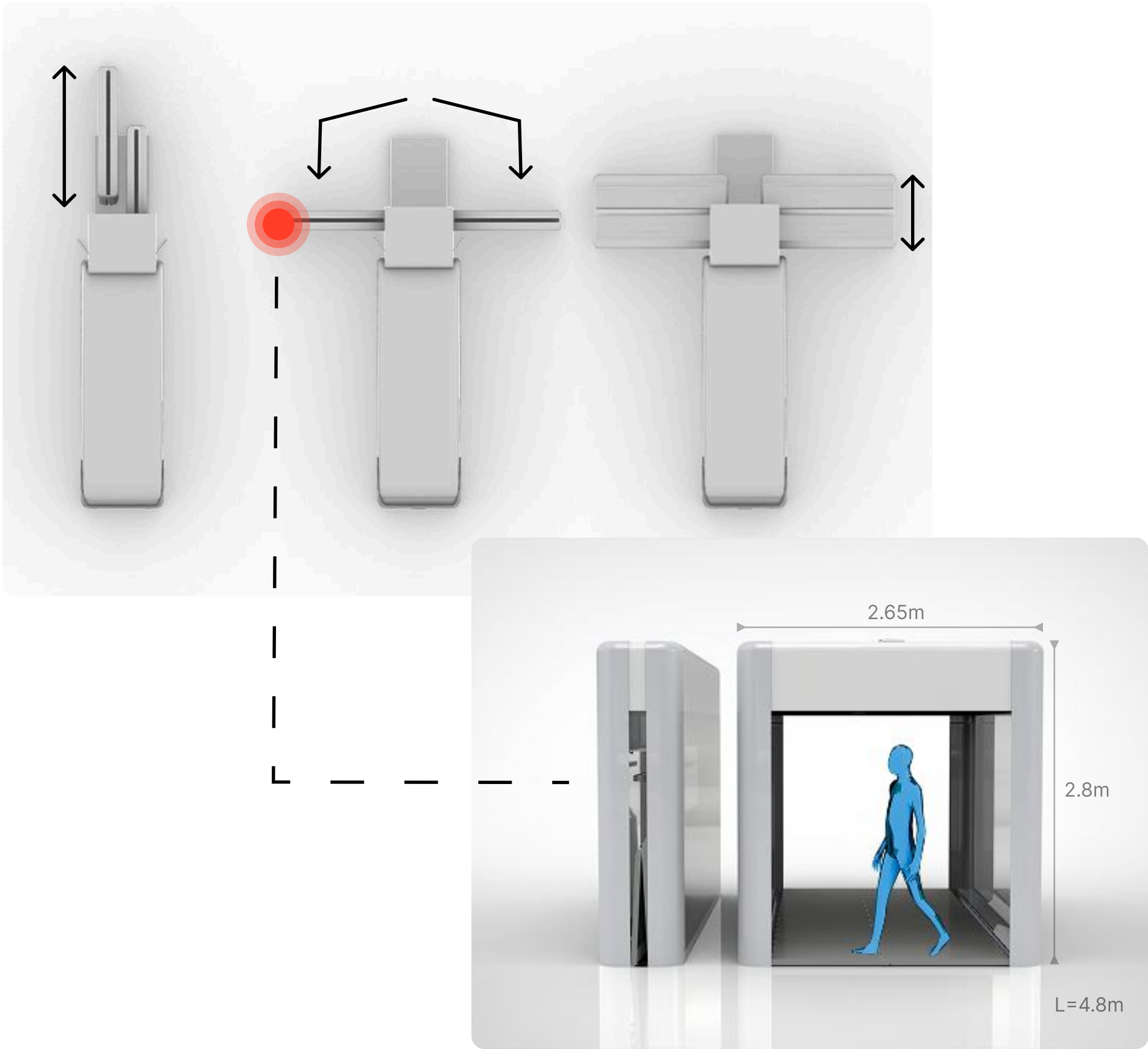
The MHU is an **autonomous driving vehicle** and has an automatic **expandable structure**.

Height: 3m, Length: 9m, Width: 2.7m



Expandable Structure

The expandable structure increases the available working space by 104.7% from 24.3m² of the MHU to 49.75m² with the cabins. The modular 'cabins' were developed around a rail based system.

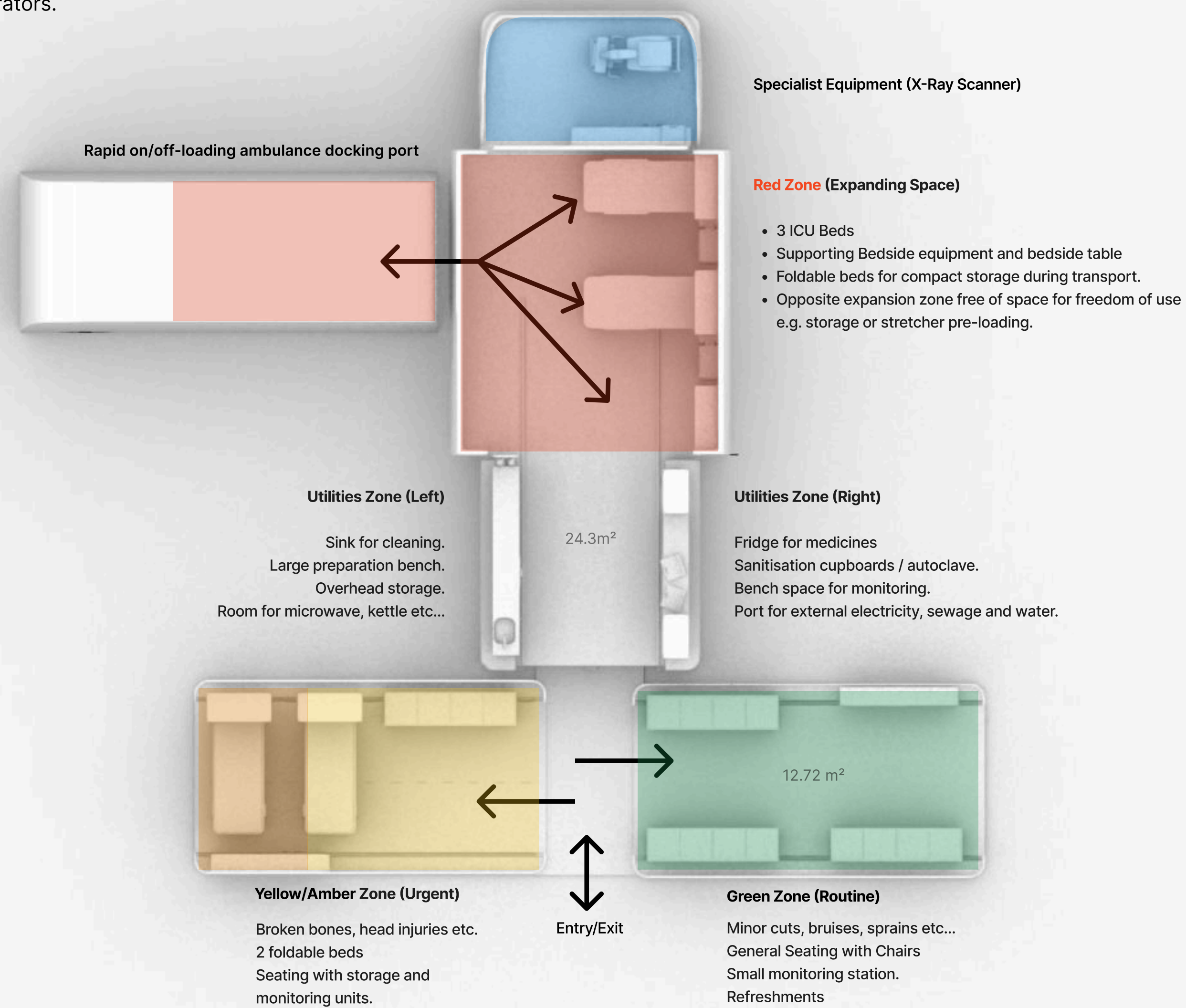
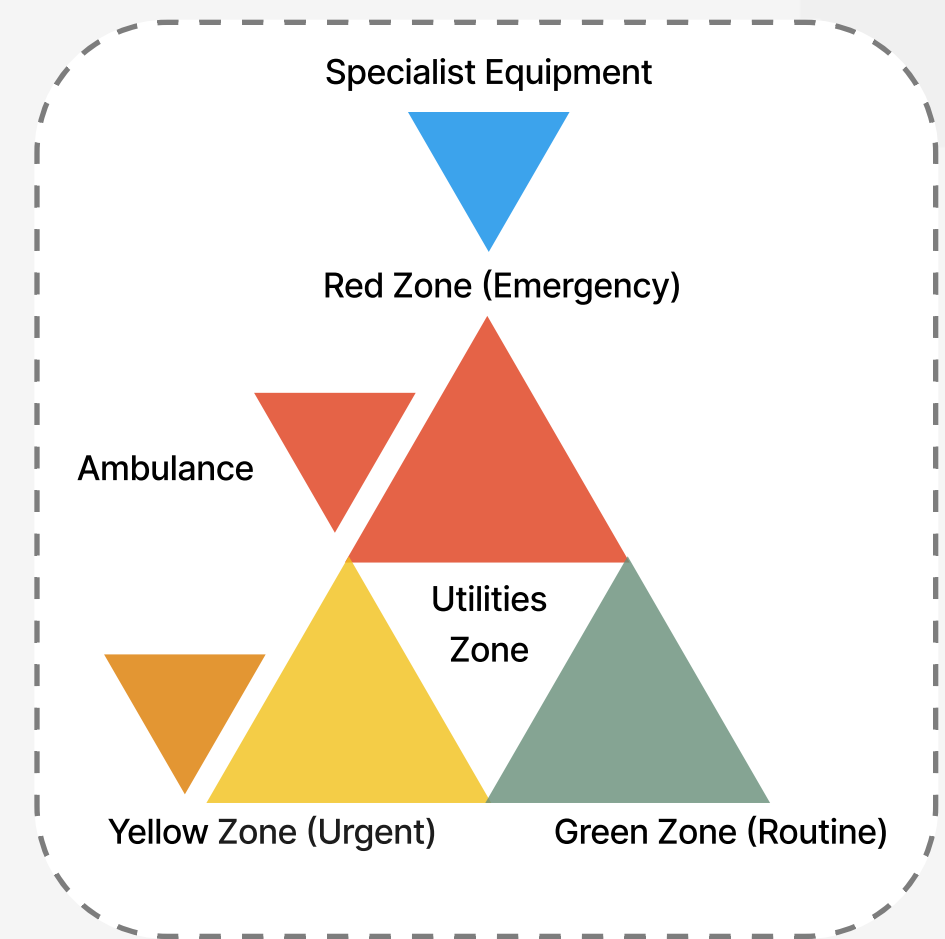


In use, the MHU would hydraulically tilt backwards, while electric motors extended the final cabin module outwards, before rotating and locking it into position.

Interior Layout

One of my key responsibilities was to design a safe, efficient interior layout that supported a clear workflow for operators.

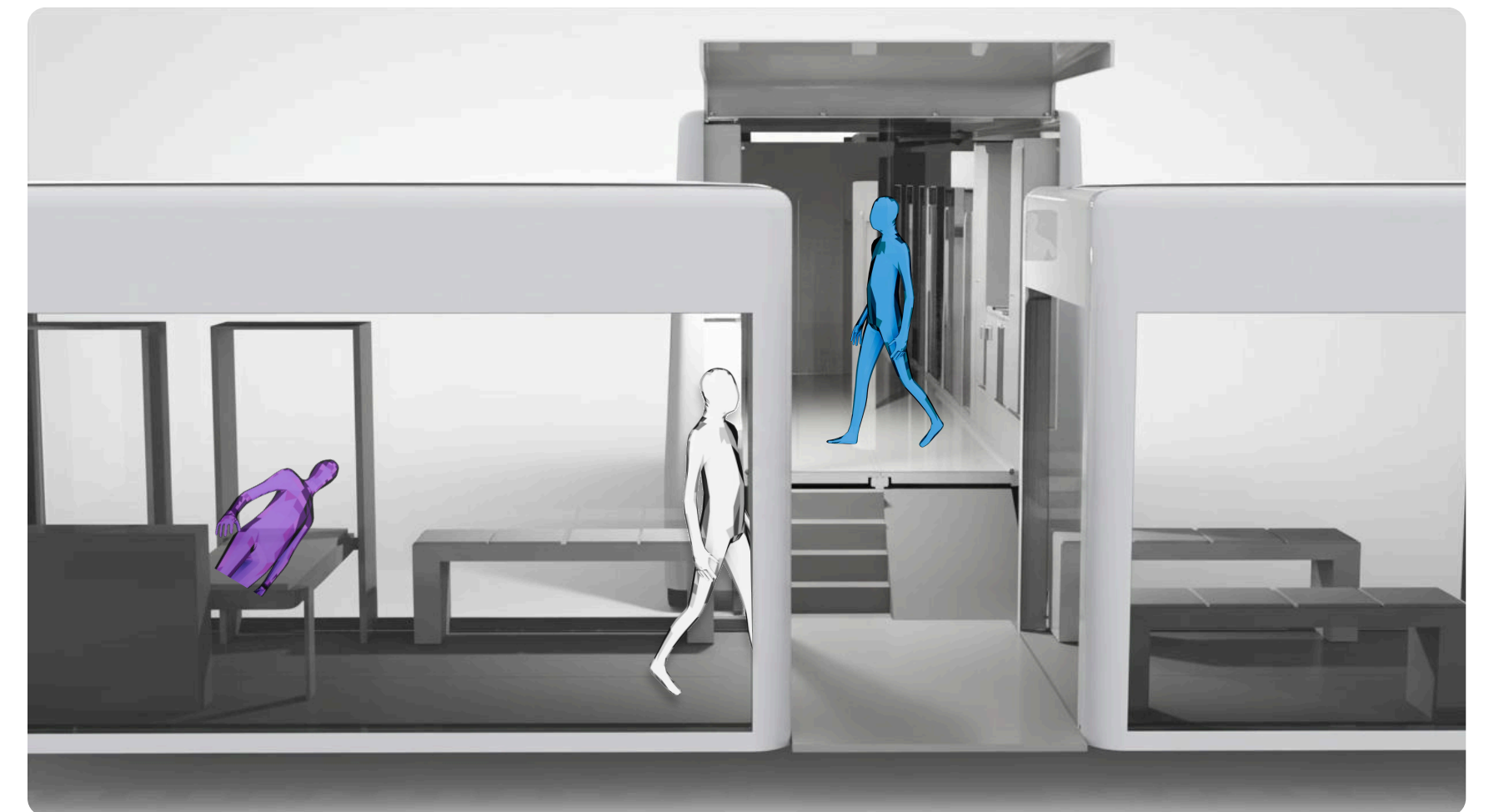
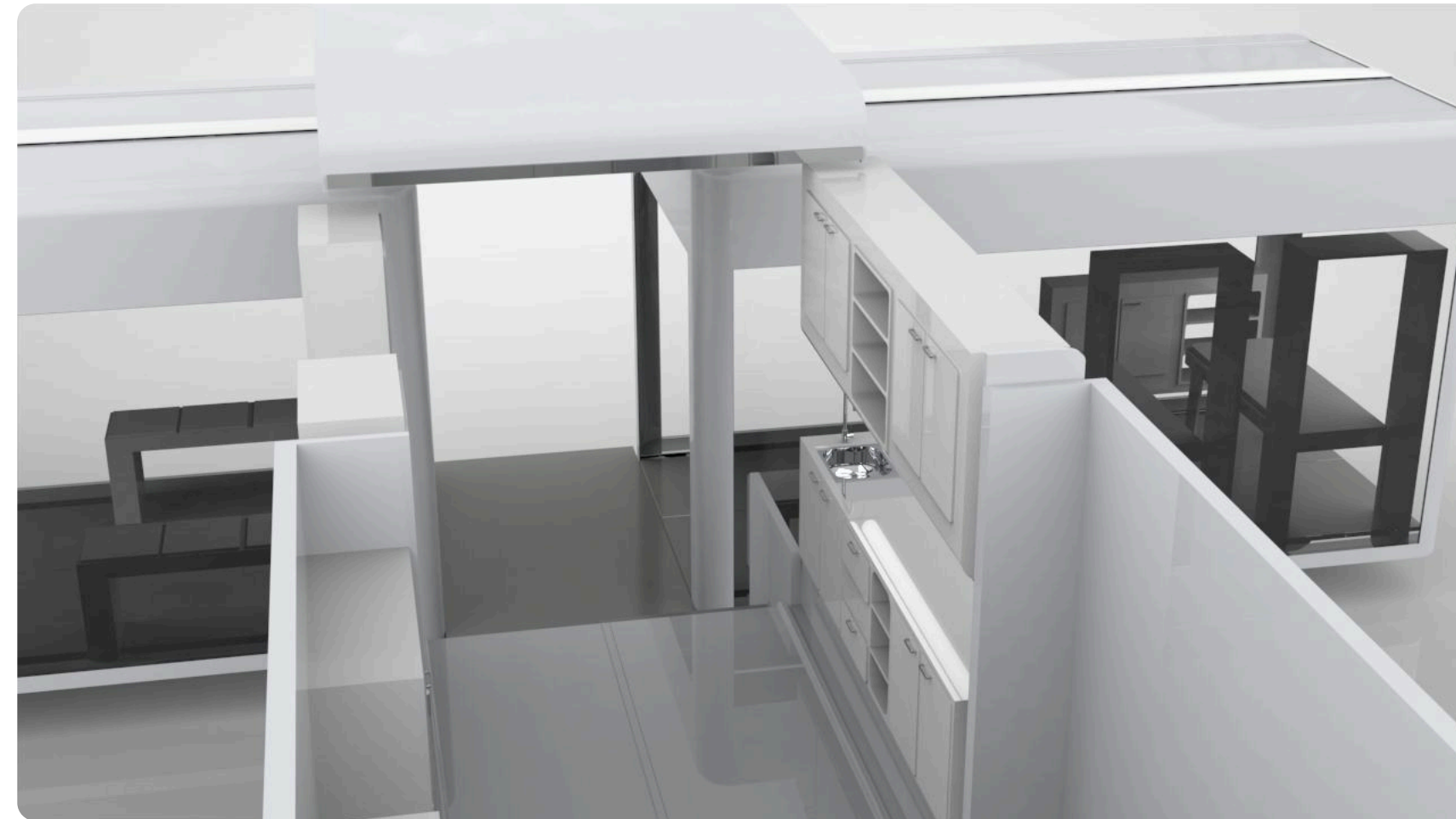
I took inspiration from hospital triage principles and worked with stakeholders to identify essential equipment needs and operational priorities.



Interior Design

All major interior components were custom designed for the bespoke MHU to optimise performance.

My role was to design each interior element, from beds and sinks to storage units, to fit the space precisely.



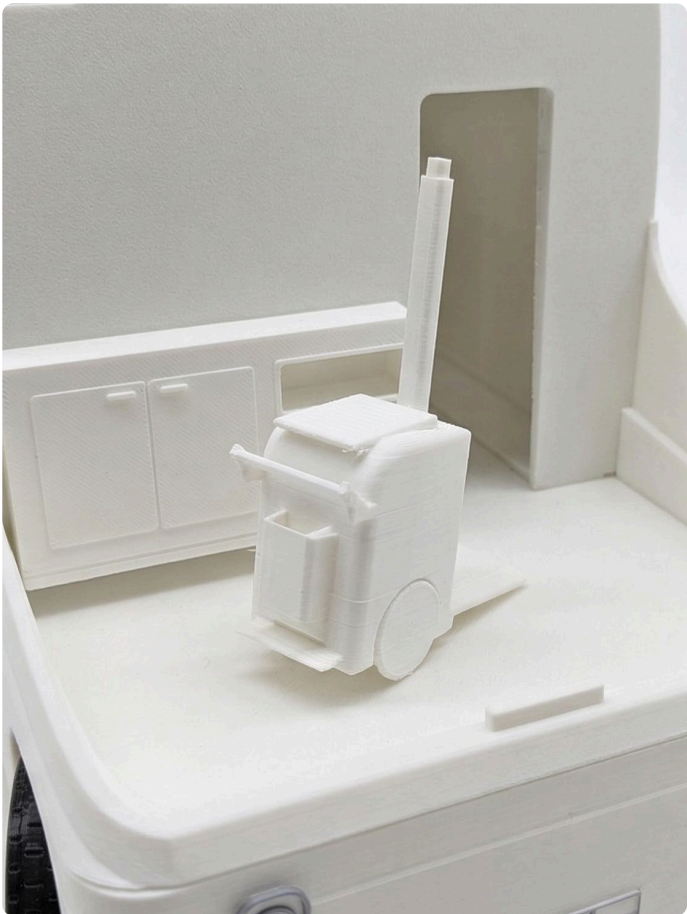
Physical Model

To support the team’s medical simulations, we developed a **functional, expandable 1:18 scale desktop model**.



I iteratively tested components in Rhinoceros and produced 3D printed parts for the model, using them to evaluate spatial and functional performance. Working closely with stakeholders, I refined the configuration to meet their requirements and optimise the layout.

X-Ray Scanner



Cabin Fitting



Interior Space



Top Down Perspective



Custom collapsible beds



Utilities zone.



Validation

I presented our concept to several healthcare regions across the Nordic countries and received extensive feedback, three contrasting examples of which are shown here:

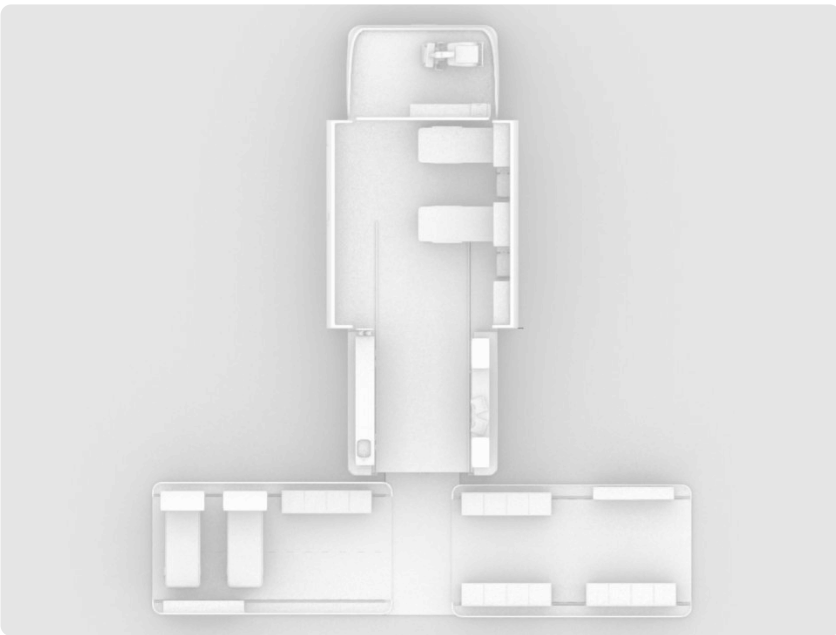
// The future is here perhaps! **This can really transform local healthcare needs.** It's an **all-in-one unit** for an array of needs. I like how you applied it to a festival but I feel this could be **better for local healthcare needs.** Especially here in Lapland.
– Dispatcher
Lapin Hyvinvointialue, FIN

// I feel this unit provides **a lot more practicality and purpose, than brick and mortar health clinics** especially in the Northern regions. It feels refined, the triage focus was very clever.
– Healthcare Administrator
Norrbotten Region, SWE

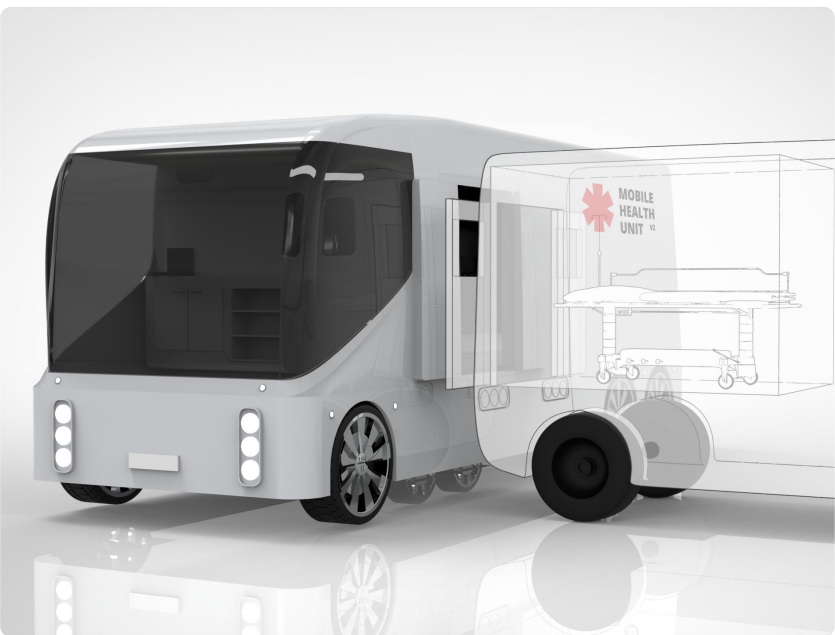
// I think it's a great idea overall, however, the **cost of this vehicle** would need every single health zone to add and I don't think this would happen in the Nordics. However, try the USA!
– Dispatcher
Lapin Hyvinvointialue, FIN

Key Features

Adaptive Layout



Multimodal Docking



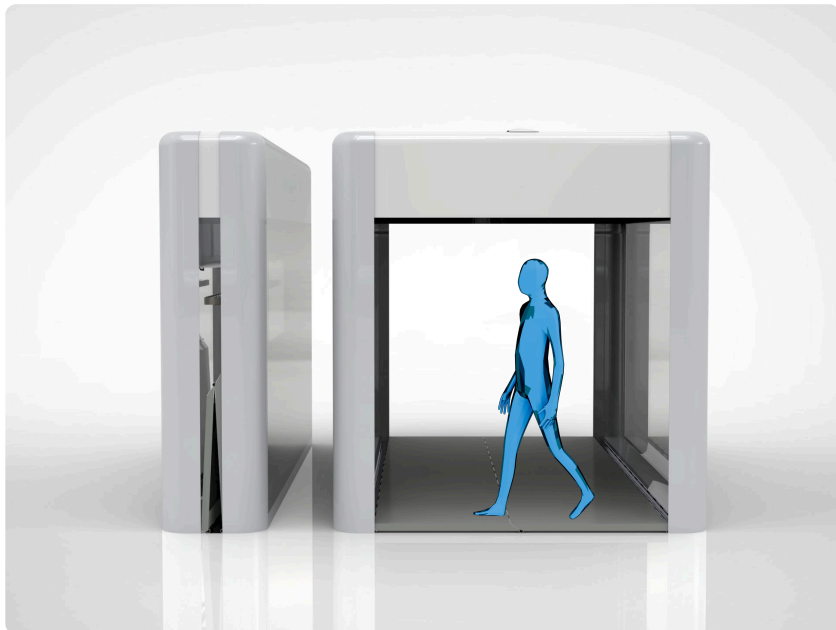
Specialised Equipment



Expandable Structure



Collapsible Modules



Autonomous Driving





STRATA

Stackable Mug Concept

Strata is a stackable mug concept developed through rapid prototyping and ergonomic testing to balance comfort, compact storage, and a timeless contemporary form. Designed around a 300 ml capacity, it was refined through iterative development for everyday domestic use.

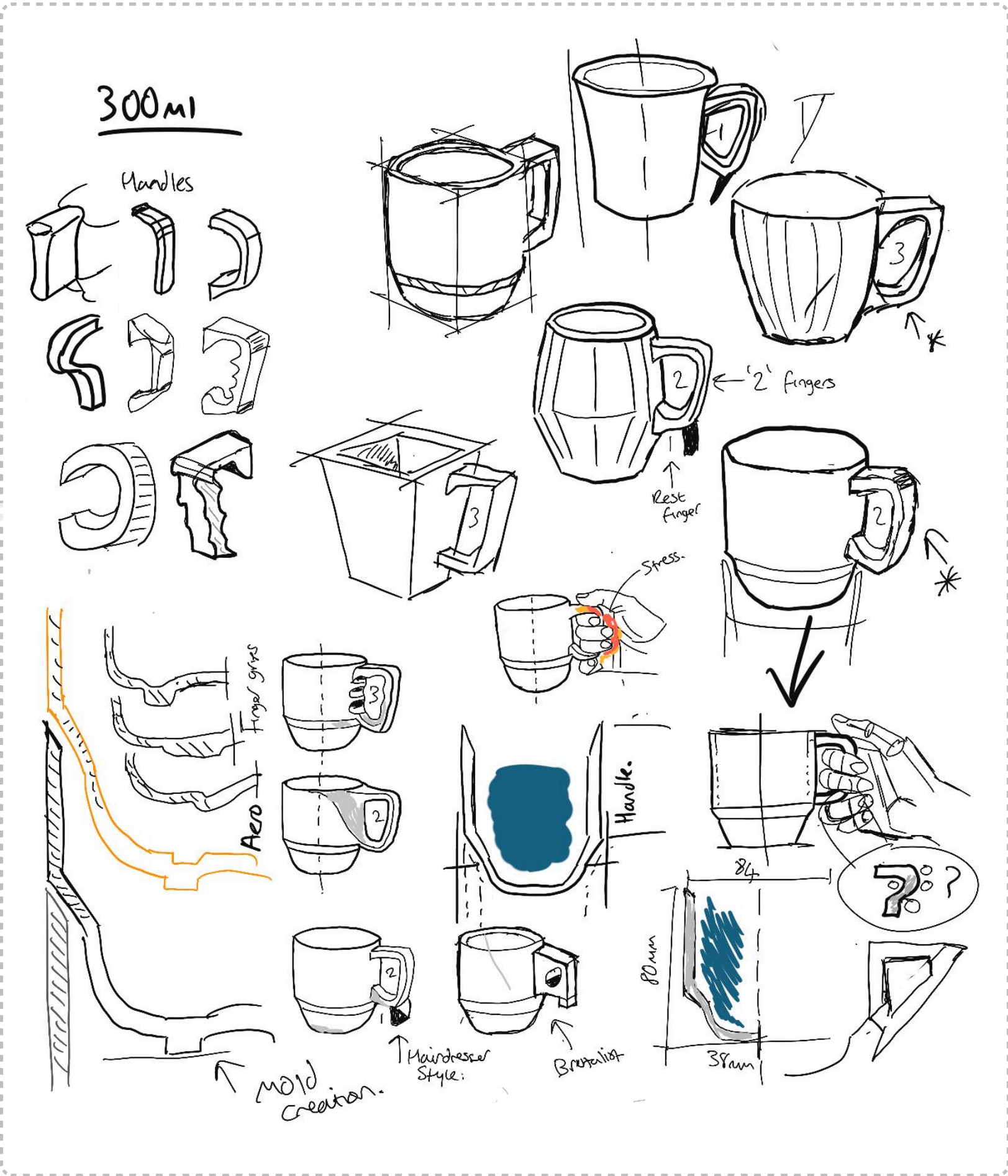
Systems Used:



Ideation

Ideation began with rapid sketching against a clear set of criteria:

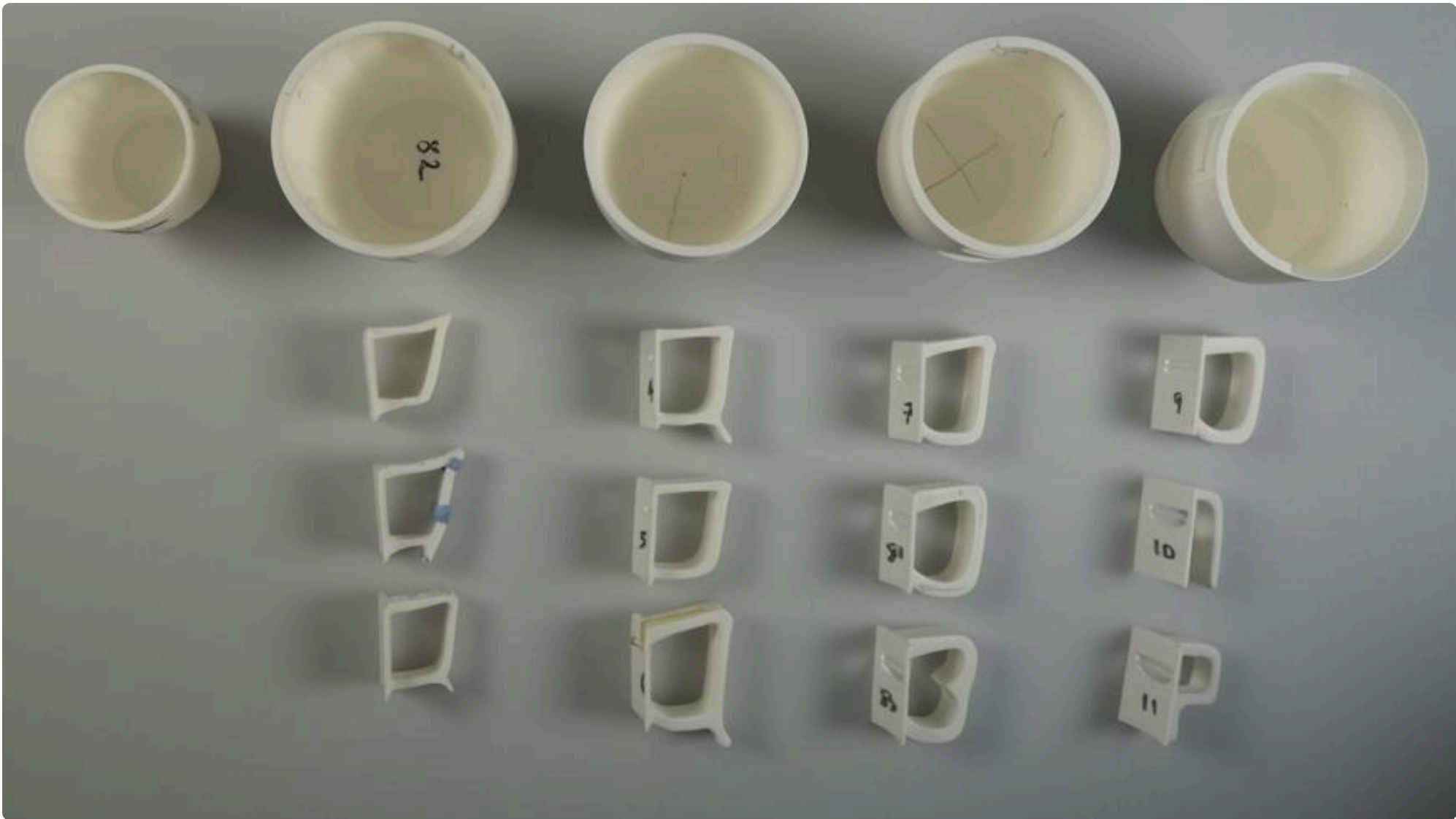
300ml capacity, 'stackability', balanced proportions, comfortable ergonomics, and suitability for mould-based production.



Physical Prototyping

This project followed an iterative design development process, using a base mug and a series of handle concepts.

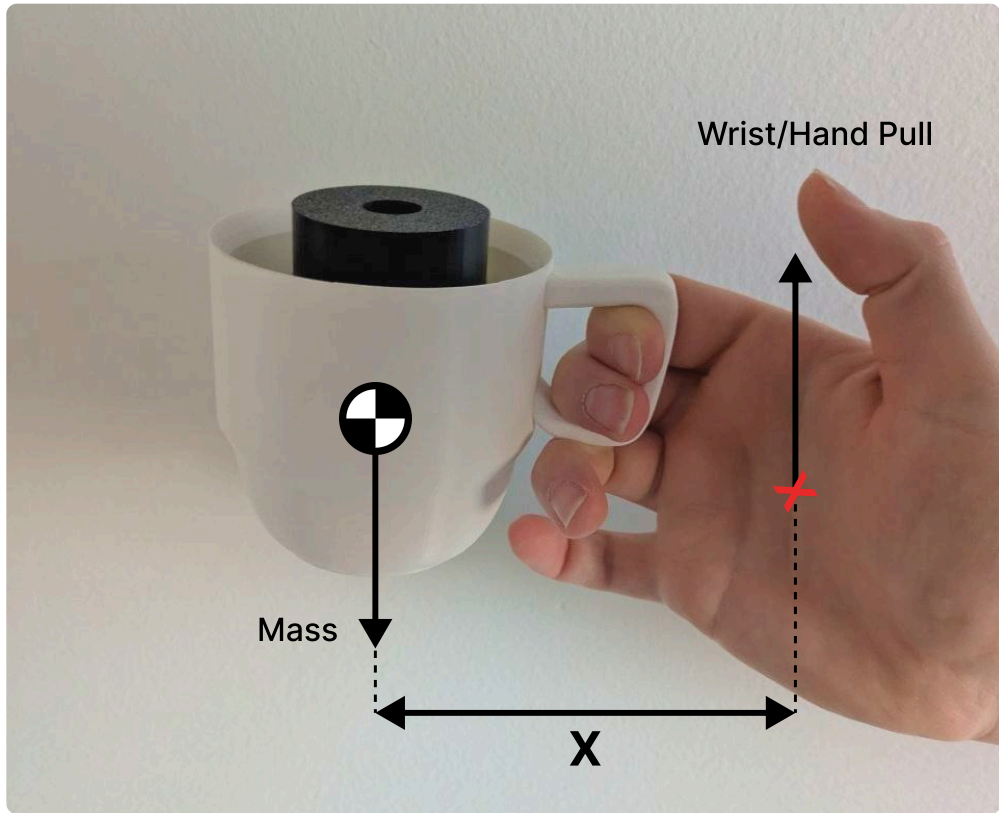
The handles were 3D printed as interchangeable components, allowing multiple variations to be tested quickly and seamlessly.



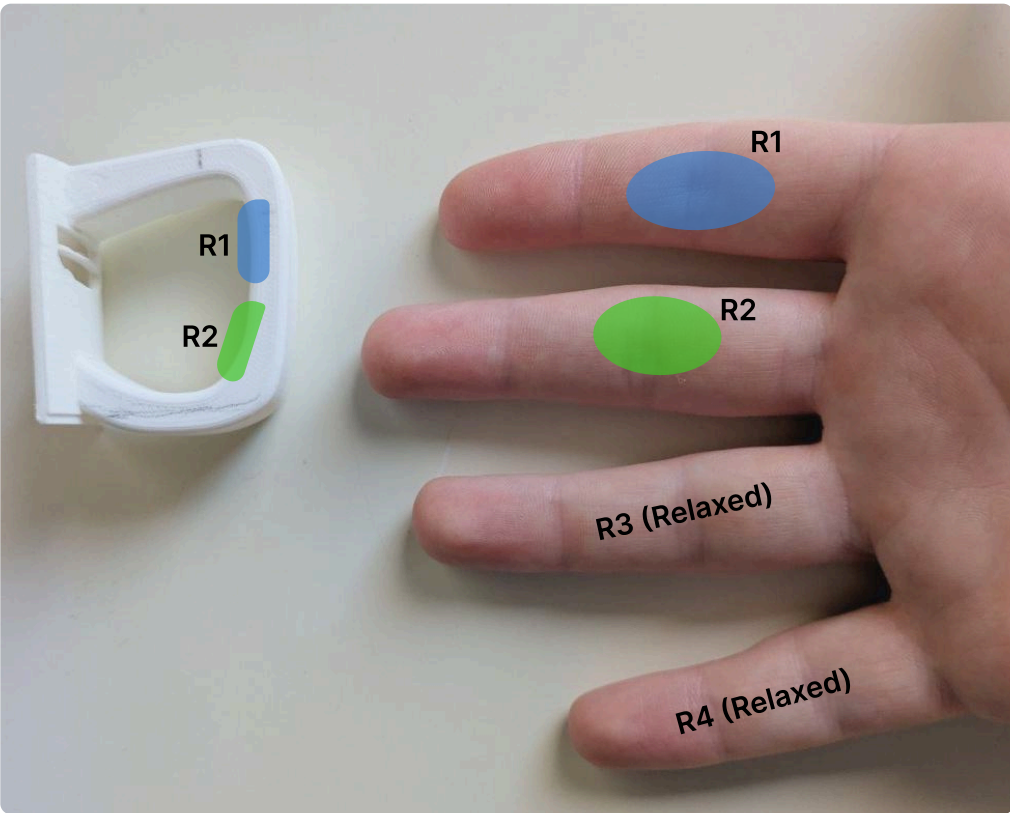
Ergonomic Testing

Ergonomic testing was used to refine handle comfort, grip stability, and overall balance, informing the final form through iterative prototyping.

Adding weights to simulate stresses.



Evaluating Grip and Finger Usage



Interchangeable Handles



Handle Testing

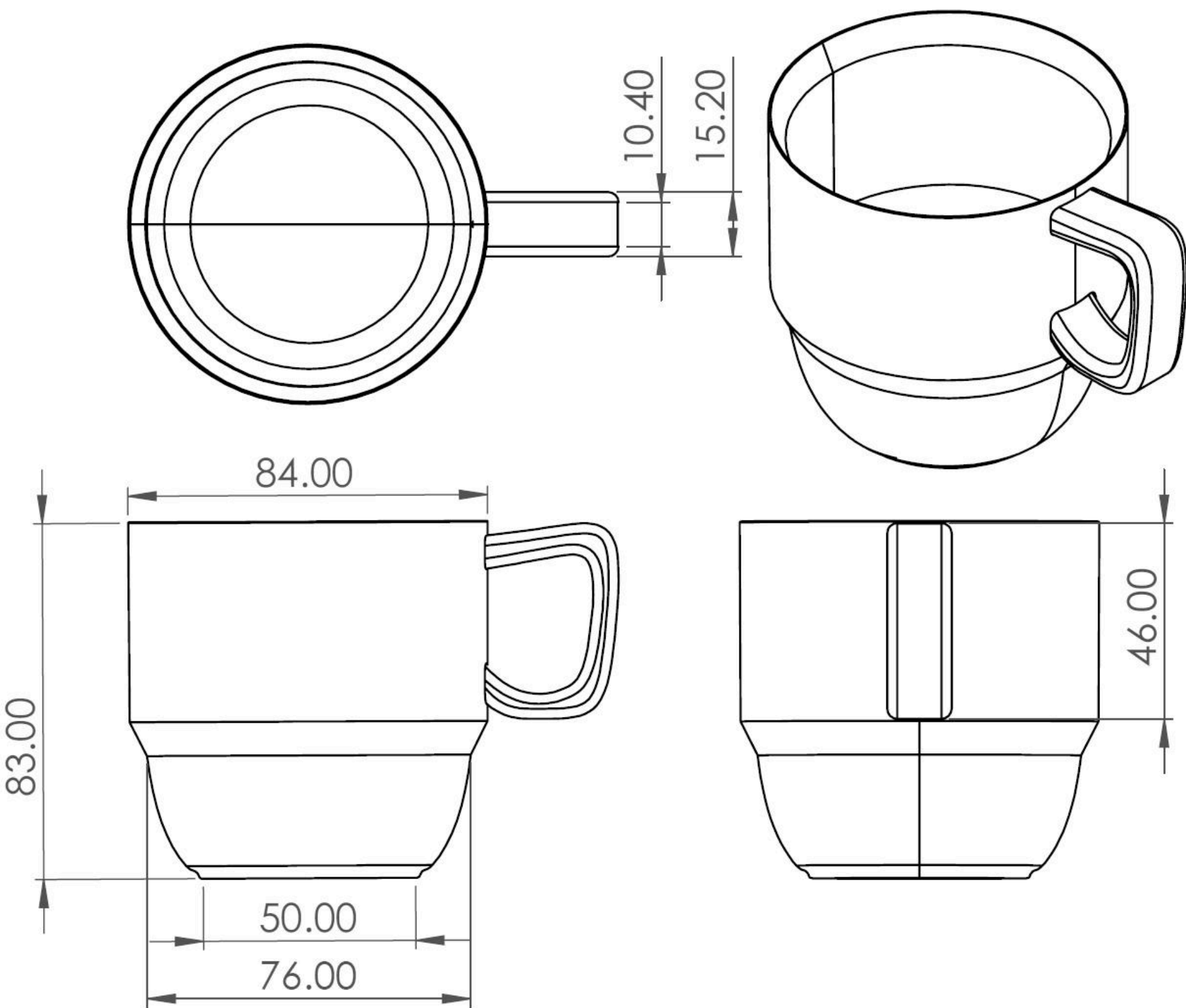


Evaluating Handle Thickness



Detailed Design

This was followed by detailed design development to resolve the form into a geometry appropriate for mould-based production.



Final Design

Following iterative prototyping and testing, STRATA resulted in a timeless, stackable mug optimised for compact storage.

The form enables stable vertical stacking while maintaining a comfortable grip and balanced proportions.

Renders (KeyShot):



Final Model



KINO

Multimodal Speaker Unit

KINO is a multifunctional media unit that combines audio playback, wireless charging, and analogue timekeeping in one compact unit.

Inspired by 1970s hi-fi systems and architectural detailing, KINO explores how technical integration and everyday usability can be expressed through a restrained, nostalgic form.



Systems Used:



Aims & Design Inspiration

KINO aimed to balance analogue familiarity with contemporary everyday functions in a compact domestic media unit, informed by wider “slowing down” trends. The project drew on 1970s to 1980s product design, architecture, and mid-century hi-fi systems, combined with 21st-century technology.



Kino International Cinema
Berlin



Braun
Travel Clocks

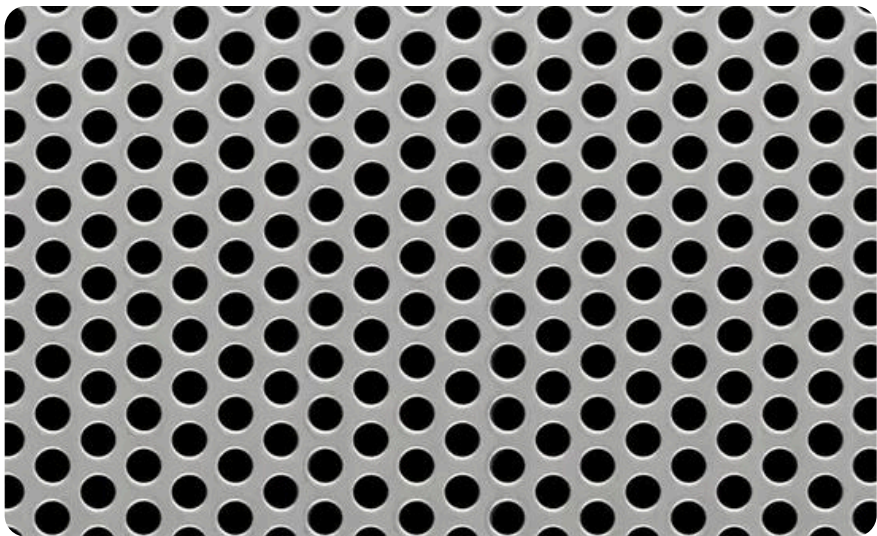


Šumperák typ V
Czechoslovak
Housing Type



Proposed Product Architecture:

- Dual 55 mm full-range drivers
- Analogue clock with soft backlight
- 15 W wireless charging pad
- AUX, USB-C, and SD card input
- Rear DC power input



Perforation and Industrial Detailing



1970s Yamaha Media Stack

Development

KINO began as a desktop speaker, but was rapidly developed within Rhinoceros to become a media unit, suited to the bedside or dining room. Designs were then rendered in KeyShot.



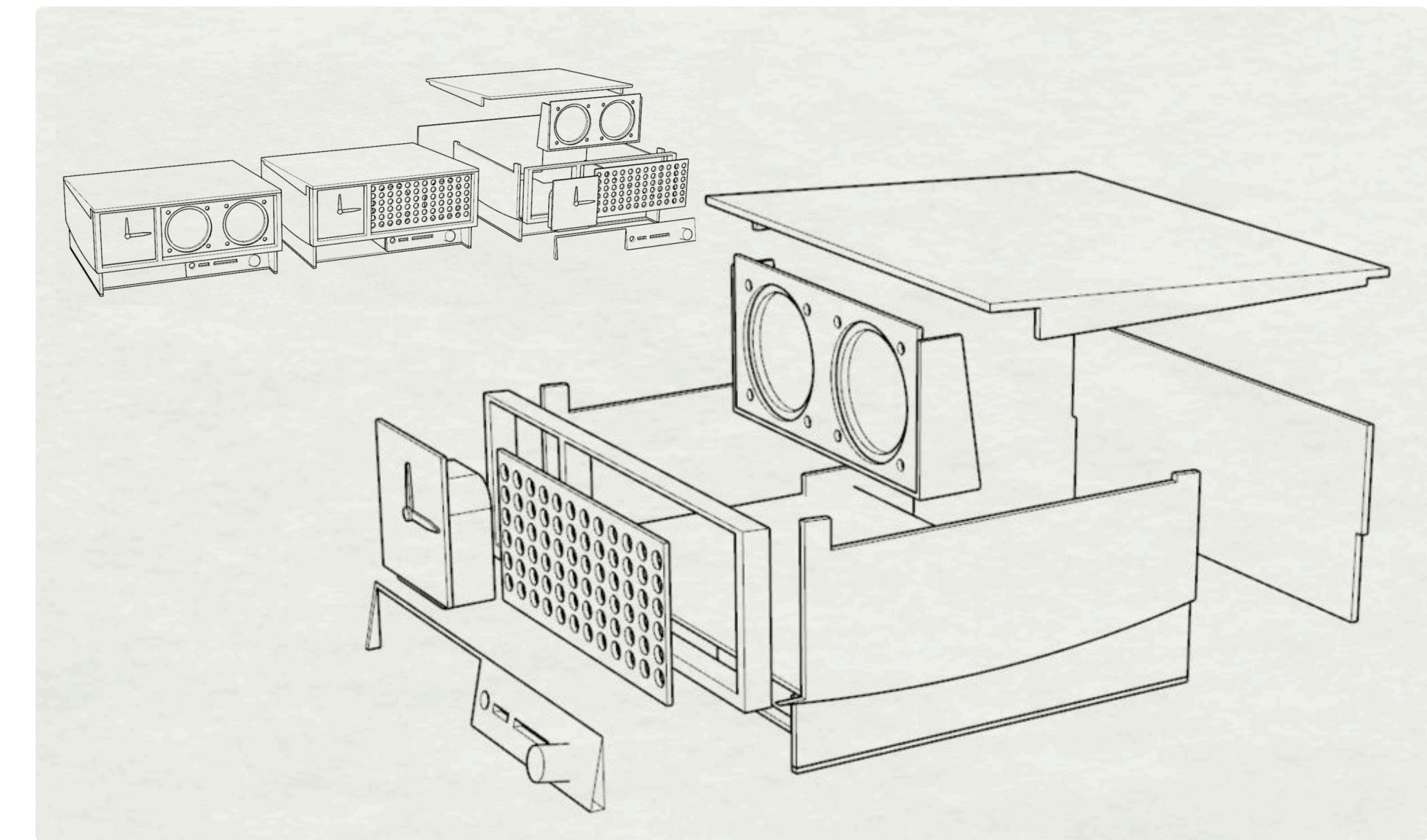
Type 1 - Form
Established the core proportions and formal language.



Type 2 - Function
Added analogue timekeeping and dual 55 mm drivers to shift the product towards domestic use.



Type 3 - Refinement
Introduced wireless charging, a stylised front plate, and lighter material detailing to create a more complete bedside product.



Final Design Renders



Generative Context-Visualisation was used to place the model within a range of spatial scenarios, enabling rapid evaluation of scale, user behaviour, and atmospheric qualities.

Contact Information

Get in touch!



[CV](#)



[LinkedIn](#)



[Medium](#)



oweinthomasiveson@gmail.com

Patents

"A re-usable cartridge (Ibrido)" - EPO2025 (Pending)

Volunteering

ÄÄNIAALTO - Sound Wave Festival 2023

Construction Engineer (03/2024-05/2024)

Designing the architectural construction plans for a soundproof large steel frame.

Aalto University

International Tutor in the BA Design (05/2022 - 04/2023)

Helping new students to settle into life in Finland and their studies in the BA Design.

Academic Papers:



Bachelor's Programme in Design

[Mitigating Petty Crime Through Design, Using Crime Prevention Strategies in Helsinki Metro Stations](#)

Grade 5/5. In cooperation with **Kaupunkiliikenne Oy**



Master's Programme in Design

[Design for Regulation-Compliant Packaging: Advancing Ecodesign Packaging under EU Regulations](#)

In cooperation with **Torggler S.r.l**