

MARCH 2025 EDITION



MANUAL 3.  
LOADING.

MOBILE  
REDUCED  
OPERATOR

CHARGING  
DOCK

CHARGE

IN  
TRUCK

Ideas

charging while  
loading/unloading

switching  
batteries when  
loading/unloading

visuals of when  
to charge, %, and  
location of charging

SHOW THE LOOPER  
RAISE (ROUTE PREVIEW)

SEAMLESS TECHNOLOGY

CONTROL THE  
CAMERA

CLEANING  
SENSOR

DO NOT WINDOWS  
WIPER

If you place the truck in  
the right position. It given  
start charging

Wireless charging technology  
no staff

Automated battery changing

Charging zone can be used  
to

No need to wait -  
just change the battery  
and continue the trip

BLUE TRUCK  
POWERED BY ENERGY

Industrial Design Portfolio

**FRIDA NECKMAR**

HEJ  
HELLO  
HI!



Hi! I'm Frida—a hands-on designer fueled by curiosity, bringing ideas to life through prototyping, problem-solving, and collaboration. With a background in industrial design and a passion for physical experiences, I thrive at the intersection of creativity and practicality.

Growing up in a family-run flower shop, I learned early on how to combine business, craftsmanship, and aesthetics—an approach that still shapes my work today. Inspired by nature, human connection, and intuitive design, I aim to create products that are not only functional but truly valued by the people who use them.

I'm always ready to take on new challenges!

# FRIDA NECKMAR

Tygelsjövägen 63, 218 74 Malmö, SWEDEN

fridaneckmar@gmail.com

+46708 25 10 40

## Tools

SOFTWARE	InDesign, Illustrator, Photoshop, PowerPoint, Fusion360, Blender, RhinoCeros 3D, KeyShot, Sketchbook, Meshmixer, Solidworks, Figma, Premiere Pro
DRIVERS LICENSE	B license since 2017
LANGUAGE	Swedish - native English - fluent Spanish & Italian - basic

## Educatuion

2023 - present	Master's programme in Advanced Product Design <i>Umeå Institute of design, Umeå University, Sweden</i>
2019 - 2023	Bachelor of Industrial Design <i>Faculty of engineering, Lund University, Lund, Sweden</i>
2014 - 2017	Economics, Enterprise and Business <i>Procivitas Privata Gymnasium, Malmö, Sweden</i>

## Internships

March 2022 - Aug 2022	Tatic Design Studio, Milan, Italy <i>Product Design, Industrial Design</i>
Sept 2022 - Jan 2023	Philips, Amsterdam, Netherlands <i>Product Design, Groomming &amp; Beauty</i>

## Work

Summer 2024 <i>Fulltime time</i>	Lind Art & Technology <i>Accessory/CMF designer, Prototyper &amp; Product tester</i>
2017 - 2023 <i>Full-time &amp; part-time</i>	Lotta Jewellery <i>Sales &amp; Store manager, Handyman, Graphic Design, Jewellery Design, Decorator</i>
2013 - 2023	Freelance Blomsterpigan <i>Decorator, graphic &amp; product design</i>
2014 - 2023 <i>Part time</i>	Restaurants: Bloom in the Park, Namu, Flädie Mat och Vingård, Nyströms Gastronomi, Prosecco Sweden, Anthony's (Austria) <i>Waitress, events &amp; weddings</i>

*I happily send references and letters of recommendation on demand*

# MIRA



# RE-SCREW



# SENTIO



# AUTOCARE



## GROUP PROJECT 2024

Frida Neckmar, Silvester Koessler,  
Xiaoyu Yu, Luisa Ebeling

### Learnings

- Strategic Design
- Common Core
- Human Centered Design
- Medical Design
- Spacial design

# MIRA

In collaboration with Getinge, we got to envision the future of the Intensive Care Unit (ICU) for 2035



UMEÅ INSTITUTE  
OF DESIGN



GETINGE 

10 Week Project | Term Project 3



# A SYSTEM IN CRISIS

Over decades, Intensive Care Units (ICUs) have evolved into machine-dense environments, designed for survival rather than patient recovery.

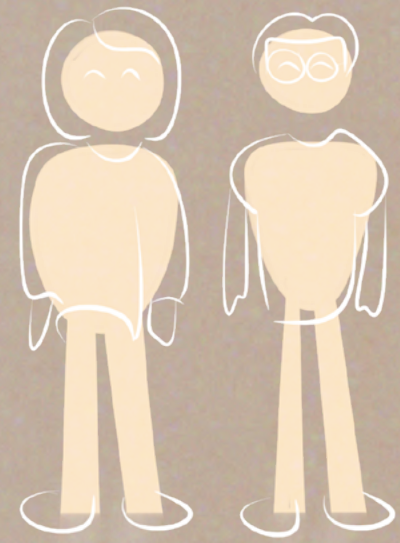
We conducted observational studies by shadowing nurses during their work-shift, mapping out the physical constraints of existing ICU rooms and identifying inefficiencies, workflow and patient experience. During our visit to Umeå Hospital, we explored several departments, each shaped by the same underlying challenge —balancing technology with human care.



# RESEARCH

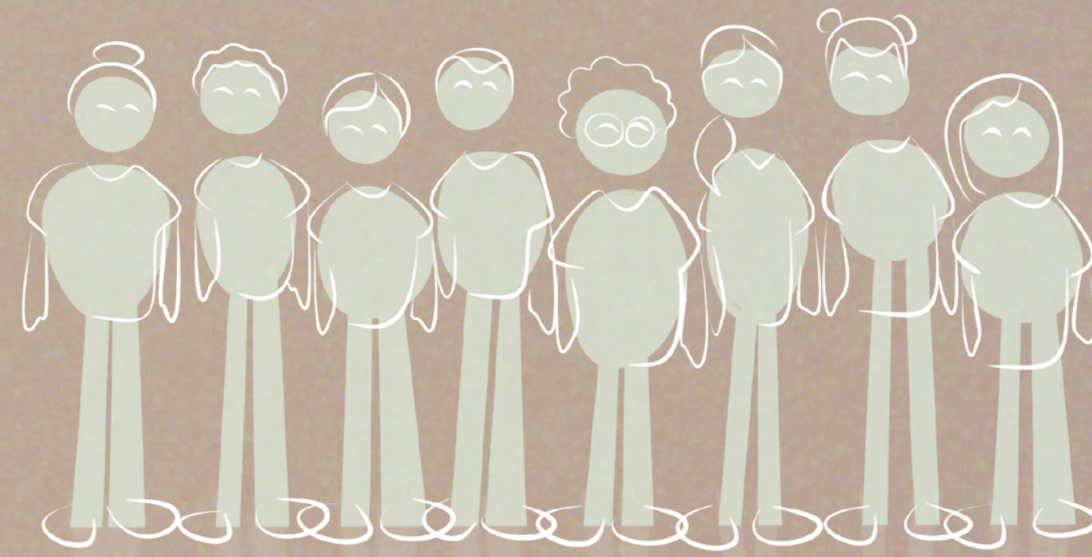
We gathered valuable insights through interviews with patients, nurses, relatives and experts from Charité, a leading research hospital in Germany with over 10 years of experience in advancing patient-centred ICU care. From these insights, we realized that to improve the ICU experience, we first had to make room.

2 PATIENTS



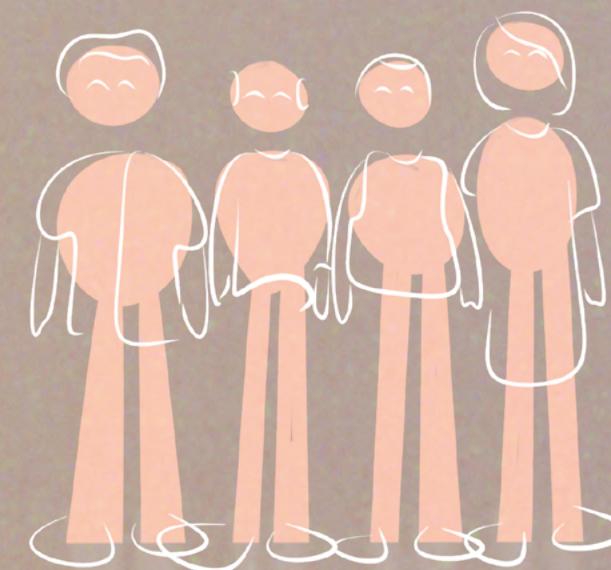
*“I was confused and had no idea which day it was.”*

8 NURSES



*“We want to take patients outside, it is important to give them hope. But we need eight people right now.”*

4 RELATIVES



*“You want to be a bridge to reality for your relative, but you can’t do more.”*

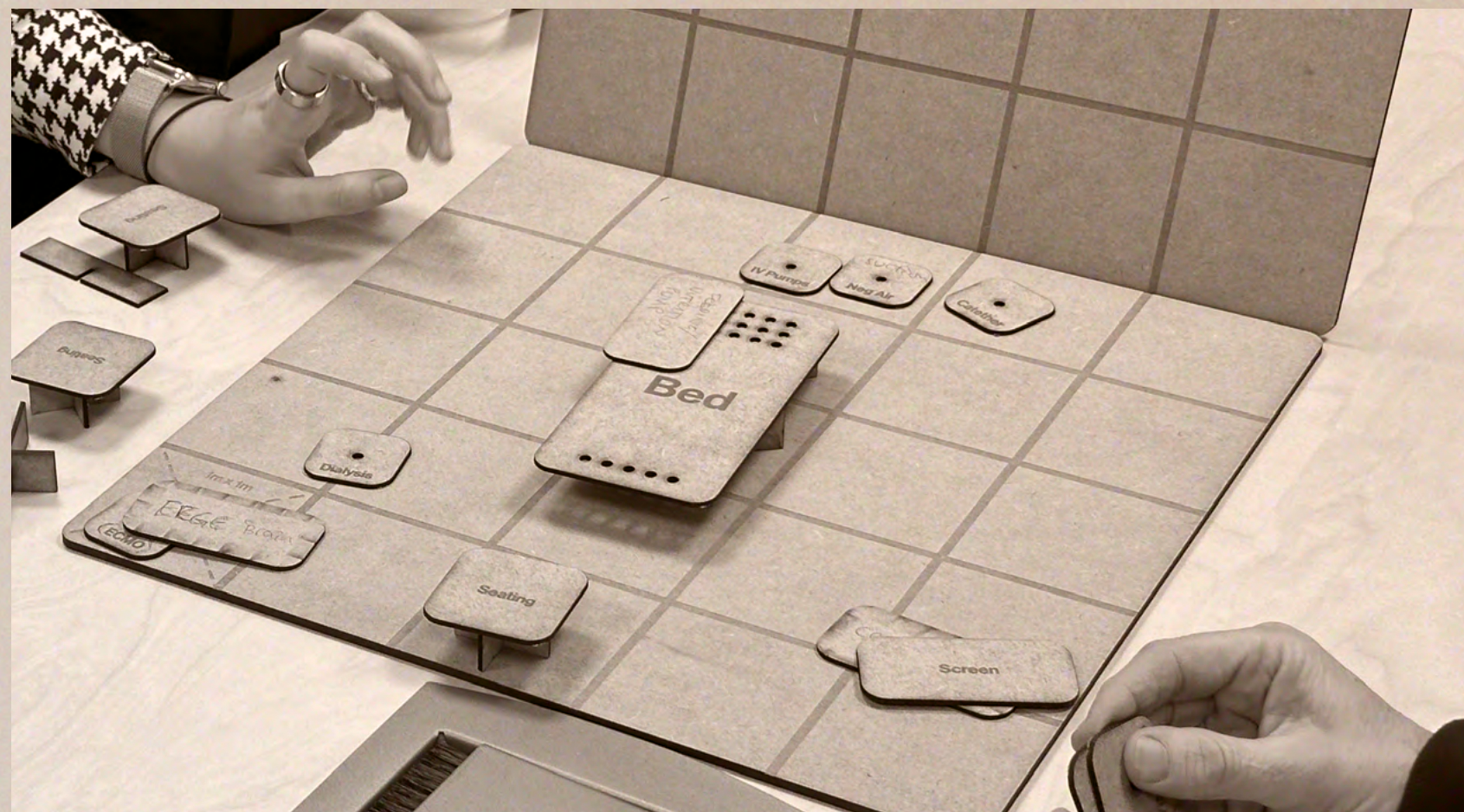
1 EXPERT



*“No one looked at the patients needs for recovery because they were heavily sedated.”*

# PROCESS

Scale model, miniature room & furniture, VR, physical 1:1 prototypes, common core & CMF explorations



1:1





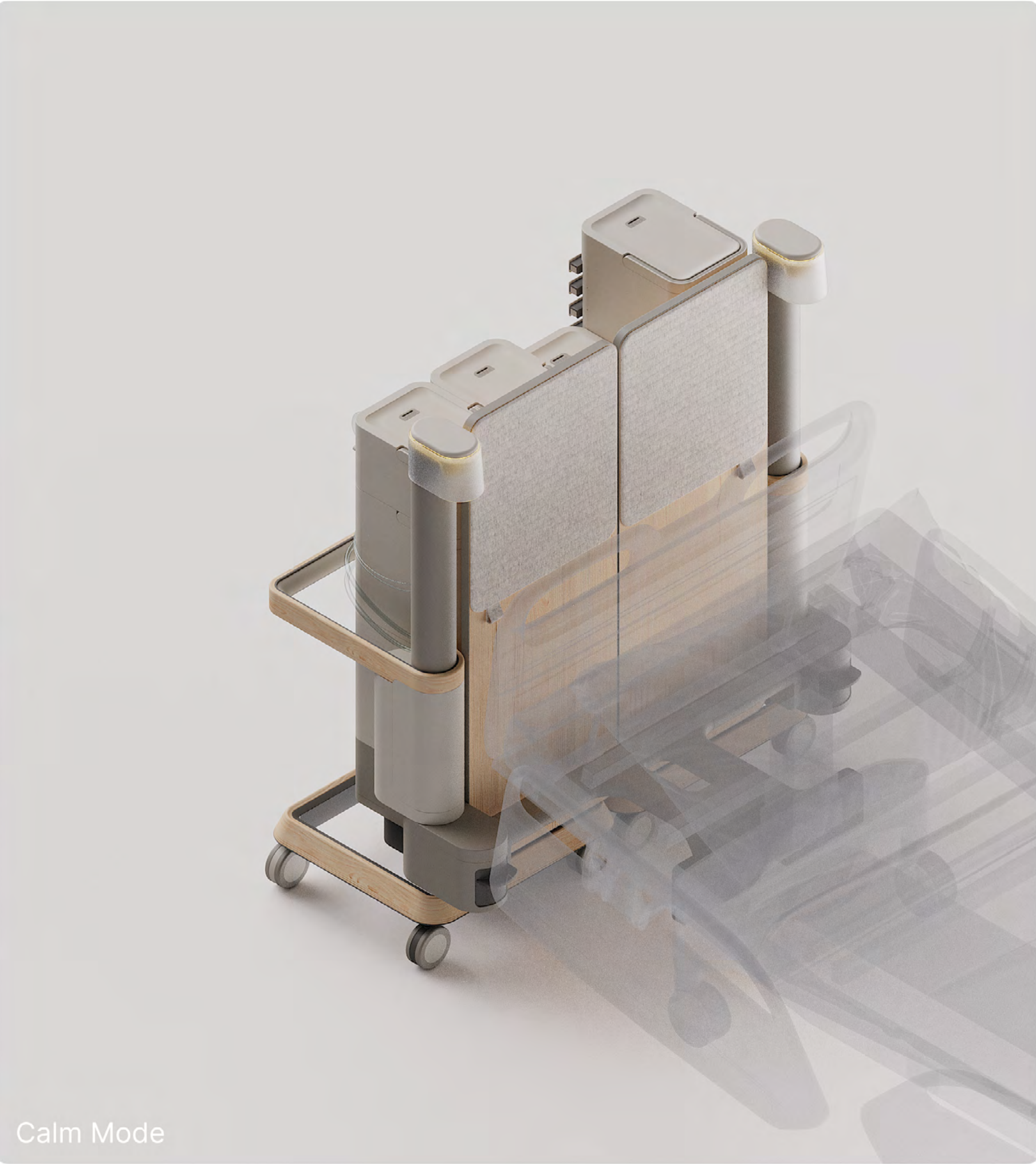
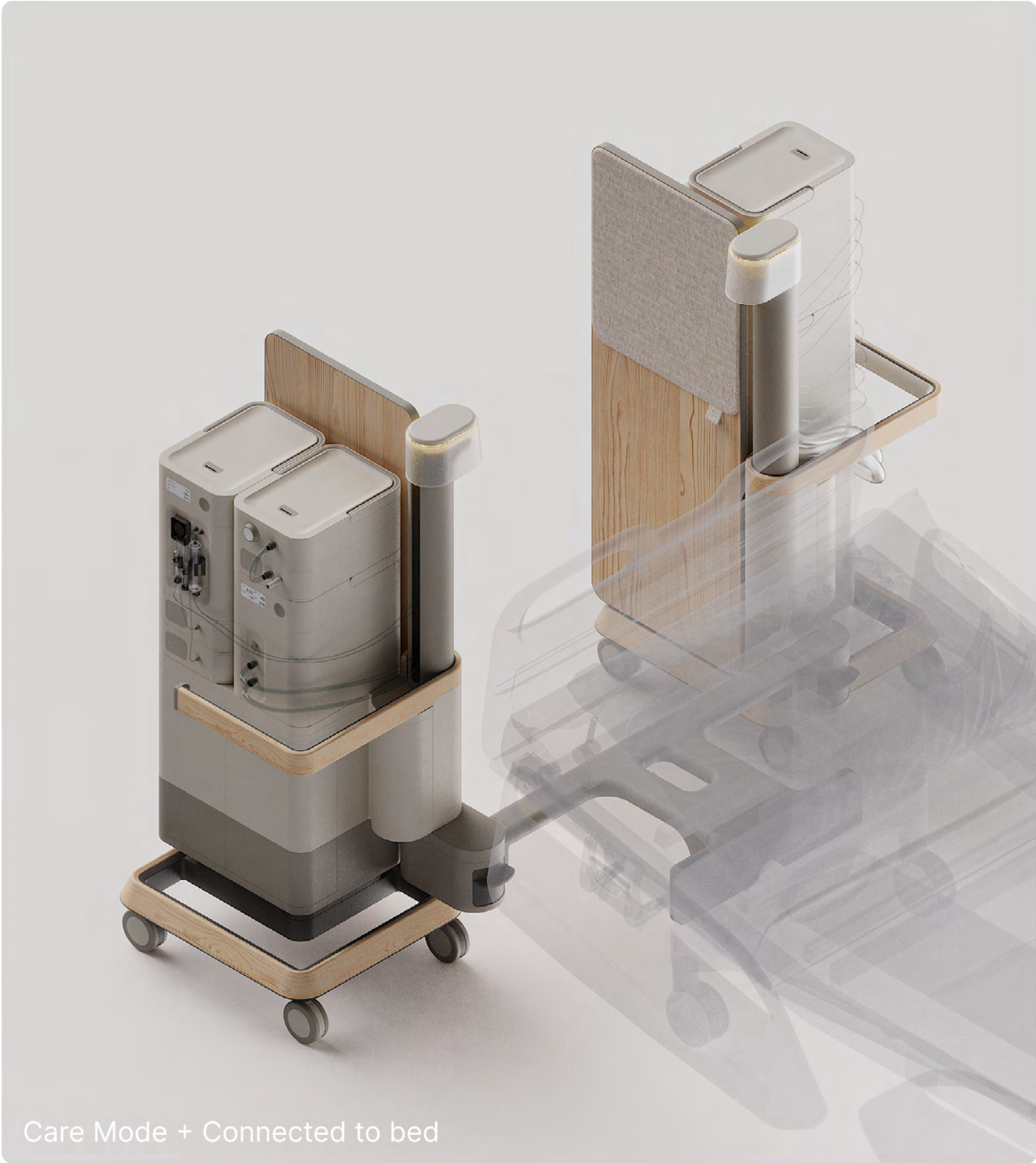
# MIRA

PLAY VIDEO

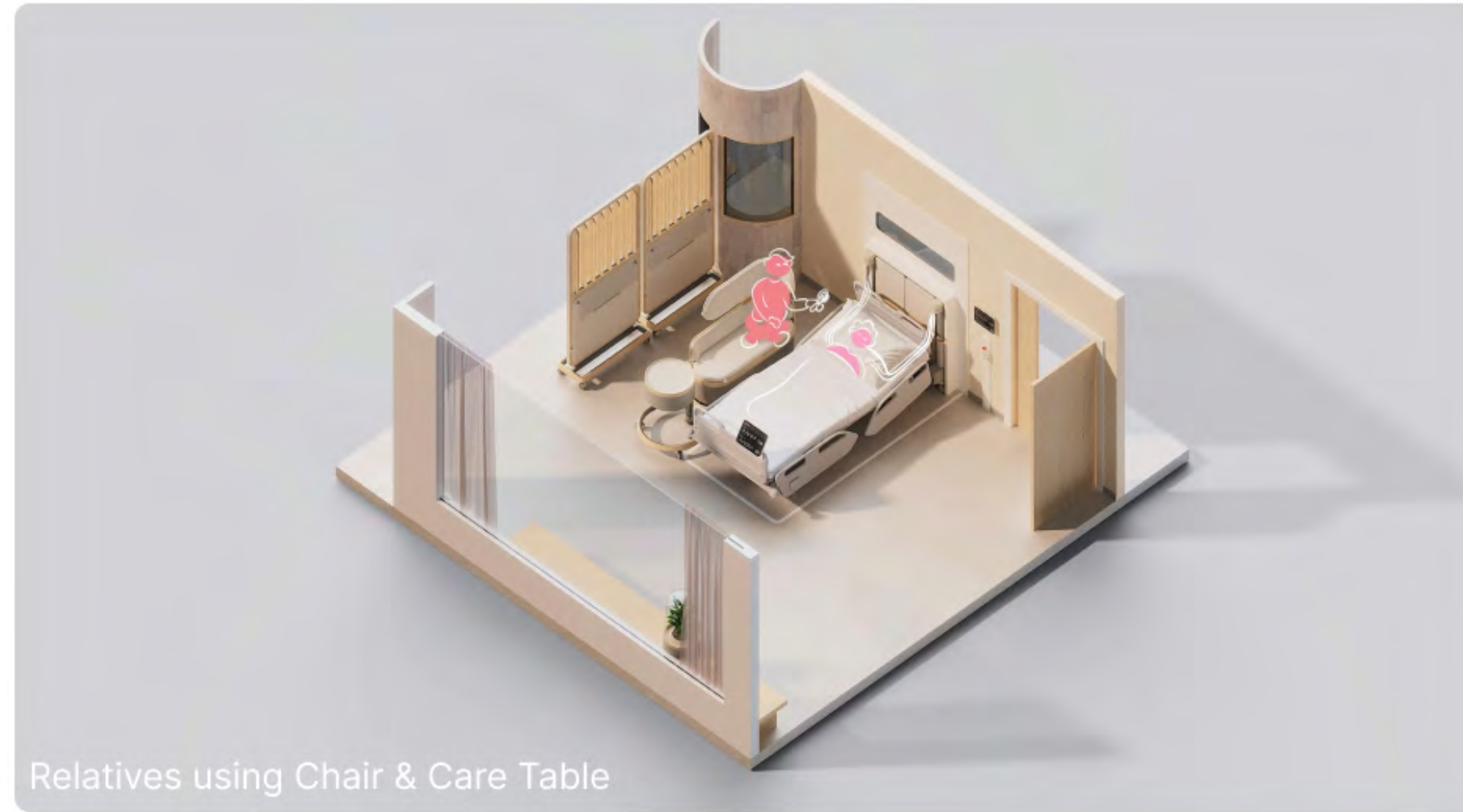
MIRA reimagines the ICU as a space for recovery, connection, and care. Its core innovation is a centralized hub that organizes machines and cables, keeping them easily accessible for caregivers while minimizing visual clutter for patients and families. This modular system integrates seamlessly into the ICU architecture, enabling a more flexible, human-centred environment.

# TRANSFORMABLE FOR DIFFERENT NEEDS

The two hubs connect to the back of the bed, each featuring flexible pillars that serve as hinges, allowing the hub to transform into different configurations based on the situation.



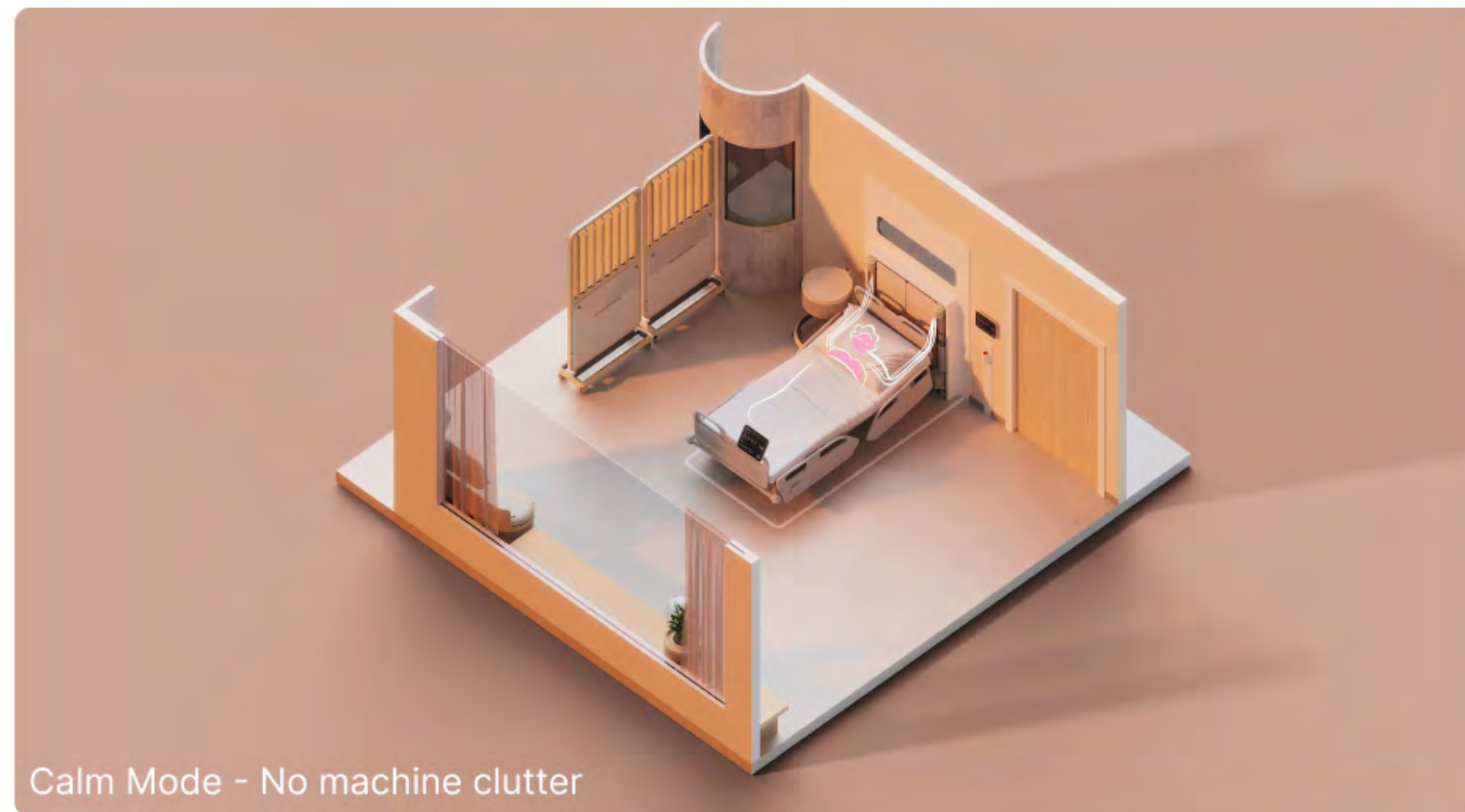
# MODES



Relatives using Chair & Care Table



Accessibility for nurses at night



Calm Mode - No machine clutter



Easier early mobilization

Centralizing the equipment into two hubs, MIRA frees up space for movement and interaction, making room for rehabilitation, family connection, and a more dignified healing experience.

# HALLWAY ACCESS

Without entering the patient's room, caregivers can monitor and adjust life-supporting equipment through a passthrough closet in the wall, reducing disturbances and noise. Tinted glass windows above, and in the alcove, allow them to see the patient and ensure everything is going well. This design helps patients sleep better at night, which is crucial for recovery and reducing delirium



Patients endure sleep deprivation due to nursing interventions, constant handovers, and machine noise. This exacerbates confusion and ICU-related delirium and slows recovery.

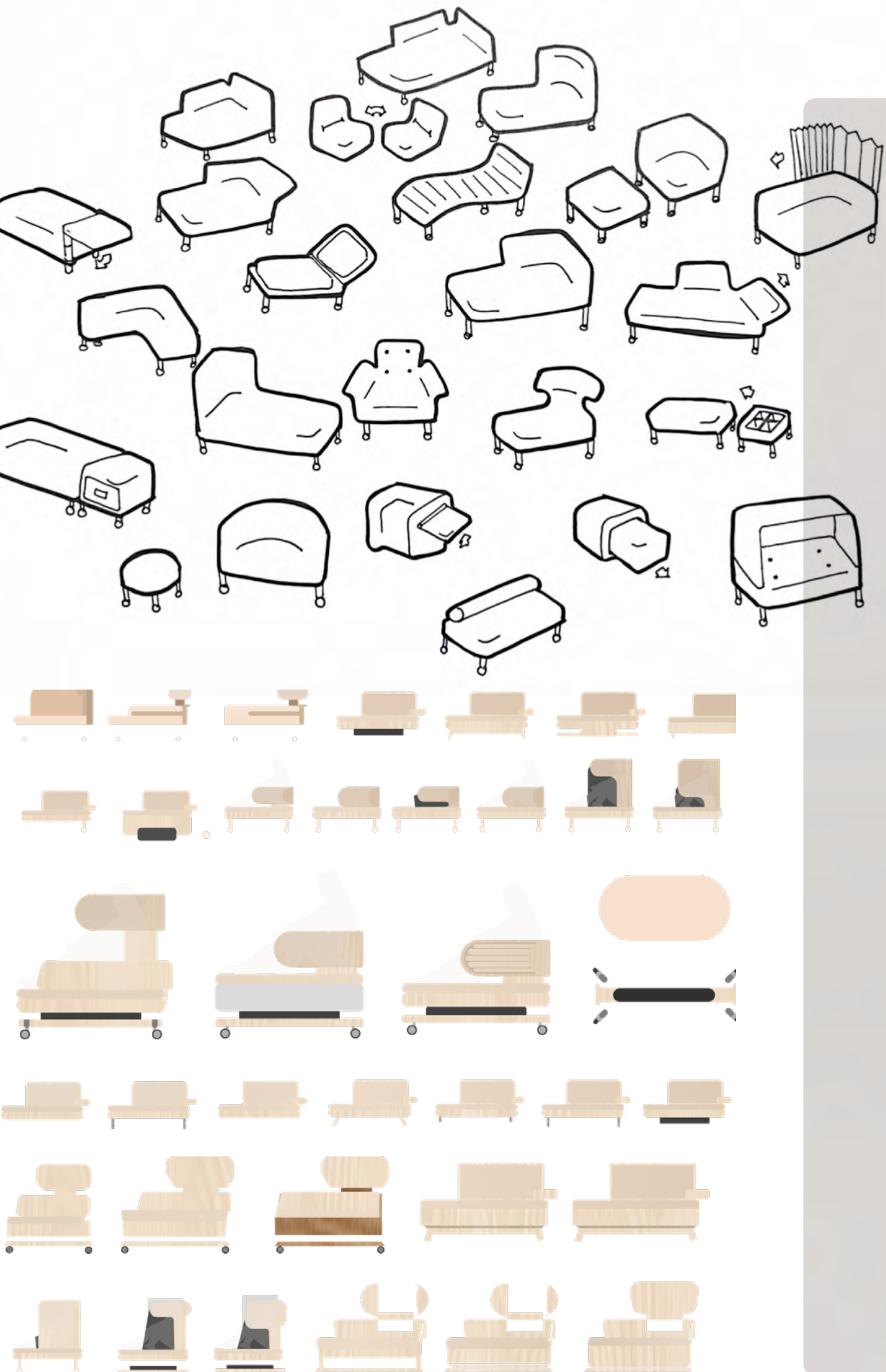
# MODULES

To enhance the cable and tube management, the system allows caregivers to organize tubes in a structured way before connecting them to the patient, reducing clutter, improving safety, and streamlining workflows. The pillar features a top cover, inspired by a bedside light, adding a warm, soft glow while visually hiding cables and tubes.



# A BRIDGE TO REALTY

Seeing a loved one in intensive care can be overwhelming, but by reducing clutter, we make space for welcoming furniture that encourages family involvement and strengthens the patient's support system.



**Foldable Headrest**  
folded to create privacy for intimate moments

**Height Adjustable**  
allows for various seating positions and humans in different sizes



**Care Table**  
allows relatives to engage in small caregiving tasks, helping them feel useful and strengthening their emotional connection to the patient

# BALANCING PRIVACY & OVERSIGHT

ICUs are often open spaces, blurring the line between private and public. MIRA introduces an adaptive divider that helps balance patient privacy with the need for caregiver oversight.



Divider - Adjustable Shades - Pinboard

## **Adjustable Shades**

allows nurses to maintain visibility when needed while giving patients a sense of personal space

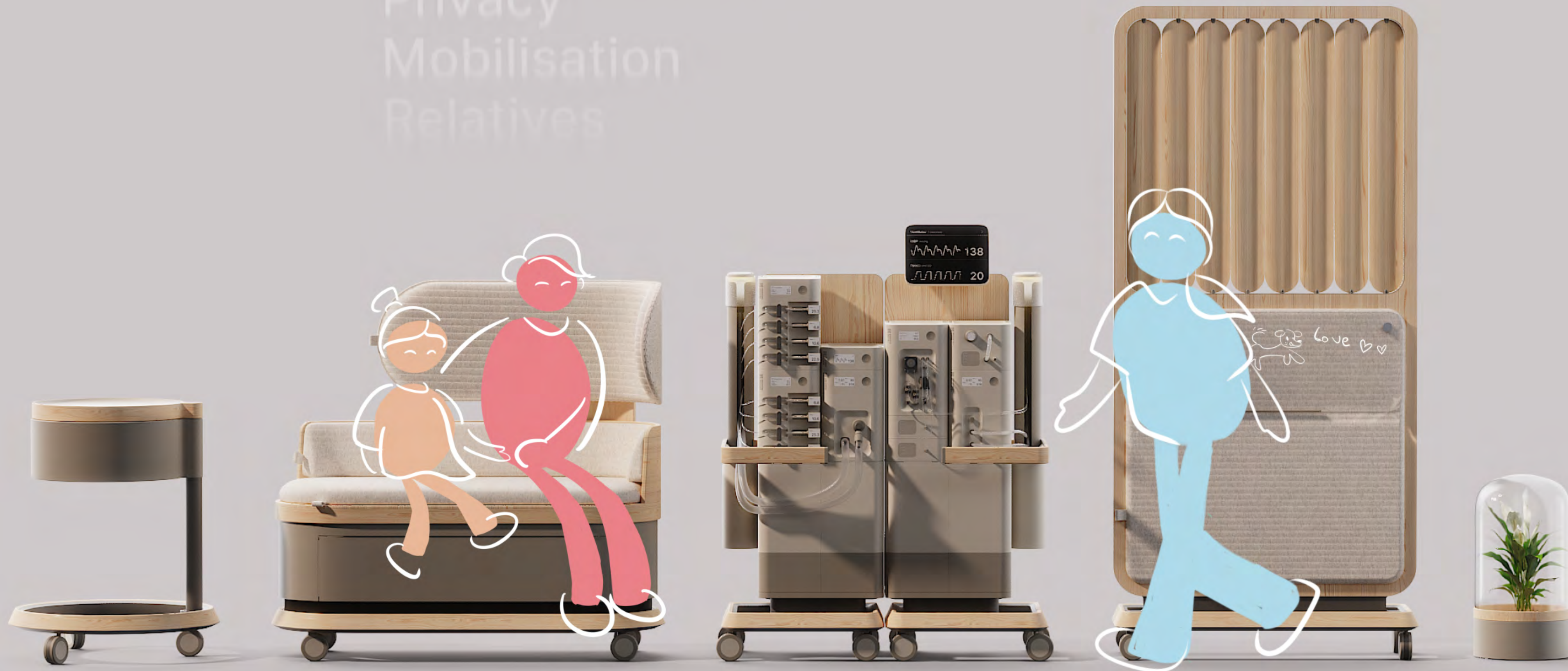
## **Easy-to-Clean Pinboard**

Invites families to safely leave messages for their loved ones, adding a personal, comforting touch to the room.

## **Acoustic Panel**

Absorbs noise and can easily be detached and washed.

Care  
Make room for **Recovery**  
Personalisation  
Privacy  
Mobilisation  
Relatives





**Learnings**

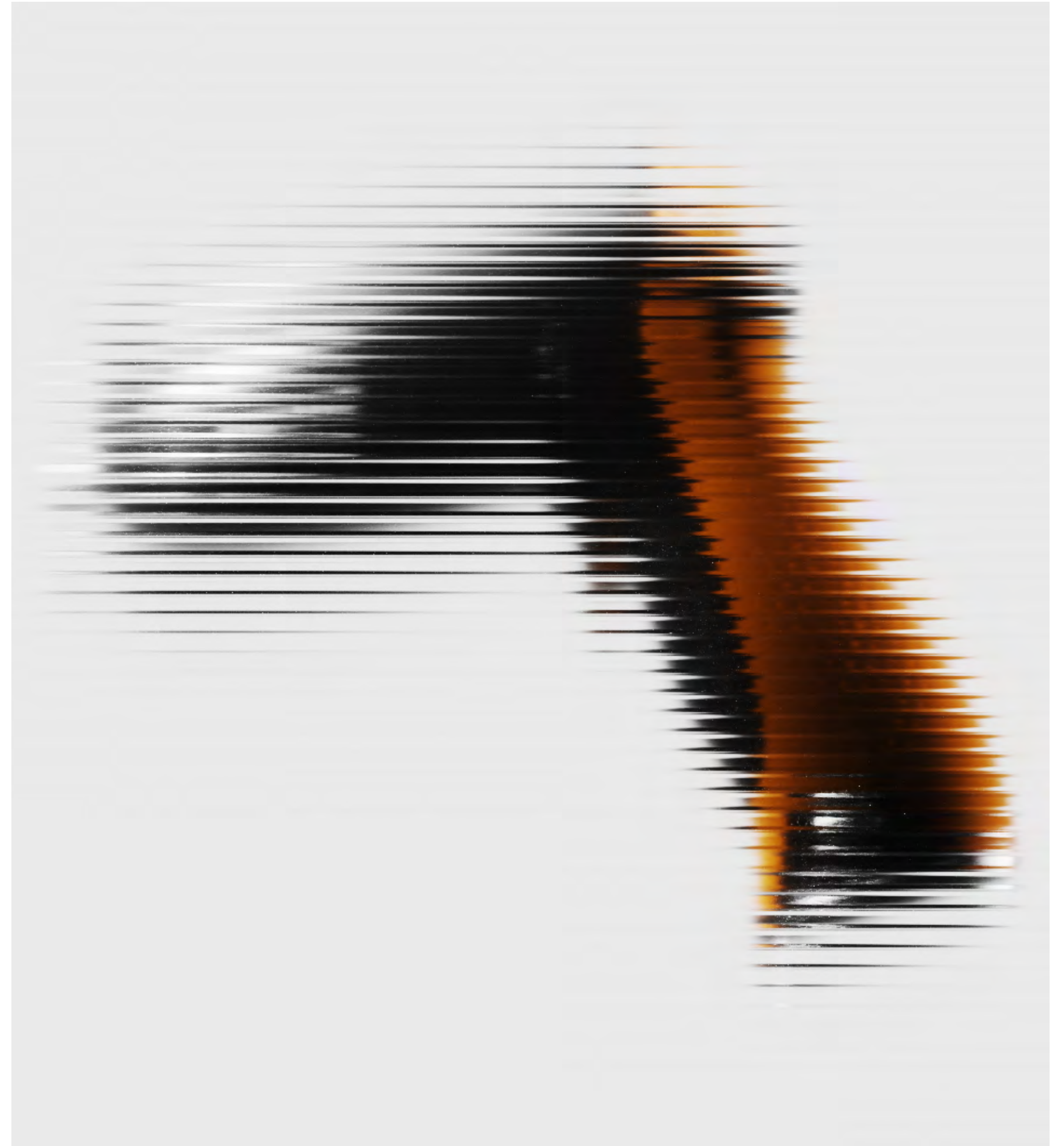
- Parametric modelling
- Design for refurbishment
- Design for production
- Brand identity
- Form

# RE-SCREW

Electric screwdriver designed for easy refurbishment, with focus on designing for production and brand language



10 Week Project | Term Project 3



# WHAT IF **FISKARS**<sup>®</sup> MADE A SCREWDRIVER?

Brand Analysis


**HUMAN ENGINEERING**



**INSPIRED BY NATURE**



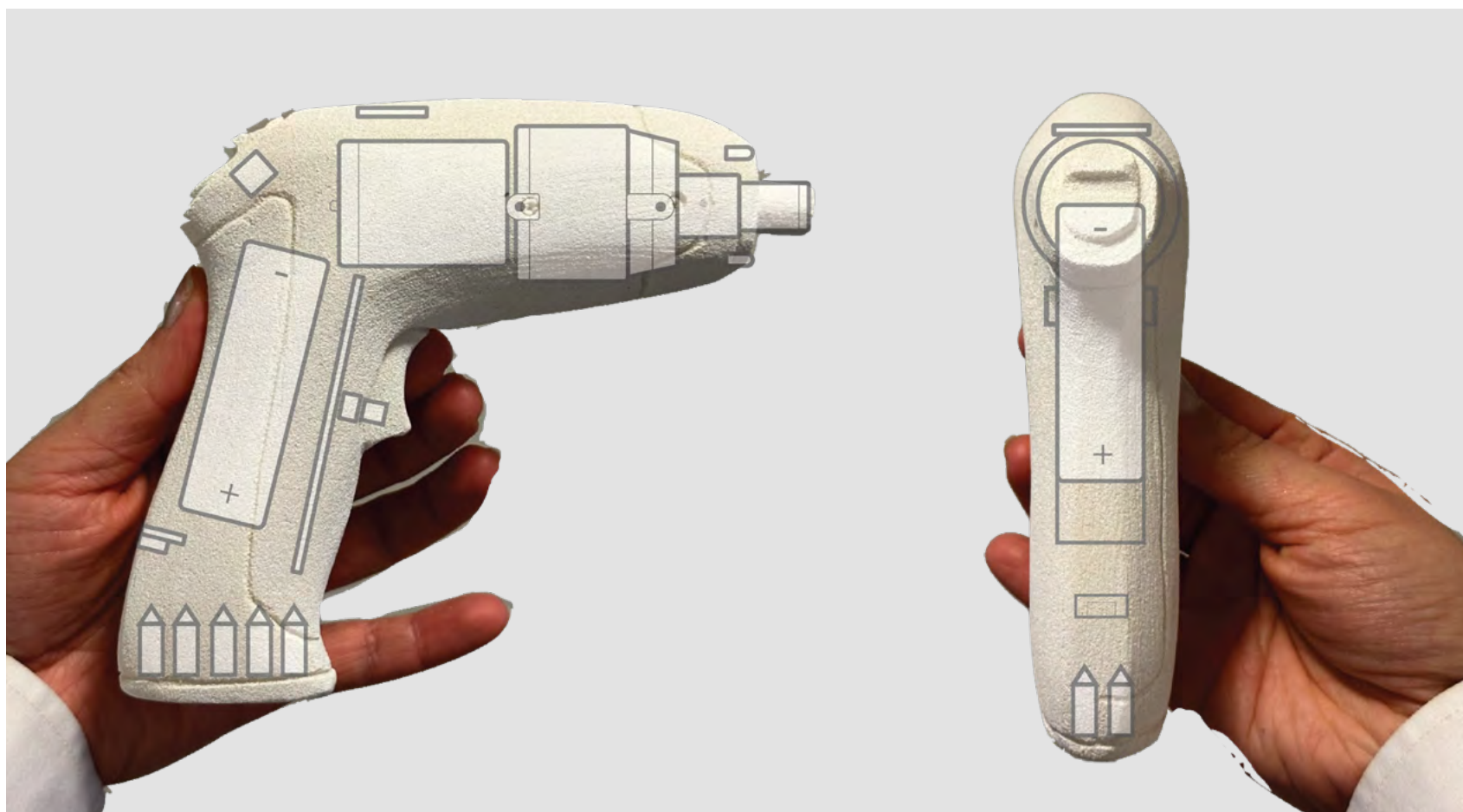
**SMART FUNCTIONS**



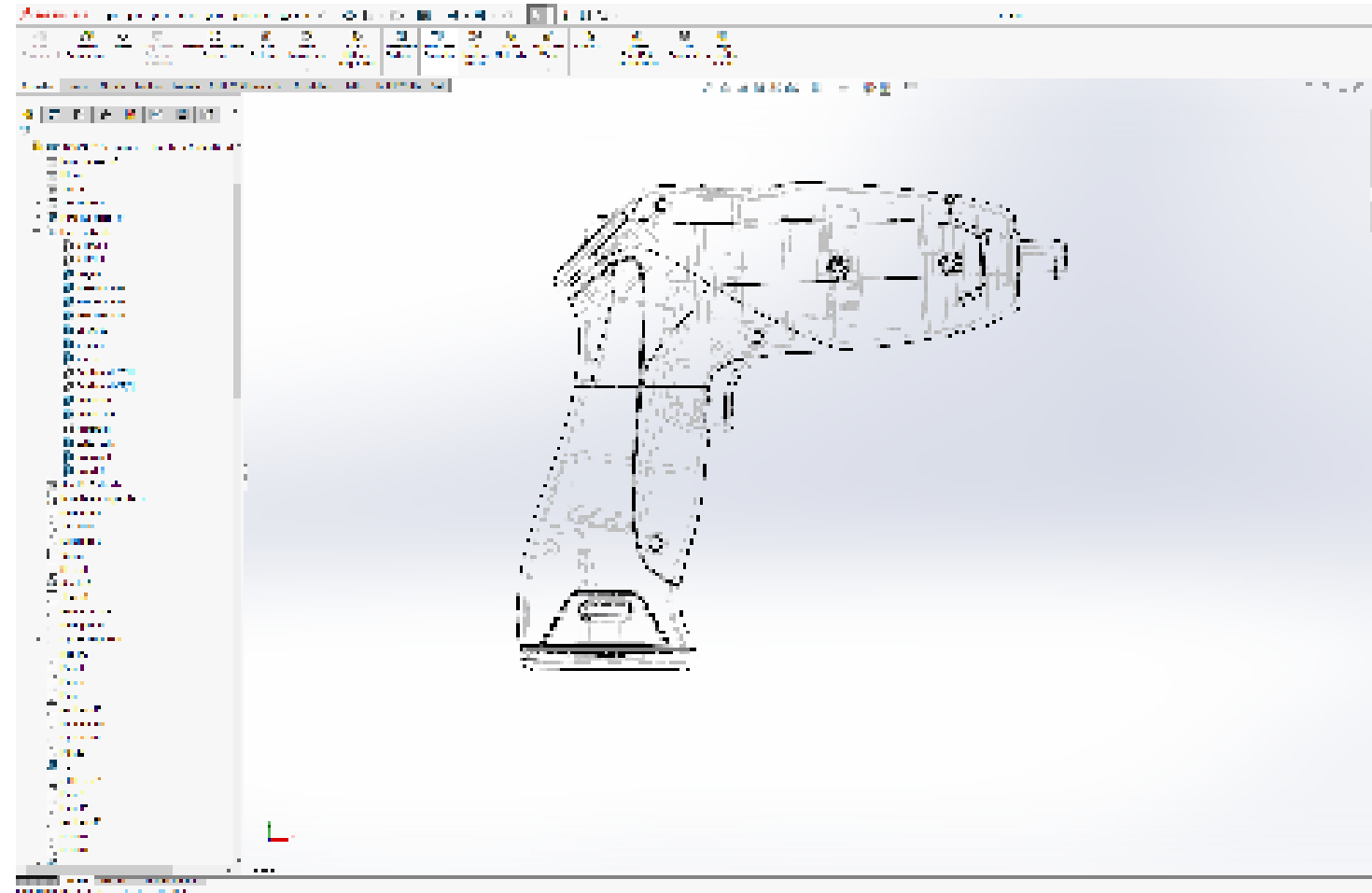
“Making the everyday extraordinary”

# FORM & TECHPACK

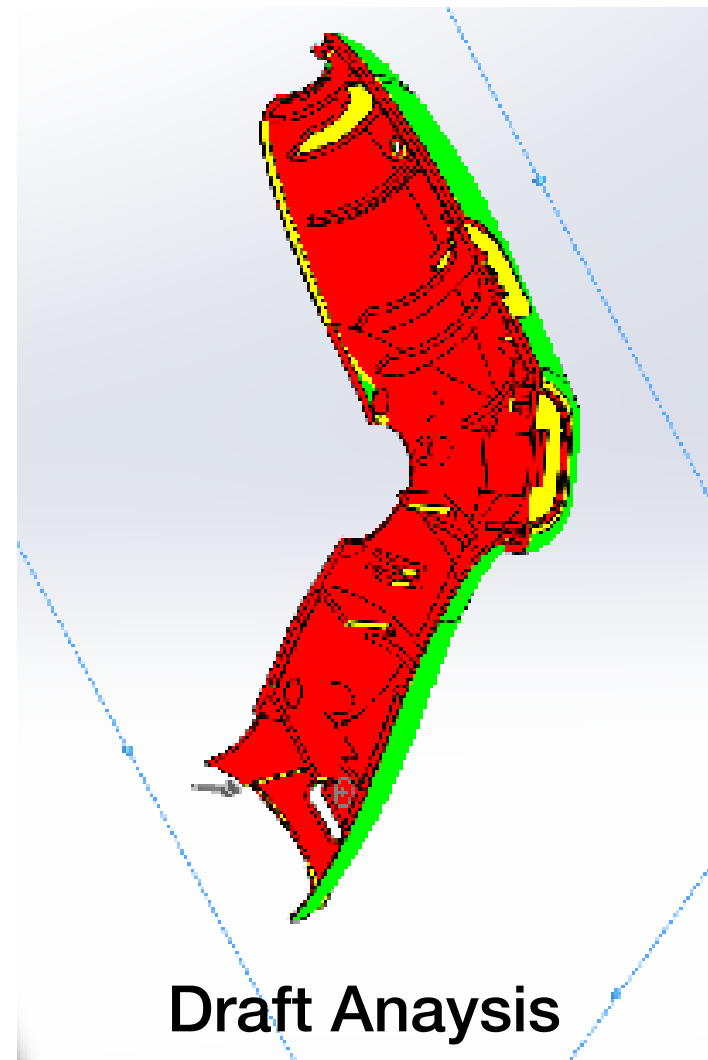
Form exporation, solid works modelling, production analysis, soildering electronics, testing & tweaking



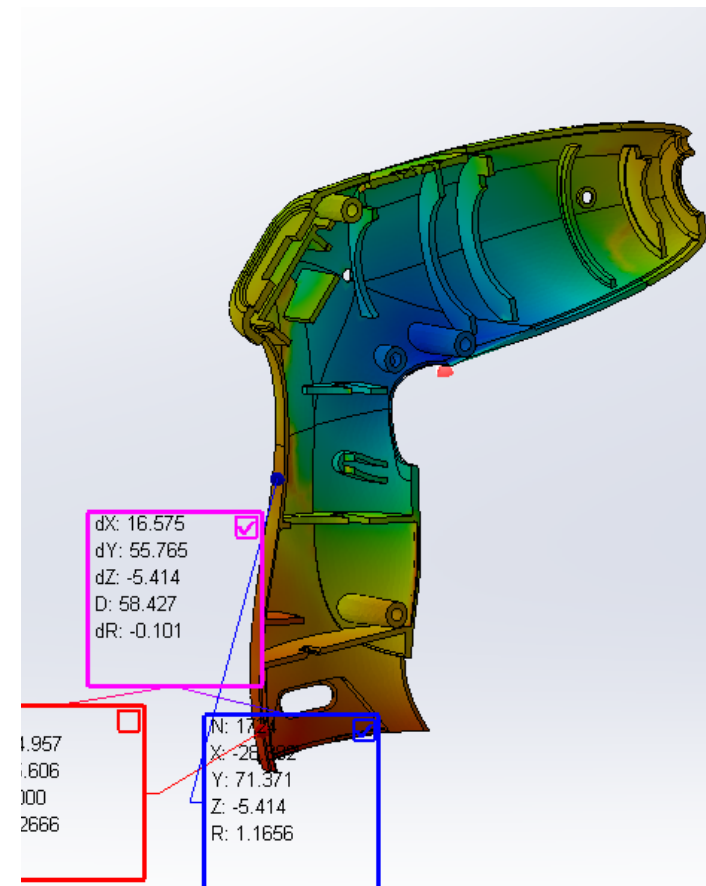
# DESIGNED FOR MANUFACTURE



Parametric Modelling



Draft Anaysis



Plastic Simulation



# PROTOTYPES



# BENEFITS



**Charging port**  
Hidden under cap  
protected from dirt



**Mini flash-light**  
Visibility in all environments



**Storage**  
3 most used bits

**Lights**  
Clear battery status indicator



**Switch**  
Intuitive & accessible with one hand

**Curved**  
Comfortable & natural grip

**Trigger**  
Soft rotating motion

**Soft touch**  
Rubber with debossed pattern

# PARTS OVERVIEW

**Brick:** Powder coated aluminium

**Main body:** 2K injection molded ABS plastic with rubber soft grip

**Trigger & Switch:** 1K injection molded ABS plastic

**Bottom:** 1K injection molded aluminium coloured plastic

**Bit holder:** Molded rubber

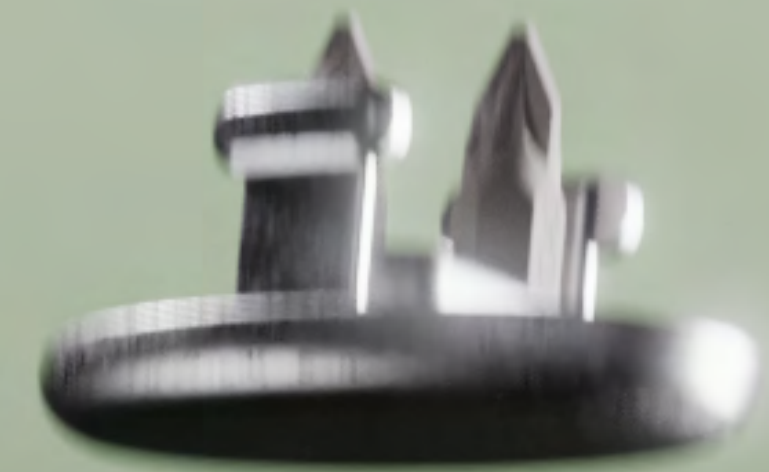


# REBIRTH EDITION

Designed to be refurbished. But how might we signalise the refurbishment in stores?  
A proud statement for the product's second life — to make old feel like new



Refurbished Certified Quality 01





FISKARS®

# RE-SCREW



Manipulated photo from IKEA

*Learnings*

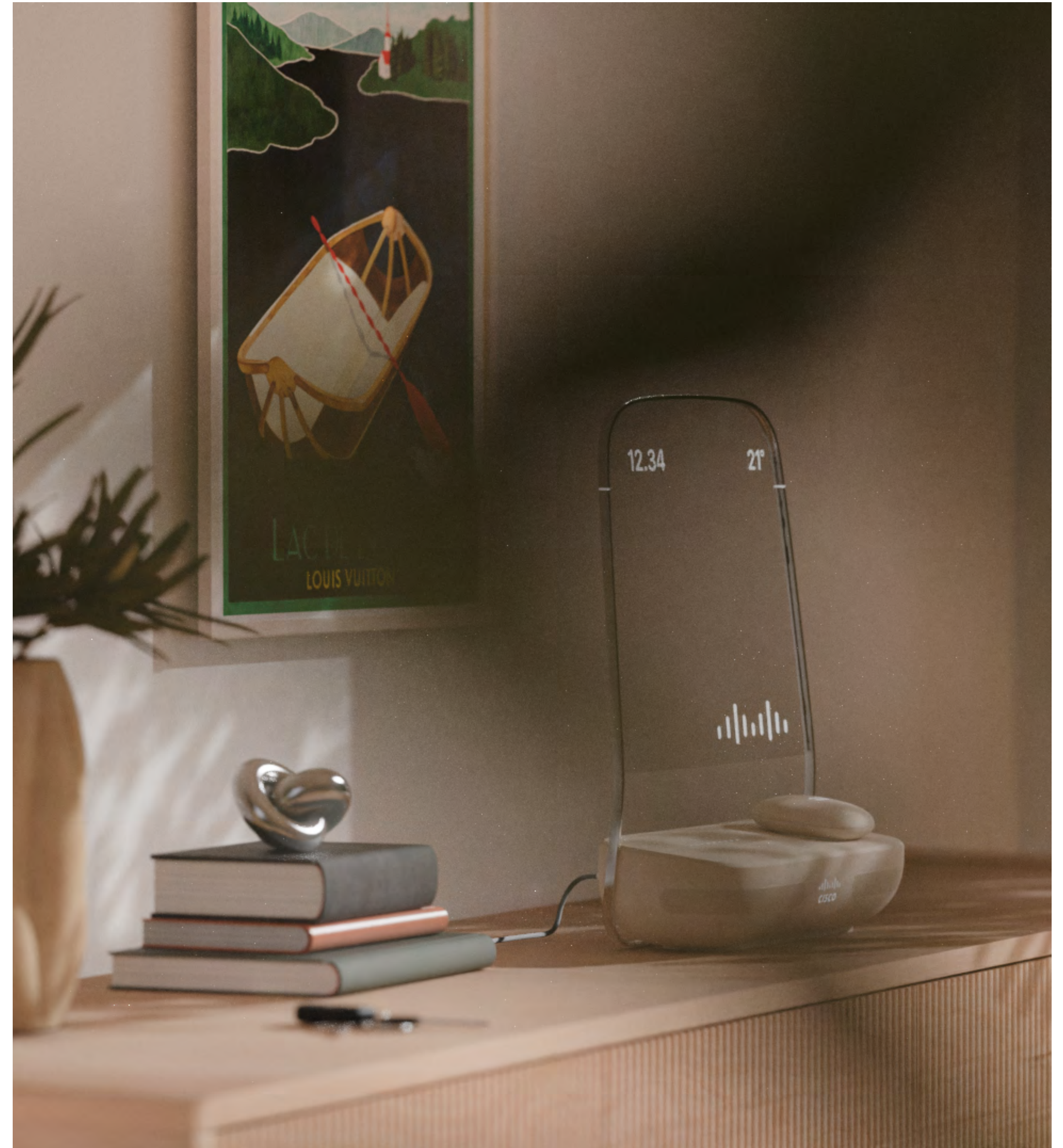
- Parametric modelling
- Design for refurbishment
- Design for production
- Brand identity
- Form

# SENTIO

Exploring strategic market opportunities for Cisco  
— what if they expanded into consumer home  
products in the next decade?

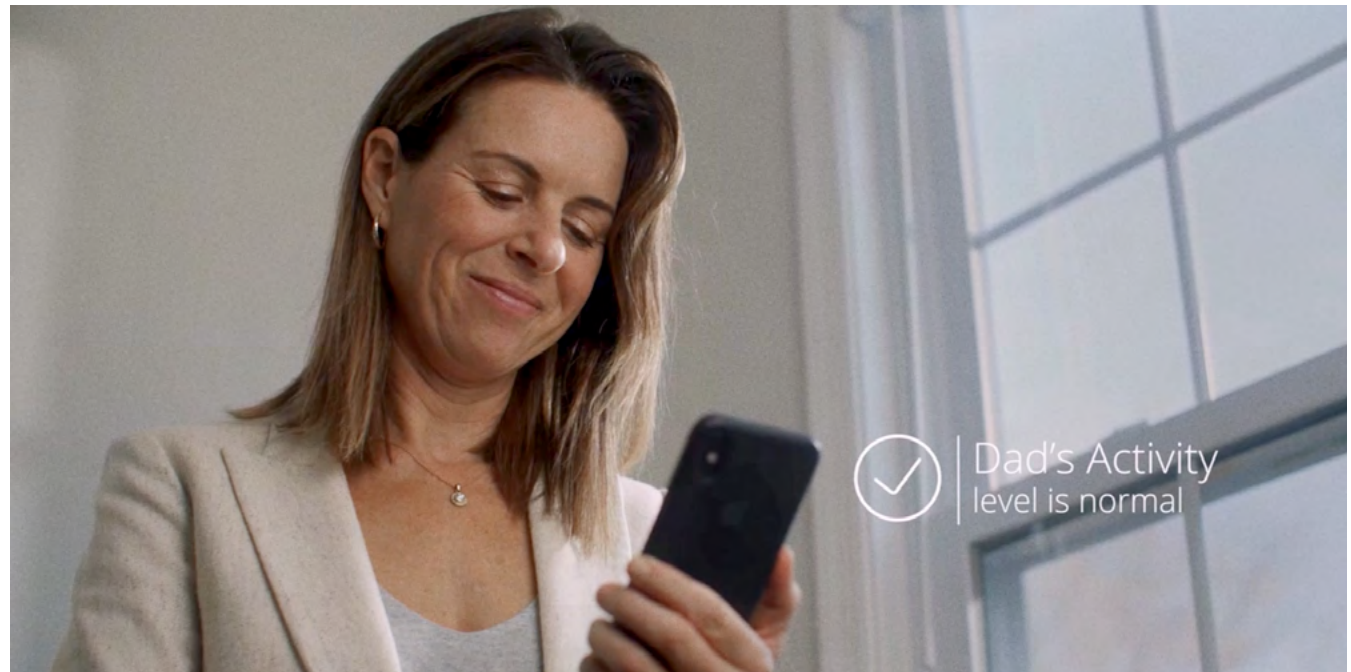
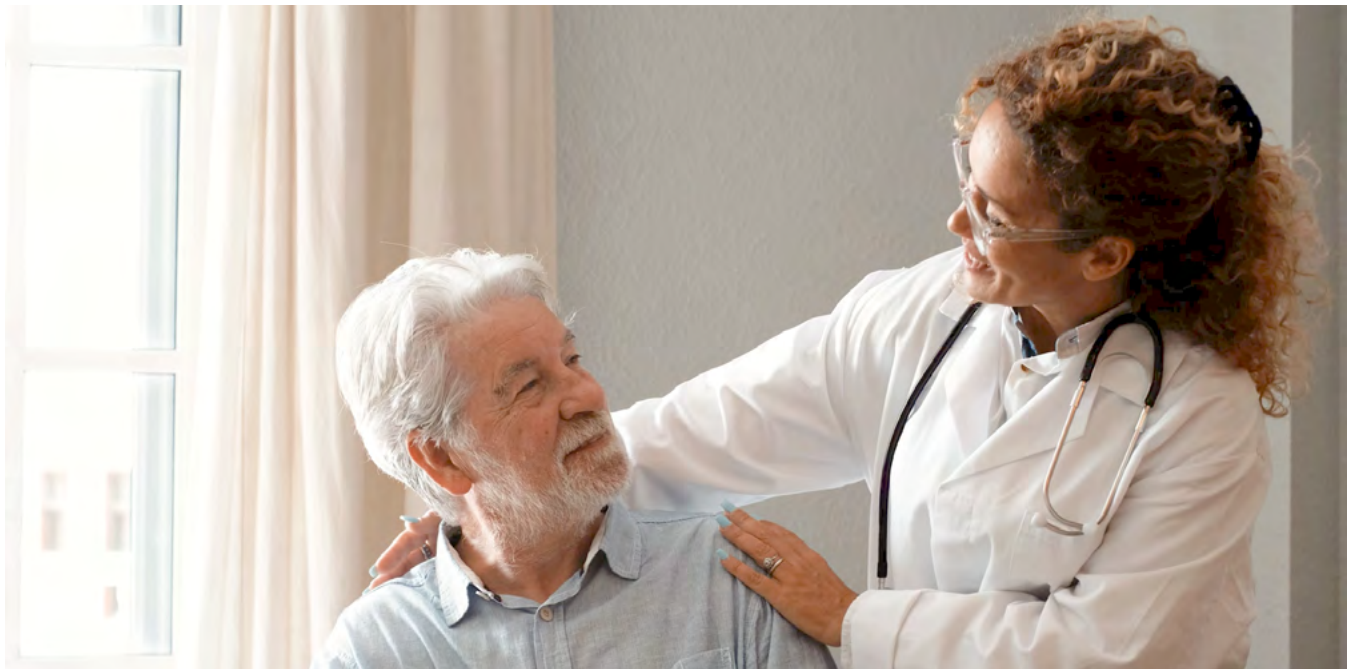


6 Week Project | Strategic Product Design



# WIFI-SENSING

Unlike other sensing methods, such as wearables, camera-based imaging, and acoustic-based solutions, WiFi technology is easy to implement and unobtrusive.



# HEALTH OVERVIEW



The transparent screen shows interesting data in a simple way.



As a ritual, the stone can be held for 60 sek to measure blood pressure.

# UNOBTRUSIVE MONITORING

A personal health and safety hub utilizing unobtrusive WIFI-sensing for passive detection of falls, motion, and monitoring of vital signs.



# DETAILS



# SENTIO

Bridging possibilities for better health, right at home



**GROUP PROJECT 2023**

*Frida Neckmar, Mårten Malmnäs,  
Julius Bahl*

*Learnings*

- Rapid mock-up
- Sketch video
- Trend research
- User-journey

# AUROCARE

In collaboration with Electrolux, we explored how garment care would look if the primary user was a domestic robot



2.5 Week Project | Introduction Project





# A NEW USER IN TOWN

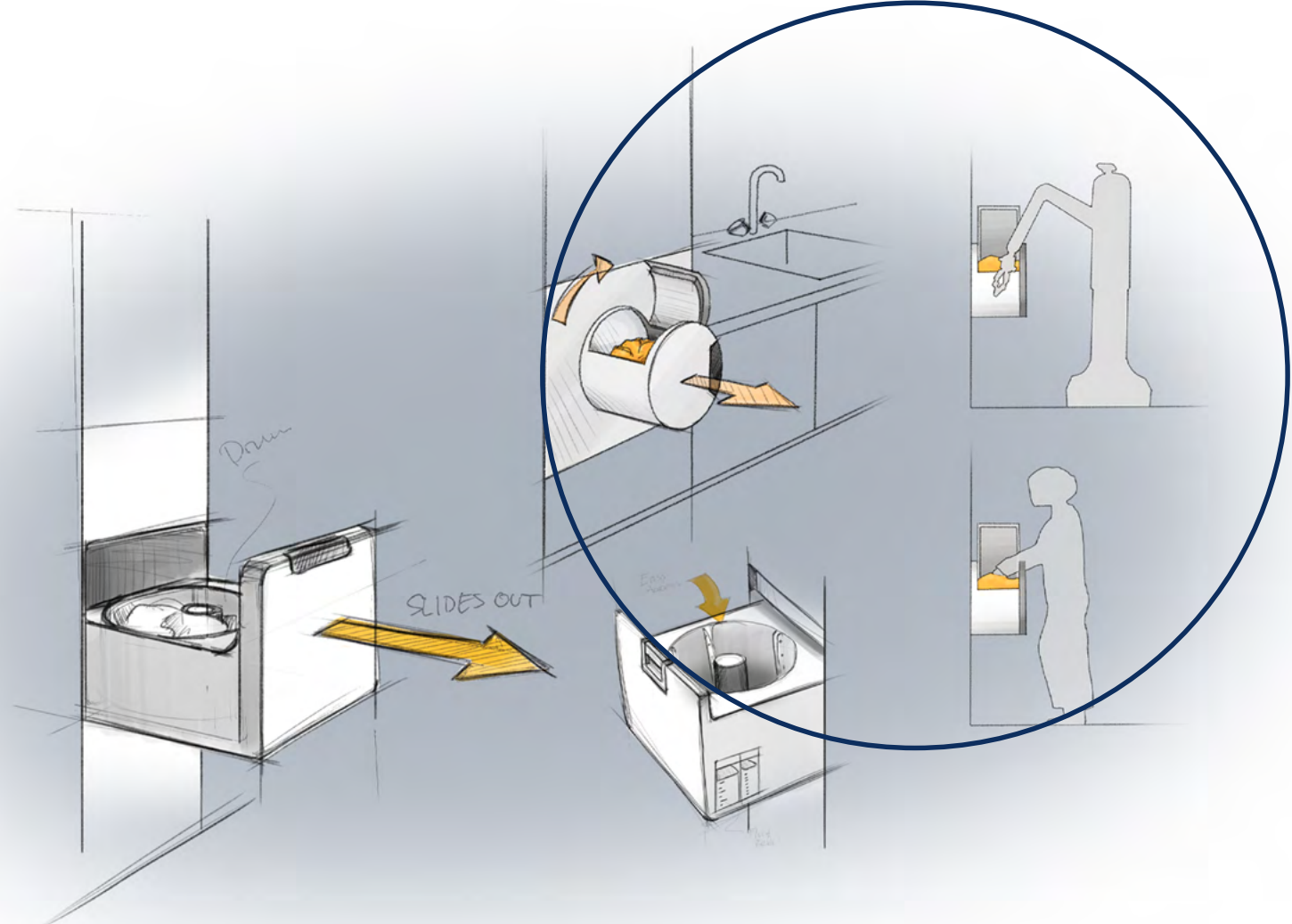


How would our household appliances look if they were designed for more than just humans?



As the population ages and more people live alone, imagining a future where the elderly can comfortably stay in their own homes with the help of **household robots** becomes increasingly realistic, especially with the next generation of home bots on our doorsteps.

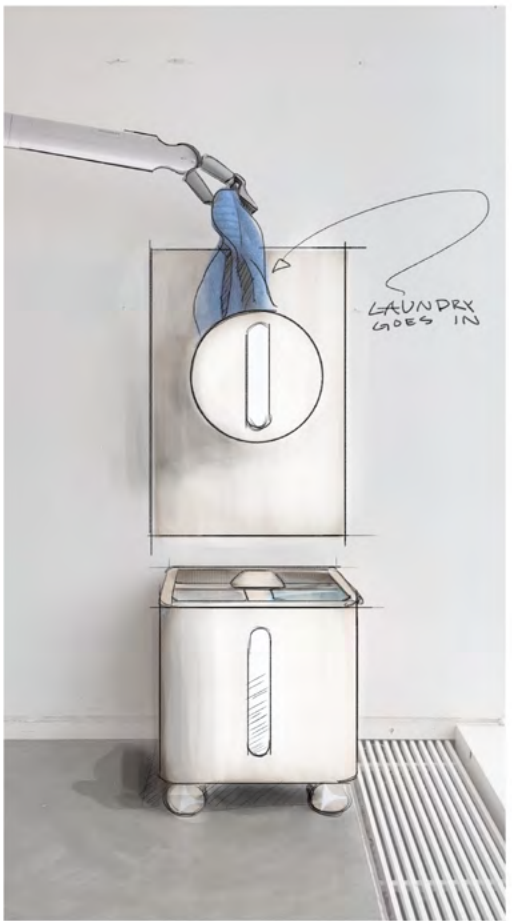
# PROCESS



DROP OFF



PICK UP



LOAD



EMPTY



PICK UP

# THE BASKET



# THE WASHER



Laundry catcher

In collaboration with  Electrolux

# AutoCare

AutoCare is a compact laundry system consisting of a small washing machine and smart laundry basket, optimised to for the collaboration between our future elderly generation and assisting domestic robots.



AutoCare Washer

AutoCare Basket



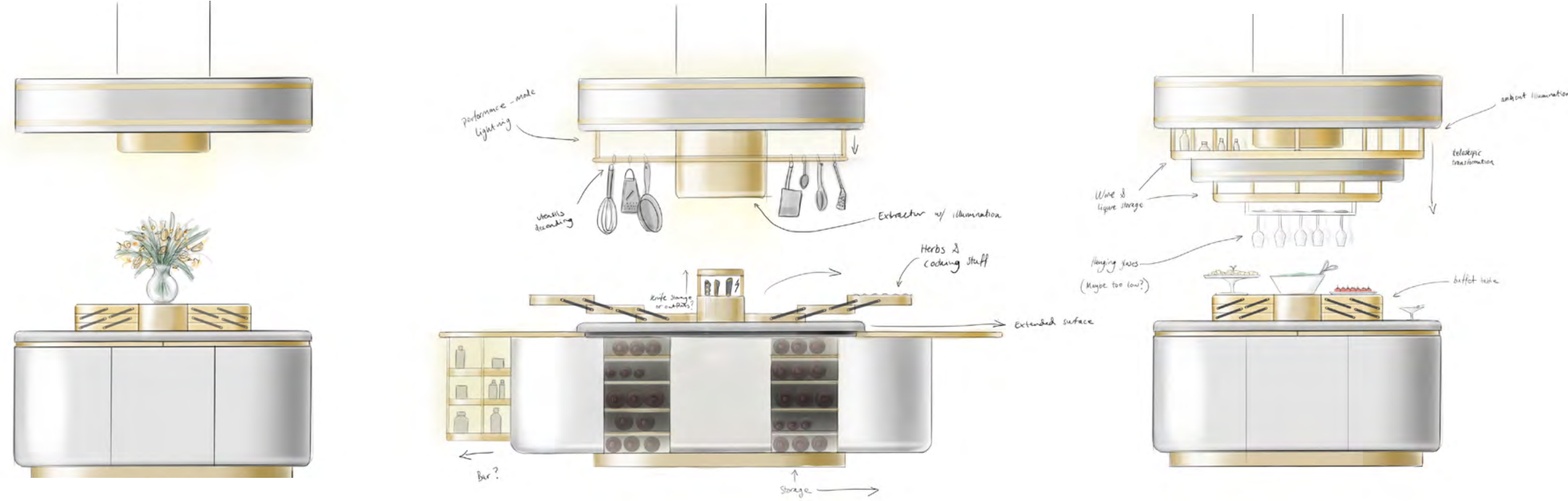
## Thank you for exploring my work!

I hope it's shown you my hands-on approach—building, testing, and pushing ideas forward with energy and curiosity. I love working with people and thrive in a collaborative environment.

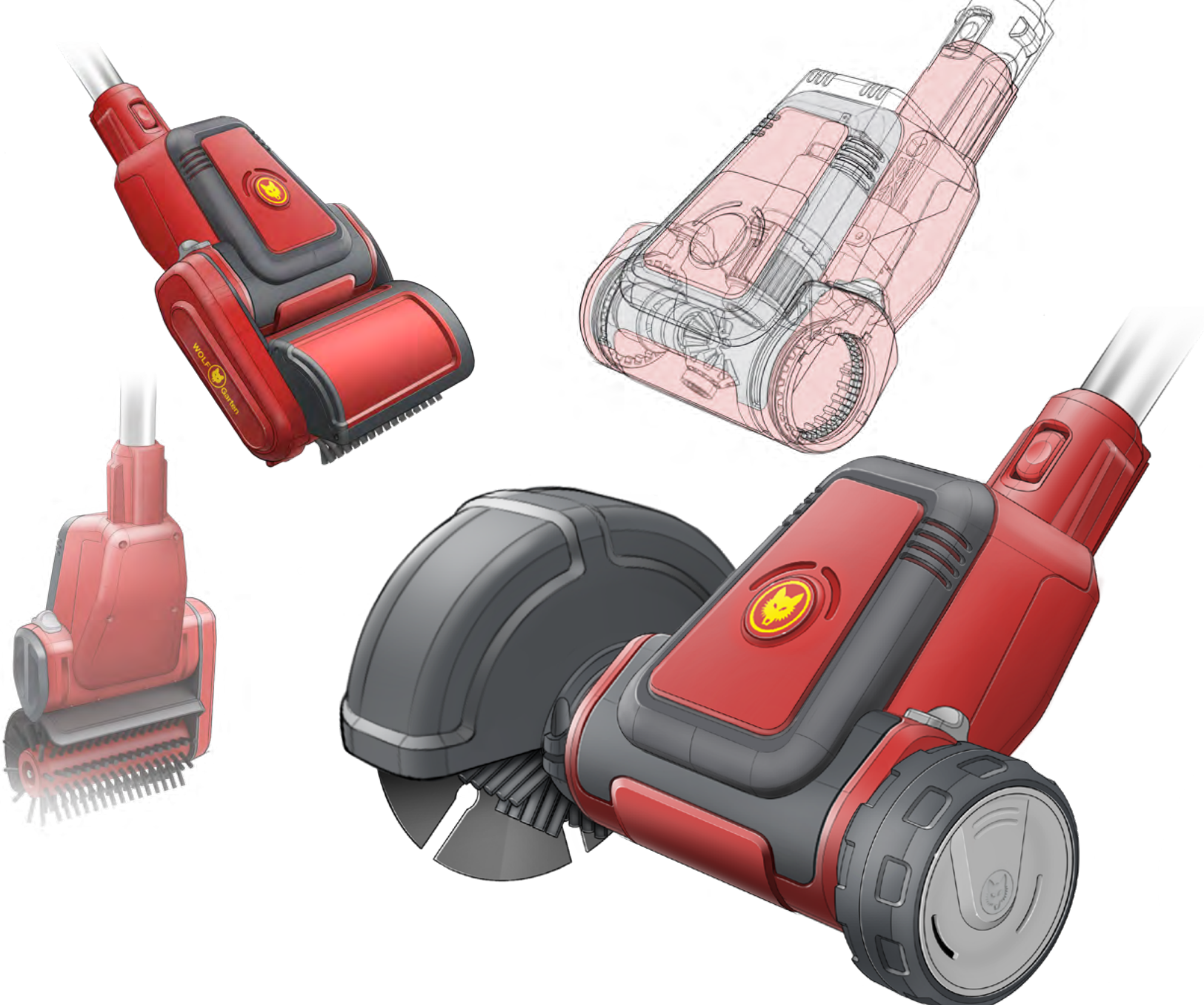
If you'd like to connect, let's talk  
—I'm always up for a new challenge!

A handwritten signature in black ink, appearing to read 'Frida Neckmar', written in a cursive style.

# INTERNSHIP PROJECTS



Kitchen design concept for Siematic at Tatic Designstudio



Final design sketches & CAD modell in Rhino for Wolfgarten at Tatic Designstudio. *Product is now available in stores.*



Kitchen refinement & redesign for Siematic at Tatic Designstudio. *Product is now available in stores.*

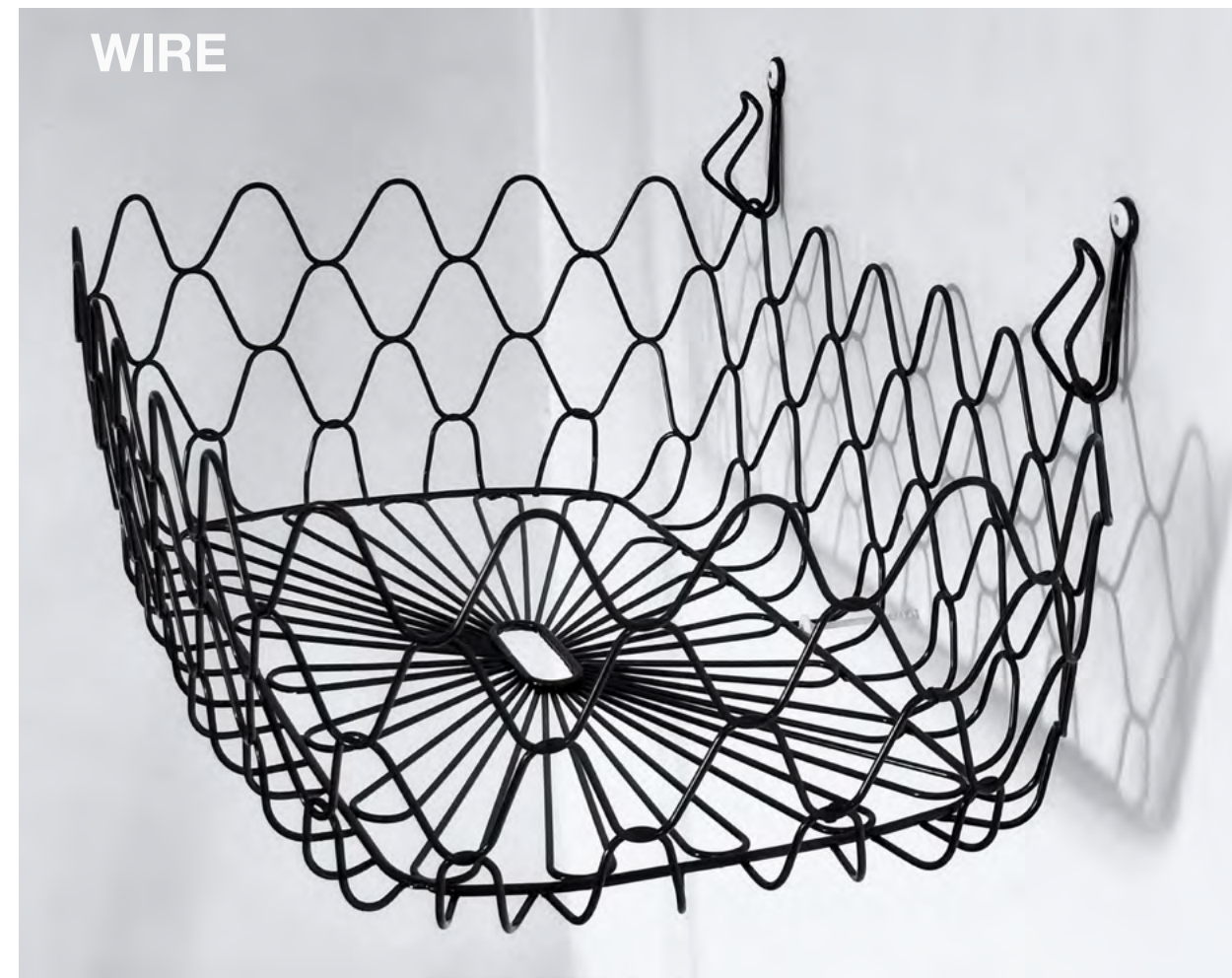


Packaging design for Perlweiss at Tatic Designstudio

# BACHELOR PROJECTS



Wrist Relieving Ergonomic Broom-set



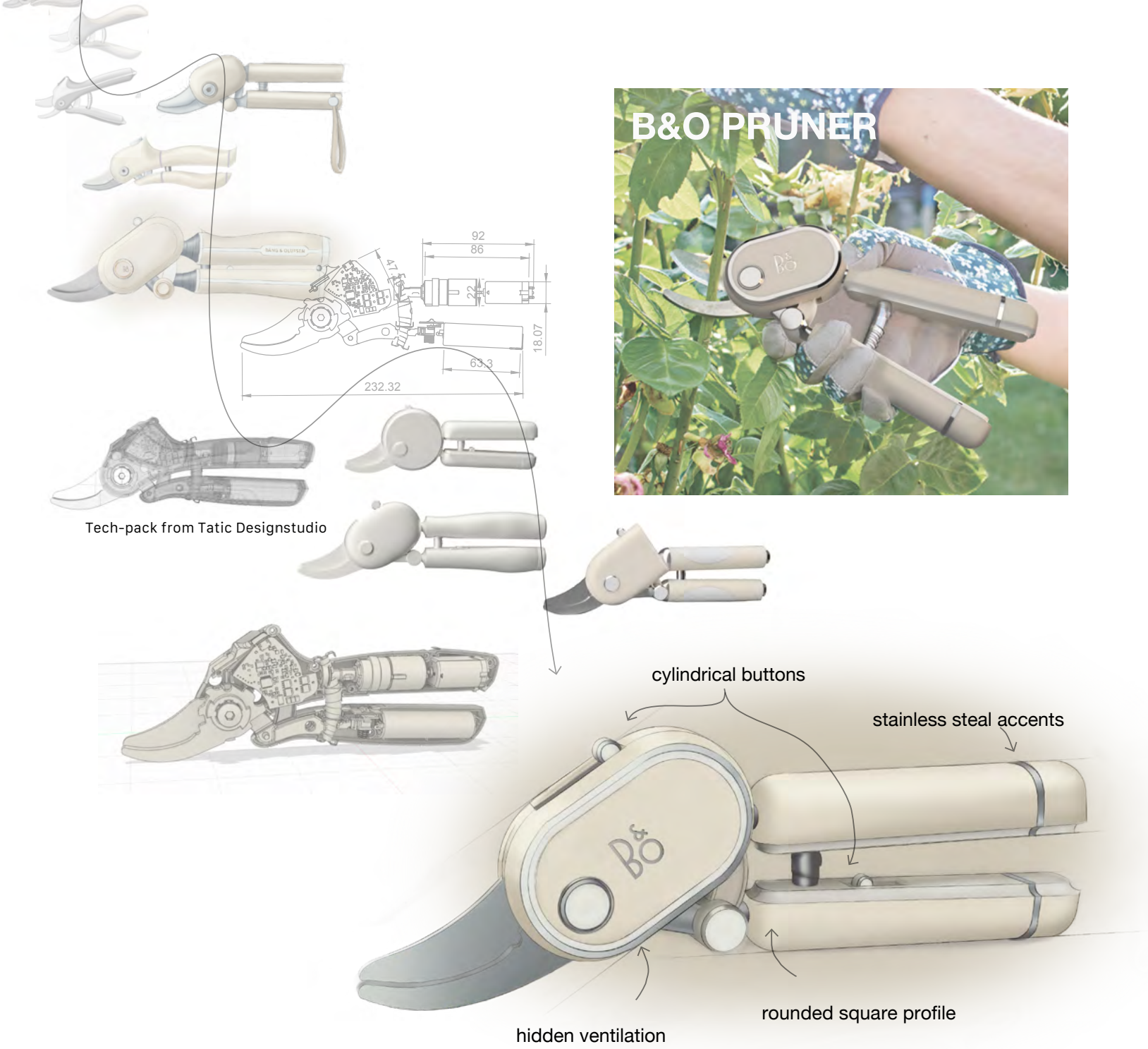
A project with focus on wire, welding and production



A product that helps elderly men when urinating seated



“Furniture in transformation”



Thesis exhibition: Vases that “Make the most out of flowers”  
Material exploration: 3D printed Clay, Glass & Acrylic