JOST SIEBERT

PORTFOLIO **2014**

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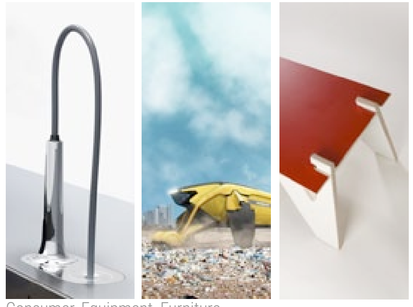
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Personal Project. Blood, Sweat and Tears.

44 WHO I AM



Would you want me in your team?

RÉSUMÉ



BASIC INFORMATION

Phone // +45 22 82 52 73

Email // hello@jostsiebert.com

Homepage // www.jostsiebert.com

Current City // COPENHAGEN, DENMARK

Nationality // GERMAN

EDUCATION

UMEÅ INSTITUTE OF DESIGN // MFA ADVANCED PRODUCT DESIGN
June 2013 - June 2015

MUNICH UNIVERSITY OF APPLIED SCIENCES // BFA INDUSTRIAL DESIGN
June 2013 - June 2015

EXPERIENCE

YOUR TEAM // PRODUCT DESIGN INTERNSHIP
Looking for challenging projects in a motivated, multi-disciplinary team.
February - June/July 2015 // Globally

°MEQU // RESPONSIBLE PRODUCT DESIGNER
Developing the world's smallest and most powerful portable infusion fluid warmer to prevent hypothermia in trauma patients.
September 2014 - February 2015 // Copenhagen, Denmark

ATLAS COPCO // PRODUCT DESIGN INTERNSHIP
Strategic product portfolio map (several thousand products).
Also, personal 50h project with main focus on improvement of visualization skills.
June - August 2014 // Örebro, Sweden

VARIOUS // FREELANCE PRODUCT DESIGNER
Transportation, household, consumer electronics, industry.
November 2012 - August 2013 // Munich, Germany

RAW EDGES // PRODUCT DESIGN INTERNSHIP
Furniture design, model making, research, exhibitions, material experiments, pattern making.
April - September 2010 // London, UK

BMW GROUP DESIGN // WORKING STUDENT
Market research, visualizations.
January - October 2009 // Munich, Germany

Cabinet-maker, snowboard instructor, retail assistant, worker in honey factory, fruit picker, call center agent, assembly worker...

LANGUAGES

German *(native)*, English *(fluent)*, French *(intermediate)*, Swedish *(basic)*, Danish *(basic)*

RECOGNITION

2014 CORE 77 DESIGN AWARD, RUNNER UP // Food Radiation Scanner

2014 IF CONCEPT DESIGN AWARD // Polar research vehicle

METHODS

Human Centered Design, Wizard-of-Oz User Testing, Personas, Digital and Analog Sketching, Quick Mock-Ups, Prototyping...

SKILLS

Photoshop, InDesign, Illustrator , Bridge, Alias Automotive, Rhino, T-splines, Solidworks, KeyShot5, Microsoft Office, Lotus Notes
(Currently learning Premiere Pro, After Effects, Audition)

MODEL MAKING + WORKSHOP
Foam, wood, metal, plastic, clay, paper, plaster, carbon/glass fiber laminating, welding (TIG, MIG/MAG), milling, mould making, silicone casting, spray painting, vacuum forming, screen printing, sewing, brazing, soldering.

°MEQU

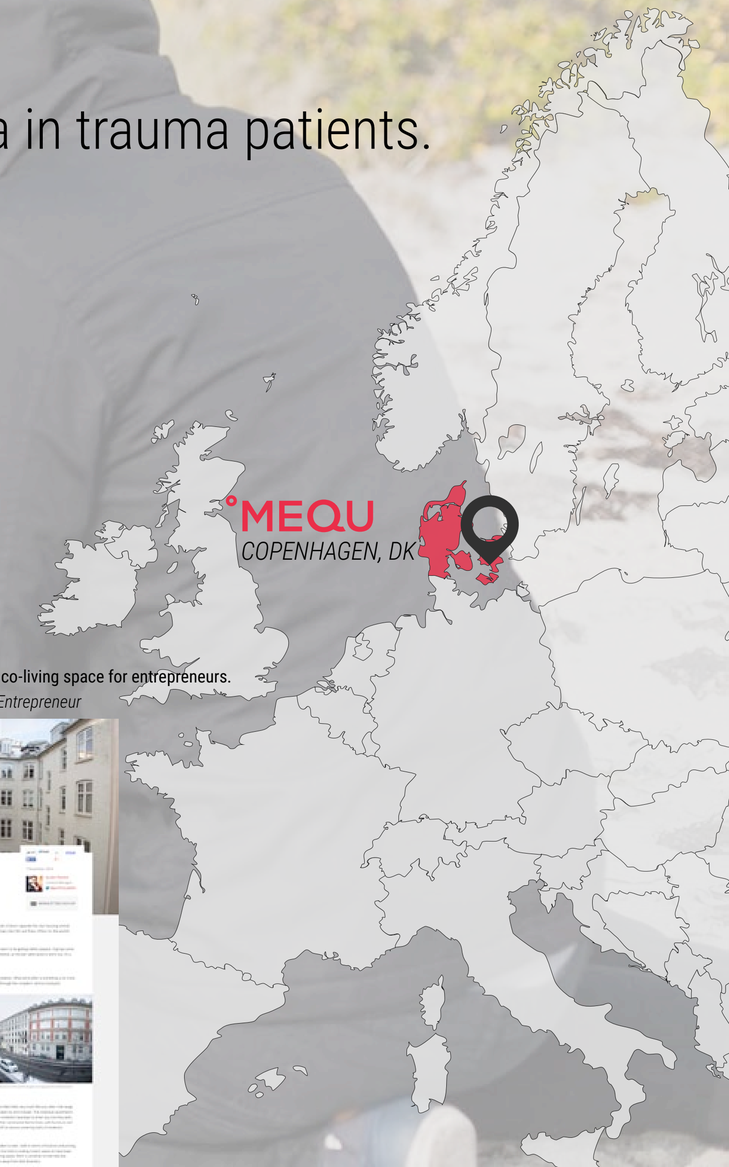
Working on the future of portable infusion-fluid warming to fight hypothermia in trauma patients.

CURRENTLY,

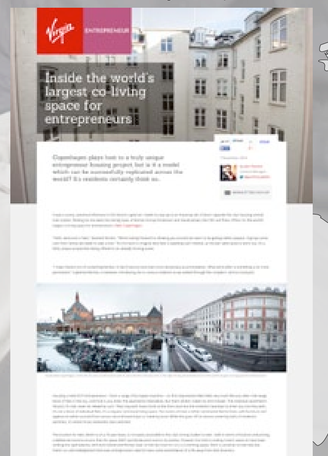
I'm **in charge of product design** for °MEQU,
a medical start-up that is developing the world's smallest and most powerful portable infusion fluid warmer.

Tasks include form language developement, branding, pricing-, sales- & marketing-strategy, video filming, user research, visualizations, CAD, communication with consultants, CE-& FDA-approval, search for manufacturer...

Visit our website to see who we are and what drives us:
www.mequ.dk (launches on december 8th)



Living in the world's largest co-living space for entrepreneurs.
Click for the article in Virgin Entrepreneur



PERSUING A HUMAN-CENTERED DESIGN APPROACH.



LEAD-USER FEEDBACK AFTER EXTENSIVE TESTING OF FIRST PROTOTYPE WITH MY COLLEAGUE MARIE LYHNE DAMGAARD

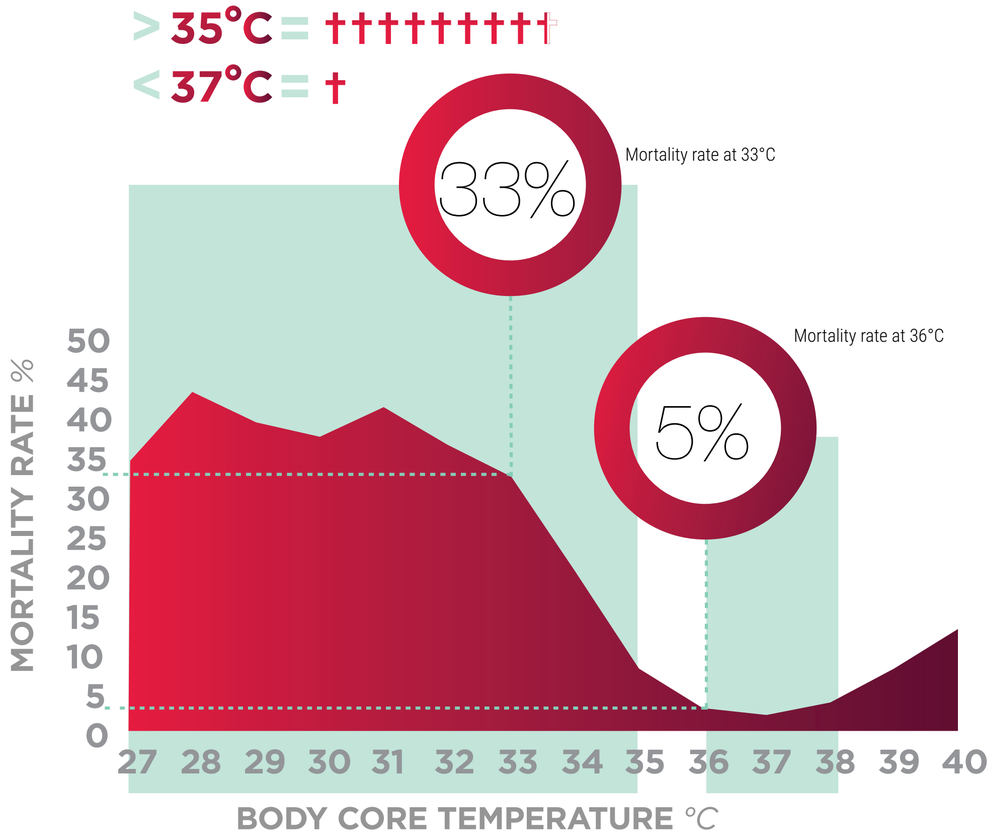
YES! THAT'S 5 LITRES OF COW **BLOOD!**



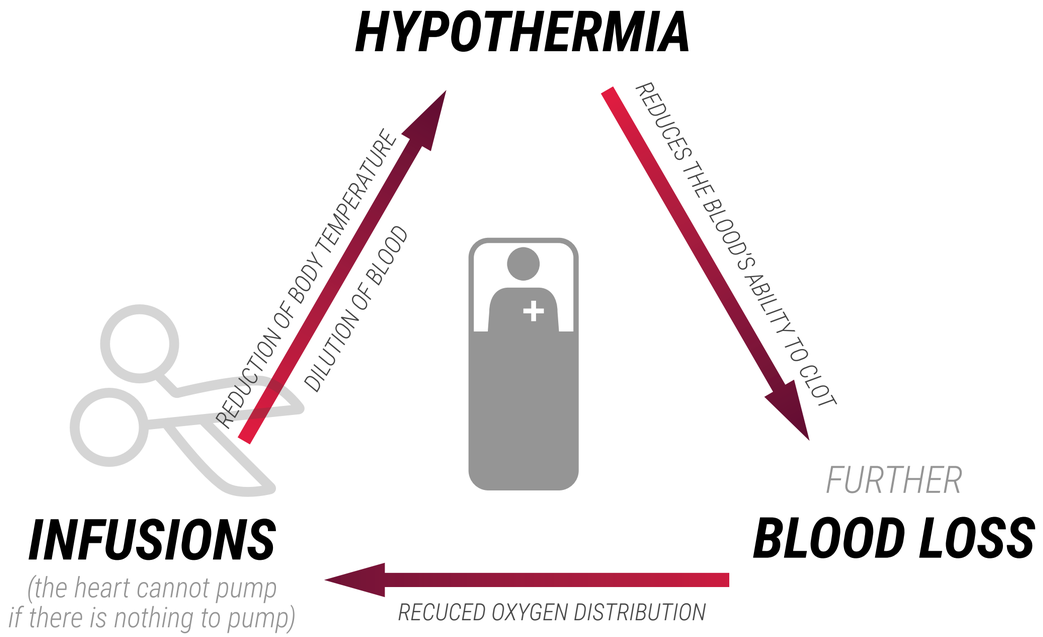


HYPOTHERMIA *AND WHY IT MATTERS*

THE MORTALITY RATE IS 8,5 TIMES HIGHER WHEN THE BODY CORE TEMPEREATURE IS BELOW 35°C



HYPOTHERMIA IN TRAUMA PATIENTS LEEDS TO A VICIOUS CIRCLE THAT WE WANT TO BREAK



The correlation between Body Core Temperature (BCT) and mortality. Percentage of mortality at each admission body temperature. Body temperature rounded to nearest integer. n = 700,304 patients. From US trauma database.

1 Martin, R Shayn;et al. Injury-associated hypothermia: an analysis, Shock Vol 24(2), Aug. 2005, pp 114.



DRÄGER AG
IS CURRENTLY FILLING A
PATENT APPLICATION
FOR OUR CONCEPT
WHICH IS WHY THIS PROJECT IS
CONFIDENTIAL
...FOR NOW
PROJECT CANNOT BE PUBLISHED UNTIL
PATENT PROCEDURE COMPLETED

EVERSAFE

Integrated excape solution for Oil and Gas Workers

Ten week term project in partnership with fellow classmate Darja Wendel in collaboration with Dräger Safety AG.

Dräger

UMEÅ UNIVERSITET

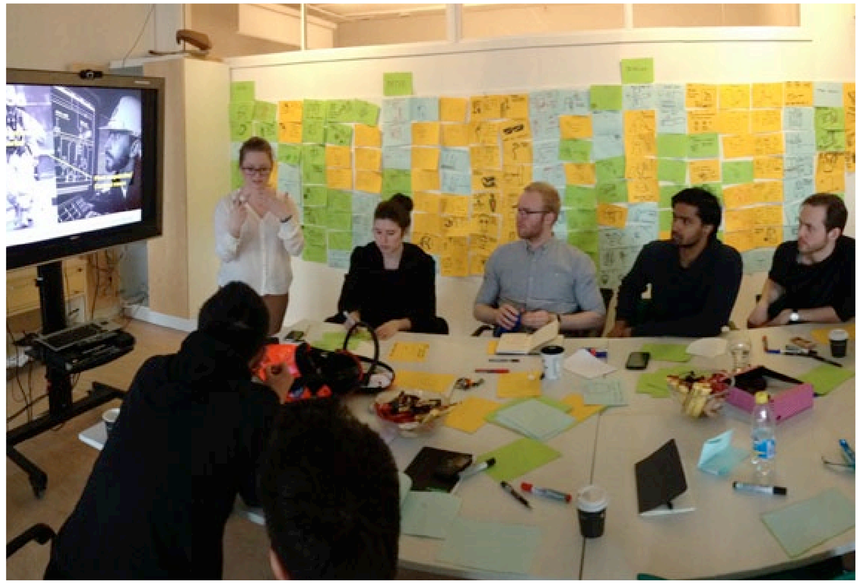


Watch our **research-video** on vimeo *(duration 1:42 min)*













HOW-MIGHT-WE...-WORKSHOP

GAS DETECTED

Every seconds counts when it comes to locating and donning an escape mask in the case of a gas leak.



1. GAS DETECTED
2. HOLD BREATH
3. LOCATE ESCAPE MASK *(WHILE HOLDING BREATH)*
4. DON MASK & ESCAPE
5. ALERT OTHERS WHEN IN SAFETY

DESIGN MODEL





STORY TELLING IS KEY!

This simple eight-second side-by-side video comparison of the Dräger's current state of the art solution and our fully functional mock-up says it all.

Unfortunately confidential for now.

FUNCTIONAL MOCK-UP



MOCK-UP VIDEO





„ What if you were protected faster and prepared at all times? “





DRÄGER HELMET BASIC

DRÄGER HELMET EVERSAFE

The Food Radiation Scanner is a kitchen appliance that helps people determine if their groceries are safe to consume. The target audience are Japanese households affected by the Fukushima incident, specifically residents living in areas where elevated radiation levels can be observed in fresh food at local markets. The Food Radiation Scanner improves on handheld Geiger counters in that it offers more accurate and understandable readings in a shorter amount of time. This way we hope to empower customers about buying locally grown food again.

AWARD RECIPIENT
C77D A
The Best of Design 2014

CORE 77 AWARD 2014
RUNNER UP

FOOD RADIATION SCANNER

What is safe to eat?

2 week group project in collaboration with Interaction Design students Madyana Torres and Kevin Gaunt and Advanced Product Design student Peter Alwin.

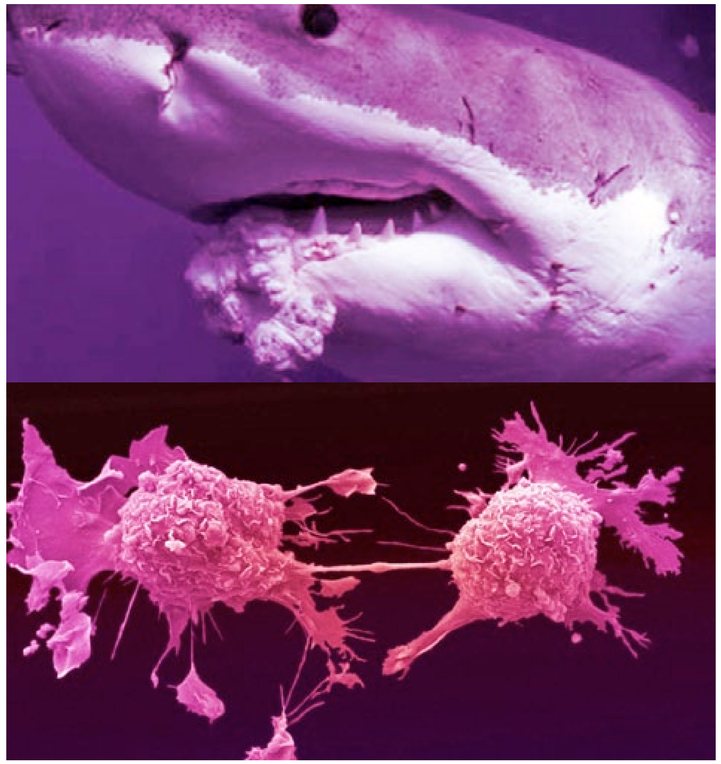
UMEÅ UNIVERSITET



SCANNING OF A CHILD FOR RADIATION AFTER THE FUKUSHIMA DAIICHI NUCLEAR DISASTER.

RADIATION

Radioactive Caesium is the most prominent and dangerous element found in foods in the aftermath of nuclear catastrophes. Caesium has a half-life of 30 years, and it persists in soils for around 300 years.



CANCER ON SHARK. HUMAN CANCER CELLS.

WHY IS IT BAD FOR YOU?

It has been proven that the likelihood of developing aggressive forms of cancer is much higher when people have been exposed to radioactivity. Radiation is very dangerous, as it can take many years until symptoms show, by which time it's too late to treat.
Children especially are very sensitive to radiation as their cells are in a state of increased growth.



FOOD RADIATION SCANNING CENTER IN TOKYO.

WHAT CAN YOU DO?

Currently there are few food scanning stations, run by NGOs. These offer their service to the japanese Citizens for a price of approximately $40.
But the process is time consuming and requires the people to bring their food to the scanning stations.

Measuring food with handheld Geiger counters is theoretically possible but very time-consuming due to their low power, and does not guarantee precise and reliable results as handling errors can easily occur, without proper training.

“What is safe to eat?”



HIROKO

34 YEARS, TEACHER

1 DAUGHTER (YUI , 7 YEARS)

LOVES TO COOK

EDUCATED

LOVES KARAOKE



HIROKO‘S DAUGHTER YUI

HER STORY:

Hiroko lives in Iwaki, a city in the Japanese prefecture of Fukushima. Although Iwaki lies outside the evacuation zone, many people moved away from the city because of their fear of radiation after the Fukushima Daiichi nuclear disaster.

Hiroko is unsure whether she should stay or move away. Leaving her hometown, friends and job, that she loves behind would be hard for her, yet she is worried about her daughter’s health and future.

THAT’S WHY SHE ASKS HERSELF:

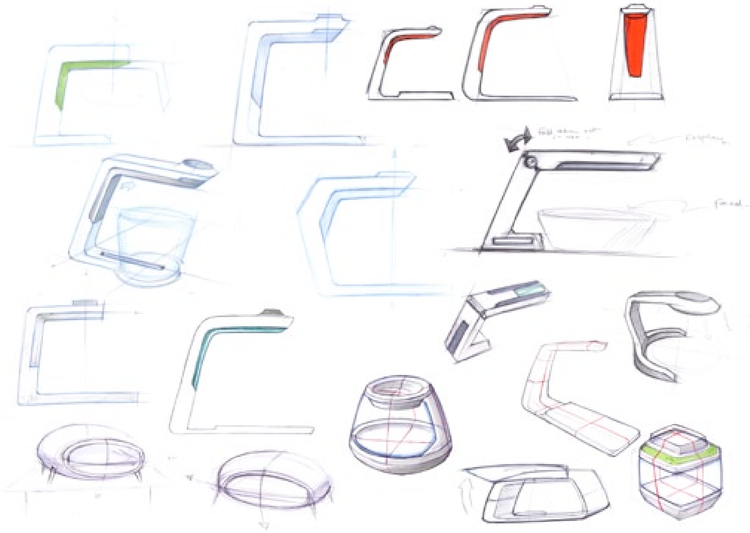
“How can I protect my daughter?”

“Where is the difference between edible and polluted?”

“Can't I scan my own food for radiation?”



TESTING VARIOUS MOCK-UPS



SKETCH EXPLORATION



INTERFACE DEVELOPMENT



WIZARD-OF-OZ USER TESTING



MODEL MAKING



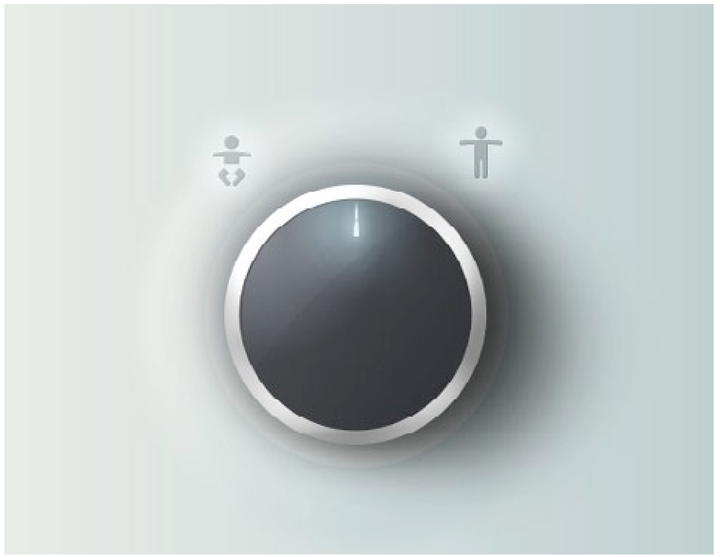
FILMING



TEAM-DINNER



SLEEP MODE



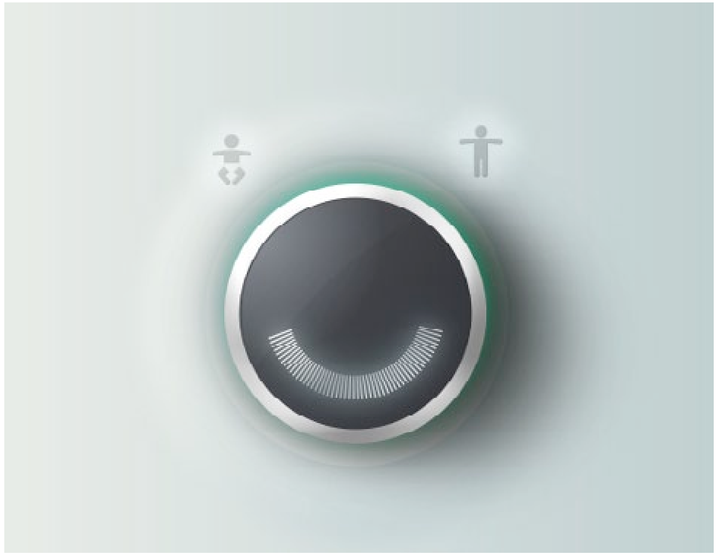
SELECT CHILD OR ADULT SETTING



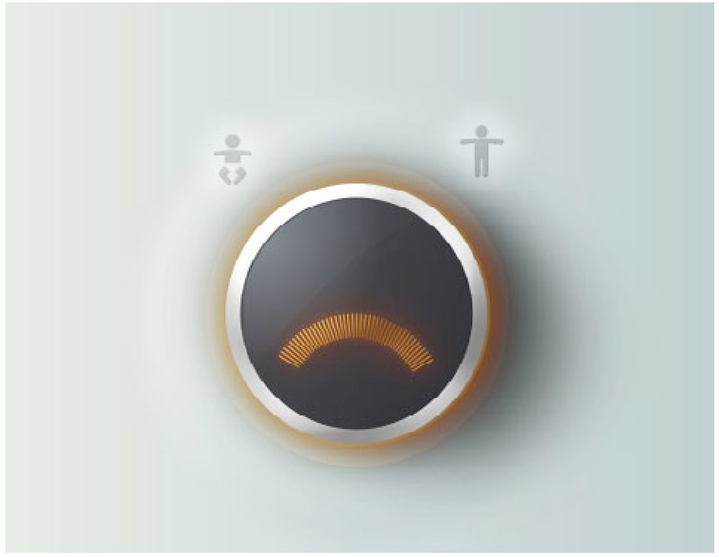
READY TO SCAN



SCANNING IN PROGRESS (ALMOST COMPLETE)



POSITIVE RESULT



NEGATIVE RESULT

SIMPLE SCANNING OF FOOD FOR RADIATION

Empowers the user by giving back control over over their food choices.





NARROW FOOTPRINT FOR JAPANESE KITCHENS



Watch our **scenario-video** on vimeo *(duration 2:04 min)*



POCKET DRILL

Designing a production-ready and functional skrewdriver prototype in 4 weeks

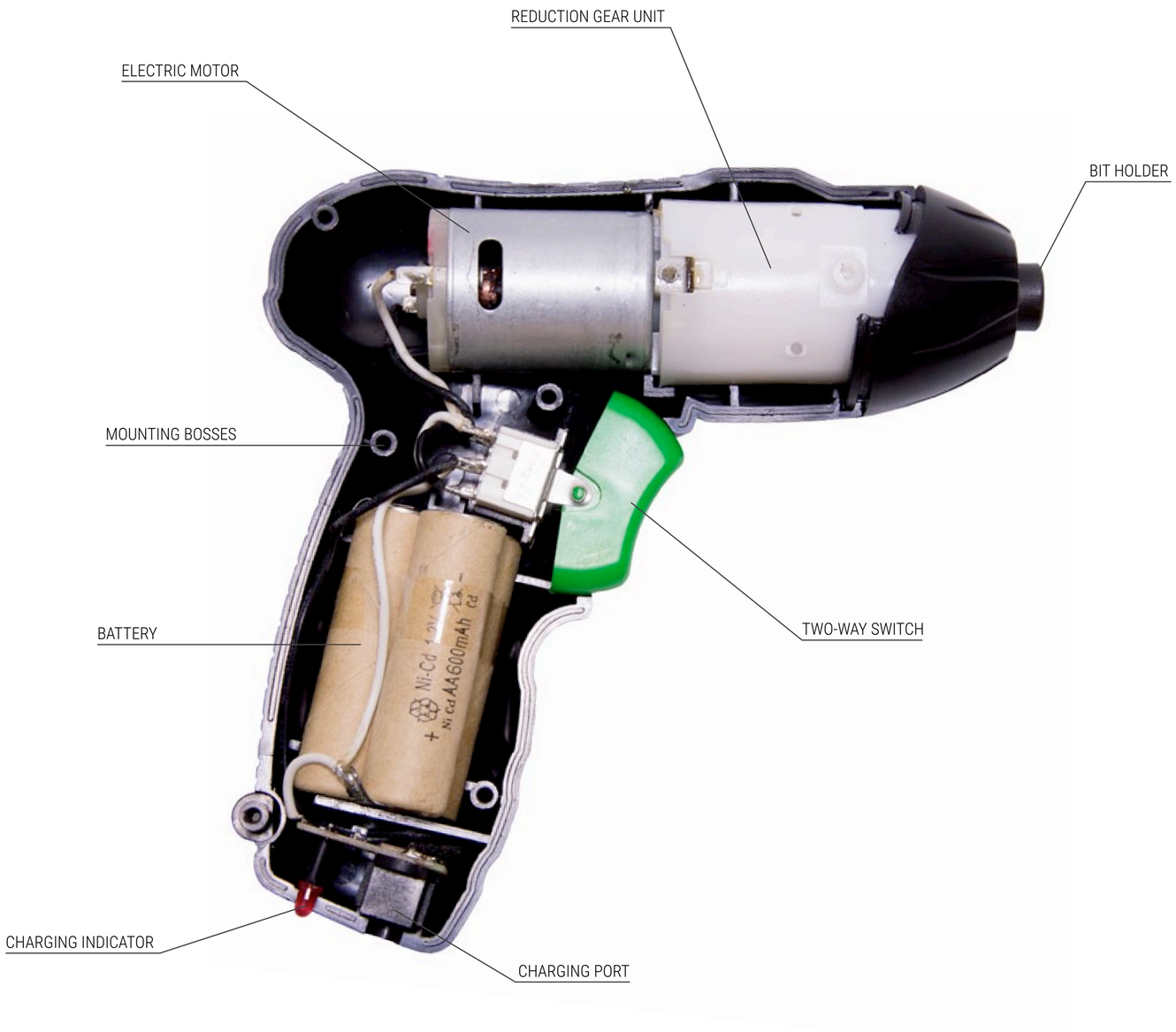
CMF, brand-analysis, prototyping, product-analysis, parametric modelling.

PRODUCT ANALYSIS

(3 HOURS)



DISMANTLING OF VARIOUS CORDLESS SCREW DRIVERS AND ANALYSIS OF COMPONENTS



BRAND BOARD // *MAKITA*

- Founded in 1915 in Nagoya, Japan.
- Product line consists of more than 850 products
- Focus on professional users
- Specialist for battery powered tools





Wrapper

- Protects
- Adds rugged appeal
- Gives sense of direction



Handles

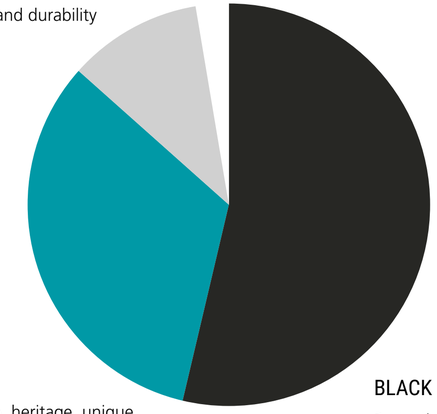
- Adds rugged appeal
- Distinctive dimple pattern
- Indicates where and how to grip



Use of Colours

SILVER
Quality, cast-metal, strength and durability

WHITE
Logo, lettering and details



TEAL
Body, DNA, heritage, unique

BLACK
Protective, functional, tactile

2D IDEATION

(6 HOURS)

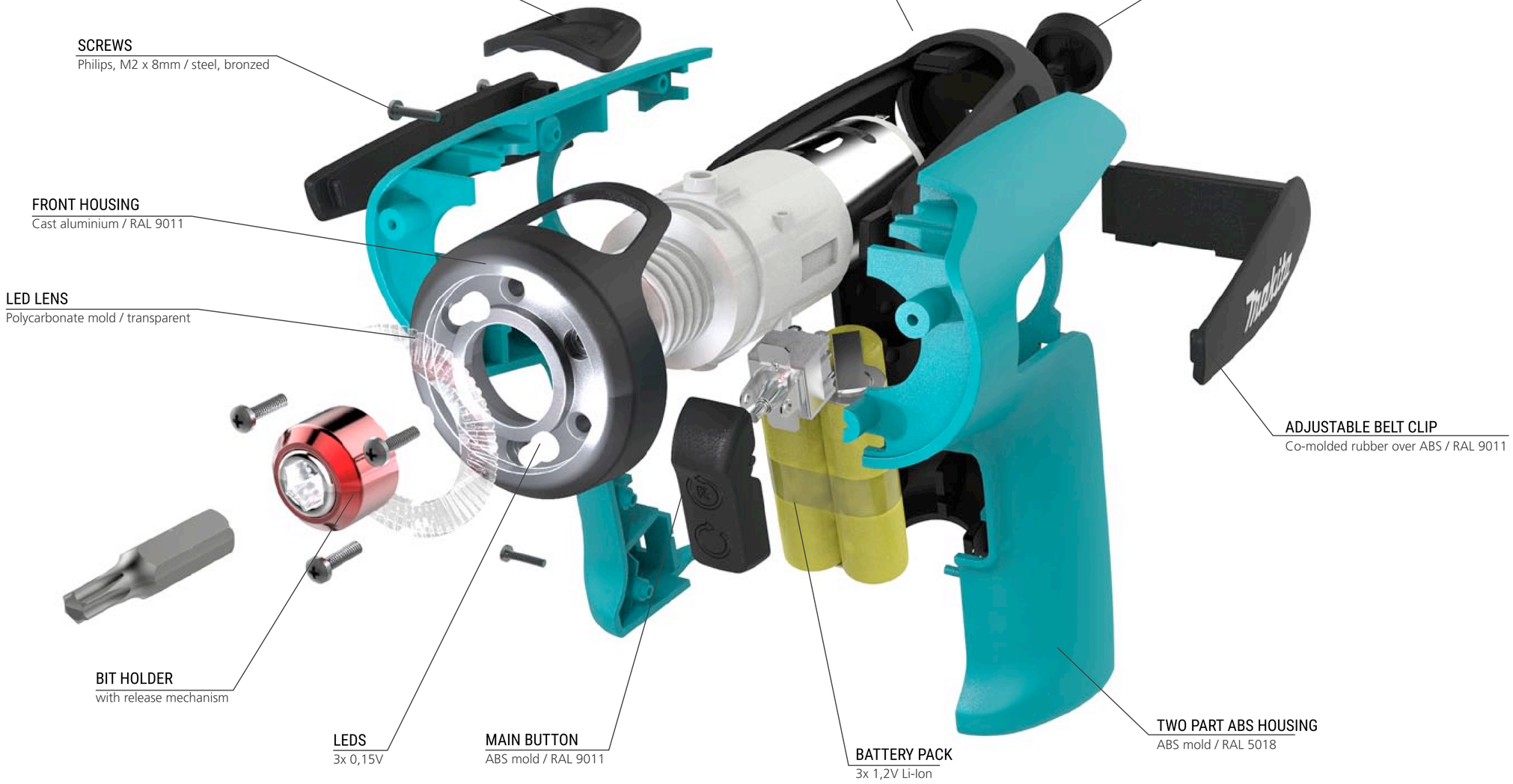


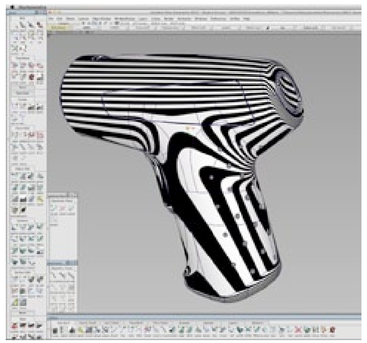
FAVOURITES
(BUILT AS FOAM MOCK-UPS)

REFINED SIDEVIEW (WITH TECHNICAL COMPONENTS)

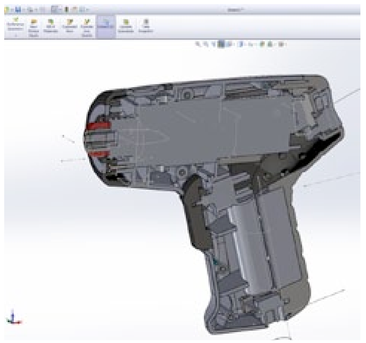
1:1 FOAM MOCK-UPS (3 HOURS)

EXPLODED VIEW

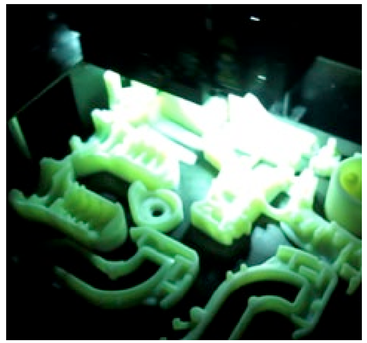




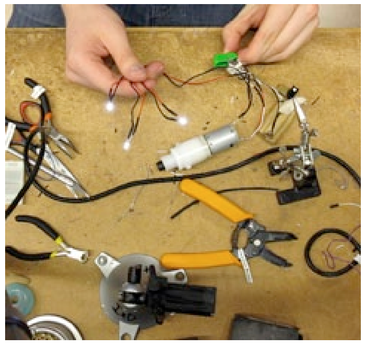
OUTER SURFACES MODELLED IN ALIAS



INSIDE CONSTRUCTION IN SOLIDWIORKS



RAPID PROTOTYPING



ADDING LEDS TO WIRING HARNESS



FITTING TEST BEFORE PAINT



PAINTED PARTS BEFORE ASSEMBLY



WORKING PROTOTYPE



DETAILS



WORKING PROTOTYPE WITH ADJUSTABLE, FULLY FUNCTIONAL BELT CLIP FOR AMBIDEXTROUS USE.

FLOAT FORWARDER

Autonomous, ground-sensitive lumber transporter.

Ten week term project in collaboration with Tunga Fordon & Rottne Industri AB.



FIELD RESEARCH & USER INTERVIEWS



Watch our **field-research & user-interview-video** on vimeo *(duration 1:48 min)*

RESEARCH PHASE



WORKSHOP WITH CLIENT

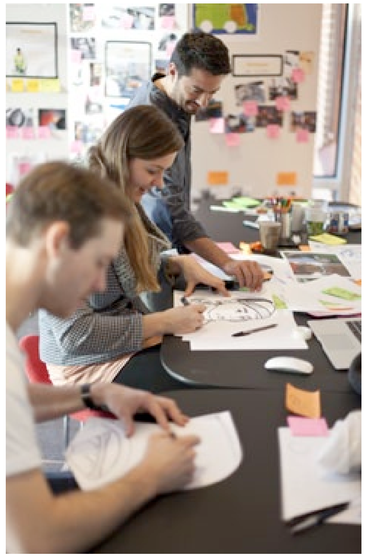


FIELD RESEARCH





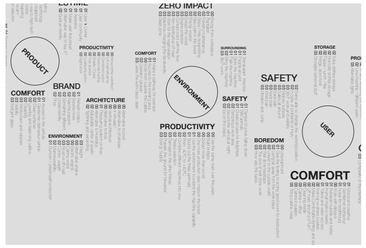
USER INTERVIEWS



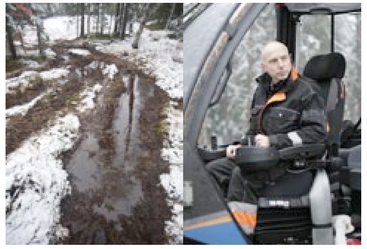
USER EXPERIENCE WORKSHOP



VISUAL PERSONA DIAGRAM



STRUCTURING OF RESEARCH RESULTS



PROBLEM DEFINITION

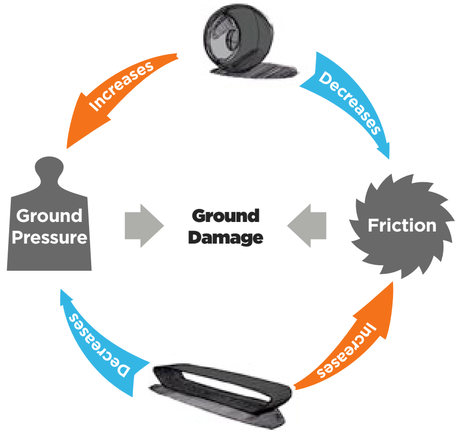
CHOSEN PROBLEMS

1. DAMAGE TO GROUND

The forwarder is responsible for most of the ground damage due to its higher weight and because it travels much more than the harvester.

The compression of the soil reduces its capability to absorbe water and transport it to the tree's roots. This leads to the development of water puddles which weaken the surface's integrity. The friction of tires and tracks then tears the ground apart





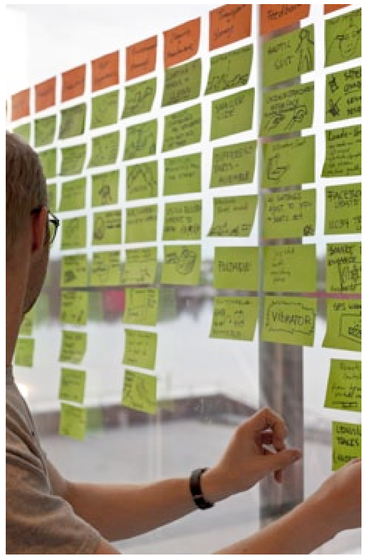
2. REPETITIVE WORK & INDEPENDENCE OF OPERATOR

Stefan is an indepentent forestry entrepreneur who runs the company that his father has founded. He is relying on Lennart, who has been with the company for over 20 years but will retire soon. Stefan says "it's impossible to find good people" for this lonely and remote work. Stefan and Lennart operate both the harvester and the forwarder, which form a team and must support each other as they work.

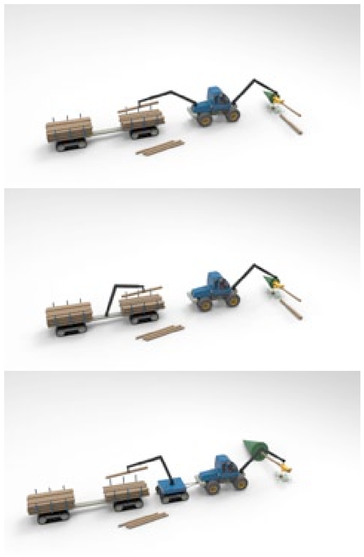




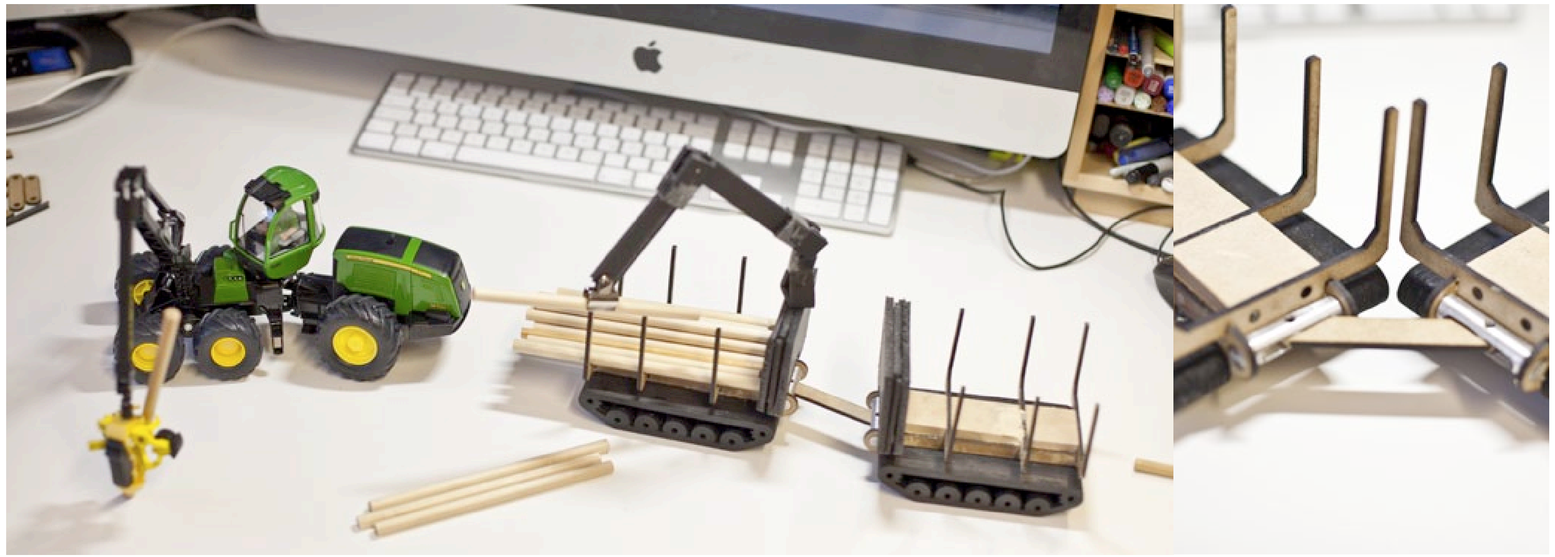
IDEATION PHASE



BRAINSTORMING



CONCEPTS

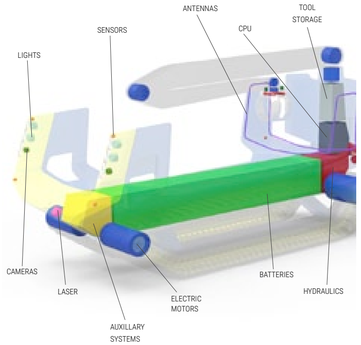


MOCK-UPS

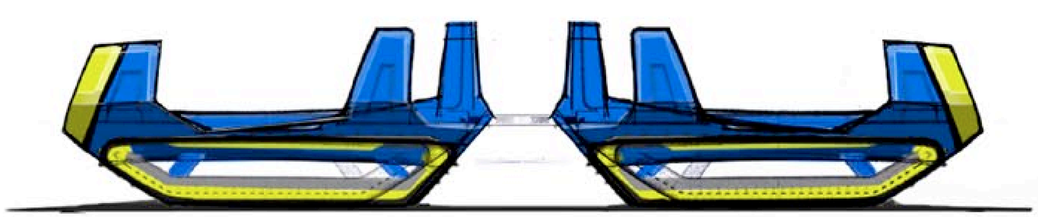




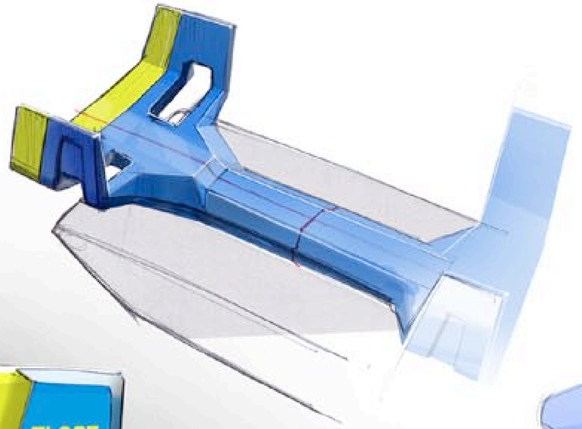
PRESENTING CONCEPTS TO USER FOR FEEDBACK

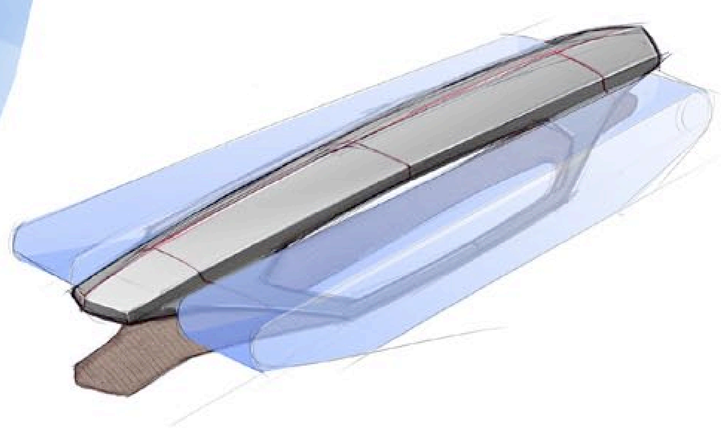


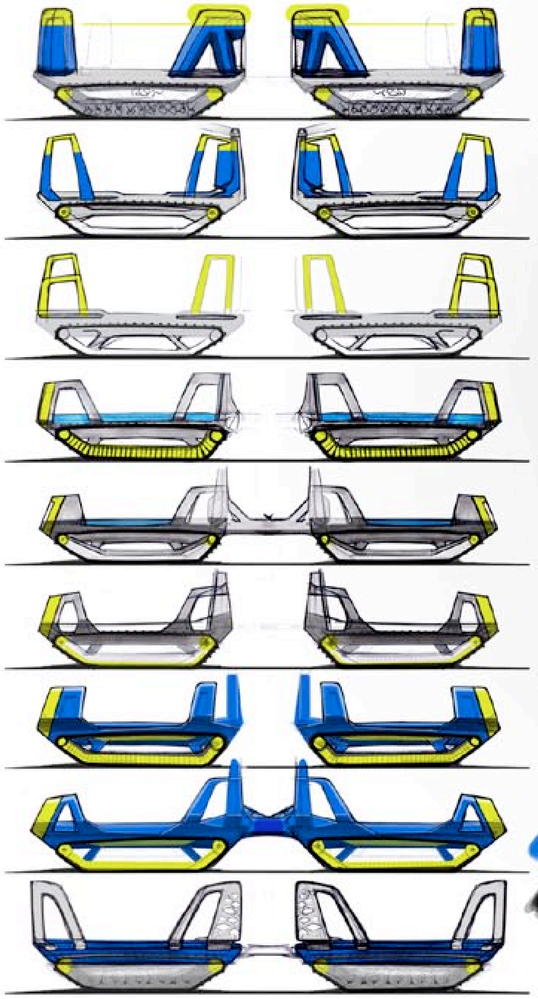
PACKAGE DEVELOPMENT



CHOSEN DIRECTION

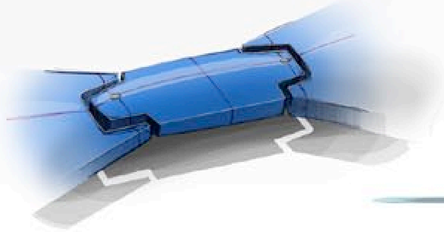








FRONT DETAIL

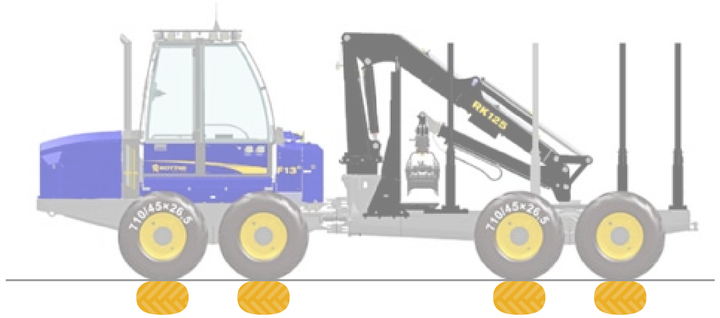




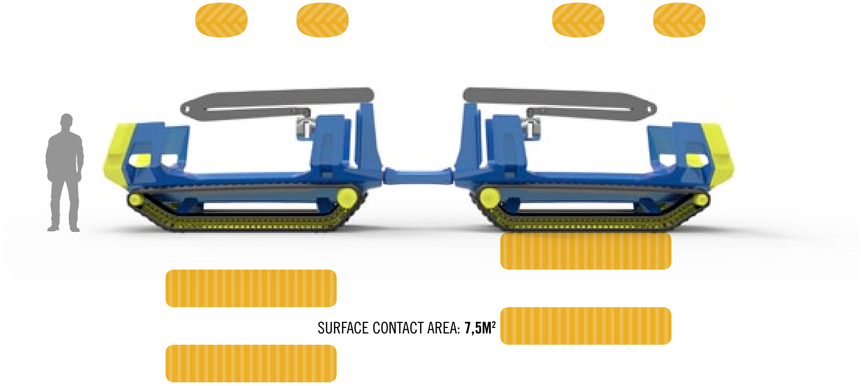
EARLY SIDEVIEW

INCREASED SURFACE CONTACT AREA

The larger the foot print, the smaller the ground pressure.



SURFACE CONTACT AREA: **3,1M²**

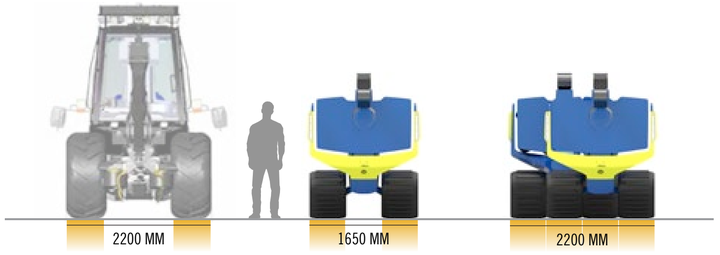


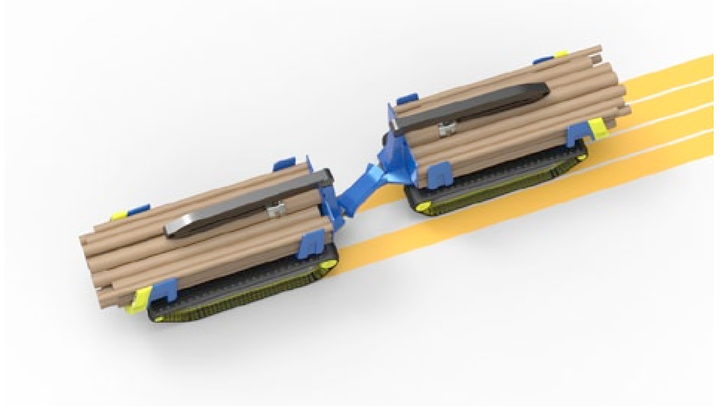
SURFACE CONTACT AREA: **7,5M²**

140% IMPROVEMENT

OFFSET DRIVE MODE

The rear module of the forwarder can drive offset from the front module. This means that each track has its own path and the pressure is being evenly distributed over the whole width of the forest road. Because the tracks are exactly 1/4th of the width of a conventional harvester, the forwarder can use the same roads, while in off-set mode or reduce it's width, if needed.





100% IMPROVEMENT

REDUCED VEHICLE WEIGHT

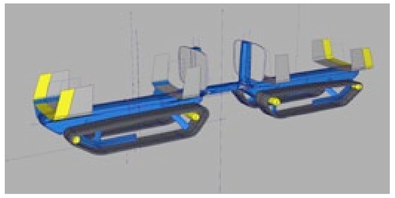
Without the need for a driver, many components of the forwarder become obsolete. Most obvious is the tiltable cabin with air-conditioning & heating, rollover-protection, reinforced windows & control elements. The complex suspension has been reduced to a few non-moving parts.

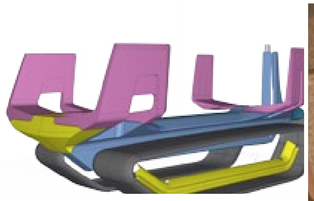


30% IMPROVEMENT
(ESTIMATED BY ROTTNE'S ENGENEERS)

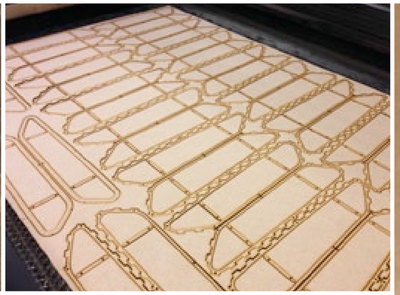
REDUCTION OF GROUND PRESSURE BY **270%**

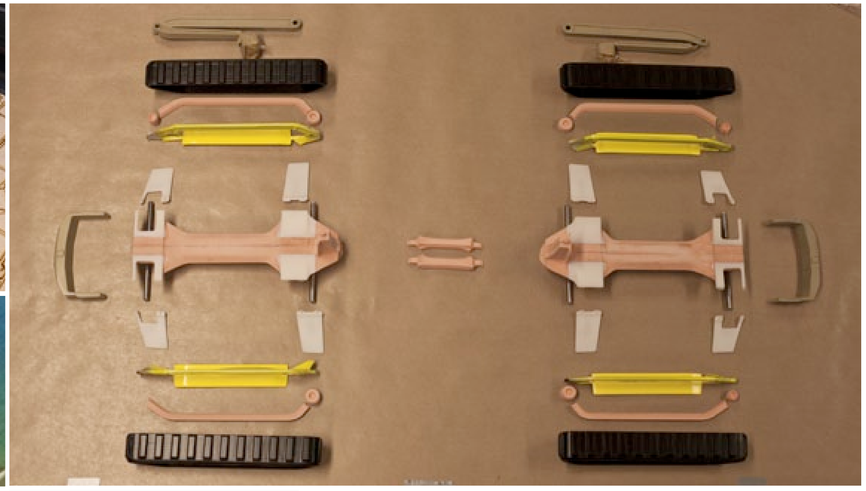
Alternative: The surface can tolerate six times more crossings before suffering the same ground damage, compared to a regular forwarder

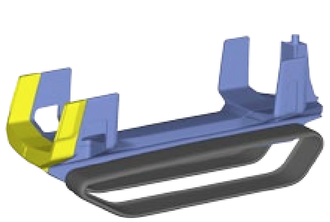
























FINAL MODEL (SCALE 1:20)

POLAR RESEARCH VEHICLE

Providing a safe and mobile environment for scientists in Antarctica.

Bachelor thesis in colaboration with Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany.

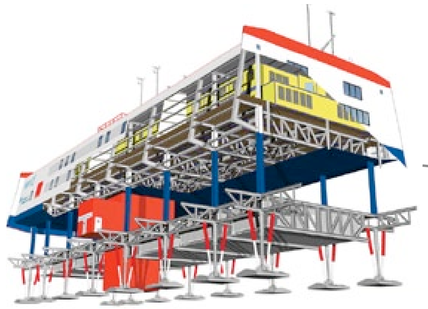


concept design award 2014

HOCHSCHULE FÜR ANGEWANDTE WISSENSCHAFTEN · FH MÜNCHEN

AWI Alfred-Wegener-Institut für Polar- und Meeresforschung in der Helmholtz-Gemeinschaft

INTERNATIONAL RESEARCH STATIONS IN ANTARCTICA



Neumayer III
research station (AWI)

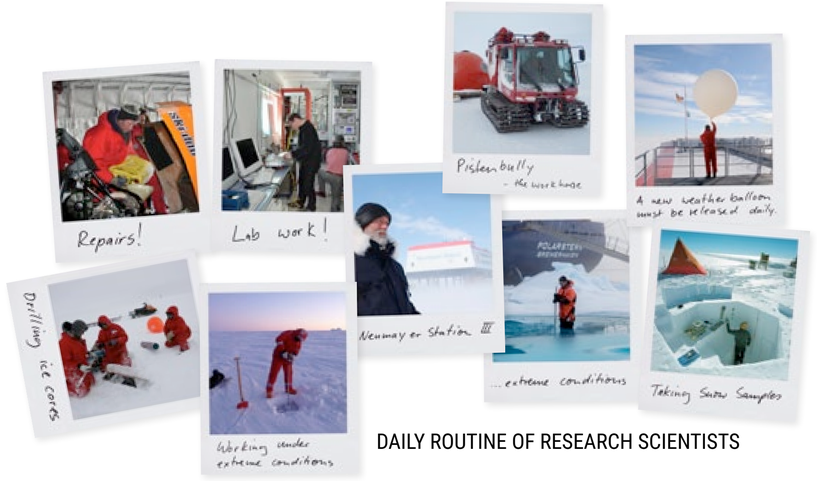
MAP OF EUROPE
FOR REFERENCE

Most parts of Antarctica are beyond reach for scientist due to vastness of the continent.



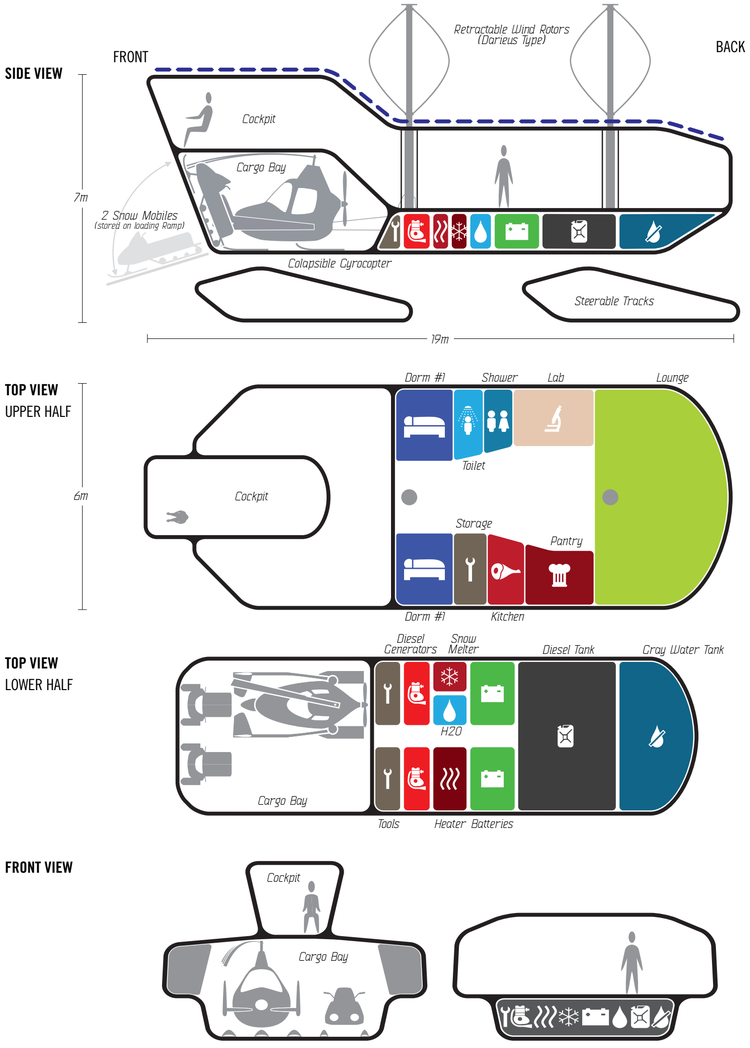
EXPERT INTERVIEW

with Jürgen Janneck, an engineer at the Alfred-Wegener Institute who took part in designing and building the first german research station in Antarctica in 1980 and travels to antarctica for extended periods each year.

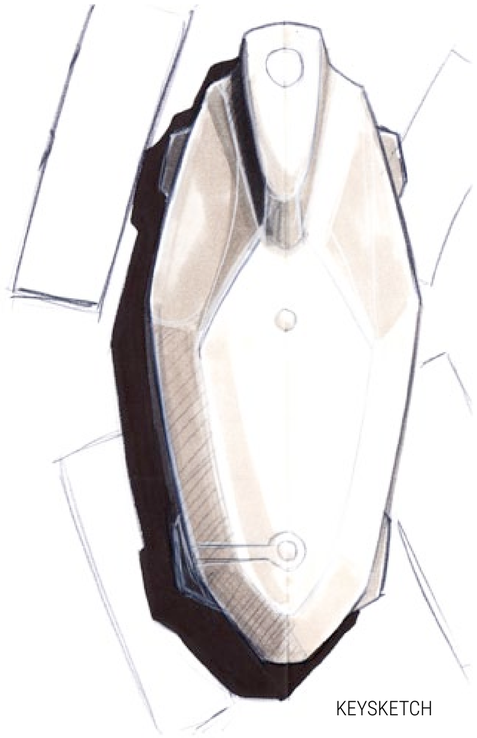


DAILY ROUTINE OF RESEARCH SCIENTISTS

DEVELOPMENT OF TECHNICAL PACKAGE



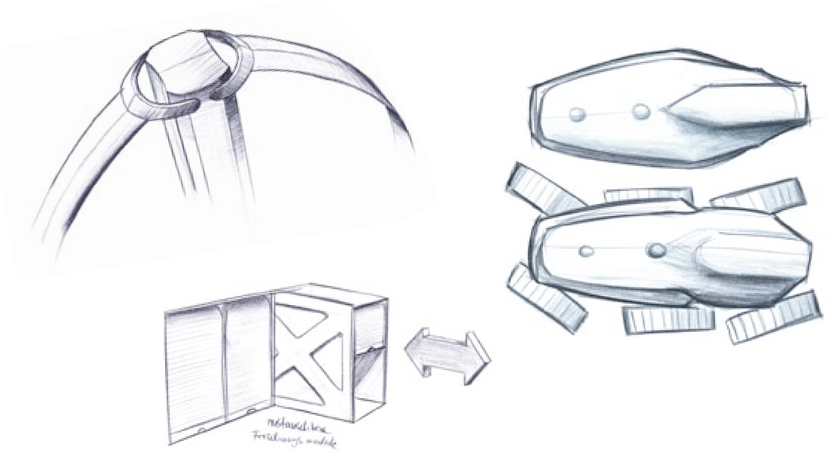
FORM DEVELOPMENT

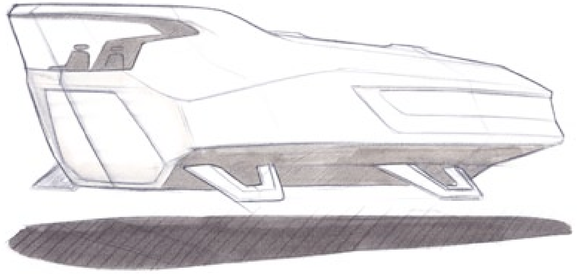


KEYSKETCH



5-MINUTE “FOAM-SKETCHES”





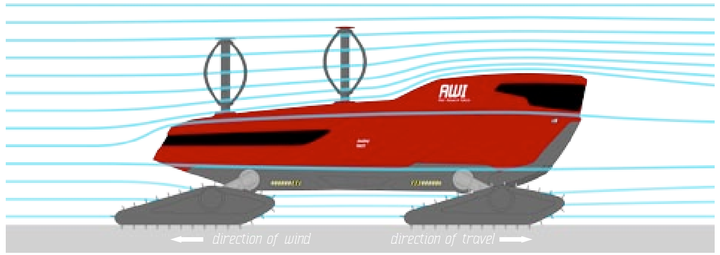


FINAL DESIGN

AERODYNAMICS

Wind speeds of up to 200 km/h require excellent aerodynamics even from the slowest of vehicles.

When stationary, with the rear into wind, cargo bay lies in wind shadow.



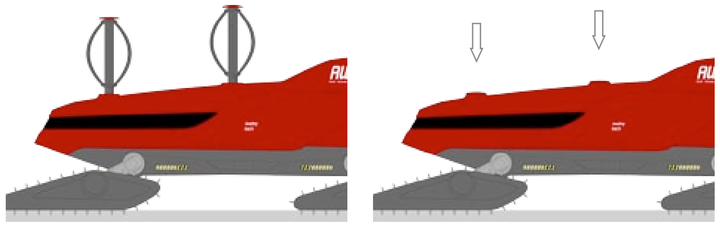
DRIVING SIMULATOR

Scientists can complete training from home before their mission



RETRACTABLE WIND ROTORS

Vertical rotors of "Darrieus"-type best suited for high wind speeds.



STEERED TRACKS

traction, stability & reliability

LOADING HATCH

for supplies and lab equipment

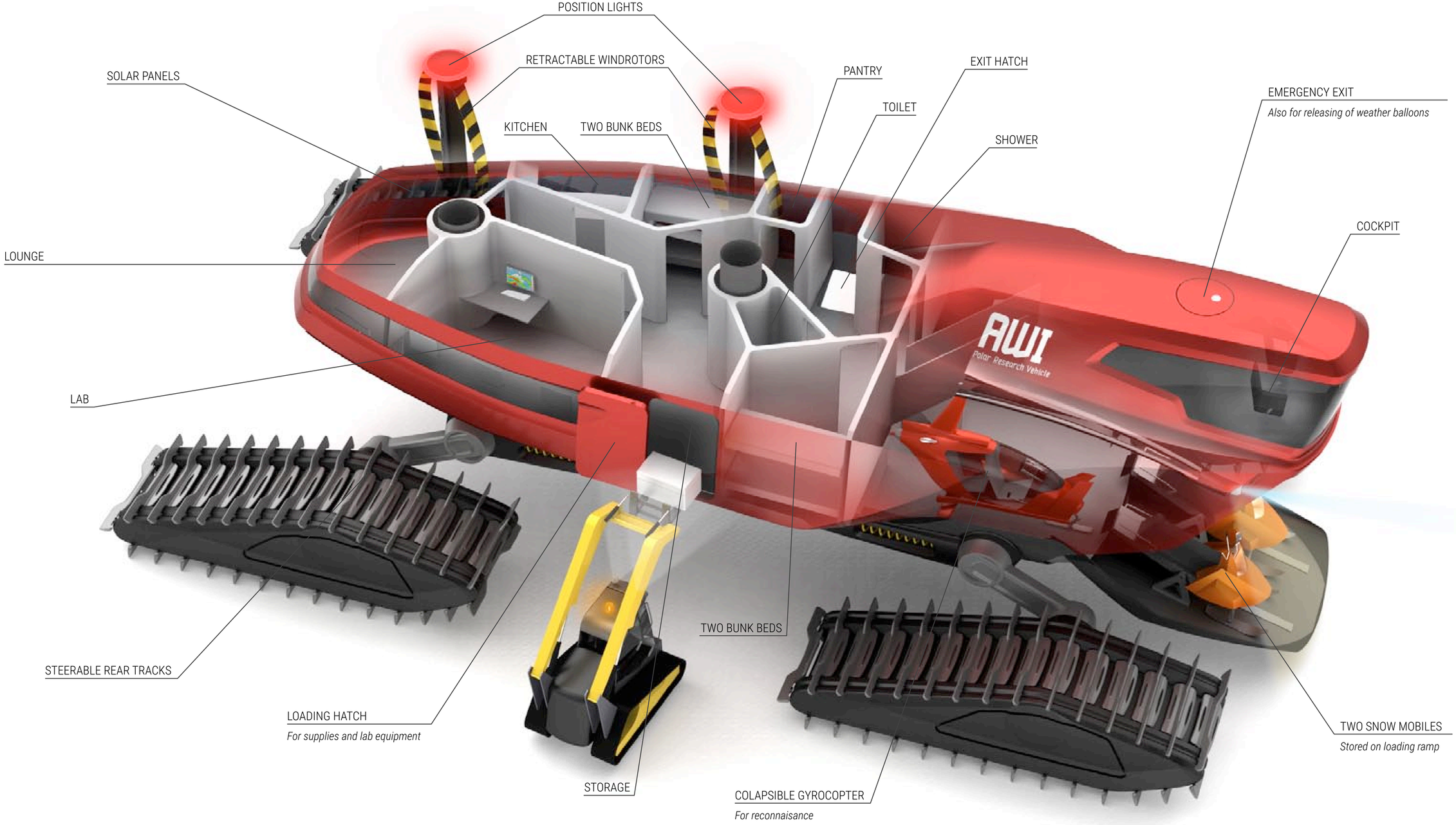


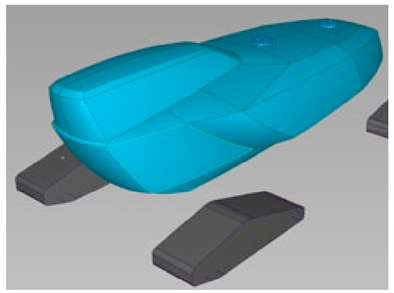
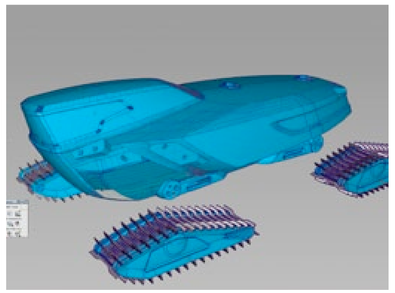
SOLAR PANELS

24 hours of sunlight during the antarctic summer

CARGO BAY

holds a colapsible gyrocopter, two snow mobiles and spares


POSITION LIGHTS
RETRACTABLE WINDROTORS
SOLAR PANELS
PANTRY
EXIT HATCH
TOILET
EMERGENCY EXIT
Also for releasing of weather balloons
KITCHEN
TWO BUNK BEDS
SHOWER
COCKPIT
LOUNGE
LAB
AWI
Polar Research Vehicle
TWO BUNK BEDS
STEERABLE REAR TRACKS
LOADING HATCH
For supplies and lab equipment
TWO SNOW MOBILES
Stored on loading ramp
STORAGE
COLAPSIBLE GYROCOPTER
For reconnaisance

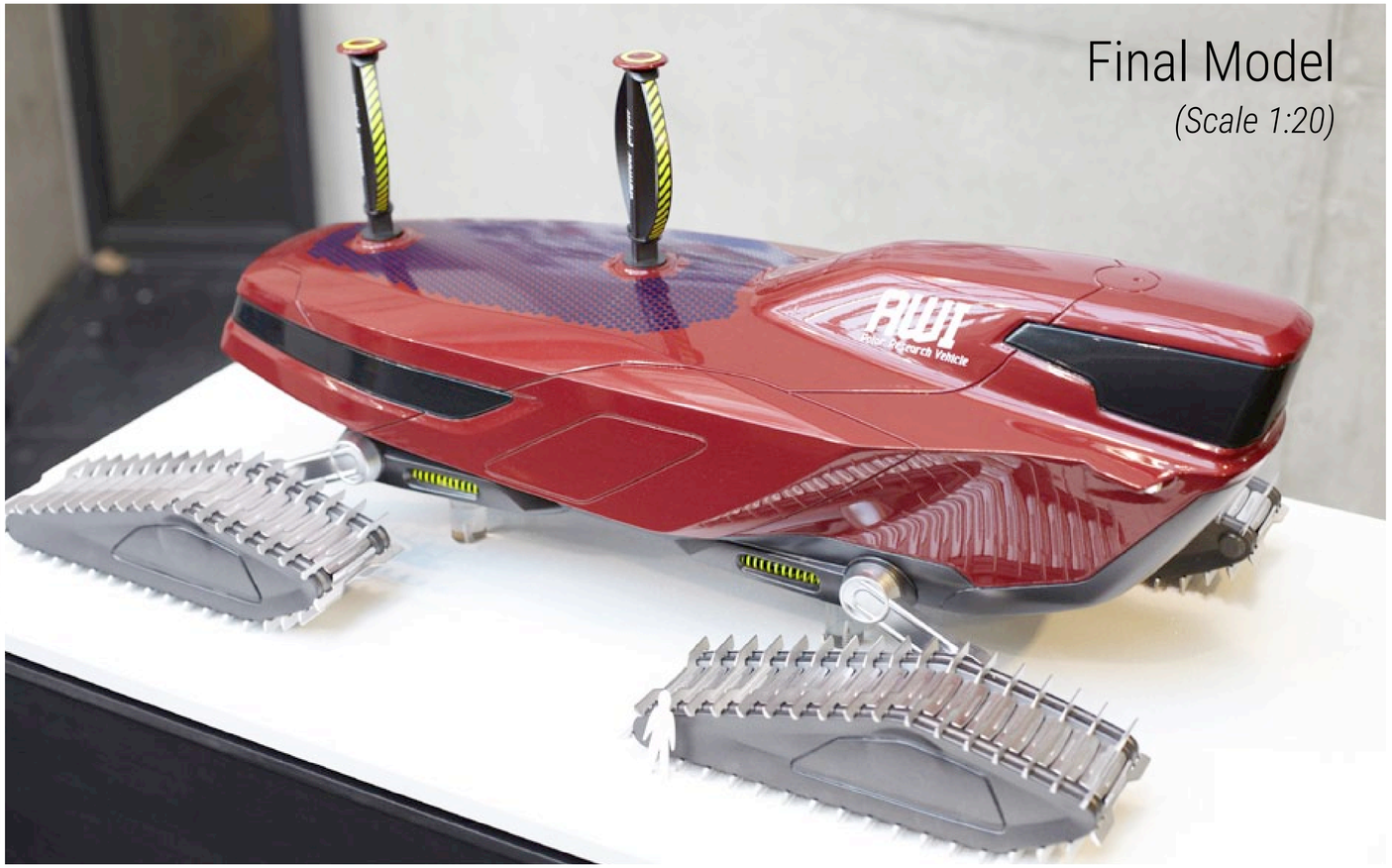










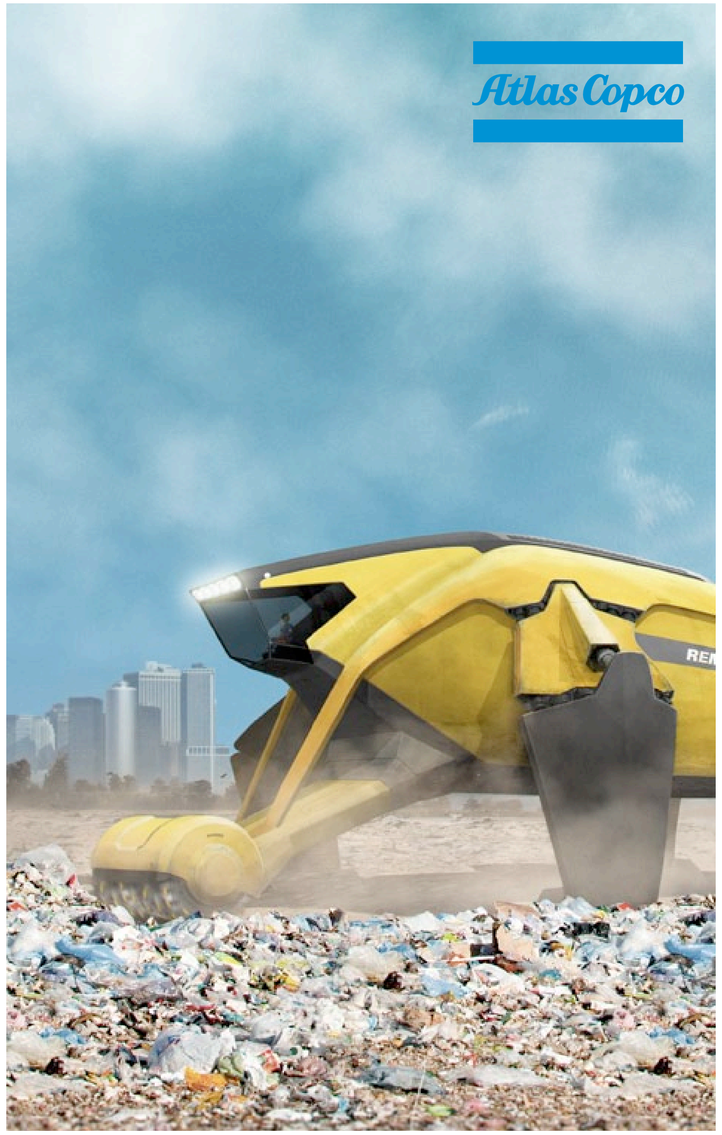

Final Model
(Scale 1:20)

STEAM SPOUT



THOROUGH AND HYGIENIC CLEANING WITH STEAM

REMINER



RECLAIMING RESOURCES AND RESTORING LAND

BENCH



MOBILE BENCH WITH IMMENSE STABILITY, YET NO GLUE OR SCREWS

CAFE RACER

Turning a 1983 Honda CB 750 into what I believe a motorcycle should be.

Personal ongoing project. Complete D.I.Y.-custom. Only frame & Motor remaining. (Mostly) built in my appartment.



That's a friend and me bending steel tubing for the rear-hoop of the frame.
The Workshop-teacher said it won't work...

From this...



Ugly, heavy, wobbly & weak brakes.

...to this



35kg lighter, handles superbly & brakes on a dime.

*You want to **hear** it?*
First test run on vimeo
(duration 0:16 min)

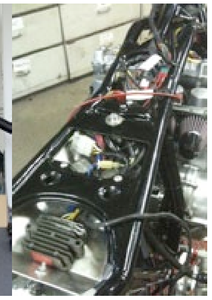
THE JOURNEY

DISSASSEMBLY, CUTTING & MODIFYING FRAME, WELDING, CRYING, LAMINATING FENDERS, PAINTING, LAUGHING, FINDING PARTS, SWITCHING TO 17" YAMAHA RUNNING GEAR, CURSING AT THE ELECTRICS, CARBURETOR-TUNING, TECHNICAL INSPECTIONS, HAVING A COLD ONE!










ADDITIONAL PHOTOS OF THE BUILD-PROCESS **HERE**

TO BE CONTINUED...



THIS IS A PROMISE...



...THIS GUY HAD TO KEEP...



...TO THIS GUY!

Since Résumés are not that personal, you may want to get to know me a little better







**It's a rather small door...*



THINGS, I AM TERRIBLY GOOD AT

Reverse parking, making lasagne, lacing bicycle wheels, climbing trees, having an idea and pulling through on it, baking cookies.

THINGS I AM TERRIBLY BAD AT

Soccer, basketball, algebra, ironing shirts...

THINGS I TAUGHT MYSELF

How to crochet wool hats, bicycle mechanics, how to change a car tire, sewing with a machine, Autodesk Alias Automotive, how a camera works and how to print analog photos, how to make red currant jelly.

THINGS I WILL DO ONE DAY

Make a paragliding license, live in Japan for a while, build a treehouse, ride a motorcycle across a continent other than Europe, build an igloo and sleep in it (done!), go ski-touring, see as many countries as I am years old.

GREATEST ACHIEVEMENT

Cycling from Munich to Lisbon with my oldest friend.
www.bridgesnotyetcrossed.tumblr.com

GREATEST JOURNEY

Snowboarding, living and working in New Zealand for a year.

THINGS I LIKE

Honest people, anything with two wheels, being outdoors, doers, swimming in lakes, Mad Max, Vancouver, long flights, alpine huts,Led Zeppelin, the Bauhaus, cooking with friends, analog cameras, creating things with my own hands, BBQs in winter, welding, ice-cream, the Beastie Boys, high quality tools, architecture, gardening, Group-B rallye cars...

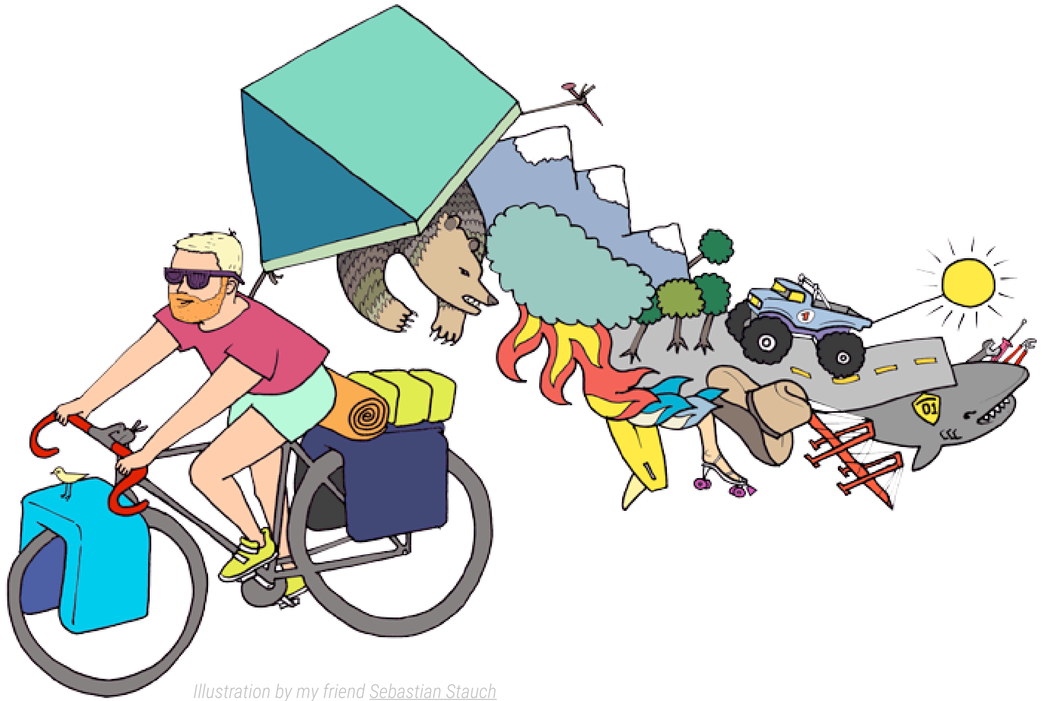


Illustration by my friend Sebastian Stauch

THANK YOU

If you think I might fit your team, let's talk.

www.jostsiebert.com
hello@jostsiebert.com
(+45) 22 82 52 73