Portfolio 2023

Jakob Kohnle

1 PHILIPS One
Appliences for GenZ

2 TetherLock
Tool Safety System

3 Flöx
Chromatography

4 FB 01
Bachelor thesis

1

PHILIPS One

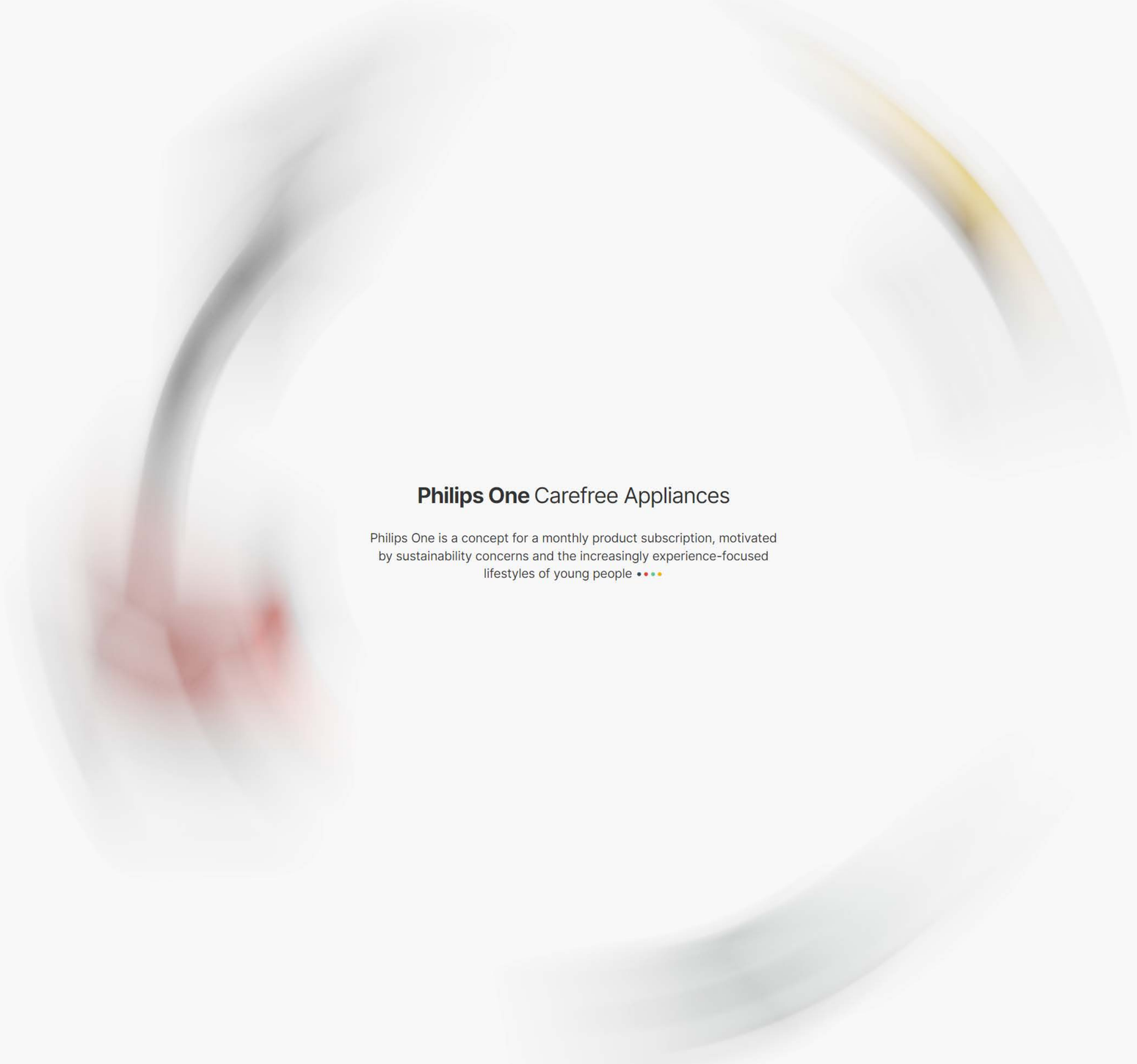
Philips One is a subscription service for products providing the essential appliances, that a student or young adult, who is moving out might need.
It is based on a true circular model, meaning products are refurbished if possible and otherwise materials are recycled.

Master project / team of two
Stijn van Cuijk; Jakob Kohnle

2021

4 months

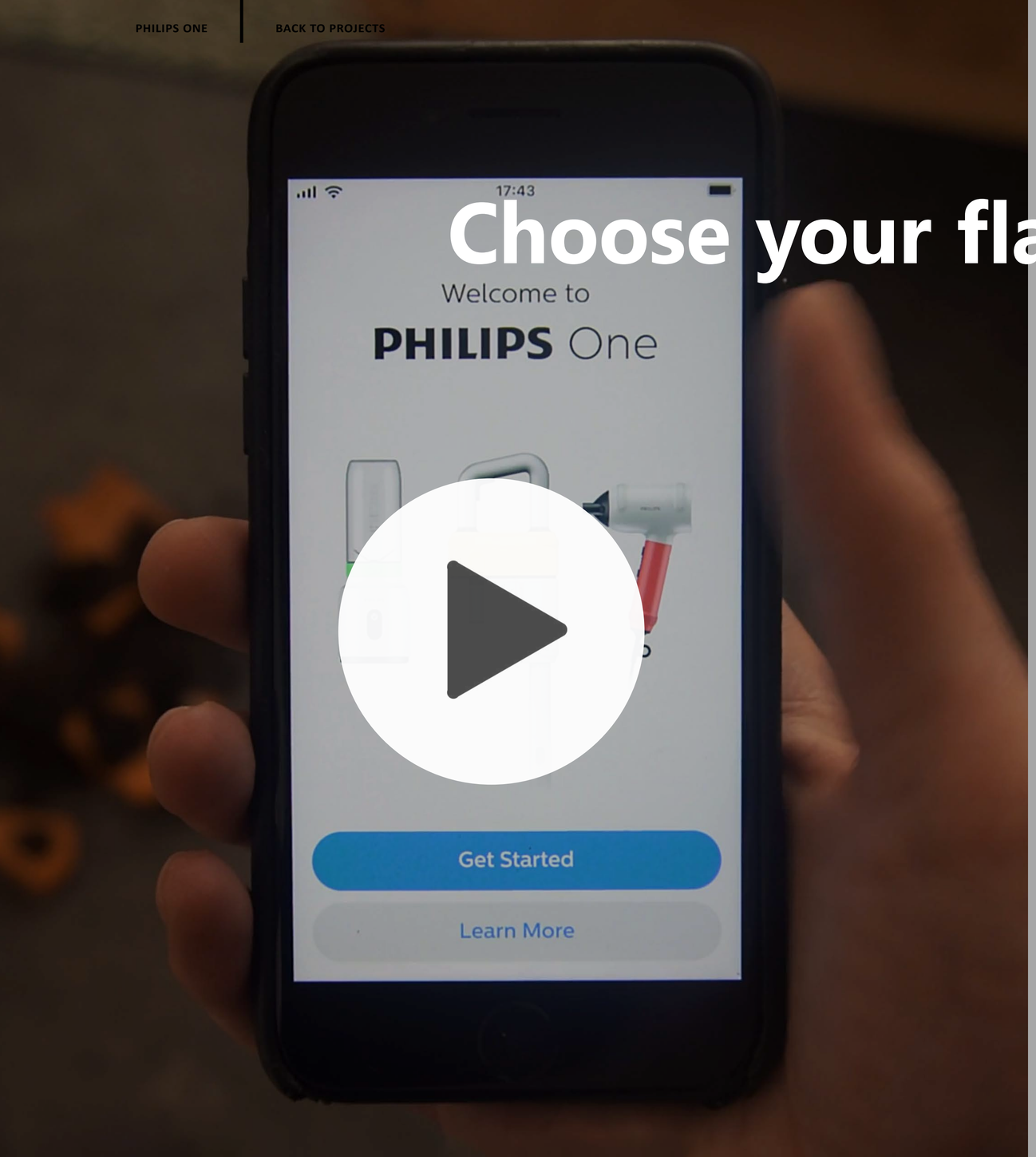
Philips

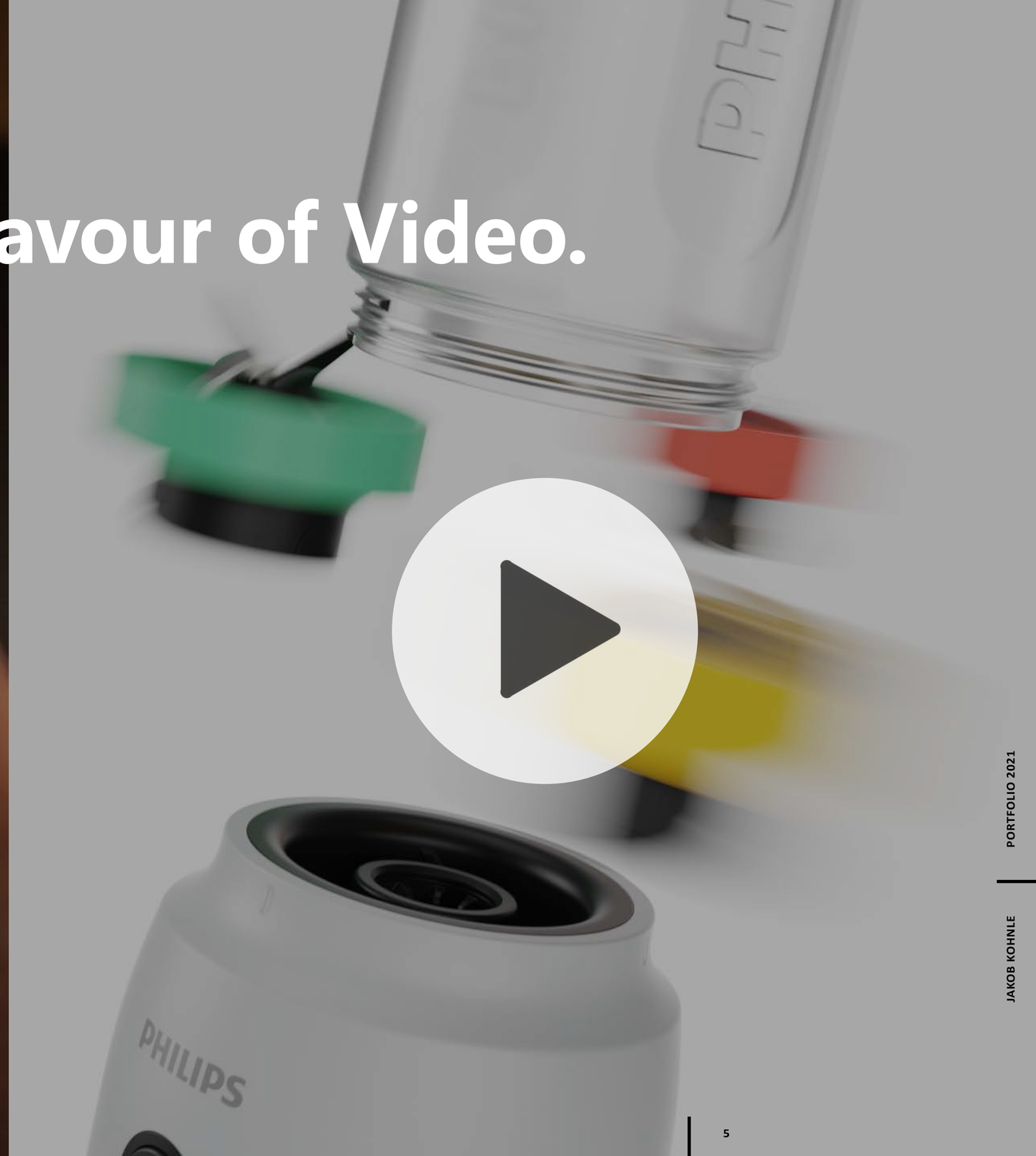


Philips One Carefree Appliances

Philips One is a concept for a monthly product subscription, motivated by sustainability concerns and the increasingly experience-focused lifestyles of young people

Choose your flavour of Video.

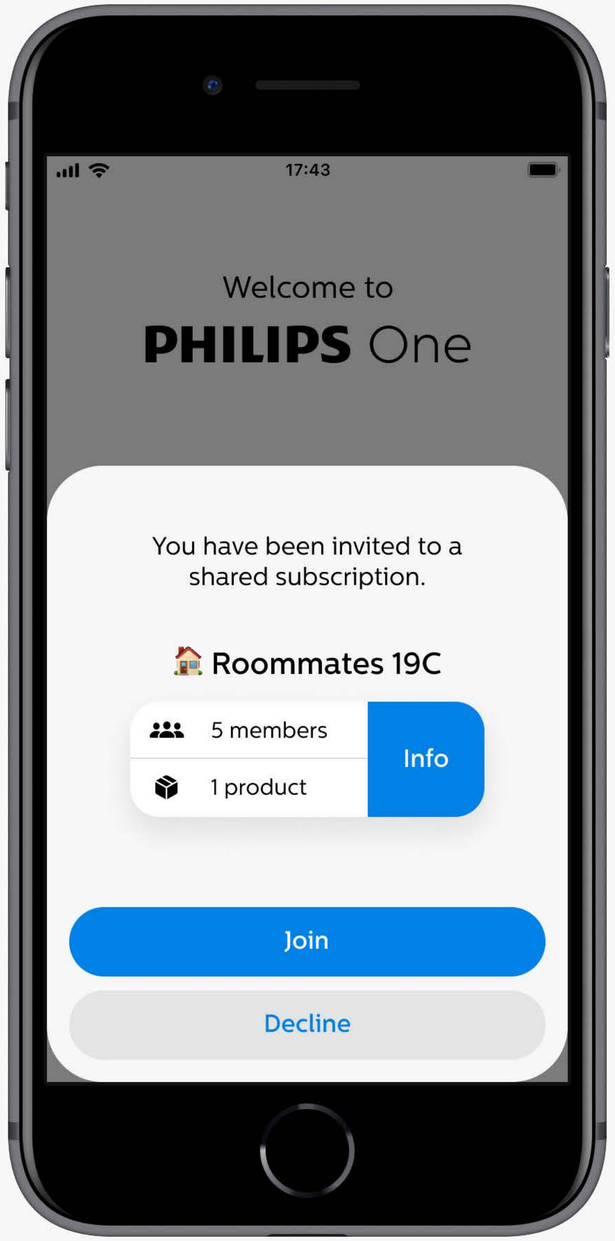




Shared Appliences

Devices in a Philips One subscription can be shared across multiple people, saving costs and avoiding unnecessary purchases.

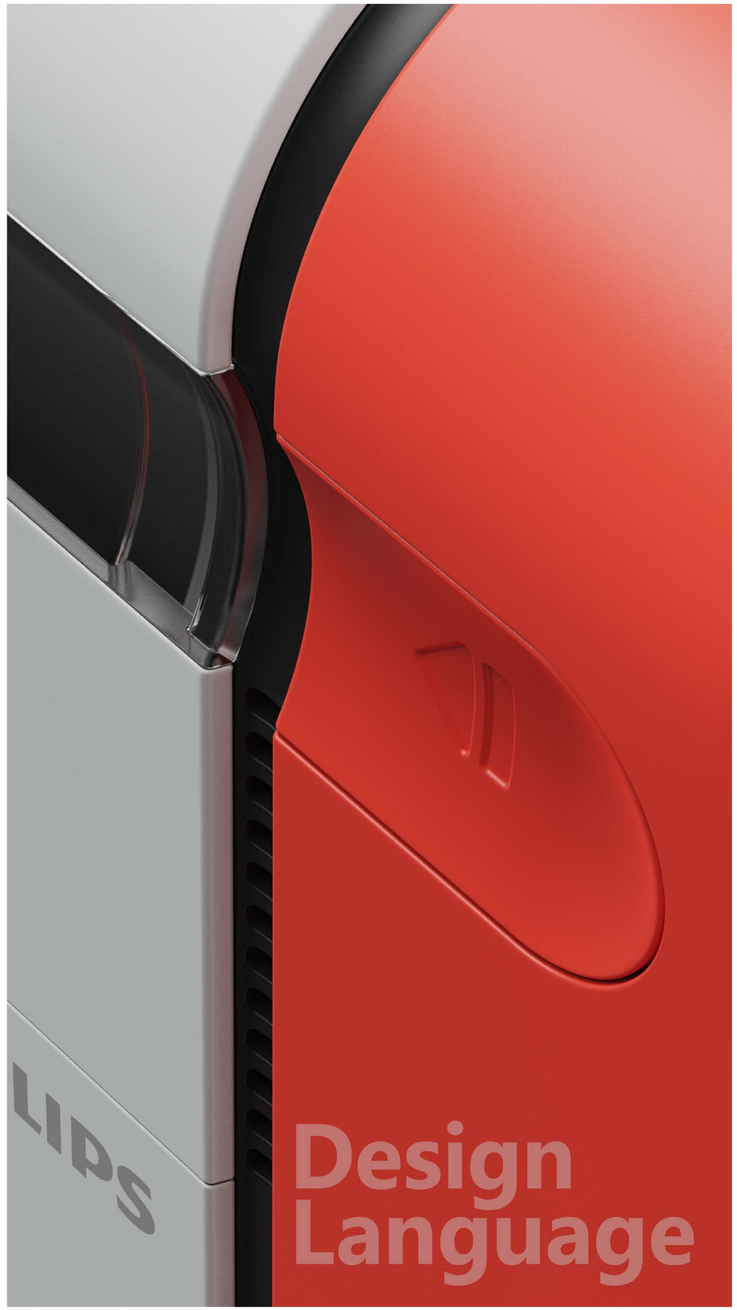
Using Bluetooth proximity unlocking, access to shared devices can be limited to people that are part of the subscription. This way they can be stored in a shared space where they are accessible to everyone. Once a device is unlocked, the app shows important status info and an overview of who last used it.



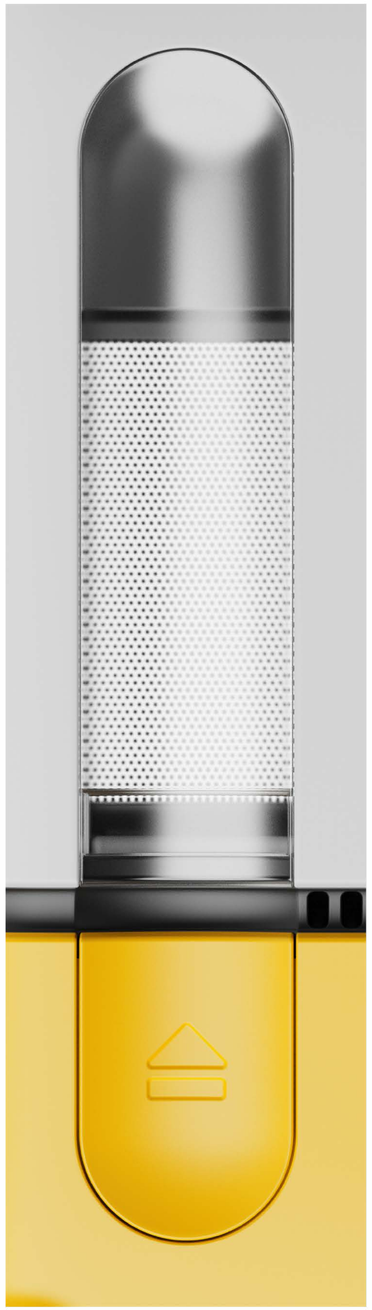
Blender

Hairdryer

Vacuum

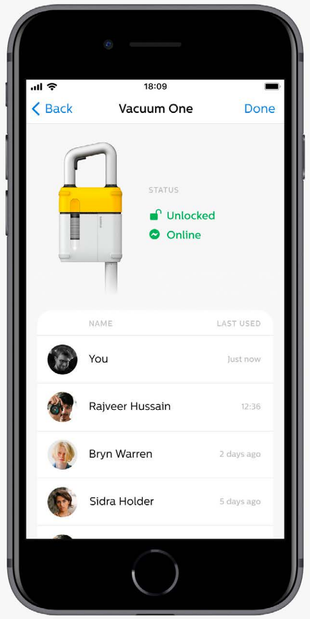


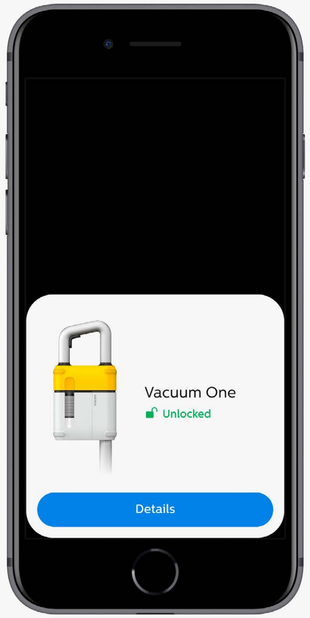
Design Language



Vacuum

. Our main goal was to provide good performance while focusing on aspects that make the vacuum more suitable for small living and shared use. All integrated into a unique design that reflects the carefree aspect of our model.





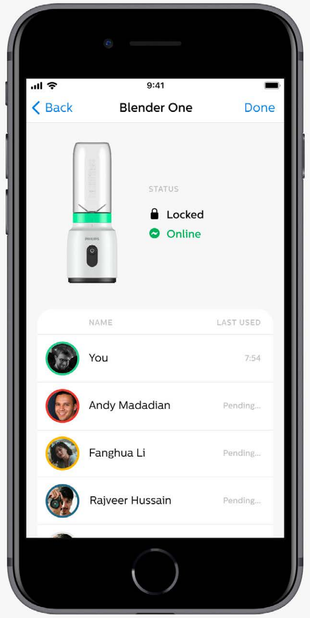
ultra thin design

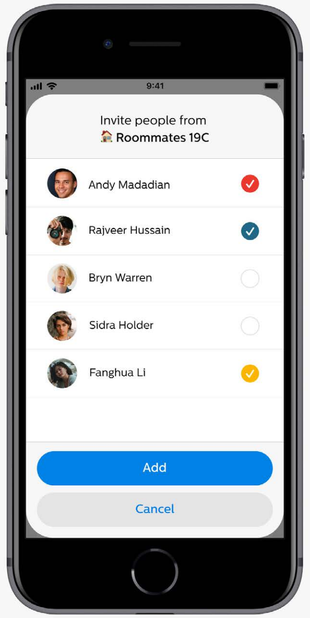
Flexible 180° head

Comes apart in three pieces

Blender

When sharing a blender, everyone gets their own cup with a colour-coded lid. This avoids conflicts with cleaning and use. The colours help identify the owner of each cup and are also represented in the app.






PHILIPS


PHILIPS

Hairdryer

The Hairdriyer like the Vacuum incororates bumpers that prevent scratching druing storage and minimze signs of wear which keeps the product looking good for longer and extends its lifespan.


PHILIPS
PHILIPS

2

TetherLock

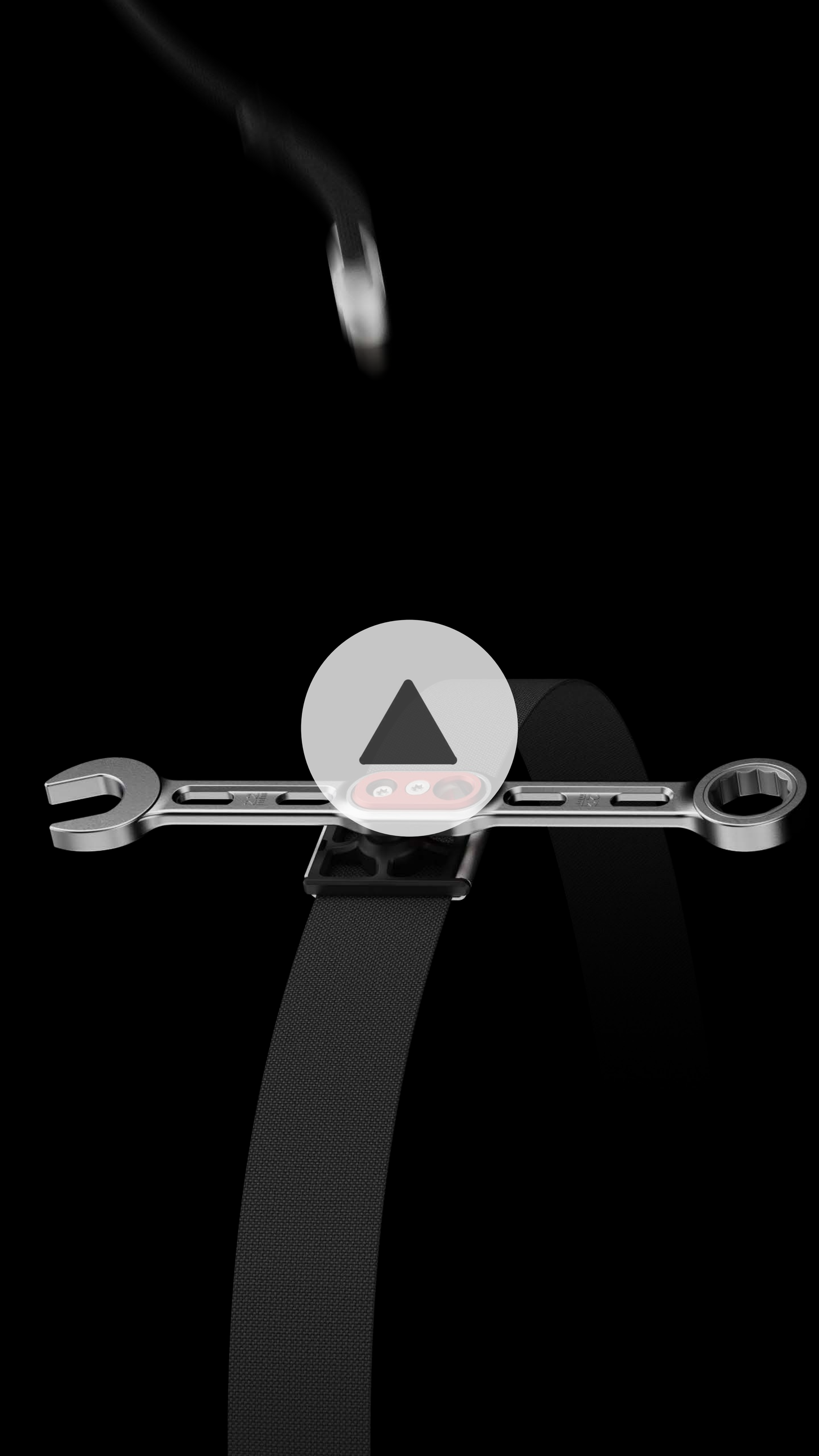
During the first semester at UID we were able to conduct extensive field research around cell site technicians and created user-centered solutions that aim to make their work easier. The result of my work is the Tether Lock, a mechanism that improves and streamlines tool tethering.

Master project / solo

2020

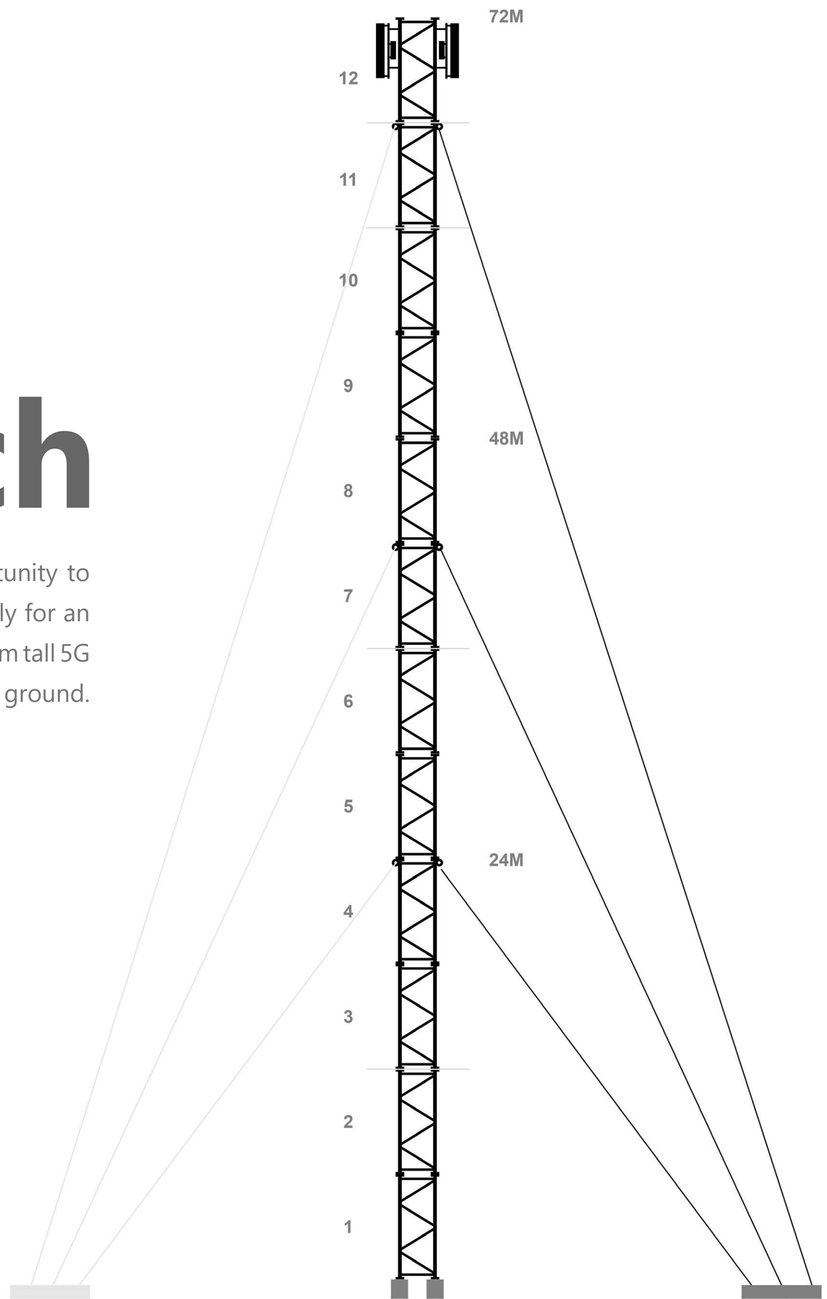
3 months

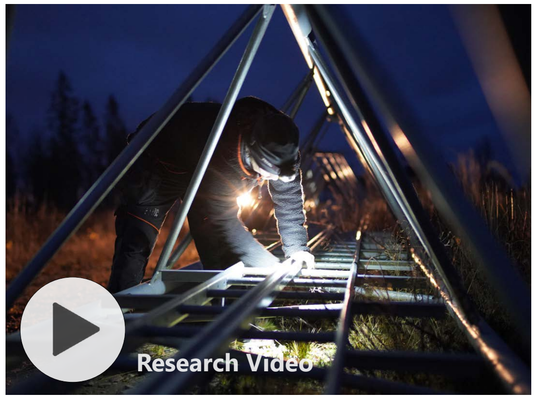
Ericsson



Field Research

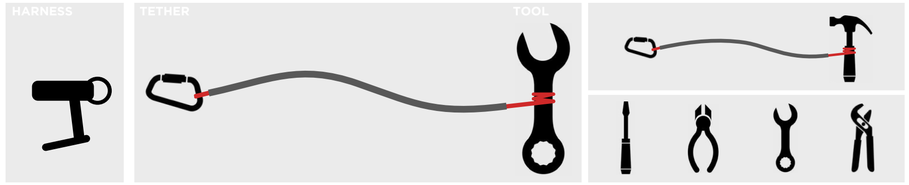
With this project we had the amazing opportunity to follow a pair of cell site technicians very closely for an entire week during which they constructed a 72 m tall 5G mast, working up in the mast as well as on the ground.

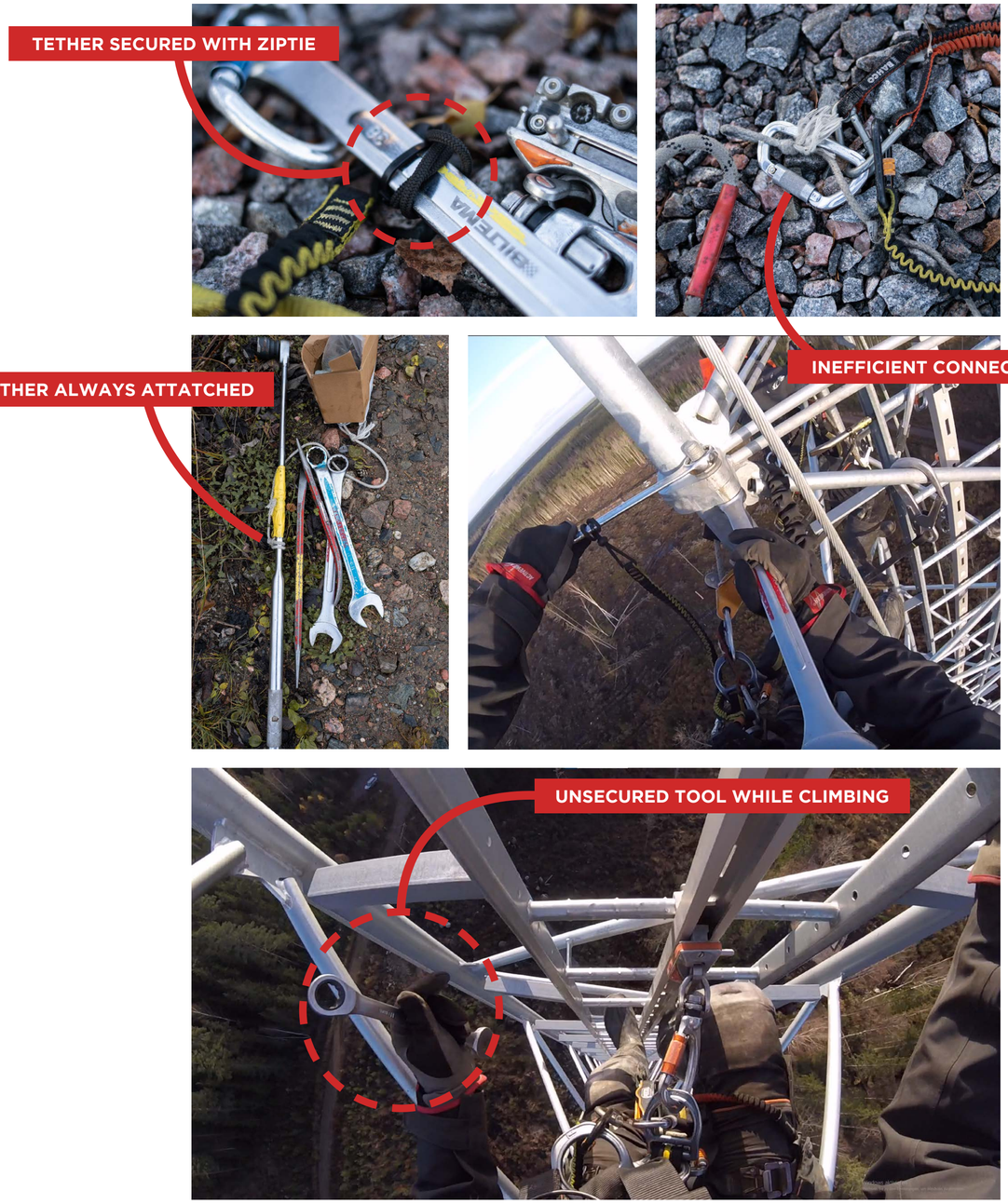




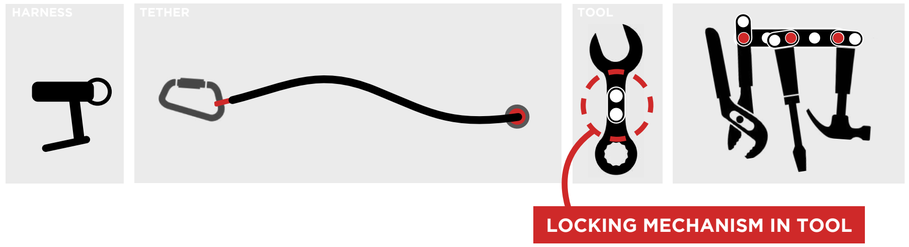
Problem
Tool Tethering

It became obvious early on, that even though safety was a big aspect, there was a trade-off that had to be made. With the current systems each tool requires its own tether, which means that more tools equals more ropes and with that more clutter. Because of this, small to medium sized tools were often not tethered, even though these can still lead to serious injuries.

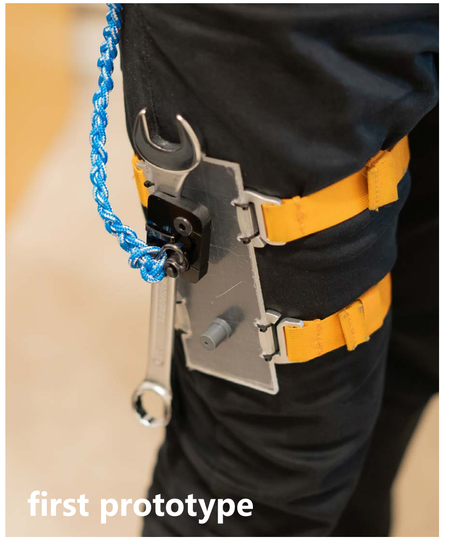


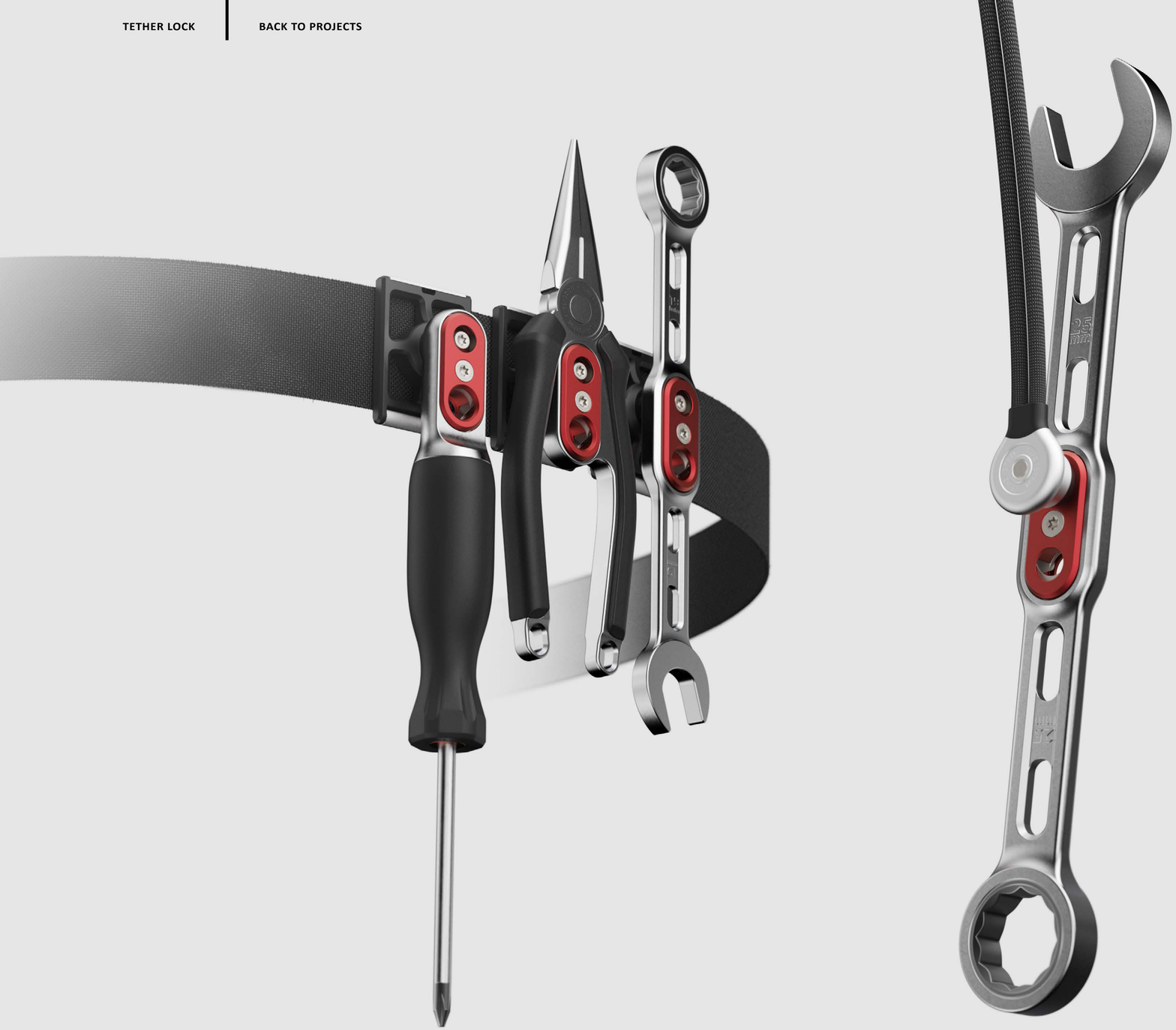


Opportunity
Tether system



Create a system that streamlines the process of securing tools and reduces the amount of tethers used.





Allways secured
Impossible to drop

This system enables a quick switch of a tool between the base and the tether, without it ever being unsecured.

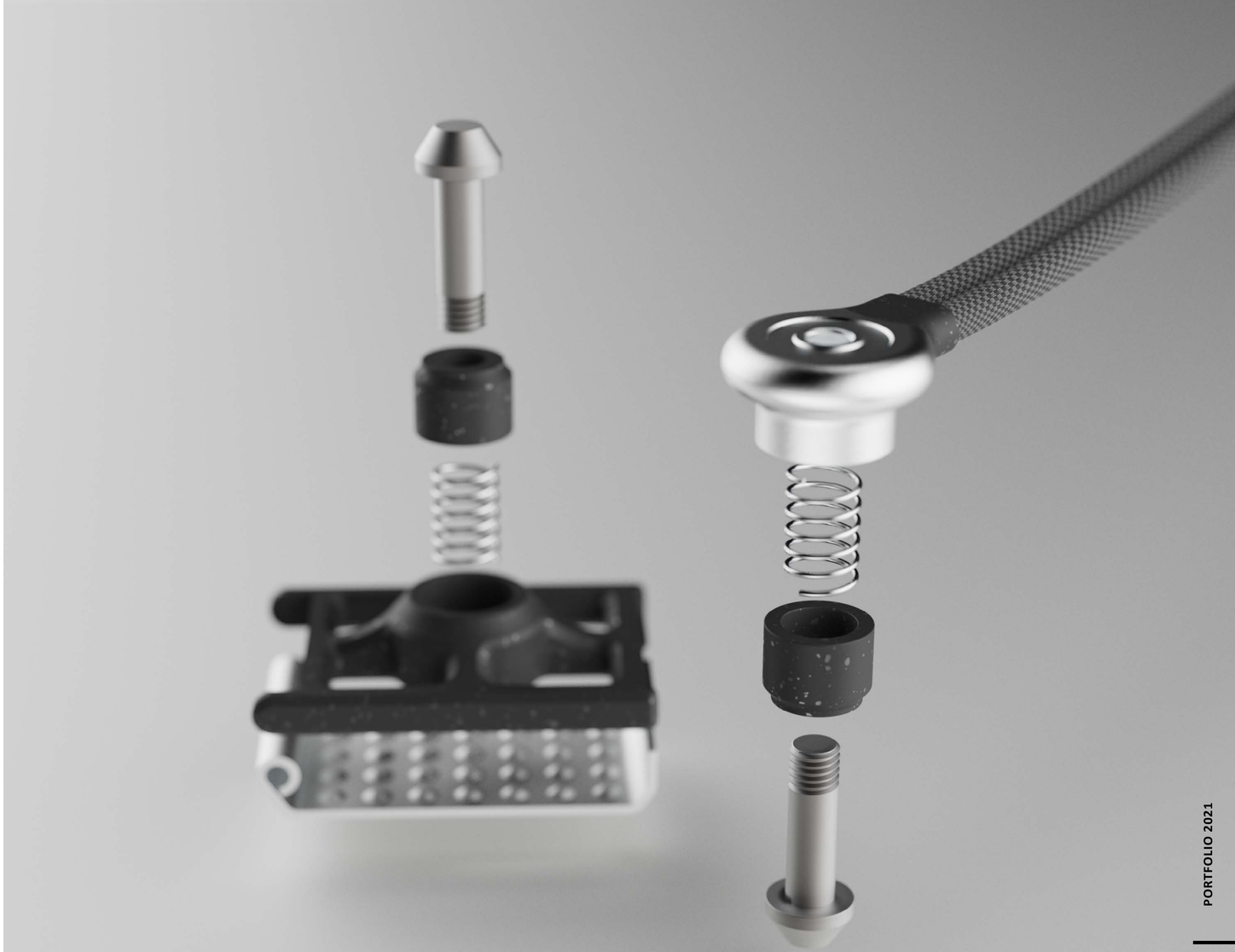
TETHER LOCK

Universal Design

The Tether Lock has a simple and reliable construction. Additionally, the parts for the mechanism are the same between all tools making replacement and maintenance easy.

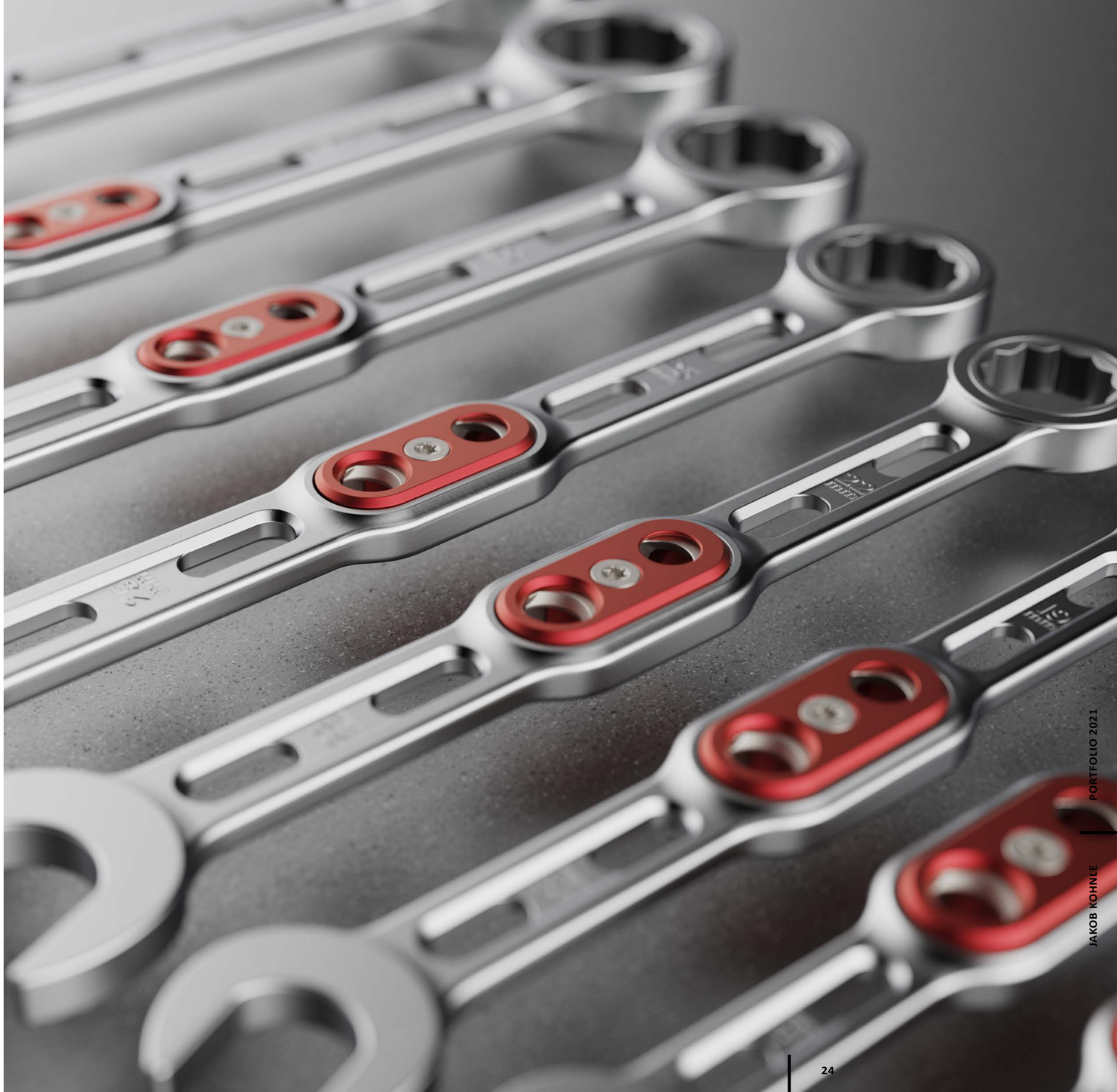
Tether and Base

The tether and the base which can be attached to a harnesses or belt, rely on the same basic components. This way the system is very flexible and parts management is very easy.



Lightweight wrench design

The wrenches have the ThetherLock integrated in the middle for optimal ergonomics and balance.
Additionally the design is optimized for lower weight instead of strength to fit the needs of industrial climbers.



selection of TetherLock tools

3

Flöx

Flöx is a single-use chromatography system for use in biopharmaceutical manufacturing to purify and seperate proteins for application in vaccines and other medications.
It aims to streamline prodction process centered around the single use Flowkit and optimize operational footprint utilization in cleanrooms

Master project / team of two
Yuchen Lan; Jakob Kohnle

2022

4 months

Cytiva


Flöx
04
05
06

More about this project coming soon...

4

PORSCHE DESIGN
FB 01

Fb 01 is a folding bicycle that focuses on a seamless and straight forward product experience. It is targeted at the modern city commuter and prioritizes ease of use over compactness.

Bachelor thesis

2019

9 months

Porsche Design

The Last Mile

The “last mile” issue refers to the challenge of getting people from transportation hubs to their final destinations, which may be a short distance away.
This last stretch of the jurney can take the longest as it often has to be covered by foot. Folding bikes offer an overlooked solution to this problem, as they can be taken on public transport yet offer a fast and independet way of transportation. But current offerings do not really match the needs of modern commuters who frequently transfer between public transport and their folding bike

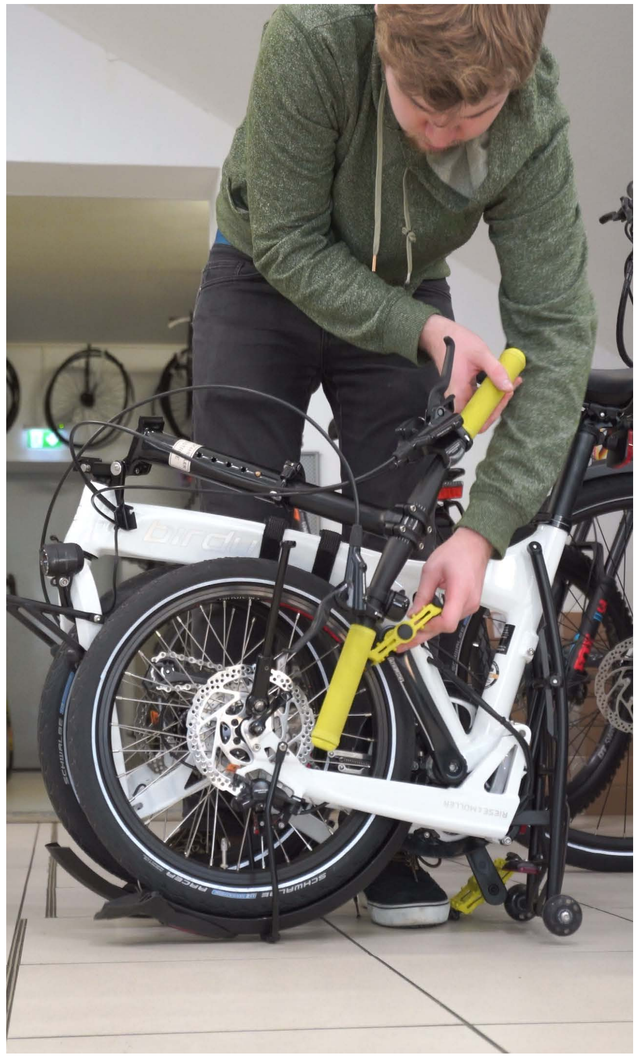
Rethinking the folding bike for the modern commuter.

Current limitations

Existing folding bikes pimarily focus on small size and disregard ease of use. The primary issues that make them inconvinient for use in combination with public transport are the cumbersom folding process which often takes several minutes and the fact that once folded the bycicle has to be carried as it can no longer roll on the wheels.

Create folding bike with focus on a quick transformation and mobility.

limited mobility when folded



cumbersome folding process

Design

My goal was to keep the Design as clean as possible, both in the folded state as well as unfolded. The lines of the bike should stay contious and at the same time they should not impact function or performance.

Geometry

The geometry is very close to a standard bike, to deliver a dynamic and secure riding experience. In Detail this means, that it has a full length wheel-base and conventional seat and handlebar height.

In the first step the handlebars are unlocked by pulling up on the lever on top and then folded down.

If the handlebars are in their lowest position, then the rear arm unlocks automatically and can be swung around by the user.

The saddle can be collapsed with one hand by pressing on the lever beneath it and sliding it into the frame.

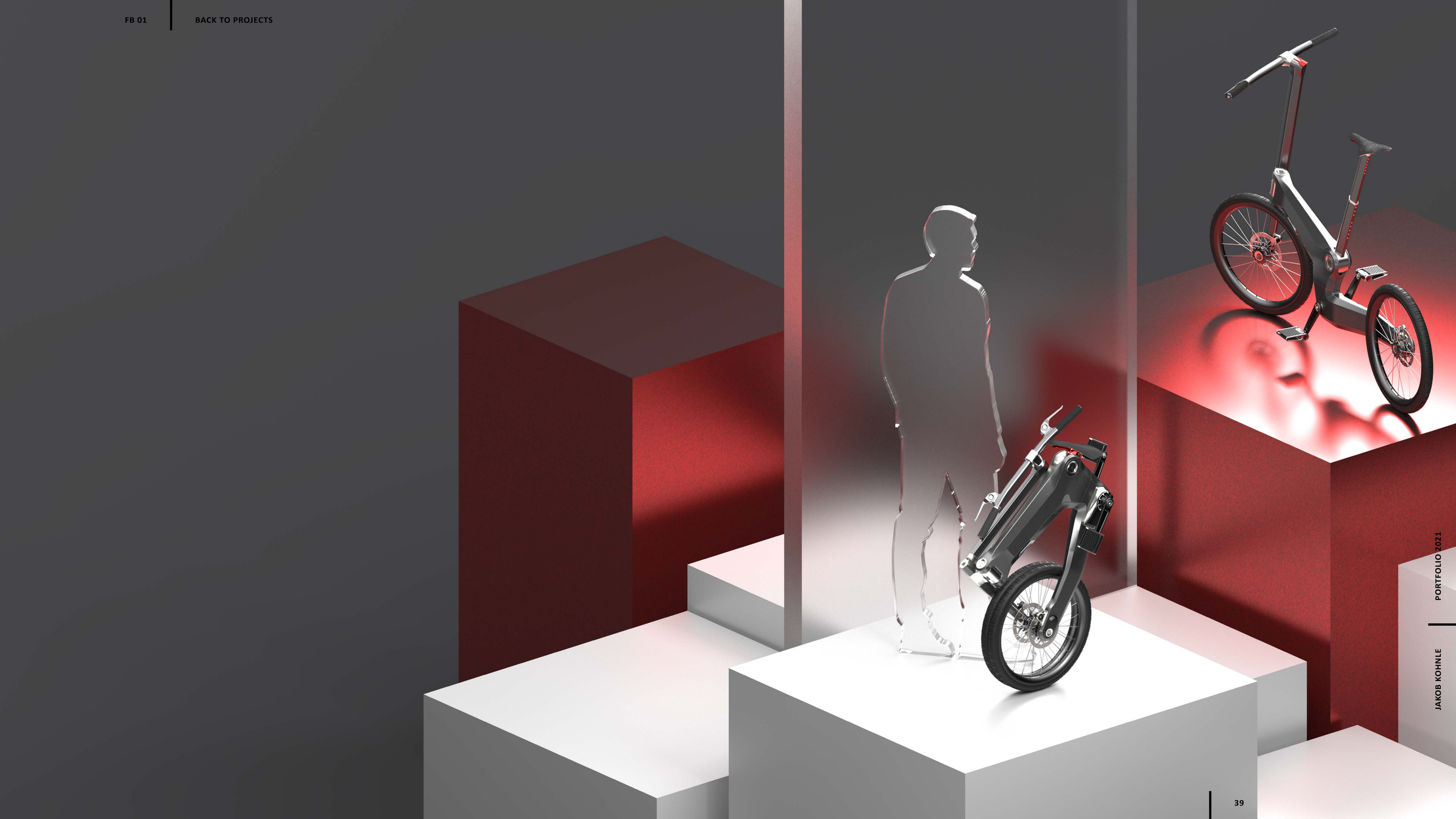
The Pedals can be folded up if needed, which reducs the width to just 24cm.

Folded

In its folded state the bicycle is still very mobile, as the wheels can still freely turn. It can just be grabbed at the saddle or handlebar and pulled. With folded pedals it is just 24cm wide.

Construction


MENU



Thank you

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