aergun.design

Portfolio

Ergun Ahmet

About Me

Hi,

I'm an award-winning designer based in London, holding two Bachelor's degrees with honours and a Master's degree in the design field. With 5+ years of experience, I co-founded two successful startups and have received more than 10 prestigious awards. I have worked across various design disciplines, refining my ability to solve complex problems. My passion lies in merging technology, engineering, and art to create innovative, user-centred designs that make a meaningful impact.

Work Experience

Design Lead
Rownd Precision Industry
Jan 2022 - Present

Industrial Design Consultant
ITU SEED
Jun 2021 - Sep 2024

Industrial Designer
Huss Engineering
Jan 2021 - Jan 2023

Industrial Designer
Knob Coffee Grinder Co
Apr 2020 - Oct 2021

Junior Product Designer
Timezeta
Jun 2020 - Dec 2020

Internships

4 different internships in the design field
2016 - 2019

Education

MA Industrial Design
Central Saint Martins - UAL
Sep 2022 - Jun 2024

BA Industrial Product Design
Istanbul Medipol University
Sep 2015 - Jun 2019

BA Architecture
Istanbul Medipol University
Jan 2016 - Jun 2020

Awards

Core77 Design Awards 2024
› *Notable - Tools Category*
› *Finalist - KeyShot Rendering Prize*

IF Design 2024 Student
› *Winner - 04 Quality Education*

European Product Design Awards (ePDA) 2023
› *Top Design Award - Work(Office)*

International Design Awards 2023
› *x1 Emerging Product Designer of the Year Award*
› *x1 Gold Award*
› *x1 Silver Award*

IMMIB Design Competition
› *1st Prize - 2021*
› *3rd Prize - 2020*
› *2nd Prize - 2019*

Best of Kickstarter Award
› *2023*

and 4 more awards

Recognations

Check my CV for more

What Makes Me a Strong Candidate

Technical Ability

Since 2015, I've been diving deep into design software, especially 3D CAD (SolidWorks/Rhino), rendering (KeyShot), and visualization (Adobe Suite). Over the years, I've picked up a lot about production techniques and materials, along with hands-on experience in rapid prototyping methods. I've got a solid grasp of everything from the initial idea to bringing products to life through the design process.

› CAD Modelling
› Rendering
› Prototyping
› Material Knowledge
› Visualisation

Adding Value Through Design

As the sole designer at two startups I co-founded, I secured $1 million in funding through the designs I prepared for pre-orders via crowdfunding. The entrepreneurs I supported in industrial design and mentored successfully produced these designs, garnering over $100,000 in investments, with projects showcased at leading trade shows worldwide. My contributions were pivotal in their growth.

› **Rownd Precision Industry:** Secured $636,150 in crowdfunding before entering production.
› **Knob Coffee Co:** Achieved $288,121 in crowdfunding solely through design efforts, receiving over 1,200 pre-orders.
› **Entrepreneurs I've Worked With:** Helped them secure funding of up to $100,000 through my designs (e.g., Newky).

Collaboration and Interpersonal Skills

As a freelance and industrial design mentor, I worked with nearly 30 clients, enhancing my ability to understand their needs and communicate effectively. In the teams I co-founded, I took on design leadership, contributing to teamwork and guiding the design processes. By collaborating with engineers from various disciplines, I strengthened my ability to work in interdisciplinary harmony.

› Effective Communication
› Teamwork and Leadership
› Understanding Customer Needs
› Multidisciplinary

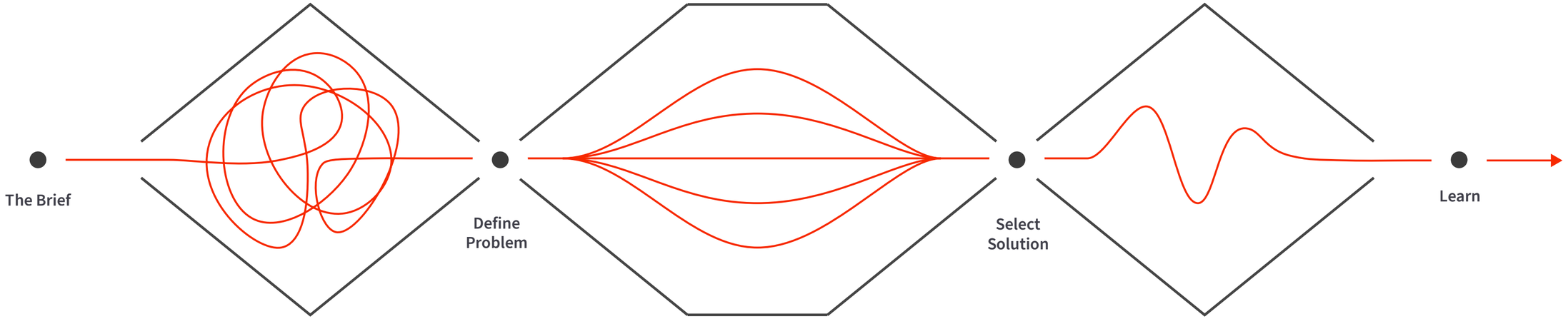
Solid Background and Creativity

I completed two bachelor's degrees with full scholarships and honors, followed by a master's in Industrial Design from Central Saint Martins UAL on a full scholarship. I have also won over ten awards in international design competitions, enhancing my research, creative thinking, and multitasking skills.

› User Research
› Multitasking
› Brainstorming
› Sketching

My Design Process

I typically utilize a technique similar to the Double Diamond design approach in my design processes. This method helps me effectively navigate the journey from concept to final product, ensuring a structured and well-executed design process.



DISCOVER

Analysis Becomes Insigts

- Design Research
- Target User Group / Persona
- Market Trends
- Competitors
- Interviews
- Pain Points

DESIGN

Insights Become Ideas

- Moodboard / Design Language
- Sketch (a lot)
- 3D CAD Modelling
- Prototyping

Test
Iterate
Imporve

- CMF Design
- Branding

DELIVER

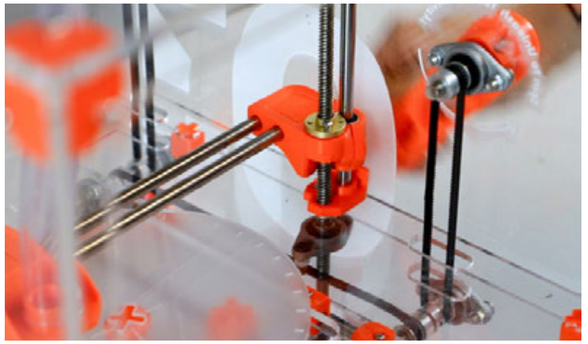
Ideas Become Products

- Final Design Presentation
- Renderings
- Technical Drawings and Documentation
- High-fidelity Prototypes
- Manufacturing-Ready 3D Data
- Animations

Content

Rownd CNC Lathe
2023

Knob Coffee Grinder
2021



PulpMaker | Mechanical Printer
2024

MOVON | One Man Crew
2024

twoo | Smart Toothbrush
2023

For more projects, please visit my website. The portfolio includes only selected 5 projects.

↘

aergundesign.com

Rownd CNC Lathe

Rownd CNC Lathe Project is an entrepreneurial venture I co-founded. I personally handled all industrial design and other design aspects of the project. After extensive development, the project launched on Kickstarter and successfully raised $636,000 in backing.

Duration	1 Year
Year	2022 - 2023
Type	Personal / Team Entrepreneur Project (Co Founder)
Website	rowndcnc.com

Featured On:

YD YANKO DESIGN

TRENDHUNTER CREATE THE FUTURE Geeky Gadgets

1817% Funded With:

KICKSTARTER

Attended:

CES Consumer Technology Association

Awards:

IDA DESIGN AWARDS WINNER 2023

EUROPEAN PRODUCT DESIGN AWARD

CORE77 DESIGN AWARDS 2024 NOTABLE

Best of Kickstarter

DIA

A CNC Anyone Can Easily Use on Their Desk

The Rownd Lathe is a CNC machine that stands out for its user-friendly design and a unique feature that we're particularly proud of – its compatibility with gamepad. This thoughtful addition prioritizes user safety and experience. The lathe is designed for shaping wood, aluminum, and plastic, and it offers a straightforward interface, specialized software, and access to an extensive open-source library. Its 7" touch screen provides vital machine information at a glance, including usage time, rotation speed, and feed rate. This touch screen acts as a central hub for selecting CAD data and initiating machining tasks, eliminating the need for a separate computer. It also includes a convenient manual processing option.

Pain Points in Existing CNC Products

Fatal Accidents

Requires Years to Master CNCs

CAM Installation Difficulty

Expensive Prices

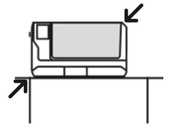
Unsuitable for Domestic Use

Cleaning

Design Criteria

Gamepad Control

First CNC Lathe that can be used with console gamepad.



Compact Size

Ideal for desktop usage with small dimensions and weight.

Material Versatility

Cut and Shape Any Material with Endless Possibilities.

Enhanced Safety

Ensure safe operation for users of all skill levels with the protective body.

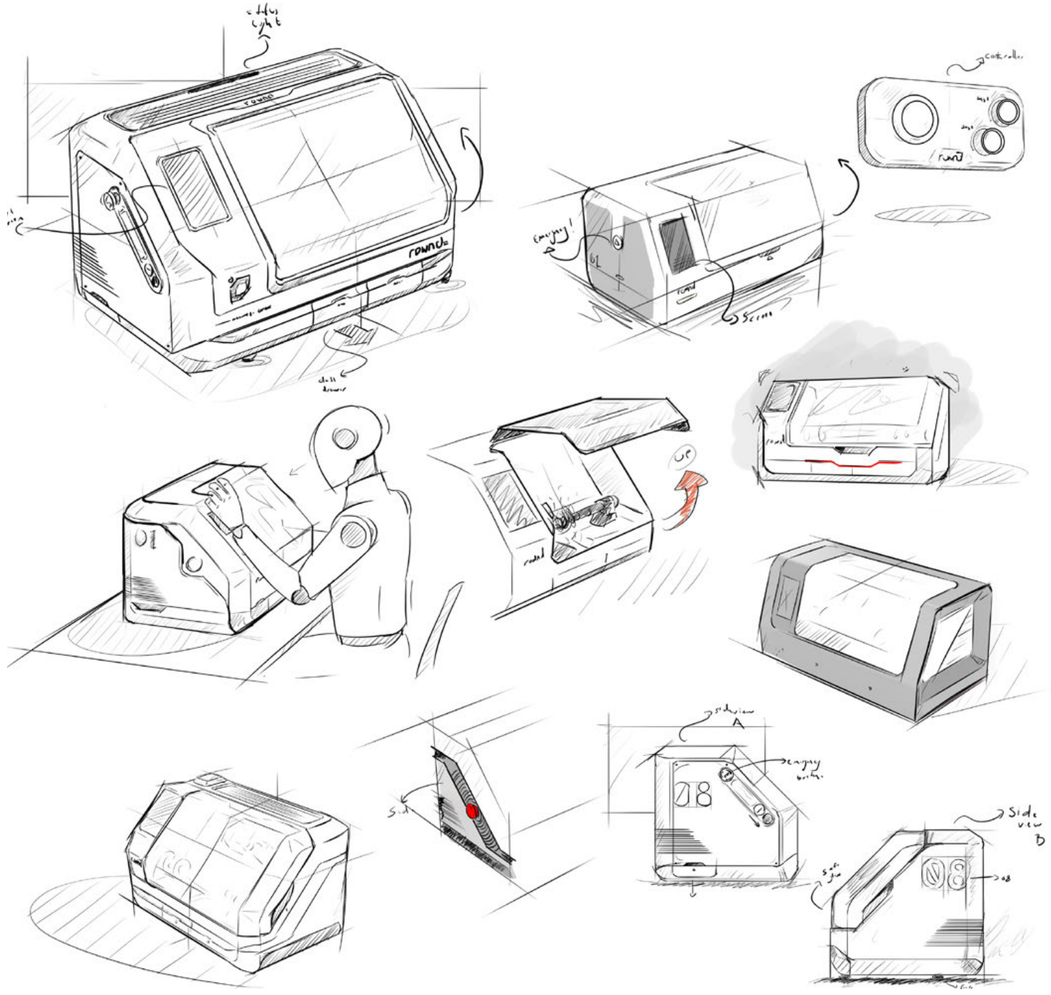
Quiet Operation

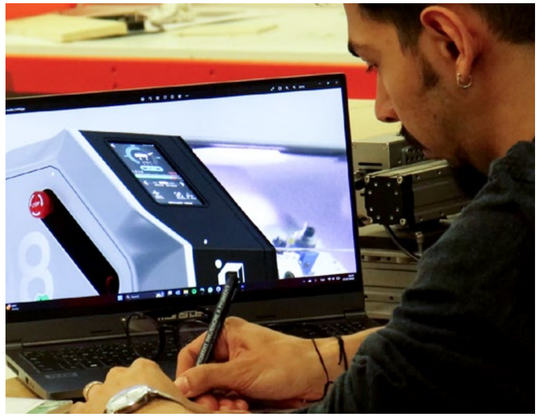
Minimize noise for a smoother and quieter user experience. The noise level is as low as 60 dB(A) during operation.

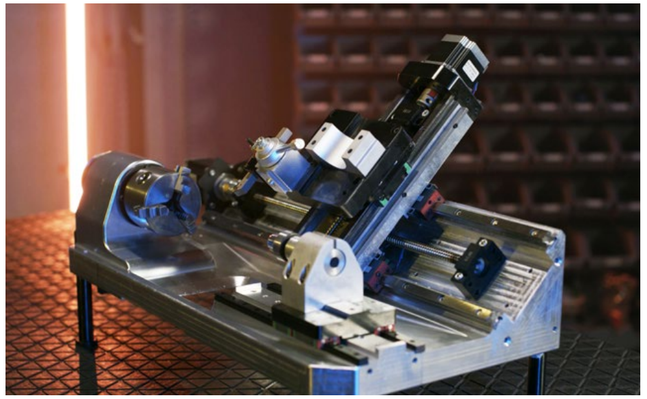
Accessibility & Multi-Method Use

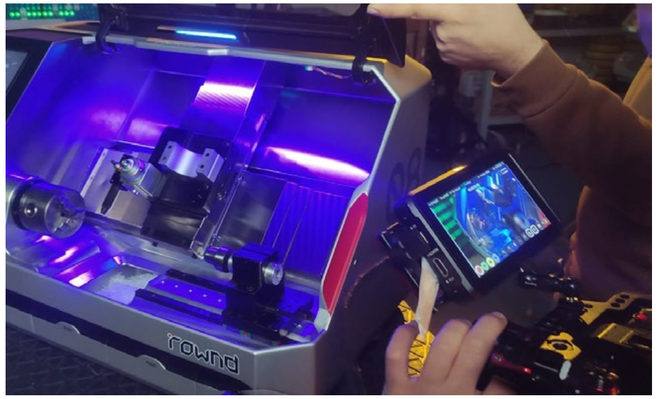
Whether you use the touch screen, the web, or the mobile app, you have access to all the functions.

/Rownd CNC Lathe









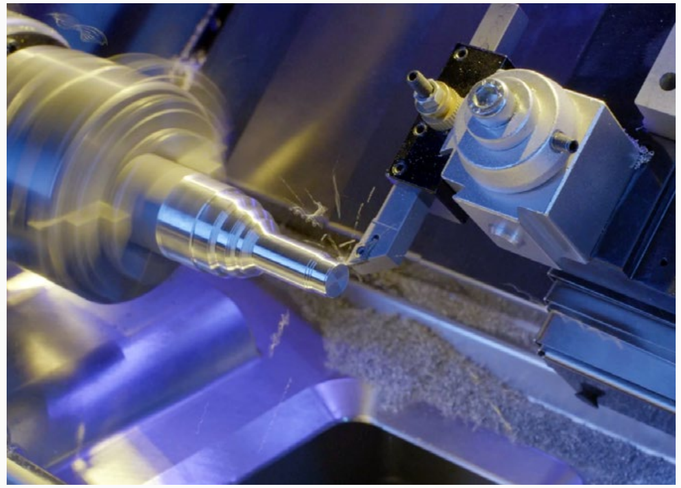
Design and Development Process from Idea to Production

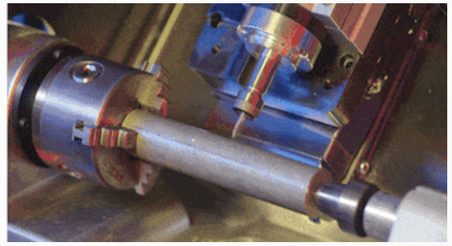
Research → Problem Defination → Ideation → Sketching

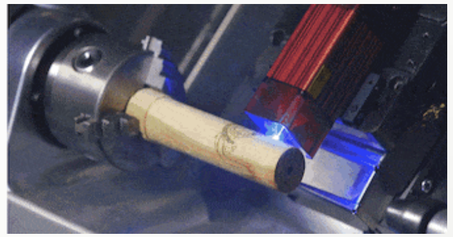
Film Shooting ← Prototyping ← Visualization ← 3D CAD Modelling

I began the design process by creating rough concept sketches and continued through to developing production-ready CAD data. During this time, I worked on various data sets and prototypes.

/Rownd CNC Lathe



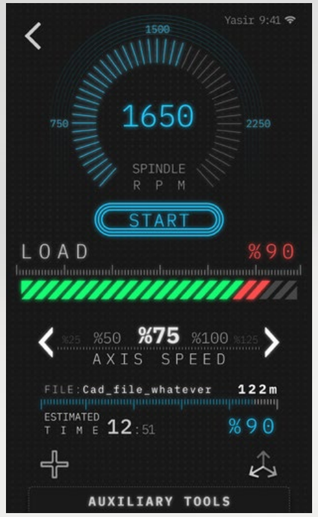


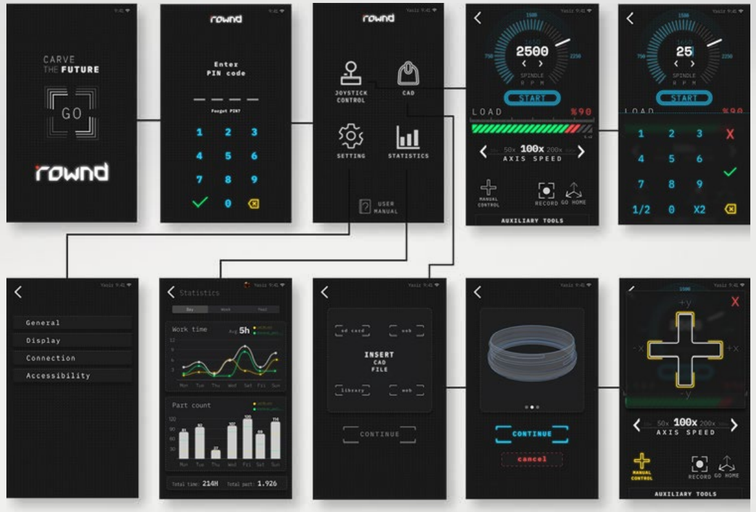


Creative Tool Compatibility

Designed for versatility, the CNC supports an Automatic Tool Changer, Laser Engraver, Auto CNC Drill, and Quick Tool Changer, letting users freely create with materials like steel, aluminum, brass, plastic, and wood up to CK45 hardness.

/Rownd CNC Lathe

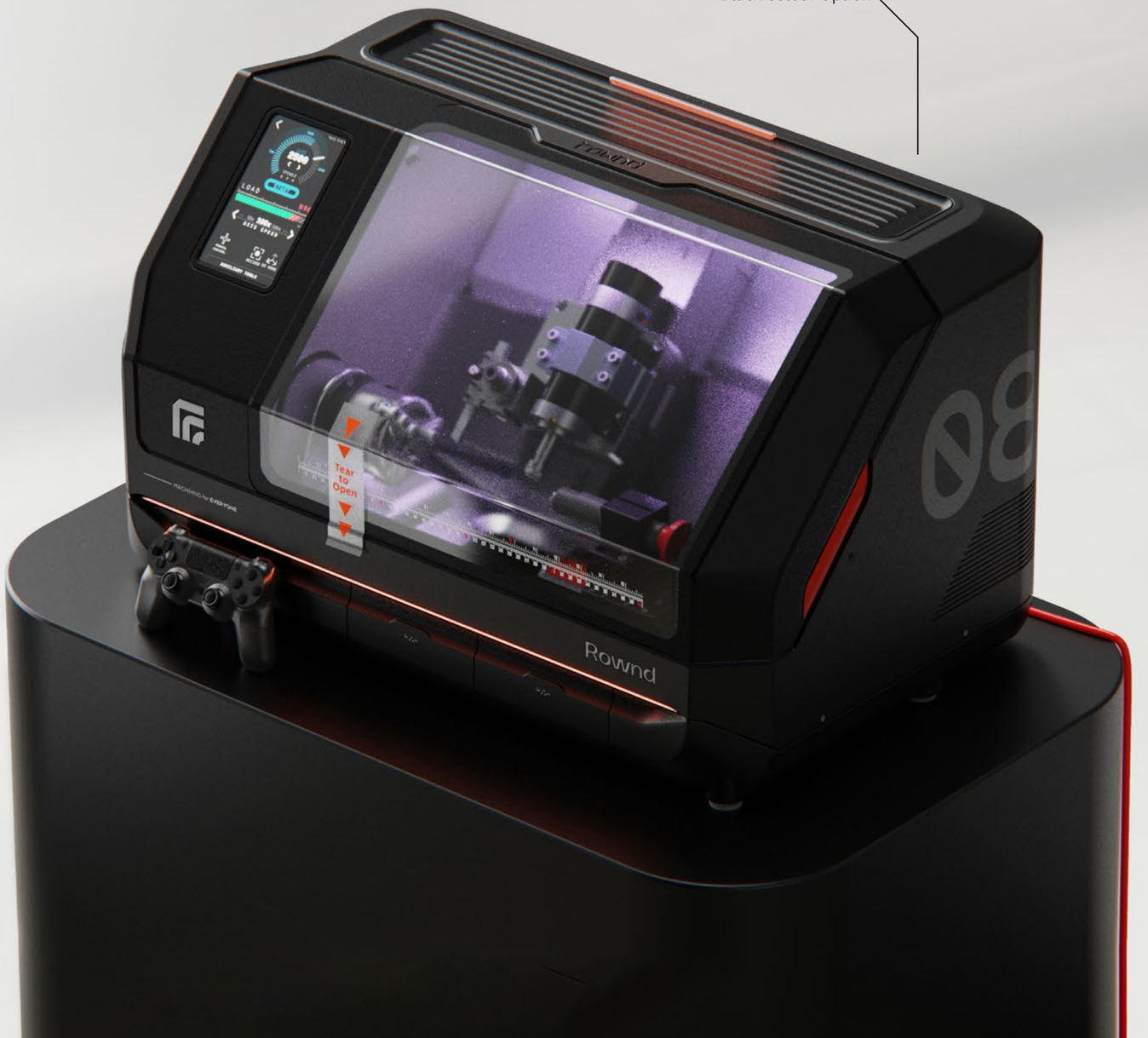


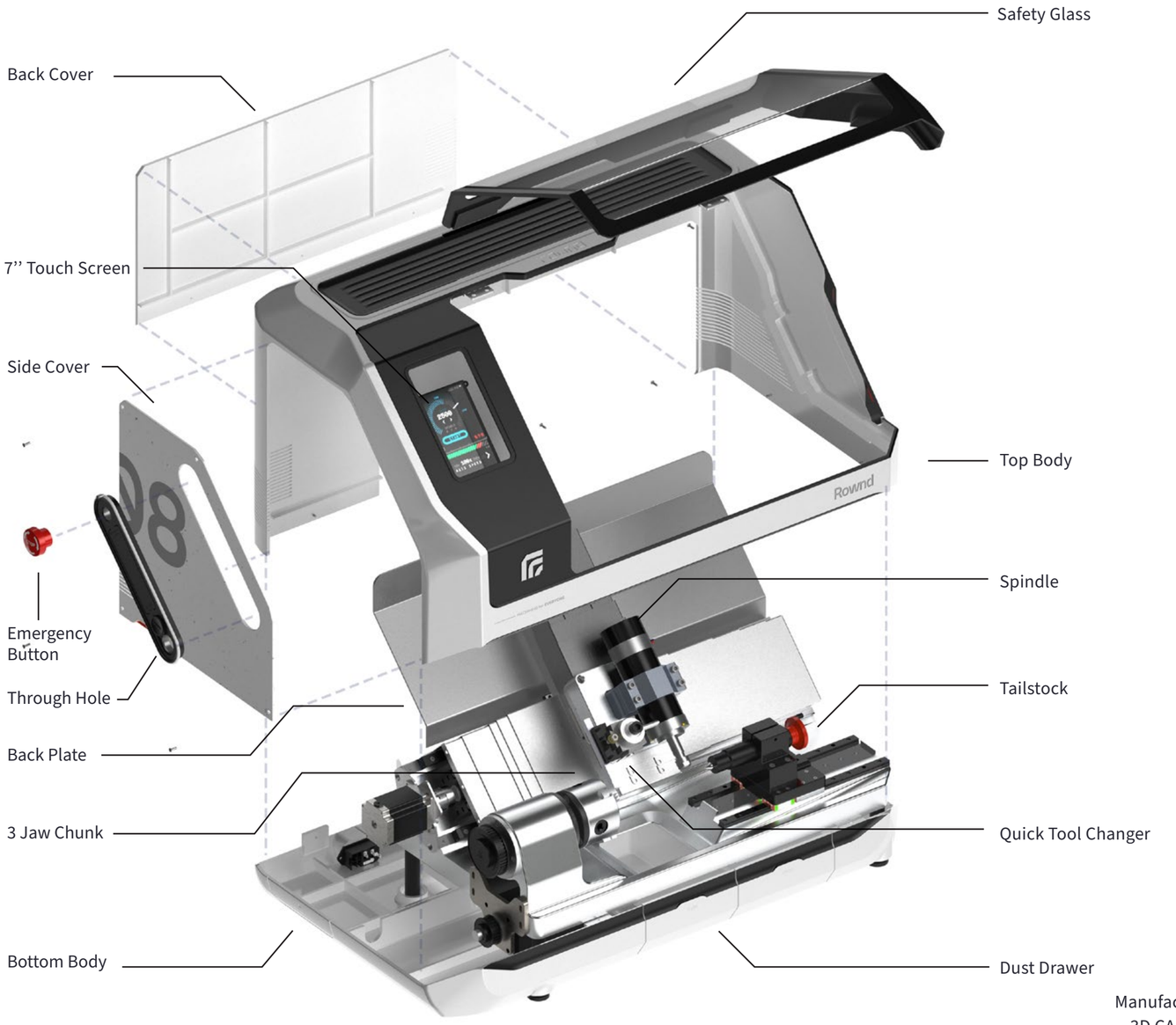


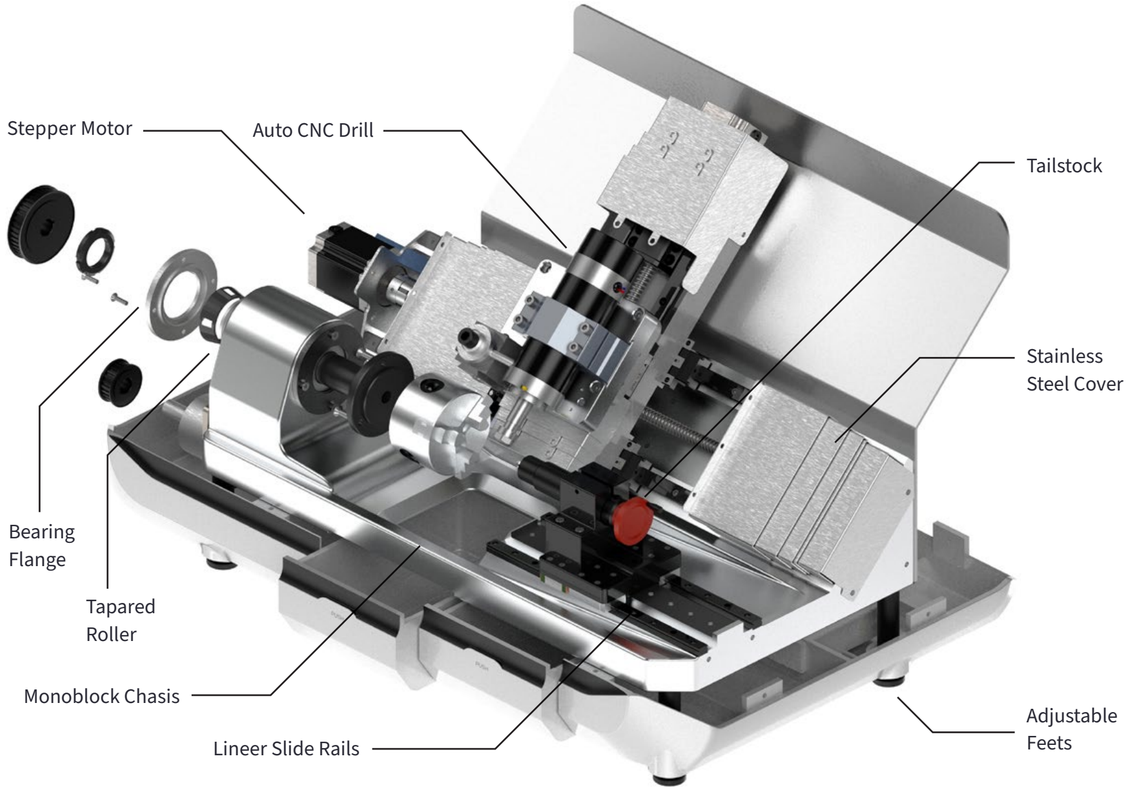
UX Design and Accessibility

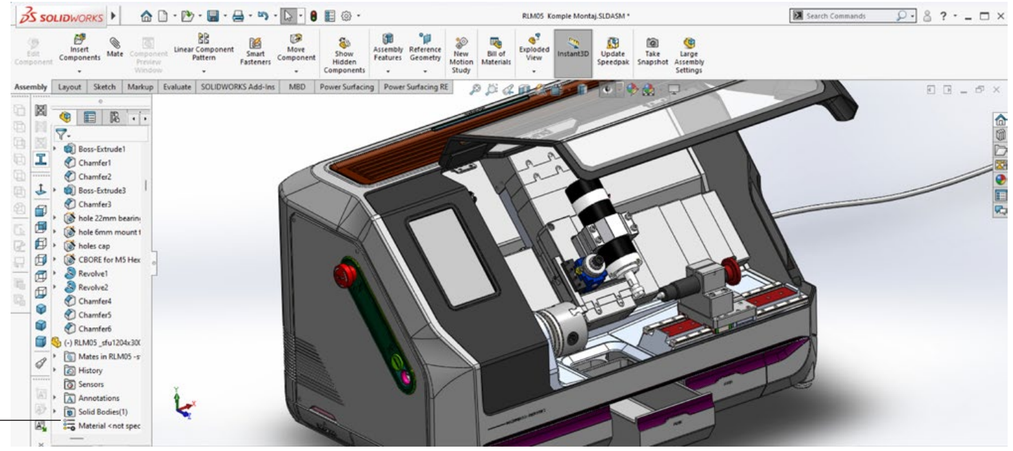
When designing the ROWND, I prioritized creating an interface that is clear and simple for every user. Unlike most CNC machines with complex control panels, the ROWND offers simplicity. It features a 7-inch touchscreen for an intuitive UI, a mobile app for manual control and 3D model imports, and even supports game controller input. This makes accessible to all, eliminating the need for advanced knowledge.

Black Colour Option









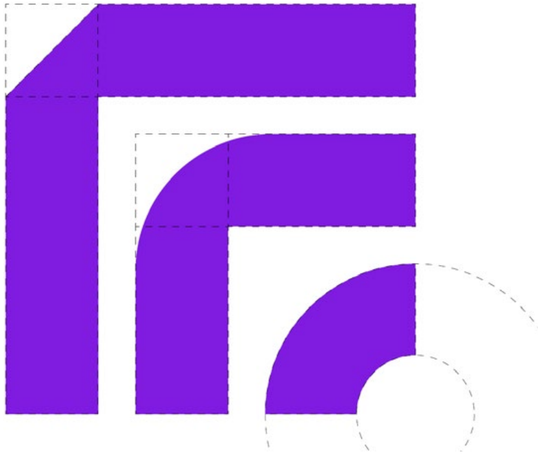
Manufacturing-ready 3D CAD (computer-aided design) Data

Design for Manufacturing

A key challenge in designing the ROWND was miniaturizing a feature-rich machine into a compact desktop format. This required innovative engineering and the preparation of precise CAD data for efficient manufacturing.

Final Product and Kickstarter

After creating numerous CAD designs and preparing a detailed manufacturing data set, we moved to the prototyping phase of the final design. The outer casing was made of plastic, while the inner chassis was produced from aluminum blocks. Following that, the painting and additional details were completed, and the electronic components, motor, and other parts were assembled. With this prototype, we had a successful Kickstarter campaign, exceeding our funding expectations. Additionally, the project was recognized with "Best of Kickstarter" and "Project We Love" awards by Kickstarter.



DIGITAL

ROWND PURPLE
#811BE2

DIGITAL

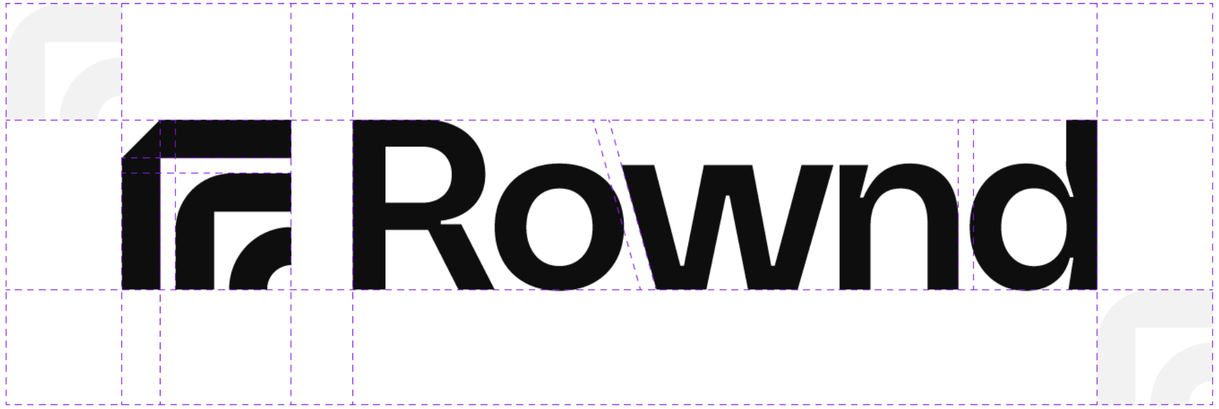
SOFT BLACK
#191919

PRINT

PANTONE 266C
C:38
M:69
Y:0
K:26
#753BBD

PRINT

SOFT BLACK
#191919



Branding

I designed the branding to maintain a cohesive look while adapting to smaller environments. By balancing the spacing and creating a smooth transition from sharp to rounded forms, I aimed to blend warmth with industrial precision. The logotype was crafted using a typeface optimized for smaller sizes, with a distinctive “R” that conveys a friendly, approachable feel even when scaled up. To reinforce the brand’s intended aesthetic, a predominantly white background should be used, ensuring clarity and visual impact, while the logomark and typography are designed to stand strong both together and independently.

Project Video

Kickstarter Page

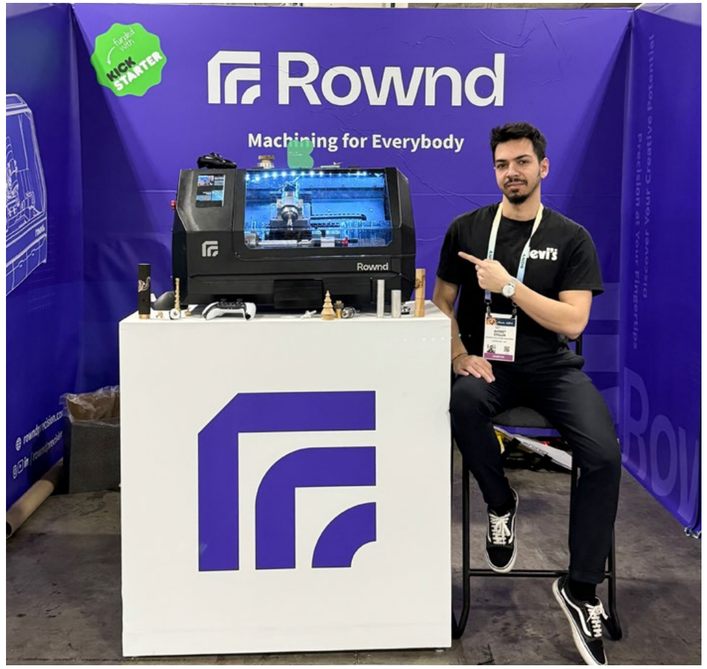
rowndcnc.com

Instagram Page

Reflection

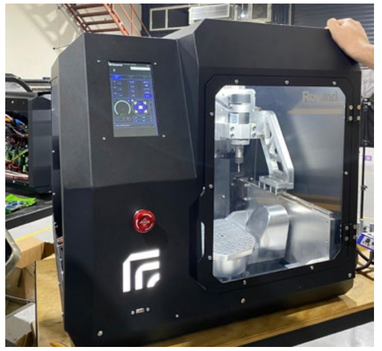
Designing a CNC machine for home users and compact spaces was a significant challenge. Most CNC machines are large and require specialized knowledge. Through thorough user research, I identified the strengths and weaknesses of existing devices. My goal was to make CNC machines as accessible as 3D printers.

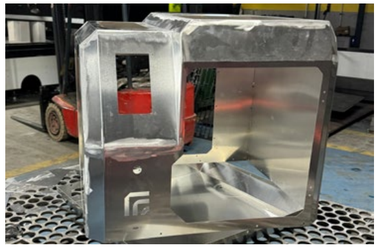
CES 2024



First Batch Production Model

5 Axis CNC Milliing - 2025





Knob Coffee Grinder

The Knob Coffee Grinder is a project developed by a small team, and I am one of the co-founders. The project concept emerged when a coffee grinder I designed for a design competition in 2018 won 1st place. Over the next three years, we refined this idea and launched a crowdfunding campaign on Kickstarter. During the campaign, our design garnered significant attention, selling over 1,200 units and surpassing our expectations by raising nearly $300,000 in backing.
I personally handled all aspects of industrial design and other design work for the project.

Duration	1 Year
Year	2020 - 2021
Type	Personal / Team Entrepreneur Project (Co Founder)
Website	knobgrinder.com

Featured On:

YD YANKO DESIGN SPRUDGE DAILY COFFEE NEWS

and many more...

1150% Funded With:

KICKSTARTER

The World’s First Axle-less Design Coffee Grinder

The Knob Coffee Grinder simplifies and enhances traditional coffee grinders by eliminating the axle that often causes uneven grinding. In standard grinders, the axle can wobble during use, leading to inconsistencies in the grind and negatively impacting the coffee’s flavor. Rather than reinforcing the axle, the Knob Coffee Grinder removes it entirely, introducing a new grinding mechanism that allows direct rotation of the burrs. This innovative design ensures a more stable and consistent grind, resulting in better-tasting coffee.

Pain Points in Standart Approaches

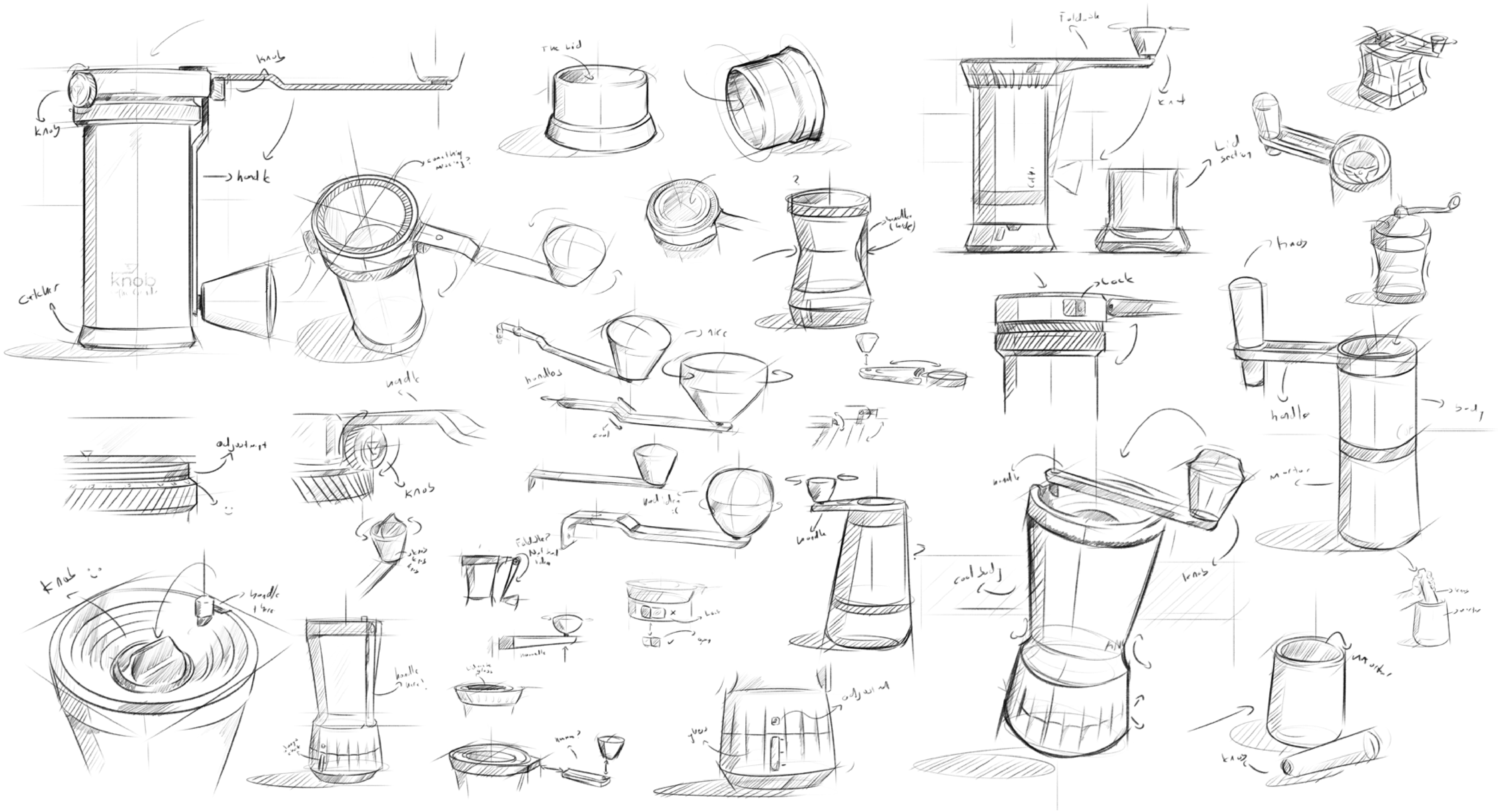
Inconsistency due to Wobbling

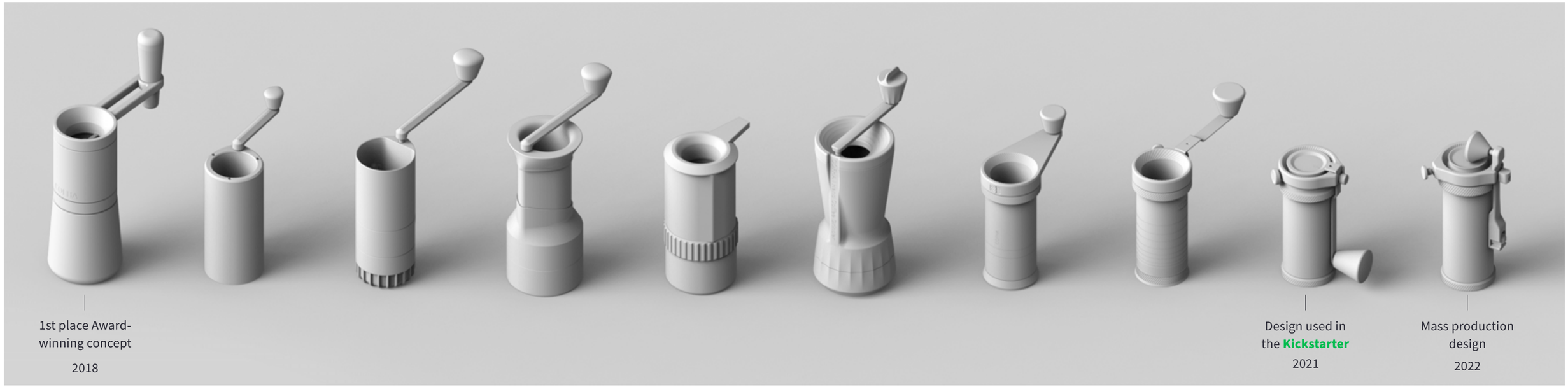
Low Grinding Variety

Unsuitable for Adjustment

Difficulty Cleaning

Non Portable Designs

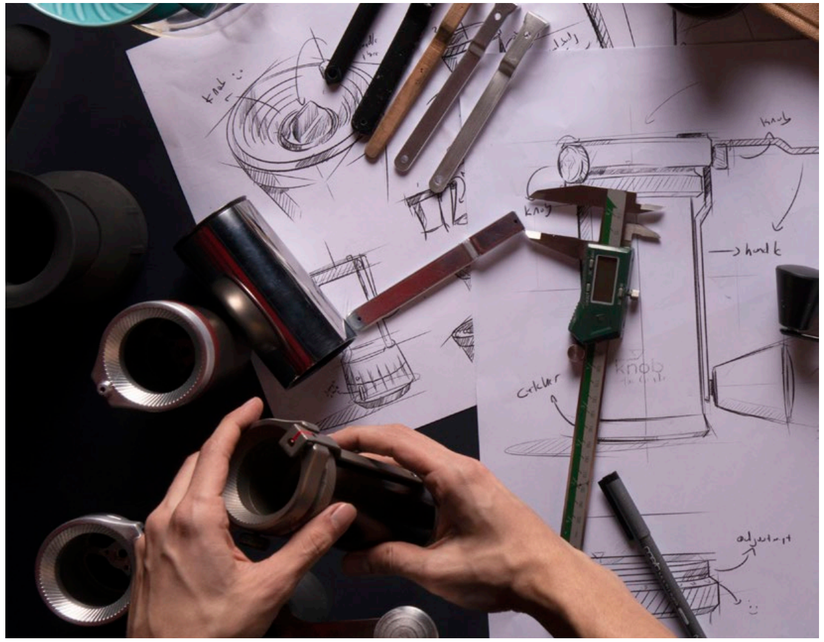




1st place Award-winning concept
2018

Design used in the **Kickstarter**
2021

Mass production design
2022



Design and Development Process

Throughout the development of the product, I worked on a total of 25 different CAD models. Many of these were prototyped and tested extensively to ensure the most accurate and optimal design was achieved.

No Axle, No Wobbling

In my design, consistency is key for a coffee grinder. I removed the problematic axle to eliminate wobbling, ensuring perfect, one-of-a-kind performance.

Portable Mode

Switching the Knob Grinder to portable mode is quick and easy. Grinder designed a crank that can be detached by means of a simple knob.

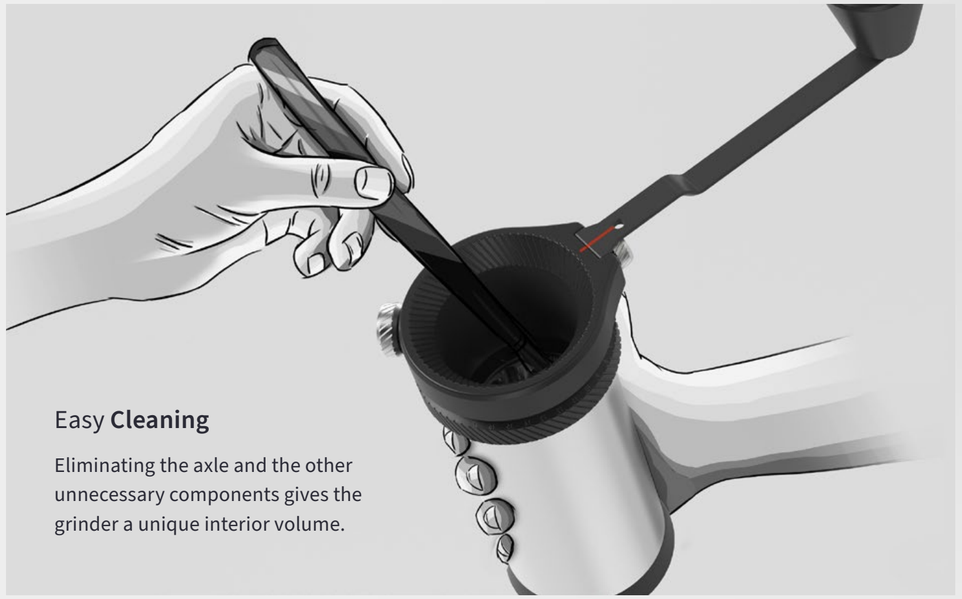
Solutions and Ideation

The Lid, and the Catcher

The lid of the Knob Coffee Grinder can also be used for measuring the coffee beans before the grinding process.

Stepless **Adjustment**

The design removes the need for resetting, allowing quick fine-to-coarse adjustments in seconds.



Easy **Cleaning**

Eliminating the axle and the other unnecessary components gives the grinder a unique interior volume.

The **Packaging**

Simple, reliable, and compact packing have a special design.

Design Engineering

The body consists of only two parts, designed for easy removal without any tools. It is also the first axeless coffee grinder ever made. The body is crafted to be manufactured from a single piece of aluminum, ensuring a streamlined, minimalist appearance while maintaining strength and longevity.

Final Product

After a long design and development process, the final prototype was manufactured to work flawlessly, with tests confirming its optimal performance. It was produced in three different colors—silver, black, and white. Photos and videos were prepared using these prototypes for the Kickstarter campaign, presenting them to customers for their consideration.

Project Video

Kickstarter Page

knobgrinder.com

Behance Page

Instagram Page

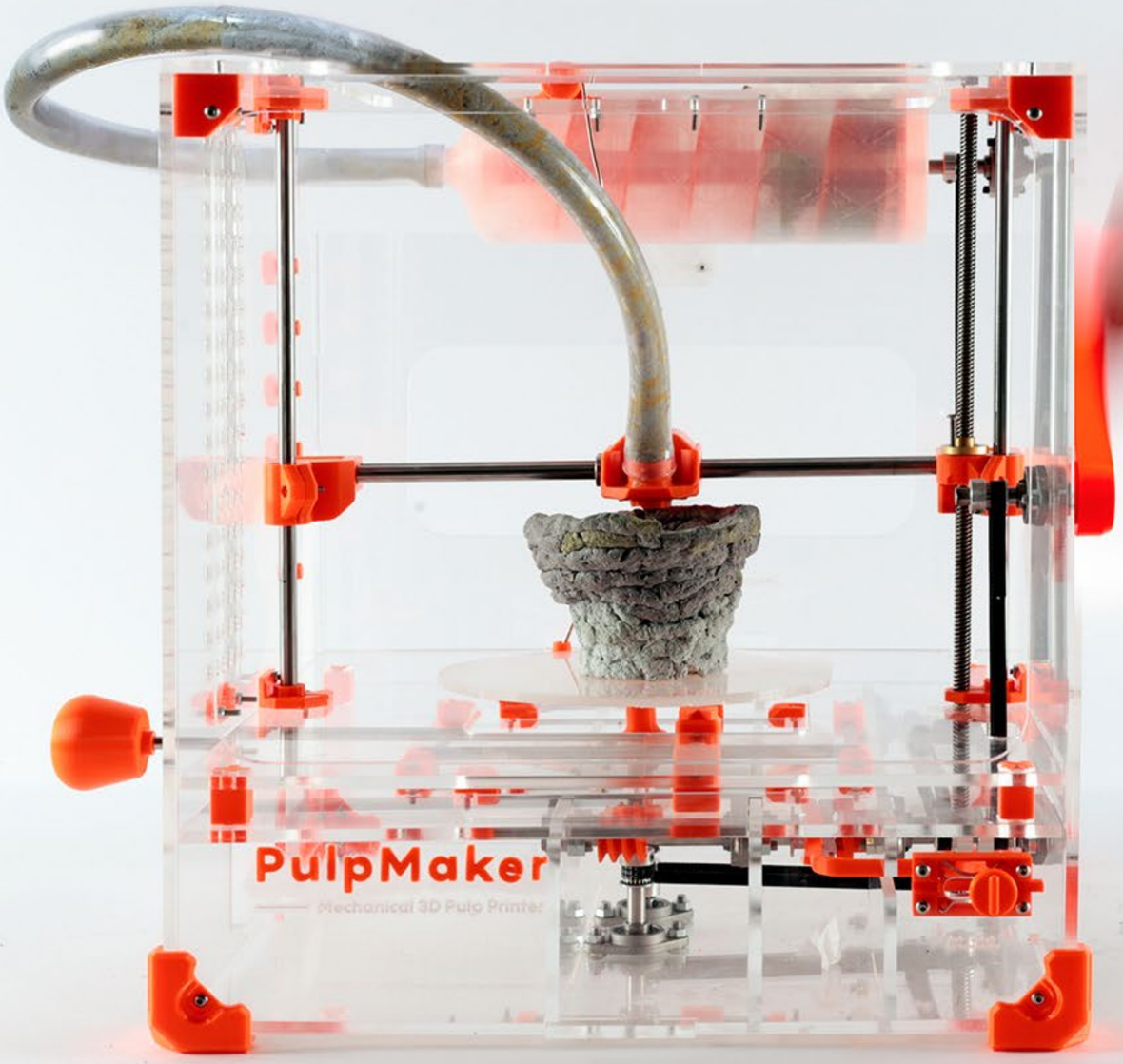
Reflection

Designing coffee equipment as a coffee enthusiast was both enjoyable and challenging. Engaging with fellow coffee lovers for input was crucial, given their discerning tastes. The design had to excel in functionality to meet their high standards. This project marked my journey from concept to mass production, where I learned extensively and received rewarding customer feedback. I still enjoy using the coffee grinder I designed in my own home.

PulpMaker

Mechanical 3D Paper Pulp Printer

As my final project for the MA Industrial Design program at UAL Central Saint Martins, I developed the PulpMaker. This project began with a focus on making a humanitarian impact and evolved into a fully functional, sustainable tool. The PulpMaker is designed to support STEM education for children living in temporary camps following crises, such as natural disasters or conflicts, while also raising awareness about sustainability. The device operates entirely mechanically, powered by the simple turning of a crank, and uses widely available waste paper as its printing material.



Duration 4 Months

Year 2024

Type Postgraduate Thesis Project

Collaborators:

4 QUALITY EDUCATION

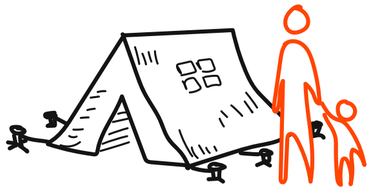
#Design for Social Impact

Project Focus

Despite living in an era of technological advancements, **250 million** children still lack access to basic education. Children affected by disasters, migration, and war face significant challenges in meeting even their most fundamental needs, leaving education, particularly in **STEM** fields, out of reach. STEM education plays a vital role in enhancing academic achievement and building a skilled workforce that supports countries' transitions to technology-driven economies.

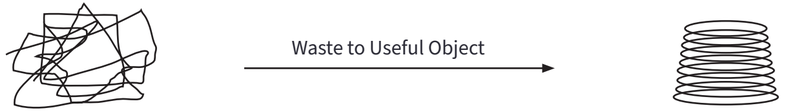
58m.
children are not attending school

12%
of children are out of school due to conflict and poverty



Playful Learning for Everyone, Everywhere

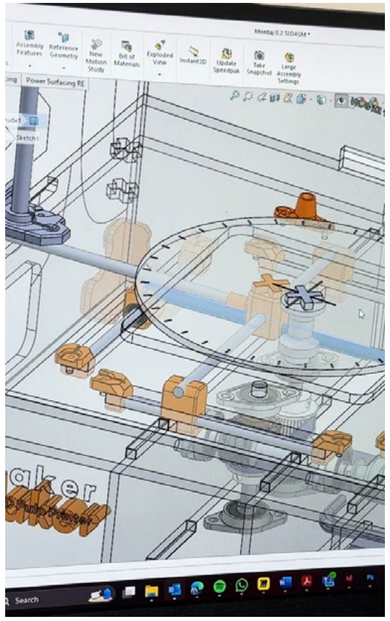
To enable the transformation of readily available waste materials into useful objects in an educational, fun, and environmentally friendly way. The idea serves a dual purpose: to provide children in underserved and challenging environments with educational opportunities, particularly in STEM fields, and to offer modest yet meaningful support to improve their living conditions.

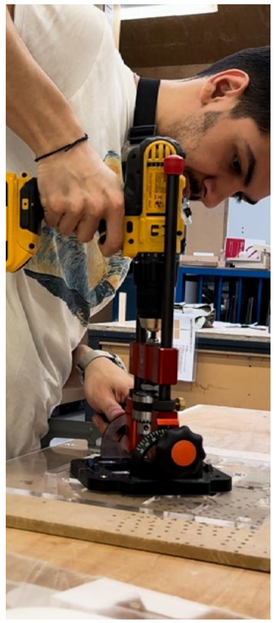


Could a 3D printer be designed to operate without requiring energy?

To develop a sustainable and engaging 3D printer that uses paper, a widely available waste material, as its primary resource to create various objects without requiring any energy input.

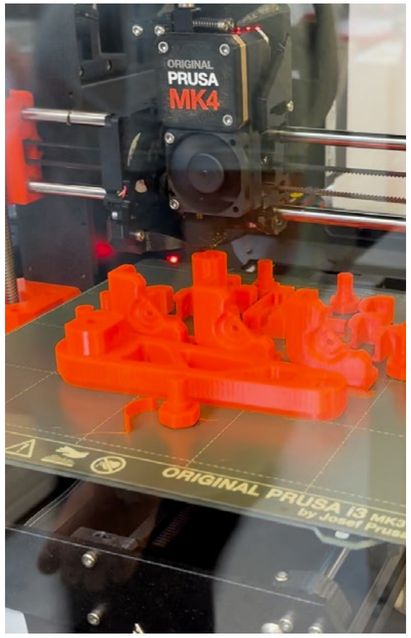
Design Criteria

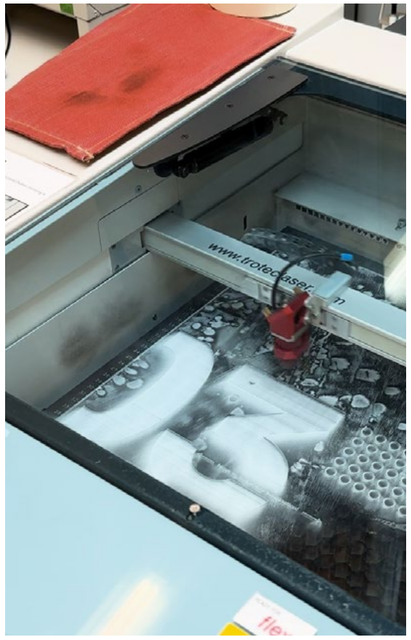


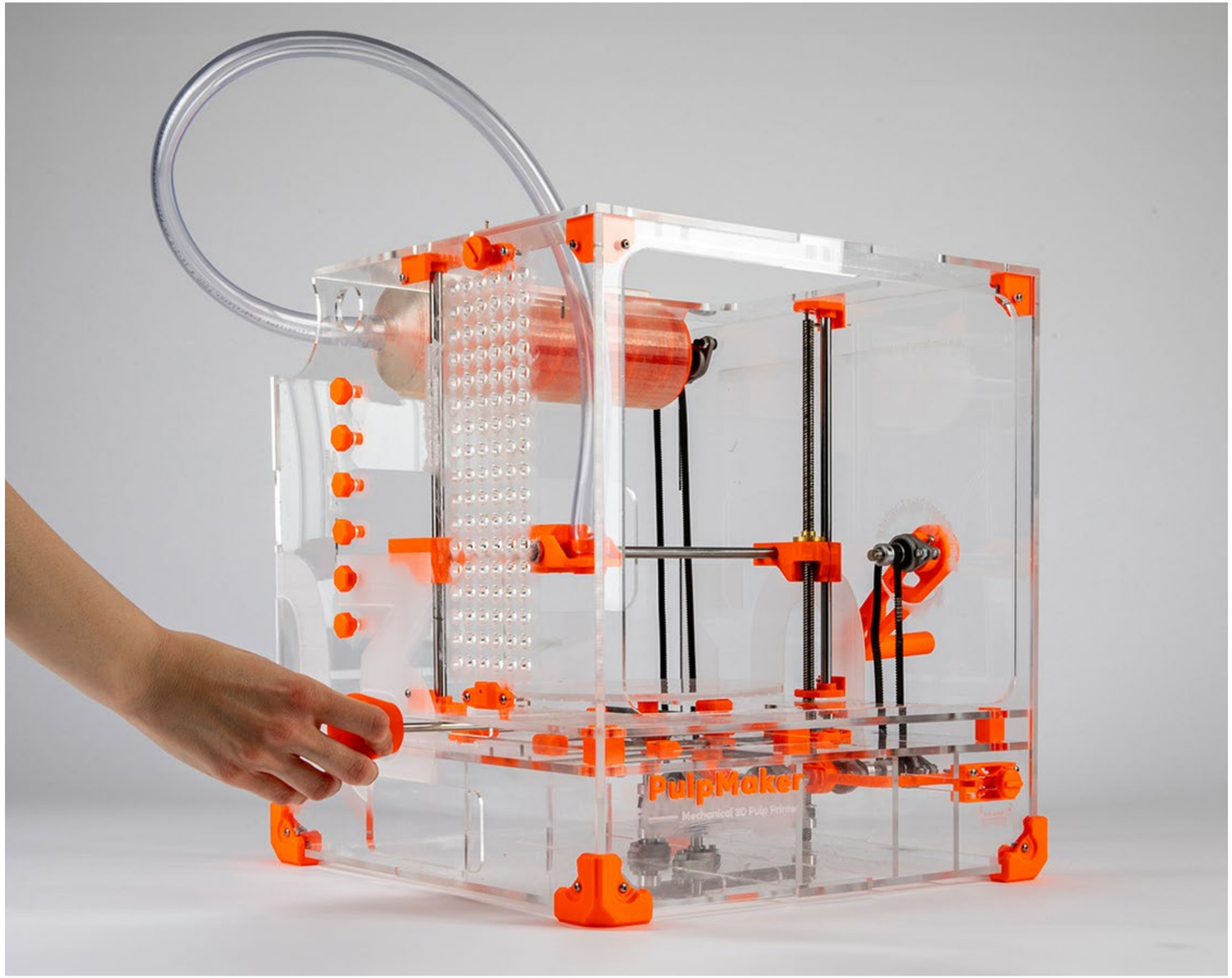


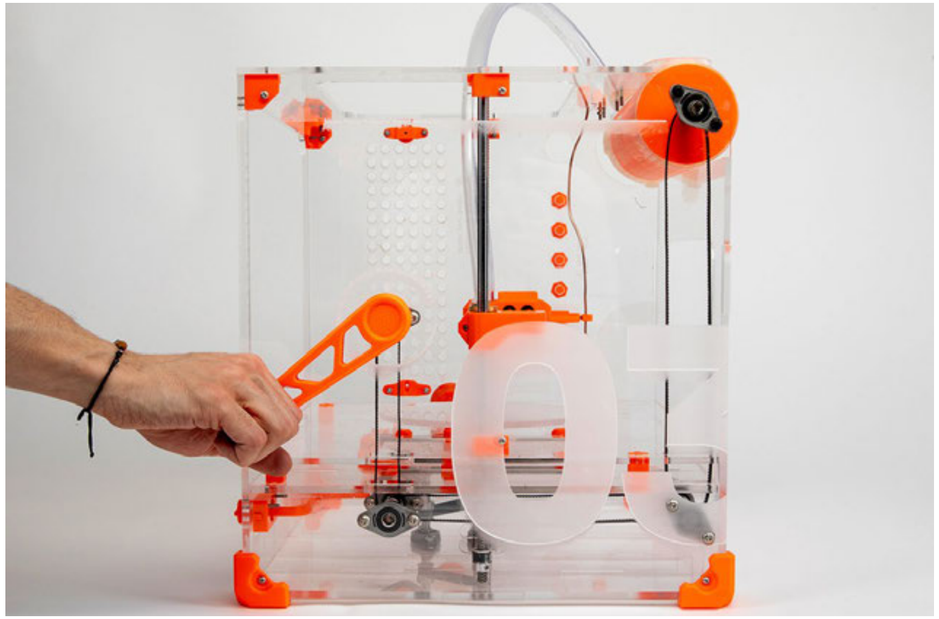
Design Process

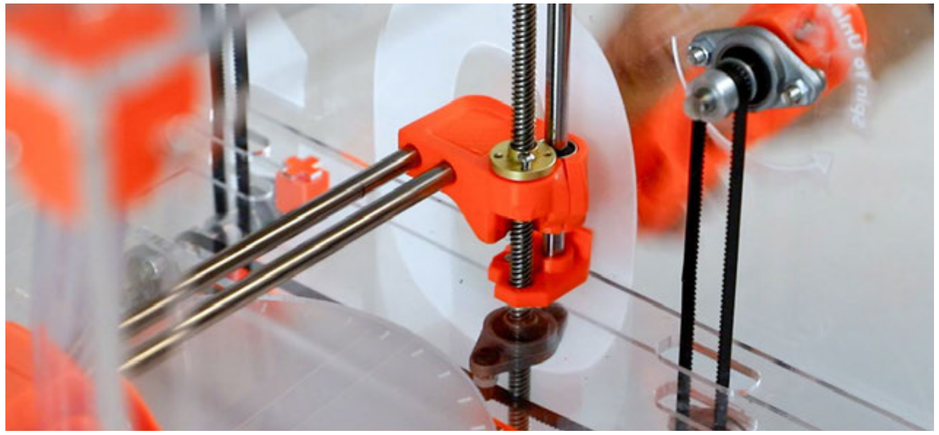
Using the Double Diamond Design Approach, I developed the PulpMaker prototype through a detailed and iterative process. I began by analyzing and disassembling an Ultimaker printer to understand 3D printer mechanics. After creating prototypes and CAD models, I focused on resolving challenges with pulp material flow, requiring extensive testing and adjustments. I employed various production methods, personally modifying components to fit the design. Finally, I completed the prototype and documented its functionality in a video.



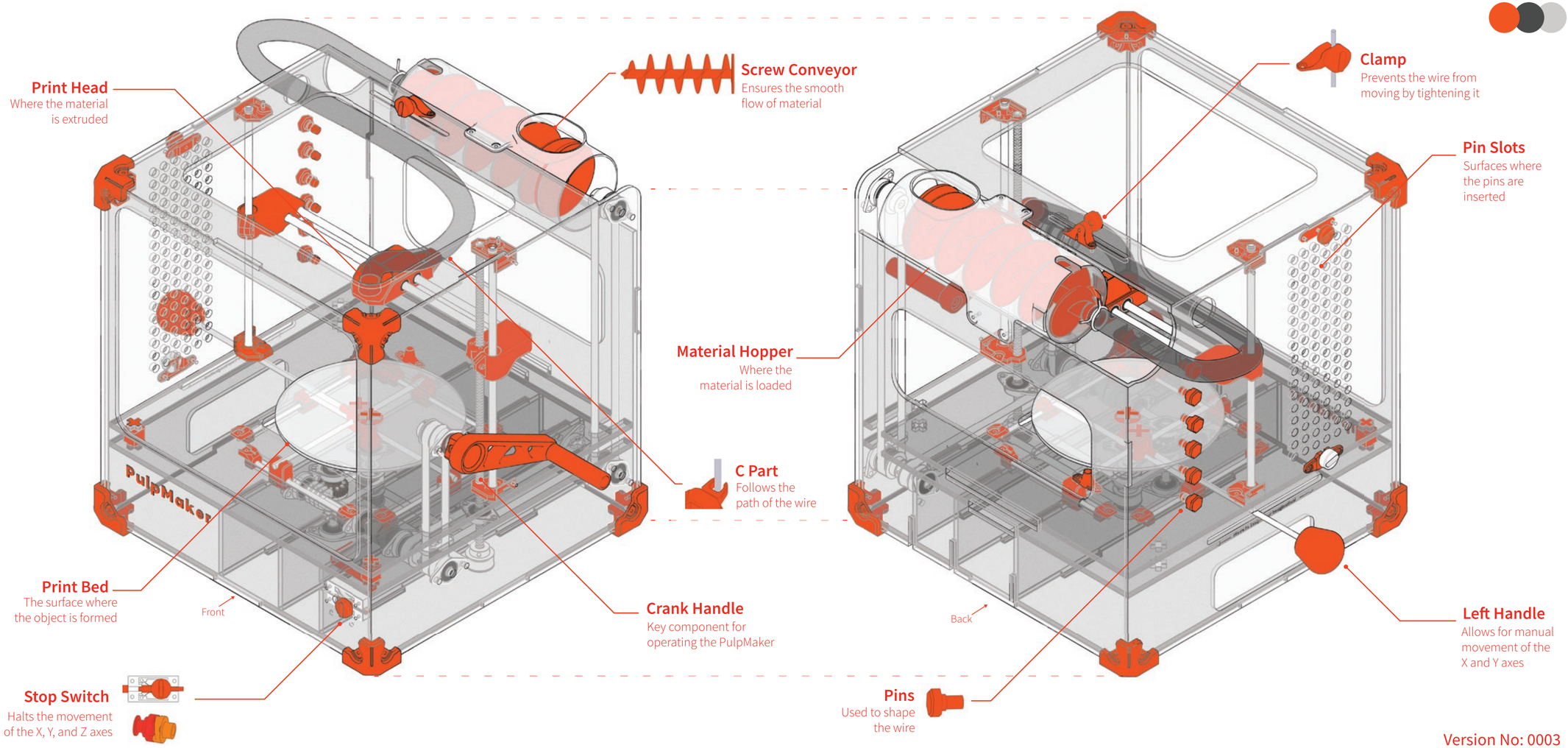



PulpMaker
Mechanical 3D Pulp Printer





/PulpMaker



Version No: 0003

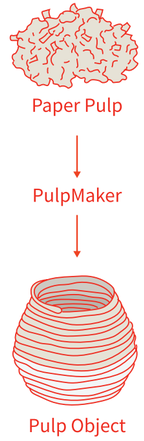
Operation Modes

1: Revolve Mode

Allows creation of circular objects. User shapes wire with pins, places it in center slot, and turns the crank. Z-axis follows wire upward, creating a 3D object.

2: Free Mode

Bed does not rotate, giving user more object creation freedom. User manually moves X and Y axes with left hand. Bed component must be detached and relocated into mechanism's slot.



Usage Steps

Preparation of Pulp:

1. Pulp is created by mixing water, paper, and binder in specific proportions.

Addition of Pulp to the Hopper:

2. Pulp is created by mixing water, paper, and binder in specific proportions.

Shaping and Placement of Wire:

3. The wire is shaped using pins to the desired form and placed in the center of the product (only in revolve mode).

Operation of PulpMaker:

4. The system is activated by turning the crank handle. If in free mode, the handle on the left side is also used.

Additional Material if Necessary:

5. If the desired object's size is large, additional material may need to be added.

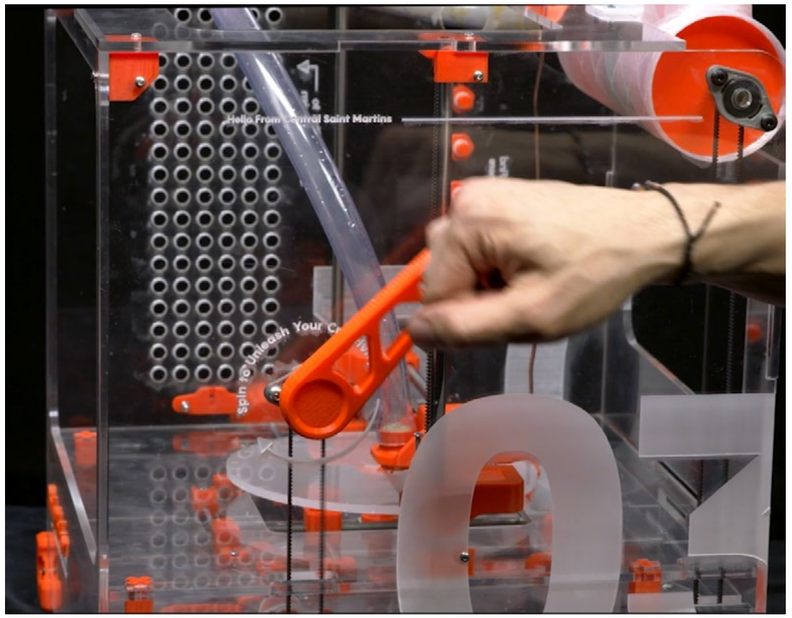
Drying of the Object:

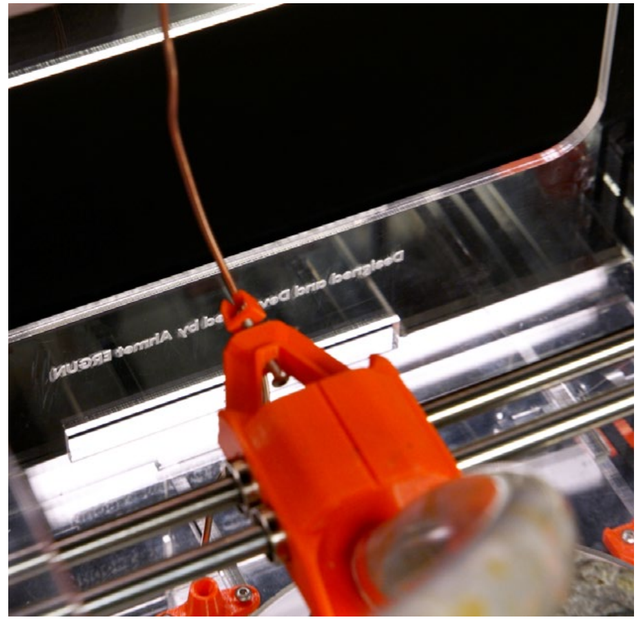
6. After completion, the object is removed from the PulpMaker and left to dry.

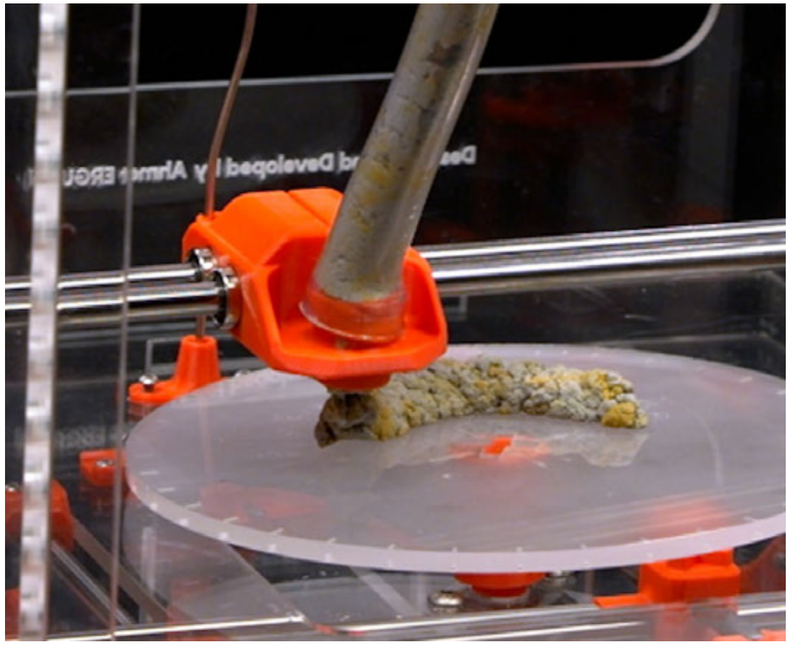
Cleaning of the PulpMaker:

7. Finally, the bed and hopper should be cleaned.

aergundesign.com

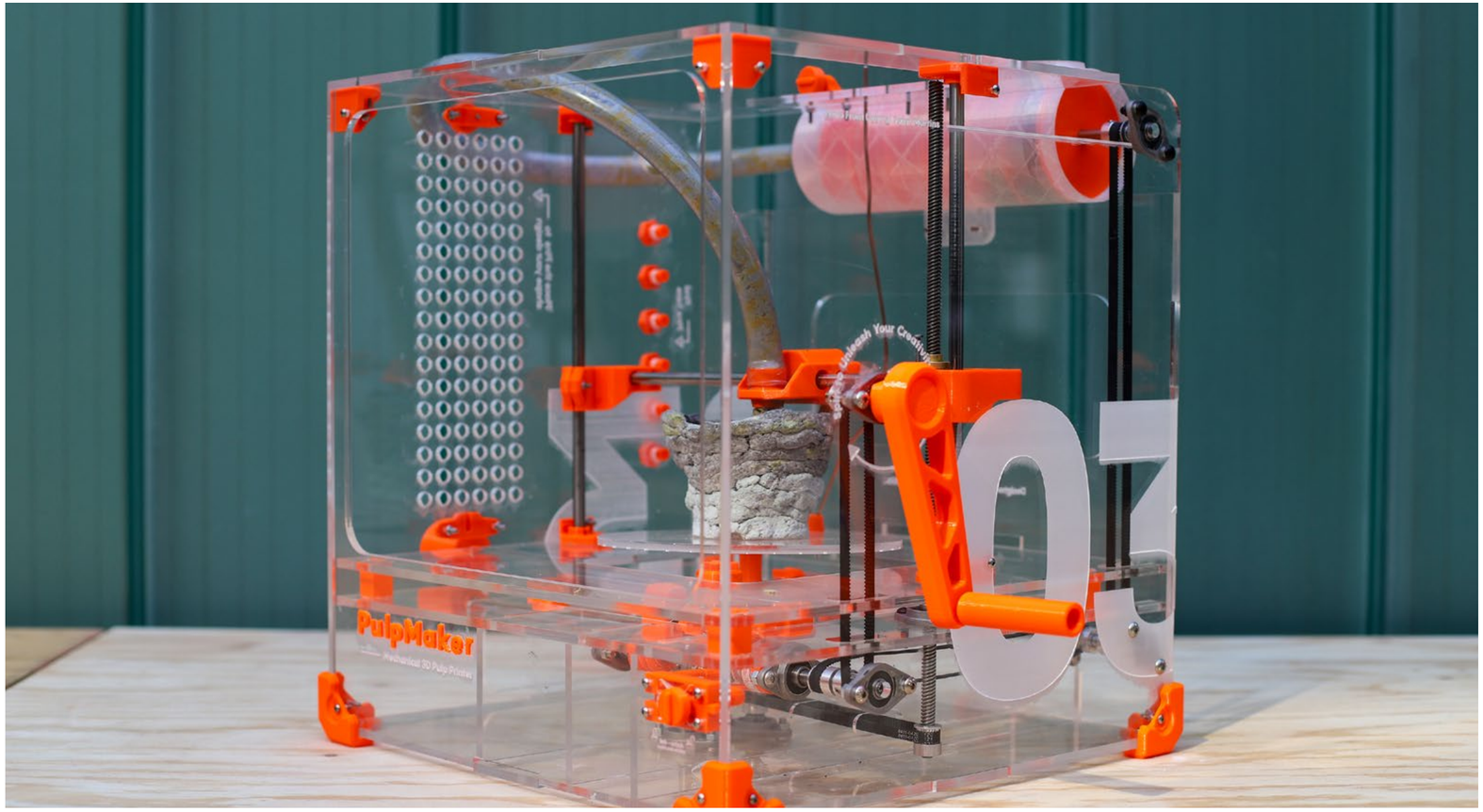


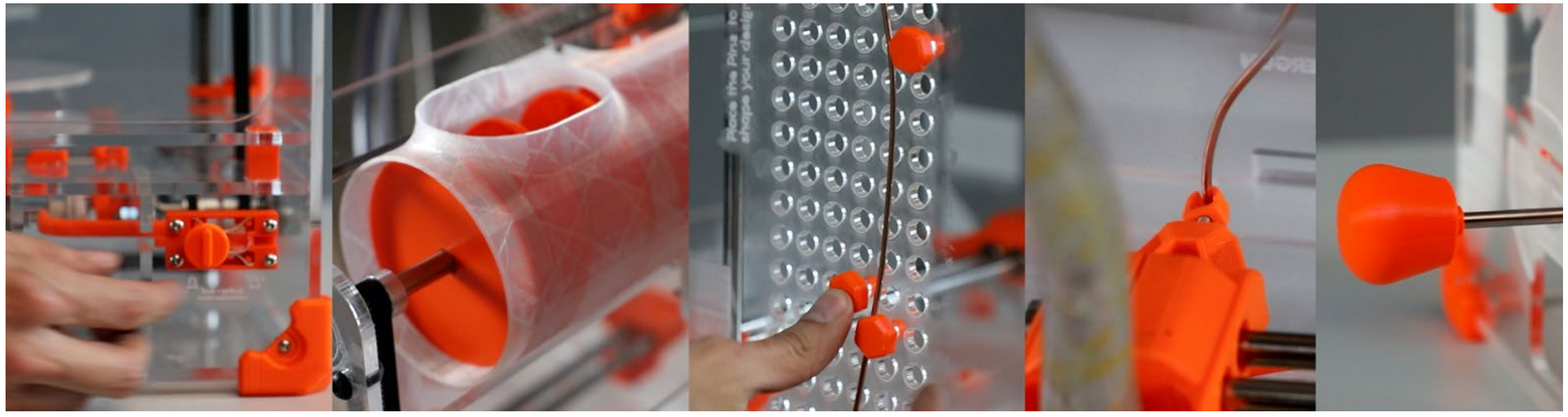




Model In Action!

After completing the final prototype, I thoroughly tested the system to ensure everything was functioning properly. In the end, I succeeded in developing a 3D printer that operates without the need for electricity!





Project Video

ualshowcase/aergun

Reflection

During the development process, I gained a profound understanding of the challenges involved in reaching crisis-affected communities, understanding their issues, and developing a product that meets their needs. Collaborating with experts and leveraging their knowledge was instrumental in advancing the project significantly. Along the way, I also acquired valuable engineering insights.

MOVON

One Man Crew

MOVON is an innovative product for filmmakers, designed by filmmakers. It is a hybrid solution that combines a production cart and a hard case into one seamless design. MOVON allows you to securely transport and organize your camera, lenses, tripod, and other essential equipment. Once on set, it effortlessly transforms into a workstation, streamlining your workflow. Its lightweight, foldable structure and durable wheels make it ideal for both urban shoots and rugged locations.

Developed specifically for crowdfunding, the industrial design of MOVON is entirely my creation, reflecting a user-centered approach to meet the unique needs of filmmakers.

Duration 4 Months

Year 2024

Type Crowdfunding Project for Client

a Hybrid solution – not a Hard Case, Not a Video Production Cart

Problem

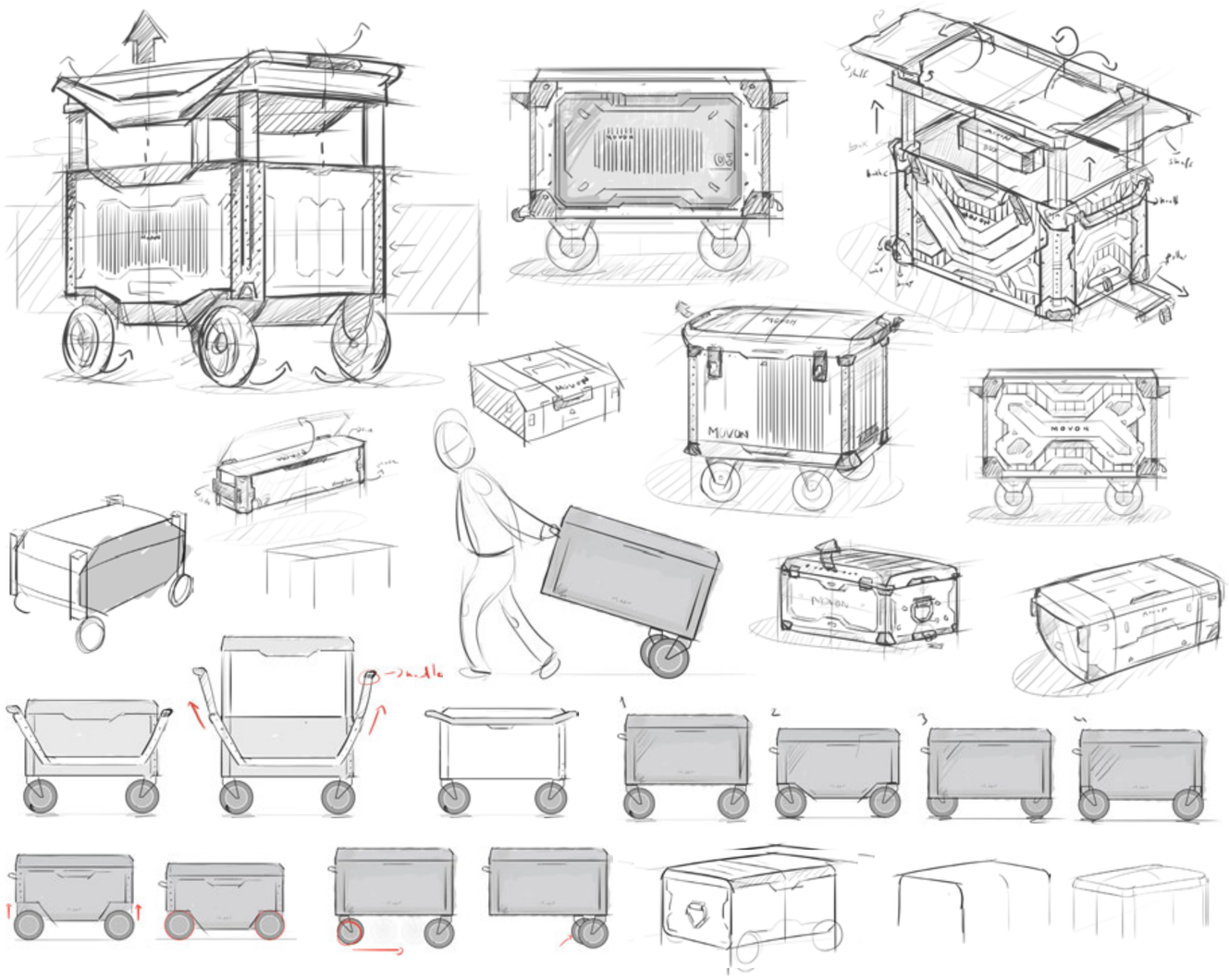
Filmmakers often struggle with carrying heavy gear and managing multiple pieces of equipment efficiently on set.

Solution

MOVON is a hybrid solution that combines a hard case and a video production cart. It offers a customizable interior, allowing you to arrange the bag to fit your equipment. It also transforms into a versatile workstation, making it easy to move your gear and set up a functional workspace wherever you go. With its compact and practical design, MOVON simplifies the setup and transportation of filmmaking gear.

Use Cases

Videographer Set/Base — Photographer Set/Base — Sound Base — Director Base — Pilot Base (Drone)



Design and Development Process

I started the design process by sketching solutions to address the problems. Then, I moved on to creating concept sketches for the design. Throughout the process, I used AI to generate visual references by inputting prompts based on my ideas, which provided additional inspiration. I also analyzed existing market products such as trolleys, carts, and hard cases to study the mechanisms they use.

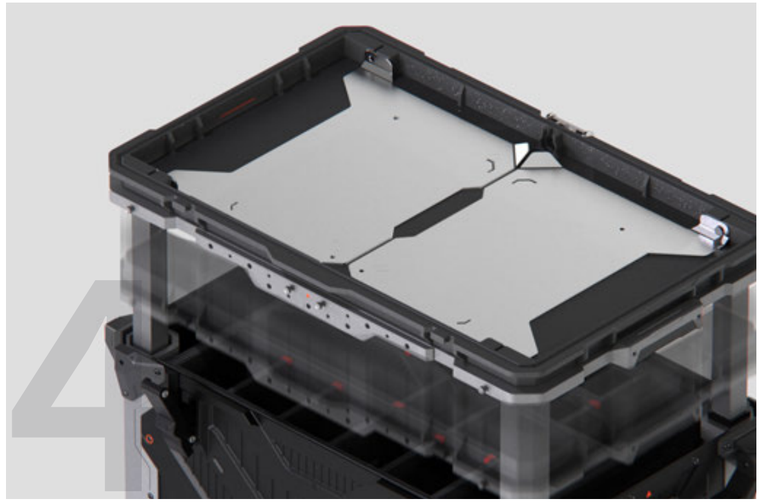
Exploring Existing Mechanisms





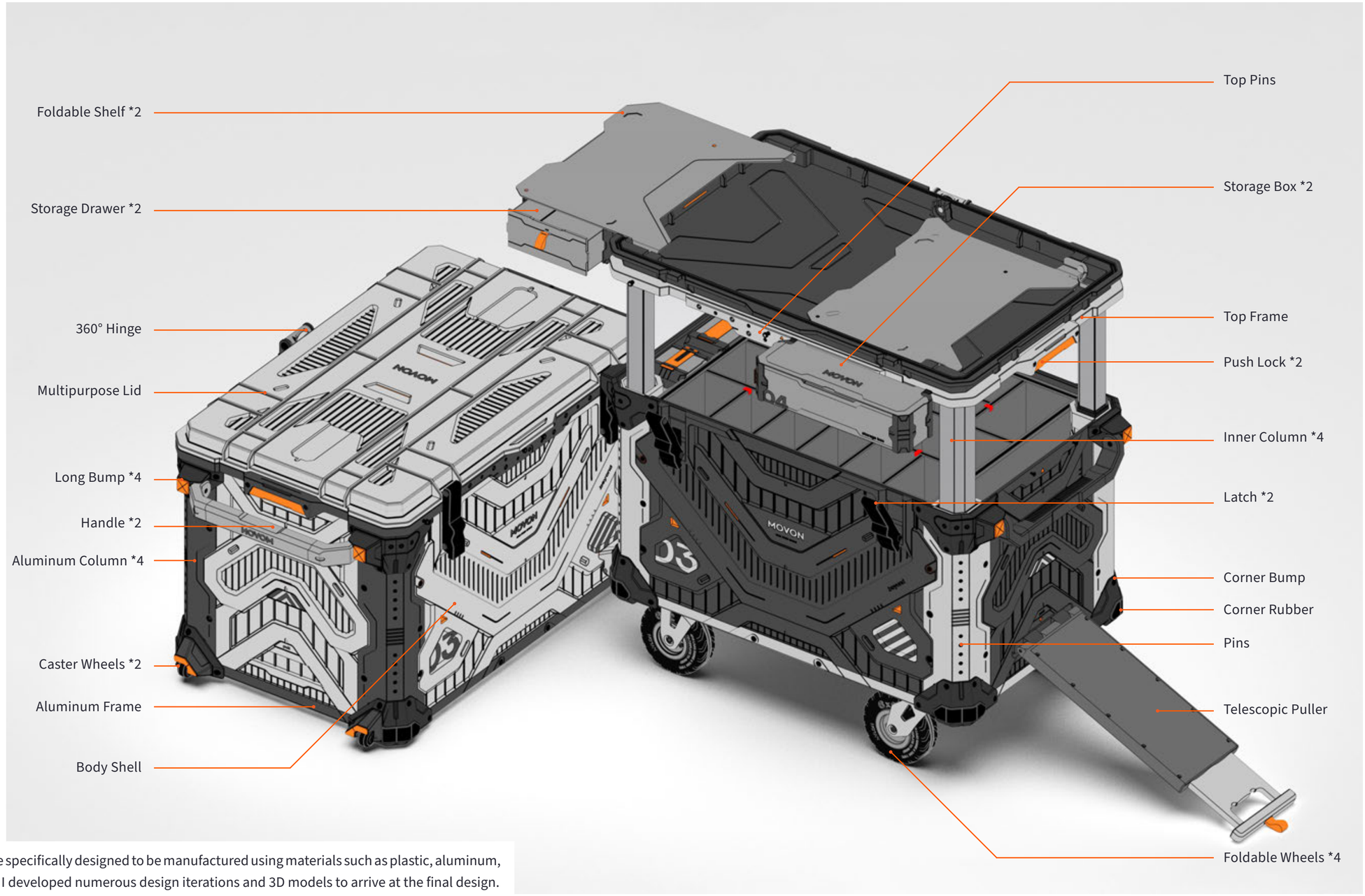

Using the AI Image Generator as an Inspiration Tool



User Experience Simplified for Everyone

The design ensures that Movon is easy to carry, operate in the desired function, and complete all stages single-handedly, making it accessible and user-friendly for everyone.



CAD Design for Manufacturing

The CAD design file consists of 320 parts, many of which were specifically designed to be manufactured using materials such as plastic, aluminum, rubber, stainless steel, and wood. Throughout the process, I developed numerous design iterations and 3D models to arrive at the final design.

IRON GRAY

#3e3e3d #aaabab #f45800

BONE WHITE

#cdc9c0 #6b6b6b #f45800

CYBER YELLOW

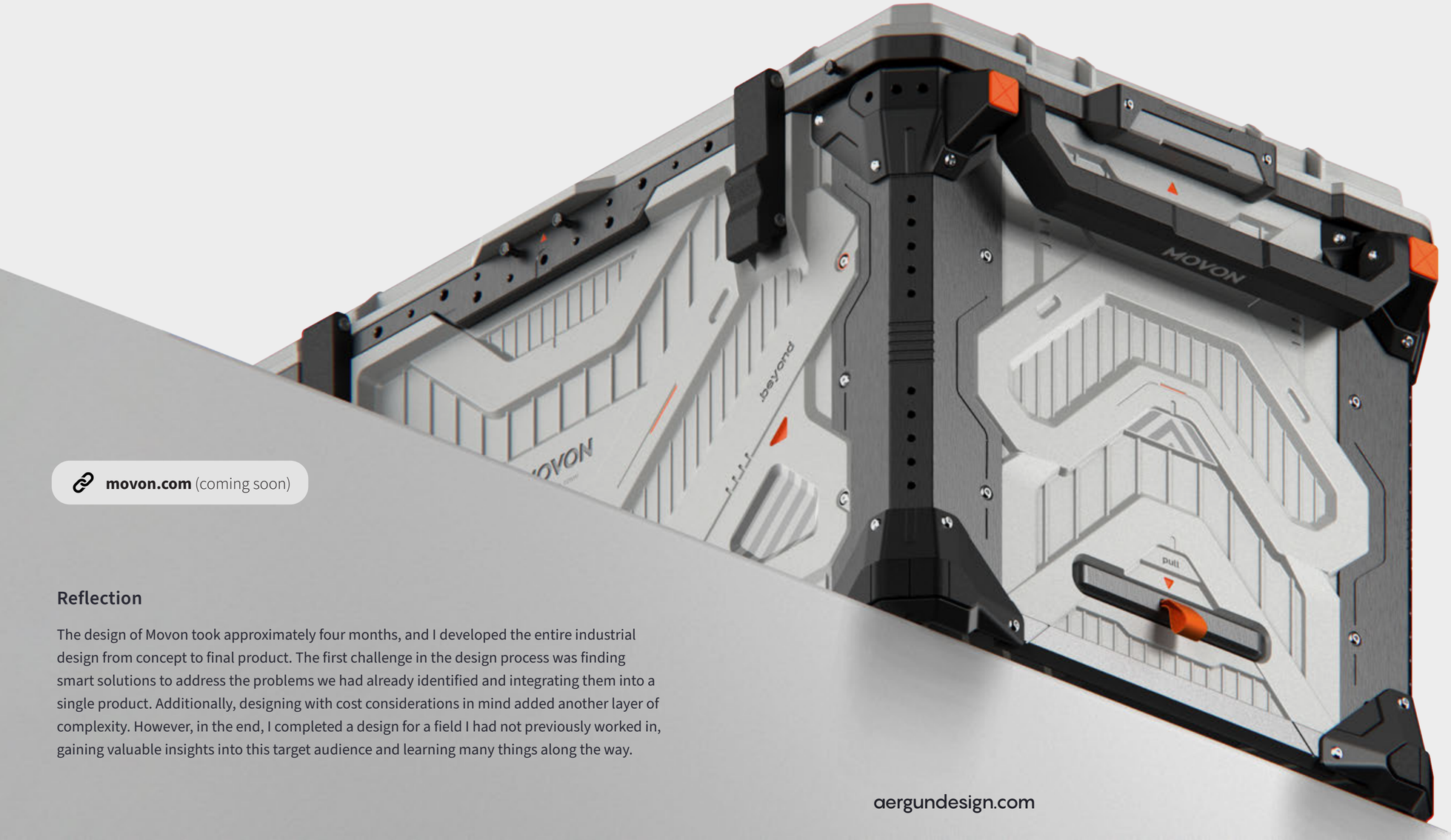
#efba2e #6b6b6b #f45800

PALE BLUE

#939eb2 #6b6b6b #f45800

CMF and Design Details

The primary color scheme includes black for the body plastic parts, with lighter tones for metal components. or crowdfunding, two main options (black and white) and two user-inspired colors were created. Vibrant orange was used as an accent to highlight key design elements.



movon.com (coming soon)

Reflection

The design of Movon took approximately four months, and I developed the entire industrial design from concept to final product. The first challenge in the design process was finding smart solutions to address the problems we had already identified and integrating them into a single product. Additionally, designing with cost considerations in mind added another layer of complexity. However, in the end, I completed a design for a field I had not previously worked in, gaining valuable insights into this target audience and learning many things along the way.

twoo

Smart Toothbrush

Twoo aims to bring a fresh perspective to smart electric toothbrushes, which have become commonplace in today's market. Through addressing commonly overlooked issues in daily use, it evolves into an ideal toothbrush boasting an appealing and sustainable design. During the design process, my objective was to tackle the everyday problems I encountered. I carefully curated the design to not only align with current trends but also infused it with subtle details reminiscent of traditional brushes, creating a harmonious blend of innovation and familiarity.

Duration 1 Week

Year 2023

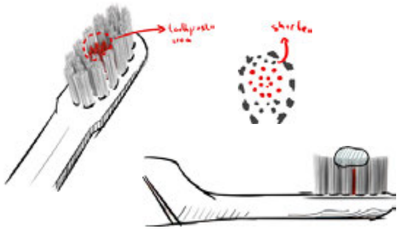
Type Client - Professional

Problem Definition

the Problem

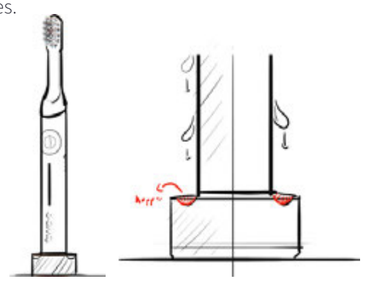
Incorrect Dispensing of Toothpaste:

Many users tend to dispense more toothpaste than needed onto their toothbrushes, often influenced by misleading advertisements. This results in unnecessary additional costs for users.



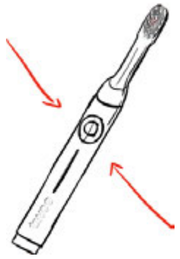
Accumulation of Water Under Toothbrushes:

Electronic toothbrushes often collect water under their base, creating ongoing cleanliness problems. When we finish brushing, we usually set the toothbrush near the sink, causing water droplets to drip onto the base and raising hygiene issues.



Bulkiness of Electronic Toothbrushes:

Most electronic toothbrushes are quite large in size, making them less portable and difficult to fit on shelves.



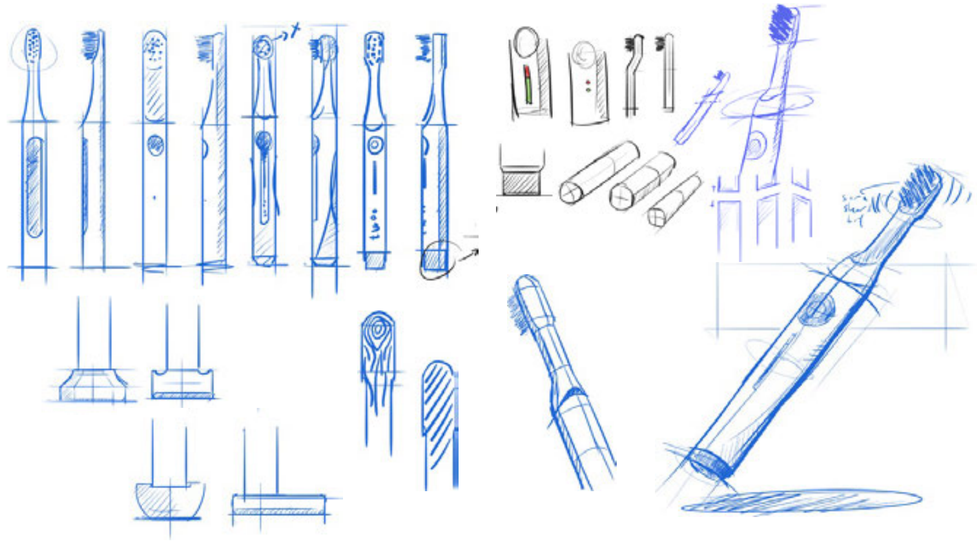
the Solution

I've designed a toothbrush with a special compartment for dispensing the perfect amount of toothpaste. Some bristles are shorter, sized like a pea, so users can apply toothpaste directly to them, ensuring they use the right amount.

The toothbrush includes a charging station that doubles as a holder, preventing water buildup underneath. This design ensures easy cleaning if water droplets accumulate on the holder.

I have made design modifications to maximize the toothbrush's portability, allowing it to be more travel-friendly and fit comfortably on shelves.

Sketches

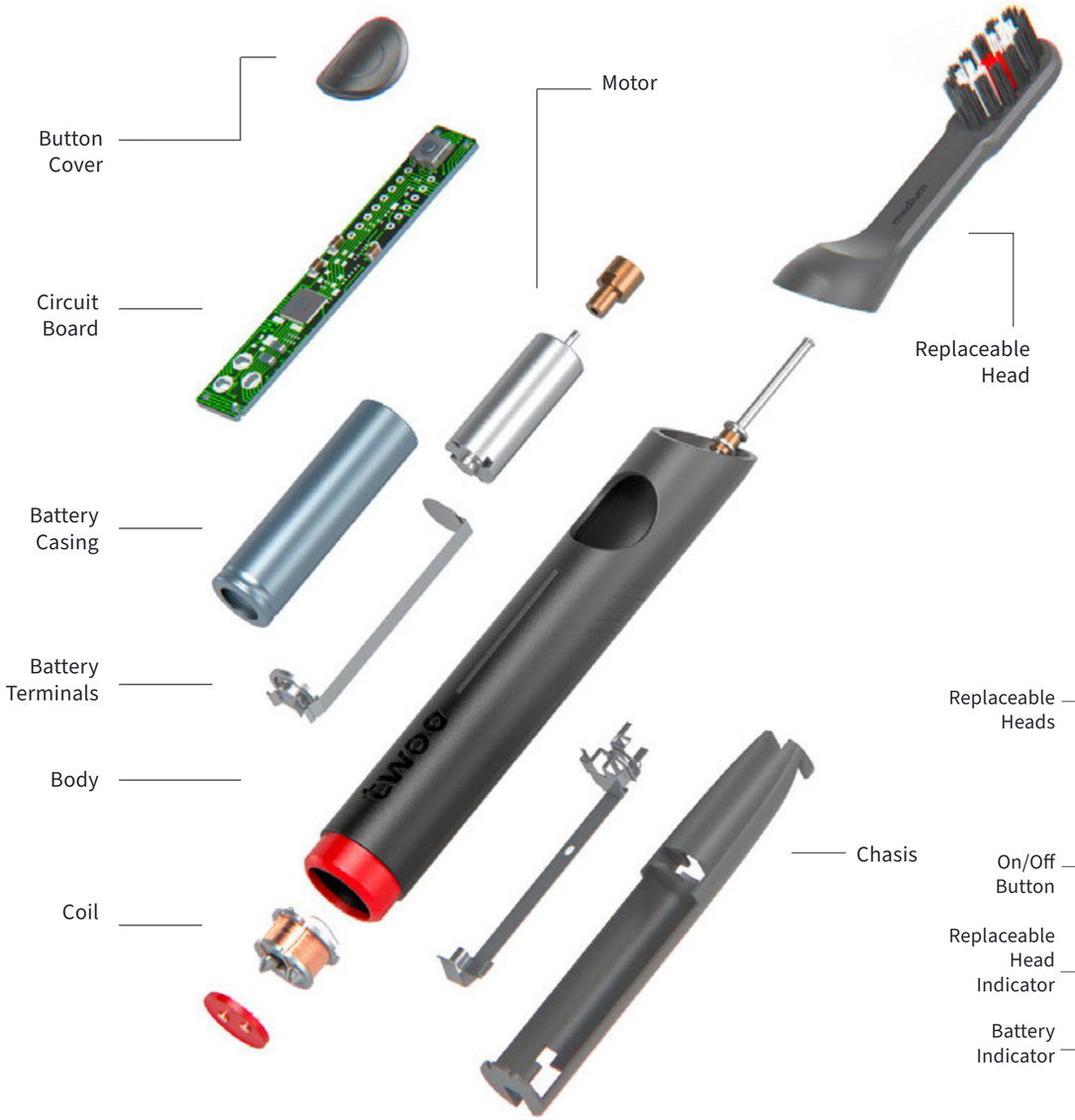


The CMF

The “twoo” toothbrush showcases a striking Color, Material, and Finish (CMF) design that seamlessly blends style with functionality. It comes in four color options: gray, black, red, and green. On the front, the proudly embossed “twoo” logo stands out, while the product’s slogan, “Innovate Your Smile,” is featured on the back. With a gradient of transitioning tones across the four colors, the lower part of the product is darker, gradually fading into lighter shades towards the upper section. The body of the product is composed of plastic components.

/twoo

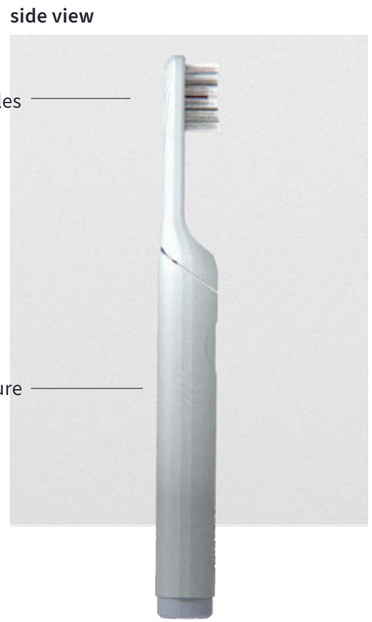
Exploded View



front view

back view

side view



The Packaging

Travel Case

Reflection

Identifying problems with the toothbrush was easy due to daily use, and I designed solutions based on my own experiences. The tight project deadline was a major challenge. To create a unique design, I explored unconventional approaches beyond typical toothbrush designs. This project also allowed me to improve my CMF design skills.

Thanks!

Lets Design Together

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