



UMER DIN

INDUSTRIAL DESIGN
PORTFOLIO

Hi, my name is Umer

Profile

I am a second year BSc student studying product design. I've been a student of the profession since high school and since then my skills have been improving as I learn more. Though I am only in the early stages of my career my end goal is to help create a more sustainable world as well as design to make life easier for people in affected areas. After I finish university I want to get a design job in a small design company so that I can gain the skills for a large design company working in sustainable design. I want to go into the sustainable energy sector designing products such as wind turbines or water turbines.

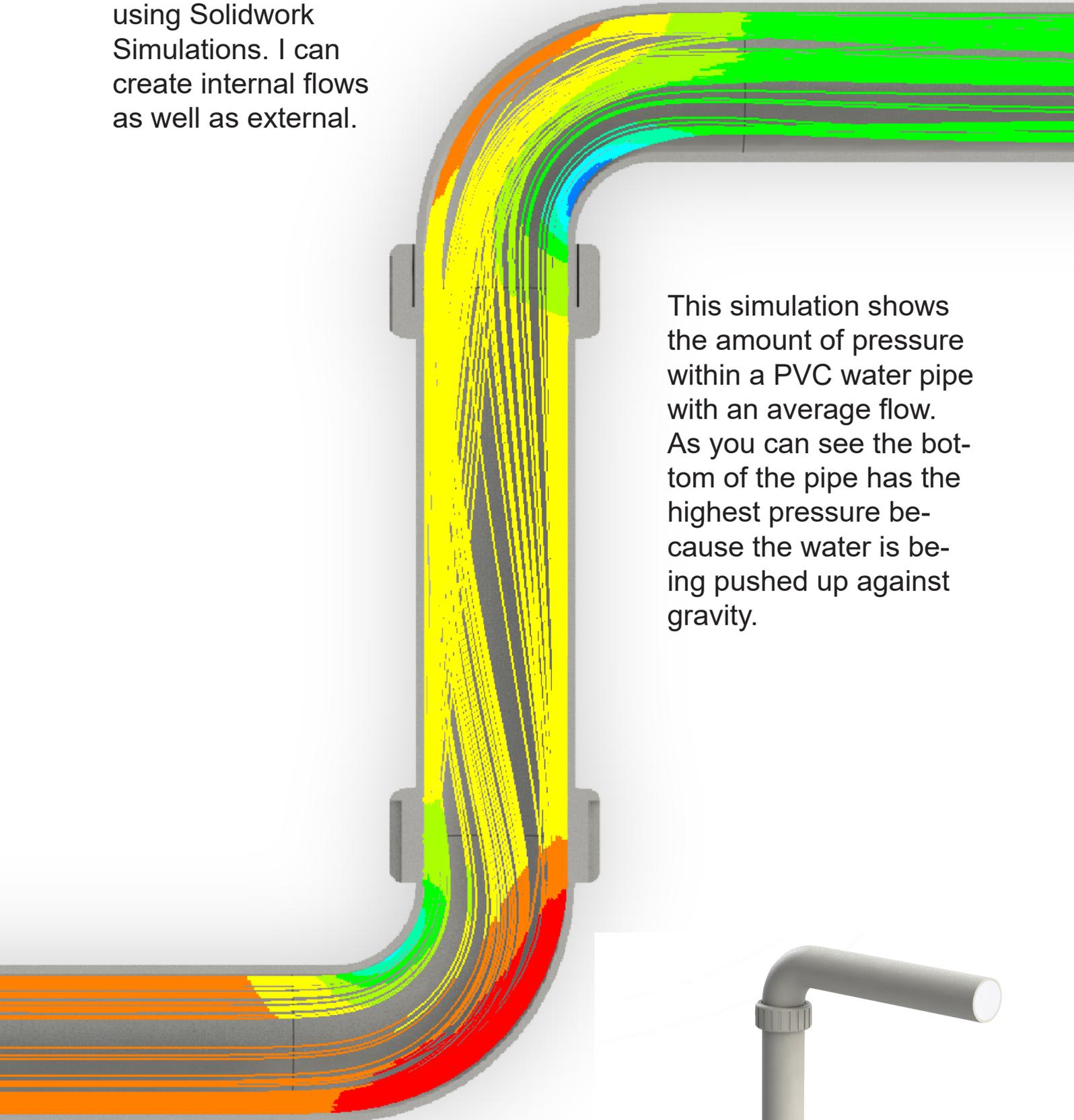
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SKILLS

Flow Simulation

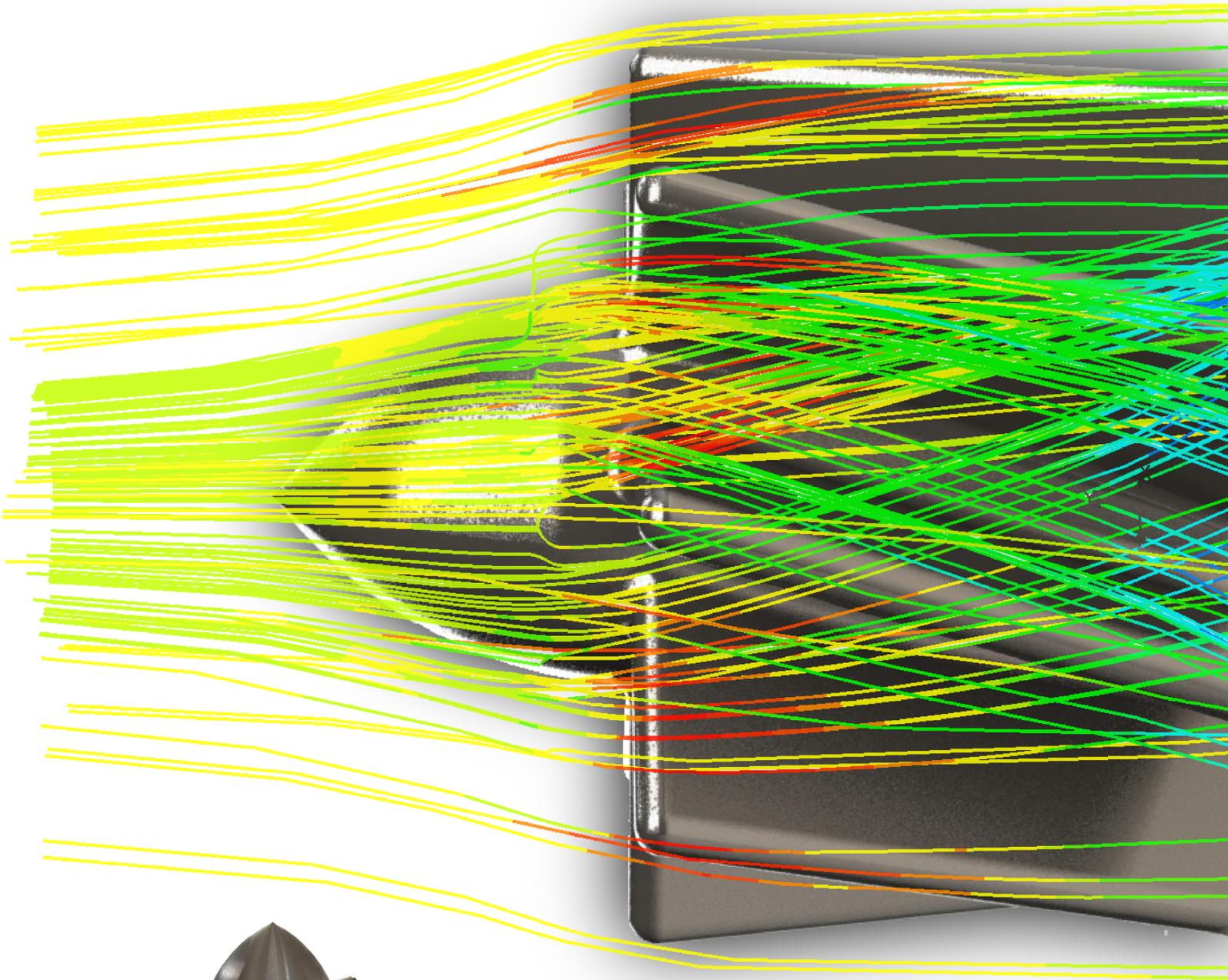
I am able to create realistic simulations using Solidwork Simulations. I can create internal flows as well as external.

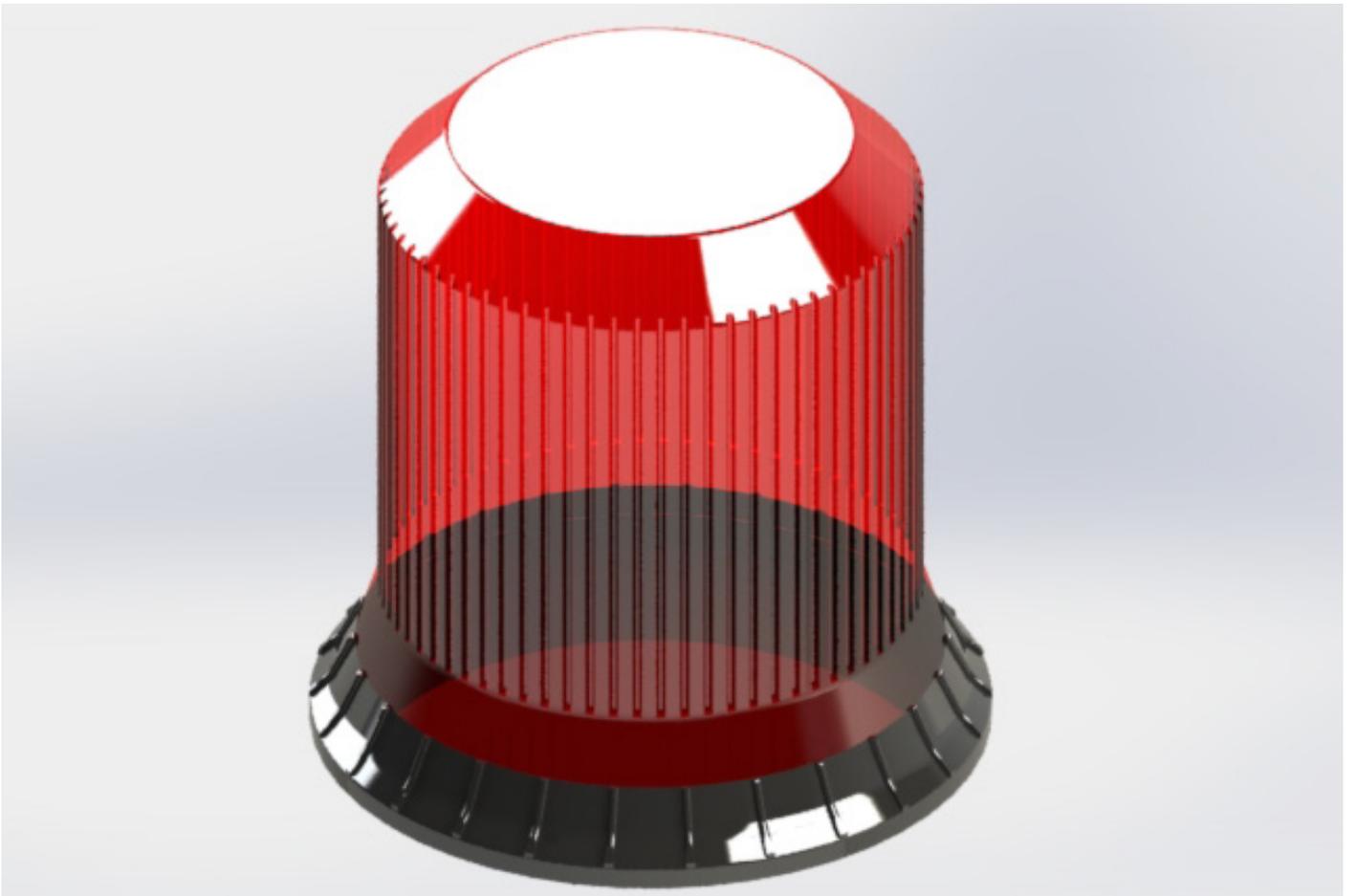
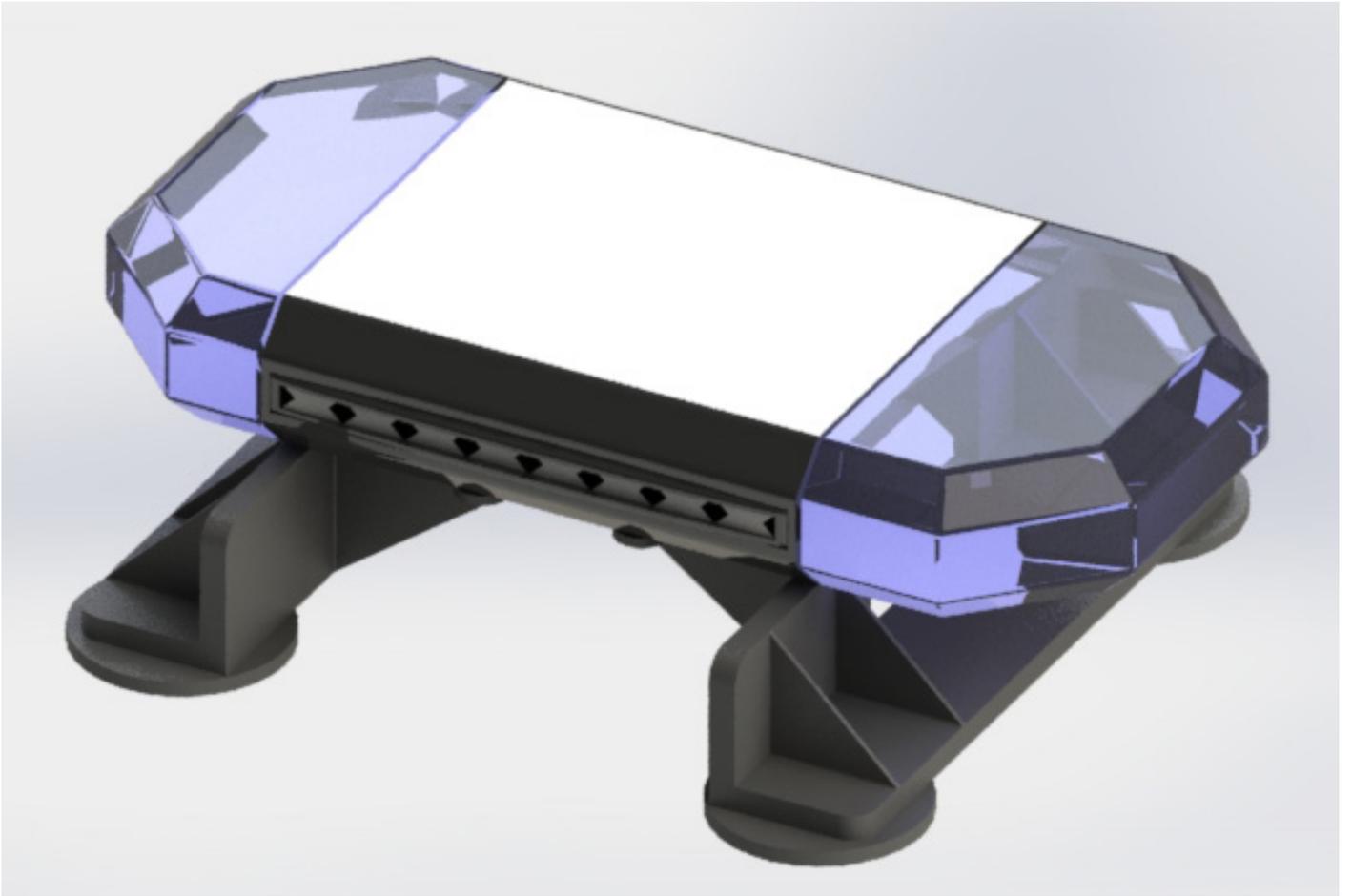


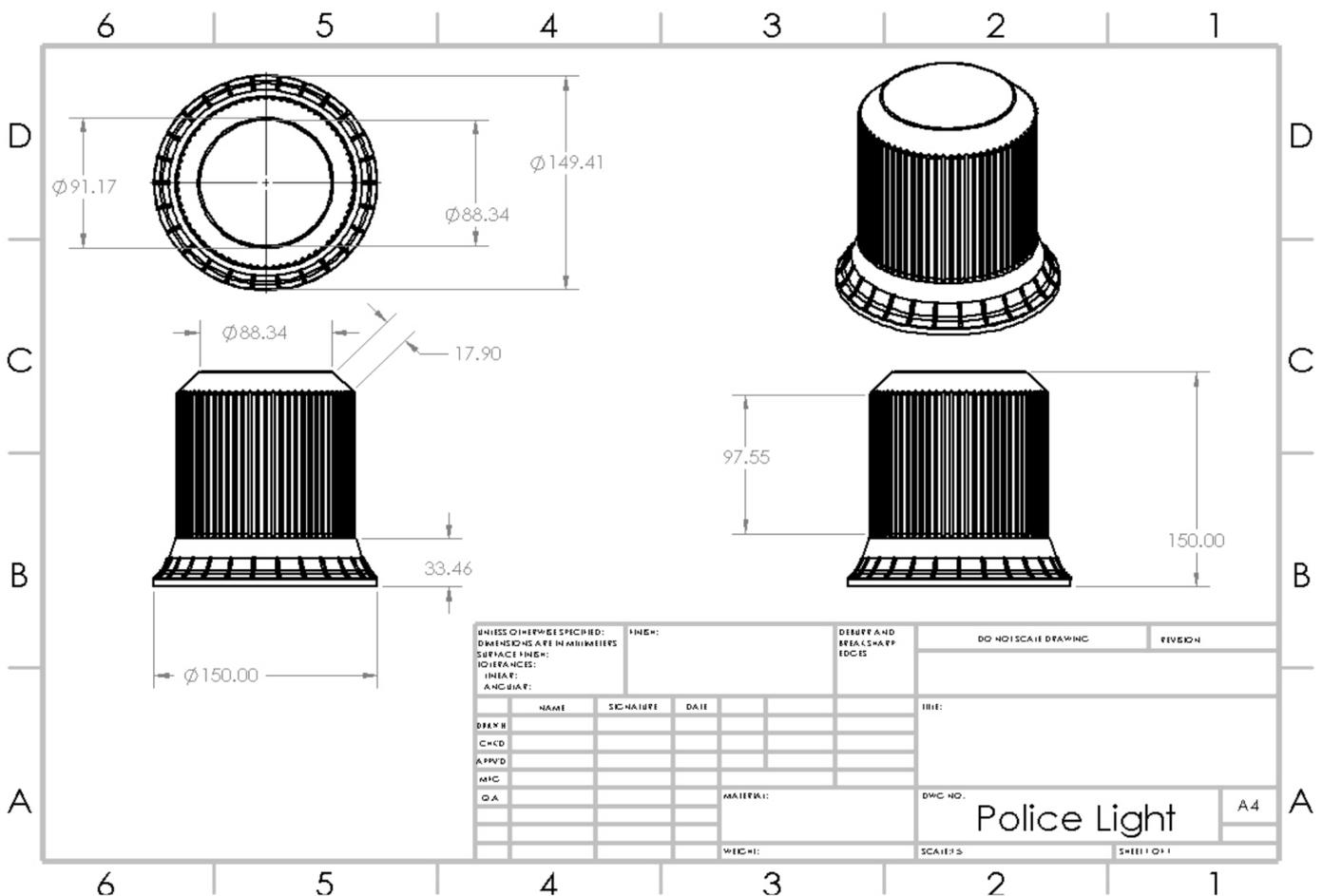
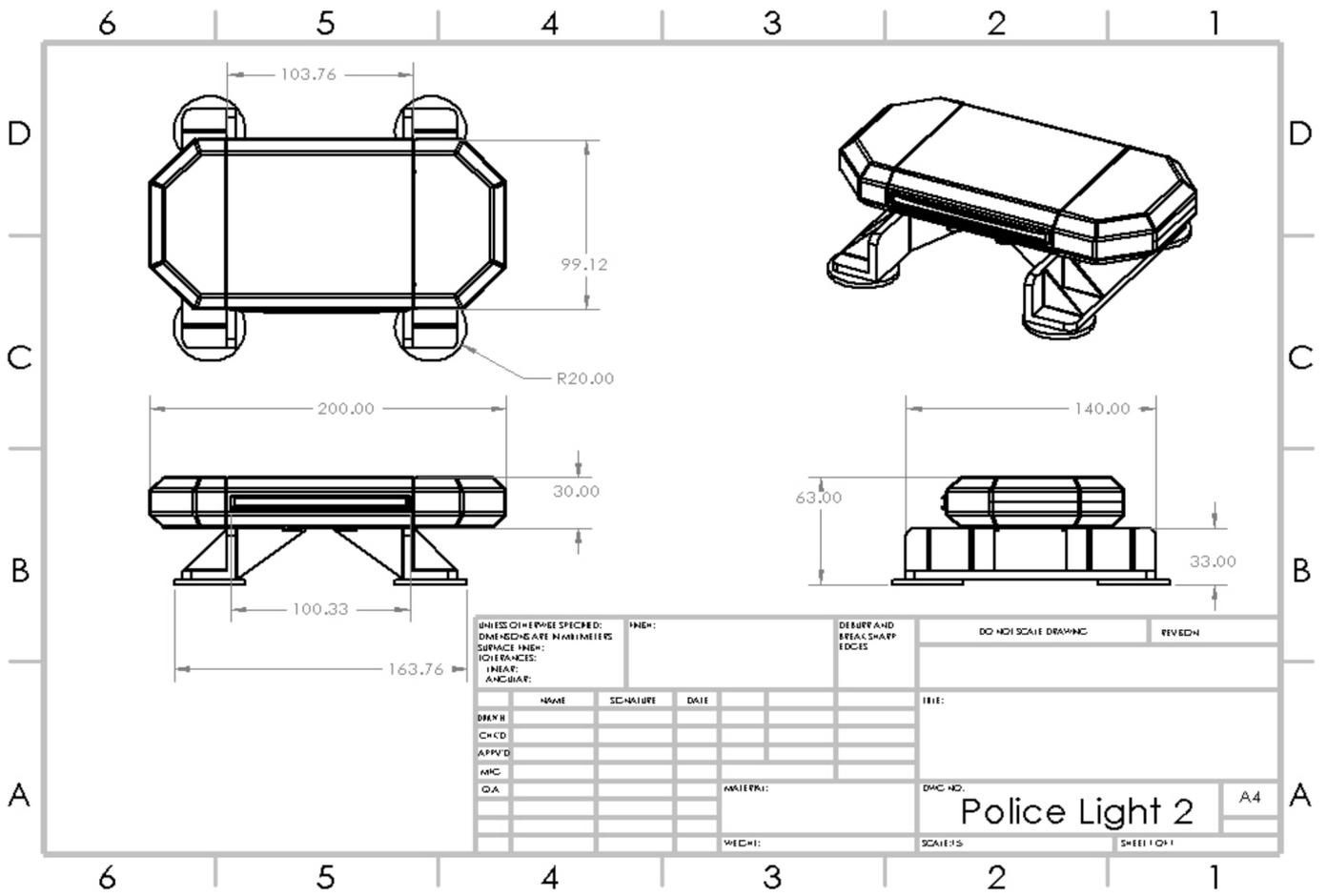
This simulation shows the amount of pressure within a PVC water pipe with an average flow. As you can see the bottom of the pipe has the highest pressure because the water is being pushed up against gravity.



This simulation shows air flow through a turbine. You can see that the red is where there is a build-up of build up because it is not as stream line as it should be





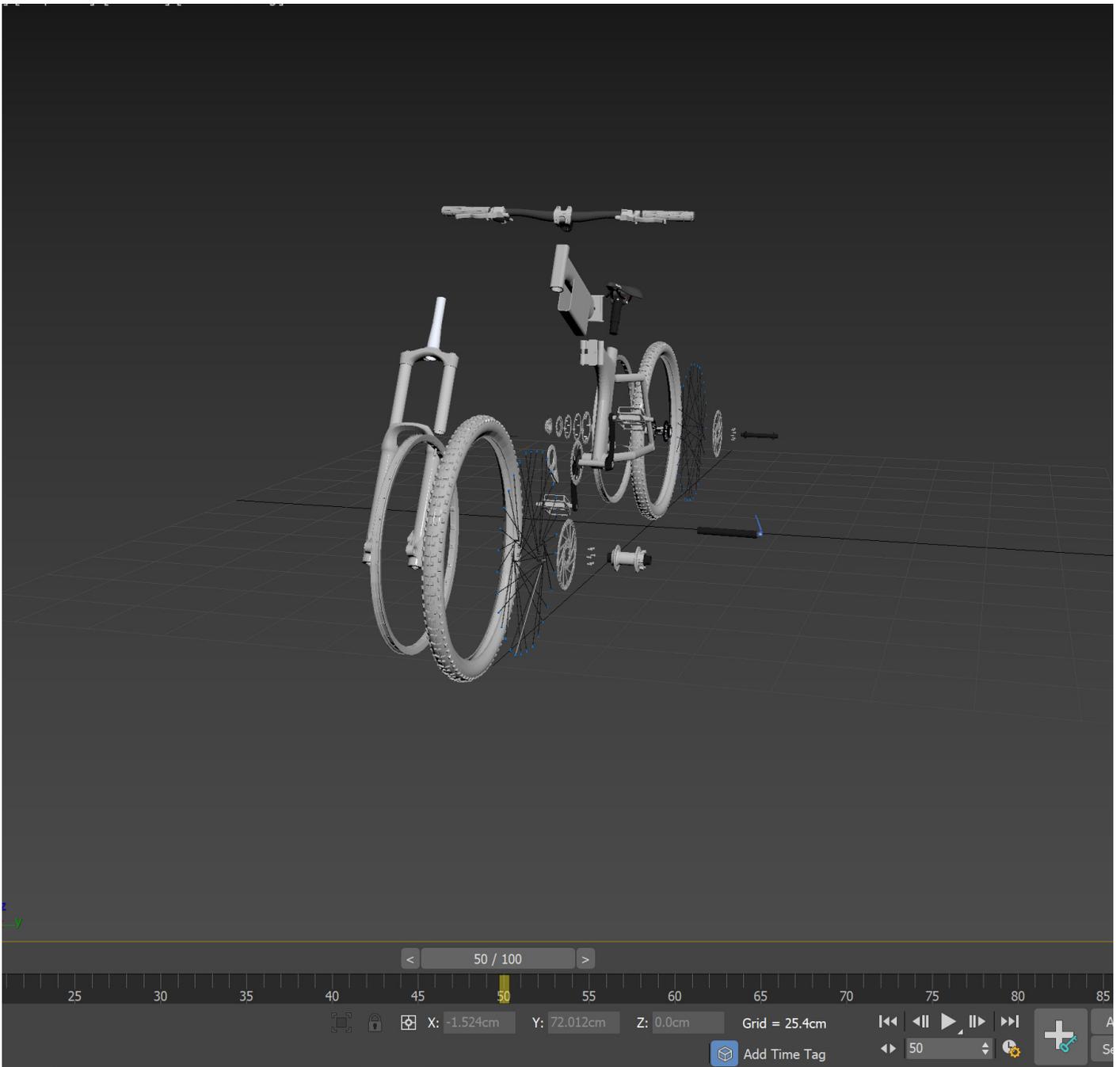




Solidworks

Self Project

I have worked with Solidworks for two years and my skills are constantly being improved. On every project I like to be precise with measurements to ensure accuracy and to give clear representations of a design. I also have sufficient experience in rapid prototyping on 3D printers.



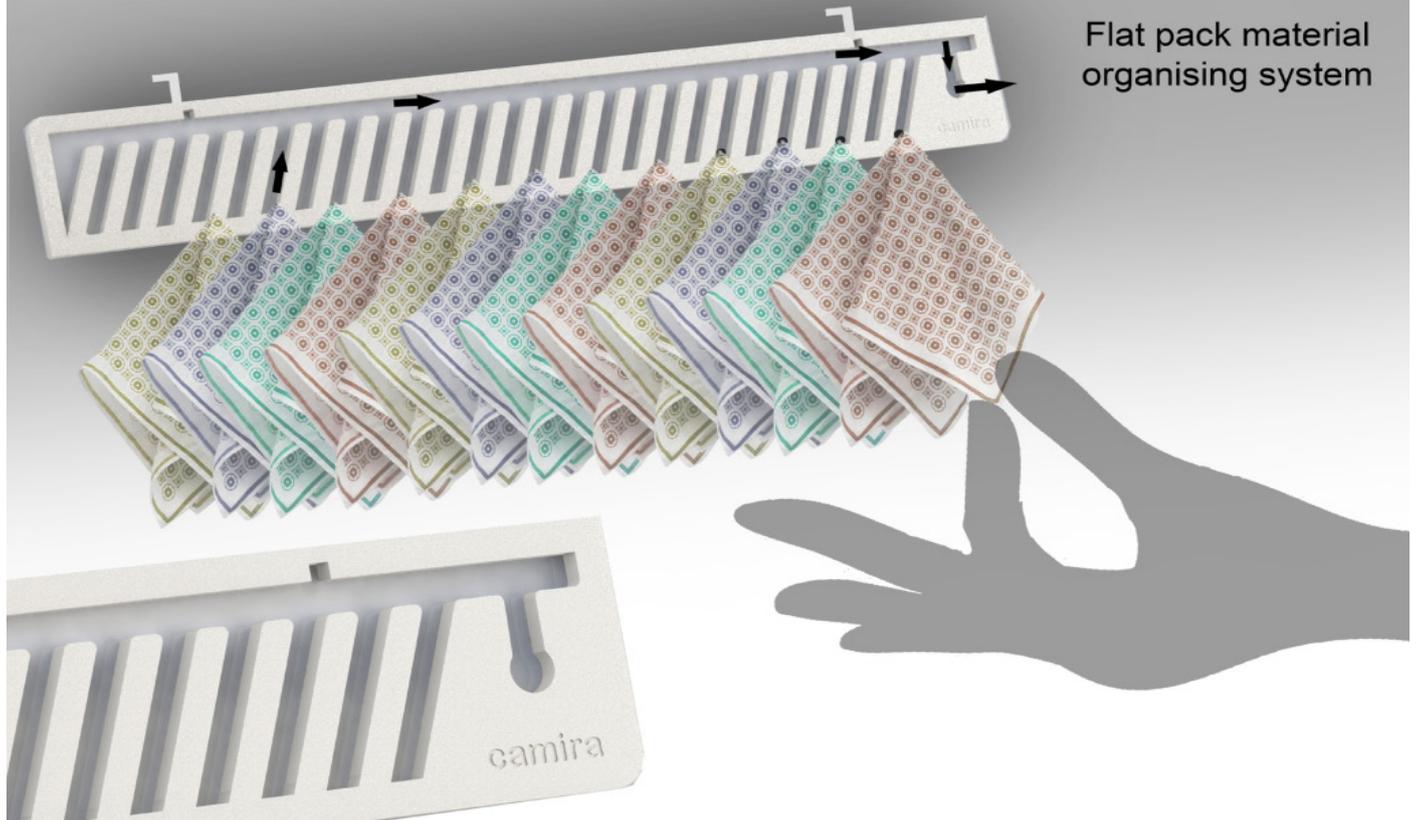
3DS Max

Self Project

I also have skills in 3Ds max , I can animate and render. This software is very useful to explain the full concept of a product as it makes it easy to visualise.

PAST WORK

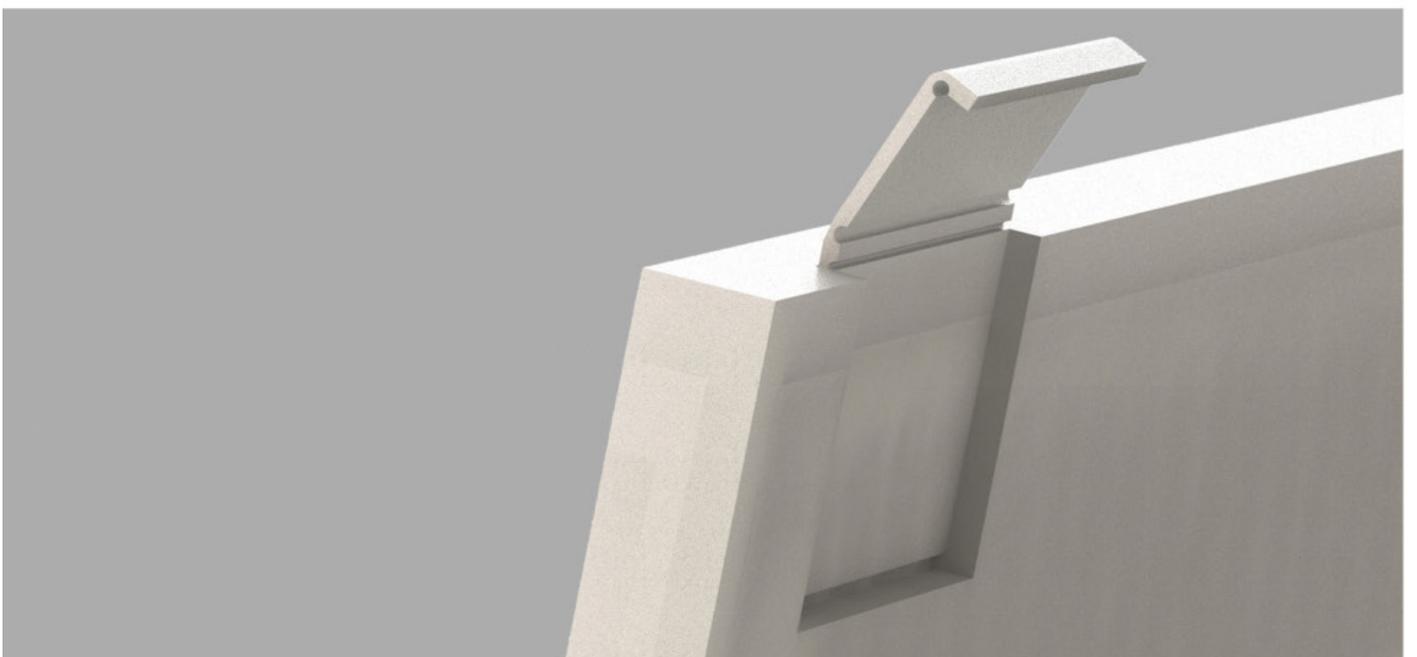
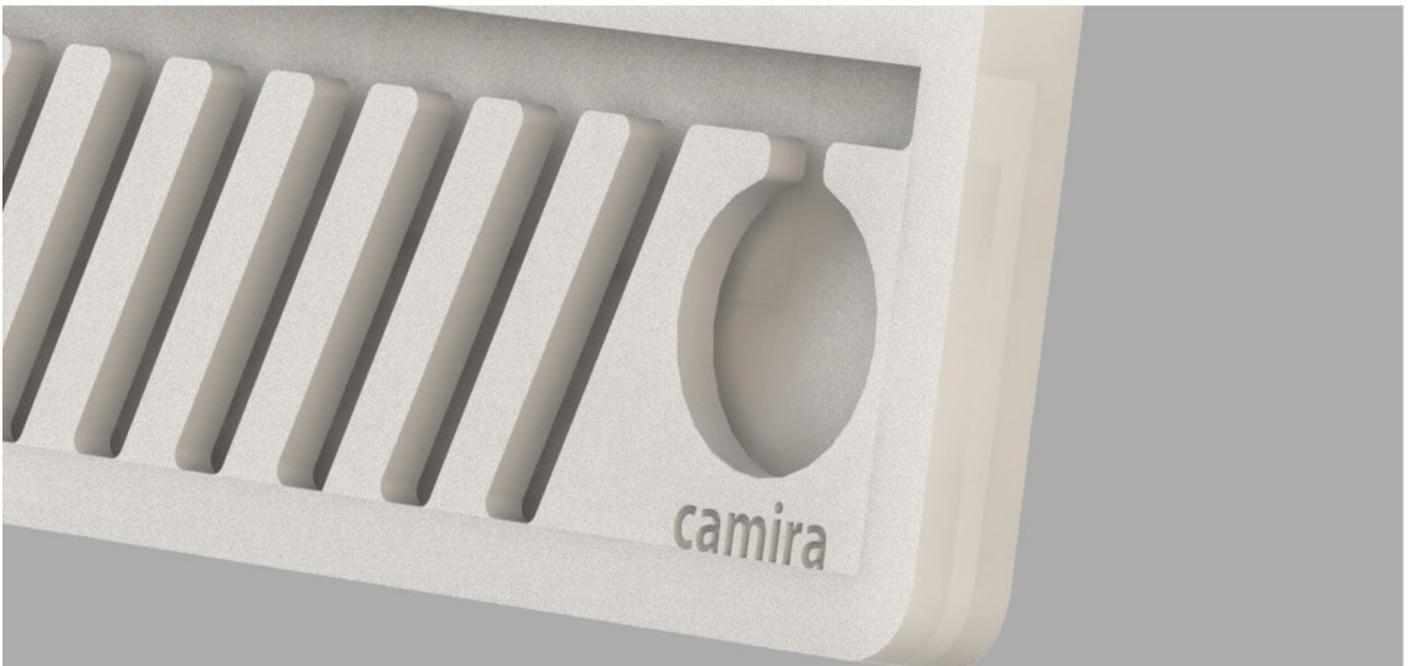
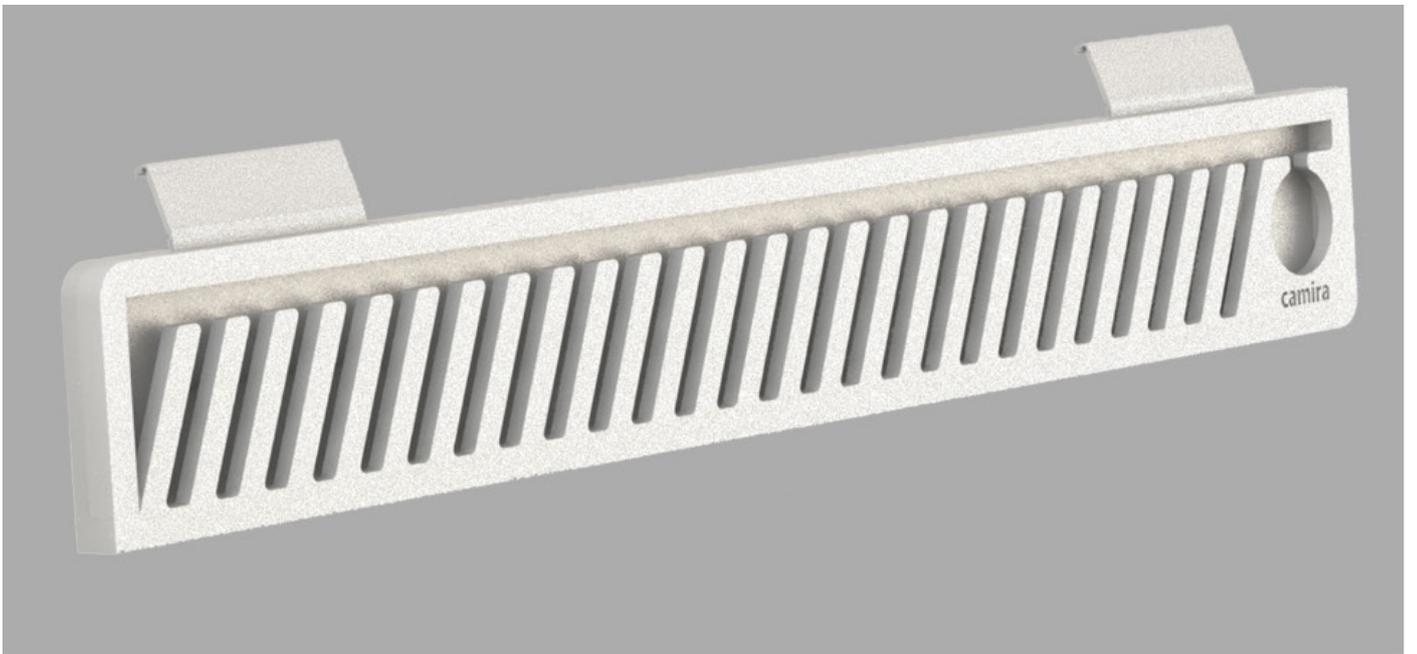
camira

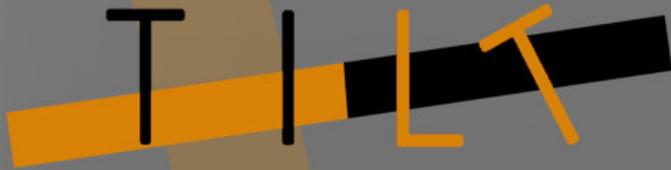


Camira

24 Hour Competition

There are many opportunities in university to work with real companies and I take every one. This was a 24hr design competition for a textiles company called Camira. The aim of the competition was to create a better way of presenting fabrics to clients. Our design was a slotting mechanism that would make it easier to remove and compare different fabrics. As I am conscious about sustainability I designed it to be easy to manufacture by laser cutting single pieces, reducing cost and weight.





FALL SENSOR ALARM

This is a device that will detect if you have **fallen** then it will send a message to an **emergency contact**



- Senses when the user has fallen
- Reacts to blood pressure changes
- Wireless smartphone connectivity
- USB chargeable
- Comfortable & durable for 24hr use



low / high blood pressure



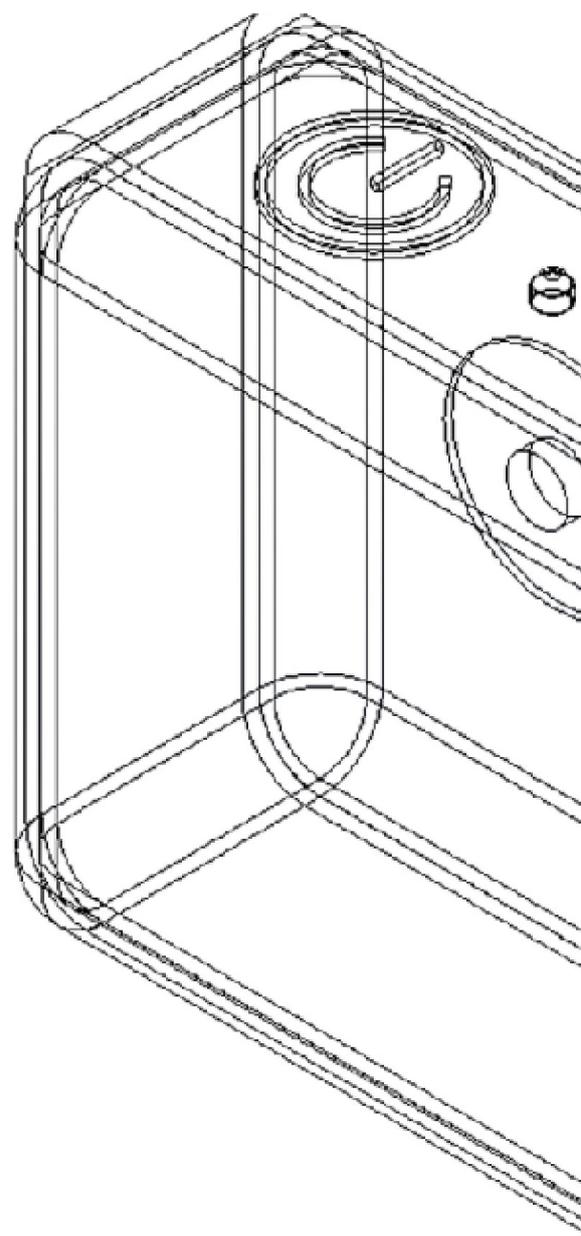
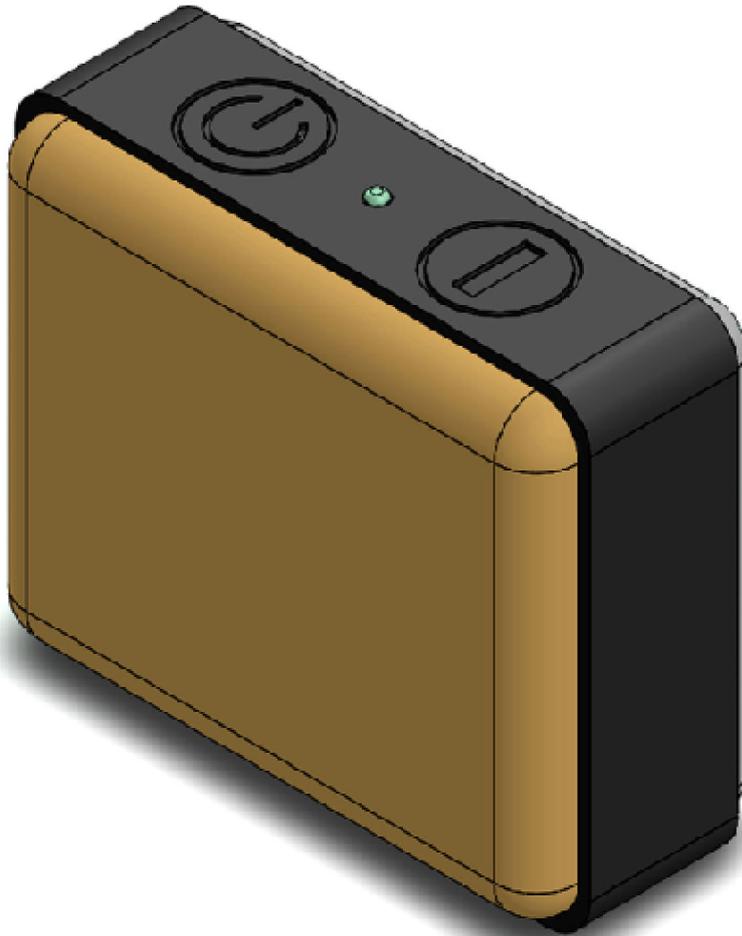
locked spine



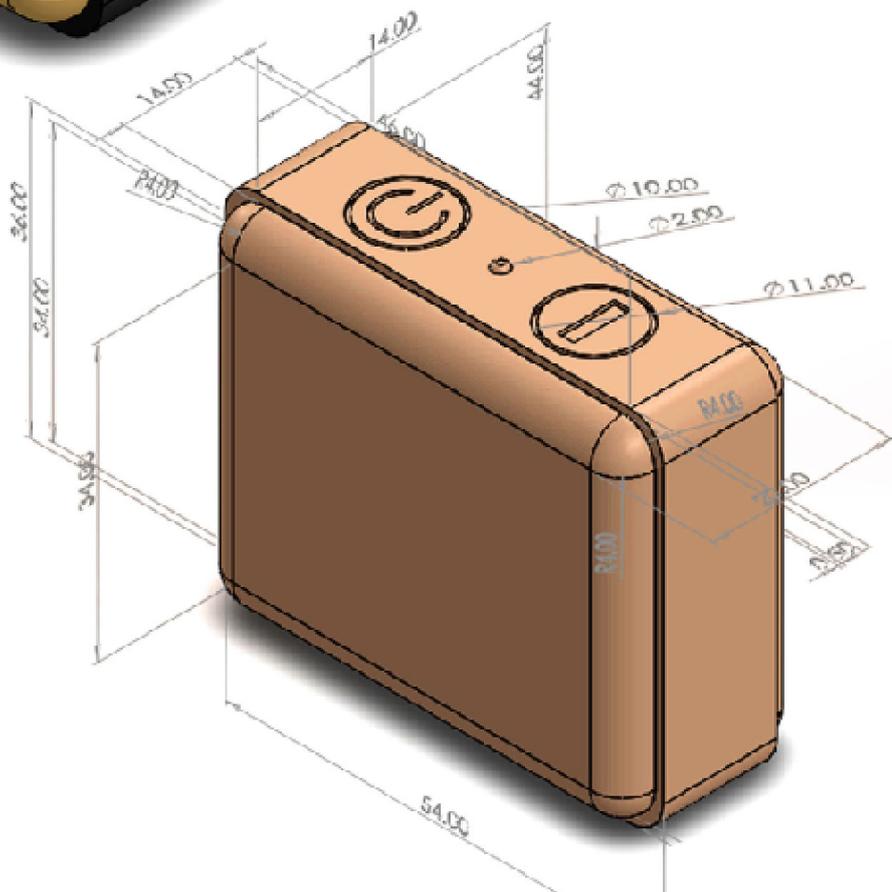
Unconsciousness



This device is created for elderly people as they are more vulnerable to fainting or falling in general. It was designed as an emergency communication device when an elderly person is alone so they can't help their selves.



The design was not meant to stand out as the elderly had to feel comfortable walking around with it. The product would have a gyrosopic sensor that would detect if there is a shift in the persons posture. The design had to be protected by a rubber cushioning to prevent damage to any of the electrical circuits.



FIBONACCI LISCIO



Connection

Group Project

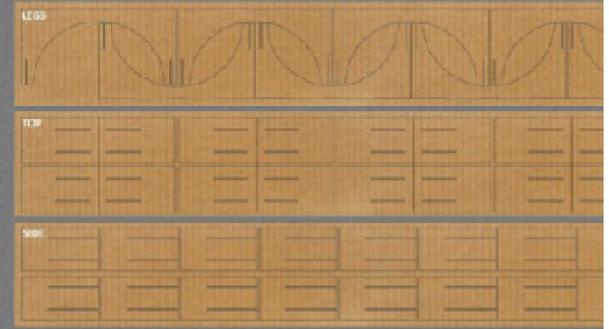
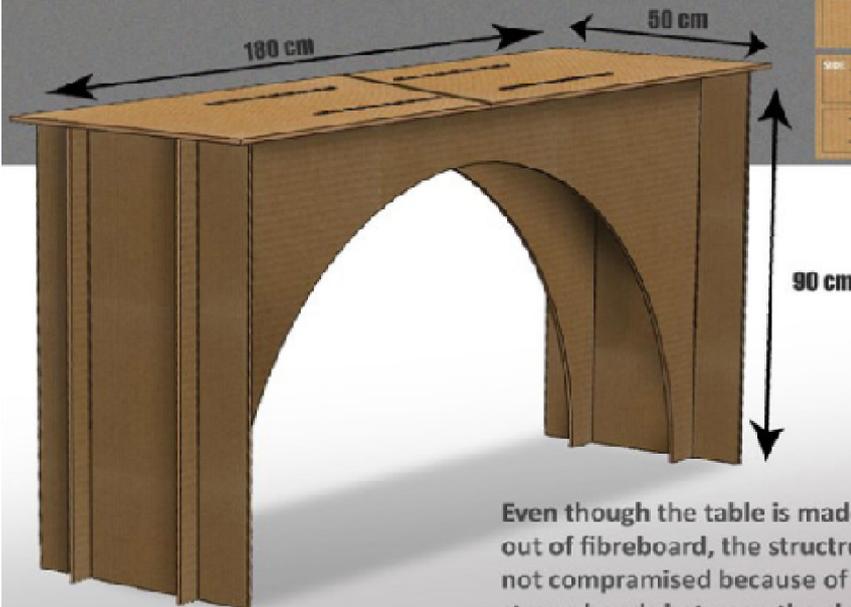
This was one of my first live briefs. This was an assignment from the furniture company connection. The aim was to create a sofa that would encourage socialisation in open office spaces. This was a group project in which we were one of the three groups whose idea went forward. This project was not very technical however it taught me about the user's connection with the product.

Simple: 1, 2, 3

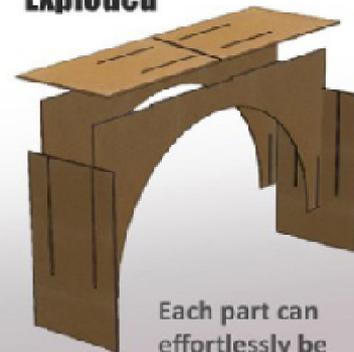
Manufacture
Die cut templates of
each pieces



Our product is a simplistic and efficient design for a pasting table that can easily be put together without the use of instructions. It will be made out of corrugated fibreboard because it is strong, easy to press cut and it's recyclable.



Exploded



Even though the table is made out of fibreboard, the structure is not compromised because of the strong bonds between the slots.

Each part can effortlessly be slotted together.

Wilko

Group Project

This was a favourite project of mine. The brief was to re-design a pasting table for Wilko. The aim was to make the design easier, simpler and cheaper. We managed to re-design the table out of corrugated board which would reduce the price of manufacture by 70% as well as reducing the weight. Our idea was also picked to go forward. This project was interesting as it encouraged sustainability.