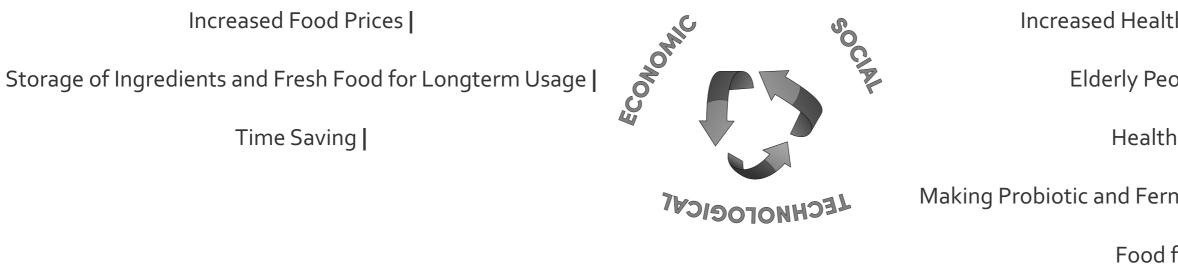


### FOOD STERILIZER & WARMER





## SET FACTORS & PRODUCT OPPORTUNITY GAP



Frozen Ingredients

Different Cooking Techniques |

To design a kitchen equipment that will help;

- to prolong the healthy storage period of our food,
- to protect our food from decaying for a longer time,
- to warm-up food stored in refrigirators easily and conveniently,
- to eliminate potentially harmfull micro organisms on our food
- to facilitate optimum ambient temperature levels needed for pro-biotic food preperation

While doing so it will contribute;

- to reduce the amount of wasted food,
- conveniently

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Increased Healthy Food Awareness |

Elderly Peoples Nutrition |

Health Concerns |

Making Probiotic and Fermented Food (Cheese, Yogurt) |

Food for Babies

- to help to minimize the risk of food originated diseases, - to children and elderly people to warm up their meals

### **USER RESEARCH & OUTCOMES**

### **USER RESEARCH OUTCOMES**

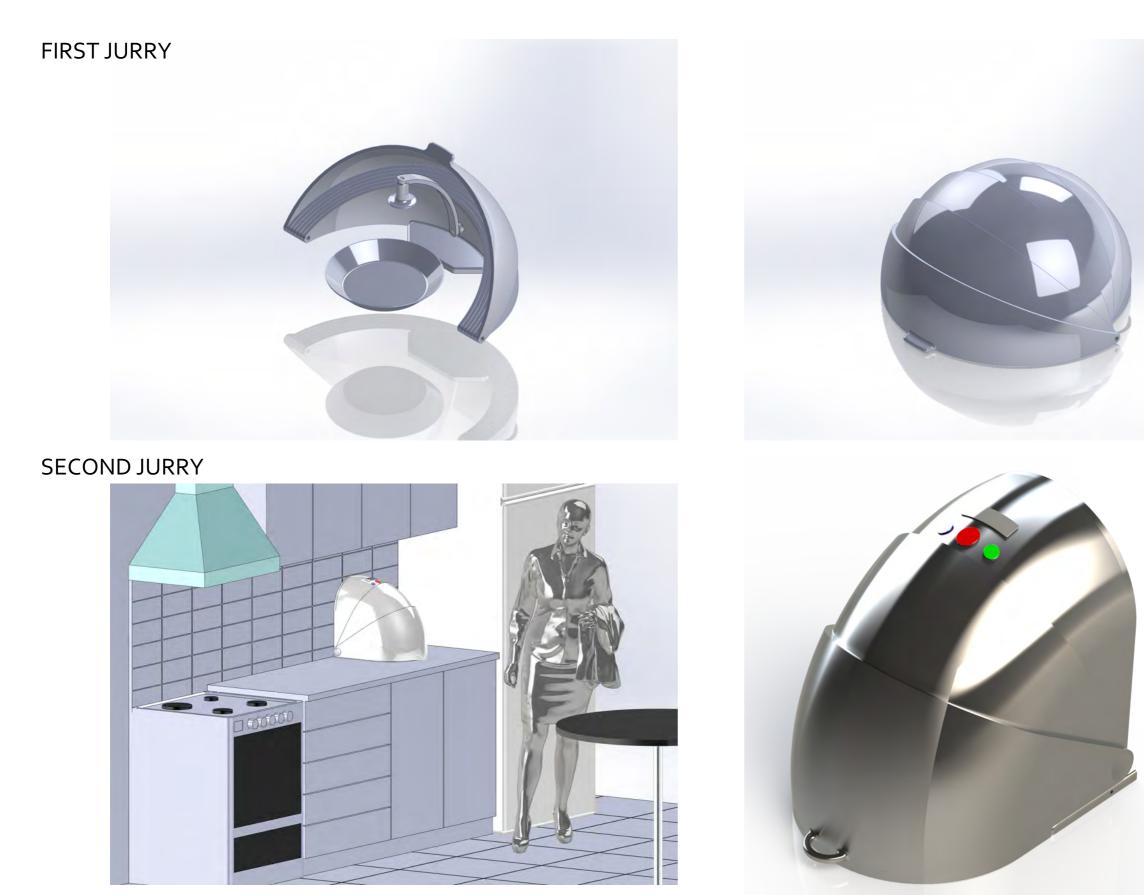
- Warming up meals is a common practice up to 2 cycles,
- Non-conventional heating methods may be somehow a barrier, or questioned due to uncertain knowledge about health related side effects,
- People are aware of decaying and risks due to pathogens on food, and they check for decayed food prior to consumption,
- Sterilization of food is a unfamiliar practice,
- Waste of food is a common issue that causes complaints,
- People are open for new methods that will pay out its cost, if it has a proven benefit,
- Physical dimensions, practicality of a kitchen appliance play a major role in consumer decision
- Cost of a new product is upmost important in making purchase decision
- Sterilization by a light source, UV-C, can be a mind blocking barrier that needs clear explanation.

### **DESIGN CONCEPT & MOOD BOARD**



# PROTECTION | SAFETY | WARMTH | CONVENIENCE

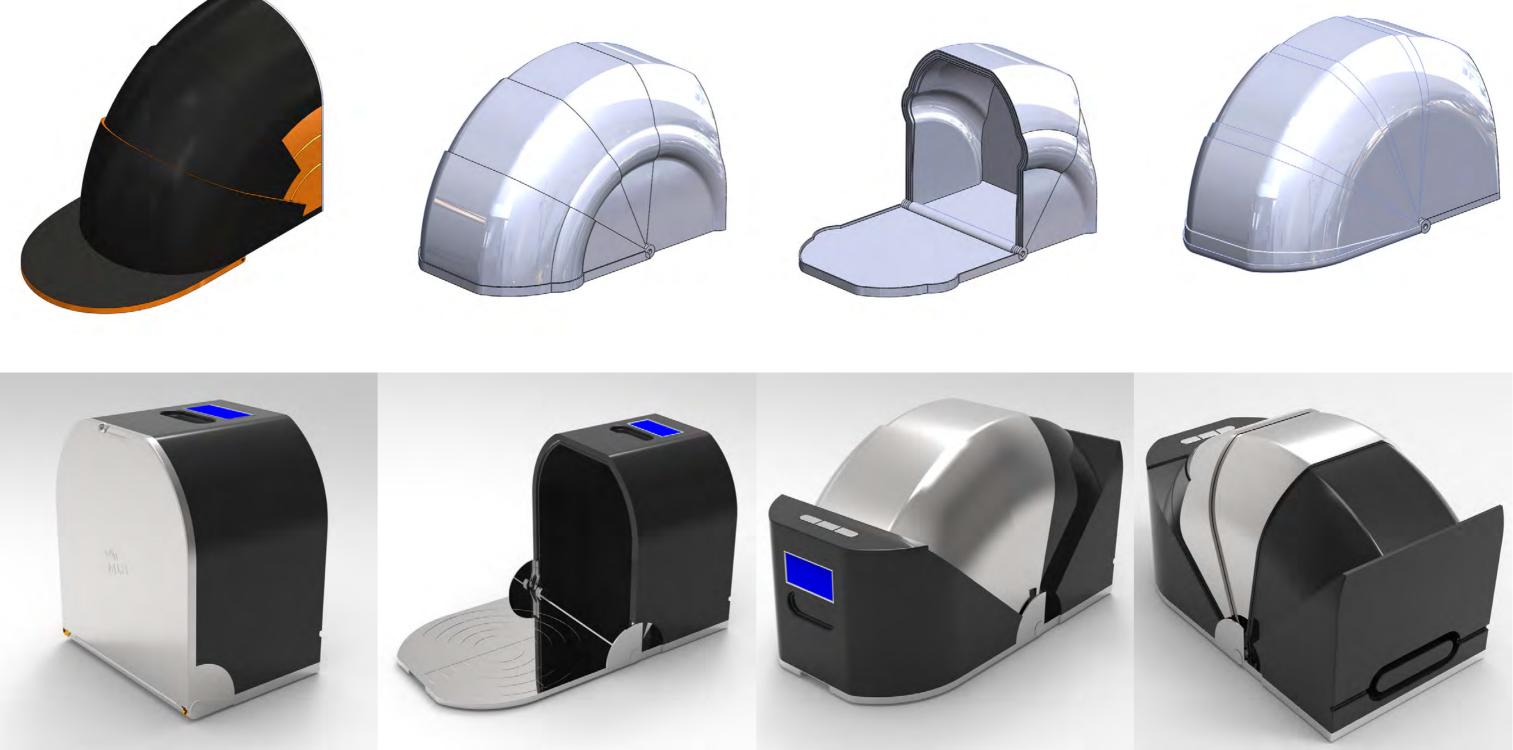
### **DESIGN PROCESS & PROGRESSION**





### **DESIGN PROCESS & PROGRESSION**

UP TO FINAL









### MOMENTUM & KITCHEN



### MOMENTUM & KITCHEN



### **USAGE SCENARIO & WARMING**



take your meal from fridge

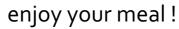
fold down the tray of MOMENTUM

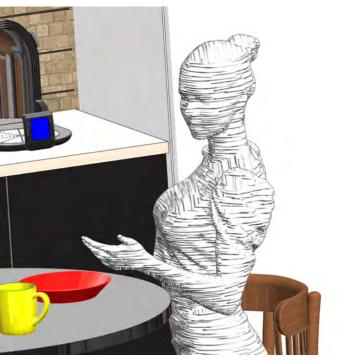
put your plate on the tray



close the hood and select temperature

when it is ready take your plate





### **USAGE SCENARIO & STERILIZING**



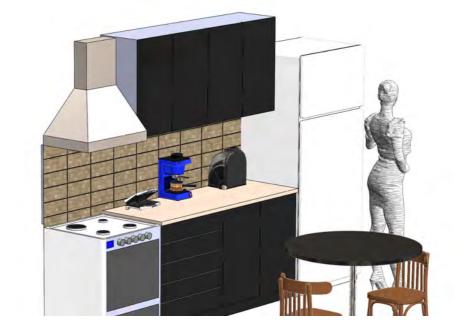
could not finish your meal?

put your remaining meal on the tray

close the hood and select sterilizing function







cover your plate and put it into the fridge

fold up the tray of MOMENTUM

well done !

### **USAGE SCENARIO & CLEANING**



MOMENTUM allows users to easily clean the interior and exterior of the device.

The 3 hood parts can be dissambled from the body by flexing the left and right walls towards outside, starting from the outer most hood component, one at a time.

Hood parts should be cleaned with soapy water and a soft cloth to avoid scratching the reflective interior surface that reflects the UVC light to your food for sterilization.

Stainless steel tray part can be removed by lifting from the edge, and underlying plastic tray support can also be removed if neccesarry. Both of this parts are washable in dish washer.

The internal main body can be cleaned with soft dump cleaning towel. Care must be taken not to scratch the reflective surfaces of the internal body, and IR lamp and UVC LEDs should be kept dry away from wet fabric.

### **USAGE INTERFACE & CONTROL PANEL**

MOMENTUM has a touch screen control panel that enables users easily operate the device for the desired function:

WARMING **STERILIZING** WARMING & STERILIZING **PRO-BIOTIC INCUBATION** 



MOMENTUM has 4 pre-defined temperature settings. 25°C and 30°C temperature settings are for pro-biotic incubation, i.e. for preparing yogurt and kefir. These temperature settings does not allow user to select sterilization function as it damages pro-biotic formation. However, these temperature setting allow users to define incubation duration for the desired incubation type.

60 °C	
50 °C	
30 °C	
25 °C	
WARM	
S	TART

### **USER INTERFACE & CONTROL PANEL**



50°C and 60°C temperature settings are for warming up food, and this temperature selections allow users to activate the sterilizing function as well. For these temperature settings users can not define duration, the device warms up the food to the desired temperature, and when reached the target setting temperature, warns the user with visual and sound feedback. It maintains the steady temperature until user opens the hood to take the food.

Users can activate sterilization function alone, without selecting any warming temperature. After making function selection user just needs to start the process.



### USER INTERFACE & CONTROL PANEL





MOMENTUM control panel continiously monitors the process and gives feedback to the user about:

selected temperature setting current temperature inside the chamber remaining duration of time selected function

It also monitors and controls the chamber; when the hood is opened it stops all functions, gives visual and sound alarm to user, for safety reasons.

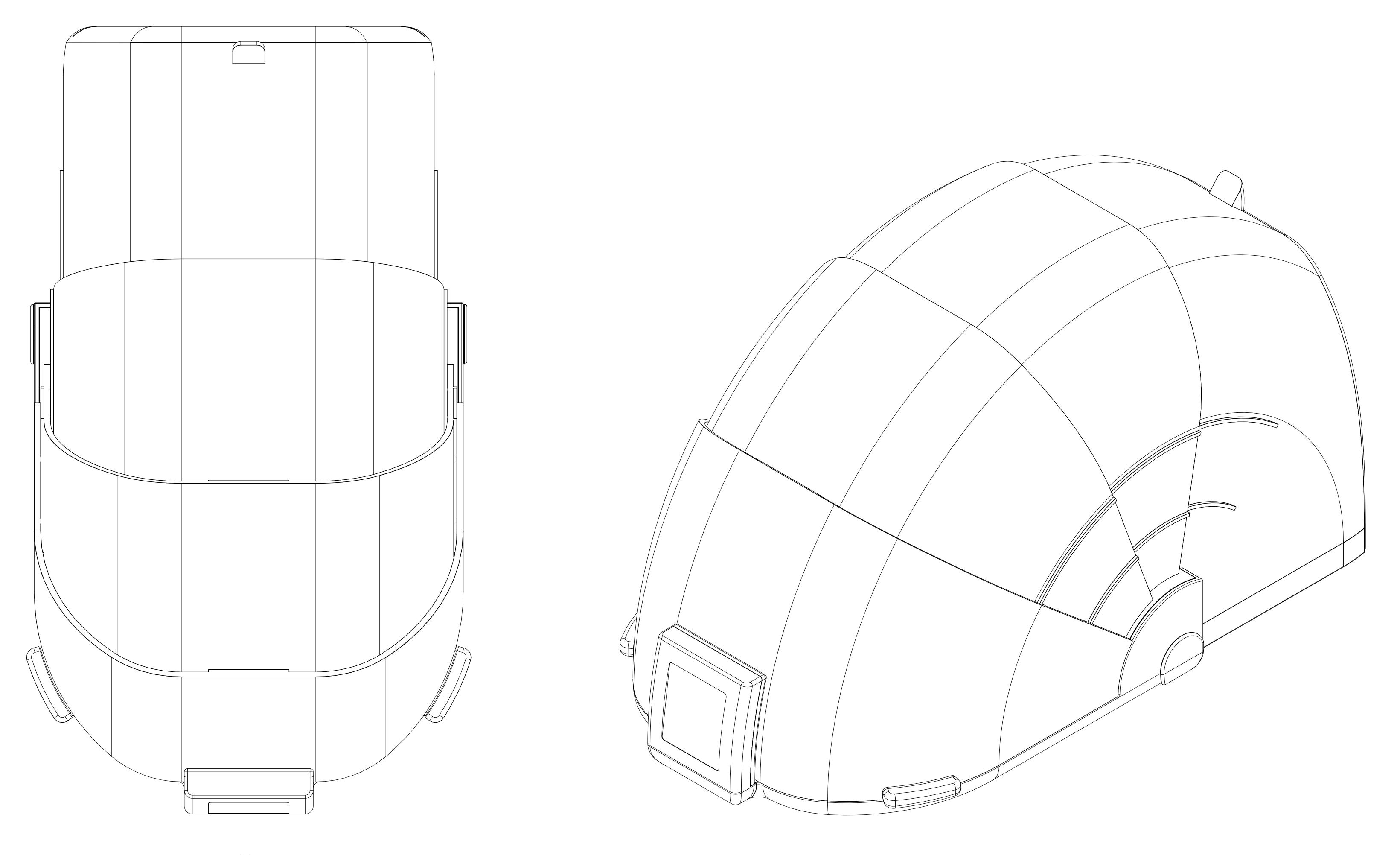


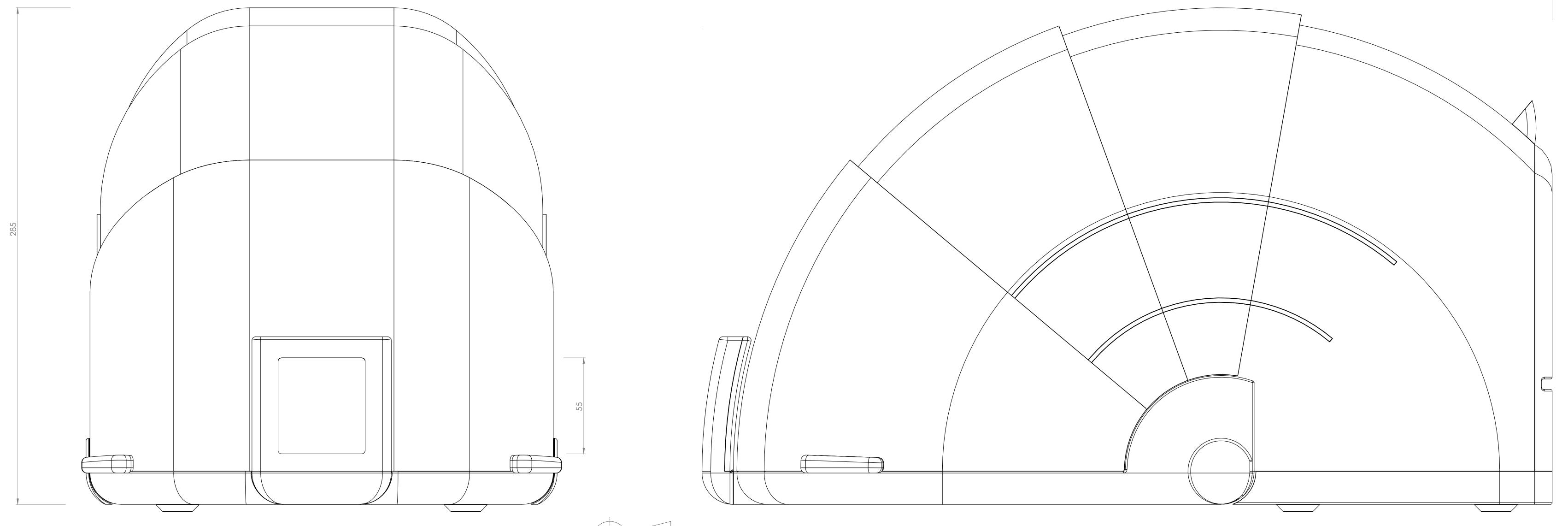
### **USER INTERFACE & CONTROL PANEL**



MOMENTUM sterilizes food under UVC light for 60 seconds, which is scientifically efficient time interval to eliminate unwanted microorganisms.

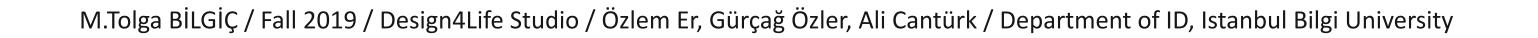
After completing selected functions, MOMENTUM gives visual and sound feedback to the user.

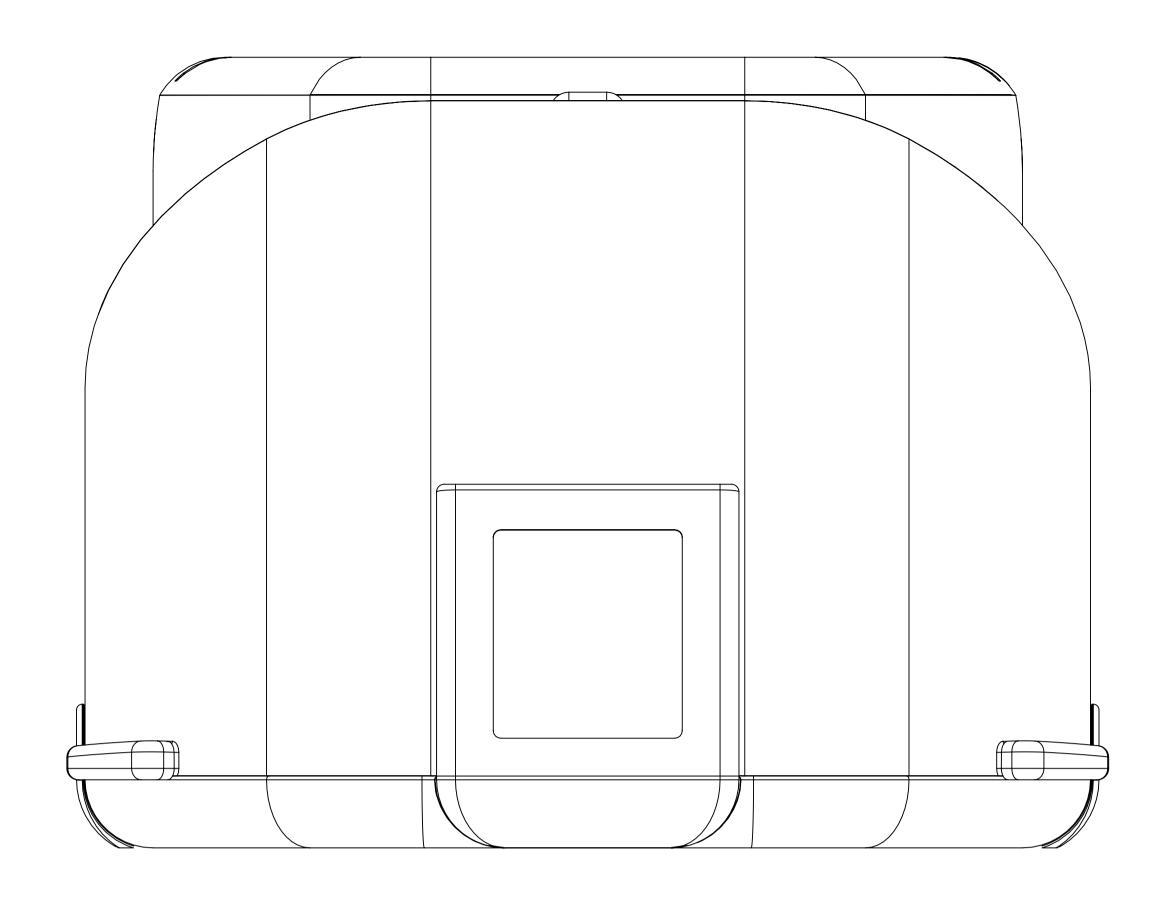


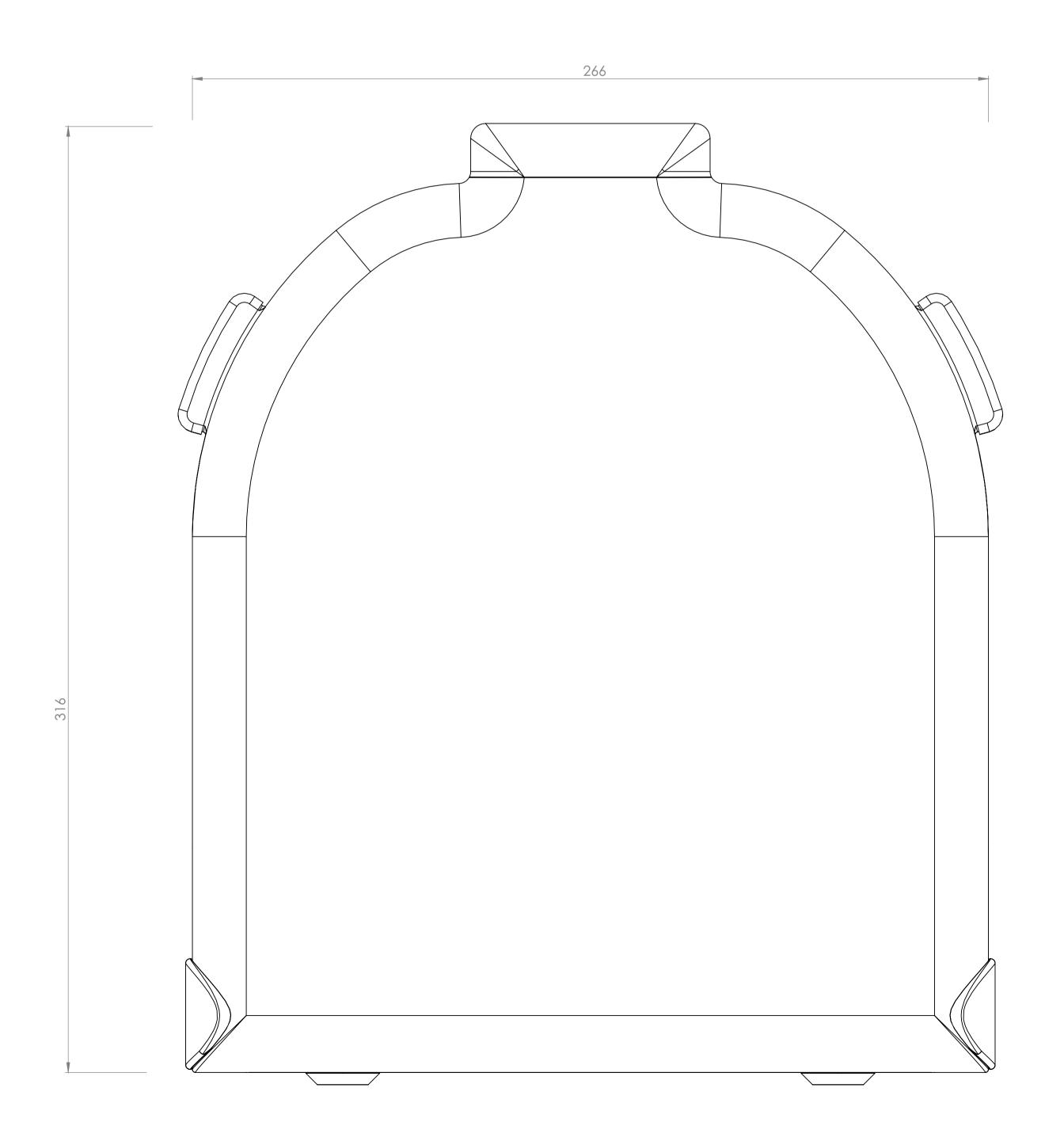


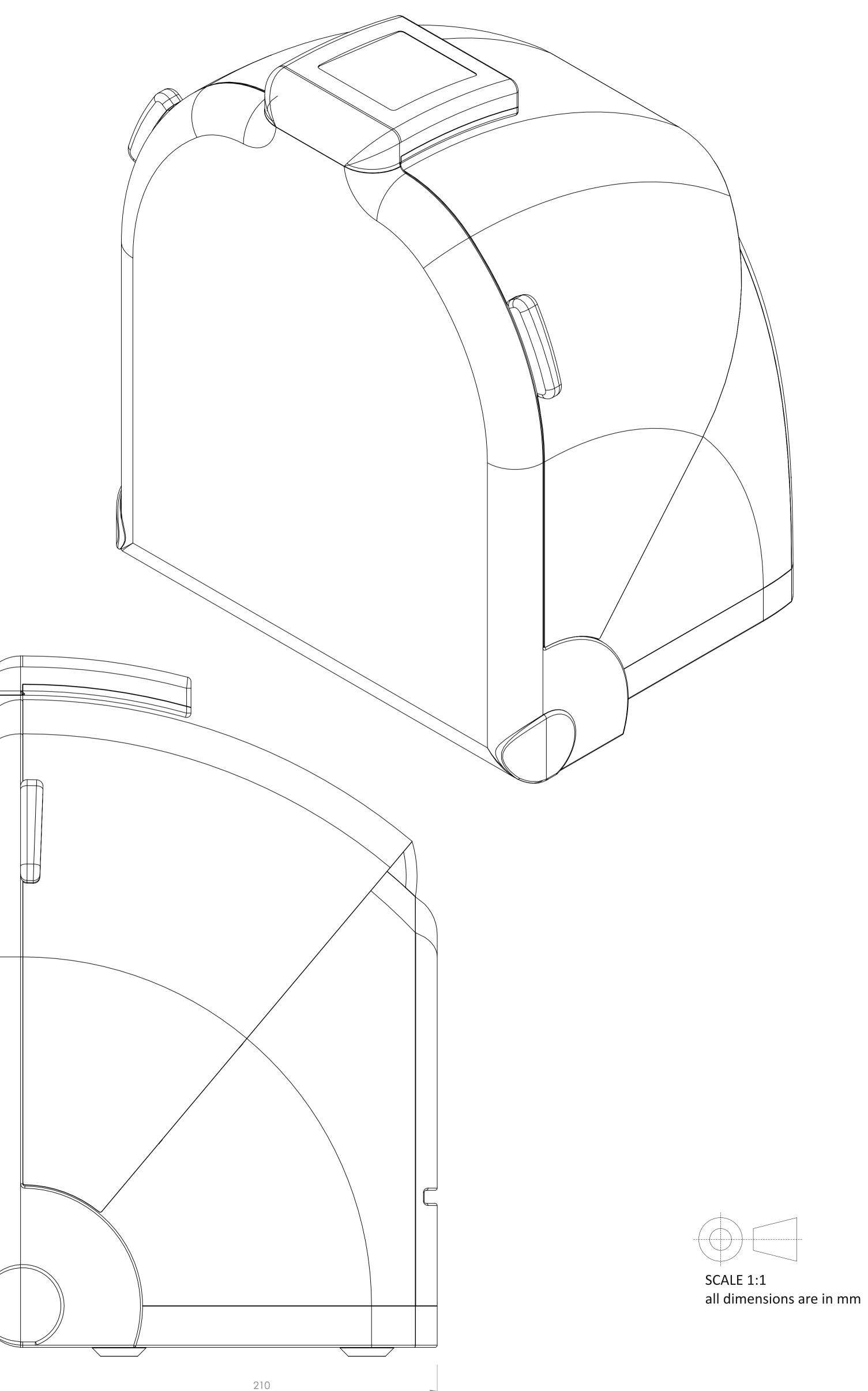


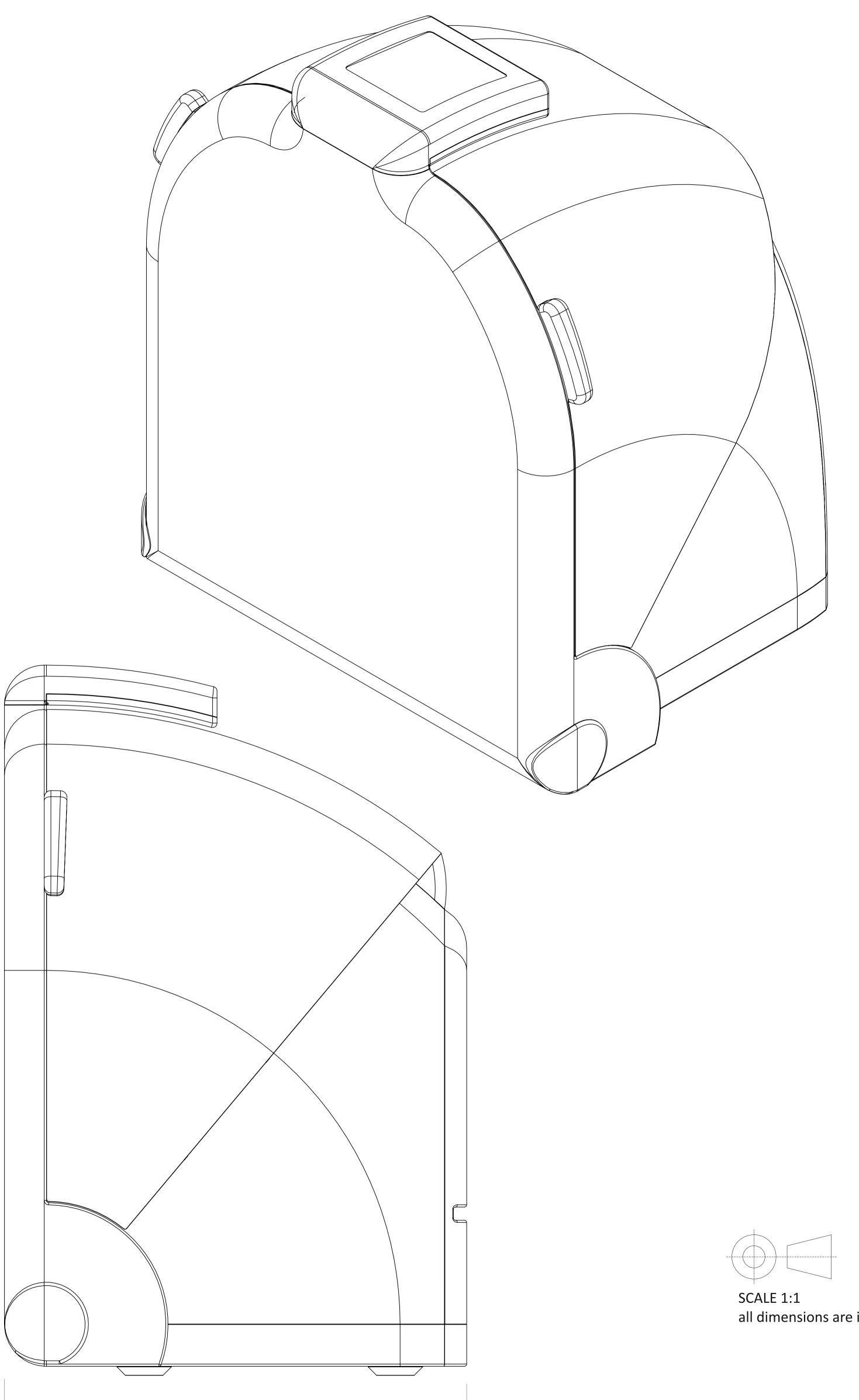






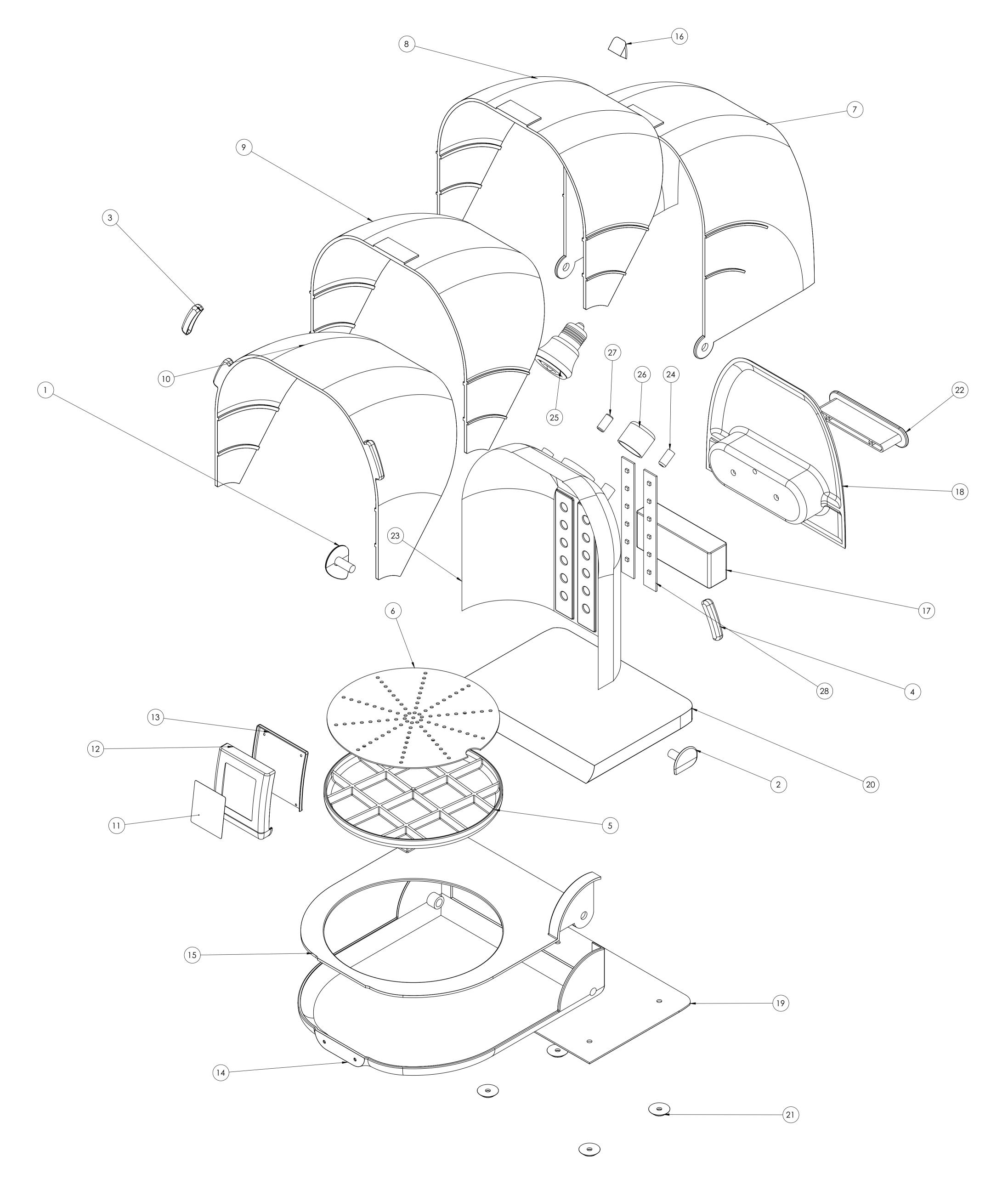




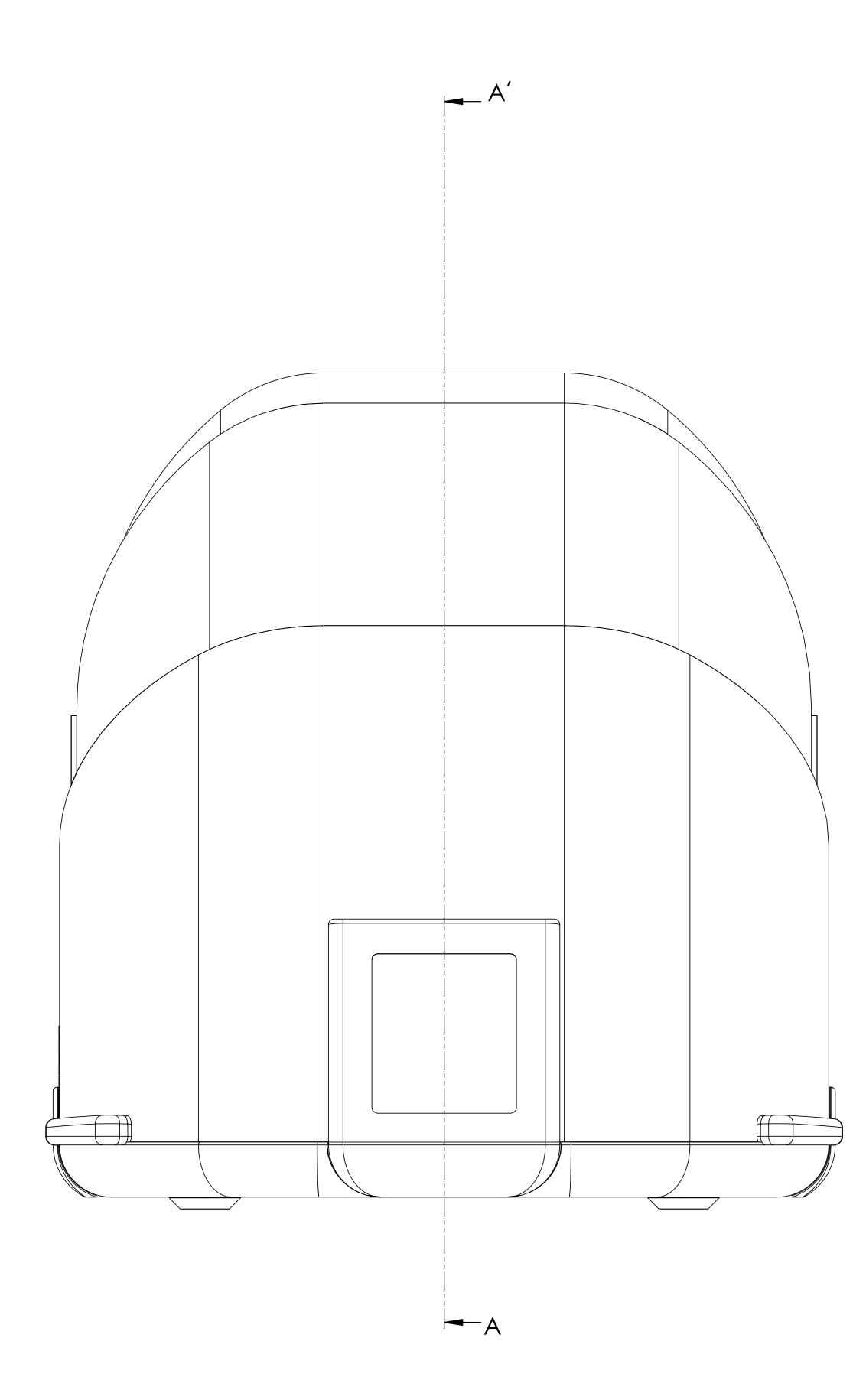


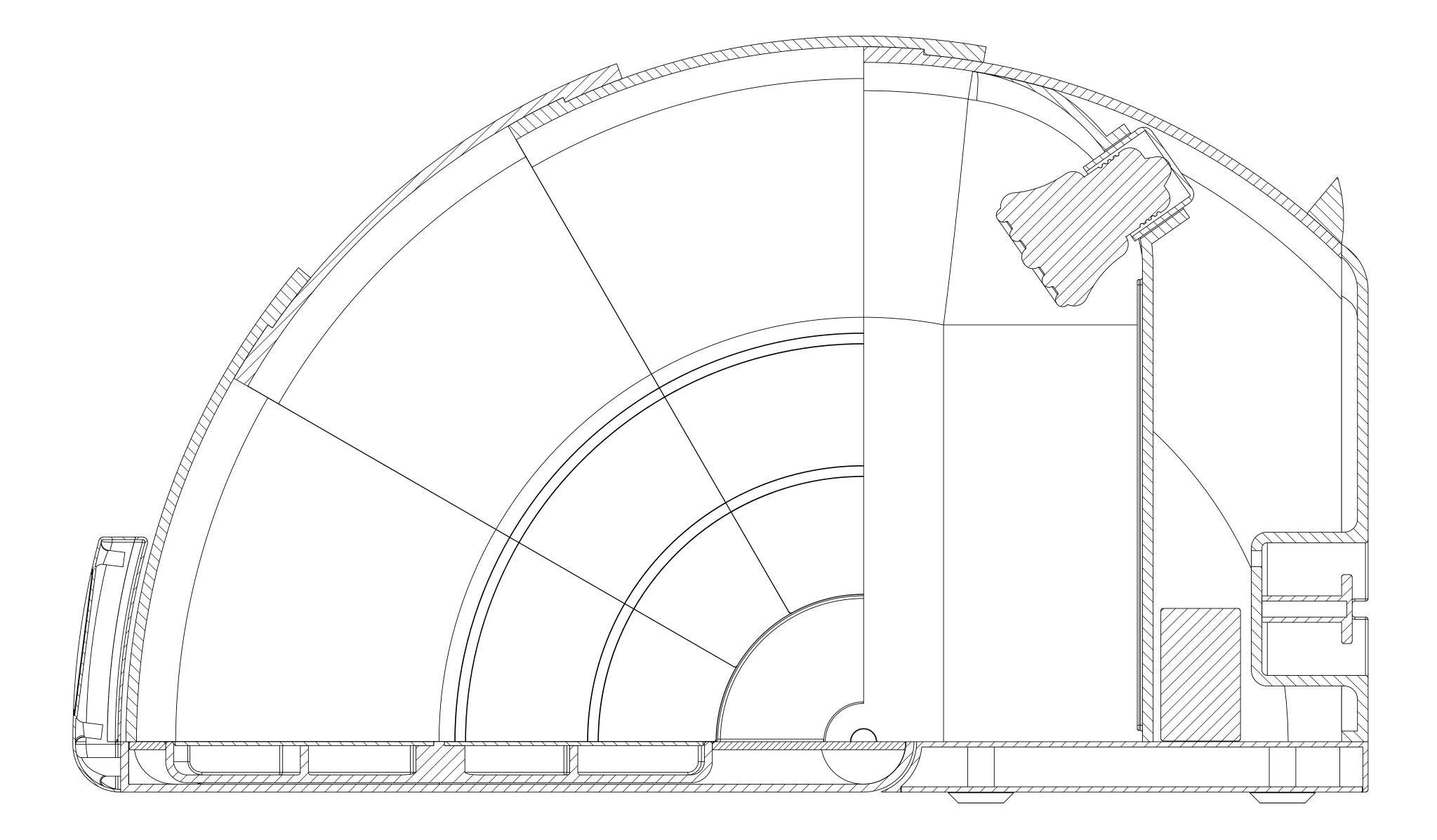
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ITEM NO.	PART NUMBER	QTY.
1	Cap-L	1
2	Cap-R	1
3	Handle Cover-L	1
4	Handle Cover-R	1
5	Plate Base Nesting	1
6	SS Plate Base	1
7	Main Cover	1
8	Hood 1	1
9	Hood 2	1
10	Hood 3	1
11	Touch Panel	1
12	Touch Panel Front Cover	1
13	Touch Panel Back Cover	1
14	Folding Base Outer Part	1
15	Folding Base Internal Part	1
16	Hood Stopper	1
17	12 V Power Supply	1
18	Back Lid	1
19	Bottom Cover	1
20	Bottom Main	1
21	Bottom Feet	1
22	Cable Roll Holder	1
23	Internal Cover Main	1
24	IR Heat Measure Sensor	1
25	IR Heating Lamp 75 W	1
26	Lamp Housing	1
27	PT100 ThermoCouple Sensor	1
28	UVC LED Engine 6x2	1



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SCALE 1 : 1

## SECTION A-A'