FRANCISCO FERNANDES portfólio

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Cleaning Cart

pg. 2

Injected Molded Waste Bin

pg. 3

EV-Charger

pg. 4

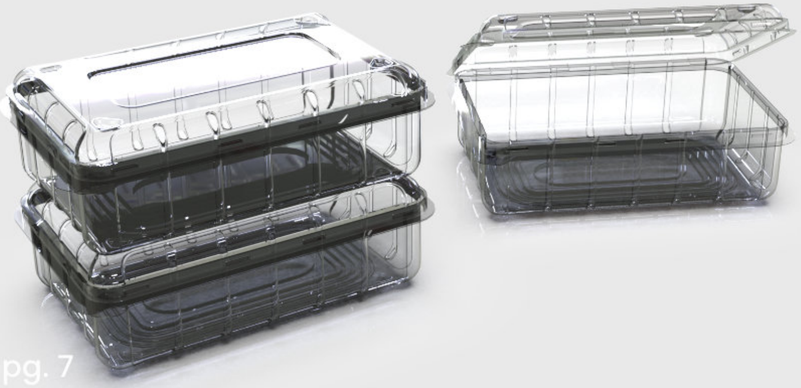
Surfboard Weight Add-on

pg. 5

Cleaning Cart

pg. 6

Barry-Box



pg. 7

This is the concept for a cleaning cart designed to be built with as few parts as possible while offering all the configurations the end customer might need. Its base structure consists of one floor, one ceiling, two walls, four door modules, and four wheels, all connected and held together by an aluminum profile.

I present the concept for a 1000 L RGB container and a 120 L RGB container, both designed to be manufactured through plastic injection molding, with a design that complies with all DIN EN 840 standards.

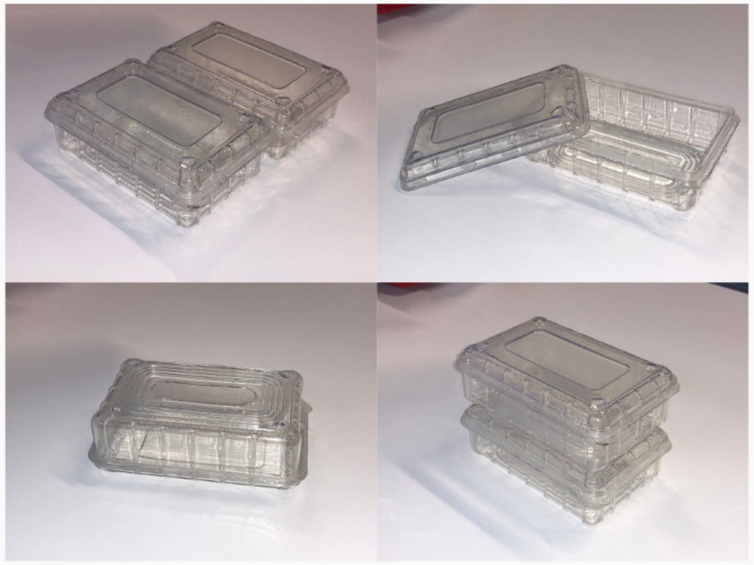
The client requested several concepts for a low-cost EV charger that would also support an affordable charging service. This concept was developed with that goal in mind, keeping manufacturing costs as low as possible while preserving structural integrity and minimizing visual pollution, as it is intended for use in a wide range of locations, including rural areas and historic sites.

This product is a surfboard weight add-on that is installed by the shaper in the same way as fin boxes (has you can see in the prototype photos). It can be placed in various advantageous positions on the board. Some of these positions, particularly near the nose, are thinner, so the product is sold as a taller unit with a marked section that allows it to be cut down to fit thinner areas of the surfboard.

It enables the surfer to add or remove weight from specific areas of the board depending on ocean conditions. This is important because modern surfboards are made from very lightweight yet strong materials; however, their reduced weight can result in insufficient inertia when riding big waves.

prototype photos

This bin was developed for a pilot project aimed at promoting the separation of bio-waste and was implemented in schools. It required unlocking using an ID card or Portugal's digital wallet. In this project, I was responsible for the graphic design of the front stickers, as well as for designing the components that hold the screen and the RFID scanner in place in the version shown on the right.



prototype photos

For this project, the client wanted to assess whether it would be more profitable to develop their own berry box design and mold instead of purchasing standard boxes from a plastic manufacturer. In this process, weight and airflow simulations were conducted to ensure the boxes would not collapse and would maintain adequate ventilation, preventing damage to the berries when multiple boxes are stacked.

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Thank you!

Hope to meet you soon.