

Pitch

Hi, we are group 1 and we'd like to introduce you to our top-of-the-line cooling machine.

Imagine you and your friends are at the beach. It's a hot day and you want something cool to drink. With a normal cooler and ice, it will take forever for your drink to cool. With our cooler, your drink will be cold in under 5 minutes! That means more time for you and your friends to enjoy cold refreshing beverages.

Our cooler also solves the universal frustration of warm drinks at social gatherings, it delivers instant cooling for tailgates, cookouts, camping, and beach trips. Built inside a compact, insulated 10-quart cooler with a removable 6-can carrier and powered by a 12-volt rechargeable battery, it provides true grab-and-go portability wherever cold drinks are needed fast.

The device proves to be a competitive product due to its compressor-free engineering. Two submersible pumps circulate a salted ice-water bath around the cans at a precise coolant velocity of 0.30 m/s, rapidly pulling heat out of the beverages without the heavy weight, noise, or high expense of traditional refrigeration systems. Because it relies on simple, everyday consumables like standard ice, water, and salt, it remains far more practical, reliable, and faster than standard ice chests.

At a target retail price of \$149.99, the unit offers premium rapid-cooling functionality at a fraction of the cost of portable electric fridges. Even at the single-prototype stage using off-the-shelf retail hardware, the entire build budget is just \$102.34, which already includes a 15% safety contingency. Transitioning to bulk commercial manufacturing and sourcing key parts—such as pumps, tubing, and molded carriers—in high volumes will dramatically lower unit production costs, keeping the device genuinely affordable for consumers while ensuring strong profit margins at scale