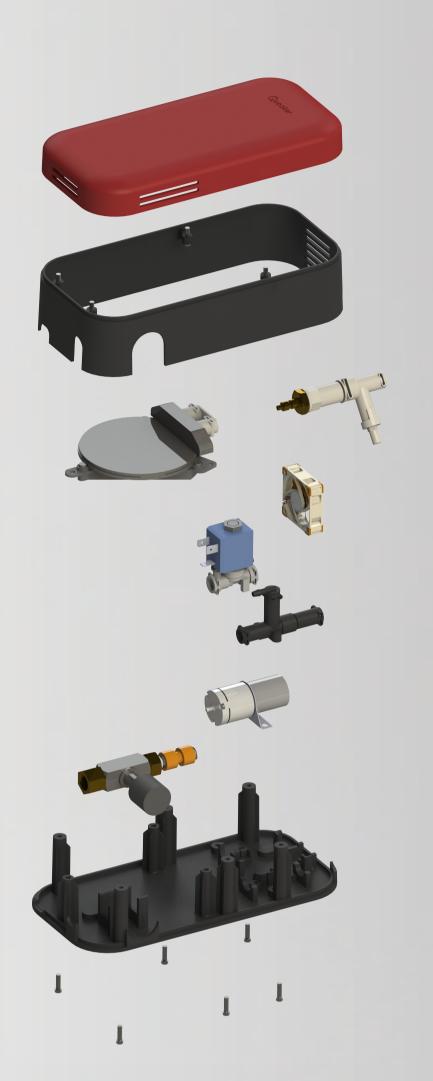
## Design of a new type of coffee milk frother for Quooker B.V.



Almost every adult human being is drinking coffee, a caffeine rich, bitter drink to get through the day. To top up caffeine levels during a short break at work or to authentically enjoy the distinctive taste and aroma of freshly milled coffee beans. To sweeten up the coffee, milk and milk alternatives are added to counter the bitterness by adding sweetness and fluffy texture. Before the milk can be poured over the coffee it needs to be prepared, from cold storage, it needs to be heated and aerated, also known as frothing.

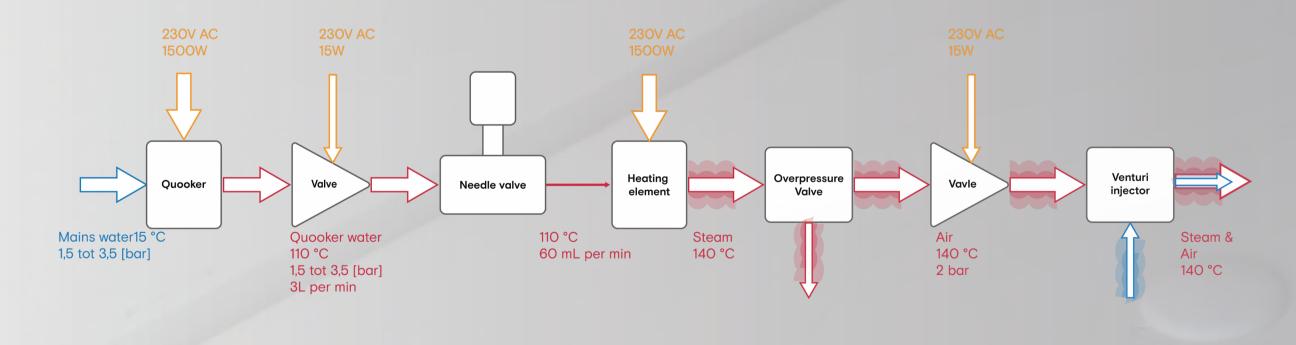
Quooker, a company that developed and sells a water tap, which can serve cooled, carbonated and boiling water, without any hassle. The innovative mindset from the start of the company is ever so present and is therefore looking into opportunities to broaden its kitchen portfolio.

During this project the possibilities for a new type of milk frother is explored that makes use of the existing boiling water ecosystem. Which will theoretically provide several key benefits when competing with regular milk frothers.

In the first phase of the project the coffee context is researched, and existing solutions are studied. A list of requirements are drawn up to set specifications for the novel design. The technical specifications could be easily set, however the expected coffee quality is a highly subjective topic. Even with professionals the perfect cappuccino does not exist.

With the gathered knowledge solutions that incorporate the potential benefits of the integration with the Quooker reservoir are explored. Resulting in three potential concepts that are evanluated with potential consumers. There could be concluded that certain aspects of all the concepts would form a promising combination of solutions.

The optimized concept is further developed to prove its life worthiness as a product. A high-fidelity integrated prototype was created to show the feasibility of the solutions and to gather opinions of the frothing principle, aesthetical language and interaction. Giving a head start for further future development if the need for a milk frothing addition is deemed necessary.





Pepijn Huis in 't Veld

Integrated product design

Design of a new type of coffee milk frother for Quooker B.V. 10-03-2023 Committee

Dr. Ir. W.F. van der Vegte Ir. E.J.J. van Breemen

Company

Rik Elmendorp

