Fresh Check, founded in 2015, offers affordable solutions to verify hygiene in the food, hospitality, and healthcare industries. Its patented technology changes colour to inform when a facility’s hygiene is not up to the standard required. Its current product line includes the Fresh Check spray, which has been approved by Campden BRI and is the first tool for hygiene verification since the ATP swab.

Since the COVID-19 pandemic hit, hygiene awareness has become increasingly at the forefront for many industries. After identifying that its spray was sometimes hard to see on solid and dark-coloured surfaces, Fresh Check created a new swab test. The swab method would allow the user to check the hygiene levels of a surface quickly and, importantly, conclusively.

Fresh Check received an Innovate UK grant via the UK Edge Catapult Scheme for the R&D required to develop the swab, and it was introduced to the MTC’s Product Manufacturing Incubator via the Innovate UK team to further develop the original prototype. Together, the teams worked to re-design the product to make it more cost effective and therefore more competitive in the market.

"This was a great project to work on; we were able to explore more about the hygiene market, in particular hygiene within the food industry and the level of testing required. Through collaboration and the passion and engagement from the Fresh Check team, we have a product with a real point of difference, that makes the brand stand out from the crowd. Through future projects we hope to develop it even further from an ease-of-manufacture perspective, as well as from a sustainability point of view too."

Dale Armson, Research Engineering – MTC Product Design Group
**THE OUTCOME**

The initial phase of the project of re-designing the product was completed, with two finalised designs focusing on a two-part design that makes Fresh Check stand out from its competitors. The proposed designs are also more cost effective to manufacture, in turn helping to increase the product’s profitability.

The MTC has also started to work with Fresh Check on how, through future projects, the product could be further refined. This includes identifying a preferred manufacturer and plastics source in the UK to ensure a higher quality of product, as well as improving the designs further for more efficient manufacturing, and supporting Fresh Check with the capability to assemble the product itself.

A key aspect of the ongoing work will also be to look at the sustainability of the product including the packaging and materials used, as this is a key cornerstone of the company’s vision.

**MTC’S SOLUTIONS**

Fresh Check approached the MTC with the brief to explore how the swab could be re-designed and then manufactured at a more competitive price point to take the product to market.

At the start of the project, the PMI team conducted a series of ideation workshops which included an in-depth analysis of the other products on the market, as well as understanding Fresh Check’s target audience and the manufacturing costs of the current prototype design.

The prototype was manufactured in four components, like similar products on the market; this was an expensive way to manufacture the product, and the team explored options to decrease the number of parts and therefore reduce costs.

By following this route, MTC believed it could help Fresh Check to achieve a key point of difference in its product design, whilst also meeting the initial requirements of the project to make the product more cost effective.

New to the plastics manufacturing industry, Fresh Check was sourcing its plastic from China but was coming up against supply chain issues, as well as challenges with the quality of the product. The MTC was able to utilise its network and vendor agnostic approach to start the procurement process of reshoring its sourcing and manufacturing to the UK.

Having created an early-stage prototype of our new hygiene testing swab product, we found ourselves at a crossroads; that’s when we were introduced to the MTC. Right away, as a start-up business, we felt comfortable with the MTC. They challenged us in the right way and guided the conversation, understanding all the challenges that we had. Thanks to their hard work and ingenuity, we now have a product that is competitive and has opened a number of doors for us that would not have been previously possible.

*Alex Bond, Co-Founder & CEO – Fresh Check*
If you would like to be involved in similar R&D projects with the MTC, or would like to discuss how the MTC can support you with your manufacturing challenges, please contact:

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