Case Study

Multimesh UK
making wirework for you

Delivery Partner

VEC

Background

With over 30 years of experience and operating in a large 30,000 state-of-the-art square-foot facility, Multimesh supplies and manufactures wire mesh products. Combining time-honoured craftsmanship and cutting-edge technology, Multimesh is proud of their unique capabilities and determination to meet all customer requirements and demands.

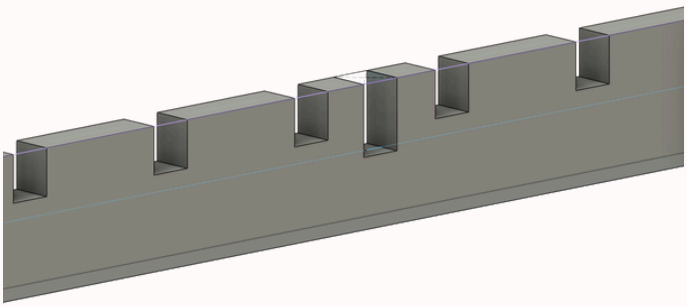
Multimesh offers a range of specialised items such as medical instrument trays, wire racks and trays for smoking ovens, as well as agricultural, equestrian, and veterinary mesh.

Challenge

Multimesh has been interested in updating and automating their manufacturing process of jigs, a tool needed for holding a cutting tool in place, ensuring accurate drilling, particularly when repeatedly drilling in a specific place and required for every order.

Currently, a singular member of the skilled Multimesh team must manually manufacture the jigs by hand using timber and sought-after skills that, ideally, need to be shared amongst the growing team.

The company were interested in investing in new machinery and equipment which could support automating this process whilst also up-skilling their teams for emerging technologies such as CAD (Computer-aided design) for product development phases.



Case Study

Multimesh UK
making wirework for you

Delivery Partner

VEC

Solution

The Horizon's VEC team collaborated with Multimesh to analyse their current processes, pinpoint areas for enhancement, and determine the equipment needed to fill the capability gaps.

The VEC recommended a valuable tool in parametric CAD, using algorithms and parameters to generate digital models of jigs and other products. To enhance the integration of these new tools among current employees, the VEC devised a table-based system to input design specifications and measurements. The system will automatically adjust digital products, thereby autonomously producing the item in their 3D printing facilities.

The VEC has also proposed a solution using software platforms such as Fusion360 to codify the expert tacit knowledge of the individual manufacturing the jig components. This approach aims to create a more standardised and automated process, enabling less experienced staff to produce jigs, alleviating the current strain on jig creation and enhance overall efficiency.

Impact

Following a bespoke workshop specifically tailored to the needs of Multimesh, the VEC assisted the company in finding a CNC saw manufacturer for their review. This upgrade from the current long-standing saw will enhance the team's safety and capabilities, incorporating computer numerical control (CNC) technology.

Ultimately, the updates and changes made by Multimesh will help the company save time by autonomously generating the design for their jigs whilst reducing the time spent on repetitive and manual processes.

"Working with the Horizons team at VEC has enabled us to remove manual processes and the reliability on sole members of our team whilst expanding our in-house capabilities.

The streamlined processes enable Multimesh to remain competitive within the landscape in addition to supporting our investment plans for future innovations."

- Paul Blanchard, Multimesh (UK) Ltd