

Nutree Life

Raising the bar of food manufacturing

“When we approached Made Smarter for help with upgrading our production process, I never imagined that we'd achieve so much so fast.”



A food manufacturer which invested in state-of-the-art automation and control technologies using Made Smarter support and advice is experiencing unprecedented demand for its products in the wake of the coronavirus crisis.

Nutree Life, based in Preston, makes both its own brand and white label vegan and free-from protein bars, as well as powders and burger mix, which are sold all over the world.

At the start of the year the business adopted a bespoke solution to upgrade its production line, integrate its machinery, and capture and respond to vital performance data.

The innovation has enabled high volume, high speed and accurate production which simply didn't exist previously. Crucially, the increased productivity and manufacturing capacity has enabled Nutree Life to cope with the upsurge in demand.

The business, which is co-owned by Patrick Mroczak and his son-in-law Adam Hodgkinson, is now on target to almost quadruple its turnover, from £1.2m to £4m, and has doubled its workforce since the start of the year.

Patrick said: "With other food producers cutting ranges to focus on volume, customers are looking for alternatives, which has created an opportunity for us. Orders from all areas of the business have increased, which means we are producing more."

"There is no doubt that without investing when we did, in the way that we did, with the help from Made Smarter, we would not be able to cope with this unprecedented increase in demand. The technologies we have adopted have enabled us to develop new products quicker and we are now taking pre-orders for the first time, such is the demand."

The project has also accelerated Nutree Life's digitalisation plans which include upgrading a second production line with the same advanced technology and linking the entire system to harness more data to improve performance.

The Challenge

Nutree Life was started three years ago after Patrick and Adam recognised growing demand for plant-based vegan products.

After engineering an innovative production line to create confectionary-like, multi-layered protein bars with a chocolate coating, they wanted to develop a product range by adding a caramel coating to the mix.

Nutree Life turned to Made Smarter for support and help in developing a technology solution to help with one of its two production lines.

"The system we engineered ourselves has been the key to our success and enabled us to create bespoke white label products for different markets, so brands can be confident their products are unique," Patrick explained. "But in order to be competitive and to take the next step in our growth we needed to invest in new technologies."

"Manual coating is very wasteful, inaccurate and time consuming, so automation and control were at the heart of our plans. We also knew there was valuable data coming from our machines that would hold the key to continuously improving what we do and how we do it."

The Solution

The bespoke solution connects two machines, one which makes the base layers of the bar, the other which coats it in caramel and then chocolate.

Sensors and software control the positioning of the bar as it moves between the machines to ensure a consistent layer of caramel.

Production data from the process is captured and transmitted to management in real-time to monitor performance, identify potential efficiencies, to plan workflow, and to compliantly audit activity which is crucial in the food sector.

The Benefits

Faster and more accurate production and control has resulted in increased productivity and improved manufacturing capacity and potential output.

It has enabled Nutree Life to make more complex products with less handling, significantly improved quality and reduced waste and energy use.

The solution is also flexible and adaptable, which means quick changeovers and reduced machine downtime between production.

Nutree Life has doubled its workforce to cope with the extra demand for its products, which it is capable of fulfilling because of the new technology.

Meanwhile, data capture of the manufacturing process has enabled the business to look for ways to improve efficiency across all areas of production.

Overall Equipment Effectiveness (OEE) - the standard for improving



manufacturing productivity - has increased from 76% to 89%.

"In terms of OEE, the world class level is 85%, which shows the big jump in terms of quality and availability we have achieved with our investment," Patrick said, "That is an important benchmark to set for our business."

The Future

The business is poised for further rapid growth and expansion. It is moving to a purpose built £1.7m factory in Burscough and is developing plans to upgrade its other production line to enable the caramel coating and create a network which captures the data for further analysis.

Patrick's ambition is for Nutree Life to turnover £8m within the

next three years, and to double its headcount again.

"When we approached Made Smarter for help with upgrading our production process, I never imagined that we'd achieve so much so fast," Patrick said. "Made Smarter made us think bigger and smarter, encouraging us to capture manufacturing data as a way of improving the accuracy and consistency of the product. It has given us the platform and the confidence to take that next step."



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