



CASE STUDY

Marlow Foods and JBT – a long and successful partnership



The story of Quorn started in the '60s with one man's vision of protecting the world from food shortages. His name was Lord Joseph Arthur Rank, chairman at a company called Rank Hovis McDougall, and he made it his mission to find a new, sustainable source of protein. And after his scientists screened over 3,000 soil samples from around the world, he discovered a microorganism in the fungi family called *Fusarium venenatum*. In a joint venture with the company ICI, Rank Hovis McDougall founded Marlow Foods to develop the product, and in 1985 the mycoprotein-based meat substitute Quorn was launched in the UK. The product became a success, and the growth since then has been massive, introducing new variants over the years.

At JBT, we are very proud to have been a part of Quorn's success. Today we are privileged to have a productive partnership with Marlow Foods, supporting them with equipment, service, maintenance, and our Food Tech Center's expertise. To learn more about how Marlow Foods views our partnership and how they benefit from it, we talked to Mark Anderson, Chief Engineer at Marlow Food's Stokesley site.



How would you describe the partnership with JBT?

From my perspective, JBT has a lot of technical and process knowledge, especially the key people we work with here, both from JBT central headquarter and the local technicians. They have supported us for a number of years, building a working knowledge of our processes, products and machinery. JBT's PProCARE® service contract provides us with essential preventive maintenance, optimisation, training, and spares to maximize uptime in our production process.



Mark Anderson,
Chief Engineer at
Marlow Food's Stokesley

In what way does JBT contribute to your uptime?

Maximizing uptime is critical to any business. In our PProCARE service contract, JBT guarantees our uptime, and in the last couple of years, they have helped us maintain a very low downtime in the areas they are responsible for. It is currently running at less than 1% due to the partnership with JBT.

They have an excellent network, call in expertise from the UK and Sweden, and use a very competent subcontractor. I have never had an issue where they could not respond within the contractual terms. Usually, it's much quicker than that, often within a couple of hours, which is very positive.

Do you have any examples of how PProCARE has benefitted you?

Over time, Quorn will be focusing on Vegan products, which runs at higher temperatures. JBT has helped us ensure we are in a position to run these products without the worry of downtime.



Frozen Quorn fillets from
Marlow Foods production

PProCARE has been invaluable in quickly getting service personnel to the plant, providing technical support and solutions. Another benefit is the predictive nature of the contract, where they provide early identification of potential failures so they can be addressed, avoiding downtime. With JBT's regular inspection of things like belts, rails, balls, and guides and replacing them in a timely manner, we avoid potential contamination and minimize any downtime issues.



Does JBT contribute to your sustainability in any way?

From a sustainability perspective, Quorn is a fantastic product in its own right. For example, Quorn Mince uses 94% less land, produces 95% fewer carbon emissions than beef, and the water footprint is 12 times lower than that of beef mince. But of course, we also constantly striving to make our business more sustainable by purchasing green energy for our plants, shifting to electric cars, and going heavily into sustainable programs to save energy. We also work with our production process, and here we've made great use of JBT's experience. They have helped us identify and develop solutions, in line with our sustainability goals, around the most efficient way to run our chillers, steamers, and freezers.

In what more areas do JBT support you?

We have used the JBT Food Tech Center to test various products like Quorn sausages and mince. We also use their application specialists to investigate how we can run our chillers and freezers more efficiently, for example, by proposing better ways of running using different temperatures without impacting the product quality.

JBT not only reviews our equipment from an engineering point of view, but they also help us with training. Their cleaning specialist has taught us how to clean the machines optimally. It's a challenge because Quorn being very sticky, hardens on the belts especially when cooked, and the residual debris can be very difficult to remove. It's good to better understand how we should clean and what chemicals are best to use.

JBT has also trained many of our engineers, which is essential because it allows us to ensure that they can complete PMs more effectively and quickly repair any faults when necessary.

In my opinion, JBT works very hard to ensure that we have a good relationship, and I see it as a partnership. JBT is probably the one company we have the most interaction with because of the criticality of our spiral freezers.

How do you think the partnership with JBT and the market for Quorn will develop in the future?

During the pandemic, the need for new, creative food concepts rose quickly. National television visited I think JBT offer an excellent service and that their skills and knowledge is invaluable for what we're doing, so I would like to continue our partnership. In the future, we will be looking at replacing equipment as it comes to the end of its life and we also look at establishing new lines as product demand grows. During this process we will use JBT's expertise in technology to find solutions that are suitable for our operation and environment, safe and easy to operate, providing maximal uptime and minimal service.

When it comes to Quorn, it has a massive potential to grow, and I believe it will do so. People are becoming increasingly aware of meat consumption and manufacturing's impact on the climate, so they are moving to alternative vegetarian and vegan protein sources. A cost-effective vegetarian product that tastes great with a natural texture that feels good in the mouth will always be in demand. And in my opinion, Quorn hits all those buttons.



PRoCARE® Service Agreements – Working together for better results

Our PRoCARE service contracts are built to maximize your uptime and financial predictability. Keeping production running without disruption is key to a successful business. Loss of production means loss of sales - and profit. With increasing capacity there is no room for unplanned downtime. Proactive, professional, preventive maintenance significantly reduces your downtime. That's what PRoCARE is all about.

Get in contact with your local JBT office to set up your PRoCARE agreement.



“We are in it for the long run”

FRIGOSCANDIA

STEIN

DSI



SCHRÖDER
THE SAFE SIDE OF FOOD.

XVISION™

FTNON

Proseal®

PRIME
EQUIPMENT GROUP
Simple Solutions for Poultry Processing

North America

John Bean Technologies
1622 First St.
Sandusky, OH 44870
USA
Phone: +1 419 626 0304
E-mail: process-solutions@jbt.com

Europe

John Bean Technologies AB
Rusthällsgatan 21, Box 913
SE-251 09 Helsingborg
SWEDEN
Phone +46 42 490 4000
E-mail: info-europe@jbt.com

Asia

John Bean Technologies Ltd.
159/26 Serm-Mit Tower, Room no. 1602-3
Sukhumvit 21 Road, Klongtoey Nua Sub-district
Wattana District, Bangkok 10110, THAILAND
Phone: +66 2257 4000
E-mail: infoasia-jbtfoodtech@jbt.com

Latin America

John Bean Technologies
Máquinas e Equipamentos Industriais Ltda.
Av .Eng. Camilo Dinucci 4605
14808-900 Araraquara, São Paulo, BRAZIL
Phone: +55 16 3301 2000
E-mail: latinamerica.info@jbt.com



We're with you, right down the line.™

jbt.com/foodtech