

## **Four Ways Food Manufacturers can Maximise Operational Efficiency**

The food and drink manufacturing industry contributes [£38 billion](#) annually to the UK economy, with industry-led reports suggesting that there is an untapped opportunity of up to [£14bn of growth](#) for the sector too.

We know one of these growth areas is maximising operational efficiencies – a key challenge for food manufacturers. So how can you make the most of your production lines?

### **1. Applying Cryogenic Freezing**

Upgrading your production equipment to use cryogenic freezing can help to optimise your outputs. Critically, this change will save you time, space and offer greater flexibility to manage peaks in demand.

Food items, such as meats or chips, can be frozen to a sustainable temperature and shelf life within minutes using cryogenic freezers, which are typically five times faster than mechanical freezers. They also take up significantly less factory floor space when compared to mechanical freezers delivering the same outputs. Plus, cryogenic freezing is a better option for manufacturing environments where there are multiple, higher value products running at different production speeds, or where there are seasonal variations in activity.

### **2. Optimising atmosphere packaging**

The way your produce is packaged can have a real impact on the quality of the final product.

Using Modified Atmosphere Packaging extends the shelf life of packaged foods – and is a proven technology in the sector. The specific mixture of gases are tailored for the particular food type, but with cooked foods, for example, the shelf life can be up to three weeks as standard. An improved shelf life means that food produce can be transported over longer distribution distances, with the risk of spoilage reduced, keeping the food looking fresh for consumers.

The result? A high-quality finished product with an optimised shelf life, all contributing to your overall efficiency.

### **3. Switching to bulk liquid supply**

Switching from a cylinder supply of gas to a bulk liquid supply offers many benefits.

It's cost efficient, takes up less space and importantly, means that staff can focus on other operational activities. Our team offer a hassle-free service and there is no need to pause production. An engineer will install the supply, allowing the gas cylinder to continue to be used until the new bulk cylinders are successfully added. More stock will be regularly delivered (and installed) as needed.

Sim card probes are automatically added too, which will be checked around 10 times each day by our dedicated teams. These are used to evaluate usage, check current stock levels in real time and determine the required delivery date – further contributing to the efficiency of your production line.

### **4. Using data and technology**

Applying a data-driven approach, such as Air Products Smart Technology, to cryogenic freezing systems offers improved safety, optimised capacity, breakdown prevention and easy operation – maximising your day-to-day operational efficiency.

It also plays a vital part in helping to optimise gas consumption, meaning changes can be detected proactively, based on gas usage, in comparison with historical data. Essentially, remote monitoring in real time means that your operative personnel won't need to make regular visits to machines and any issues can be spotted, diagnosed and dealt with more efficiently – and all at the touch of a button.

There isn't a silver bullet to flawless efficiency, but implementing these recommendations will ensure improvements across your systems. They'll help you make both time and financial savings as well as contributing to your overall operational efficiencies.

**Want to know more?**

If you would like to speak to us about how we can help support your business in the current market, get in touch at 0800 389 0202, via email at [apukinfo@airproducts.co.uk](mailto:apukinfo@airproducts.co.uk), or fill in the request form below.